

May 8, 2006

QUARTERLY GROUNDWATER MONITORING REPORT  
MARCH 2006 GROUNDWATER SAMPLING  
ASE JOB NO. 3934

at  
Albany Hill Mini Mart  
800 San Pablo Avenue  
Albany, CA 94706

**RECEIVED**

*By lopprojectop at 12:20 pm, Jun 02, 2006*

Prepared by:  
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## 1.0 INTRODUCTION

### Site Location (Site), See Figure 1

Albany Hill Mini Mart  
800 San Pablo Avenue  
Albany, CA 94706

### Responsible Party

Dr. Joginder Sikand  
1300 Ptarmigan Drive #1  
Walnut Creek, CA 94595

### Environmental Consulting Firm

Aqua Science Engineers, Inc. (ASE)  
208 W. El Pintado  
Danville, CA 94526  
Contact: Robert Kitay, Senior Geologist  
(925) 820-9391

### Agency Review

Alameda County Health  
Care Services Agency (ACHCSA)  
1131 Harbor Bay Pkwy  
Suite 250  
Alameda, CA 94502  
Contact: Jerry Wickham  
(510) 567-6791

California Regional Water  
Quality Control Board (RWQCB)  
San Francisco Bay Region  
1515 Clay Street, Suite 1400  
Oakland, CA 94612  
Contact: Ms. Betty Graham  
(510) 622-2433

The following is a report detailing the results of the March 2006 quarterly groundwater sampling at the Albany Hill Mini Mart Property. This sampling was conducted as required by the ACHCSA and RWQCB. ASE prepared this report on behalf of Dr. Joginder Sikand, the property owner and responsible party.



## **2.0 GROUNDWATER FLOW DIRECTION AND GRADIENT**

On March 6, 2006, ASE measured the depth to groundwater in all ten site monitoring wells using an electric water level sounder. The surface of the groundwater was also checked for the presence of free-floating hydrocarbons or sheen. No sheen or free-floating hydrocarbons were observed in any of the monitoring wells. Groundwater elevation data is presented in Table One. The top of casing elevation of each monitoring well was also resurveyed to mean sea level (msl) by CSS Environmental Services of Novato, California on April 26, 2006. The top of casing elevations are also tabulated in Table One, and the survey report is presented in Appendix A. A groundwater potentiometric surface map is presented as Figure 2. The groundwater flow direction and gradient beneath the site is very inconsistent this quarter with flow direction components to the north, east, and south.

## **3.0 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS**

On March 6, 2006, ASE collected groundwater samples from all monitoring wells except MW-8. Monitoring well MW-8 could not be accessed for sampling due to a car parked over the well. Prior to sampling, each monitoring well was purged of at least three well casing volumes of groundwater using disposable polyethylene bailers. The parameters pH, temperature, and conductivity were monitored during the well purging, and samples were not collected until these parameters stabilized. Groundwater samples were collected from each well using the same polyethylene bailers and were decanted from the bottom of the bailers using low-flow emptying devices into 40-ml volatile organic analysis (VOA) vials, pre-preserved with hydrochloric acid. The samples were capped without headspace, labeled, and placed in coolers with wet ice for transport to Kiff Analytical of Davis, California (ELAP #2236) under appropriate chain-of-custody documentation. Petroleum hydrocarbon odors were noted during the purging and sampling of monitoring wells MW-1, MW-2, MW-3, MW-7, and MW-9. Well sampling field logs are presented in Appendix B.

The well purge water was placed into a 55-gallon steel drum and labeled for temporary storage until proper disposal could be arranged.

The groundwater samples were analyzed by Kiff for total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylbenzene, and total xylenes (collectively known as BTEX), fuel oxygenates, and lead scavengers by EPA Method 8260B, and total petroleum hydrocarbons as diesel (TPH-D) by EPA Method 8015. The analytical results for this and previous sampling events are summarized in Table Two. The most recent certified analytical report and chain-of-custody documentation are included as Appendix C.

#### 4.0 RESULTS AND CONCLUSIONS

- Concentrations of TPH-G, TPH-D, MTBE and BTEX constituents other than benzene decreased slightly in groundwater samples collected from monitoring well MW-1, while benzene concentrations increased slightly this quarter.
- Concentrations of TPH-D decreased slightly in groundwater samples collected from MW-2 this quarter, while benzene and MTBE concentrations increased slightly.
- Concentrations of TPH-G, TPH-D, MTBE and BTEX decreased significantly in groundwater samples collected from monitoring well MW-3 this quarter.
- Concentrations of all compounds analyzed remained similar in groundwater samples collected from monitoring well MW-4 this quarter.
- Concentrations of TPH-G and BTEX increased in groundwater samples collected from monitoring well MW-5R this quarter.
- Concentrations of TPH-G increased slightly this quarter, while concentrations of TPH-D, benzene, and MTBE decreased in groundwater samples collected from monitoring well MW-6 this quarter.
- There was a significant decrease in all hydrocarbon concentrations in groundwater samples collected from monitoring well MW-7 this quarter.
- Concentrations of TPH-G and ethylbenzene decreased this quarter, while concentrations of benzene and toluene increased this quarter in groundwater samples collected from monitoring well MW-9.
- Concentrations of TPH-G, TPH-D, and BTEX detected in groundwater samples collected from monitoring well MW-10 decreased slightly this quarter, while fuel oxygenate concentrations increased slightly in the same sample.

#### Concentrations exceeding Environmental Screening Levels<sup>1</sup> (ESLs)

- In MW-1 the benzene concentration exceeded the ESL.
- In MW-4 the TPH-G, benzene, and total xylenes concentrations exceeded the ESLs.
- In MW-5R the TPH-G, toluene, ethylbenzene and total xylene concentrations exceeded the ESLs.
- In MW-6, the TPH-G concentration exceeded the ESL.
- In MW-7, the TPH-G, ethylbenzene, and total xylenes concentrations exceeded ESLs.
- In MW-9, the TPH-G, benzene, and total xylenes concentrations exceeded ESLs.

#### 5.0 RECOMMENDATIONS

ASE recommends continued groundwater monitoring on a quarterly basis. The next groundwater sampling is scheduled for June 2006.

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<sup>1</sup> As presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region dated February 2005.



ASE has recently conducted the work outlined in the "Interim Report of Soil and Groundwater Assessment and Workplan for Additional Activities" document prepared by ASE on September 29, 2005. A report of these activities will be prepared during the next quarter.

## 6.0 REPORT LIMITATIONS


The results presented in this report represent the conditions at the time of the groundwater sampling, at the specific locations where the groundwater samples were collected, and for the specific parameters analyzed by the laboratory. It does not fully characterize the site for contamination resulting from sources other than the former underground storage tanks and associated plumbing at the site, or for parameters not analyzed by the laboratory. All of the laboratory work cited in this report was prepared under the direction of an independent CAL-DHS certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.

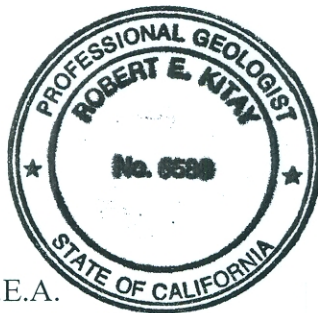
Aqua Science Engineers appreciates the opportunity to provide environmental consulting services for this project, and trust that this report meets your needs. Please feel free to call us at (925) 820-9391 if you have any questions or comments.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

  
David Rainis  
Project Geologist

  
Robert E. Kitay, P.G., R.E.A.  
Senior Geologist



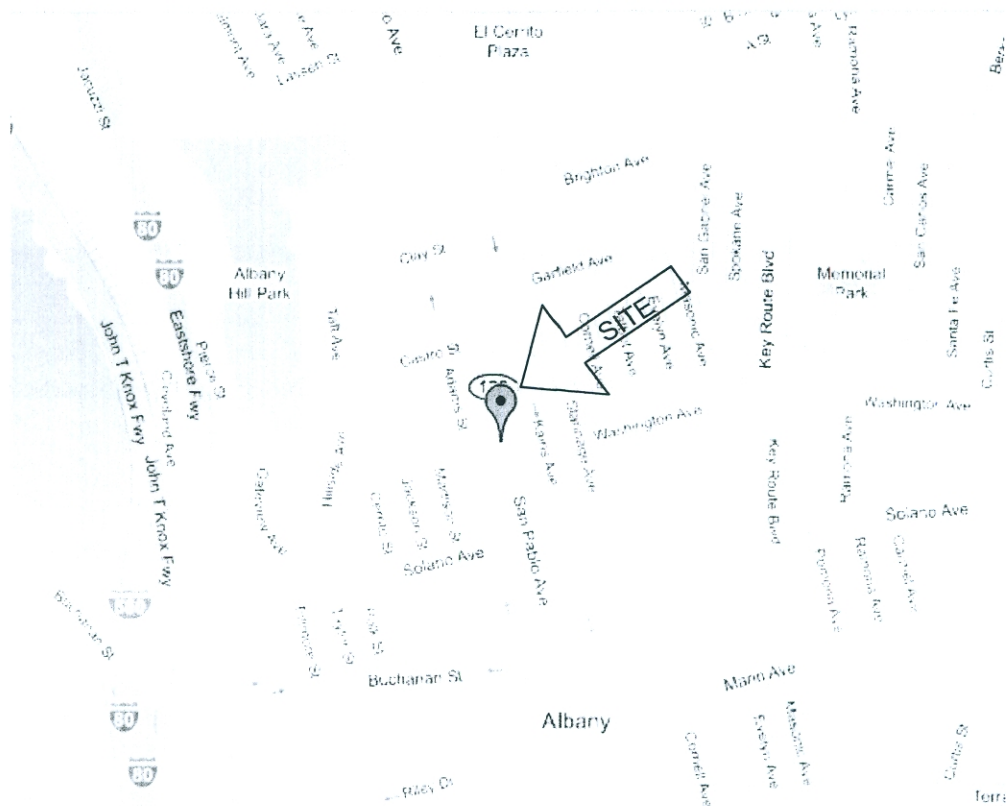
Attachments: Figures 1 and 2  
Tables One and Two  
Appendices A through C

cc: Mr. Jerry Wickham, ACHCSA  
Ms. Betty Graham, RWQCB

## FIGURES



NORTH



### LOCATION MAP

ALBANY HILL MINI MART  
800 SAN PABLO AVE  
ALBANY, CALIFORNIA

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FIGURE 1

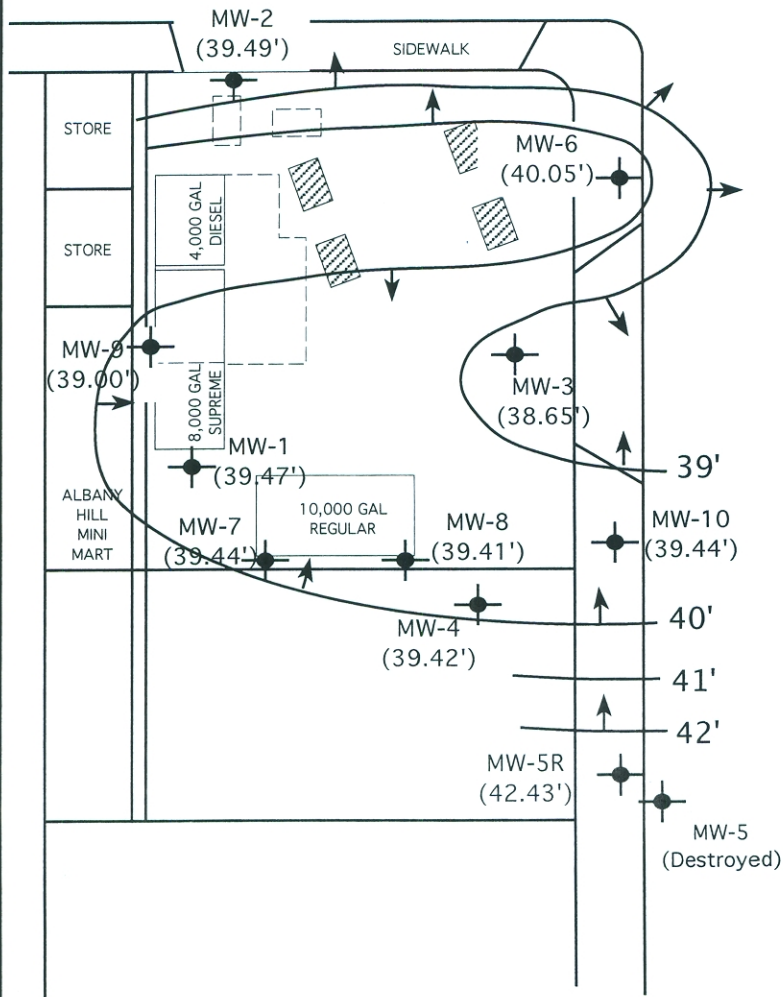


NORTH

SCALE: 1" = 20'

WASHINGTON AVENUE

SAN PABLO AVENUE



### LEGEND

- MW-9 (39.00') MONITORING WELL WITH GROUNDWATER ELEVATION IN FEET
- GROUNDWATER ELEVATION COUNTOUR LINE WITH FLOW DIRECTION
- APPROXIMATE FORMER UST LOCATION

POTENTIOMETRIC  
SURFACE COUNTOUR MAP  
MARCH 6, 2006

ALBANY HILL MINI MART  
800 SAN PABLO AVENUE  
ALBANY, CALIFORNIA

AQUA SCIENCE ENGINEERS

Figure 2



## TABLES

**TABLE ONE**  
Groundwater Elevation Data  
**Albany Hill Mini Mart**  
800 San Pablo Avenue, Albany, CA

Well ID	Date of Measurement	Top of Casing Elevation* (feet)	Depth to Water (feet)	Groundwater Elevation (feet)
MW-1	8/6/99	101.68	11.95	89.73
	11/5/99		12.72	88.96
	2/7/00		10.34	91.34
	5/5/00		10.59	91.09
	8/3/00		11.75	89.93
	11/8/00		11.67	90.01
	2/8/01		11.20	90.48
	6/7/01		11.35	90.33
	9/7/01		11.71	89.97
	12/13/01		10.67	91.01
	6/13/02	46.42	11.42	90.26
	9/11/02		12.42	89.26
	2/14/03		10.69	35.73
	9/10/04		13.83	32.59
	12/7/04		12.18	34.24
	4/18/05		9.92	36.50
	6/20/05		10.64	35.78
	10/7/05		12.42	34.00
	12/7/05		11.51	34.91
	3/6/06		9.35	39.47
MW-2	8/6/99	101.57	10.83	90.74
	11/5/99		11.66	89.91
	2/7/00		9.23	92.34
	5/5/00		9.54	92.03
	8/3/00		10.69	90.88
	11/8/00		10.62	90.95
	2/8/01		10.17	91.40
	6/7/01		10.30	91.27
	9/7/01		10.65	90.92
	12/13/01		9.65	91.92
	6/13/02	45.31	10.37	91.20
	9/11/02		11.32	90.25
	2/14/03		9.59	35.72
	9/10/04		11.78	33.53
	12/7/04		11.13	34.18
	4/18/05		8.71	36.60
	6/20/05		9.60	35.71
	10/7/05		11.39	33.92
	12/7/05		11.49	33.82
	3/6/06		8.22	39.49

**TABLE ONE**  
Groundwater Elevation Data  
**Albany Hill Mini Mart**  
800 San Pablo Avenue, Albany, CA

Well ID	Date of Measurement	Top of Casing Elevation* (feet)	Depth to Water (feet)	Groundwater Elevation (feet)
MW-3	8/6/99	100.33	10.58	89.75
	11/5/99		11.39	88.94
	2/7/00		9.05	91.28
	5/5/00		9.29	91.04
	8/3/00		10.43	89.90
	11/8/00		10.33	90.00
	2/8/01		9.94	90.39
	6/7/01		10.04	90.29
	9/7/01		10.31	90.02
	12/13/01		9.38	90.95
	6/13/02	45.08	10.03	90.30
	9/11/02		11.02	89.31
	2/14/03		9.40	35.68
	9/10/04		12.51	32.57
	12/7/04		11.86	33.22
	4/18/05		8.49	36.59
	6/20/05		9.34	35.74
	10/7/05		11.11	33.97
	12/7/05		10.22	34.86
	3/6/06	47.49	8.84	38.65
MW-4	6/13/02	100.05	10.18	89.87
	9/11/02	45.20	11.12	88.93
	2/14/03		9.51	35.69
	9/10/04		11.59	33.61
	12/7/04		10.91	34.29
	4/18/05		8.62	36.58
	6/20/05		9.45	35.75
	10/7/05		11.20	34.00
	12/7/05		10.30	34.90
	3/6/06	47.61	8.19	39.42
MW-5	6/13/02	98.37	8.88	89.49
	9/11/02	44.12	9.95	88.42
	2/14/03		8.66	35.46
	9/10/04		10.26	33.86
	12/7/04		10.79	33.33
	4/18/05		Well Destroyed by City During Street Construction	
	6/20/05		Well Destroyed by City During Street Construction	
MW-5R	10/7/05	47.36	10.94	42.43
	12/7/05		9.97	
	3/6/06		4.93	

**TABLE ONE**  
Groundwater Elevation Data  
**Albany Hill Mini Mart**  
800 San Pablo Avenue, Albany, CA

Well ID	Date of Measurement	Top of Casing Elevation* (feet)	Depth to Water (feet)	Groundwater Elevation (feet)
MW-6	6/13/02	99.36	8.85	90.51
	9/11/02		9.82	89.54
	2/14/03	43.88	8.21	35.67
	9/10/04		10.33	33.55
	12/7/04		9.83	34.05
	4/18/05		7.08	36.80
	6/20/05		7.52	36.36
	10/7/05		10.92	32.96
	12/7/05		8.85	35.03
	3/6/06	46.27	6.22	40.05
MW-7	6/13/02	100.96	10.95	90.01
	9/11/02		11.90	89.06
	2/14/03	45.59	10.25	35.34
	9/10/04		12.35	33.24
	12/7/04		11.42	34.17
	4/18/05		9.34	36.25
	6/20/05		10.19	35.40
	10/7/05		12.96	32.63
	12/7/05		not sampled	
	3/6/06	48.36	8.92	39.44
MW-8	6/13/02	100.54	10.57	89.97
	9/11/02		11.53	89.01
	2/14/03	45.59	9.98	35.61
	9/10/04		11.98	33.61
	12/7/04		11.42	34.17
	4/18/05		8.99	36.60
	6/20/05		9.83	35.76
	10/7/05		11.60	33.99
	12/7/05		11.69	33.90
	3/6/06	47.99	8.58	39.41
MW-9	2/14/03	46.86	10.84	36.02
	9/10/04		12.97	33.89
	12/7/04		12.84	34.02
	4/18/05		9.75	37.11
	6/20/05		10.83	36.03
	10/7/05		12.59	34.27
	12/7/05		12.56	34.30
	3/6/06	49.24	10.24	39.00
MW-10	10/7/05		10.52	
	12/7/05		not sampled	
	3/6/06	46.90	7.46	39.44

Notes:

Data prior to September 10, 2004, including survey data, is based on tables compiled by AARS.

\* Top of casing elevations were initially surveyed to an arbitrary benchmark. The elevations were resurveyed on November 11, 2002 with respect mean sea level.

**TABLE TWO**  
Summary of Analytical Results for **GROUNDWATER** Samples  
**Albany Hill Mini Mart**  
800 San Pablo Avenue, Albany, CA  
All results are in **parts per billion (ppb)**

Well ID or Sample Point	Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TAME	TBA	MTBE	Other VOCs
MW-1	8/6/99	1,500	1,200	4.3	2.9	9.1	28	--	--	ND	--
	11/5/99	1,800	1,400	5.1	3.2	8.9	33	--	--	ND	--
	2/7/00	1,100	890	3.3	1.9	5.6	21	--	--	ND	--
	5/7/00	970	650	2.9	1.7	4.9	18	--	--	ND	--
	8/3/00	1,200	270*	190	43.0	41	160	--	--	360	--
	11/8/00	4,200	230*	990	200.0	130	560	--	--	840**	--
	2/8/01	2,800	380*	630	130.0	51	250	--	--	390	--
	6/7/01	650	190	97	13.0	20	62	--	--	320	--
	9/7/01	970	400	260	17.0	44	140	--	--	460	--
	12/13/01	291	< 50	91.7	1.4	17.4	7.2	--	--	499	--
	6/13/02	5,120	2,160*	1,860	22.0	316	318	--	--	325	--
	11/11/02	824	< 50	216	< 5	22	20	--	--	290	--
	2/14/03	1,783	590*	546	5.0	90	52	--	--	321	--
	9/10/04	900	82	210	8.4	52	23	< 0.5	5.1	220	< 0.5
	12/7/04	540	< 80	130	3.1	24	14	< 0.5	< 5.0	240	< 0.5
	4/18/05	1,600	< 200	390	3.6	32	57	< 0.5	< 5.0	240	0.53 1,2-DCA
	6/20/05	2,500	< 300	740	12.0	110	69	< 0.5	5.7	240	< 0.50
	10/7/05	520	130	97	26.0	11	28	< 0.50	< 5.0	190	< 0.50
	12/7/05	220	86	42	11	6.2	12	< 0.50	< 5.0	230	< 0.50
	<b>3/6/06</b>	<b>180</b>	<b>69</b>	<b>63</b>	<b>1.6</b>	<b>3.8</b>	<b>2.3</b>	<b>&lt; 0.50</b>	<b>&lt; 5.0</b>	<b>180</b>	<b>&lt; 0.50</b>
MW-2	8/6/99	ND	340	ND	ND	ND	ND	--	--	ND	--
	11/5/99	ND	420	ND	ND	ND	0.7	--	--	ND	--
	2/7/00	ND	310	ND	ND	ND	0.6	--	--	ND	--
	5/7/00	ND	280	ND	ND	ND	< 1	--	--	ND	--
	8/3/00	460	70*	79	3.0	43	8	--	--	3,300	--
	11/8/00	200	120	57	2.0	13	8	--	--	3,000	--
	2/8/01	290	80	50	1.0	0.6	4	--	--	3,100	--
	6/7/01	210	80	18	0.6	3	5	--	--	2,000	--
	9/7/01	230	ND	51	ND	8	8	--	--	2,400	--
	12/13/01	172	ND	53	1.2	7.7	8.4	--	--	1,780	--
	6/13/02	86	< 50	6	6.7	1.1	4.5	--	--	1,830	--
	11/11/02	1,040	< 50	5	1.0	< 1	5	--	--	1,250	--
	2/14/03	82	< 50	8	< 1	1	< 3	--	--	1,520	--
	9/10/04	< 100	72	1.6	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	620	< 1.0
	12/7/04	< 150	86	17	< 1.5	< 1.5	< 1.5	< 1.5	< 7.0	540	< 1.5
	4/18/05	280	130	55	< 1.5	4.4	< 1.5	< 1.5	< 20	840	< 1.5
	6/20/05	200	100	34	< 0.90	2.4	2.7	< 0.90	5.2	540	< 0.90
	10/7/05	< 90	150	11	< 0.90	< 0.90	< 0.90	< 0.90	< 5.0	360	< 0.90
	12/7/05	< 90	110	1.5	< 0.90	< 0.90	< 0.90	< 0.90	< 5.0	500	< 0.90
	<b>3/6/06</b>	<b>&lt; 90</b>	<b>88</b>	<b>7.0</b>	<b>&lt; 0.90</b>	<b>&lt; 0.90</b>	<b>&lt; 0.90</b>	<b>&lt; 0.90</b>	<b>5.2</b>	<b>610</b>	<b>&lt; 0.90</b>

**TABLE TWO**  
Summary of Analytical Results for **GROUNDWATER** Samples  
**Albany Hill Mini Mart**  
800 San Pablo Avenue, Albany, CA  
All results are in **parts per billion (ppb)**

Well ID or Sample Point	Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TAME	TBA	MTBE	Other VOCs
MW-3	8/6/99	ND	ND	ND	ND	ND	ND	--	--	ND	--
	11/5/99	92	54	ND	ND	0.6	1.7	--	--	ND	--
	2/7/00	120	71	ND	0.6	0.8	2.2	--	--	ND	--
	5/7/00	100	68	ND	ND	0.7	1.9	--	--	ND	--
	8/3/00	910	300*	220	9.0	35	16	--	--	11,000**	--
	11/8/00	990	200	320	0.8	18	9	--	--	8,000	--
	2/8/01	990	110	180	21.0	7	24	--	--	5,200**	--
	6/7/01	370	140	62	4.0	8	13	--	--	6,600**	--
	9/7/01	460	ND	87	1.0	11	25	--	--	9,400**	--
	12/13/01	251	ND	66.8	0.9	2.6	8.4	--	--	6,610	--
	6/13/02	3,630	< 50	41	60.0	41	187	--	--	8,820**	--
	11/11/02	6,210	< 50	150	< 1	5	< 3	--	--	7,770	--
	2/14/03	176	< 50	31	< 1	2	< 3	--	--	5,040	--
	9/10/04	< 1,000	140	110	< 10	< 10	21	20	200	4,400	< 10
	12/7/04	1,000	150	310	19.0	24	50	21	< 100	4,000	< 10
	4/18/05	750	150	170	16.0	33	36	6.1	< 50	1,700	< 5.0
	6/20/05	680	120	140	9.7	20	38	7.4	< 20	1,900	< 4.0
	10/7/05	630	160	140	10.0	11	34	9.2	< 20	2,000	< 4.0
	12/7/05	550	200	120	6.4	7.2	10	11	56	2,400	< 4.0
	<b>3/6/06</b>	<b>&lt; 200</b>	<b>88</b>	<b>36</b>	<b>&lt; 2.0</b>	<b>5.3</b>	<b>2.1</b>	<b>4.2</b>	<b>13</b>	<b>1,000</b>	<b>&lt; 2.0</b>
MW-4	6/13/02	4,460	1,500*	425	409.0	115	730	--	--	32	--
	11/11/02	5,150	2,380*	2,010	74.0	399	252	--	--	< 20	--
	2/14/03	6,360	2,410*	1,560	82.0	274	573	--	--	< 1	--
	9/10/04	1,600	180	370	6.5	68	93	< 1.0	10	13	1.1 (DIPE)
	12/7/04	1,900	< 200	450	8.2	72	100	< 0.9	5.4	9.5	< 0.9
	4/18/05	10,000	< 800	1,500	27.0	420	900	< 1.5	15	18	< 1.5
	6/20/05	6,100	< 600	830	19.0	280	400	< 1.5	17	22	< 1.5
	10/7/05	3,200	< 500	660	8.7	110	140	< 1.5	12	14	< 1.5
	12/7/05	1,000	< 200	220	2.5	48	37	< 0.5	< 5.0	12	< 0.5
	<b>3/6/06</b>	<b>1,200</b>	<b>&lt; 300</b>	<b>280</b>	<b>2.1</b>	<b>32</b>	<b>77</b>	<b>0.65</b>	<b>15</b>	<b>75</b>	<b>1.0 (DIPE), 0.57 (1,2-DCA)</b>
MW-5	6/13/02	536	< 50	6.4	0.6	22	23	--	--	11	--
	11/11/02	3,270	1,230*	< 1	< 1	28	8	--	--	< 1	--
	2/14/03	1,260	610*	9	7.0	22	5	--	--	< 1	--
	9/10/04	1,300	150	2.4	< 0.50	0.77	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
	12/7/04	1,000	< 200	4.1	< 0.50	1.4	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
	4/18/05	Improperly Destroyed by City of Albany During Street Improvements									
MW-SR	10/7/05	760	< 800	2.4	< 0.50	8.3	1.2	< 0.50	< 5.0	< 0.50	< 0.50
	12/7/05	5,200	< 2,000	36	1.0	320	15	< 0.50	< 5.0	< 0.50	< 0.50
	<b>3/6/06</b>	<b>6,300</b>	<b>&lt; 3,000</b>	<b>44</b>	<b>1.2</b>	<b>370</b>	<b>19</b>	<b>&lt; 0.90</b>	<b>5.9</b>	<b>&lt; 0.90</b>	<b>&lt; 0.90</b>



# TABLE TWO

Summary of Analytical Results for GROUNDWATER Samples

Albany Hill Mini Mart

800 San Pablo Avenue, Albany, CA

All results are in parts per billion (ppb)

Well ID or Sample Point	Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TAME	TBA	MTBE	Other VOCs
MW-6	6/13/02	2,980	1,460*	31	2.3	3.8	12	--	--	310	--
	11/11/02	3,570	1,210*	336	5	< 5	< 15	--	--	95	--
	2/14/03	3,770	1,620*	429	12	7	10	--	--	122	--
	9/10/04	< 1,000	390	2.7	< 0.50	< 0.50	< 0.50	2.3	48	280	< 0.50
	12/7/04	1,800	< 600	32	1.7	< 0.50	1.1	2.2	49	160	< 0.50
	4/18/05	1,200	1,400	34	1.3	< 0.50	0.90	0.86	19	36	< 0.50
	6/20/05	590	1,300	3.3	< 0.50	< 0.50	< 0.50	< 0.50	5.5	8.5	< 0.50
	10/7/05	470	1,300	6.8	< 0.50	< 0.50	< 0.50	0.67	20	82	< 0.50
	12/7/05	420	910	10	< 0.50	< 0.50	< 0.50	< 0.50	7.3	22	< 0.50
	3/6/06	790	590	3.2	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	4.3	< 0.50
MW-7	6/13/02	24,100	1,570*	2,310	657	945	5,430	--	--	951	--
	11/11/02	4,760	2,160*	1,820	21	316	1,141	--	--	702	--
	2/14/03	4,320	2,380*	1,020	7	223	293	--	--	1,410	--
	9/10/04	4,800	< 300	640	16	250	490	< 1.5	31	590	< 1.5
	12/7/04	990	< 300	140	3.4	49	70	4.0	< 20	960	< 2.0
	4/18/05	1,400	< 300	260	1.3	96	16	< 1.0	20	370	< 1.0
	6/20/05	1,900	< 200	320	1.0	130	24	< 0.50	17	370	< 0.50
	10/7/05	2,600	< 800	190	4.7	91	200	0.73	8.0J	310	< 0.50
	12/7/05					Not sampled. Inaccessible					
	3/6/06	640	< 200	85	0.88	24	30	< 0.5	8.0	150	< 0.50
MW-8	6/13/02	20,000	7,760*	2,200	1,140	1,050	4,090	--	--	12,000	--
	11/11/02	5,010	2,010*	187	< 1	15	< 3	--	--	16,600	--
	2/14/03	1,980	< 50	607	6	113	40	--	--	11,500	--
	9/10/04	< 2,000	200	110	< 20	26	49	25	< 200	8,600	< 20
	12/7/04	2,000	280	420	< 10	40	61	31	100	6,800	< 10
	4/18/05	< 1000	250	76	< 10	23	< 10	17	< 100	3,700	< 10
	6/20/05	1,300	300	190	< 7.0	21	40	19	< 40	3,400	< 7.0
	10/7/05	< 700	200	85	< 7.0	9.3	8.3	23	< 40	4,400	< 7.0
	12/7/05	1,400	300	250	8.7	41	90	18	< 40	4,400	< 7.0
	3/6/06					Not sampled. Inaccessible					

**TABLE TWO**  
Summary of Analytical Results for **GROUNDWATER** Samples  
**Albany Hill Mini Mart**  
800 San Pablo Avenue, Albany, CA  
All results are in **parts per billion (ppb)**

Well ID or Sample Point	Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TAME	TBA	MTBE	Other VOCs
MW-9	6/27/02	19,000	--	1,430	1,750	501	5,410	--	--	< 0.5	--
	11/11/02	19,000	13,200*	3,390	4,540	1,020	9,050	--	--	549	--
	2/14/03	21,300	8,200*	1,700	2,200	701	4,970	--	--	< 1	--
	9/10/04	12,000	< 1,500	890	37	280	2,000	< 5.0	< 50	< 5.0	< 5.0
	12/7/04	13,000	< 1,500	950	580	480	2,900	< 5.0	< 50	< 5.0	< 5.0
	4/18/05	9,600	< 1,000	620	180	260	1,400	< 2.5	< 25	< 2.5	< 2.5
	6/20/05	9,800	< 1,500	760	260	430	1,400	< 2.0	< 9.0	< 2.0	< 2.0
	10/7/05	3,400	<1000	350	170	100	480	< 0.50	< 5.0	< 0.50	< 0.50
	12/7/05	5,600	<1000	320	97	200	580	< 0.90	< 5.0	< 0.90	< 0.90
	<b>3/6/06</b>	<b>4,200</b>	<b>&lt; 800</b>	<b>460</b>	<b>120</b>	<b>97</b>	<b>600</b>	<b>&lt; 0.90</b>	<b>&lt; 5.0</b>	<b>&lt; 0.90</b>	<b>&lt; 0.90</b>
MW-10	10/7/05	470	330	17	< 0.50	2	11	1.2	9.4J	210	< 0.50
	12/7/05					Not sampled. Inaccessible					
	<b>3/6/06</b>	<b>130</b>	<b>130</b>	<b>4.2</b>	<b>&lt; 0.50</b>	<b>&lt; 0.50</b>	<b>&lt; 0.50</b>	<b>4.9</b>	<b>13</b>	<b>820</b>	<b>0.55 (DIPE)</b>
ESL		500	640	46	130	290	13	NE	NE	1,800	Varies

Notes:

Data prior to August 2004 is based on a table compiled by AARS - ASE has not checked results against original laboratory reports.

\* Does not match diesel pattern

\*\* Confirmed by GC/MS method 8260

ESL = Environmental screening levels presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (July 2003)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region.

Most recent concentrations are in **Bold**.

Non-detectable concentrations noted by the less than sign (<) followed by the laboratory detection limit.

NE indicates that no ESL has been established for this compound.

# **APPENDIX A**

## Elevation Survey Report



CSS ENVIRONMENTAL SERVICES, INC.  
 Managing Cost, Scope and Schedule  
 100 Galli Drive, Suite 1  
 Novato, CA 94949  
 Telephone: (415) 883-6203  
 Facsimile: (415) 883-6204

### Site Positions

6364B Aqua Science - Albany Site  
 Albany Hill Mini Mart  
 800 San Pablo Ave, Albany, CA

Horizontal Coordinate System: North American 1983-CONUS Date: 04/26/06  
 Height System: North American Vertical Datum 1988 Ortho. Ht. (GEOID99)  
 Project file: 6364 Aqua Science Fremont.spr  
 Desired Horizontal Accuracy: 0.200Ft + 1ppm  
 Desired Vertical Accuracy: 0.300Ft + 2ppm  
 Confidence Level: 95% Err.  
 Linear Units of Measure: Int. Feet

Site ID	Site Descriptor	Position	95% Error	Fix Status	Position Status
All wells surveyed 04/21/06.					
1	MW-1 NORTH RIM (NR) WELL LOC	Lat. 37° 53' 31.31547" N	0.067		Adjusted
		Lon. 122° 17' 59.67862" W	0.073		
	NR Elevation	Elv. 49.25			
	W TOC Elevation	Elv. 48.82			
2	MW-2 TBM2 ON NR	Lat. 37° 53' 31.88714" N	0.067		Adjusted
		Lon. 122° 17' 59.77284" W	0.072		
	TBM-2/NR Elevation	Elv. 48.01			
	N TOC Elevation	Elv. 47.71			
3	MW-3 NR WELL LOC	Lat. 37° 53' 31.60833" N	0.047		Adjusted
		Lon. 122° 17' 59.14295" W	0.052		
	NR Elevation	Elv. 47.83			
	W TOC Elevation	Elv. 47.49			
4	MW-4 NR WELL LOC	Lat. 37° 53' 31.14780" N	0.114		Adjusted
		Lon. 122° 17' 59.04553" W	0.098		
	NR Elevation	Elv. 47.81			
	N TOC Elevation	Elv. 47.61			
5	MW-5R NR WELL LOC	Lat. 37° 53' 30.80584" N	0.048		Adjusted
		Lon. 122° 17' 58.55888" W	0.052		
	NR Elevation	Elv. 47.66			
	N TOC Elevation	Elv. 47.36			
6	MW-6 THIS IS TBM-1	Lat. 37° 53' 31.89466" N	0.047		Adjusted
		Lon. 122° 17' 58.90744" W	0.051		
	TBM-1/NR Elevation	Elv. 46.849	0.111		
	SE TOC Elevation	Elv. 46.27			



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Managing Cost, Scope and Schedule  
100 Galli Drive, Suite 1  
Novato, CA 94949  
Telephone: (415) 883-6203  
Facsimile: (415) 883-6204

7	MW-7	NR WELL LOC	Lat. 37° 53' 31.25132" N	0.055		Adjusted
			Lon. 122° 17' 59.39534" W	0.053		
		NR Elevation	Elv. 48.69			
		NNE TOC Elevation	Elv. 48.36			
8	MW-8	NR WELL LOC	Lat. 37° 53' 31.29687" N	0.048		Adjusted
			Lon. 122° 17' 59.16924" W	0.052		
		NR Elevation	Elv. 48.21			
		W TOC Elevation	Elv. 47.99			
9	MW-9	NR WELL LOC	Lat. 37° 53' 31.55817" N	0.055		Adjusted
			Lon. 122° 17' 59.81677" W	0.058		
		NR Elevation	Elv. 49.45			
		NNW TOC Elevation	Elv. 49.24			
10	MW-10	NR WELL LOC	Lat. 37° 53' 31.47654" N	0.047		Adjusted
			Lon. 122° 17' 58.77054" W	0.052		
		NR Elevation	Elv. 47.12			
		W TOC Elevation	Elv. 46.90			
11	AS-1	NR WELL LOC	Lat. 37° 53' 31.90896" N	0.047		Adjusted
			Lon. 122° 17' 59.57700" W	0.052		
12	AS-2	NR WELL LOC	Lat. 37° 53' 31.94819" N	0.048		Adjusted
			Lon. 122° 17' 59.36340" W	0.052		
13	AS-3	NR WELL LOC	Lat. 37° 53' 31.79452" N	0.048		Adjusted
			Lon. 122° 17' 59.07581" W	0.052		
14	0882	MONUMENT HT0882	Lat. 37° 46' 48.04137" N	0.000	Fixed	Adjusted
			Lon. 122° 17' 53.51060" W	0.000	Fixed	
			Elv. 9.130	0.000	Fixed	
15	9563	MONUMENT JT9563	Lat. 38° 01' 48.78742" N	0.000	Fixed	Adjusted
			Lon. 122° 15' 16.40456" W	0.000	Fixed	
			Elv. 183.000	0.000	Fixed	



## **APPENDIX B**

### Well Sampling Field Logs



# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME	Albany Hill		
JOB NUMBER	3934	DATE OF SAMPLING	3-6-06
WELL ID.	MW-1	SAMPLER	dr
TOTAL DEPTH OF WELL	24.2	WELL DIAMETER	2
DEPTH TO WATER PRIOR TO PURGING	9.35		
PRODUCT THICKNESS	0		
DEPTH OF WELL CASING IN WATER	14.85		
NUMBER OF GALLONS PER WELL CASING VOLUME	2.52		
NUMBER OF WELL CASING VOLUMES TO BE REMOVE	3		
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING	7.56		
EQUIPMENT USED TO PURGE WELL	disposable bailer		
TIME EVACUATION STARTED	1240	TIME EVACUATION COMPLETED	1300
TIME SAMPLES WERE COLLECTED	1300		
DID WELL GO DRY	no	AFTER HOW MANY GALLONS	✓
VOLUME OF GROUNDWATER PURGED	7.56		
SAMPLING DEVICE	disposable bailer		
SAMPLE COLOR	clear	ODOR/SEDIMENT	slight h.c / no

### CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	42.5	7.08	1215
2	63.0	7.09	1031
3	63.1	7.09	1025

### SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-1	5	40ml VOA		Y

# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME <u>Albany Hill</u>	
JOB NUMBER <u>39341</u>	DATE OF SAMPLING <u>3-6-06</u>
WELL ID. <u>MW-2</u>	SAMPLER <u>dr</u>
TOTAL DEPTH OF WELL <u>24.8</u>	WELL DIAMETER <u>2</u>
DEPTH TO WATER PRIOR TO PURGING <u>8.22</u>	
PRODUCT THICKNESS <u>Ø</u>	
DEPTH OF WELL CASING IN WATER <u>6.58</u>	
NUMBER OF GALLONS PER WELL CASING VOLUME <u>2.82</u>	
NUMBER OF WELL CASING VOLUMES TO BE REMOVE <u>3</u>	
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING <u>8.46</u>	
EQUIPMENT USED TO PURGE WELL <u>disposable bailer</u>	
TIME EVACUATION STARTED <u>1337</u>	TIME EVACUATION COMPLETED <u>1355</u>
TIME SAMPLES WERE COLLECTED <u>1356</u>	
DID WELL GO DRY <u>no</u>	AFTER HOW MANY GALLONS <u>—</u>
VOLUME OF GROUNDWATER PURGED <u>8.46</u>	
SAMPLING DEVICE <u>disposable bailer</u>	
SAMPLE COLOR <u>clear</u>	ODOR/SEDIMENT <u>light h.c / no</u>

### CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	64.4	7.34	611
2	64.2	7.32	579
3	64.1	7.31	575

### SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
<u>MW-2</u>	<u>5</u>	<u>40ml VOA</u>		<u>Y</u>



# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME	
JOB NUMBER	DATE OF SAMPLING 3-6-06
WELL ID. MW-3	SAMPLER
TOTAL DEPTH OF WELL 23.8	WELL DIAMETER
DEPTH TO WATER PRIOR TO PURGING 8.84	
PRODUCT THICKNESS	
DEPTH OF WELL CASING IN WATER 14.96	
NUMBER OF GALLONS PER WELL CASING VOLUME 2.54	
NUMBER OF WELL CASING VOLUMES TO BE REMOVE 3	
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 7.43	
EQUIPMENT USED TO PURGE WELL	disposable bailer
TIME EVACUATION STARTED 1317	TIME EVACUATION COMPLETED 1334
TIME SAMPLES WERE COLLECTED 1335	
DID WELL GO DRY	AFTER HOW MANY GALLONS
VOLUME OF GROUNDWATER PURGED 7.43	
SAMPLING DEVICE	disposable bailer
SAMPLE COLOR clear	ODOR/SEDIMENT 1/2 hr h.c.

### CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	65.0	6.99	699
2	65.9	7.00	690
3	65.9	7.01	690

### SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-3	5	40ml VOA		Y

# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME	
JOB NUMBER <u>3934</u>	DATE OF SAMPLING <u>3-6-06</u>
WELL ID. <u>MW-4</u>	SAMPLER
TOTAL DEPTH OF WELL <u>24.5</u>	WELL DIAMETER
DEPTH TO WATER PRIOR TO PURGING <u>8.19</u>	
PRODUCT THICKNESS <u>Ø</u>	
DEPTH OF WELL CASING IN WATER <u>16.31</u>	
NUMBER OF GALLONS PER WELL CASING VOLUME <u>2.77</u>	
NUMBER OF WELL CASING VOLUMES TO BE REMOVE <u>3</u>	
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING <u>8.32</u>	
EQUIPMENT USED TO PURGE WELL	disposable bailer
TIME EVACUATION STARTED <u>1437</u>	TIME EVACUATION COMPLETED <u>1443</u>
TIME SAMPLES WERE COLLECTED <u>1444</u>	
DID WELL GO DRY <u>✓</u>	AFTER HOW MANY GALLONS <u>✓</u>
VOLUME OF GROUNDWATER PURGED <u>8.32</u>	
SAMPLING DEVICE	disposable bailer
SAMPLE COLOR <u>clear</u>	ODOR/SEDIMENT <u><del>odor</del> n/n</u>

### CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	<u>64.0</u>	<u>6.80</u>	<u>1670</u>
2	<u>64.2</u>	<u>6.85</u>	<u>1665</u>
3	<u>64.4</u>	<u>6.89</u>	<u>1660</u>

### SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
<u>MW-4</u>	<u>5</u>	<u>40ml VOA</u>		<u>Y</u>



# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME

JOB NUMBER	DATE OF SAMPLING <u>3-6-06</u>
WELL ID. <u>MW-5R</u>	SAMPLER
TOTAL DEPTH OF WELL <u>19.58</u>	WELL DIAMETER
DEPTH TO WATER PRIOR TO PURGING <u>4.93</u>	
PRODUCT THICKNESS <u>0</u>	
DEPTH OF WELL CASING IN WATER <u>14.65</u>	
NUMBER OF GALLONS PER WELL CASING VOLUME <u>2.5</u>	
NUMBER OF WELL CASING VOLUMES TO BE REMOVE <u>3</u>	
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING <u>7.5</u>	
EQUIPMENT USED TO PURGE WELL	disposable bailer
TIME EVACUATION STARTED <u>1445</u>	TIME EVACUATION COMPLETED <u>1459</u>
TIME SAMPLES WERE COLLECTED <u>1500</u>	
DID WELL GO DRY <u>—</u>	AFTER HOW MANY GALLONS <u>—</u>
VOLUME OF GROUNDWATER PURGED <u>7.5</u>	
SAMPLING DEVICE <u>disposable bailer</u>	
SAMPLE COLOR <u>clear</u>	ODOR/SEDIMENT <u>n/a</u>

### CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	63.0	6.80	1500
2	63.1	6.89	1450
3	63.2	6.95	1445

### SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW5R	5	40ml VOA		Y

# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME	Albany Hill		
JOB NUMBER	39341	DATE OF SAMPLING	3-6-06
WELL ID.	MW-6	SAMPLER	dr
TOTAL DEPTH OF WELL	24.7	WELL DIAMETER	2
DEPTH TO WATER PRIOR TO PURGING	0		
PRODUCT THICKNESS	6.22		
DEPTH OF WELL CASING IN WATER	18.48		
NUMBER OF GALLONS PER WELL CASING VOLUME	3.14		
NUMBER OF WELL CASING VOLUMES TO BE REMOVE	3		
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING	9.42		
EQUIPMENT USED TO PURGE WELL	disposable bailer		
TIME EVACUATION STARTED	1359	TIME EVACUATION COMPLETED	1410
TIME SAMPLES WERE COLLECTED	1411		
DID WELL GO DRY	no	AFTER HOW MANY GALLONS	n/a
VOLUME OF GROUNDWATER PURGED	9.42		
SAMPLING DEVICE	disposable bailer		
SAMPLE COLOR	clear	ODOR/SEDIMENT	no/no

### CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	63.7	7.87	1101
2	63.5	7.10	1100
3	63.4	7.09	1095

### SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-6	5	40ml VOA		Y



# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME	A4		
JOB NUMBER	DATE OF SAMPLING 3-6-06		
WELL ID.	mw-7		
TOTAL DEPTH OF WELL	24.7	WELL DIAMETER	
DEPTH TO WATER PRIOR TO PURGING	8.92		
PRODUCT THICKNESS	0		
DEPTH OF WELL CASING IN WATER	15.78		
NUMBER OF GALLONS PER WELL CASING VOLUME	2.68		
NUMBER OF WELL CASING VOLUMES TO BE REMOVE	3		
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING	8.05		
EQUIPMENT USED TO PURGE WELL	disposable bailer		
TIME EVACUATION STARTED	1300	TIME EVACUATION COMPLETED	1314
TIME SAMPLES WERE COLLECTED	1315		
DID WELL GO DRY	AFTER HOW MANY GALLONS		
VOLUME OF GROUNDWATER PURGED	8.05		
SAMPLING DEVICE	disposable bailer		
SAMPLE COLOR	clear	ODOR/SEDIMENT	15 / no

### CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	61.8	7.06	902
2	63.0	7.05	787
3	63.0	7.01	780

### SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
	5	40ml VOA		Y

# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME	
JOB NUMBER	DATE OF SAMPLING <i>3-2-06</i>
WELL ID. <i>MW-8</i>	SAMPLER
TOTAL DEPTH OF WELL	WELL DIAMETER
DEPTH TO WATER PRIOR TO PURGING <i>8.58</i>	
PRODUCT THICKNESS	
DEPTH OF WELL CASING IN WATER	
NUMBER OF GALLONS PER WELL CASING VOLUME	
NUMBER OF WELL CASING VOLUMES TO BE REMOVE	3
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING	
EQUIPMENT USED TO PURGE WELL	disposable bailer
TIME EVACUATION STARTED	TIME EVACUATION COMPLETED
TIME SAMPLES WERE COLLECTED	
DID WELL GO DRY	AFTER HOW MANY GALLONS
VOLUME OF GROUNDWATER PURGED	
SAMPLING DEVICE	disposable bailer
SAMPLE COLOR	ODOR/SEDIMENT

*\* couldn't access w/ bailer - parked car*

### CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1			
2			
3			

### SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
	5	40ml VOA		Y



# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME	Albany Hill		
JOB NUMBER	3934	DATE OF SAMPLING	3-6-06
WELL ID.	MW-9	SAMPLER	dr
TOTAL DEPTH OF WELL	16.8	WELL DIAMETER	2
DEPTH TO WATER PRIOR TO PURGING	10.24		
PRODUCT THICKNESS	0		
DEPTH OF WELL CASING IN WATER	6.56		
NUMBER OF GALLONS PER WELL CASING VOLUME	1.12		
NUMBER OF WELL CASING VOLUMES TO BE REMOVE	3		
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING	3.36		
EQUIPMENT USED TO PURGE WELL	disposable bailer		
TIME EVACUATION STARTED	1145	TIME EVACUATION COMPLETED	1150
TIME SAMPLES WERE COLLECTED	1515		
DID WELL GO DRY	yes	AFTER HOW MANY GALLONS	~16
VOLUME OF GROUNDWATER PURGED	16		
SAMPLING DEVICE	disposable bailer		
SAMPLE COLOR	clear	ODOR/SEDIMENT	h.c./no

### CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	62.5	7.7	820
2			
3			

### SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-9	5	40ml VOA		Y

# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME	Albany Hall		
JOB NUMBER	39734	DATE OF SAMPLING	3-6-06
WELL ID.	MW-10	SAMPLER	dr
TOTAL DEPTH OF WELL	24.74	WELL DIAMETER	2
DEPTH TO WATER PRIOR TO PURGING	7.46		
PRODUCT THICKNESS			
DEPTH OF WELL CASING IN WATER	17.28		
NUMBER OF GALLONS PER WELL CASING VOLUME	2.94		
NUMBER OF WELL CASING VOLUMES TO BE REMOVE	3		
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING	8.8		
EQUIPMENT USED TO PURGE WELL	disposable bailer		
TIME EVACUATION STARTED	1413	TIME EVACUATION COMPLETED	1434
TIME SAMPLES WERE COLLECTED	1435		
DID WELL GO DRY	no	AFTER HOW MANY GALLONS	
VOLUME OF GROUNDWATER PURGED	8.8		
SAMPLING DEVICE	disposable bailer		
SAMPLE COLOR	clear	ODOR/SEDIMENT	no/no

### CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	62.1	7.00	1170
2	62.0	7.01	1105
3	62.0	6.99	1100

### SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-10	5	40ml VOA		Y

## **APPENDIX C**

Certified Analytical Report  
and  
Chain of Custody Documentation



Report Number : 48807

Date : 3/15/2006

David Rains  
Aqua Science Engineers, Inc.  
208 West El Pintado Rd.  
Danville, CA 94526

Subject : 9 Water Samples  
Project Name : Albany Hill  
Project Number :

Dear Mr. Rains,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink, appearing to read 'Joel Kiff', is written over a printed name.

Joel Kiff



Subject : 9 Water Samples  
Project Name : Albany Hill  
Project Number :

## Case Narrative

The Method Reporting Limit for TPH as Diesel is increased due to interference from Gasoline-Range Hydrocarbons for samples MW-4, MW-5R, MW-7 and MW-9.

Tert-Butanol results for samples MW-2, MW-3 and MW-10 may be biased slightly high and are flagged with a 'J'. A fraction of MtBE (typically less than 1%) converts to Tert-Butanol during the analysis of water samples. We consider this conversion effect to be mathematically significant in samples that contain MtBE/Tert-Butanol in ratios of over 20:1.

Matrix Spike/Matrix Spike Duplicate Results associated with sample MW-3 for the analyte Methyl-t-butyl ether were affected by the analyte concentrations already present in the un-spiked sample.

Approved By: \_\_\_\_\_

Joe Kiff



Report Number : 48807

Date : 3/15/2006

Project Name : **Albany Hill**

Project Number :

Sample : **MW-1**

Matrix : Water

Lab Number : 48807-01

Sample Date : 3/6/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>63</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Toluene</b>	<b>1.6</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Ethylbenzene</b>	<b>3.8</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Total Xylenes</b>	<b>2.3</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Methyl-t-butyl ether (MTBE)</b>	<b>180</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Diisopropyl ether (DIPE)</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Ethyl-t-butyl ether (ETBE)</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Tert-amyl methyl ether (TAME)</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Tert-Butanol</b>	<b>&lt; 5.0</b>	5.0	ug/L	EPA 8260B	3/13/2006
<b>TPH as Gasoline</b>	<b>180</b>	50	ug/L	EPA 8260B	3/13/2006
<b>1,2-Dichloroethane</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>1,2-Dibromoethane</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
Toluene - d8 (Surr)	97.8		% Recovery	EPA 8260B	3/13/2006
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	3/13/2006
Dibromofluoromethane (Surr)	106		% Recovery	EPA 8260B	3/13/2006
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	3/13/2006
<b>TPH as Diesel</b>	<b>69</b>	50	ug/L	M EPA 8015	3/14/2006
Octacosane (Diesel Surrogate)	85.6		% Recovery	M EPA 8015	3/14/2006

Approved By:

Joel Kiff

Project Name : **Albany Hill**

Project Number :

Sample : **MW-2**

Matrix : Water

Lab Number : 48807-02

Sample Date :3/6/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>7.0</b>	0.90	ug/L	EPA 8260B	3/11/2006
<b>Toluene</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/11/2006
<b>Ethylbenzene</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/11/2006
<b>Total Xylenes</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/11/2006
<b>Methyl-t-butyl ether (MTBE)</b>	<b>610</b>	0.90	ug/L	EPA 8260B	3/11/2006
<b>Diisopropyl ether (DIPE)</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/11/2006
<b>Ethyl-t-butyl ether (ETBE)</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/11/2006
<b>Tert-amyl methyl ether (TAME)</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/11/2006
<b>Tert-Butanol</b>	<b>5.2 J</b>	5.0	ug/L	EPA 8260B	3/11/2006
<b>TPH as Gasoline</b>	<b>&lt; 90</b>	90	ug/L	EPA 8260B	3/11/2006
<b>1,2-Dichloroethane</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/11/2006
<b>1,2-Dibromoethane</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/11/2006
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	3/11/2006
4-Bromofluorobenzene (Surr)	93.8		% Recovery	EPA 8260B	3/11/2006
Dibromofluoromethane (Surr)	102		% Recovery	EPA 8260B	3/11/2006
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	3/11/2006
<b>TPH as Diesel</b>	<b>88</b>	50	ug/L	M EPA 8015	3/14/2006
Octacosane (Diesel Surrogate)	77.8		% Recovery	M EPA 8015	3/14/2006

Approved By:

Joel Kiff



Project Name : **Albany Hill**

Project Number :

Sample : **MW-3**

Matrix : Water

Lab Number : 48807-03

Sample Date :3/6/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>36</b>	2.0	ug/L	EPA 8260B	3/13/2006
<b>Toluene</b>	<b>&lt; 2.0</b>	2.0	ug/L	EPA 8260B	3/13/2006
<b>Ethylbenzene</b>	<b>5.3</b>	2.0	ug/L	EPA 8260B	3/13/2006
<b>Total Xylenes</b>	<b>2.1</b>	2.0	ug/L	EPA 8260B	3/13/2006
<b>Methyl-t-butyl ether (MTBE)</b>	<b>1000</b>	2.0	ug/L	EPA 8260B	3/13/2006
<b>Diisopropyl ether (DIPE)</b>	<b>&lt; 2.0</b>	2.0	ug/L	EPA 8260B	3/13/2006
<b>Ethyl-t-butyl ether (ETBE)</b>	<b>&lt; 2.0</b>	2.0	ug/L	EPA 8260B	3/13/2006
<b>Tert-amyl methyl ether (TAME)</b>	<b>4.2</b>	2.0	ug/L	EPA 8260B	3/13/2006
<b>Tert-Butanol</b>	<b>13 J</b>	9.0	ug/L	EPA 8260B	3/13/2006
<b>TPH as Gasoline</b>	<b>&lt; 200</b>	200	ug/L	EPA 8260B	3/13/2006
<b>1,2-Dichloroethane</b>	<b>&lt; 2.0</b>	2.0	ug/L	EPA 8260B	3/13/2006
<b>1,2-Dibromoethane</b>	<b>&lt; 2.0</b>	2.0	ug/L	EPA 8260B	3/13/2006
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	3/13/2006
4-Bromofluorobenzene (Surr)	94.8		% Recovery	EPA 8260B	3/13/2006
Dibromofluoromethane (Surr)	107		% Recovery	EPA 8260B	3/13/2006
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	3/13/2006
<b>TPH as Diesel</b>	<b>88</b>	50	ug/L	M EPA 8015	3/14/2006
Octacosane (Diesel Surrogate)	87.2		% Recovery	M EPA 8015	3/14/2006

Approved By:

Joel Kiff

Project Name : **Albany Hill**

Project Number :

Sample : **MW-4**

Matrix : Water

Lab Number : 48807-04

Sample Date : 3/6/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>280</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Toluene</b>	<b>2.1</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Ethylbenzene</b>	<b>32</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Total Xylenes</b>	<b>77</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Methyl-t-butyl ether (MTBE)</b>	<b>75</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Diisopropyl ether (DIPE)</b>	<b>1.0</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Ethyl-t-butyl ether (ETBE)</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Tert-amyl methyl ether (TAME)</b>	<b>0.65</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Tert-Butanol</b>	<b>15</b>	5.0	ug/L	EPA 8260B	3/13/2006
<b>TPH as Gasoline</b>	<b>1200</b>	50	ug/L	EPA 8260B	3/13/2006
<b>1,2-Dichloroethane</b>	<b>0.57</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>1,2-Dibromoethane</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
Toluene - d8 (Surr)	98.8		% Recovery	EPA 8260B	3/13/2006
4-Bromofluorobenzene (Surr)	106		% Recovery	EPA 8260B	3/13/2006
Dibromofluoromethane (Surr)	106		% Recovery	EPA 8260B	3/13/2006
1,2-Dichloroethane-d4 (Surr)	105		% Recovery	EPA 8260B	3/13/2006
<b>TPH as Diesel</b>	<b>&lt; 300</b>	300	ug/L	M EPA 8015	3/14/2006
Octacosane (Diesel Surrogate)	82.6		% Recovery	M EPA 8015	3/14/2006

Approved By:

Joel Kiff



Project Name : **Albany Hill**

Project Number :

Sample : **MW-5R**

Matrix : Water

Lab Number : 48807-05

Sample Date :3/6/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>44</b>	0.90	ug/L	EPA 8260B	3/14/2006
<b>Toluene</b>	<b>1.2</b>	0.90	ug/L	EPA 8260B	3/14/2006
<b>Ethylbenzene</b>	<b>370</b>	0.90	ug/L	EPA 8260B	3/14/2006
<b>Total Xylenes</b>	<b>19</b>	0.90	ug/L	EPA 8260B	3/14/2006
<b>Methyl-t-butyl ether (MTBE)</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/14/2006
<b>Diisopropyl ether (DIPE)</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/14/2006
<b>Ethyl-t-butyl ether (ETBE)</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/14/2006
<b>Tert-amyl methyl ether (TAME)</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/14/2006
<b>Tert-Butanol</b>	<b>5.9</b>	5.0	ug/L	EPA 8260B	3/14/2006
<b>TPH as Gasoline</b>	<b>6300</b>	90	ug/L	EPA 8260B	3/14/2006
<b>1,2-Dichloroethane</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/14/2006
<b>1,2-Dibromoethane</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/14/2006
Toluene - d8 (Surr)	86.1		% Recovery	EPA 8260B	3/14/2006
4-Bromofluorobenzene (Surr)	98.5		% Recovery	EPA 8260B	3/14/2006
Dibromofluoromethane (Surr)	84.7		% Recovery	EPA 8260B	3/14/2006
1,2-Dichloroethane-d4 (Surr)	86.0		% Recovery	EPA 8260B	3/14/2006
<b>TPH as Diesel</b>	<b>&lt; 3000</b>	3000	ug/L	M EPA 8015	3/14/2006
Octacosane (Diesel Surrogate)	84.2		% Recovery	M EPA 8015	3/14/2006

Approved By:

Joel Kiff

Project Name : **Albany Hill**

Project Number :

Sample : **MW-6**

Matrix : Water

Lab Number : 48807-06

Sample Date : 3/6/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>3.2</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Toluene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Ethylbenzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Total Xylenes</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Methyl-t-butyl ether (MTBE)</b>	<b>4.3</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Diisopropyl ether (DIPE)</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Ethyl-t-butyl ether (ETBE)</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Tert-amyl methyl ether (TAME)</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Tert-Butanol</b>	<b>&lt; 5.0</b>	5.0	ug/L	EPA 8260B	3/13/2006
<b>TPH as Gasoline</b>	<b>790</b>	50	ug/L	EPA 8260B	3/13/2006
<b>1,2-Dichloroethane</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>1,2-Dibromoethane</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
Toluene - d8 (Surr)	99.6		% Recovery	EPA 8260B	3/13/2006
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	3/13/2006
Dibromofluoromethane (Surr)	107		% Recovery	EPA 8260B	3/13/2006
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	3/13/2006
<b>TPH as Diesel</b>	<b>590</b>	50	ug/L	M EPA 8015	3/13/2006
Octacosane (Diesel Surrogate)	99.2		% Recovery	M EPA 8015	3/13/2006

Approved By:

Joel Kiff

Project Name : **Albany Hill**

Project Number :

Sample : **MW-7**

Matrix : Water

Lab Number : 48807-07

Sample Date :3/6/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>85</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Toluene</b>	<b>0.88</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Ethylbenzene</b>	<b>24</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Total Xylenes</b>	<b>30</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Methyl-t-butyl ether (MTBE)</b>	<b>150</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Diisopropyl ether (DIPE)</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Ethyl-t-butyl ether (ETBE)</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Tert-amyl methyl ether (TAME)</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Tert-Butanol</b>	<b>8.0</b>	5.0	ug/L	EPA 8260B	3/13/2006
<b>TPH as Gasoline</b>	<b>640</b>	50	ug/L	EPA 8260B	3/13/2006
<b>1,2-Dichloroethane</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>1,2-Dibromoethane</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	3/13/2006
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	3/13/2006
Dibromofluoromethane (Surr)	106		% Recovery	EPA 8260B	3/13/2006
1,2-Dichloroethane-d4 (Surr)	99.8		% Recovery	EPA 8260B	3/13/2006
<b>TPH as Diesel</b>	<b>&lt; 200</b>	200	ug/L	M EPA 8015	3/13/2006
Octacosane (Diesel Surrogate)	100		% Recovery	M EPA 8015	3/13/2006

Approved By:

Joel Kiff



Project Name : **Albany Hill**

Project Number :

Sample : **MW-9**

Matrix : Water

Lab Number : 48807-08

Sample Date :3/6/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>460</b>	0.90	ug/L	EPA 8260B	3/11/2006
<b>Toluene</b>	<b>120</b>	0.90	ug/L	EPA 8260B	3/11/2006
<b>Ethylbenzene</b>	<b>97</b>	0.90	ug/L	EPA 8260B	3/11/2006
<b>Total Xylenes</b>	<b>600</b>	0.90	ug/L	EPA 8260B	3/11/2006
<b>Methyl-t-butyl ether (MTBE)</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/11/2006
<b>Diisopropyl ether (DIPE)</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/11/2006
<b>Ethyl-t-butyl ether (ETBE)</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/11/2006
<b>Tert-amyl methyl ether (TAME)</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/11/2006
<b>Tert-Butanol</b>	<b>&lt; 5.0</b>	5.0	ug/L	EPA 8260B	3/11/2006
<b>TPH as Gasoline</b>	<b>4200</b>	90	ug/L	EPA 8260B	3/11/2006
<b>1,2-Dichloroethane</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/11/2006
<b>1,2-Dibromoethane</b>	<b>&lt; 0.90</b>	0.90	ug/L	EPA 8260B	3/11/2006
Toluene - d8 (Surr)	96.8		% Recovery	EPA 8260B	3/11/2006
4-Bromofluorobenzene (Surr)	94.6		% Recovery	EPA 8260B	3/11/2006
Dibromofluoromethane (Surr)	98.0		% Recovery	EPA 8260B	3/11/2006
1,2-Dichloroethane-d4 (Surr)	98.5		% Recovery	EPA 8260B	3/11/2006
<b>TPH as Diesel</b>	<b>&lt; 800</b>	800	ug/L	M EPA 8015	3/13/2006
Octacosane (Diesel Surrogate)	99.0		% Recovery	M EPA 8015	3/13/2006

Approved By:

Joel Kiff





Project Name : **Albany Hill**

Project Number :

Sample : **MW-10**

Matrix : Water

Lab Number : 48807-09

Sample Date :3/6/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>4.2</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Toluene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Ethylbenzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Total Xylenes</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Methyl-t-butyl ether (MTBE)</b>	<b>820</b>	1.5	ug/L	EPA 8260B	3/14/2006
<b>Diisopropyl ether (DIPE)</b>	<b>0.55</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Ethyl-t-butyl ether (ETBE)</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Tert-amyl methyl ether (TAME)</b>	<b>4.9</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>Tert-Butanol</b>	<b>13 J</b>	5.0	ug/L	EPA 8260B	3/13/2006
<b>TPH as Gasoline</b>	<b>130</b>	50	ug/L	EPA 8260B	3/13/2006
<b>1,2-Dichloroethane</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
<b>1,2-Dibromoethane</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	3/13/2006
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	3/13/2006
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	3/13/2006
Dibromofluoromethane (Surr)	107		% Recovery	EPA 8260B	3/13/2006
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	3/13/2006
<b>TPH as Diesel</b>	<b>130</b>	50	ug/L	M EPA 8015	3/13/2006
Octacosane (Diesel Surrogate)	95.2		% Recovery	M EPA 8015	3/13/2006

Approved By:

Joel Kiff

Report Number : 48807

Date : 3/15/2006

**QC Report : Method Blank Data**Project Name : **Albany Hill**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	3/13/2006
Octacosane (Diesel Surrogate)	84.2		%	M EPA 8015	3/13/2006
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/13/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/13/2006
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Toluene - d8 (Surr)	99.6		%	EPA 8260B	3/13/2006
4-Bromofluorobenzene (Surr)	91.9		%	EPA 8260B	3/13/2006
Dibromofluoromethane (Surr)	102		%	EPA 8260B	3/13/2006
1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	3/13/2006
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/13/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/13/2006
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Toluene - d8 (Surr)	100		%	EPA 8260B	3/13/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
4-Bromofluorobenzene (Surr)	104		%	EPA 8260B	3/13/2006
Dibromofluoromethane (Surr)	107		%	EPA 8260B	3/13/2006
1,2-Dichloroethane-d4 (Surr)	105		%	EPA 8260B	3/13/2006
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/13/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/13/2006
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/13/2006
Toluene - d8 (Surr)	103		%	EPA 8260B	3/13/2006
4-Bromofluorobenzene (Surr)	99.3		%	EPA 8260B	3/13/2006
Dibromofluoromethane (Surr)	107		%	EPA 8260B	3/13/2006
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	3/13/2006
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/11/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/11/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/11/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/11/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/11/2006
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/11/2006
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/11/2006
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/11/2006
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/11/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/11/2006
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/11/2006
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/11/2006

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 48807

Date : 3/15/2006

**QC Report : Method Blank Data**

Project Name : **Albany Hill**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Toluene - d8 (Surr)	97.4		%	EPA 8260B	3/11/2006
4-Bromofluorobenzene (Surr)	92.2		%	EPA 8260B	3/11/2006
Dibromofluoromethane (Surr)	102		%	EPA 8260B	3/11/2006
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	3/11/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/14/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
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KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By: Joel Kiff





Report Number : 48807

Date : 3/15/2006

## QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Albany Hill**

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	Blank	<50	1000	1000	1070	1230	ug/L	M EPA 8015	3/13/06	107	123	14.0	70-130	25
Benzene	48826-06	<0.50	39.8	39.5	40.3	40.2	ug/L	EPA 8260B	3/13/06	101	102	0.370	70-130	25
Toluene	48826-06	<0.50	39.8	39.5	40.3	39.7	ug/L	EPA 8260B	3/13/06	101	100	0.653	70-130	25
Tert-Butanol	48826-06	<5.0	199	198	183	194	ug/L	EPA 8260B	3/13/06	91.9	98.2	6.63	70-130	25
Methyl-t-Butyl Ether	48826-06	<0.50	39.8	39.5	40.7	38.0	ug/L	EPA 8260B	3/13/06	102	96.1	6.04	70-130	25
Benzene	48837-03	<0.50	40.0	40.0	32.7	31.8	ug/L	EPA 8260B	3/13/06	81.7	79.5	2.74	70-130	25
Toluene	48837-03	<0.50	40.0	40.0	33.1	32.7	ug/L	EPA 8260B	3/13/06	82.7	81.8	1.14	70-130	25
Tert-Butanol	48837-03	<5.0	200	200	177	176	ug/L	EPA 8260B	3/13/06	88.5	87.8	0.820	70-130	25
Methyl-t-Butyl Ether	48837-03	<0.50	40.0	40.0	35.5	35.3	ug/L	EPA 8260B	3/13/06	88.8	88.3	0.634	70-130	25
Benzene	48812-02	<0.50	40.0	40.0	37.4	35.8	ug/L	EPA 8260B	3/11/06	93.6	89.5	4.52	70-130	25
Toluene	48812-02	<0.50	40.0	40.0	38.3	36.2	ug/L	EPA 8260B	3/11/06	95.7	90.6	5.41	70-130	25
Tert-Butanol	48812-02	<5.0	200	200	182	186	ug/L	EPA 8260B	3/11/06	91.2	92.9	1.93	70-130	25
Methyl-t-Butyl Ether	48812-02	<0.50	40.0	40.0	42.1	41.6	ug/L	EPA 8260B	3/11/06	105	104	1.12	70-130	25
Benzene	48807-09	4.2	40.0	40.0	38.8	37.8	ug/L	EPA 8260B	3/13/06	86.5	84.2	2.68	70-130	25
Toluene	48807-09	<0.50	40.0	40.0	37.2	37.0	ug/L	EPA 8260B	3/13/06	93.0	92.4	0.644	70-130	25
Tert-Butanol	48807-09	13	200	200	192	200	ug/L	EPA 8260B	3/13/06	89.2	93.4	4.54	70-130	25
Methyl-t-Butyl Ether	48807-09	900	40.0	40.0	933	918	ug/L	EPA 8260B	3/13/06	83.4	44.8	60.1	70-130	25

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

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**QC Report : Matrix Spike/ Matrix Spike Duplicate**

Report Number : 48807

Date : 3/15/2006

Project Name : **Albany Hill**

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	48872-01	<0.50	40.0	40.0	36.9	35.7	ug/L	EPA 8260B	3/14/06	92.3	89.2	3.41	70-130	25
Toluene	48872-01	<0.50	40.0	40.0	37.7	36.3	ug/L	EPA 8260B	3/14/06	94.4	90.8	3.82	70-130	25
Tert-Butanol	48872-01	<5.0	200	200	184	184	ug/L	EPA 8260B	3/14/06	92.0	92.1	0.132	70-130	25
Methyl-t-Butyl Ether	48872-01	0.56	40.0	40.0	41.7	41.4	ug/L	EPA 8260B	3/14/06	103	102	0.801	70-130	25

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By: Joel Kiff



**QC Report : Laboratory Control Sample (LCS)**

Report Number : 48807

Date : 3/15/2006

Project Name : **Albany Hill**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	3/13/06	102	70-130
Toluene	40.0	ug/L	EPA 8260B	3/13/06	102	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/13/06	95.4	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/13/06	98.2	70-130
Benzene	40.0	ug/L	EPA 8260B	3/13/06	89.9	70-130
Toluene	40.0	ug/L	EPA 8260B	3/13/06	92.1	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/13/06	98.2	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/13/06	107	70-130
Benzene	40.0	ug/L	EPA 8260B	3/11/06	94.4	70-130
Toluene	40.0	ug/L	EPA 8260B	3/11/06	96.4	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/11/06	92.1	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/11/06	106	70-130
Benzene	40.0	ug/L	EPA 8260B	3/13/06	97.3	70-130
Toluene	40.0	ug/L	EPA 8260B	3/13/06	104	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/13/06	107	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/13/06	106	70-130
Benzene	40.0	ug/L	EPA 8260B	3/14/06	90.9	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

Joel Kiff



**QC Report : Laboratory Control Sample (LCS)**

Report Number : 48807

Date : 3/15/2006

Project Name : **Albany Hill**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Toluene	40.0	ug/L	EPA 8260B	3/14/06	93.8	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/14/06	88.6	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/14/06	102	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

Joel Kiff







48807

8/24/00



May 11, 2006

Jerry Wickham  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

SUBJECT: Albany Hill Mini Mart  
800 San Pablo Avenue  
Albany, California

Dear Mr. Wickham:

Attached please find a copy of the most recent groundwater sampling report for the above referenced site. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Sincerely,

A handwritten signature in dark ink, appearing to read "Joginder", with a stylized flourish at the end.

Joginder Sikand