FIRST 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.

March 29, 2006 Project 03-103.07



March 29, 2006 Project 03-103.07

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

APR 1 0 2006

Environmental Health

Subject:

Report for First 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 first 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 March 10, 2006, Sierra obtained and recorded groundwater data, and collected groundwater samples from three groundwater monitoring wells (MW1 through MW3) at 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).

GROUNDWATER MONITORING

On March 10, 2006, Sierra performed the first quarter 2006 groundwater monitoring at the Site. Sierra's field personnel measured the groundwater levels at MW1 through MW3 (Figure 2) using an electronic sounder. Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 17.85' to 19.15' 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-3 were collected from the wells. After collection, the groundwater from each well was transferred into clean volatile organic analysis (VOA) vials. The VOAs were sealed with Teflon-septum screw caps, labeled, placed on ice in a cooler, and delivered to Entech 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) 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

Sierra has recently received an approval letter from ACHCS for the Work plan regarding Soil and Groundwater Investigation. Sierra will perform the groundwater investigation as soon as all the proper permit processing is completed.

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

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 C - Field Notes

cc: Mr. Amir Gholami, ACHCS (1 Copy)

R04-103.07\1stQ2006GWMH03292006

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
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

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)
МWЗ	8-18-00	2	99.69	20.68	79.01
	3-30-01	_	00.00	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

1.

Depths to groundwater were measured to the top of the well casings Water table elevations were measured in relation to an assumed datum (100') relative elevation 2.

TABLE II
ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Sample ID	Sample Date	Sample Location	TPHG µg/L	Benzene μg/L	Toluene μ g /L	Ethylbenzene μg/L	Xylenes μg/L	MTBE 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	i	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 3-10-06		40,000	3,300	7,500	3,700	18,000	2,500
	3-10-00		53,000	3,600	6,900	4,000	18,000	3,300
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	İ	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	1	66,000	1,500	210	4,500	9,200	1,900
*	03-09-04 6-24-04	ĺ	61,000	1,500	2,000	4,200	8,500	2,200
*	9-09-04		29,000	1,200	72 110	3,100	6,000	2,100
*	12-21-04		37,000 27,000	1,600 1,400	110 84	4,000	8,500 5,400	3,100
*	3-16-05		27,000 54,000	1,700	140	3,100	5,400	3,200
*	6-09-05		2,800	1,700 420	ND	4,500 180	8,900	4,000
*	9-22-05		33,000	1,400	ND ND	3,400	51 5,700	930
*	12-7-05		20,000	1,400	130	3,400	5,700 6,000	2,200 3,000
*	3-10-06		34,000	2,100	170	4,200	7,500	4,400
	3 10-00		54,000	۵,۱۰۰	170	4,200	7,500	4,400

TABLE II
ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES
CONTINUED

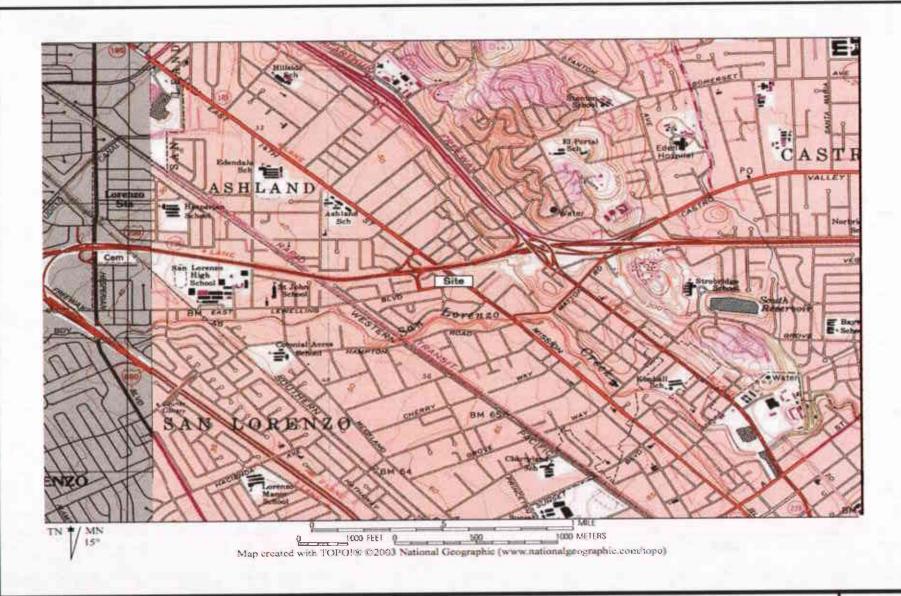
Sample ID	Sample Date	Sample Location	TPHG µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene μg/L	Xylenes μg/L	MTBE μg/L
<u> </u>								
MW-3	8-18-00	мwз	46,000	3,200	550	3,700	14,000	2,200
*	3-30-01		30,000	3,300	340	2,800	9,100	4,700
*	6-22-01		35,000	4,000	340	2,900	7,600	4,100
*	9-20-01		30,000	3,800	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	1	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	ļ	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	ļ	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	1	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

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.

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

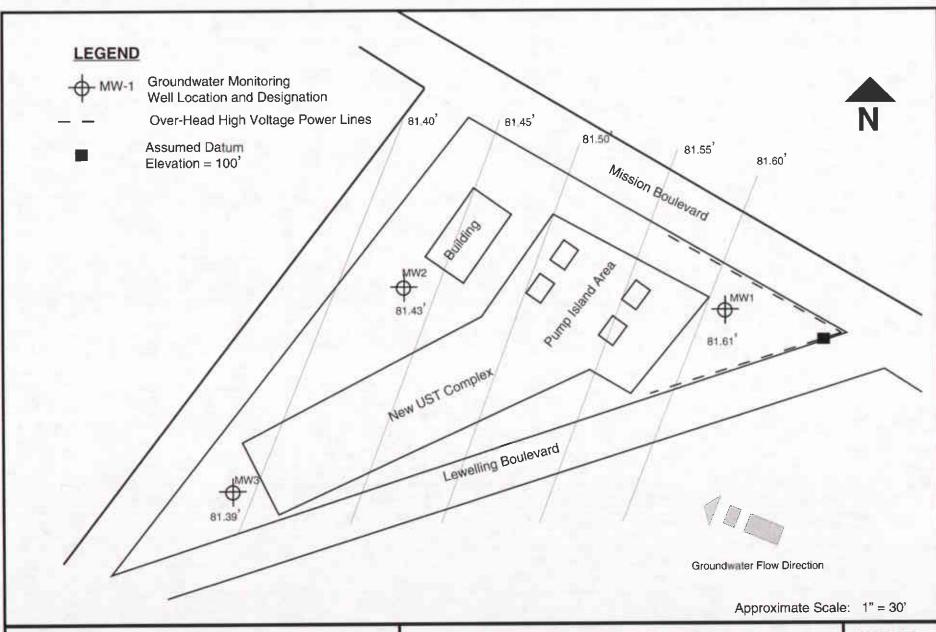
SITE LOCATION MAP

First Quarter 2006 Groundwater Monitoring Report ABE Petroleum LLC

17715 Mission Boulevard · Hayward · California

FIGURE

March 29, 2006 Project 03-103.07





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Environmental Consultants

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Groundwater Monitoring Well Locations

First Quarter 2006 Groundwater Monitoring ABE Petroleum LLC

17715 Mission Boulevard • Hayward • California

FIGURE

March. 29, 2006 Project 03-103.07

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.

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.

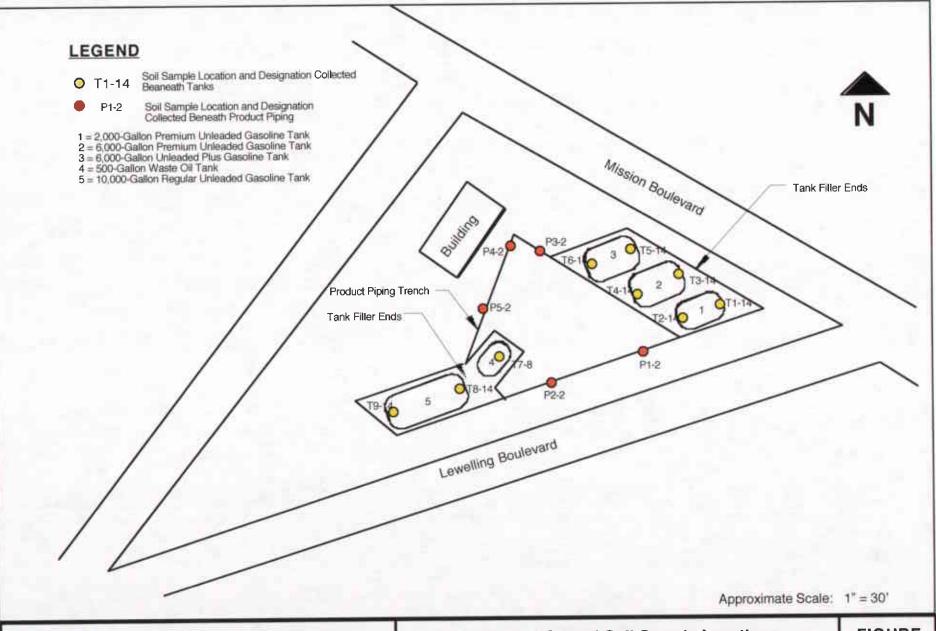
On December 21, 2004, Sierra performed fourth quarter 2004 groundwater monitoring at the Site. Sierra's field personnel measured the groundwater levels at MW1 through MW3 (Figure 2). Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 22.92' to 24.21' feet 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.





SIERRA ENVIRONMENTAL, INC. Environmental Consultants

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Former UST and Soil Sample Locations

First Quarter 2006 Groundwater Monitoring ABE Petroleum LLC

17715 Mission Boulevard · Hayward · California

FIGURE

March 29, 2006 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: 48366

Sierra Environmental, Inc.

Issued: 03/22/2006

980 West Taylor Street

San Jose, CA 95126

Project Number: 03-103

Project Name: ABE

Global ID: T0600102154

Project Location: 17715 Mission Blvd. /Hayward, CA

Certificate of Analysis - Final Report

On March 10, 2006, samples were received under chain of custody for analysis. Entech analyzes samples "as received" unless otherwise noted. The following results are included:

Matrix

<u>Test</u>

Comments

Liquid

Electronic Deliverables

EPA 8260B for Groundwater and Water - EPA 624 for

Wastewater

TPH as Gasoline by GC/MS

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,

Erin Cunniffe

Operations Manager

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

GlobalID: T0600102154

Certificate of Analysis - Data Report

Samples Received: 03/10/2006 Sample Collected by: Client

Lab #: 48366-001 Sample ID: MW-1 Matrix: Liquid Sample Date: 3/10/2006

Result (Ougl D/P-F	Detection Limit	linite	Pren Date	Pren Ratch		8260Petroleum OC Batch
				.			WM1060321
			μg/L				WM1060321
6900	200	100	μg/L	N/A	N/A	3/21/2006	WM1060321
4000	200	100	μ g/L	N/A	N/A	3/21/2006	WM1060321
18000	200	100	μg/L	N/A	N/A	3/21/2006	WM1060321
3300	200	200	μg/L	N/A	N/A	3/21/2006	WM1060321
ND	200	1000	μg/L	N/A	N/A	3/21/2006	WM1060321
ND	200	2000	μg/L	N/A	N/A	3/21/2006	WM1060321
ND	200	1000	μg/L	N/A	N/A	3/21/2006	WM1060321
ND	200	1000	μg/L	N/A	N/A	3/21/2006	WM1060321
	Result 3600 6900 4000 18000 3300 ND ND ND	Result Qual D/P-F 3600 200 6900 200 4000 200 18000 200 3300 200 ND 200 ND 200 ND 200 ND 200 ND 200	3600 200 100 6900 200 100 4000 200 100 18000 200 100 3300 200 200 ND 200 1000 ND 200 1000 ND 200 2000 ND 200 1000	Result Qual D/P-F Detection Limit Units 3600 200 100 μg/L 6900 200 100 μg/L 4000 200 100 μg/L 18000 200 100 μg/L 3300 200 200 μg/L ND 200 1000 μg/L ND 200 2000 μg/L ND 200 1000 μg/L ND 200 1000 μg/L	Result Qual D/P-F Detection Limit Units Prep Date 3600 200 100 μg/L N/A 6900 200 100 μg/L N/A 4000 200 100 μg/L N/A 18000 200 100 μg/L N/A 3300 200 200 μg/L N/A ND 200 1000 μg/L N/A ND 200 2000 μg/L N/A ND 200 1000 μg/L N/A ND 200 1000 μg/L N/A	Result Qual D/P-F Detection Limit Units Prep Date Prep Batch 3600 200 100 μg/L N/A N/A 6900 200 100 μg/L N/A N/A 4000 200 100 μg/L N/A N/A 18000 200 100 μg/L N/A N/A 3300 200 200 μg/L N/A N/A ND 200 1000 μg/L N/A N/A ND 200 2000 μg/L N/A N/A ND 200 1000 μg/L N/A N/A ND 200 1000 μg/L N/A N/A	Result Qual D/P-F Detection Limit Units Prep Date Prep Batch Analysis Date 3600 200 100 μg/L N/A N/A 3/21/2006 6900 200 100 μg/L N/A N/A 3/21/2006 4000 200 100 μg/L N/A N/A 3/21/2006 18000 200 100 μg/L N/A N/A 3/21/2006 3300 200 200 μg/L N/A N/A 3/21/2006 ND 200 1000 μg/L N/A N/A N/A 3/21/2006 ND 200 2000 μg/L N/A N/A N/A 3/21/2006 ND 200 2000 μg/L N/A N/A N/A 3/21/2006 ND 200 1000 μg/L N/A N/A N/A 3/21/2006

Surrogate	Surrogate Recovery	Control Limits (%)				
4-Bromofluorobenzene	96.4	60	-	130		
Dibromofluoromethane	111	60	-	130		
Toluene-d8	95.3	60	-	130		

Analyzed by: XBian Reviewed by: MaiChiTu

GC-MS									TPH as Gasoline - GC-MS		
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch		
TPH as Gasoline	53000		200	5000	μg/L	N/A	N/A	3/21/2006	WM1060321		
Surrogate	Surrogate Recovery		Control Limits (%)				Analyzed by: XBian				
4-Bromofluorobenzene	90.8		60	- 130				Reviewed by: Mai@	ChiTu		
Dibromofluoromethane	100		60	- 130							
Toluene-d8	90.8		60	- 130							

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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

GlobalID: T0600102154

Certificate of Analysis - Data Report

Samples Received: 03/10/2006 Sample Collected by: Client

Lab #: 48366-002

Sample ID: MW-2

Matrix: Liquid Sample Date: 3/10/2006

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	8260Petroleum QC Batch
Benzene	2100		100	50	μg/L	N/A	N/A	3/21/2006	WM1060321
Tolucne	170		100	50	μg/L	N/A	N/A	3/21/2006	WM1060321
Ethyl Benzene	4200		100	50	μg/I_	N/A	N/A	3/21/2006	WM106032
Xylenes, Total	7500		100	50	μg/L	N/A	N/A	3/21/2006	WM1060321
Methyl-t-butyl Ether	4400		100	100	μg/L	N/A	N/A	3/21/2006	WM106032
tert-Butyl Ethyl Ether	ND		100	500	μg/L	N/A	N/A	3/21/2006	WM106032
tert-Butanol (TBA)	1200		100	1000	μg/L	N/A	N/A	3/21/2006	WM106032
Diisopropyl Ether	ND		100	500	μg/L	N/A	N/A	3/21/2006	WM106032
tert-Amyl Methyl Ether	ND		100	500	μg/L	N/A	N/A	3/21/2006	WM1060321
Surrogate	Surrogate Recovery		Control I	imits (%)	•		-	Analyzed by: XBia	ID

Surrogate	Surrogate Recovery	Control Limits (%)				
4-Bromofluorobenzene	90.9	60 - 130				
Dibromofluoromethane	110	60 - 130				
Toluene-d8	92.2	60 - 130				

Analyzed by: XBian
Reviewed by: MaiChiTu

GC-MS							TPH as Gasoline - GC-MS	
Parameter	Result Qu	ial D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	34000	100	2500	μg/L	N/A	N/A	3/21/2006	WM1060321
Surrogate	Surrogate Recovery	Control	Limits (%)				Analyzed by: XBian	
4-Bromofluorobenzene	85.7	60	- 130				Reviewed by: Mai(ChiTu
Dibromofluoromethane	99.4	60	- 130					
Toluene-d8	87.8	60	- 130					

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Phone: (408) 588-0200

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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

GlobalID: T0600102154

Certificate of Analysis - Data Report

Samples Received: 03/10/2006 Sample Collected by: Client

Lab #: 48366-003

Sample ID: MW-3

Matrix: Liquid Sample Date: 3/10/2006

Parameter	Result	Qual D/I	P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	8260Petroleum OC Batch
Benzene	1100		:5	12	μg/L	N/A	N/A	3/21/2006	WM106032
Toluene	24	2	.5	12	μg/L	N/A	N/A	3/21/2006	WM106032
Ethyl Benzene	990	2	.5	12	μg/L	N/A	N/A	3/21/2006	WM106032
Xylenes, Total	810	2	5	12	μ g/ L	N/A	N/A	3/21/2006	WM106032
Methyl-t-butyl Ether	1300	2	5	25	μg/L	N/A	N/A	3/21/2006	WM106032
tert-Butyl Ethyl Ether	ND	2	5	120	μg/L	N/A	N/A	3/21/2006	WM106032
tert-Butanol (TBA)	1400	2	5	250	μg/L	N/A	N/A	3/21/2006	WM106032
Diisopropyl Ether	ND	2	5	120	μg/L	N/A	N/A	3/21/2006	WM106032
tert-Amyl Methyl Ether	ND	2	5	120	μg/L	N/A	N/A	3/21/2006	WM106032
Surrogate	Surrogate Recovery	Con	trol Lin	aits (%)			-	Analyzed by: XBi	

Surrogate Recovery	Control Limits (%)				
93.6	60	-	130		
109	60	-	130		
92.8	60	-	130		
	93.6 109	93.6 60 109 60	93.6 60 - 109 60 -		

Reviewed by: MaiChiTu

GC-MS							TPH as Gas	oline - GC-MS
Parameter	Result Q	ual D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	9100	25	620	μg/l.	N/A	N/A	3/21/2006	WM1060321
Surrogate	Surrogate Recovery	Control 1	Limits (%)				Analyzed by: XBia	n
4-Bromofluorobenzene	88.2	60	- 130				Reviewed by: Mai0	hiTu
Dibromofluoromethane	98.9	60	- 130				·	
Toluene-d8	88.4	60	- 130					

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Method Blank - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM1060321 Validated by: MaiChiTu - 03/22/06

QC Batch Analysis Date: 3/21/2006

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	% Recovery	Control Limits				
4-Bromofluorobenzene	99.6	60	-	130		
Dibromofluoromethane	113	60	-	130		
Toluene-d8	103	60	-	130		

Laboratory Control Sample / Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM1060321 Reviewed by: MaiChiTu - 03/22/06

QC Batch ID Analysis Date: 3/21/2006

LCS

Parameter	Method Blan	k Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
Benzene	<0.50	20	21.7	µg/L	108	70 - 130
Methyl-t-butyl Ether	<1.0	20	24.6	μg/L	123	70 - 130
Toluene	<0.50	20	20.6	μg/L	103	70 - 130
Surrogate	% Recovery (Control Limits				
4-Bromofluorobenzene	98.1	60 - 130				

 4-Bromofluorobenzene
 98.1
 60 - 130

 Dibromofluoromethane
 108.0
 60 - 130

 Toluene-d8
 93.6
 60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	<0.50	20	22.1	μg/L	110	1.8	25.0	70 - 130
Methyl-t-butyl Ether	<1.0	20	25.2	μg/L	126	2.4	25.0	70 - 130
Toluene	<0.50	20	20.9	µg/L	104	1.4	25.0	70 - 130

Surrogate	% Recovery	Control Limit				
4-Bromofluorobenzene	98.5	60 - 130				
Dibromofluoromethane	109.0	60 - 130				
Toluene-d8	94.5	60 - 130				

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Method Blank - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM1060321

Validated by: MaiChiTu - 03/22/06

QC Batch Analysis Date: 3/21/2006

Parameter	Result	DF	PQLR	Units
TPH as Gasoline	ND	1	25	µg/L

Surrogate for Blank	% Recovery	Cont	rol	Limit
4-Bromofluorobenzene	93.8	60	-	130
Dibromofluoromethane	102	60	-	130
Toluene-d8	98.6	60	-	130

Laboratory Control Sample / Duplicate - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM1060321 Reviewed by: MaiChiTu - 03/22/06

QC Batch ID Analysis Date: 3/21/2006

LCS

Parameter TPH as Gasoline	Method B <25	lank Spike Amt 120	SpikeResult 136	Units µg/L	% Recovery 108	Recovery Limits 65 - 135
Surrogate	% Recovery	Control Limits				
4-Bromofluorobenzene	96.4	60 - 130				
Dibromofluoromethane	98.6	60 - 130				
Toluene-d8	97.1	60 - 130				

LCSD

Parameter	Method Blan	k Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Gasoline	<25	120	127	μg/L	102	6.6	25.0	65 - 135
Surrogate	9/ Daggrams (Control Limita						

% Recovery	Contr	oł	Limits
97,7	60	-	130
98.6	60	-	130
96.6	60	-	130
	97,7 98.6	97.7 60 98.6 60	97.7 60 - 98.6 60 -

lab# 48366



SIERRA ENVIRONMENTAL, INC

CHAIN OF CUSTODY Date: 3-10-05 Project No: _03-103.067-Project Name: __ABE **Paul Garg** Project Location: 17715 Mission Boulevard Client: **Analysis Requested Turnaround Time** Sampling Matrix Nº of Sample Date **Containers** Time Sampled TPHG **BTEX** BTEX, Fuel 8015/8020 8015 418.1 TRPH 8020 Oxygenates **TPHD** TPHG 8260 BTEX,MTBE -001 MW-13-10-06 × 24-hour Normal WATER Other 24-hour Normal × Nor nal 24-hour X × Other Normal 24-hour Normal 24-hour Other 24-hour Normal Other 24-hour Normal Other the results in EDF F GLOBALID AF TOGOD 10215\$ Remarks: Time Received 1127

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Appendix D FIELD NOTES



GROUNDWATER MONITORING DATA FORM

Project No:	03 -1	. 50	.07_		D	ate: _	` ` }.	<u>~\(</u>	5—	06	
Project Name: —AB	· E	<u> </u>			W	/eli Nº:	: <u>MW</u> _	-1			
-											
Project Location:	17	715	<u>, Mi</u>	ission	Boi	<u>llew</u>	يد کم				
DUB OF										- Makuma	
PURGE WATER VOLUME	Total Well Depth (ft)		epth to ater (ft	Water Colur (ft)	ភាអ	Ca	Multiplic Ising Diar			Casing Volume (gal)	Purged Volume (gal)
CALCULATION	33.25	1-	1.85	12-11	,	2"	4"		6"	2,46	6.0
!	JJ. ∠J	}	< 0.1	15.4		0.16	0.64 1.44				<u> </u>
Purge Method:	BAIL	- • V		Mea	in	- Defi	······································		TI	6C	
Pulge Medica				18100	isu,	g ne.	feno.				,
Time											
Volume Purged (gal)		\dashv	10	7		4			 C_		
Temperature (° F)						 `-					
			649		≤ <u>3</u>	 	C. 0		<u> </u>		
pH			6.61	6.	53	6	48	6.	42	-	!
Specific Conductivity (umhos/cm)		420		,!		フ		<u></u>		
Turbidity/Color			Liny	<u>, </u>	<u>→</u>		,		- }		
Odor			Xes		→	_	チ	-	9		
					·						*
Comments:											
											:
				 							

GROUNDWATER MONITORING DATA FORM

Project No:										
PURGE WATER VOLUME CALCULATION	Total Well Depth (ft)	Depth to Water (ft		Water Column (ft)		Multiplier Casing Diameter			Casing Volume (gal)	Purged Volume (gal)
	33.75	19.15		d. ا		.16	4 "	1.44	233	7.0
Purge Method: Bailar Measuring Reference: 700										
Time										
Volume Purged (gal)	 	0)	Z	,3		4.5	7.0		
Temperature (° F)		66	.0		3.3			66.9		
рН		60	1	6.1	63			6349		
Specific Conductivity (umhos/cm)			4200		ص	4	100	4200	,	
Turbidity/Color		ST	14 14		3		-4	7		_
Odor		Xe	5		5_	*	-3	 		
Comments: HC alox										



GROUNDWATER MONITORING DATA FORM

Project No:C		Date: 3 - 10 - 06									
Project Name: -AB	5		Well N°:	Well N°: শω-3							
Field Personnel:	Mil	Le & M	Weather: Cloudy								
Project Location: 17715 Mission Boulever											
Project Location.											
PURGE WATER VOLUME CALCULATION	Total Well Depth (ft)	Depth to Water (ft	Water Column (ft)		Multipli sing Dia		Casing Volume (gal)	Purged Volume (gal)			
	22.75	101 -	15.42	2"	4"	6"	2.47	7.4			
	33.75	18.30	17.76	0.16	0.64	1.44		7.4 27.5			
Purge Method: _	Bail	10	Mosey	-lan Dofe		. 70) (
Purge Method: Barring Reference: 100											
Time											
Volume Purged (gal)	0	7.5	+-	ט כ	7.5						
		_				 					
Temperature (° F)	65.		- 	.81	67.1						
pH		6,48	6.36		28	6.21					
Specific Conductivity (u	umhos/cm)	3900	_	e 42	بعا	9200					
Turbidity/Color		3-01	, -5 >	_	P	ح-					
Odor		Yes	->		3	-5					
Comments: AC Octor											

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