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FOURTH QUARTER 2006 GROUNDWATER MONITORING

ABE Petroleum LLC 17715 Mission Boulevard Hayward, California 94539

> Prepared for Mr. Paul Garg ABE Petroleum LLC

Prepared by Sierra Environmental, Inc.

January 15, 2007 Project 03-103.07 January 15, 2007 Project 03-103.07

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

Subject: Report for Fourth Quarter 2006 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 fourth quarter 2006 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 December 13, 2006, Sierra obtained and recorded groundwater data, and collected groundwater samples from seven groundwater monitoring wells (MW1 through MW7) at and near the Site for chemical analysis. Sierra submitted the samples to Entech Analytical Labs, Inc. (Entech) of Santa Clara, California for chemical analysis. Entech is an independent State-certified analytical laboratory (# 2346).

BACKGROUND

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

GROUNDWATER MONITORING

On December 13, 2006, Sierra performed the fourth quarter 2006 groundwater monitoring at the Site. Sierra's field personnel measured the groundwater levels at MW1 through MW7 (Figure 2) using an electronic sounder. Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 17.45' to 21.48' feet below TOC with a northwesterly flow direction during this monitoring event. Table I presents the groundwater measurement data.

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 through 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 Entech with chain-of-custody documentation. Cal/Trans personnel damaged MW4 wellhead. Sierra repaired the wellhead. Please, refer to the following section for detailed information.

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.

ADDITIONAL ACTIVITIES

On November 17, 2006, Cal/Trans notified Sierra that MW4 and MW5 were covered by soil during Cal/Trans grading work. Therefore, Sierra's representative met with Cal/Trans agents at the Site to visually observe condition of MW4 and MW5, and locate the wells. Sierra's representative could not locate the wells, as Cal/Trans properties were covered with imported soil. On November 21, 2006, Sierra field personnel used metal detector to locate the wellheads (MW4 & MW5). After locating the wells, it was revealed that MW4 wellhead (concrete box) was damaged. On December 13, 2006, Sierra's personnel obtained construction material and restored MW4's wellhead.

CHEMICAL ANALYSIS

The samples were analyzed for TPHG using the United States Environmental Protection Agency (EPA) method GC-MS. 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

Concentrations of the gasoline constituents in the groundwater beneath the Site remain high. No gasoline constituents have been detected in the groundwater samples collected from the off-Site wells (MW4 through MW7) suggesting that groundwater plume remains within proximity of the Site. Sierra recommends continuing the quarterly groundwater monitoring during one complete hydrologic cycle (March and June 2007).

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.

Reza Baradaran, PE, GE Registered Geotechnical Engineer

Mitch Hajiaghai, REA II, CAC **Project Manager**

Attachments:

Table I Groundwater Elevation Data

Analytical Results for Groundwater Samples Table II Figure 1 Site Location Map

Figure 2 **Groundwater Monitoring Well Locations**

Background Information Appendix A

Appendix B QA/QC Protocol

Certified Analytical Results and Chain-of-Custody Documentation Appendix C

Appendix C Field Notes

cc: Ms. Donna Drogos ACHCS (1 Copy)

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 3-30-01 6-22-01 9-20-01 12-27-01 9-24-02 12-17-02 4-2-03 6-12-03 9-29-03 12-04-03 03-09-04 6-24-04 9-09-04 12-21-04 3-16-05 6-09-05 9-22-05 12-07-05 3-10-06 6-7-06 9-11-06	2	99.46 59.50	20.32 20.30 21.91 23.56 22.59 23.69 22.75 21.15 20.64 22.95 23.70 19.80 21.44 23.30 22.92 18.99 20.02 20.69 21.90 17.85 15.91 18.60	79.14 79.16 77.55 75.90 76.87 75.77 76.71 78.31 78.82 76.51 75.76 79.66 78.02 76.16 76.54 80.47 79.44 78.77 77.56 81.61 43.59 40.90
	12-13-06			20.05	39.45

TABLE I GROUNDWATER ELEVATION DATA (CONTINUED)

Well ID	Measurement Date	Well Casing Diameter (in)	Well Casing Elevation (ft)	Depth to ¹ Water (ft)	Water Table ² Elevation (ft)
MW2	8-18-00 3-30-01 6-22-01 9-20-01 12-27-01 9-24-02 12-17-02 4-2-03 6-12-03 9-29-03 12-04-03 03-09-04 6-24-04 9-09-04 12-21-04 3-16-05 6-09-05	2	100.58	21.55 21.55 23.15 24.78 23.82 24.89 23.99 22.32 21.84 24.15 24.91 21.05 22.95 24.55 24.21 20.29 21.68	79.03 79.03 77.43 75.80 76.76 75.69 76.59 78.26 78.74 76.43 75.67 79.53 77.63 76.03 76.03 76.37 80.29 78.90
	9-22-05 12-7-05 3-10-06			21.98 23.22 19.15	78.60 77.36 81.43
	6-7-06 9-11-06 12-13-06		60.61	17.31 19.99 21.48	43.30 40.62 39.13

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 3-30-01 6-22-01 9-20-01	2	99.69	20.68 20.68 22.31 23.92	79.01 79.01 77.38 75.77
	12-27-01 9-24-02 12-17-02 4-2-03			22.95 22.95 24.03 23.09 21.46	76.74 76.74 75.66 76.60 78.23
	6-12-03 9-29-03 12-04-03 03-09-04			20.99 23.30 24.05 20.20	78.70 76.39 75.64 79.49
	6-24-04 9-09-04 12-21-04 3-16-05			22.11 20.20 23.35 19.43	77.58 79.49 76.34 80.26
	6-09-05 9-22-05 12-7-05 3-10-06			20.47 21.13 22.36 18.30	79.22 78.56 77.33 81.39
	6-7-06 9-11-06 12-13-06		59.73	16.30 16.47 19.13 20.66	43.26 40.60 39.07
MW4	6-7-06 9-11-06 12-13-06	2	59.29	15.71 18.40 19.64	43.58 40.89 39.65
MW5	6-7-06 9-11-06 12-13-06	2	56.31	13.35 15.99 17.45	42.96 40.32 38.86
MW6	6-7-06 9-11-06 12-13-06	2	56.63	13.64 16.25 17.72	42.99 40.38 38.91
MW7	6-7-06 9-11-06 12-13-06	2	57.50	14.50 17.12 18.58	43.00 40.38 38.92

^{1.}

Depths to groundwater were measured to the top of the well casings Water table elevations were measured in relation to mean sea level (MSL) 2.

TABLE II
ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Sample ID	Sample Date	Sample Location	TPHG¹ μg/L	Benzene μg/L	Toluene μg/L	Ethylbenzene μg/L	Xylenes μg/L	MTBE² 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

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	ND³
*	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	ND₃	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

TABLE II
ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES
(CONTINUED)

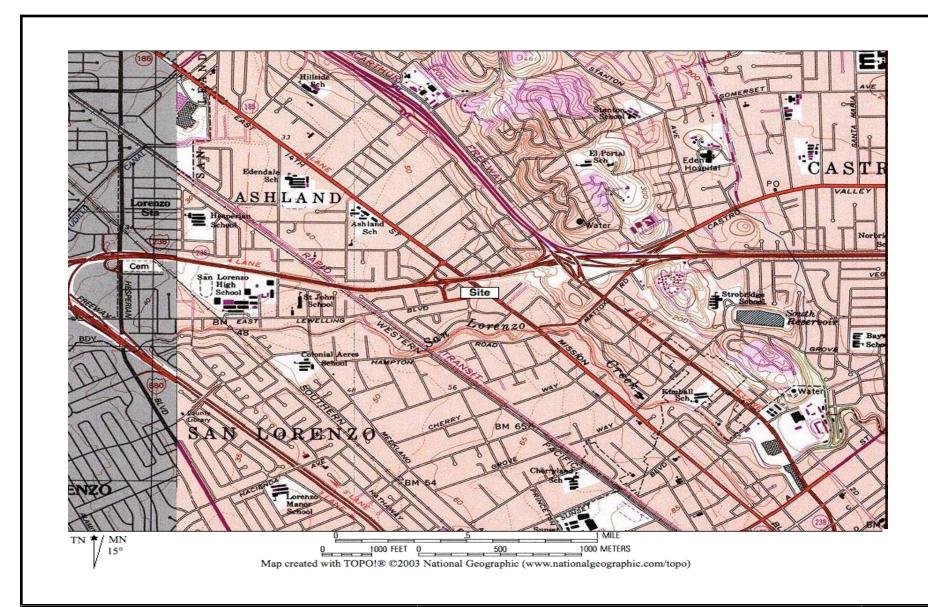
Sample ID	Sample Date	Sample Location	TPHG μg/L	Benzene μg/L	Toluene μg/L	Ethylbenzene μg/L	Xylenes μg/L	MTBE μg/L
MW-3	8-18-00	MW3	46,000	3,200	550	3,700	14,000	2,200
*	3-30-01		30,000	3,300	340	2,800	9,100	4,700
*	6-22-01		35,000	4,000	340	2,900	7,600	4,100
*	9-20-01		30,000	3,800	260	2,500	6,600	5,300
*	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	1200	ND	1,000	1300	520
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
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
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
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

1. TPHG = Total Petroleum Hydrocarbons as Gasoline

2. MTBE = Methyl Tertiary Butyl Ether

3. ND = Not Detected

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





SIERRA ENVIRONMENTAL, INC. Environmental Consultants

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

SITE LOCATION MAP

Fourth Quarter 2006 Groundwater Monitoring Report ABE Petroleum LLC

17715 Mission Boulevard · Hayward · California

FIGURE

1

January 15, 2007 Project 03-103.07

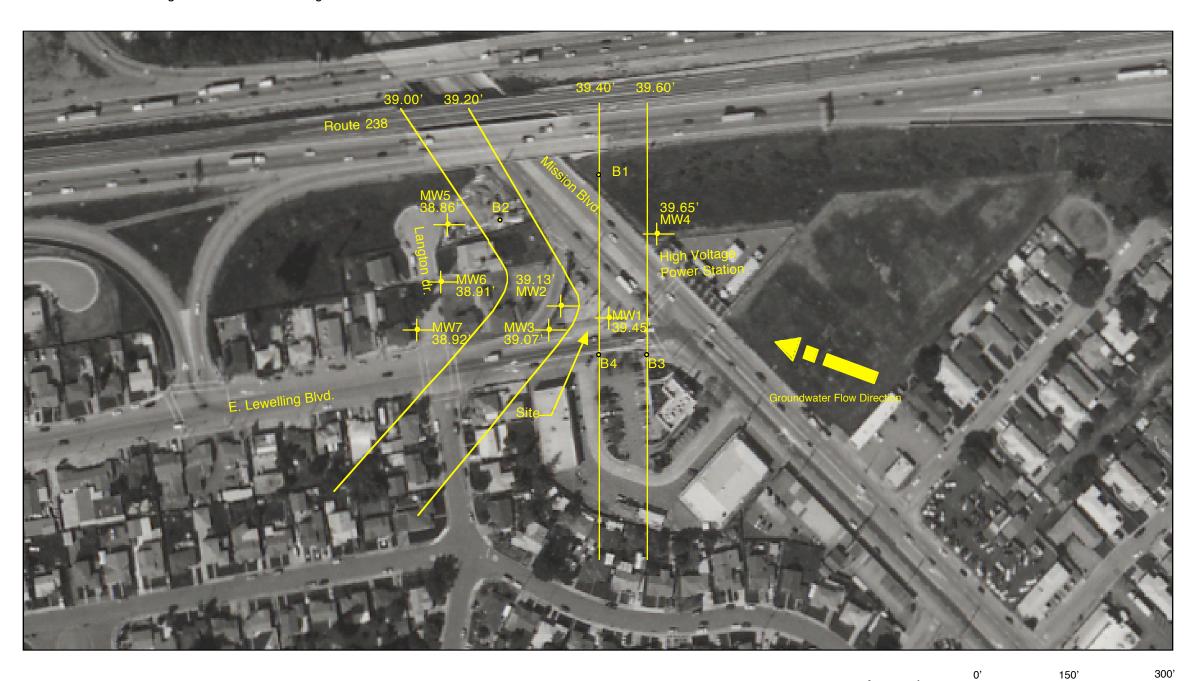
LEGEND

• B1 Historical Soil Boring Location And Designation

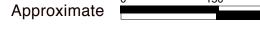


MW4 Groundwater Monitoring Well Location And Designation





Source: Pacific Aerial Surveys 3-11-05





SIERRA ENVIRONMENTAL, INC.

Environmental Consultants

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

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

Fourth Quarter 2006 Groundwater Monitoring
ABE PETROLEUM LLC

17715 Mission Boulevard - Hayward - California

FIGURE

January 15, 2007 Project 04-103.07

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.

On March 30, 2001, Sierra performed first quarter 2001 groundwater monitoring at the Site. The field and analytical results are presented in Table I and II. Groundwater was measured at approximately 20 to 21 feet from top of the well casing (TOC) at the Site with a northwesterly flow direction.

On June 22, 2001, Sierra performed second quarter 2001 groundwater monitoring at the Site. Groundwater levels were measured at approximately 22 to 23 feet below TOC with a northwesterly flow direction during this monitoring event.

On September 20, 2001, Sierra performed third quarter 2001 groundwater monitoring at the Site. Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 24 to 25 feet below TOC with a northwesterly flow direction during this monitoring event.

On December 27, 2001, Sierra performed fourth quarter 2001 groundwater monitoring at the Site. Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 22.59 to 23.82 feet below TOC with a northwesterly flow direction during this monitoring event.

On September 24, 2002, Sierra performed third quarter 2002 groundwater monitoring at the Site. Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 23.69 to 24.89 feet below TOC with a northwesterly flow direction during this monitoring event.

On December 17, 2002, Sierra performed fourth quarter 2002 groundwater monitoring at the Site. Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 22.75 to 23.99 feet below TOC with a northwesterly flow direction during this monitoring event.

On April 2, 2003, Sierra performed first quarter 2003 groundwater monitoring at the Site. Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 21.25 to 22.32 feet below TOC with a westerly flow direction during this monitoring event.

On June 12, 2003, Sierra performed second quarter 2003 groundwater monitoring at the site. Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 20.64 to 20.94 feet below TOC with a westerly flow direction during this monitoring event.

Sierra prepared soil and Groundwater investigation plan and addendum to the plan dated May 27 and September 10, 2003 respectively for the site. The Addendum to the plan dated September 10, 2003 is being reviewed by ACHCS.

On September 29, 2003, Sierra performed third quarter 2003 groundwater monitoring at the site. Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 22.95 to 24.15 feet below TOC with a westerly flow direction during this monitoring event.

On December 4, 2003, Sierra performed fourth quarter 2003 groundwater monitoring at the site. Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 23.70 to 24.91 feet below TOC with a westerly flow direction during this monitoring event.

On March 9, 2004, Sierra performed first quarter 2004 groundwater monitoring at the Site. Sierra's field personnel measured the groundwater levels at MW1 through MW3 (Figure 2). Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 19.80 to 20.20 feet below TOC with a northwesterly flow direction during this monitoring event. Table I presents the groundwater measurement data.

On June 24, 2004, Sierra performed second quarter 2004 groundwater monitoring at the Site. Sierra's field personnel measured the groundwater levels at MW1 through MW3 (Figure 2). Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 21.44 to 22.95 feet below TOC with a northwesterly flow direction during this monitoring event. Table I presents the groundwater measurement data.

On September 9, 2004, Sierra performed third quarter 2004 groundwater monitoring at the Site. Sierra's field personnel measured the groundwater levels at MW1 through MW3 (Figure 2). Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 23.30' to 24.55' feet below TOC with a northwesterly flow direction during this monitoring event. Table I presents the groundwater measurement data.

On December 21, 2004, Sierra performed fourth quarter 2004 groundwater monitoring at the Site. Sierra's field personnel measured the groundwater levels at MW1 through MW3 (Figure 2). Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 22.92' to 24.21' feet below TOC with a northwesterly flow direction during this monitoring event. Table I presents the groundwater measurement data.

On March 16, 2005, Sierra performed first quarter 2004 groundwater monitoring at the Site. Sierra's field personnel measured the groundwater levels at MW1 through MW3 (Figure 2). Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 18.99' to 20.29' feet below TOC with a northwesterly flow direction during this monitoring event. Table I presents the groundwater measurement data.

On June 9, 2005, Sierra performed second quarter 2005 groundwater monitoring at the Site. Sierra's field personnel measured the groundwater levels at MW1 through MW3 (Figure 2). Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 20.02' to 21.68' feet below TOC with a northwesterly flow direction during this monitoring event. Table I presents the groundwater measurement data.

On September 22, 2005, Sierra performed Third quarter 2005 groundwater monitoring at the Site. Sierra's field personnel measured the groundwater levels at MW1 through MW3 (Figure 2). Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 20.69' to 23.22' feet below TOC with a northwesterly flow direction during this monitoring event. Table I presents the groundwater measurement data.

On December 7, 2005, Sierra performed fourth quarter 2005 groundwater monitoring at the Site. Sierra's field personnel measured the groundwater levels at MW1 through MW3 (Figure 2). Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 21.90' to 23.93' feet below TOC with a northwesterly flow direction during this monitoring event. Table I presents the groundwater measurement data.

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 μ g/l total petroleum hydrocarbons as gasoline (TPHG), 16 μ g/l toluene 15 μ g/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 methyl tertiary butyl ether (MTBE) was detected in water samples collected at this property. Only 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 After the well construction, Sierra had the wellheads surveyed, Langton Drive. 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 is shorter than the MTBE plume.

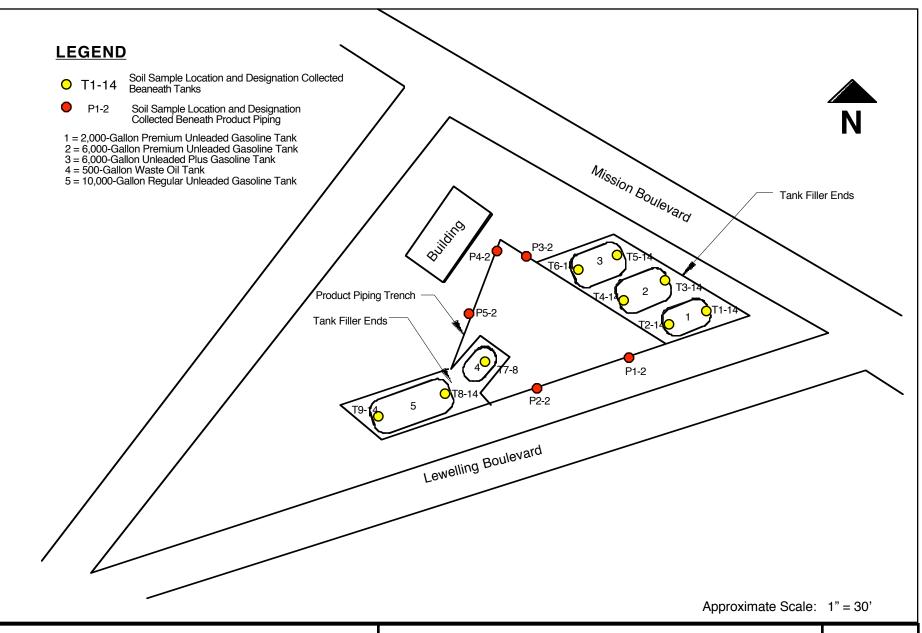
On May 10th and 11th, 2006, Sierra constructed groundwater monitoring well MW4 through MW7 at the Cal Tran properties in northwest and east of the Site and two of those monitoring wells were constructed along the Langton Drive in southwest and west of the site.

More than 72 hours after well construction, Sierra developed the wells to clean and stabilize the sand and aquifer material around the slotted section of the wells. Before the development, Sierra measured the depth of the groundwater level in the wells. The water extracted from the well during the well development activities was stored in 55-gallon drums for future proper disposal.

On July 7, 2006, Sierra retained CTL Engineering, Inc. (CTL) to survey the wellhead elevations with respect to mean sea level, as well as obtain horizontal and vertical controls using Global Positioning System (GPS). The wellhead elevations were tied to the monitoring wells MW1 through MW3 at the Site.

Based on the groundwater elevation measurements obtained on July 7, 2006, groundwater flow direction is toward northwest with an approximate gradient of 0.02 ft/ft. Figure 4 also shows groundwater elevation contour.

On September 11, 2006, Sierra performed third quarter 2006, groundwater monitoring at the Site. Sierra's field personnel measured the groundwater levels at MW1 through MW7 (Figure 2). Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 15.99' to 19.99' feet below TOC with a northwesterly flow direction during this monitoring event. Table I presents the groundwater measurement data.





SIERRA ENVIRONMENTAL, INC.

Environmental Consultants

980 W. Taylor St., San Jose, CA 95126 Phone [408]971-6758 • Fax [408] 971-6759 Former UST and Soil Sample Locations

Fourth Quarter 2006 Groundwater Monitoring
ABE Petroleum LLC

17715 Mission Boulevard · Hayward · California

FIGURE



January 15-2007 Project 03-103.07

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

3334 Victor Court, Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Mitch Hajiaghai Lab Certificate Number: 52984

Sierra Environmental, Inc. Issued: 12/29/2006

980 West Taylor Street San Jose, CA 95126

Project Number: 03-103 Global ID: T0600102154

Project Name: ABE

Project Location: 17715 Mission Blvd. /Hayward, CA

Certificate of Analysis - Final Report

On December 13, 2006, samples were received under chain of custody for analysis. Entech analyzes samples "as received" unless otherwise noted. The following results are included:

Matrix Test / Comments

Liquid Electronic Deliverables for Geotracker

TPH-Purgeable: GC/MS VOCs: EPA 8260B

Entech Analytical Labs, Inc. is certified for environmental analyses by the State of California (#2346). If you have any questions regarding this report, please call us at 408-588-0200 ext. 225.

Sincerely,

Laurie Glantz-Murphy Laboratory Director

3334 Victor Court, Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Sierra Environmental, Inc. 980 West Taylor Street San Jose, CA 95126 Attn: Mitch Hajiaghai

Project Number: 03-103 Project Name: ABE

Project Location: 17715 Mission Blvd. /Hayward,CA

Reviewed by: EricKum

Analyzed by: BDhabalia Reviewed by: EricKum

GlobalID: T0600102154

Certificate of Analysis - Data Report

Samples Received: 12/13/2006 Sample Collected by: Client

VOCs: EPA 8260B								
Parameter	Result	Qual D/P-1	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	2600	200	100	$\mu g/L$	N/A	N/A	12/20/2006	WM7061220
Toluene	8400	200	100	\mug/L	N/A	N/A	12/20/2006	WM7061220
Ethyl Benzene	4300	200	100	$\mu g/L$	N/A	N/A	12/20/2006	WM7061220
Xylenes, Total	20000	200	100	$\mu g/L$	N/A	N/A	12/20/2006	WM7061220
Methyl-t-butyl Ether	1200	200	200	$\mu g/L$	N/A	N/A	12/20/2006	WM7061220
tert-Butyl Ethyl Ether	ND	200	1000	$\mu g/L$	N/A	N/A	12/20/2006	WM7061220
tert-Butanol (TBA)	ND	200	2000	μg/L	N/A	N/A	12/20/2006	WM7061220
Diisopropyl Ether	ND	200	1000	μg/L	N/A	N/A	12/20/2006	WM7061220
tert-Amyl Methyl Ether	ND	200	1000	μg/L	N/A	N/A	12/20/2006	WM7061220
Surrogate	Surrogate Recovery	Contro	l Limits (%)				Analyzed by: BDha	balia

Surrogate	Surrogate Recovery	Control L	imits (%)
4-Bromofluorobenzene	89.3	60 -	130
Dibromofluoromethane	104	60 -	130
Toluene-d8	94.4	60 -	130

Parameter	Result	Qual I	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	21000		200	5000	μg/L	N/A	N/A	12/20/2006	WM7061220

Surrogate	Surrogate Recovery	Control Limits (%
4-Bromofluorobenzene	108	60 - 130
Dibromofluoromethane	116	60 - 130
Toluene-d8	101	60 - 130

3334 Victor Court, Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Sierra Environmental, Inc. 980 West Taylor Street San Jose, CA 95126 Attn: Mitch Hajiaghai

Project Number: 03-103 Project Name: ABE

Project Location: 17715 Mission Blvd. /Hayward,CA

Reviewed by: EricKum

GlobalID: T0600102154

Certificate of Analysis - Data Report

Samples Received: 12/13/2006 Sample Collected by: Client

Lab #: 52984-002	Sample ID: MW-2	Matrix: Liquid Sample Date:	12/13/2006

VOCs: EPA 8260B	_					_	_	
Parameter	Result	Qual D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	1400	100	50	\mug/L	N/A	N/A	12/20/2006	WM7061220
Toluene	220	100	50	$\mu g/L$	N/A	N/A	12/20/2006	WM7061220
Ethyl Benzene	3400	100	50	$\mu g/L$	N/A	N/A	12/20/2006	WM7061220
Xylenes, Total	4900	100	50	$\mu g/L$	N/A	N/A	12/20/2006	WM7061220
Methyl-t-butyl Ether	1900	100	100	$\mu g/L$	N/A	N/A	12/20/2006	WM7061220
tert-Butyl Ethyl Ether	ND	100	500	$\mu g/L$	N/A	N/A	12/20/2006	WM7061220
tert-Butanol (TBA)	ND	100	1000	$\mu g/L$	N/A	N/A	12/20/2006	WM7061220
Diisopropyl Ether	ND	100	500	$\mu g/L$	N/A	N/A	12/20/2006	WM7061220
tert-Amyl Methyl Ether	ND	100	500	μg/L	N/A	N/A	12/20/2006	WM7061220
Surrogate	Surrogate Recovery	Control	Limits (%)				Analyzed by: BDha	balia

SurrogateSurrogate RecoveryControl Limits (%)4-Bromofluorobenzene89.160-130Dibromofluoromethane10060-130Toluene-d894.760-130

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	36000		100	2500	$\mu g/L$	N/A	N/A	12/20/2006	WM7061220
Surrogate	Surrogate Recovery		Control l	Limits (%)				Analyzed by: BDha	balia
4-Bromofluorobenzene	108		60 -	130				Reviewed by: Erick	Kum
Dibromofluoromethane	112		60 -	130					
Toluene-d8	101		60 -	130					

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Sierra Environmental, Inc. 980 West Taylor Street San Jose, CA 95126 Attn: Mitch Hajiaghai

Project Number: 03-103 Project Name: ABE

Project Location: 17715 Mission Blvd. /Hayward,CA

Analyzed by: BDhabalia Reviewed by: EricKum

GlobalID: T0600102154

Certificate of Analysis - Data Report

Samples Received: 12/13/2006 Sample Collected by: Client

Lah # · 529	84-003 Samp	le ID+ MW-3	Matrix: Liquid	Sample Date:	12/13/2006
Lab π . $J L J$	ot-ood bamb	1C 1D. 1V1 VV -3	Widtia. Liquid	Dambie Date.	14/13/4000

VOCs: EPA 8260B									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	1200		25	12	μg/L	N/A	N/A	12/20/2006	WM7061220
Toluene	ND		25	12	$\mu g/L$	N/A	N/A	12/20/2006	WM7061220
Ethyl Benzene	1000		25	12	$\mu g/L$	N/A	N/A	12/20/2006	WM7061220
Xylenes, Total	1300		25	12	$\mu g/L$	N/A	N/A	12/20/2006	WM7061220
Methyl-t-butyl Ether	520		25	25	$\mu g/L$	N/A	N/A	12/20/2006	WM7061220
tert-Butyl Ethyl Ether	ND		25	120	μg/L	N/A	N/A	12/20/2006	WM7061220
tert-Butanol (TBA)	2000		25	250	μg/L	N/A	N/A	12/20/2006	WM7061220
Diisopropyl Ether	ND		25	120	μg/L	N/A	N/A	12/20/2006	WM7061220
tert-Amyl Methyl Ether	ND		25	120	\mug/L	N/A	N/A	12/20/2006	WM7061220

Surrogate	Surrogate Recovery	Control	l Li	mits (%)	
4-Bromofluorobenzene	77.4	60	-	130	
Dibromofluoromethane	86.0	60	-	130	
Toluene-d8	80.0	60	-	130	

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	13000		25	620	\mug/L	N/A	N/A	12/20/2006	WM7061220
Surrogate	Surrogate Recovery	7	Control	Limits (%)				Analyzed by: BDha	balia
4-Bromofluorobenzene	93.5		60	130				Reviewed by: Erick	Kum
Dibromofluoromethane	95.7		60	130					
Toluene-d8	85.0		60	130					

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Sierra Environmental, Inc. 980 West Taylor Street San Jose, CA 95126 Attn: Mitch Hajiaghai

Project Number: 03-103 Project Name: ABE

Project Location: 17715 Mission Blvd. /Hayward,CA

Analyzed by: BDhabalia Reviewed by: MaiChiTu

GlobalID: T0600102154

Certificate of Analysis - Data Report

Samples Received: 12/13/2006 Sample Collected by: Client

Lab #: 52984-004	Sample ID: MW-4	Matrix: Liquid Sample Date	• 12/13/2006

VOCs: EPA 8260B									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	0.50	μg/L	N/A	N/A	12/21/2006	WM7061221
Toluene	ND		1.0	0.50	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
Ethyl Benzene	ND		1.0	0.50	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
Xylenes, Total	ND		1.0	0.50	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
Methyl-t-butyl Ether	ND		1.0	1.0	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
tert-Butyl Ethyl Ether	ND		1.0	5.0	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
tert-Butanol (TBA)	ND		1.0	10	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
Diisopropyl Ether	ND		1.0	5.0	μg/L	N/A	N/A	12/21/2006	WM7061221
tert-Amyl Methyl Ether	ND		1.0	5.0	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221

Surrogate	Surrogate Recovery	Control I	Limits (%)
4-Bromofluorobenzene	80.8	60 -	130
Dibromofluoromethane	97.0	60 -	130
Toluene-d8	91.6	60 -	130

97.4

TPH-Purgeable: GC/MS

Toluene-d8

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	ND		1.0	25	μg/L	N/A	N/A	12/21/2006	WM7061221
Surrogate	Surrogate Recovery	7	Control 1	Limits (%)				Analyzed by: BDha	balia
4-Bromofluorobenzene	97.5		60 -	130				Reviewed by: MaiC	ChiTu
Dibromofluoromethane	108		60 -	130					

130

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Sierra Environmental, Inc. 980 West Taylor Street San Jose, CA 95126 Attn: Mitch Hajiaghai

Project Number: 03-103 Project Name: ABE

Project Location: 17715 Mission Blvd. /Hayward,CA

Reviewed by: MaiChiTu

Analyzed by: BDhabalia Reviewed by: MaiChiTu

GlobalID: T0600102154

Certificate of Analysis - Data Report

Samples Received: 12/13/2006 Sample Collected by: Client

Lab #: 52984-005	Sample ID: MW-5	Matrix: Liquid Sample 1	Date: 12/13/2006

VOCs: EPA 8260B								
Parameter	Result (Qual D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND	1.0	0.50	\mug/L	N/A	N/A	12/21/2006	WM7061221
Toluene	ND	1.0	0.50	\mug/L	N/A	N/A	12/21/2006	WM7061221
Ethyl Benzene	ND	1.0	0.50	\mug/L	N/A	N/A	12/21/2006	WM7061221
Xylenes, Total	ND	1.0	0.50	\mug/L	N/A	N/A	12/21/2006	WM7061221
Methyl-t-butyl Ether	ND	1.0	1.0	\mug/L	N/A	N/A	12/21/2006	WM7061221
tert-Butyl Ethyl Ether	ND	1.0	5.0	\mug/L	N/A	N/A	12/21/2006	WM7061221
tert-Butanol (TBA)	ND	1.0	10	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
Diisopropyl Ether	ND	1.0	5.0	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
tert-Amyl Methyl Ether	ND	1.0	5.0	\mug/L	N/A	N/A	12/21/2006	WM7061221
Surrogate	Surrogate Recovery	Control	Limits (%)			Analyzed by: BDhabalia		

Surrogate	Surrogate Recovery	Contro	IЫ	mits (%)	
4-Bromofluorobenzene	86.1	60	-	130	
Dibromofluoromethane	103	60	-	130	
Toluene-d8	95.7	60	_	130	

Parameter	Result	Qual D/P	-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	ND	1.	0	25	μg/L	N/A	N/A	12/21/2006	WM7061221

Surrogate	Surrogate Recovery	Control Limits (%				
4-Bromofluorobenzene	104	60 - 130				
Dibromofluoromethane	115	60 - 130				
Toluene-d8	101	60 - 130				

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Sierra Environmental, Inc. 980 West Taylor Street San Jose, CA 95126 Attn: Mitch Hajiaghai

Project Number: 03-103 Project Name: ABE

Project Location: 17715 Mission Blvd. /Hayward,CA

Reviewed by: MaiChiTu

GlobalID: T0600102154

Certificate of Analysis - Data Report

Samples Received: 12/13/2006 Sample Collected by: Client

Lab #: 52	2984-006	Sample ID: MW-6	Matrix: Liquid S	ample Date: 12/13/2006

VOCs: EPA 8260B								
Parameter	Result	Qual D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND	1.0	0.50	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
Toluene	ND	1.0	0.50	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
Ethyl Benzene	ND	1.0	0.50	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
Xylenes, Total	ND	1.0	0.50	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
Methyl-t-butyl Ether	ND	1.0	1.0	μg/L	N/A	N/A	12/21/2006	WM7061221
tert-Butyl Ethyl Ether	ND	1.0	5.0	μg/L	N/A	N/A	12/21/2006	WM7061221
tert-Butanol (TBA)	ND	1.0	10	μg/L	N/A	N/A	12/21/2006	WM7061221
Diisopropyl Ether	ND	1.0	5.0	μg/L	N/A	N/A	12/21/2006	WM7061221
tert-Amyl Methyl Ether	ND	1.0	5.0	μg/L	N/A	N/A	12/21/2006	WM7061221
Surrogate	Surrogate Recovery	Control	Limits (%)	Analyzed by: BDhabalia				

Surrogate	Surrogate Recovery	Control Limits (%)			
4-Bromofluorobenzene	84.0	60 -	- 130		
Dibromofluoromethane	102	60 -	130		
Toluene-d8	94.0	60 -	- 130		

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	ND		1.0	25	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
Surrogate	Surrogate Recovery	7	Control	Limits (%)				Analyzed by: BDha	balia
4-Bromofluorobenzene	101		60	130				Reviewed by: MaiC	ChiTu
Dibromofluoromethane	114		60	130					
Toluene-d8	98.8		60	130					

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Sierra Environmental, Inc. 980 West Taylor Street San Jose, CA 95126 Attn: Mitch Hajiaghai

Project Number: 03-103 Project Name: ABE

Project Location: 17715 Mission Blvd. /Hayward,CA

Analyzed by: BDhabalia Reviewed by: MaiChiTu

GlobalID: T0600102154

Certificate of Analysis - Data Report

Samples Received: 12/13/2006 Sample Collected by: Client

Lab #: 52984-007	Sample ID: MW-7	Matrix: Liquid	Sample Date: 12/13/2006
-------------------------	-----------------	-----------------------	--------------------------------

VOCs: EPA 8260B									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	0.50	μg/L	N/A	N/A	12/21/2006	WM7061221
Toluene	ND		1.0	0.50	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
Ethyl Benzene	ND		1.0	0.50	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
Xylenes, Total	ND		1.0	0.50	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
Methyl-t-butyl Ether	ND		1.0	1.0	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
tert-Butyl Ethyl Ether	ND		1.0	5.0	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
tert-Butanol (TBA)	ND		1.0	10	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221
Diisopropyl Ether	ND		1.0	5.0	μg/L	N/A	N/A	12/21/2006	WM7061221
tert-Amyl Methyl Ether	ND		1.0	5.0	$\mu g/L$	N/A	N/A	12/21/2006	WM7061221

Surrogate	Surrogate Recovery	Control Limits (%)			
4-Bromofluorobenzene	84.0	60 -	130		
Dibromofluoromethane	102	60 -	130		
Toluene-d8	96.1	60 -	130		

102

TPH-Purgeable: GC/MS

Toluene-d8

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	ND		1.0	25	μg/L	N/A	N/A	12/21/2006	WM7061221
Surrogate	Surrogate Recovery	7	Control 1	Limits (%)				Analyzed by: BDha	balia
4-Bromofluorobenzene	101		60 -	130				Reviewed by: MaiC	ChiTu
Dibromofluoromethane	114		60 -	130					

130

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Liquid - VOCs: EPA 8260B

QC Batch ID: WM7061220 Validated by: EricKum - 12/21/06

QC Batch Analysis Date: 12/20/2006

Parameter	Result	DF	PQLR	Units
Benzene	ND	1	0.50	μg/L
Diisopropyl Ether	ND	1	5.0	μg/L
Ethyl Benzene	ND	1	0.50	μg/L
Methyl-t-butyl Ether	ND	1	1.0	μg/L
tert-Amyl Methyl Ether	ND	1	5.0	μg/L
tert-Butanol (TBA)	ND	1	10	μg/L
tert-Butyl Ethyl Ether	ND	1	5.0	μg/L
Toluene	ND	1	0.50	μg/L
Xylenes, Total	ND	1	0.50	μg/L

Surrogate for Blank	% Recovery	Control Limits				
4-Bromofluorobenzene	83.8	60	-	130		
Dibromofluoromethane	92.9	60	-	130		
Toluene-d8	92.6	60	_	130		

Method Blank - Liquid - TPH-Purgeable: GC/MS

QC Batch ID: WM7061220 Validated by: EricKum - 12/21/06

QC Batch Analysis Date: 12/20/2006

Parameter			Result	DF	PQLR	Units
TPH as Gasoline			ND	1	25	μg/L
Surrogate for Blank	% Recovery	Control Limits				
4-Bromofluorobenzene	101	60 - 130				
Dibromofluoromethane	103	60 - 130				
Toluene-d8	97.4	60 - 130				

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Method Blank - Liquid - VOCs: EPA 8260B

QC Batch ID: WM7061221 Validated by: MaiChiTu - 12/26/06

QC Batch Analysis Date: 12/21/2006

Parameter	Result	DF	PQLR	Units
Benzene	ND	1	0.50	μg/L
Diisopropyl Ether	ND	1	5.0	μg/L
Ethyl Benzene	ND	1	0.50	μg/L
Methyl-t-butyl Ether	ND	1	1.0	μg/L
tert-Amyl Methyl Ether	ND	1	5.0	μg/L
tert-Butanol (TBA)	ND	1	10	μg/L
tert-Butyl Ethyl Ether	ND	1	5.0	μg/L
Toluene	ND	1	0.50	μg/L
Xylenes, Total	ND	1	0.50	μg/L

Surrogate for Blank% RecoveryControl Limits4-Bromofluorobenzene94.360-130Dibromofluoromethane98.760-130Toluene-d892.260-130

Method Blank - Liquid - TPH-Purgeable: GC/MS

QC Batch ID: WM7061221Validated by: MaiChiTu - 12/26/06

QC Batch Analysis Date: 12/21/2006

Parameter			Result	DF	PQLR	Units
TPH as Gasoline			ND	1	25	μg/L
Surrogate for Blank	% Recovery	Control Limits				
4-Bromofluorobenzene	102	60 - 130				
Dibromofluoromethane	110	60 - 130				
Toluene-d8	96.9	60 - 130				

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LCS / LCSD - Liquid - VOCs: EPA 8260B

QC Batch ID: WM7061220 Reviewed by: EricKum - 12/21/06

QC Batch ID Analysis Date: 12/20/2006

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Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
1,1-Dichloroethene	<0.50	20	18.3	μg/L	91.5	70 - 130
Benzene	<0.50	20	17.9	μg/L	89.5	70 - 130
Chlorobenzene	<0.50	20	18.5	μg/L	92.5	70 - 130
Methyl-t-butyl Ether	<1.0	20	15.4	μg/L	77.0	70 - 130
Toluene	< 0.50	20	19.9	μg/L	99.5	70 - 130
Trichloroethene	<0.50	20	17.8	μg/L	89.0	70 - 130
Surrogate	% Recovery Co	ontrol Limits				

Surrogate	% Recovery	Control Limits			
4-Bromofluorobenzene	90.0	60 - 130			
Dibromofluoromethane	93.0	60 - 130			
Toluene-d8	92.0	60 - 130			

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
1,1-Dichloroethene	< 0.50	20	19.9	μg/L	99.5	8.4	25.0	70 - 130
Benzene	< 0.50	20	19.1	μg/L	95.5	6.5	25.0	70 - 130
Chlorobenzene	< 0.50	20	19.2	μg/L	96.0	3.7	25.0	70 - 130
Methyl-t-butyl Ether	<1.0	20	16.8	μg/L	84.0	8.7	25.0	70 - 130
Toluene	< 0.50	20	20.7	μg/L	104	3.9	25.0	70 - 130
Trichloroethene	< 0.50	20	19.1	μg/L	95.5	7.0	25.0	70 - 130

Surrogate	% Recovery	Control Limits			
4-Bromofluorobenzene	90.4	60	-	130	
Dibromofluoromethane	95.0	60	-	130	
Toluene-d8	90.7	60	-	130	

LCS / LCSD - Liquid - TPH-Purgeable: GC/MS

QC Batch ID: WM7061220 Reviewed by: EricKum - 12/21/06

QC Batch ID Analysis Date: 12/20/2006

LCS

Parameter	Method B	lank Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
TPH as Gasoline	<25	120	111	μg/L	88.6	65 - 135
Surrogate	% Recovery	Control Limits				
4-Bromofluorobenzene	104.0	60 - 130				
Dibromofluoromethane	99.5	60 - 130				
Toluene-d8	99.0	60 - 130				

LCSD

Parameter	Method Blan	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Gasoline	<25	120	118	μg/L	94.2	6.1	25.0	65 - 135
Surrogate	% Recovery	ontrol Limits						
4-Bromofluorobenzene	105.0	60 - 130						
Dibromofluoromethane	101.0	60 - 130						
Toluene-d8	99.0	60 - 130						

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LCS / LCSD - Liquid - VOCs: EPA 8260B

Reviewed by: MaiChiTu - 12/26/06 QC Batch ID: WM7061221

QC Batch ID Analysis Date: 12/21/2006

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Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
1,1-Dichloroethene	< 0.50	20	20.7	μg/L	104	70 - 130
Benzene	< 0.50	20	19.0	μg/L	95.0	70 - 130
Chlorobenzene	< 0.50	20	18.9	μg/L	94.5	70 - 130
Methyl-t-butyl Ether	<1.0	20	15.8	μg/L	79.0	70 - 130
Toluene	< 0.50	20	20.7	μg/L	104	70 - 130
Trichloroethene	< 0.50	20	19.2	μg/L	96.0	70 - 130
Surrogate	% Recovery C	ontrol Limits				
4-Bromofluorobenzene	90.8	60 - 130				
Dibromofluoromethane	97.6	60 - 130				
Toluene-d8	93.4	60 - 130				

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
1,1-Dichloroethene	< 0.50	20	21.8	μg/L	109	5.2	25.0	70 - 130
Benzene	< 0.50	20	20.5	μg/L	102	7.6	25.0	70 - 130
Chlorobenzene	< 0.50	20	20.3	μg/L	102	7.1	25.0	70 - 130
Methyl-t-butyl Ether	<1.0	20	18.4	μg/L	92.0	15	25.0	70 - 130
Toluene	< 0.50	20	21.8	μg/L	109	5.2	25.0	70 - 130
Trichloroethene	< 0.50	20	20.6	μg/L	103	7.0	25.0	70 - 130

Surrogate	% Recovery	Cont	rol	Limits
4-Bromofluorobenzene	94.1	60	-	130
Dibromofluoromethane	98.1	60	-	130
Toluene-d8	91.5	60	-	130

LCS / LCSD - Liquid - TPH-Purgeable: GC/MS

Reviewed by: MaiChiTu - 12/26/06 QC Batch ID: WM7061221

QC Batch ID Analysis Date: 12/21/2006

LCS

Parameter	Method B	lank Spike Amt	SnikaRasult	Units	% Recovery	Recovery Limits
TPH as Gasoline	<25	120	134		108	65 - 135
IFII as Gasolille	<25	120	134	μg/L	100	05 - 155
Surrogate	% Recovery	Control Limits				
4-Bromofluorobenzene	103.0	60 - 130				
Dibromofluoromethane	102.0	60 - 130				
Toluene-d8	98.4	60 - 130				

LCSD

Parameter	Method B	lank Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Gasoline	<25	120	125	μg/L	99.7	7.6	30.0	65 - 135
Surrogate	% Recovery	Control Limits						
4-Bromofluorobenzene	103.0	60 - 130						
Dibromofluoromethane	103.0	60 - 130						
Toluene-d8	98.7	60 - 130						

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MS / MSD - Liquid - VOCs: EPA 8260B

QC Batch ID: WM7061221Reviewed by: MaiChiTu - 12/26/06

QC Batch ID Analysis Date: 12/21/2006 MS Sample Spiked: 52984-004

	Sample	Spike	Spike		Analysis		Recovery
Parameter	Result	Amount	Result	Units	Date	% Recovery	Limits
Benzene	ND	20	20.1	μg/L	12/21/2006	100	70 - 130
Methyl-t-butyl Ether	ND	20	16.9	μg/L	12/21/2006	84.5	70 - 130
Toluene	ND	20	21.1	μg/L	12/21/2006	106	70 - 130

Surrogate	% Recovery	Control Limits				
4-Bromofluorobenzene	96.0	60	- 13	80		
Dibromofluoromethane	103.0	60	- 13	80		
Toluene-d8	93.0	60	- 13	30		

MSD Sample Spiked: 52984-004

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	RPD	RPD Limits	Recovery Limits
Methyl-t-butyl Ether	ND	20	21.1	μg/L	12/21/2006	106	22	25.0	70 - 130
Toluene	ND	20	24.0	μg/L	12/21/2006	120	13	25.0	70 - 130

Surrogate	% Recovery	Control Limits				
4-Bromofluorobenzene	94.3	60	-	130		
Dibromofluoromethane	102.0	60	-	130		
Toluene-d8	90.0	60	_	130		

Wht 52984



SIERRA ENVIRONMENTAL, INC.

Environmental Consultants

					CHAIN	OF C	CUSTO	DY				
Project Na Project Lo		ABE 17715 Mi	ssion Bou		Project No:	_03- Paul G	103.00 arg		Date: Sampler	12-15- : <u>Mike H</u>		
Sample ID	Date Sampled	Sampling Time	Matrix	N° of Containers			А	nalysis Re	equested		Turnar	ound Time
					8015/8020 TPHG BTEX,MTBE	8015 TPHD	418.1 TRPH	BTEX 8020	TPHG&BTEx Fuel Oxygenates 8260B			
MW-1	12-13-06		water	3	$-\infty$)]			X.	-	24-hour Other	Normal
MW-Z	×		X	×	-00	2.			×		24-hour Other	Normal
MW-3	×		X	X	-00	3			×		24-hour Other	Normal
MW-4	'X		X	X	~ 201	4			X		24-hour Other	Normal
MW-3	X		X	×	-00	5			X	-	24-hour Other	(Normal
MW-6	X		X	X	-004	>			X		24-hour Other	Normal
MW-7	X		X	义	~oo.	7			X		24-hour Other	Normal
Remarks: Samples co	ontained pre	eservative. Pl	ease email ti	he results in E	EDF format for	r Geotra	ncker Globa	al ID#T06	00102154	Temp	10°	
Religionishe	epy al	That		Date, 12/13/01		ime Ser	Received	by xere		D	ate 12/04	ISTime
Relin quish e	arby	<u> </u>	The Park Land	Date	7	Time	Received			D	ate	Time

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Appendix D FIELD NOTES

Project No: 03-10 Project Name: AB Field Personnel: M Project Location:	E	s Missio	— n Blvd.	Date: _1 Well N°: Weathe		Clos	Jy	
PURGE WATER VOLUME	Total Well Depth (ft)	Depth to Water (ft	Water Column (ft)	Ca	Multiplier	eter	Casing Volume (gal)	Purged Volume (gal)
CALCULATION	33.25	2005	13.20	2"	4"	6"	.2.(6.3
	33.25	200	13.20	0.16	0.64	1.44	2.1	- 6-0

Time					
Volume Purged (gal)	0	2	4	6	
Temperature (° F)	69.0	68.8	68.6	68.7	
рН	6.72	6.70	6.70	6.69	
Specific Conductivity (umhos/cm)	2200	2200	2100	2100	
Turbidity/Color	28xx	-	-	T	
Odor	yes	\rightarrow	1	7	

Measuring Reference:

Bailer

comments: sheens were observed in Water

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Purge Method:

Project No: 03-103	Date: _12-13-06														
Project Name: ABE							Well N°: _MW2								
Field Personnel: Mi	Weather: Cloudy														
Project Location:	1771	812.				_				_					
PURGE WATER VOLUME	Total Well Depth (ft)				ater Column (ft)		Ca	Multipli		er	Casing Volume (gal)	Purge Volume			
CALCULATION	22.75	7	1.119	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1777		2"	4"		6"	1.96	2 6.0			
	33.75	21.48		12.27			0.16	0.64		1.44	(. 1 -	- 6.0			
Purge Method: BG. Lev Measuring Reference: TOC															
Time															
Volume Purged (gal)			v		2		1	4		6					
Temperature (° F)			69.3		68.8	31	6	8.8	68178		<u> </u>				
рН			6.61		(م.لة	3	6.63		6.60						
Specific Conductivity (umhos/cm)		220		2300		230		2	300					
Turbidity/Color			300	7	->		-	_		-)					
Odor			X)	->		-	3	-	-5					
Comments:													_		

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Project No: 03-10	3.00		Date: _12-13-06										
Project Name: -ABI	Ē		Well N°: -MW3										
Field Personnel: M	ike & Maz		Weather: Cloudy										
Project Location:	\77\	5 Mission	Blvd.										
PURGE WATER VOLUME	Total Well Depth (ft)	Depth to Water (ft	Water Column (ft)	Ca	Multiplic		Casing Volume (gal)	Purged Volume (gal)					
CALCULATION	33.75	20.66	13.09	2"	4"	6"	2.0						
	33.75	20.00	1,	0.16	0.64	1.44							
Purge Method: Bailer Measuring Reference:													
Time													
Volume Purged (gal)		0	2	4	-	6							
Temperature (° F)		69.1	68:	9 6	8.7	68.72							
рН		6.71	6.7	0 6	. 46	6.63		,					
Specific Conductivity	(umhos/cm)	2 200		0 -	7	->							
Turbidity/Color		gray			~	_5							
Odor		Yer	->		7	->							
Comments: ——													

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Date: -12-13-06

Well No: -MW4

Field Personnel: M					- 0\		eathe	r:	6	100	-(y	
Project Location: 17715 Mission Blod.													
PURGE WATER VOLUME	Total Well Depth (ft)	Depth to Water (ft		Water Column (ft)			Ca	Multipli sing Dia		r		Casing Volume (gal)	Purged Volume (gal)
CALCULATION	29	1	9.64	6	9.36		2"	4"	6"			1.44	4.5
							0.16	0.64	.	1.44			
Purge Method: _	Bai	1-	er		. Measu	rinç	g Refe	erence	:	To	2		
Time													
Volume Purged (gal)			6		1.5			3		4.5			
Temperature (° F)			69.9		69.6		69	- 0	6	8.8			*
рН			6.66	0	6.6	2	6.	57	6	.53)		
Specific Conductivity (umhos/cm)		2360		2300	>	23	00	22	co			
Turbidity/Color			1.5 M	7	->			7	_	う			
Odor			Na		->			7	-	2			
Comments: ——													

Project No: 03-103.00

Project Name: ABE

Project No: 03-10	3.00			Date: <u>12-13-06</u>									
Project Name: -ABE	i			Well N°: -MW5									
Field Personnel: Mi	ike & Maz			Weather: Cloady									
Project Location:		17715 4	1:ssion B	sion BlvL									
PURGE WATER VOLUME	Total Well Depth (ft)	Depth to Water (ft	Water Column (ft)	Ca	Multiplic		Casing Volume (gal)	Purged Volume (gal)					
CALCULATION	28	17.45	10.55	2"	4"	6"	1,5	5.06					
	26	11.12	10.55	0.16	0.64	1.44	1.68						
Purge Method: Bailey Measuring Reference: Toc													
Time													
Volume Purged (gal)	0	1.5	3	-0	5								
Temperature (° F)		69.	0 68.7	68	8	68.75							
рН		6.70	6.6		63	6.60							
Specific Conductivity (umhos/cm)	220		0 23	00	7200							
Turbidity/Color		BYON	4)		5	4							
Odor		No	->	-	ゝ	4							
Comments:		(

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Project No: <u>03-103.00</u>							Date: _12-13-06									
Project Name: -ABE							Well N°: MW6									
Field Personnel: Mi	_	Weather: Cloudy														
Project Location:	cation: 17715 Mission Blvd.															
PURGE WATER VOLUME	Total Well Depth (ft)				Water Column (ft)			Multipli sing Dia		er	Casing Volume (gal)	Purged Volume (gal)				
CALCULATION	0.5	1-	772 7		.28		2"	4"		6"	116	3.45				
	25	'			1.00		0.16	0.64		1.44	1.16	53.5				
Purge Method: Bailer Measuring Reference: TGC																
Time																
Volume Purged (gal)			0		i		2	2 .		3.5						
Temperature (° F)			70.0		69.9		69.9		69.7							
рН			6.72		670)	6.69		6.68							
Specific Conductivity (umhos/cm)		230	C	220		211	, 0	2200							
Turbidity/Color			Bigo	めか	-)		J	2		9						
Odor		NO		3		_	7		7							
Comments: ——																

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Project No: <u>03-103.00</u>							Date: _12-13-06								
Project Name: -ABI	E			_		Well N°: MW7									
Field Personnel: M	ike & Maz					Weather: Croudy									
Project Location:	17	17715 Mission Rlvd.													
PURGE WATER VOLUME	Total Well Depth to Depth (ft) Water (ft				Column (ft)	=	Ca	Multipli		er	Casing Volume (gal)		Purged Volume (gal)		
CALCULATION						1	2"	4"	T	6"			7.		
	25	1	8.58	6	,42	0	0.16	0.64		1.44	1.02		3.0		
Purge Method: Baller Measuring Reference:															
Time						I									
Volume Purged (gal)			0.		(-	2		3					
Temperature (° F)			69.4	1 1	69.7		69	.6	6	9.3					
рН			6.6	7	6.60	1	6.	58	6	56					
Specific Conductivity ((umhos/cm)		2300		300		23	00	-	->					
Turbidity/Color			Brown	2 .	>	I		1	d	->	I				
Odor			No	0	-)		-	5	0	ー					
Comments: —		_				_			7	*					

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