CAMBRIA

November 7, 2001

Barney Chan
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: **Third Quarter 2001 Monitoring Report**
Shell-branded Service Station
4411 Foothill Boulevard
Oakland, California
Incident #98995746
Cambria Project #243-0897-002

NOV 13 2001

#113/RO 415

Dear Mr. Chan:

On behalf of Equiva Services LLC, Cambria Environmental Technology, Inc. (Cambria) is submitting this groundwater monitoring report in accordance with the reporting requirements of 23 CCR 2652d.

THIRD QUARTER 2001 ACTIVITIES

Groundwater Monitoring: Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged and sampled all on-site wells, calculated groundwater elevations, and compiled the gasoline constituents analytical data. Cambria prepared a vicinity/ area well survey map (Figure 1), a groundwater elevation contour map (Figure 2), compiled the bio-attenuation parameters data (Table 1), and prepared a methyl tertiary butyl ether (MTBE) and mass removal graph (Figure 3). Blaine's report, presenting the laboratory report and supporting field documents, is included as Attachment A.

Joint sampling and gauging of the Shell-branded site and the adjacent Chevron site were coordinated with Gettler Ryan Inc. in the third quarter 2001. The adjacent BP Oil Company site is gauged and sampled annually only in the first quarter.

Dual-Phase Vacuum Extraction (DVE): On July 23, August 20, and September 18, 2001 Advanced Cleanup Technologies Inc. of Benicia, California conducted eight-hour mobile DVE events at the site using a vacuum truck. DVE is the process of applying high vacuum through an airtight well seal to simultaneously extract soil vapors from the vadose zone and enhance groundwater extraction from the saturated zone. Mobile DVE uses a vacuum truck to create the vacuum and contain extracted fluids.

Oakland, CA
San Ramon, CA
Sonoma, CA

Cambria Environmental Technology, Inc.

1144 65th Street
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Oakland, CA 94608
Tel (510) 420-0700
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DVE was performed on well S-2 (Figure 2). After extracting groundwater and vapors from S-2 for the majority of the eight-hour event, the remaining capacity of the truck was filled with groundwater from well BW-A. Since April 2001, DVE and groundwater extraction have extracted approximately 18,588 gallons of groundwater from wells S-2, BW-A, and T-2 and removed an estimated 1.05 pounds of total petroleum hydrocarbons as gasoline, and 0.39 pounds of MTBE (Tables 2 and 3). MTBE concentrations and mass removal from S-2 are shown on Figure 3.

ANTICIPATED FOURTH QUARTER 2001 ACTIVITIES

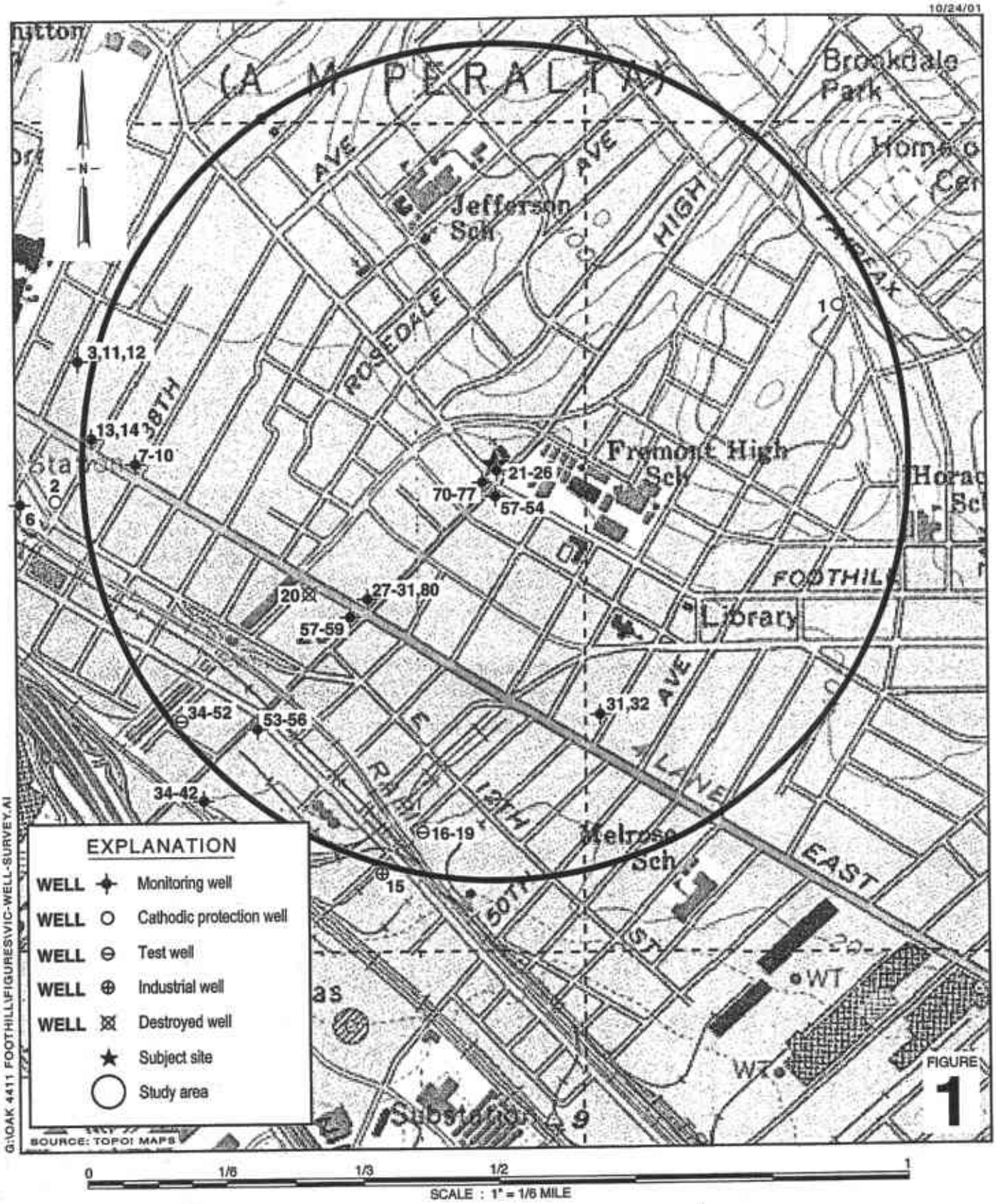
Corrective Action Plan (CAP): Cambria is preparing a CAP to be implemented in conjunction with the impending site demolition and fueling facility removal. The CAP will contain summaries of site background and site characteristics, a discussion of remedial alternatives, and Cambria's recommendations for remedial action.

Site Demolition and Fueling Facility Removal: Construction plans are underway to remove underground storage tanks (USTs), product dispensers, product piping, and all other site features. According to current plans, the site will be sold to the Oakland School District to be used by the adjacent high school as a parking lot. A report providing details of the UST and fuel facility removal, and any corrective actions taken will be provided following completion of the site work.

DVE: Due to the upcoming site demolition, planned remedial efforts, and the lack of DVE effectiveness in decreasing MTBE concentrations in well S-2, Cambria plans to terminate all DVE operations at the site. An evaluation of the DVE operations at the site, and recommendations for other remedial actions, will be provided in Cambria's CAP.

Bio-attenuation Parameter Testing Termination: Bio-attenuation parameters have been measured in groundwater samples since the first quarter of 1998. The collected data is sufficient to indicate that moderate aerobic degradation of benzene, toluene, ethylbenzene and xylenes is occurring in groundwater at the site. Therefore, bio-attenuation parameters will no longer be measured at the site.

Groundwater Monitoring: The next quarterly sampling event is scheduled for November 2001, before site construction begins. Blaine will gauge and sample all wells, and tabulate the data. Cambria will prepare a monitoring report.



Shell-branded Service Station
4411 Foothill Boulevard
Oakland, California
Incident #98995746

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Vicinity / Area Well Survey Map
(1/2-Mile Radius)

11/01/01

Groundwater Elevation Contour Map

September 13, 2001

CAMBRIA

Shell-branded Service Station
4411 Foothill Boulevard
Oakland, California
Incident #98995746

FIGURE
2

EAST 17TH STREET

BOND STREET

FOOTHILL BOULEVARD

HIGH STREET

HIGH STREET

C-8	7.87 (<0.500) - 3/8/01 (<2.50) - 3/8/01
C-9	4.13 (<0.500) - 3/8/01 (<2.50) - 3/8/01
C-7	8.58 (670) (<500)
C-6	11.60 (180) (170)
C-5	17.07 (<0.500) - 3/8/01 (5.15) - 3/8/01
C-4	14.78 (0.68) (18)
C-3	17.36 (<0.50) (<2.5)
C-2	15.28 (1,200) (2,200)
C-1	19.91 (<3.0) (660)
S-1	28.05 1.8 17
S-2	28.44 140 9,200
S-3	27.37 400 <100
S-4	27.79 790 880
BW-A	NS <20 13,900
MW-8	NA <0.5 - 12/19/96 <10 - 12/19/96
MW-2	NA (<0.5) - 12/19/96 (<10) - 12/19/96
MW-4	NA (<0.5) - 12/19/96 (<10) - 12/19/96
MW-3	NA (<0.5) - 3/8/01 (7.7) - 3/8/01
MW-6	NA (<0.5) - 12/19/96 (<10) - 12/19/96
MW-5	NA (12,000) - 3/9/00 (<5.0) - 3/9/00
MW-7	NA (1.2) - 12/19/96 (<10) - 12/19/96
MW-9	NA (<0.5) - 12/19/96 (<10) - 12/19/96

10.00 15.00 20.00 25.00

5.00 5.00

0 25 50 100 200
SCALE 1:50 FEET

Groundwater Gradient Direction
(12/30/98 to 09/13/01)

EXPLANATION

- S-1 — Monitoring well location
- BW-A — Tank backfill well location
- MW-3 — Recovery well
- NA — Not available
- NS — Not surveyed
- → — Groundwater flow direction
- XX.XX — Groundwater elevation contour, in feet above mean sea level (msl), approximately located, dashed where inferred
- Well / ELEV / Benzene / MTBE — Well designation; Groundwater elevation, in feet above msl; Benzene and MTBE concentrations are in parts per billion and are analyzed by EPA Method 8260; results in parentheses were analyzed by EPA Method 8020.

Basement presence based on field observations

G:\OAKLAND\4411FOOTHILL\FIGURES\3QM01-MP.AI

G:\OAKLAND4411FOOTHILL\FIGURES\3QM01-MTBE-MASSREMOVAL.AI

Vacops/DVE Effect on MTBE Concentration

Well S-2

Date	DTW-ft
6/14/99	9.8
9/30/99	10.58
12/22/99	10.13
3/9/00	7.88
6/20/00	10.27
9/5/00	10.19
12/4/01	10.30
3/8/01	8.57
6/7/01	9.39

EXPLANATION

- (GWE) Cumulative MTBE mass removed
- (DVE) Cumulative MTBE vapor mass removed
- MTBE Concentration
- Log. (MTBE Concentration)

10/29/01

Shell-branded Service Station

4411 Foothill Boulevard
Oakland, California
Incident #98995746

C A M B R I A

MTBE and Mass Removal

Well S-2

FIGURE

3

Table 1. **Groundwater Analytical Data - Bioattenuation Parameters -** Shell-branded Service Station Incident #98995746, 4411 Foothill Boulevard, Oakland, California

Well ID	Date	Depth to Water (feet)	Benzene (ppb)	Motor Oil	Ferrous Iron	Nitrate as Nitrogen	Sulfate	DO	ORP (millivolts)	Notes
				← (Concentrations in ppm) →						
S-1	03/16/98	6.00	250	---	1.9	<1.0	<1.0	5.3/3.7	158/155	
	06/23/98	6.31	280	---	2.0	<1.0	5.9	3.8/2.4	117/94	
	09/01/98	9.17	370	---	4.5	<1.0	12	1.4/2.6	-85/-51	
	12/30/98	8.99	174	0.334	4.1	<1.0	6.2	1.6/2.0	-25/-62	
	03/30/99	6.10	1,360	0.279	0.880	0.115	6.10	1.2/1.8	-56/-39	
	06/14/99	7.94	135	---	1.30	<1.00	5.70	1.4/2.1	-72/-24	
	09/30/99	10.04	189	<0.500	1.20	5.41	<5.00	4.3/2.0	-350/-70	
	12/22/99	9.42	50.2	<0.500	0.0670	<1.00	12.1	1.80/2.30	-49/-142	
	03/09/00	6.21	21.2	---	0.12	<0.10	5.3	2.0/2.9	-81/-190	a
	06/20/00	9.18	26.0	<0.500	0.451	<1.00	14.8	2.0/2.4	-37/12	
	09/05/00	10.14	43.5	0.546	0.0291	<1.00	9.72	0.6/0.3	35/-70	
	12/04/00	10.10	5.34	---	0.0257	<1.00	10.2	8.6/9.8	-149/-204	
	03/08/01	5.84	49.6	---	0.559	0.52	7.91	NA/2.7	NA/-8	
	06/07/01	8.80	120.0	---	0.15	<0.05	7.7	6.2/2.2	167/150	
	09/28/01	**10.25**	**1.8**		**<0.10**	**0.86**	**10.0**	**7.8/8.9**	**-45/-15**	
S-2	03/16/98	7.97	830	---	1.7	<1.0	17	7.0/4.3	147/149	
	06/23/98	8.20	46	---	4.3	<1.0	5.7	4.2/3.8	128/134	
	06/23/98	8.20	49	---	3.7	<1.0	5.4	4.2/3.8	128/134	duplicate
	09/01/98	9.85	170	---	4.1	<1.0	7.8	1.9/1.6	-26/-11	
	12/30/98	9.84	369	---	1.9	<1.0	10	2.0/1.8	-54/-36	
	03/30/99	8.41	234	---	<0.100	<0.100	8.51	2.1/1.8	-10/-08	
	06/14/99	9.80	175	---	1.40	<1.00	5.20	2.4/2.1	-121/-113	
	09/30/99	10.58	135	<0.500	0.260	5.36	14.0	5.1/4.8	-172/-42	
	12/22/99	10.13	55.8	<0.500	0.0540	<1.00	24.3	9.60/5.20	-90/-46	
	03/09/00	7.88	1,190	---	0.019	<0.10	6.3	7.6/5.0	58/504	
	06/20/00	10.27	348	<0.500	0.499	<1.00	11.6	1.9/2.2	7/21	
	09/05/00	10.19	106	<0.500	0.885	<1.00	9.36	0.5/1.6	-30/-50	
	12/04/00	10.30	4.37	---	0.116	<1.00	15.9	10.6/9.4	68/505	
	03/08/01	8.57	318	---	0.267	<0.5	11.2	NA/2.7	NA/112	
	06/07/01	9.39	450	---	0.6	<0.05	11	1.1/2.0	110/97	
	09/28/01	**10.34**	**140**	**---**	**<0.10**	**<0.10**	**17**	**11.0/4.5**	**175/37**	

Table 1. **Groundwater Analytical Data - Bioattenuation Parameters** - Shell-branded Service Station Incident #98995746, 4411 Foothill Boulevard, Oakland, California

Well ID	Date	Depth to Water (feet)	Benzene (ppb)	Motor Oil	Ferrous Iron	Nitrate as Nitroger	Sulfate	DO	ORP (millivolts)	Notes
				←		(Concentrations in ppm)	→			
S-3	03/16/98	5.75	840	---	3.8	<1.0	12	3.0/3.4	153/142	
	06/23/98	5.98	90	---	2.0	<1.0	8.9	4.2/2.0	119/121	
	09/01/98	8.98	480	---	2.7	<1.0	7.3	1.9/2.8	57/35	
	09/01/98	8.98	420	---	2.2	<1.0	7.2	1.9/2.8	57/35	duplicate
	12/30/98	9.11	240	---	5.2	<1.0	5.9	1.8/1.6	75/54	
	03/30/99	6.95	195	---	<0.100	0.689	17.5	1.3/1.5	72/61	
	06/14/99	8.85	37.4	---	4.10	<1.00	15.0	1.6/1.2	-118/-108	
	09/30/99	9.66	226	<0.500	0.440	5.89	7.69	3.5/2.8	-140/-70	
	12/22/99	9.50	207	<0.500	1.30	<1.00	5.65	0.98/0.80	16/-57	
	03/09/00	6.25	84.5	---	0.046	4.9	16	1.0/1.4	-163/-110	a
	06/20/00	9.67	117	<0.500	0.639	6.92	19.8	1.8/2.0	-102/-92	
	09/05/00	9.49	127	<0.500	2.53	<1.00	5.36	1.1/1.9	-24/-47	
	12/04/00	9.23	217	---	2.77	<1.00	<5.00	1.1/15	-175/-159	
	03/08/01	8.17	465	---	1.92	<0.5	5.01	1.1/NA	-22/-48	
	06/07/01	8.78	230	---	1.4	<0.05	<2.0	0.8/0.9	162/104	
	09/28/01	**9.93**	**400**	**---**	**<0.10**	**0.36**	**0.74**	**3.7/2.9**	**194/32**	
S-4	03/31/00	8.92	4,570	---	3.23	<1.00	<5.00	1.8/1.2	-25/-37	
	06/20/00	8.77	4,590	<0.500	0.814	<1.00	11.2	2.7/2.9	3/-78	
	09/05/00	10.57	841	<0.500	5.62	<1.00	15.9	1.3/0.3	-90/-74	
	12/04/00	10.67	949	---	6.47	<1.00	14.1	1.1/1.0	-224/-202	
	03/08/01	8.44	5,210	---	6.58	<0.5	<5	1.0/0.9	-103/-99	
	06/07/01	10.57	2,500	---	8.8	<0.05	3.5	0.7/0.6	77/25	
	09/28/01	**11.27**	**790**	**---**	**3.9**	**<0.10**	**15.0**	**3.8/3.9**	**68/2**	
Ideal Aerobic Degradation Relationship:					Direct	Inverse	Inverse	Inverse	Direct	
Observed Relationship:					Inconclusive	Inverse	Moderately inverse	Moderately inverse	Inconclusive	

Table 1. **Groundwater Analytical Data - Bioattenuation Parameters** - Shell-branded Service Station Incident #98995746, 4411 Foothill Boulevard, Oakland, California

Well ID	Date	Depth to Water (feet)	Benzene (ppb)	Motor Oil ←	Ferrous Iron	Nitrate as Nitroger (Concentrations in ppm)	Sulfate →	DO	ORP (millivolts)	Notes

Abbreviations and Notes:

Benzene analyzed by EPA Method 8020 or 8260
Motor Oil = Extractable hydrocarbons as motor oil by modified EPA Method 8015
DO = Dissolved oxygen (pre-purge / post-purge)
ORP = Oxidation reduction potential (pre-purge / post-purge)
ppb = Parts per billion
ppm = Parts per million
<n = Below detection limit of n units
Ferrous iron by modified EPA Method 200.7
Nitrate as nitrate and sulfate by EPA Method 300.0
NA = Not available

a = TPHg result was generated out of hold time

Table 2: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995746, 4411 Foothill Boulevard, Oakland, California

					TPPH			Benzene			MTBE		
Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Date Sampled	TPPH Concentration (ppb)	TPPH Removed (pounds)	TPPH Removed To Date (pounds)	Benzene Concentration (ppb)	Benzene Removed (pounds)	Benzene Removed To Date (pounds)	MTBE Concentration (ppb)	MTBE Removed (pounds)	MTBE Removed To Date (pounds)
04/30/01	S-2	300	300	03/08/01	<2,500	0.00313	0.00313	318	0.00080	0.00080	**17,500**	0.04381	0.04381
05/23/01	S-2	400	700	03/08/01	<2,500	0.00417	0.00730	318	0.00106	0.00186	**17,500**	0.05841	0.10222
06/18/01	S-2	475	1,175	06/07/01	18,000	0.07134	0.07865	450	0.00178	0.00364	**18,000**	0.07134	0.17356
07/23/01	S-2	500	1,675	06/07/01	18,000	0.07510	0.15374	450	0.00188	0.00552	**18,000**	0.07510	0.24866
08/20/01	S-2	300	1,975	06/07/01	18,000	0.04506	0.19880	450	0.00113	0.00665	**18,000**	0.04506	0.29372
09/18/01	S-2	500	2,475	06/07/01	18,000	0.07510	0.27390	450	0.00188	0.00852	**18,000**	0.07510	0.36882
04/21/00	BW-A	2,013	2,013	03/08/01	<2,500	0.02100	0.02100	46.6	0.00078	0.00078	**11,700**	0.19653	0.19653
04/28/00	BW-A	2,000	4,013	03/08/01	<2,500	0.02086	0.04186	46.6	0.00078	0.00156	**11,700**	0.19526	0.39179
06/18/01	BW-A	2,000	6,013	06/07/01	1,100	0.01836	0.06021	<10	0.00008	0.00164	7,200	0.12016	0.51194
07/23/01	BW-A	10	6,023	06/07/01	1,100	0.00009	0.06031	<10	0.00000	0.00164	7,200	0.00060	0.51254
08/20/01	BW-A	100	6,123	06/07/01	1,100	0.00092	0.06122	<10	0.00000	0.00165	7,200	0.00601	0.51855
09/18/01	BW-A	2,300	8,423	06/07/01	1,100	0.02111	0.08234	<10	0.00010	0.00174	7,200	0.13818	0.65674
Total Gallons Extracted:			**10,898**		**Total Pounds Removed:**		**0.35624**			**0.01027**			**1.02556**
					Total Gallons Removed:		**0.05840**			**0.00141**			**0.16541**

Abbreviations & Notes:

$(\#)(\sim 6\#/gal) \approx .059$

TPPH = Total purgeable hydrocarbons as gasoline
MtBE = Methyl tert-butyl ether
ppb = Parts per billion
gal = Gallon
Mass removed based on the formula: volume extracted (gal) x Concentration (µg/L) x (g/10^6µg) x (pound/453.6g) x (3.785 L/gal)
Volume removal data based on the formula: density (in gms/cc) x 9.339 (ccxlbs/gms/gals) 9.339
TPPH, benzene analyzed by EPA Method 8015/8020
MTBE analyzed by EPA Method 8260 in bold font, all other MTBE analyzed by EPA Method 8020
Concentrations based on most recent groundwater monitoring results
If concentration is less than the laboratory detection limit, one half of the detection limit concentration is used in the mass removal calculation.
Groundwater extracted by vacuum trucks provided by ACTI. Water disposed of at a Martinez Refinery.

Table 3: Vapor Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995746, 4411 Foothill Boulevard, Oakland, Califo

Date	Well ID	Interval Hours of Operation (hours)	System Flow Rate (CFM)	Hydrocarbon Concentrations (Concentrations in ppmv) TPHg	Benzene	MTBE	TPPH TPHg Removal Rate (#/hour)	TPPH Cumulative TPHg Removed (#)	Benzene Benzene Removal Rate (#/hour)	Benzene Cumulative Benzene Removed (#)	MTBE MTBE Removal Rate (#/hour)	MTBE Cumulative MTBE Removed (#)
04/30/01	S-2	6.50	1.2	2,500	20	120	0.040	0.261	0.000	0.002	0.002	0.013
05/23/01	S-2	7.00	5.0	3,000	60	38	0.201	1.664	0.004	0.027	0.003	0.031
06/18/01	S-2	6.50	2.8	4,400	39	46	0.165	2.735	0.001	0.036	0.002	0.042
07/23/01	S-2	7.00	3.6	4,500	39	34	0.217	4.251	0.002	0.048	0.002	0.054
08/20/01*	S-2	6.75	3.6	610	7.8	7.4	0.029	4.449	0.000	0.050	0.000	0.057
09/18/01	S-2	6.00	8.9	5,900	47	46.0	0.702	8.661	0.005	0.081	0.006	0.090
Total Pounds Removed:							**TPHg =**	**8.661**	**Benzene =**	**0.081**	**MTBE =**	**0.090**

Abbreviations and Notes:

CFM = Cubic feet per minute

TPHg = Total petroleum hydrocarbons as gasoline (C6-C12) by modified EPA Method 8015 in 1 liter tedlar bag samples

ppmv = Parts per million by volume

= Pounds

TPHG, Benzene, and MTBE analyzed by EPA Method8260 in 1 liter tedlar bag samples

TPHg / Benzene / MTBE removal rate = Rate based on Bay Area Air Quality Management District's Manual of Procedures for Soil Vapor Extraction dated July 17, 1991.

(Rate = Concentration (ppmv) x system flow rate (cfm) x (1lb-mole/386ft3) x molecular weight (86 lb/lb-mole for TPHg, 78 lb/lb-mole for benzene, 88 lb/lb-mole for MTBE) x 60 min/hour x 1/1,000,000)

* = System flow rate estimated.

Cumulative TPHg / Benzene / MTBE removal = Previous removal rate multiplied by the hour-interval of operation plus the previous total

If concentration is less than the laboratory detection limit, one half of the detection limit concentration is used in the mass removal calculation.

ATTACHMENT A

Blaine Groundwater Monitoring Report and Field Notes

BLAINE
TECH SERVICES INC.

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October 11, 2001

Karen Petryna
Equiva Services LLC
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Burbank, CA 91510-7869

Third Quarter 2001 Groundwater Monitoring at
Shell-branded Service Station
4411 Foothill Boulevard
Oakland, CA

Monitoring performed on September 13, 2001

Groundwater Monitoring Report **010913-G-1**

This report covers the routine monitoring of groundwater wells at this Shell-branded facility. In accordance with standard procedures that conform to Regional Water Quality Control Board requirements, routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to the Martinez Refining Company.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL CONCENTRATIONS**. The full analytical report for the most recent samples and the field data sheets are attached to this report.

At a minimum, Blaine Tech Services, Inc. field personnel are certified on completion of a forty hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. Our activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrological conditions or formulation of recommendations was performed.

Please call if you have any questions.

Yours truly,

Nick Sudano
Project Coordinator

NS/jt

attachments: Cumulative Table of WELL CONCENTRATIONS
Certified Analytical Report
Field Data Sheets

cc: Anni Kreml
Cambria Environmental Technology, Inc.
1144 65th Street, Ste. C
Oakland, CA 94608-2411

WELL CONCENTRATIONS
Shell-branded Service Station
4411 Foothill Boulevard
Oakland, CA
Wic #204-5508-3400

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
S-1	12/18/1992	41,000	NA	3,100	1,100	1,200	8,700	NA	NA	38.31	9.06	NA	NA
S-1	05/26/1993	39,000	6,000	1,300	4,700	1,500	7,800	NA	NA	38.31	NA	NA	NA
S-1	05/28/1993	NA	NA	NA	NA	NA	NA	NA	NA	38.31	12.13	26.18	NA
S-1	06/03/1993	NA	NA	NA	NA	NA	NA	NA	NA	38.31	8.89	29.42	NA
S-1	06/08/1993	NA	NA	NA	NA	NA	NA	NA	NA	38.31	8.80	29.51	NA
S-1	09/21/1993	34,000	5,900	480	5,000	3,800	18,000	NA	NA	38.31	10.40	27.91	NA
S-1	12/14/1993	25,000	13,000	1,100	5,000	2,200	11,000	NA	NA	38.31	9.66	28.65	NA
S-1	03/17/1994	57,000	1,600	1,300	5,400	2,100	11,000	NA	NA	38.31	8.20	30.11	NA
S-1	06/16/1994	57,000	3,000	1,600	6,000	2,000	13,000	NA	NA	38.31	9.41	28.90	NA
S-1	09/22/1994	39,000	ND	1,300	2,100	1,500	7,100	NA	NA	38.31	11.13	27.18	NA
S-1 a	12/15/1994	30,000	3,100	1,100	4,700	1,600	10,000	NA	NA	38.31	7.15	31.16	NA
S-1 a, b	03/30/1995	30,000	3,100	1,400	4,000	1,500	11,000	NA	NA	38.31	6.09	32.22	NA
S-1	06/2019/95	28,000	2,100	1,100	2,300	1,100	8,300	NA	NA	38.31	7.30	31.01	NA
S-1	09/20/1995	40,000	2,600	840	3,600	1,300	8,600	NA	NA	38.31	10.02	28.29	NA
S-1 a	12/06/1995	38,000	6,400	920	3,200	1,500	9,400	NA	NA	38.31	11.64	26.67	NA
S-1	03/21/1996	48,000	NA	700	4,200	1,100	8,600	NA	NA	38.31	6.87	31.44	NA
S-1	09/06/1996	41,000	4,100	830	2,600	2,100	12,000	<250	NA	38.31	10.50	27.81	NA
S-1	12/19/1996	40,000	2,500	540	3,100	1,900	9,800	920	NA	38.31	8.24	30.07	NA
S-1	03/17/1997	42,000	4,700	610	2,700	1,700	11,000	3,500	NA	38.31	7.26	31.05	NA
S-1	06/11/1997	28,000	4,000	540	960	1,300	5,300	220	NA	38.31	10.69	27.62	NA
S-1 (D)	06/11/1997	30,000	3,900	580	1,000	1,400	5,400	<125	NA	38.31	10.69	27.62	NA
S-1	09/17/1997	27,000	4,400	310	1,200	1,900	9,000	170	NA	38.31	10.26	28.05	NA
S-1 (D)	09/17/1997	27,000	4,400	270	1,200	1,900	9,000	170	NA	38.31	10.26	28.05	NA
S-1	12/11/1997	21,000	3,400	350	820	1,500	6,500	<125	NA	38.31	6.96	31.35	NA
S-1	03/16/1998	25,000	2,500	250	820	670	5,000	<125	NA	38.31	6.00	32.31	NA
S-1 (D)	03/16/1998	26,000	NA	250	840	720	5,100	<125	NA	38.31	6.00	32.31	5.3/3.7
S-1	06/23/1998	<1,000	230	280	14	23	15	6,100	7,800	38.31	6.31	32.00	3.8/2.4
S-1	09/01/1998	26,000	2,300	370	620	1,300	33	1,400	120	38.31	9.17	29.14	1.4/2.6
S-1	12/30/1998	29,900	1,970	174	732	1,680	5,740	182	NA	38.31	8.99	29.32	1.6/2.0

WELL CONCENTRATIONS
Shell-branded Service Station
4411 Foothill Boulevard
Oakland, CA
Wic #204-5508-3400

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
S-1	03/30/1999	14,200	1,150	1,360	260	1,070	3,580	<500	90.0	38.31	6.10	32.21	1.2/1.8
S-1	03/31/1999	NA	NA	NA	NA	NA	NA	NA	NA	38.31	7.84	30.47	NA
S-1	06/14/1999	20,200	4,280	135	407	825	5,000	705	NA	38.31	7.94	30.37	1.4/2.1
S-1	09/30/1999	18,300	3,120	189	531	1,250	4,740	322	NA	38.31	10.04	28.27	4.3/2.0
S-1	12/22/1999	2,450	444a	50.2	97.5	139	458	133	NA	38.31	9.42	28.89	1.8/2.3
S-1	03/09/2000	1,230d	1,200a	21.2d	115d	116d	411d	45.1d	NA	38.30	6.21	32.09	2.0/2.9
S-1	06/20/2000	755	352a	26.0	48.4	43.1	230	71.5	NA	38.30	9.18	29.12	2.0/2.4
S-1	09/05/2000	2,980	783a	43.5	117	168	871	192	NA	38.30	10.14	28.16	0.6/0.3
S-1	12/04/2000	399	238a	5.34	14.6	36.2	106	24.9	NA	38.30	10.10	28.20	8.6/9.8
S-1	12/12/2000	NA	NA	NA	NA	NA	NA	NA	NA	38.30	9.22	29.08	NA
S-1	03/08/2001	2,940	1,390a	49.6	52.9	21.8	749	87.6	NA	38.30	5.84	32.46	2.7e
S-1	06/07/2001	10,000	1,400	120	370	680	2,400	150	NA	38.30	8.80	29.50	6.2/2.2
S-1	**09/13/2001**	**240**	**<200**	**1.8**	**8.9**	**16**	**53**	**NA**	**17**	**38.30**	**10.25**	**28.05**	**7.8/8.9**
S-2	05/28/1993	NA	NA	NA	NA	NA	NA	NA	NA	38.79	9.51	29.28	NA
S-2	06/03/1993	NA	NA	NA	NA	NA	NA	NA	NA	38.79	9.51	29.28	NA
S-2	06/08/1993	NA	NA	NA	NA	NA	NA	NA	NA	38.79	9.57	29.22	NA
S-2	06/29/1993	1,300	NA	290	35	38	130	NA	NA	38.79	NA	NA	NA
S-2	09/21/1993	3,300	NA	870	24	190	120	NA	NA	38.79	10.54	28.25	NA
S-2	12/14/1993	1,300	NA	400	16	36	27	NA	NA	38.79	9.76	29.03	NA
S-2	03/17/1994	4,500	NA	610	27	92	110	NA	NA	38.79	9.92	28.87	NA
S-2 (D)	03/17/1994	4,000	NA	610	26	93	120	NA	NA	38.79	9.92	28.87	NA
S-2	06/16/1994	2,800	NA	690	45	97	140	NA	NA	38.79	10.11	28.68	NA
S-2	09/22/1994	4,000	NA	630	94	64	230	NA	NA	38.79	10.51	28.28	NA
S-2	12/15/1994	1,600	NA	450	300	67	130	NA	NA	38.79	9.12	29.67	NA
S-2 b	03/30/1995	8,200	NA	2,800	190	240	700	NA	NA	38.79	7.86	30.93	NA
S-2	06/20/1995	9,600	NA	2,600	160	170	500	NA	NA	38.79	9.51	29.28	NA
S-2	09/20/1995	4,200	NA	920	45	98	140	NA	NA	38.79	10.06	28.73	NA
S-2	12/06/1995	<5,000	NA	790	67	64	130	NA	NA	38.79	10.52	28.27	NA

WELL CONCENTRATIONS
Shell-branded Service Station
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Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
S-2	03/21/1996	3,700	NA	850	45	96	170	NA	NA	38.79	8.60	30.19	NA
S-2	09/06/1996	2,400	NA	500	33	39	84	490	NA	38.79	10.50	28.29	NA
S-2	12/19/1996	1,200	NA	330	15	24	31	430	NA	38.79	9.40	29.39	NA
S-2	03/17/1997	4,100	NA	780	42	110	120	2,200	NA	38.79	9.82	28.97	NA
S-2	06/11/1997	760	NA	120	<5.0	7.0	7.6	900	NA	38.79	10.18	28.61	NA
S-2	09/17/1997	1,500	NA	230	8.6	40	27	480	NA	38.79	9.90	28.89	NA
S-2	12/11/1997	1,300	NA	240	15	33	57	280	NA	38.79	8.27	30.52	NA
S-2	03/16/1998	1,100	NA	830	48	<10	<10	4,700	4,800	38.79	7.97	30.82	7.0/4.3
S-2	06/23/1998	720	NA	46	6.8	50	68	50	8.8	38.79	8.20	30.59	4.2/3.8
S-2 (D)	06/23/1998	810	NA	49	7.1	50	70	49	8.8	38.79	8.20	30.59	4.2/3.8
S-2	09/01/1998	<2,000	NA	170	<20	<20	<20	9,300	12,000	38.79	9.85	28.94	1.9/1.6
S-2	12/30/1998	<5,000	NA	369	<50	<50	<50	14,300	NA	38.79	9.84	28.95	2.0/1.8
S-2	03/30/1999	<2,000	NA	234	<20.0	27.4	36.9	49,200	53,000	38.79	8.41	30.38	2.1/1.8
S-2	03/31/1999	NA	NA	NA	NA	NA	NA	NA	NA	38.79	8.67	30.12	NA
S-2	06/14/1999	<1,000	NA	175	<10.0	<10.0	11.1	67,500	NA	38.79	9.80	28.99	NA
S-2	09/30/1999	678	177a	135	8.22	14.9	25.8	17,100	17,000c	38.79	10.58	28.21	5.1/4.8
S-2	12/22/1999	316	142a	55.8	10.1	5.26	10.4	9,410	8,810	38.79	10.13	28.66	9.6/5.2
S-2	03/09/2000	2,670	630a	1,190d	62.7	84.1	125	29,200d	31,400c	38.78	7.88	30.90	7.6/5.0
S-2	06/20/2000	<5,000	401a	348	<50.0	50.4	127	35,800	33,900c	38.78	10.27	28.51	1.9/2.2
S-2	09/05/2000	<5,000	373a	106	<50.0	<50.0	<50.0	25,800	37,100c	38.78	10.19	28.59	0.5/1.6
S-2	12/04/2000	<250	1,730a	4.37	<2.50	<2.50	<2.50	4,500	5,130c	38.78	10.30	28.48	10.6/9.4
S-2	12/12/2000	NA	NA	NA	NA	NA	NA	NA	NA	38.78	9.66	29.12	NA
S-2	03/08/2001	<2,500	<51.3	318	45.7	53.5	88.5	15,500	17,500	38.78	8.57	30.21	2.7e
S-2	06/07/2001	18,000	11,000	450	170	390	2,200	13,000	18,000	38.78	9.39	29.39	1.1/2.0
S-2	**09/13/2001**	**13,000**	**<5,000**	**140**	**110**	**350**	**1,400**	**NA**	**9,200**	**38.78**	**10.34**	**28.44**	**11.0/4.5**
S-3	05/28/1993	NA	NA	NA	NA	NA	NA	NA	NA	37.33	8.45	28.88	NA
S-3	06/03/1993	NA	NA	NA	NA	NA	NA	NA	NA	37.33	8.36	28.97	NA
S-3	01/19/1900	NA	NA	NA	NA	NA	NA	NA	NA	37.33	8.41	28.92	NA

WELL CONCENTRATIONS
Shell-branded Service Station
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Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
S-3	06/29/1993	29,000	NA	1,500	1,800	950	6,200	NA	NA	37.33	NA	NA	NA
S-3	09/21/1993	15,000	NA	900	2,200	2,600	11,000	NA	NA	37.33	10.08	27.25	NA
S-3	12/94/1993	20,000	NA	1,100	2,400	1,800	8,500	NA	NA	37.33	8.80	28.53	NA
S-3	03/17/1994	14,000	NA	580	190	750	1,700	NA	NA	37.33	8.34	28.99	NA
S-3	06/16/1994	20,000	NA	700	690	1,400	4,100	NA	NA	37.33	9.12	28.21	NA
S-3 (D)	06/16/1994	19,000	NA	680	560	1,300	3,700	NA	NA	37.33	NA	NA	NA
S-3	09/22/1994	24,000	NA	630	1,100	1,400	5,700	NA	NA	37.33	10.27	27.06	NA
S-3 (D)	09/22/1994	25,000	NA	720	1,100	1,500	6,100	NA	NA	37.33	NA	NA	NA
S-3	12/15/1994	18,000	NA	520	800	1,100	4,200	NA	NA	37.33	7.81	29.52	NA
S-3 (D)	12/15/1994	23,000	NA	1,000	1,900	2,000	8,600	NA	NA	37.33	NA	NA	NA
S-3 b	03/30/1995	8,800	NA	360	730	700	3,700	NA	NA	37.33	7.06	30.27	NA
S-3 (D)	03/30/1995	7,600	NA	330	570	600	2,600	NA	NA	37.33	NA	NA	NA
S-3	06/20/1995	9,600	NA	510	170	960	1,700	NA	NA	37.33	8.15	29.18	NA
S-3 (D)	06/20/1995	9,800	NA	500	170	950	1,700	NA	NA	37.33	NA	NA	NA
S-3	09/20/1995	21,000	NA	400	560	1,300	4,600	NA	NA	37.33	9.32	28.01	NA
S-3	12/06/1995	24,000	NA	630	1,400	1,400	6,000	NA	NA	37.33	10.53	26.80	NA
S-3 (D)	12/06/1995	22,000	NA	630	1,200	1,400	5,500	NA	NA	37.33	NA	NA	NA
S-3	03/21/1996	9,100	NA	290	110	490	1,600	NA	NA	37.33	7.32	30.01	NA
S-3 (D)	03/21/1996	11,000	NA	310	250	540	2,100	NA	NA	37.33	NA	NA	NA
S-3	09/06/1996	15,000	NA	440	300	1,100	3,000	500	NA	37.33	10.10	27.23	NA
S-3 (D)	09/06/1996	11,000	NA	490	170	820	1,500	700	NA	37.33	NA	NA	NA
S-3	12/19/1996	12,000	NA	600	380	850	2,500	380	NA	37.33	8.36	28.97	NA
S-3 (D)	12/19/1996	12,000	NA	590	380	830	2,500	540	NA	37.33	8.36	28.97	NA
S-3	03/17/1997	12,000	NA	520	140	740	1,400	320	NA	37.33	8.57	28.76	NA
S-3 (D)	03/17/1997	9,600	NA	500	100	680	1,100	<250	NA	37.33	8.57	28.76	NA
S-3	06/11/1997	9,600	NA	510	94	740	1,100	410	NA	37.33	9.26	28.07	NA
S-3	09/17/1997	21,000	NA	140	560	1,800	7,200	130	NA	37.33	9.62	27.71	NA
S-3	12/11/1997	24,000	NA	530	970	1,600	6,900	950	NA	37.33	7.34	29.99	NA
S-3 (D)	12/11/1997	29,000	NA	520	1,000	1,600	7,300	970	NA	37.33	7.34	29.99	NA

WELL CONCENTRATIONS
Shell-branded Service Station
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Oakland, CA
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Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
S-3	03/16/1998	29,000	NA	840	810	1,700	6,000	<250	NA	37.33	5.75	31.58	3.0/3.4
S-3	06/23/1998	3,800	NA	90	220	240	1,400	<50	NA	37.33	5.98	31.35	4.2/2.0
S-3	09/01/1998	9,600	NA	480	120	870	1,800	490	<50	37.33	8.98	28.35	1.9/2.8
S-3 (D)	09/01/1998	9,200	NA	420	110	800	1,700	110	<50	37.33	8.98	28.35	1.9/2.8
S-3	12/30/1998	7,660	NA	240	103	410	834	64.9	NA	37.33	9.11	28.22	1.8/1.6
S-3	03/30/1999	2,070	NA	195	10.0	<5.00	48.6	354	64.6	37.33	6.95	30.38	1.3/1.5
S-3	03/31/1999	NA	NA	NA	NA	NA	NA	NA	NA	37.33	7.48	29.85	NA
S-3	06/14/1999	1,250	NA	37.4	17.4	110	109	118	NA	37.33	8.85	28.48	NA
S-3	09/30/1999	8,270	2,020a	226	113	686	1,440	184	NA	37.33	9.66	27.67	3.5/2.8
S-3	12/22/1999	9,530	2,270a	207	132	603	1,450	616	NA	37.33	9.50	27.83	0.98/0.8
S-3	03/09/2000	2,290d	1,600a	84.5d	17.0d	104d	105d	29.3d	NA	37.30	6.25	31.05	1.0/1.4
S-3	06/20/2000	5,570	2,900a	117	41.6	395	393	354	NA	37.30	9.67	27.63	1.8/2.0
S-3	09/05/2000	6,930	1,600a	127	85.5	354	535	509	NA	37.30	9.49	27.81	1.1/1.9
S-3	12/04/2000	8,390	1,460a	217	82.4	471	952	436	NA	37.30	9.23	28.07	1.1/1.5
S-3	12/12/2000	NA	NA	NA	NA	NA	NA	NA	NA	37.30	9.23	28.07	NA
S-3	03/08/2001	19,400	1,720a	465	772	1,230	3,830	160	NA	37.30	8.17	29.13	1.1f
S-3	06/07/2001	12,000	1,400	230	110	900	1,100	120	NA	37.30	8.78	28.52	0.8/0.9
S-3	**09/13/2001**	**32,000**	**<2,000**	**400**	**880**	**2,000**	**7,000**	**NA**	**<100**	**37.30**	**9.93**	**27.37**	**3.7/2.9**
S-4	03/29/2000	NA	NA	NA	NA	NA	NA	NA	NA	39.06	8.37	30.69	NA
S-4	03/31/2000	20,900	5,780a	4,570	272	595	997	4,490	4,450c	39.06	8.92	30.14	1.8/1.2
S-4	06/20/2000	19,500	244a	4,590	309	723	1,290	3,740	NA	39.06	8.77	30.29	2.7/2.9
S-4	09/05/2000	5,760	1,670a	841	54.2	162	115	1,040	NA	39.06	10.57	28.49	1.3/0.3
S-4	12/04/2000	3,990	1,050a	949	<10.0	118	48.3	1,120	NA	39.06	10.67	28.39	1.1/1.0
S-4	12/12/2000	NA	NA	NA	NA	NA	NA	NA	NA	39.06	10.64	28.42	NA
S-4	03/08/2001	20,100	5,840a	5,210	105	381	281	2,520	NA	39.06	8.44	30.62	1.0/0.9
S-4	06/07/2001	11,000	3,500	2,500	86	370	170	2,000	NA	39.06	10.57	28.49	0.7/0.6
S-4	**09/13/2001**	**4,200**	**<800**	**790**	**14**	**110**	**48**	**NA**	**690**	**39.06**	**11.27**	**27.79**	**3.8/3.9**

WELL CONCENTRATIONS
Shell-branded Service Station
4411 Foothill Boulevard
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Wic #204-5508-3400

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
BW-A	09/30/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.55	NA	2.3
BW-A	12/22/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.52	NA	2.2
BW-A	03/09/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.99	NA	1.5
BW-A	06/20/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.69	NA	2.4
BW-A	09/05/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.43	NA	1.0
BW-A	12/04/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.96	NA	1.3
BW-A	12/12/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.71	NA	NA
BW-A	03/08/2001	<2,500	1,370a	46.6	<25.0	<25.0	<25.0	10,600	11,700	NA	6.38	NA	0.9/1.4
BW-A	06/07/2001	1,100	960	<10	<10	<10	17	7,200	NA	NA	9.82	NA	3.6/0.8
BW-A	**09/13/2001**	**<2,000**	**460**	**<20**	**<20**	**<20**	**<50**	**NA**	**13,000**	**NA**	**10.49**	**NA**	**3.3/1.7**

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to September 13, 2001 analyzed by EPA Method 8015.

TEPH = Total petroleum hydrocarbons as diesel by modified EPA Method 8015.

BTEX = benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to September 13, 2001 analyzed by EPA Method 8020.

MTBE = methyl-tertiary-butyl ether

TOB = Top of Box Elevation

GW = Groundwater

DO = Dissolved Oxygen

ug/L = parts per billion

ppm = parts per million

msl = Mean sea level

ft = Feet

<n = Below detection limit

D = Duplicate sample

n/n = Pre-purge / Post-purge

NA = Not applicable

WELL CONCENTRATIONS
Shell-branded Service Station
4411 Foothill Boulevard
Oakland, CA
Wic #204-5508-3400

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)

Notes:

a = Chromatogram pattern indicates an unidentified hydrocarbon.

b = National Environmental Testing, Inc. (NET), analyzed within hold time but further dilutions were required and analyzed out of hold time.
NET suggests that these should be considered minimum concentrations.

c = Sample analyzed outside the EPA recommended holding times.

d = Result reported was generated out of hold time.

e = Post-purge DO reading.

f = Pre-purge DO reading.

Wells S-1 through S-4 surveyed February 3, 2000 by Virgil Chavez Land Surveying of Vallejo, California.

KIFF ANALYTICAL LLC

Report Number : 22280
Date : 10/1/2001

Nick Sudano
Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112-1105

Subject : 4 Water Samples
Project Name : 4411 Foothill Boulevard, Oakland
Project Number : 010913-G1
P.O. Number : 98995746

Dear Mr. Sudano,

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,

Joel Kiff

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 22280
Date : 10/1/2001

Subject : 4 Water Samples
Project Name : 4411 Foothill Boulevard, Oakland
Project Number : 010913-G1
P.O. Number : 98995746

Case Narrative

The Method Reporting Limit for TPH as Diesel has been increased due to interference from Gasoline-Range Hydrocarbons for the following samples :

S-1
S-2
S-3
S-4

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 916-297-4800

KIFF ANALYTICAL LLC

Report Number : 22280

Date : 10/1/2001

Project Name : **4411 Foothill Boulevard, Oakland**

Project Number : **010913-G1**

Sample : **S-1** Matrix : Water Lab Number : 22280-01

Sample Date :9/13/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**1.8**	0.50	ug/L	EPA 8260B	9/23/2001
Toluene	**8.9**	0.50	ug/L	EPA 8260B	9/23/2001
Ethylbenzene	**16**	0.50	ug/L	EPA 8260B	9/23/2001
Total Xylenes	**53**	0.50	ug/L	EPA 8260B	9/23/2001
Methyl-t-butyl ether (MTBE)	**17**	0.50	ug/L	EPA 8260B	9/23/2001
Diisopropyl ether (DIPE)	**< 2.0**	2.0	ug/L	EPA 8260B	9/23/2001
Ethyl-t-butyl ether (ETBE)	**< 2.0**	2.0	ug/L	EPA 8260B	9/23/2001
Tert-amyl methyl ether (TAME)	**< 2.0**	2.0	ug/L	EPA 8260B	9/23/2001
Tert-Butanol	**< 50**	50	ug/L	EPA 8260B	9/23/2001
Ethanol	**< 500**	500	ug/L	EPA 8260B	9/23/2001
TPH as Gasoline	**240**	50	ug/L	EPA 8260B	9/23/2001
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	9/23/2001
4-Bromofluorobenzene (Surr)	105		% Recovery	EPA 8260B	9/23/2001
TPH as Diesel	**< 200**	200	ug/L	M EPA 8015	9/16/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 22280
Date : 10/1/2001

Project Name : **4411 Foothill Boulevard, Oakland**
Project Number : **010913-G1**

Sample : **S-2** Matrix : Water Lab Number : 22280-02
Sample Date :9/13/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**140**	20	ug/L	EPA 8260B	9/25/2001
Toluene	**110**	20	ug/L	EPA 8260B	9/25/2001
Ethylbenzene	**350**	20	ug/L	EPA 8260B	9/25/2001
Total Xylenes	**1400**	20	ug/L	EPA 8260B	9/25/2001
Methyl-t-butyl ether (MTBE)	**9200**	20	ug/L	EPA 8260B	9/25/2001
Diisopropyl ether (DIPE)	**< 20**	20	ug/L	EPA 8260B	9/25/2001
Ethyl-t-butyl ether (ETBE)	**< 20**	20	ug/L	EPA 8260B	9/25/2001
Tert-amyl methyl ether (TAME)	**< 20**	20	ug/L	EPA 8260B	9/25/2001
Tert-Butanol	**2500**	200	ug/L	EPA 8260B	9/25/2001
Ethanol	**< 500**	500	ug/L	EPA 8260B	9/24/2001
TPH as Gasoline	**13000**	2000	ug/L	EPA 8260B	9/25/2001
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	9/25/2001
4-Bromofluorobenzene (Surr)	105		% Recovery	EPA 8260B	9/25/2001
TPH as Diesel	**< 5000**	5000	ug/L	M EPA 8015	9/17/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 22280
Date : 10/1/2001

Project Name : **4411 Foothill Boulevard, Oakland**
Project Number : **010913-G1**

Sample : **S-3** Matrix : Water Lab Number : 22280-03
Sample Date :9/13/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**400**	10	ug/L	EPA 8260B	9/26/2001
Toluene	**880**	10	ug/L	EPA 8260B	9/26/2001
Ethylbenzene	**2000**	10	ug/L	EPA 8260B	9/26/2001
Total Xylenes	**7000**	10	ug/L	EPA 8260B	9/26/2001
Methyl-t-butyl ether (MTBE)	**< 100**	100	ug/L	EPA 8260B	9/26/2001
TPH as Gasoline	**32000**	1000	ug/L	EPA 8260B	9/26/2001
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	9/26/2001
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	9/26/2001
TPH as Diesel	**< 2000**	2000	ug/L	M EPA 8015	9/17/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 22280
Date : 10/1/2001

Project Name : **4411 Foothill Boulevard, Oakland**
Project Number : **010913-G1**

Sample : **S-4** Matrix : Water Lab Number : 22280-04
Sample Date :9/13/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**790**	2.5	ug/L	EPA 8260B	9/23/2001
Toluene	**14**	2.5	ug/L	EPA 8260B	9/23/2001
Ethylbenzene	**110**	2.5	ug/L	EPA 8260B	9/23/2001
Total Xylenes	**48**	2.5	ug/L	EPA 8260B	9/23/2001
Methyl-t-butyl ether (MTBE)	**690**	25	ug/L	EPA 8260B	9/23/2001
TPH as Gasoline	**4200**	250	ug/L	EPA 8260B	9/23/2001
Toluene - d8 (Surr)	99.6		% Recovery	EPA 8260B	9/23/2001
4-Bromofluorobenzene (Surr)	106		% Recovery	EPA 8260B	9/23/2001
TPH as Diesel	**< 800**	800	ug/L	M EPA 8015	9/17/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 22280

Date : 10/1/2001

Project Name : **4411 Foothill Boulevard,**

Project Number : **010913-G1**

22280 Quality Control Data - Method Blank

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	**< 50**	50	ug/L	M EPA 8015	9/16/2001

Approved By: Joel Kiff

Report Number : 22280

Date : 10/1/2001

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **4411 Foothill Boulevard,**

Project Number : **010913-G1**

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
Spike Recovery Data														
TPH as Diesel	Blank	<50	1000	1000	770	768	ug/L	M EPA 8015	9/16/2001	77.0	76.8	0.156	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 22280

Date : 10/1/2001

Project Name : **4411 Foothill Boulevard,**

Project Number : **010913-G1**

22280 Quality Control Data - Method Blank

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	9/22/2001
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	9/22/2001
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	9/22/2001
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	9/22/2001
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	9/22/2001
Diisopropyl ether (DIPE)	**< 2.0**	2.0	ug/L	EPA 8260B	9/22/2001
Ethyl-t-butyl ether (ETBE)	**< 2.0**	2.0	ug/L	EPA 8260B	9/22/2001
Tert-amyl methyl ether (TAME)	**< 2.0**	2.0	ug/L	EPA 8260B	9/22/2001
Tert-Butanol	**< 50**	50	ug/L	EPA 8260B	9/22/2001
Ethanol	**< 500**	500	ug/L	EPA 8260B	9/22/2001
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	9/22/2001
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	9/22/2001
4-Bromofluorobenzene (Surr)	99.8		% Recovery	EPA 8260B	9/22/2001

Approved By: Joel Kiff

Report Number : 22280

Date : 10/1/2001

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **4411 Foothill Boulevard,**

Project Number : **010913-G1**

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
Spike Recovery Data														
Benzene	22215-01	<0.50	19.1	19.4	19.5	19.7	ug/L	EPA 8260B	9/22/2001	102	101	0.736	70-130	25
Toluene	22215-01	<0.50	19.1	19.4	19.8	20.0	ug/L	EPA 8260B	9/22/2001	104	103	0.556	70-130	25
Tert-Butanol	22215-01	23	95.3	97.0	117	119	ug/L	EPA 8260B	9/22/2001	98.5	98.8	0.292	70-130	25
Methyl-t-Butyl Ether	22215-01	<0.50	19.1	19.4	18.4	18.6	ug/L	EPA 8260B	9/22/2001	96.3	95.9	0.390	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 22280

Date : 10/1/2001

QC Report : Laboratory Control Sample (LCS)

Project Name : **4411 Foothill Boulevard,**

Project Number : **010913-G1**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	19.3	ug/L	EPA 8260B	9/22/2001	101	70-130
Toluene	19.3	ug/L	EPA 8260B	9/22/2001	103	70-130
Tert-Butanol	96.5	ug/L	EPA 8260B	9/22/2001	95.7	70-130
Methyl-t-Butyl Ether	19.3	ug/L	EPA 8260B	9/22/2001	91.6	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Sequoia
Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

28 September, 2001

Joel Kiff
Kiff Analytical
720 Olive Drive, Suite D
Davis, CA 95616

RE: -
Sequoia Report: MKI0273

Enclosed are the results of analyses for samples received by the laboratory on 09/14/01 13:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Heather Shelley

Heather Shelley
Project Manager

CA ELAP Certificate #1210

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

Kiff Analytical	Project: -	
720 Olive Drive, Suite D	Project Number: 4411 Foothill Blvd.	**Reported:**
Davis CA, 95616	Project Manager: Joel Kiff	09/28/01 13:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S-1	MKI0273-01	Water	09/13/01 11:35	09/14/01 13:20
S-2	MKI0273-02	Water	09/13/01 11:57	09/14/01 13:20
S-3	MKI0273-03	Water	09/13/01 12:11	09/14/01 13:20
S-4	MKI0273-04	Water	09/13/01 11:00	09/14/01 13:20

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Heather Shelley, Project Manager

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

Kiff Analytical	Project: -	
720 Olive Drive, Suite D	Project Number: 4411 Foothill Blvd.	**Reported:**
Davis CA, 95616	Project Manager: Joel Kiff	09/28/01 13:22

Ferrous Iron by Hach method 8146/1;10 Phenanthroline Method

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-1 (MKI0273-01) Water	**Sampled: 09/13/01 11:35**	**Received: 09/14/01 13:20**							
Ferrous Iron	ND	0.10	mg/l	1	1I27034	09/14/01	09/14/01	Hach Co. 8146	
S-2 (MKI0273-02) Water	**Sampled: 09/13/01 11:57**	**Received: 09/14/01 13:20**							
Ferrous Iron	ND	0.10	mg/l	1	1I27034	09/14/01	09/14/01	Hach Co. 8146	
S-3 (MKI0273-03) Water	**Sampled: 09/13/01 12:11**	**Received: 09/14/01 13:20**							
Ferrous Iron	ND	0.10	mg/l	1	1I27034	09/14/01	09/14/01	Hach Co. 8146	
S-4 (MKI0273-04) Water	**Sampled: 09/13/01 11:00**	**Received: 09/14/01 13:20**							
Ferrous Iron	**3.9**	1.0	mg/l	10	1I27034	09/14/01	09/14/01	Hach Co. 8146	

Sequoia Analytical

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Kiff Analytical	Project: -	
720 Olive Drive, Suite D	Project Number: 4411 Foothill Blvd.	**Reported:**
Davis CA, 95616	Project Manager: Joel Kiff	09/28/01 13:22

Anions by EPA Method 300.0

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-1 (MKI0273-01) Water	**Sampled: 09/13/01 11:35**	**Received: 09/14/01 13:20**							
Nitrate as NO3	**0.86**	0.10	mg/l	1	1I17027	09/14/01	09/14/01	EPA 300.0	
Sulfate as SO4	**10**	0.50	"	"	"	"	"	"	
S-2 (MKI0273-02) Water	**Sampled: 09/13/01 11:57**	**Received: 09/14/01 13:20**							
Nitrate as NO3	ND	0.10	mg/l	1	1I17027	09/14/01	09/14/01	EPA 300.0	
Sulfate as SO4	**17**	0.50	"	"	"	"	"	"	
S-3 (MKI0273-03) Water	**Sampled: 09/13/01 12:11**	**Received: 09/14/01 13:20**							
Nitrate as NO3	**0.36**	0.10	mg/l	1	1I17027	09/14/01	09/14/01	EPA 300.0	
Sulfate as SO4	**0.74**	0.50	"	"	"	"	"	"	
S-4 (MKI0273-04) Water	**Sampled: 09/13/01 11:00**	**Received: 09/14/01 13:20**							
Nitrate as NO3	ND	0.10	mg/l	1	1I17027	09/14/01	09/14/01	EPA 300.0	
Sulfate as SO4	**15**	0.50	"	"	"	"	"	"	

Sequoia Analytical

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Kiff Analytical	Project: -	
720 Olive Drive, Suite D	Project Number: 4411 Foothill Blvd.	**Reported:**
Davis CA, 95616	Project Manager: Joel Kiff	09/28/01 13:22

Ferrous Iron by Hach method 8146/1;10 Phenanthroline Method - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1I27034 - General Preparation										
Blank (1I27034-BLK1)				Prepared & Analyzed: 09/14/01						
Ferrous Iron	ND	0.10	mg/l							
LCS (1I27034-BS1)				Prepared & Analyzed: 09/14/01						
Ferrous Iron	0.408	0.10	mg/l	0.400		102	90-110			
Matrix Spike (1I27034-MS1)		Source: MKI0273-01		Prepared & Analyzed: 09/14/01						
Ferrous Iron	0.411	0.10	mg/l	0.400	ND	103	80-120			
Matrix Spike Dup (1I27034-MSD1)		Source: MKI0273-01		Prepared & Analyzed: 09/14/01						
Ferrous Iron	0.409	0.10	mg/l	0.400	ND	102	80-120	0.488	20	

Sequoia Analytical

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(408) 776-9600
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Kiff Analytical	Project: -	
720 Olive Drive, Suite D	Project Number: 4411 Foothill Blvd.	**Reported:**
Davis CA, 95616	Project Manager: Joel Kiff	09/28/01 13:22

Anions by EPA Method 300.0 - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1I17027 - General Preparation										
Blank (1I17027-BLK1)				Prepared & Analyzed: 09/14/01						
Nitrate as NO3	ND	0.10	mg/l							
Sulfate as SO4	ND	0.50	"							
LCS (1I17027-BS1)				Prepared & Analyzed: 09/14/01						
Nitrate as NO3	10.6	0.10	mg/l	10.0		106	90-110			
Sulfate as SO4	10.5	0.50	"	10.0		105	90-110			
Matrix Spike (1I17027-MS1)		Source: MKI0305-01		Prepared & Analyzed: 09/14/01						
Nitrate as NO3	9720	100	mg/l	10000	ND	97.2	80-120			
Sulfate as SO4	16700	500	"	10000	5000	117	80-120			
Matrix Spike Dup (1I17027-MSD1)		Source: MKI0305-01		Prepared & Analyzed: 09/14/01						
Nitrate as NO3	9780	100	mg/l	10000	ND	97.8	80-120	0.615	20	
Sulfate as SO4	16700	500	"	10000	5000	117	80-120	0.00	20	

Sequoia Analytical

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Kiff Analytical	Project: -	
720 Olive Drive, Suite D	Project Number: 4411 Foothill Blvd.	**Reported:**
Davis CA, 95616	Project Manager: Joel Kiff	09/28/01 13:22

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

KIFF ANALYTICAL LLC

720 Olive Drive, Suite D
Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4803

MKI0273

Lab No. _____ Page ____ of ____

Chain-of-Custody Record and Analysis Request

Project Manager: JOEL KIFF
Phone No.: (530) 297-4800
Company/Address: KIFF ANALYTICAL
FAX No.:
Project Number: ~~01913-~~ ~~22280~~ G1 P.O. No.: 22080
Email Address: joelkiff@aol.com
☒ .pdf ☐ .xls ☐ .doc ☐ other
Project Name: 4411 FOOTHILL BOULEVARD, OAKLAND
Sampler Signature:
Project Location:

Sample Designation	Sampling Date	Sampling Time	Container: 40 ml VOA	Container: SLEEVE	Container: Poly 1L	Preservative: HCl	Preservative: HNO_3	Preservative: ICE	Preservative: NONE	Matrix: WATER	Matrix: SOIL	BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/M8015)	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421/239.2) TOTAL (X) W.E.T. (X)	2 NITRATE	SULFATE	PERCHLORATE	TAT: 12 hr/24 hr/48 hr/72 hr/1 wk	For Lab Use Only
S-1	9/13/01	1135			2																				X	X	X		01
S-2	9/13/01	1157			2																				X	X	X		02
S-3	9/13/01	1211			2																				X	X	X		03
S-4	9/13/01	1100			2																				X	X	X		04

	Date	Time		
Relinquished by: John Cuttle / Kiff Analytical	09/13/01	1320	Received by: Melissa D Guillen	9/14/01 1320
Relinquished by: K. Cox	9/14/01	1320	Received by: WHS	9/14 1220
Relinquished by: 9/14 1320	Date	Time	Received by Laboratory: Melissa D Guillen	

Remarks:

Bill to:

White - Lab, Yellow - File, Pink - Originator

Forms/coc 062801.fh9

LAB: Kiff

EQUIVA Services LLC Chain Of Custody Record 22280

Lab Identification (if necessary):

Address:

City, State, Zip:

Equiva Project Manager to be invoiced: Karen Petryna

☒ SCIENCE & ENGINEERING

[redacted]

☐ CRMT HOUSTON

INCIDENT NUMBER (S&E ONLY): 9 8 9 9 5 7 4 6

SAP or CRMT NUMBER (TS/CRMT): [redacted]

DATE: 9-13-01

PAGE: 1 of 1

CONSULTANT COMPANY: Blaine Tech Services

ADDRESS: 1680 Rogers Avenue

CITY: San Jose, CA 95112

TELEPHONE: 408-573-0555 FAX: 408-573-7771 E-MAIL: nsudano@blainetech.com

SITE ADDRESS (Street and City): 4411 Foothill Boulevard, Oakland

PROJECT CONTACT (Report to): Nick Sudano

CONSULTANT PROJECT NO.: BTS # 010913-G1

SAMPLER NAME(S) (Print): Morgan Gillies

LAB USE ONLY

TURNAROUND TIME (BUSINESS DAYS): ☒ 10 DAYS ☐ 5 DAYS ☐ 72 HOURS ☐ 48 HOURS ☐ 24 HOURS ☐ LESS THAN 24 HOURS

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY: _____

GC/MS MTBE CONFIRMATION: HIGHEST ☒ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES: TEMPERATURE ON RECEIPT C°

* Ferrous iron only Filtered in Field

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH- Gas, Purgeable	BTEX	MTBE (8021B - 5ppb RL)	MTBE (8260B - 0.5 ppbRL)	Oxygenates (5) by (8260)	Ethanol (8260B)	Methanol	1,2-DCA (8260B)	EDB (8260B)	TPH-Diesel, Extractable (8015m)	Nitrate	Sulfate	Ferrous Iron	9-13-01	FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes
	S-1	9/6/01	1135	GW	7	X	X	X		X	X				X	X	X	X	X	-01
	S-2	9/6/01	1157			X	X	X		X	X				X	X	X	X	X	-02
	S-3	9/6/01	1211			X	X	X							X	X	X	X	X	-03
	S-4	9/6/01	1100	↓	↓	X	X	X							X	X	X	X	X	-04
	[redacted]	9/6/01																		

Relinquished by: (Signature)	Received by: (Signature)	Date: 9/13/01	Time: 1225
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature) John Cuttle / Kiff Analytical	Date: 091301	Time: 1225

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.

10/16/00 Revision

O&O Graphic (714) 888-9702

KIFF ANALYTICAL LLC

Report Number : 22314
Date : 10/5/2001

Nick Sudano
Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112-1105

Subject : 1 Water Sample
Project Name : 4411 Foothill Boulevard, Oakland
Project Number : 010913-G1
P.O. Number : 98995746

Dear Mr. Sudano,

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,

Joel Kiff

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 22314
Date : 10/5/2001

Project Name : **4411 Foothill Boulevard, Oakland**
Project Number : **010913-G1**

Sample : **BW-A** Matrix : Water Lab Number : 22314-01
Sample Date :9/13/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 20**	20	ug/L	EPA 8260B	9/27/2001
Toluene	**< 20**	20	ug/L	EPA 8260B	9/27/2001
Ethylbenzene	**< 20**	20	ug/L	EPA 8260B	9/27/2001
Total Xylenes	**< 50**	50	ug/L	EPA 8260B	9/28/2001
Methyl-t-butyl ether (MTBE)	**13000**	500	ug/L	EPA 8260B	9/28/2001
TPH as Gasoline	**< 2000**	2000	ug/L	EPA 8260B	9/27/2001
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	9/27/2001
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	9/27/2001
TPH as Diesel	**460**	50	ug/L	M EPA 8015	9/25/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 22314

Date : 10/5/2001

Project Name : **4411 Foothill Boulevard,**

Project Number : **010913-G1**

22314 Quality Control Data - Method Blank

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	**< 50**	50	ug/L	M EPA 8015	9/21/2001

Approved By: Joel Kiff

Report Number : 22314

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 10/5/2001

Project Name : **4411 Foothill Boulevard,**

Project Number : **010913-G1**

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
Spike Recovery Data														
TPH as Diesel	Blank	<50	1000	1000	1020	999	ug/L	M EPA 8015	9/21/2001	102	99.9	1.91	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 22314

Date : 10/5/2001

Project Name : **4411 Foothill Boulevard,**

Project Number : **010913-G1**

22314 Quality Control Data - Method Blank

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	9/27/2001
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	9/27/2001
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	9/27/2001
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	9/27/2001
Methyl-t-butyl ether (MTBE)	**< 5.0**	5.0	ug/L	EPA 8260B	9/27/2001
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	9/27/2001
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	9/27/2001
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	9/27/2001

Approved By: Joel Kiff

Report Number : 22314

Date : 10/5/2001

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **4411 Foothill Boulevard,**

Project Number : **010913-G1**

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
Spike Recovery Data														
Benzene	22316-20	<0.50	19.2	20.0	20.1	21.0	ug/L	EPA 8260B	9/27/2001	105	105	0.214	70-130	25
Toluene	22316-20	<0.50	19.2	20.0	20.4	21.4	ug/L	EPA 8260B	9/27/2001	106	107	0.469	70-130	25
Tert-Butanol	22316-20	19	95.9	100	94.8	99.0	ug/L	EPA 8260B	9/27/2001	78.6	79.6	1.21	70-130	25
Methyl-t-Butyl Ether	22316-20	290	19.2	20.0	314	314	ug/L	EPA 8260B	9/27/2001	126	123	3.04	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 22314

Date : 10/5/2001

QC Report : Laboratory Control Sample (LCS)

Project Name : **4411 Foothill Boulevard,**

Project Number : **010913-G1**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	20.0	ug/L	EPA 8260B	9/26/2001	106	70-130
Toluene	20.0	ug/L	EPA 8260B	9/26/2001	108	70-130
Tert-Butanol	100	ug/L	EPA 8260B	9/26/2001	97.0	70-130
Methyl-t-Butyl Ether	20.0	ug/L	EPA 8260B	9/26/2001	99.6	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

LAB: Kiff

EQUIVA Services LLC Chain Of Custody Record

Lab Identification (if necessary):

Address:

City, State, Zip:

Equiva Project Manager to be invoiced:

☑ SCIENCE & ENGINEERING

[redacted]

☐ CRMT HOUSTON

Karen Petryna

22314

INCIDENT NUMBER (S&E ONLY): 9 8 9 9 5 7 4 6

SAP or CRMT NUMBER (TS/CRMT): [redacted]

DATE: 9/13/01

PAGE: 1 of 1

CONSULTANT COMPANY: Blaine Tech Services

ADDRESS: 1680 Rogers Avenue

CITY: San Jose, CA 95112

TELEPHONE: 408-573-0555 FAX: 408-573-7771 E-MAIL: asudano@blainetech.com

SITE ADDRESS (Street and City): 4411 Foothill Boulevard, Oakland

PROJECT CONTACT (Report to): Nick Sudano

CONSULTANT PROJECT NO.: BTS # 010915-G1

SAMPLER NAME(S) (Print): Morgan Gillies

LAB USE ONLY

TURNAROUND TIME (BUSINESS DAYS): ☒ 10 DAYS ☐ 5 DAYS ☐ 72 HOURS ☐ 48 HOURS ☐ 24 HOURS ☐ LESS THAN 24 HOURS

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

GC/MS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL

SPECIAL INSTRUCTIONS OR NOTES:

TEMPERATURE ON RECEIPT C°

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH- Gas, Purgeable	BTEX	MTBE (8021B - 5ppb RL)	MTBE (8260B - 0.5 ppbRL)	Oxygenates (5) by (8260)	Ethanol (8260B)	Methanol	1,2-DCA (8260B)	EDB (8260B)	TPH-Diesel, Extractable (8015m)	Nitrate	Sulfate	Ferrous Iron	[redacted]	
	BW-A	9/13/01	1250	GW	5	X	X	X							X				X	-01

FIELD NOTES:

Container/Preservative or PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature) John Cuttle/Kiff Analytical	Date: 091401	Time: 1117

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.

10/16/00 Revision

WELL GAUGING DATA

Project # 010913-61 Date 9/12/01 Client 76 9957446

Site 4411 FOOTHILL BLVD., OAKLAND

	Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC
** 5	S-1	4							
* 2	S-2	4					10.25	24.56	
3	S-3	4					10.34	22.34	
4	S-4	4					9.93	20.47	
1	BW-A	4	- Removed ORC TO GAUGE				11.27	20.19	
							10.49	12.40	

* GAUGED w/ ORC IN WELL.

** GAUGED @ 10:17 after S-2. - DUE TO CAR PARKED OVER WELL.

EQUIVA WELL MONITORING DATA SHEET

BTS #: 010913-G1	Site: 98995746
Sampler: MG	Date: 9/13/01
Well I.D.: S-1	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: ~~24.58~~ 24.58	Depth to Water: ~~10.25~~ 10.25
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC (Grade)	D.O. Meter (if req'd): (YSI) HACH

Purge Method:

- Bailer
- Disposable Bailer
- Middleburg
- (X) Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method:

- Bailer
- (X) Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other:_____

9.3 (Gals.) X 3 = 27.9 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1123	67.2	8.3	961	30	~~10~~	
1126	67.7	8.8	868	45.3	20	
1129	67.5	9.5	873	12.7	28	

Did well dewater? Yes (No) Gallons actually evacuated: 28

Sampling Time: 1135 Sampling Date: 9/13/01

Sample I.D.: S-1 Laboratory: Sequoia Columbia Other Kiff

Analyzed for: (TPH-G) (BTEX) (MTBE) (TPH-D) Other: Fe^{2+}, NITRATE, SULFATE

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd): Pre-purge: 7.8 mg/L Post-purge: 8.9 mg/L

O.R.P. (if req'd): Pre-purge: -45 mV Post-purge: -15 mV

EQUIVA WELL MONITORING DATA SHEET

BTS #: 010913-G1 | Site: 98995746

Sampler: MG | Date: 9/13/01

Well I.D.: S-2 | Well Diameter: 2 3 (4) 6 8 ___

Total Well Depth: 22.34 | Depth to Water: 10.34

Depth to Free Product: | Thickness of Free Product (feet):

Referenced to: PVC (Grade) | D.O. Meter (if req'd): (YSI) HACH

Purge Method:

Bailer
Disposable Bailer
Middleburg
(Electric Submersible)
Waterra
Peristaltic
Extraction Pump
Other_____

Sampling Method:

Bailer
(X) Disposable Bailer
Extraction Port
Dedicated Tubing
Other: _____

7.8 (Gals.) X 3 = 23.4 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
955	70.5	7.5	1334	124	8	HEAVY SHEEN / SMALL GLOBS OF FP ODOR
959	68.8	7.5	1318	62	16	
	PURGED @ 16 Gal. DTW= 20.07				~~24~~	
1158	68.7	7.2	1137	7.1	—	FP ON PROBE

FP on bailer in streaks + globs - no measurable FP DTW=11.80

Did well dewater? (Yes) No | Gallons actually evacuated: ~~24~~ 16

Sampling Time: ~~1200~~ 1151 | Sampling Date: 9/13/01

Sample I.D.: S-2 | Laboratory: Sequoia Columbia Other Kiff

Analyzed for: (TPH-G BTEX MTBE TPH-D) Other: Fe^{2+}, Nitrate, Sulfate

EB I.D. (if applicable): @ Time | Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd): Pre-purge: 11.0 mg/L | Post-purge: 4.5 mg/L

O.R.P. (if req'd): Pre-purge: 175 mV | Post-purge: 37 mV

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

EQUIVA WELL MONITORING DATA SHEET

BTS #: 010913-G1 | Site: 98995746

Sampler: MG | Date: 9/13/01

Well I.D.: S-3 | Well Diameter: 2 3 (4) 6 8 ___

Total Well Depth: 20.47 | Depth to Water: 9.93

Depth to Free Product: | Thickness of Free Product (feet):

Referenced to: PVC (Grade) | D.O. Meter (if req'd): (YSI) HACH

Purge Method:

- Bailer
- Disposable Bailer
- Middleburg
- ~~Electric Submersible~~
- Waterra
- Peristaltic
- Extraction Pump
- Other ___

Sampling Method:

- Bailer
- X Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: ___

6.9 (Gals.) X 3 = 20.1 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1029	69.9	6.7	692	11	7	ODOR
1032	69.7	6.7	707	7	14	
	Dewater @ 16 gal. DTW = 18.50					
1213	69.5	6.9	686	4	—	
						DTW-11.48

Did well dewater? (Yes) No | Gallons actually evacuated: 16

Sampling Time: ~~1215~~ 1211 | Sampling Date: 9/13/01

Sample I.D.: S-3 | Laboratory: Sequoia Columbia Other Kiff

Analyzed for: (TPH-G BTEX MTBE TPH-D) Other: Fe^{2+}, Nitrate, Sulfate

EB I.D. (if applicable): @ Time | Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd): Pre-purge: 3.7 mg/L | Post-purge: 2.9 mg/L

O.R.P. (if req'd): Pre-purge: 194 mV | Post-purge: 32 mV

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

EQUIVA WELL MONITORING DATA SHEET

BTS #: 010913-G1	Site: 98995746
Sampler: MG	Date: 9/13/01
Well I.D.: S-4	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 20.19	Depth to Water: 11.27
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC (Grade)	D.O. Meter (if req'd): (YSI) HACH

Purge Method:
- Bailer
- Disposable Bailer
- Middleburg
- ✓ Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other ___

Sampling Method:
- Bailer
- ✗ Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: ___

5.8 (Gals.) X 3 = 17.4 Gals.
1 Case Volume — Specified Volumes — Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1049	67.8	6.6	1563	36	6	
1052	67.7	6.6	1523	160	12	
1055	67.6	6.6	1480	180	18	ODOR

Did well dewater? Yes (No)	Gallons actually evacuated: 18
Sampling Time: 1100	Sampling Date: 9/13/01
Sample I.D.: S-4	Laboratory: Sequoia Columbia Other Kiff
Analyzed for: (TPH-G BTEX MTBE TPH-D)	Other: Fe^{2+}, Nitrate, Sulfate
EB I.D. (if applicable): @ Time	Duplicate I.D. (if applicable):
Analyzed for: TPH-G BTEX MTBE TPH-D	Other:
D.O. (if req'd): (Pre-purge:) 3.8 mg/L	(Post-purge:) 3.9 mg/L
O.R.P. (if req'd): (Pre-purge:) 68 mV	(Post-purge:) 2 mV

EQUIVA WELL MONITORING DATA SHEET

BTS #: 010913-G1	Site: 98995746
Sampler: MG	Date: 9/13/01
Well I.D.: BW-A	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 12.40	Depth to Water: 10.49
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC (Grade)	D.O. Meter (if req'd): (YSI) HACH

Purge Method:

- Bailer
- X Disposable Bailer
- Middleburg
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method:

- Bailer
- X Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

1.2 (Gals.) X 3 = 3.6 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1241	73.6	7.0	1069	83	1.5	
1244	74.2	6.9	1032	47	3.0	
1247	74.4	6.9	1023	39	4.0	

Did well dewater? Yes (No) Gallons actually evacuated: 4

Sampling Time: 1250 Sampling Date: 9/13/01

Sample I.D.: BW-A Laboratory: Sequoia Columbia Other Kiff

Analyzed for: (TPH-G BTEX MTBE TPH-D) Other: ~~Ext~~, ~~Nitrate~~, ~~Sulfate~~

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	3.3 mg/L	Post-purge:	1.7	mg/L
O.R.P. (if req'd):	Pre-purge:	39 mV	Post-purge:	28	mV