CAMBRIA

May 7, 2001

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

RO # 493

Re: **First Quarter 2001 Monitoring Report**
Shell-branded Service Station
610 Market Street
Oakland, California
Incident #99895750
Cambria Project #243-0594-002

MAY 10 2001

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.

REMEDIATION SUMMARY

Mobile Dual-Phase Vacuum Extraction Treatment (DVE): From March to October 2000, Cambria coordinated mobile DVE from wells MW-2 and MW-3. DVE removes soil vapors and separate-phase hydrocarbons from the vadose zone and enhances groundwater removal from remediation or monitoring wells. Due to low water-extraction volumes, DVE was discontinued. Hydrocarbon mass removal calculations for extracted groundwater and vapor are presented in Tables 1 and 2, respectively.

FIRST QUARTER 2001 ACTIVITIES

Groundwater Monitoring: Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged and sampled the site wells, calculated groundwater elevations, and compiled the analytical data. Cambria prepared a groundwater elevation contour map (Figure 1). Blaine's report, presenting the laboratory report and supporting field documents, is included as Attachment A.

Oakland, CA
San Ramon, CA
Sonoma, CA

Cambria Environmental Technology, Inc.

1144 65th Street
Suite B
Oakland, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

DVE Extraction Pilot Test: In late March, Cambria performed a DVE pilot test using an internal combustion engine. Results of this test will be presented in a forthcoming report.

ANTICIPATED SECOND QUARTER 2001 ACTIVITIES

Groundwater Monitoring: Blaine will gauge and sample all wells and tabulate the data. Cambria will prepare a monitoring report.

Site Conceptual Model (SCM): Cambria is preparing an SCM for this site. Based on the SCM, previous DVE activities onsite, and the engine pilot test data, Cambria will evaluate whether previously proposed wells are warranted.

CLOSING

We appreciate the opportunity to work with you on this project. Please call Jacquelyn Jones at (510) 420-3316 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc

Stephan A. Bork, C.E.G., C.HG.
Associate Hydrogeologist

REGISTERED GEOLOGIST
STEPHAN A. BORK
No. EG 2058
CERTIFIED
ENGINEERING
GEOLOGIST
STATE OF CALIFORNIA

Figure: 1 - Groundwater Elevation Contour Map

Tables: 1 - Groundwater Extraction - Mass Removal Data
2 - Vapor Extraction - Mass Removal Data

Attachment: A - Blaine Groundwater Monitoring Report and Field Notes

cc: Karen Petryna, Equiva Services LLC, P.O. Box 7869, Burbank, California 91510-7869
Virginia R. Rawson, Tr., 1860 Tice Creek Drive #1353, Walnut Creek, CA 94595
Ronald L. & Cathy L. Labatt, PO Box 462, Kamiah, ID 83536

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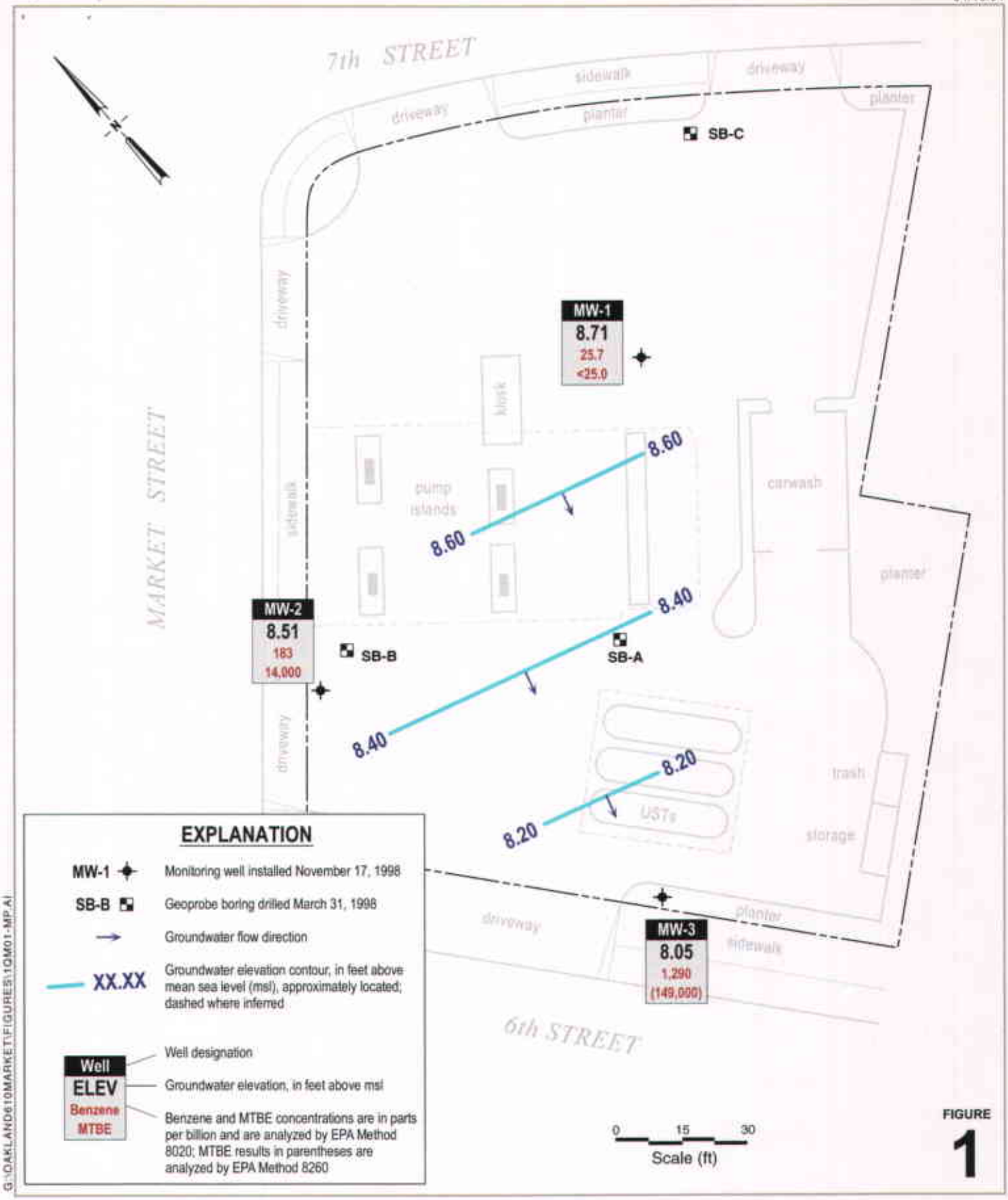
04/16/01



G:\OAKLAND\610MARKET\FIGURES\1QM01-MP.AI

FIGURE
1

Shell-branded Service Station

610 Market Street
Oakland, California
Incident #98995750

CAMBRIA

Groundwater Elevation Contour Map

March 6, 2001

Table 1: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995750, 610 Market Street, Oakland, CA

Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Date Sampled	TPPH Concentration (ppb)	TPPH Removed (lb)	TPPH Removed To Date (lb)	Benzene Concentration (ppb)	Benzene Removed (lb)	Benzene Removed to Date (lb)	MTBE Concentration (ppb)	MTBE Removed (lb)	MTBE Removed To Date (lb)
					TPPH			**Benzene**			**MTBE**		
03/15/00	MW-2	0	0	03/21/00	<5,000	<0.00000	0.00000	94.7	0.00000	0.00000	13,900	0.00000	0.00000
03/22/00	MW-2	100	100	03/21/00	<5,000	<0.00417	<0.00417	94.7	0.00008	0.00008	13,900	0.01160	0.01160
03/27/00	MW-2	75	175	03/21/00	<5,000	<0.00313	<0.00730	94.7	0.00006	0.00014	13,900	0.00870	0.02030
04/03/00	MW-2	100	275	03/21/00	<5,000	<0.00417	<0.01147	94.7	0.00008	0.00022	13,900	0.01160	0.03190
04/17/00	MW-2	200	475	03/21/00	<5,000	<0.00834	<0.01982	94.7	0.00016	0.00038	13,900	0.02320	0.05509
04/24/00	MW-2	125	600	03/21/00	<5,000	<0.00522	<0.02503	94.7	0.00010	0.00047	13,900	0.01450	0.06959
05/01/00	MW-2	50	650	03/21/00	<5,000	<0.00209	<0.02712	94.7	0.00004	0.00051	13,900	0.00580	0.07539
05/15/00	MW-2	75	725	03/21/00	<5,000	<0.00313	<0.03025	94.7	0.00006	0.00057	13,900	0.00870	0.08409
05/22/00	MW-2	100	825	03/21/00	<5,000	<0.00417	<0.03442	94.7	0.00008	0.00065	13,900	0.01160	0.09569
05/29/00	MW-2	75	900	03/21/00	<5,000	<0.00313	<0.03755	94.7	0.00006	0.00071	13,900	0.00870	0.10439
06/05/00	MW-2	617	1,517	03/21/00	<5,000	<0.02574	<0.06329	94.7	0.00049	0.00120	13,900	0.07156	0.17595
08/17/00	MW-2	665	2,182	06/20/00	101	0.00056	<0.06385	5.95	0.00003	0.00123	7,670	0.04256	0.21851
09/13/00	MW-2	429	2,611	06/20/00	101	0.00036	<0.06421	5.95	0.00002	0.00125	7,670	0.02746	0.24597
10/27/00*	MW-2	75	2,686	06/20/00	101	0.00006	<0.06428	5.95	0.00000	0.00126	7,670	0.00480	0.25077
03/15/00	MW-3	500	500	03/21/00	<25,000	<0.02086	<0.02086	466	0.00194	0.00194	**155,000**	0.64669	0.64669
03/22/00	MW-3	100	600	03/21/00	<25,000	<0.01565	<0.03651	466	0.00039	0.00233	**155,000**	0.12934	0.77603
03/27/00	MW-3	75	675	03/21/00	<25,000	<0.01565	<0.05215	466	0.00029	0.00262	**155,000**	0.09700	0.87303
04/03/00	MW-3	100	775	03/21/00	<25,000	<0.02086	<0.07301	466	0.00039	0.00301	**155,000**	0.12934	1.00237
04/17/00	MW-3	200	975	03/21/00	<25,000	<0.04172	<0.11473	466	0.00078	0.00379	**155,000**	0.25868	1.26104
04/24/00	MW-3	125	1,100	03/21/00	<25,000	<0.02608	<0.14081	466	0.00049	0.00428	**155,000**	0.16167	1.42271
05/01/00	MW-3	100	1,200	03/21/00	<25,000	<0.02086	<0.16167	466	0.00039	0.00467	**155,000**	0.12934	1.55205
05/15/00	MW-3	75	1,275	03/21/00	<25,000	<0.01565	<0.17732	466	0.00029	0.00496	**155,000**	0.09700	1.64905
05/22/00	MW-3	50	1,325	03/21/00	<25,000	<0.01043	<0.18775	466	0.00019	0.00515	**155,000**	0.06467	1.71372
05/29/00	MW-3	75	1,400	03/21/00	<25,000	<0.01565	<0.20339	466	0.00029	0.00544	**155,000**	0.09700	1.81073
06/05/00	MW-3	675	2,075	03/21/00	<25,000	<0.14081	<0.34420	466	0.00262	0.00807	**155,000**	0.87303	2.68375

Table 1: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995750, 610 Market Street, Oakland, CA

					TPPH			Benzene			MTBE		
Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Date Sampled	TPPH Concentration (ppb)	TPPH Removed (lb)	TPPH Removed To Date (lb)	Benzene Concentration (ppb)	Benzene Removed (lb)	Benzene Removed to Date (lb)	MTBE Concentration (ppb)	MTBE Removed (lb)	MTBE Removed To Date (lb)
08/17/00	MW-3	554	2,629	06/20/00	16,200	0.07489	0.41909	1,140	0.00527	0.01334	**579,000**	2.67659	5.36034
09/13/00	MW-3	716	3,345	06/20/00	16,200	0.09679	0.51588	1,140	0.00681	0.02015	**579,000**	3.45927	8.81961
10/27/00*	MW-3	250	3,595	06/20/00	16,200	0.03379	0.54968	1,140	0.00238	0.02253	**579,000**	1.20785	10.02745
Total Gallons Extracted:		**6,281**			**Total Pounds Removed:**		**<0.61395**			**0.02378**			**10.27822**
					Total Gallons Removed:		**<0.10065**			**0.00326**			**1.65778**

Abbreviations & Notes:

TPPH = Total purgeable hydrocarbons as gasoline
MtBE = Methyl tert-butyl ether
µg/L = Micrograms per liter
ppb = Parts per billion, equivalent to µg/L
lb = Pound
SPH = Separate phase hydrocarbons
L = Liter
gal = Gallon
g = Gram
* = Groundwater volume pumped estimated; data not available
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/gmsxgals)
TPPH and benzene analyzed by EPA Method 8015/8020
MTBE data in bold font analyzed by EPA Method 8260, all other MTBE analyzed by EPA Method 8020
Concentrations based on most recent groundwater monitoring results
Groundwater extracted by vacuum trucks provided by ACTI; water disposed of at a Martinez refinery

Table 2: Vapor Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995750, 610 Market Street, Oakland, Californi

Date	Well ID	Interval Hours of Operation (hours)	System Flow Rate (CFM)	Hydrocarbon Concentrations (Concentrations in ppmv) TPHg	Benzene	MTBE	TPHg Removal Rate (#/hour)	TPHg Cumulative TPHg Removed (#)	Benzene Removal Rate (#/hour)	Benzene Cumulative Benzene Removed (#)	MTBE Removal Rate (#/hour)	MTBE Cumulative MTBE Removed (#)
							TPHg		**Benzene**		**MTBE**	
03/15/00	MW-2	0	0	NA	NA	NA	0.000	0.000	0.000	0.000	0.000	0.000
04/17/00	MW-2	1.25	0.86	15.9	0.340	519	0.000	0.000	0.000	0.000	0.006	0.008
06/05/00	MW-2	4.00	9.8	1,910	62.7	363	0.250	1.001	0.007	0.030	0.049	0.202
07/07/00	MW-2	4.00	13.7	473	<3.1	42	0.087	1.348	<0.001	<0.032	0.008	0.234
08/17/00	MW-2	4.00	17	1,799	61	149	0.409	2.983	0.013	<0.082	0.035	0.372
09/13/00	MW-2	1.20	38	3,300	<15.7	631	1.676	4.995	<0.007	<0.091	0.328	0.766
10/27/00	MW-2	1.75	5.8	16.8	0.229	9.29	0.001	4.997	0.000	<0.091	0.001	0.767
03/15/00	MW-3	0.22	0.87	3,400	50	410	0.040	0.009	0.001	0.000	0.005	0.001
03/15/00	MW-3	2.75	0.74	3,700	47	410	0.037	0.109	0.000	0.001	0.004	0.012
04/17/00	MW-3	1.25	7.8	246	8.05	2,850	0.026	0.141	0.001	0.002	0.304	0.393
06/05/00	MW-3	4.00	5	2,130	23.0	529	0.142	0.711	0.001	0.008	0.036	0.537
07/07/00	MW-3	4.00	0.8	<2,833	57	3,861	<0.030	<0.832	0.001	0.010	0.042	0.706
08/17/00	MW-3	4.00	2.8	22,833	346	4,222	0.855	<4.251	0.012	0.057	0.162	1.353
09/13/00	MW-3	3.75	34	15,200	<31.4	1,670	6.909	<30.158	<0.013	<0.106	0.777	4.266
10/27/00	MW-3	1.50	6.4	11.7	0.215	9.27	0.001	<30.159	0.000	<0.106	0.001	4.267
Total Pounds Removed:							**TPHg = <35.156**		**Benzene = <0.196**		**MTBE = 5.034**	

Table 2: Vapor Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995750, 610 Market Street, Oakland, Californi

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

NA = Not available

TPHG, Benzene, and MTBE analyzed by EPA Method 8015/8020 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)

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

ATTACHMENT A

Blaine Groundwater Monitoring Report and Field Notes

BLAINE
TECH SERVICES, INC.

1680 ROGERS AVENUE
SAN JOSE, CA 95112-1105
(408) 573-7771 FAX
(408) 573-0555 PHONE
CONTRACTOR'S LICENSE #746684
www.blainetech.com

April 2, 2001

Karen Petryna
Equiva Services LLC
P.O. Box 7869
Burbank, CA 91510-7869

First Quarter 2001 Groundwater Monitoring at
Shell-branded Service Station
610 Market Street
Oakland, CA

Monitoring performed on March 6, 2001

Groundwater Monitoring Report **010306-T-2**

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 Shell Martinez Manufacturing Complex.

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. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. concentrates on objective data collection and does not participate in the interpretation of analytical results, the definition of geological or hydrological conditions, the formulation of recommendations, or the marketing of remedial systems.

Please call if you have any questions.

Yours truly,

Deidre Kerwin
Operations Manager

DK/jt

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

cc: Anni Kreml
Cambria Environmental
1144 65th St. Suite C
Oakland, CA 94608-2411

WELL CONCENTRATIONS
Shell-branded Service Station
610 Market Street
Oakland, CA
WIC #204-5508-5702

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
MW-1	12/17/1998	2,200	20	<10	110	420	<50	NA	21.70	13.71	7.99
MW-1	03/09/1999	4,320	25.8	<10.0	338	474	<100	NA	21.70	13.03	8.67
MW-1	06/16/1999	6,150	107	84.0	615	1,050	<250	NA	21.70	13.82	7.88
MW-1	09/29/1999	3,440	97.3	58.7	433	578	89.1	NA	21.70	14.45	7.25
MW-1	12/22/1999	1,370	34.5	4.38	196	49.1	29.3	NA	21.70	15.39	6.31
MW-1	03/21/2000	2,550	10.3	3.36	164	312	65.6	NA	21.70	11.94	9.76
MW-1	06/20/2000	4,770	64.3	18.6	387	732	51.3	NA	21.70	13.15	8.55
MW-1	09/21/2000	7,490	350	229	690	1,490	160	NA	21.70	13.65	8.05
MW-1	11/30/2000	5,410	420	168	494	1,170	167	NA	21.70	14.20	7.50
MW-1	**03/06/2001**	**965**	**25.7**	**9.14**	**13.3**	**9.12**	**<25.0**	**NA**	**21.70**	**12.99**	**8.71**
MW-2	12/17/1998	<5,000	<50	<50	<50	<50	11,000	NA	19.61	12.07	7.54
MW-2	03/09/1999	<250	5.20	<2.50	<2.50	<2.50	9,870	NA	19.61	11.46	8.15
MW-2	06/16/1999	<50.0	0.569	<0.500	<0.500	<0.500	3,440	NA	19.61	12.26	7.35
MW-2	09/29/1999	58.6	2.51	0.978	<0.500	<0.500	3,930	NA	19.61	12.51	7.10
MW-2	12/22/1999	<2,000	50.4	<20.0	<20.0	<20.0	15,000	NA	19.61	13.40	6.21
MW-2	03/21/2000	<5,000	94.7	<50.0	<50.0	<50.0	13,900	NA	19.61	10.36	9.25
MW-2	06/20/2000	101	5.95	<0.500	<0.500	0.552	7,670	NA	19.61	11.12	8.49
MW-2	09/21/2000	<2,000	<20.0	<20.0	<20.0	<20.0	4,460	NA	19.61	11.95	7.66
MW-2	11/30/2000	81.1	4.46	0.924	0.841	3.23	3,450	NA	19.61	12.48	7.13
MW-2	**03/06/2001**	**<500**	**183**	**<5.00**	**<5.00**	**<5.00**	**14,000**	**NA**	**19.61**	**11.10**	**8.51**
MW-3	12/17/1998	30,000	890	110	2,100	4,300	42,000	43,000	19.05	11.65	7.40
MW-3	03/09/1999	22,700	536	<200	1,030	1,510	35,400	38,500	19.05	11.03	8.02
MW-3	06/16/1999	19,300	625	129	805	1,210	42,400	51,600	19.05	11.89	7.16
MW-3	09/29/1999	20,200	727	155	1,000	1,180	84,100	136,000a	19.05	12.35	6.70
MW-3	12/22/1999	44,500	767	64.4	1,810	2,090	191,000	186,000a	19.05	13.45	5.60
MW-3	03/21/2000	<25,000	466	<250	727	2,280	126,000	155,000	19.05	10.00	9.05

WELL CONCENTRATIONS
Shell-branded Service Station
610 Market Street
Oakland, CA
WIC #204-5508-5702

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
MW-3	06/20/2000	16,200	1,140	98.8	1,140	1,410	579,000	376,000a	19.05	11.15	7.90
MW-3	09/21/2000	<50,000	712	<500	520	795	293,000	298,000	19.05	11.58	7.47
MW-3	11/30/2000	18,000	1,050	124	1,120	2,010	543,000a	403,000a	19.05	12.10	6.95
MW-3	**03/06/2001**	**19,900**	**1,290**	**115**	**1,450**	**1,760**	**706,000**	**149,000**	**19.05**	**11.00**	**8.05**

Abbreviations:
TPPH = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
BTEX = benzene, toluene, ethylbenzene, xylenes by EPA Method 8020
MTBE = methyl-tertiary-butyl ether by EPA Method 8020
TOC = Top of Casing Elevation
GW = Groundwater
ug/L = parts per billion
msl = Mean sea level
ft = Feet
<n = Below detection limit
NA = Not applicable

Notes:
Wells MW-1, MW-2, and MW-3 surveyed December 9, 1998 by Virgil Chavez Land Surveying of Vallejo, California.
a = Sample was analyzed outside the EPA recommended holding time.

Sequoia
Analytical

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

19 March, 2001

Nick Sudano
Blaine Tech Services (Shell)
1680 Rogers Avenue
San Jose, CA 95112

RE: 610 Market Street
Sequoia Report: MKC0156

Enclosed are the results of analyses for samples received by the laboratory on 03/07/01 09:56. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeff Smyly
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

Blaine Tech Services (Shell)	Project: 610 Market Street	
1680 Rogers Avenue	Project Number: 610 Market St./ Oakland	**Reported:**
San Jose CA, 95112	Project Manager: Nick Sudano	03/19/01 16:36

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MKC0156-01	Water	03/06/01 12:50	03/07/01 09:56
MW-2	MKC0156-02	Water	03/06/01 12:37	03/07/01 09:56
MW-3	MKC0156-03	Water	03/06/01 13:00	03/07/01 09:56

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.

Jeff Smyly, Project Manager

Sequoia Analytical

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

Blaine Tech Services (Shell)	Project: 610 Market Street	
1680 Rogers Avenue	Project Number: 610 Market St./ Oakland	**Reported:**
San Jose CA, 95112	Project Manager: Nick Sudano	03/19/01 16:36

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MKC0156-01) Water Sampled: 03/06/01 12:50 Received: 03/07/01 09:56									
Purgeable Hydrocarbons	**965**	500	ug/l	10	1C08001	03/08/01	03/08/01	DHS LUFT	P-01
Benzene	**25.7**	5.00	"	"	"	"	"	"	
Toluene	**9.14**	5.00	"	"	"	"	"	"	
Ethylbenzene	**13.3**	5.00	"	"	"	"	"	"	
Xylenes (total)	**9.12**	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	25.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*110 %*		*70-130*		"	"	"	
MW-2 (MKC0156-02) Water Sampled: 03/06/01 12:37 Received: 03/07/01 09:56									
Purgeable Hydrocarbons	ND	500	ug/l	10	1C14002	03/14/01	03/14/01	DHS LUFT	
Benzene	**183**	5.00	"	"	"	"	"	"	
Toluene	ND	5.00	"	"	"	"	"	"	
Ethylbenzene	ND	5.00	"	"	"	"	"	"	
Xylenes (total)	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	**14000**	250	"	100	"	"	03/14/01	"	
Surrogate: a,a,a-Trifluorotoluene		*97.1 %*		*70-130*		"	"	*03/14/01*	"
MW-3 (MKC0156-03) Water Sampled: 03/06/01 13:00 Received: 03/07/01 09:56									
Purgeable Hydrocarbons	**19900**	10000	ug/l	200	1C08001	03/08/01	03/08/01	DHS LUFT	P-01
Benzene	**1290**	100	"	"	"	"	"	"	
Toluene	**115**	100	"	"	"	"	"	"	
Ethylbenzene	**1450**	100	"	"	"	"	"	"	
Xylenes (total)	**1760**	100	"	"	"	"	"	"	
Methyl tert-butyl ether	**706000**	12500	"	5000	"	"	03/13/01	"	M-03
Surrogate: a,a,a-Trifluorotoluene		*126 %*		*70-130*		"	"	*03/08/01*	"

Sequoia Analytical

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

Blaine Tech Services (Shell)	Project: 610 Market Street	
1680 Rogers Avenue	Project Number: 610 Market St./ Oakland	**Reported:**
San Jose CA, 95112	Project Manager: Nick Sudano	03/19/01 16:36

MTBE Confirmation by EPA Method 8260A

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (MKC0156-03) Water Sampled: 03/06/01 13:00 Received: 03/07/01 09:56									
Methyl tert-butyl ether	**149000**	40000	ug/l	40000	1C19023	03/16/01	03/16/01	EPA 8260A	
Surrogate: 1,2-Dichloroethane-d4		*109 %*		*70-130*	"	"	"	"	

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Blaine Tech Services (Shell)	Project: 610 Market Street	
1680 Rogers Avenue	Project Number: 610 Market St./ Oakland	**Reported:**
San Jose CA, 95112	Project Manager: Nick Sudano	03/19/01 16:36

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1C08001 - EPA 5030B [P/T]										
Blank (1C08001-BLK1)				Prepared & Analyzed: 03/08/01						
Purgeable Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	0.500	"							
Methyl tert-butyl ether	ND	2.50	"							
Surrogate: a,a,a-Trifluorotoluene	*9.88*		"	*10.0*		*98.8*	*70-130*			
LCS (1C08001-BS1)				Prepared & Analyzed: 03/08/01						
Purgeable Hydrocarbons	222	50.0	ug/l	250		88.8	70-130			
Surrogate: a,a,a-Trifluorotoluene	*15.0*		"	*10.0*		*150*	*70-130*			*S-02*
Batch 1C14002 - EPA 5030B [P/T]										
Blank (1C14002-BLK1)				Prepared & Analyzed: 03/14/01						
Purgeable Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	0.500	"							
Methyl tert-butyl ether	ND	2.50	"							
Surrogate: a,a,a-Trifluorotoluene	*10.5*		"	*10.0*		*105*	*70-130*			
LCS (1C14002-BS1)				Prepared & Analyzed: 03/14/01						
Purgeable Hydrocarbons	246	50.0	ug/l	250		98.4	70-130			
Surrogate: a,a,a-Trifluorotoluene	*11.2*		"	*10.0*		*112*	*70-130*			

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1680 Rogers Avenue	Project Number: 610 Market St./ Oakland	**Reported:**
San Jose CA, 95112	Project Manager: Nick Sudano	03/19/01 16:36

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1C14002 - EPA 5030B [P/T]										
Matrix Spike (1C14002-MS1)		**Source: MKC0285-04**		Prepared & Analyzed: 03/14/01						
Purgeable Hydrocarbons	222	50.0	ug/l	250	ND	88.8	60-140			
Surrogate: a,a,a-Trifluorotoluene	*11.5*		"	*10.0*		*115*	*70-130*			
Matrix Spike Dup (1C14002-MSD1)		**Source: MKC0285-04**		Prepared & Analyzed: 03/14/01						
Purgeable Hydrocarbons	212	50.0	ug/l	250	ND	84.8	60-140	4.61	25	
Surrogate: a,a,a-Trifluorotoluene	*10.9*		"	*10.0*		*109*	*70-130*			

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Blaine Tech Services (Shell)	Project: 610 Market Street	
1680 Rogers Avenue	Project Number: 610 Market St./ Oakland	**Reported:**
San Jose CA, 95112	Project Manager: Nick Sudano	03/19/01 16:36

MTBE Confirmation by EPA Method 8260A - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1C19023 - EPA 5030B P/T										
Blank (1C19023-BLK1)				Prepared & Analyzed: 03/16/01						
Methyl tert-butyl ether	ND	1.00	ug/l							
Surrogate: 1,2-Dichloroethane-d4	*10.9*		"	*10.0*		*109*	*70-130*			
LCS (1C19023-BS1)				Prepared & Analyzed: 03/16/01						
Methyl tert-butyl ether	9.15	1.00	ug/l	10.0		91.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	*11.9*		"	*10.0*		*119*	*70-130*			
Matrix Spike (1C19023-MS1)		**Source: MKC0247-02**		Prepared & Analyzed: 03/16/01						
Methyl tert-butyl ether	147	5.00	ug/l	50.0	98.3	97.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	*9.97*		"	*10.0*		*99.7*	*70-130*			
Matrix Spike Dup (1C19023-MSD1)		**Source: MKC0247-02**		Prepared & Analyzed: 03/16/01						
Methyl tert-butyl ether	193	5.00	ug/l	50.0	98.3	189	70-130	27.1	25	Q-01
Surrogate: 1,2-Dichloroethane-d4	*10.8*		"	*10.0*		*108*	*70-130*			

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Blaine Tech Services (Shell)	Project: 610 Market Street	
1680 Rogers Avenue	Project Number: 610 Market St./ Oakland	**Reported:**
San Jose CA, 95112	Project Manager: Nick Sudano	03/19/01 16:36

Notes and Definitions

M-03	Sample was analyzed at a second dilution.
P-01	Chromatogram Pattern: Gasoline C6-C12
Q-01	The spike recovery for this QC sample is outside of established control limits. Review of associated batch QC indicates the recovery for this analyte does not represent an out-of-control condition for the batch.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample.
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

LAB: SEQ

Lab Identification (if necessary):

Address:

City, State, Zip:

EQUIVA Services LLC Chain Of Custody Record

Equiva Project Manager to be Invoiced: Karen Petryna

☑ SCIENCE & ENGINEERING
☐ TECHNICAL SERVICES
☐ CMT HOUSTON

INCIDENT NUMBER (SAP ONLY): 98995750

SAP PC CMNT NUMBER (TECHNET): [redacted]

DATE: 03-06-01

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: rsudano@blainetech.com

SITE ADDRESS (Street and City): 610 Market Street, Oakland

PROJECT CONTACT (Report to): Nick Sudano

CONSULTANT PROJECT NO.: BTS # 010806-T2

SAMPLER NAME(S) (Print): Mike Todd

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 ☐ LIST AGENCY: _____

GOLD MTBE CONFIRMATION: HIGHEST ✓ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES: Confirm highest MTBE hit. by 8260.

TEMPERATURE ON RECEIPT C°: _____

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH - Gas, Purgeable (8015m)	BTEX (8021B)	MTBE (8021B)	MTBE (8260B)	TPH - Diesel, Extractable (8015m)	Oxygenates (5) by (8260B)	Ethanol, Methanol (8015B)	MTBE (8260B) Confirmation, See Note
	MW1	03-06-01	1250	W	3	X	X	X					X
	MW2	"	1297	"	3	X	X	X					X
	MW3	"	1300	"	3	X	X	X					X

FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes

MKC0156

MKC0156

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
[signature]	[signature]	3-7-01	845
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

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

OAQ Graphic (714) 895-9702

10/1999 Revision

WELL GAUGING DATA

Project # 010300-T2 Date 03-06-01 Client 99995750

Site 1010 Market, Oakland, CA

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	
MW1	4	odor				12.99	24.65		
MW2	4	Odor				11.10	19.80		Stinger
MW3	4	Odor				11.00	19.60		Stinger

EQUIVA WELL MONITORING DATA SHEET

BTS #: 010306-T2	Site: 98995750
Sampler: MT	Date: 03-06-01
Well I.D.: MW-1	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 24.65	Depth to Water: 12.99
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: ____

7.6 (Gals.) X 3 = 22.8 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
1242	64.7	6.9	786	17	8	
1243	64.9	6.9	777	29	16	
1244	65.1	6.9	757	28	23	

Did well dewater? Yes (No)
Gallons actually evacuated: 23

Sampling Time: 1250
Sampling Date: 03-06-01

Sample I.D.: MW-1
Laboratory: (Sequoia) Columbia Other ____

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

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:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

EQUIVA WELL MONITORING DATA SHEET

BTS #: 010306-T2	Site: 98995750
Sampler: MT	Date: 03-06-01
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 19.80	Depth to Water: 11.10
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 X
Waterra
Peristaltic
Extraction Pump
Other_____

Sampling Method: (Bailer)

Disposable Bailer
Extraction Port
Dedicated Tubing
Other: _____

5.7 (Gals.) X	3	=	17.1 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	radius^2 * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1230	64.2	6.8	961	20	6	
1231	64.6	6.7	950	19	12	
1232	64.7	6.7	947	12	18	
* Removed & Replaced stinger						

Did well dewater? Yes (No) Gallons actually evacuated: 18

Sampling Time: 1237 Sampling Date: 03-06-01

Sample I.D.: MW-2 Laboratory: (Sequoia) Columbia Other_____

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

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:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

EQUIVA WELL MONITORING DATA SHEET

BTS #: 010306-T2	Site: 98995750
Sampler: MT	Date: 03-06-01
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 19.60	Depth to Water: 11.00
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 X
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

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

5.6 (Gals.) X 3 = 16.8 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
1254	65.1	6.9	821	41	6	
1255	64.9	6.8	833	15	12	
1256	64.8	6.7	850	19	17	
	* Removed & Replaced stinger					

Did well dewater? Yes (No)		Gallons actually evacuated: 17	
Sampling Time: 1300		Sampling Date: 03-06-01	
Sample I.D.: MW-3		Laboratory: (Sequoia) Columbia Other_____	
Analyzed for: (TPH-G BTEX MTBE) TPH-D		Other:	
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:	mg/L	Post-purge: mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge: mV