

## C A M B R I A

April 4, 2002

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

Re: **First Quarter 2002 Monitoring Report**  
Shell-branded Service Station  
11989 Dublin Boulevard  
Dublin, California  
Incident #98995328  
Cambria Project #244-0548-002



Dear Ms. chu:

Effective March 1, 2002, Equiva Services LLC (Equiva) and Equilon Enterprises LLC are now doing business as (dba) Shell Oil Products US (Shell). On behalf of Shell, Cambria Environmental Technology, Inc. (Cambria) is submitting this groundwater monitoring report in accordance with the reporting requirements of 23 CCR 2652d.

### FIRST QUARTER 2002 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 vicinity/area well survey map (Figure 1) and a groundwater elevation contour map with a rose diagram showing groundwater gradient (Figure 2). Blaine's report, presenting the laboratory report and supporting field documents, is included as Attachment A.

Analysis for additional oxygenates was reported in the *Fourth Quarter 2001 Monitoring Report*. In a February 6, 2002 email, the Alameda County Health Care Services Agency requested that we continue this analysis in future monitoring events for wells MW-2, MW-3, and MW-4. Equiva agreed to do this in an email response also dated February 6, 2002. However, the sampling event for the site was performed on January 11, 2002, prior to this request, so the oxygenate analysis was not performed this quarter. It will be included in future events.

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

**ANTICIPATED SECOND QUARTER 2002 ACTIVITIES**

**Groundwater Monitoring:** Blaine will gauge and sample all wells and tabulate the data. Analysis for additional oxygenates will be performed on wells MW-2, MW-3 and MW-4. Cambria will prepare a monitoring report.

**Dissolved Oxygen Monitoring:** As proposed in the *Fourth Quarter 2001 Monitoring Report*, dissolved oxygen monitoring will be discontinued at this site.

**Downgradient Monitoring Well Installation:** Cambria has performed site reconnaissance to evaluate a suitable location for a well downgradient of well MW-4. We will prepare a work plan proposing this well installation.

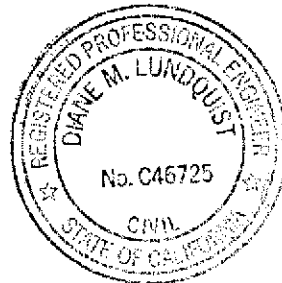


**CLOSING**

We appreciate the opportunity to work with you on this project. Please call Diane Lundquist at (510) 420-3334 if you have any questions or comments.

Sincerely,  
**Cambria Environmental Technology, Inc**

Diane M. Lundquist, P.E.  
Principal Engineer

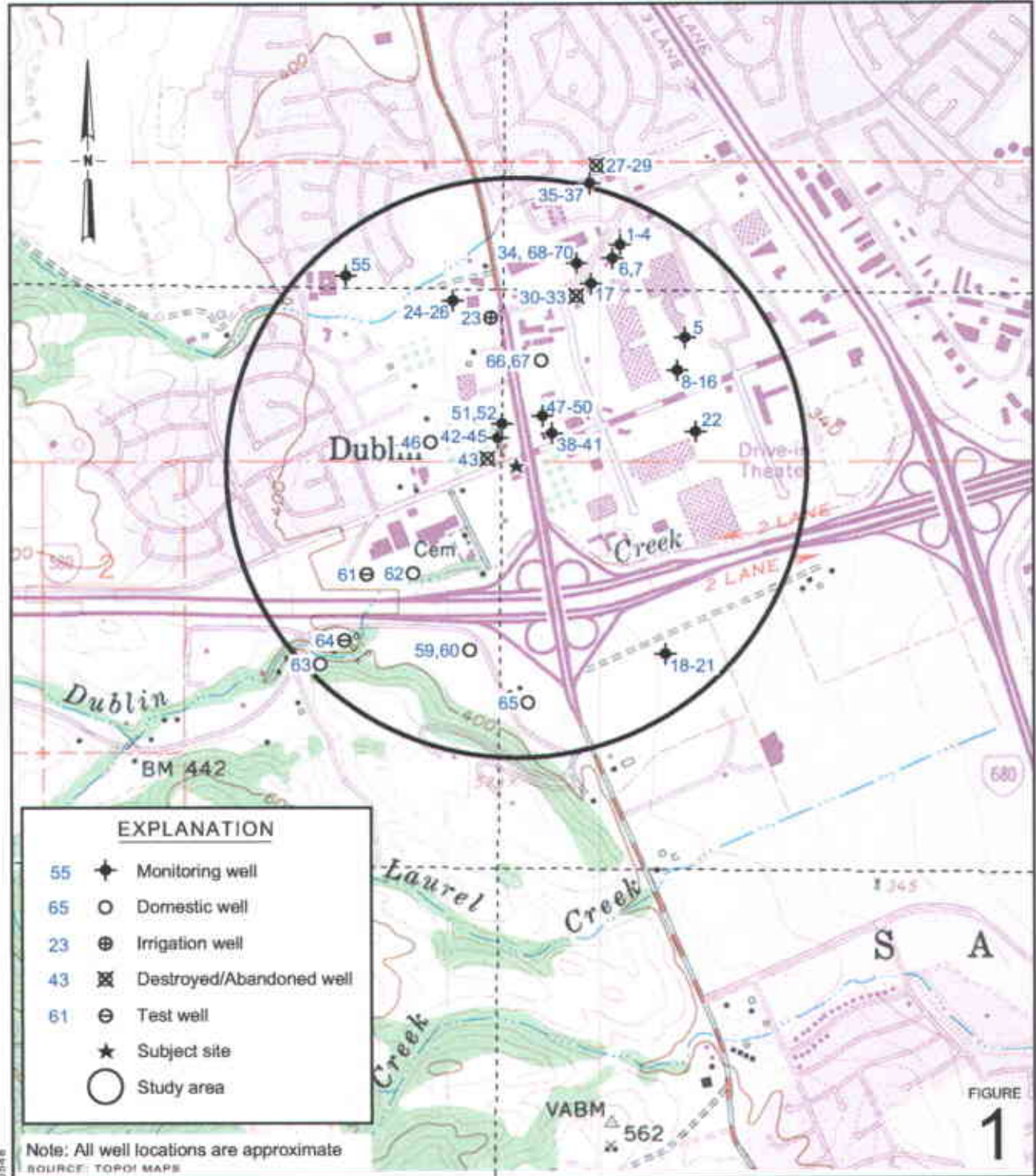


Figures: 1 - Vicinity/Area Well Survey Map  
2 - Groundwater Elevation Contour Map

Attachment: A - Blaine Groundwater Monitoring Report and Field Notes

cc: Karen Petryna, Shell Oil Products US, P.O. Box 7869, Burbank, California 91510-7869

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**Shell-branded Service Station**  
 11989 Dublin Boulevard  
 Dublin, California



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

**EXPLANATION**

- MW-1 ● Monitoring well location
- BW-7 ▲ Tank backfill well
- SB-1 ▲ Soil boring location (11/16/97)
- SB-1 ● Soil boring location (8/5/98)
- FH ○ Fire Hydrant (FH)
- MH ○ Manhole (MH)
- SD Storm drain inlet
- 8.25' bgs Utility depth below ground surface
- ▶ Flow direction indicator
- Gas line (G)
- - - Storm Drain line (SD)
- - - Water line (W)
- - - Sanitary Sewer line (SS)
- - - Electric line (E)
- Groundwater flow direction
- XX.XX Groundwater elevation contour, in feet above mean sea level (msl), approximately located

Well	ELEV	Benzene	MTBE
MW-1	362.44	<0.50	<5.0
MW-2	346.71	<50	15.000
MW-3	346.09	<2.0	830
MW-4	341.76	<20	5.100

Well designation  
Groundwater elevation, in feet above msl  
Benzene and MTBE concentrations are in parts per billion and are analyzed by EPA Method 8260.

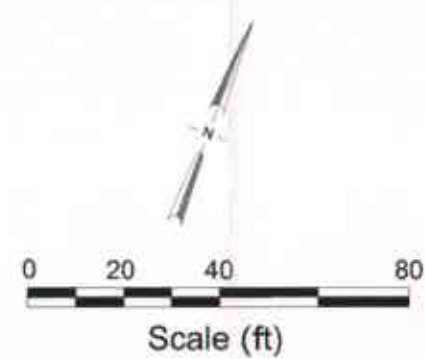
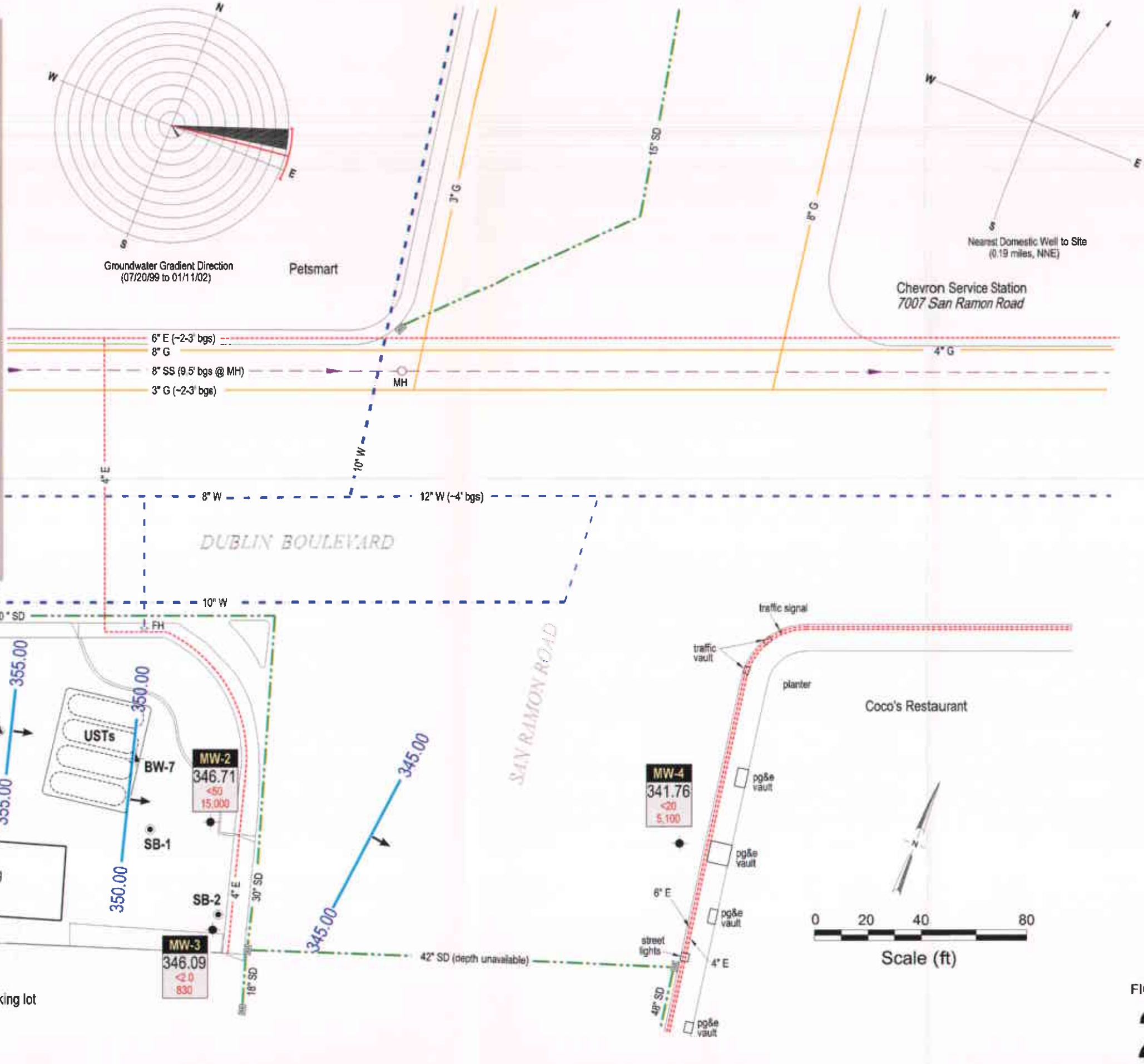


FIGURE 2

**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

February 4, 2002

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

First Quarter 2002 Groundwater Monitoring at  
Shell-branded Service Station  
11989 Dublin Boulevard  
Dublin, CA

Monitoring performed on January 11, 2002

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#### Groundwater Monitoring Report 020111-SO-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 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,

Leon Gearhart  
Project Coordinator

LG/mrb

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

cc: Anni Kreml  
Cambria Environmental Technology, Inc.  
1144 65<sup>th</sup> Street  
Oakland, CA 94608-2411

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**11989 Dublin Boulevard**  
**Dublin, CA**

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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	D.O. Reading (ppm)
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MW-1	07/20/1999	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	367.99	6.24	361.75	NA
MW-1	10/25/1999	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	367.99	6.36	361.63	NA
MW-1	01/27/2000	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	367.99	5.65	362.34	NA
MW-1	04/03/2000	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	367.99	5.68	362.31	1.2/1.6
MW-1	07/27/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	367.99	5.69	362.30	1.0/1.1
MW-1	10/16/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	367.99	5.74	362.25	1.2/0.8
MW-1	01/16/2001	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	367.99	5.71	362.28	0.59/2.8
MW-1	04/19/2001	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	367.99	5.63	362.36	1.4/1.5
MW-1	07/13/2001	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	367.99	5.70	362.29	2.3/3.1
MW-1	08/13/2001	NA	NA	NA	NA	NA	NA	NA	NA	367.99	5.72	362.27	NA
MW-1	10/26/2001	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	367.99	5.73	362.26	0.4/0.0
MW-1	01/11/2002	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	367.99	5.55	362.44	5.4/2.0

MW-2	07/20/1999	2,600	699	55.0	<2.50	59.5	<2.50	9,370	NA	365.43	20.31	345.12	NA
MW-2	10/25/1999	4,710	761	61.1	<10.0	74.6	<10.0	22,800	NA	365.43	22.80	342.63	NA
MW-2	01/27/2000	3,820	1490	60.8	<10.0	156	<10.0	13,400	15,000a	365.43	19.17	346.26	NA
MW-2	04/03/2000	7,130	NA	184	14.9	238	18.8	34,200	28,000	365.43	19.03	346.40	1.6/1.7
MW-2	07/27/2000	311	NA	10.0	<0.500	<0.500	<0.500	280	NA	365.43	19.09	346.34	1.9/1.7
MW-2	10/16/2000	3,970	NA	123	<5.00	68.5	<5.00	14,000	15,600	365.43	23.98	341.45	0.5/0.5
MW-2	01/16/2001	5,780	NA	125	9.71	139	6.93	7,660	7,810	365.43	22.12	343.31	0.90/2.61
MW-2	04/19/2001	4,460	NA	114	7.61	115	4.87	15,200	18,400	365.43	20.95	344.48	1.6/1.5
MW-2	07/13/2001	<5,000	NA	<25	<25	110	<25	NA	15,000	365.43	22.62	342.81	2.7/1.8
MW-2	08/13/2001	NA	NA	NA	NA	NA	NA	NA	NA	365.43	22.33	343.10	NA
MW-2	10/26/2001	3,700	NA	<20	<20	66	<20	NA	9,200	365.43	22.32	343.11	0.7/0.8
MW-2	01/11/2002	<5,000	NA	<50	<50	54	<50	NA	15,000	365.43	18.72	346.71	5.1/c

MW-3	07/20/1999	208	177	4.69	<0.500	<0.500	<0.500	664	NA	364.97	24.23	340.74	NA
MW-3	10/25/1999	378	182	9.49	<0.500	<0.500	<0.500	1,410	NA	364.97	23.26	341.71	NA



**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**11989 Dublin Boulevard**  
**Dublin, CA**

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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	D.O. Reading (ppm)
MW-3	01/27/2000	428	100	29.4	<0.500	<0.500	<0.500	941	NA	364.97	19.53	345.44	NA
MW-3	04/03/2000	<125	NA	11.4	<1.25	<1.25	<1.25	639	NA	364.97	19.13	345.84	1.4/1.9
MW-3	07/27/2000	4,360	NA	78.4	6.95	85.8	2.61	26,600	25,200b	364.97	19.10	345.87	1.9/2.0
MW-3	10/16/2000	586	NA	21.3	<0.500	<0.500	<0.500	3,310	NA	364.97	24.11	340.86	1.1/0.8
MW-3	01/16/2001	558	NA	14.7	<0.500	<0.500	<0.500	2,210	NA	364.97	22.19	342.78	0.87/3.5
MW-3	04/19/2001	376	NA	9.08	<0.500	<0.500	<0.500	667	NA	364.97	20.96	344.01	1.7/1.4
MW-3	07/13/2001	370	NA	<2.0	<2.0	<2.0	<2.0	NA	670	364.97	22.77	342.20	3.1/4.8
MW-3	08/13/2001	NA	NA	NA	NA	NA	NA	NA	NA	364.97	22.59	342.38	NA
MW-3	10/26/2001	<200	NA	<2.0	<2.0	<2.0	<2.0	NA	680	364.97	22.81	342.16	1.0/3.2
MW-3	01/11/2002	480	NA	<2.0	<2.0	<2.0	<2.0	NA	830	364.97	18.88	346.09	1.1/3.2
MW-4	08/10/2001	NA	NA	NA	NA	NA	NA	NA	NA	364.01	25.63	338.38	NA
MW-4	08/13/2001	2,400	NA	<10	<10	<10	<10	NA	8,300	364.01	26.32	337.69	4.2/2.7
MW-4	10/26/2001	<2,000	NA	<20	<20	<20	<20	NA	8,600	364.01	26.02	337.99	3.1/2.8
MW-4	01/11/2002	<2,000	NA	<20	<20	<20	<20	NA	5,100	364.01	22.25	341.76	7.9/3.0

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**11989 Dublin Boulevard**  
**Dublin, CA**

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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	D.O. Reading (ppm)
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Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to July 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 July 13, 2001, analyzed by EPA Method 8020.

MTBE = Methyl-tertiary-butyl ether by EPA Method 8020.

TOC = Top of Casing 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

n/n = Pre-purge/Post-purge DO Readings

NA = Not applicable

Notes:

Wells surveyed June 21, 1999, by Virgil Chavez Land Surveying of Vallejo, California.

Wells surveyed August 23, 2001, by Virgil Chavez Land Surveying of Vallejo, California.

a = Sample was analyzed outside the EPA recommended holding time.

b = Concentration is an estimate.

c = D.O. meter malfunctioning.



Report Number : 24334

Date : 1/25/2002

Leon Gearhart  
Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112-1105

Subject : 4 Water Samples  
Project Name : 11989 Dublin Boulevard, Dublin  
Project Number : 020111-SO2  
P.O. Number : 98995328

Dear Mr. Gearhart,

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



Report Number : 24334

Date : 1/25/2002

Project Name : 11989 Dublin Boulevard, Dublin

Project Number : 020111-SO2

Sample : MW-1

Matrix : Water

Lab Number : 24334-01

Sample Date :1/11/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/22/2002
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/22/2002
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/24/2002
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/24/2002
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	1/22/2002
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/22/2002
Toluene - d8 (Surr)	98.5		% Recovery	EPA 8260B	1/22/2002
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	1/22/2002

Sample : MW-2

Matrix : Water

Lab Number : 24334-02

Sample Date :1/11/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 50	50	ug/L	EPA 8260B	1/22/2002
Toluene	< 50	50	ug/L	EPA 8260B	1/22/2002
Ethylbenzene	54	50	ug/L	EPA 8260B	1/22/2002
Total Xylenes	< 50	50	ug/L	EPA 8260B	1/22/2002
Methyl-t-butyl ether (MTBE)	15000	500	ug/L	EPA 8260B	1/22/2002
TPH as Gasoline	< 5000	5000	ug/L	EPA 8260B	1/22/2002
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	1/22/2002
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	1/22/2002

Approved By:  Joel Kiff



Report Number : 24334

Date : 1/25/2002

Project Name : 11989 Dublin Boulevard, Dublin

Project Number : 020111-SO2

Sample : MW-3

Matrix : Water

Lab Number : 24334-03

Sample Date :1/11/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 2.0	2.0	ug/L	EPA 8260B	1/20/2002
Toluene	< 2.0	2.0	ug/L	EPA 8260B	1/20/2002
Ethylbenzene	< 2.0	2.0	ug/L	EPA 8260B	1/20/2002
Total Xylenes	< 2.0	2.0	ug/L	EPA 8260B	1/20/2002
Methyl-t-butyl ether (MTBE)	830	20	ug/L	EPA 8260B	1/20/2002
TPH as Gasoline	480	200	ug/L	EPA 8260B	1/20/2002
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	1/20/2002
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	1/20/2002

Sample : MW-4

Matrix : Water

Lab Number : 24334-04

Sample Date :1/11/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 20	20	ug/L	EPA 8260B	1/20/2002
Toluene	< 20	20	ug/L	EPA 8260B	1/20/2002
Ethylbenzene	< 20	20	ug/L	EPA 8260B	1/20/2002
Total Xylenes	< 20	20	ug/L	EPA 8260B	1/20/2002
Methyl-t-butyl ether (MTBE)	5100	200	ug/L	EPA 8260B	1/20/2002
TPH as Gasoline	< 2000	2000	ug/L	EPA 8260B	1/20/2002
Toluene - d8 (Surr)	99.6		% Recovery	EPA 8260B	1/20/2002
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	1/20/2002

Approved By:  Joel Kiff

Report Number : 24334

Date : 1/25/2002

**QC Report : Method Blank Data**

Project Name : **11989 Dublin Boulevard, Dublin**

Project Number : **020111-SO2**

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/20/2002
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/20/2002
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/20/2002
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/20/2002
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	1/20/2002
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/20/2002
Toluene - dB (Surr)	100		%	EPA 8260B	1/20/2002
4-Bromofluorobenzene (Surr)	98.9		%	EPA 8260B	1/20/2002

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
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KIFF ANALYTICAL, LLC

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

Approved By: Joel Kiff



Report Number : 24334

Date : 1/25/2002

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : 11989 Dublin Boulevard,

Project Number : 020111-SO2

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	24337-01	<0.50	19.0	19.0	20.6	20.6	ug/L	EPA 8260B	1/20/2002	108	108	0.00	70-130	25
Toluene	24337-01	<0.50	19.0	19.0	19.5	19.1	ug/L	EPA 8260B	1/20/2002	103	100	2.29	70-130	25
Tert-Butanol	24337-01	<5.0	95.2	95.1	91.5	88.2	ug/L	EPA 8260B	1/20/2002	296.1	92.7	3.58	70-130	25
Methyl-t-Butyl Ether	24337-01	<0.50	19.0	19.0	19.0	18.9	ug/L	EPA 8260B	1/20/2002	299.6	99.1	0.503	70-130	25

KIFF ANALYTICAL, LLC

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

Approved By:  Joel Kiff



Report Number : 24334

Date : 1/25/2002

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

Project Name : **11989 Dublin Boulevard,**

Project Number : **020111-SO2**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	1/20/2002	107	70-130
Toluene	40.0	ug/L	EPA 8260B	1/20/2002	100	70-130
Tert-Butanol	200	ug/L	EPA 8260B	1/20/2002	92.2	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	1/20/2002	93.8	70-130

KIFF ANALYTICAL, LLC

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

Approved By:  Joel Kiff

LAB: KiFF

# EQUIVA Services LLC Chain Of Custody Record

Lab Identification (if necessary):  
 Address:  
 City, State, Zip:

Equiva Project Manager to be invoiced:  
**Karen Petryna**  
24334

INCIDENT NUMBER (SEE ONLY)  
 9 8 9 9 5 3 2 8  
 SAMPLER NUMBER (SEE ONLY)

DATE: 1/11/02  
 PAGE: 1 of 1

SAMPLING COMPANY:  
**Blaine Tech Services**  
 ADDRESS:  
**1880 Rogers Avenue, San Jose, CA 95112**  
 PROJECT CONTACT (attach copy or PDF Report):  
**Nick Sudano**  
 TELEPHONE: **408-573-0555** FAX: **408-573-7771** E-MAIL: **nsudano@blainetech.com**

LOG CODE: **BTSS**  
 SITE ADDRESS (Street and City):  
**11989 Dublin Boulevard, Dublin**  
 GLOBAL ID NO.: **T0600102083**  
 EDF DELIVERABLE TO (Responsible Party or Designer):  
**Anni Kreml** PHONE NO.: **510-420-3335** E-MAIL: **akreml@cambria-env.com** CONSULTANT PROJECT NO.:  
**BTS # 020111-502**

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

SAMPLER NAME(S) (Print):  
Shawn O Bryan

LA - RWQCB REPORT FORMAT  UST AGENCY:

GCMS MTBE CONFIRMATION: HIGHEST \_\_\_\_\_ HIGHEST per BORING \_\_\_\_\_ ALL \_\_\_\_\_

SPECIAL INSTRUCTIONS OR NOTES: \_\_\_\_\_ TEMPERATURE ON RECEIPT C° \_\_\_\_\_

## REQUESTED ANALYSIS

Field Sample Identification	SAMPLING		MATRX	NO. OF CONT.
	DATE	TIME		
MW-1	1/11/02	1403	W	3
MW-2	↓	1427	↓	↓
MW-3	↓	1416	↓	↓
MW-4	↓	1340	↓	↓

TPH - Gas, Purgeable	BTEX	MTBE (8021B - 5ppb RL)	MTBE (8260B - 0.5ppb RL)	Oxygenates (5) by (8260B)	Ethanol (8260B)	Methanol	1,2-DCA (8260B)	EDB (8260B)	TPH - Diesel, Extractable (8015m)	MTBE (8260B) Confirmation, See Note
X	X	X								
X	X	X								
X	X	X								
X	X	X								

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

-01  
 -02  
 -03  
 -04

Received by: (Signature) 	Received by: (Signature) 	Date: <u>01/14/02</u>	Time: <u>1320</u>
Received by: (Signature)	Received by: (Signature)	Date:	Time:
Received by: (Signature)	Received by: (Signature)	Date:	Time:

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

C&G Graphic (714) 898-9702

## WELL GAUGING DATA

Project # 020111-50-2 Date 1/11/02 Client Equiva

Site 11989 Dublin Blvd , 9899 5328

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	
MW-1	4					5.55	19.78	TOC	
MW-2	4					18.72	32.53	↓	
MW-3	4					18.88	32.65		
MW-4	2					22.25	35.20		✓

## EQUIVA WELL MONITORING DATA SHEET

Project #: <u>02 0111-50-1</u>	Job # <u>9899 5328</u>
Sampler: <u>O. Bryan</u>	Date: <u>1/11/02</u>
Well I.D.: <u>MW-1</u>	Well Diameter: 2 3 <u>(4)</u> 6 8
Total Well Depth: <u>19.78</u>	Depth to Water: <u>5.55</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius <sup>2</sup> * 0.163

Purge Method: Bailer      Sampling Method: Bailer  
Middleburg      Extraction Port  
Electric Submersible      Other: \_\_\_\_\_  
Extraction Pump  
Other: \_\_\_\_\_

<u>9.2</u>	X	<u>3</u>	=	<u>27.6</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1357	67.2	6.7	1062	176	10	
1358	68.0	6.8	1076	113	20	
1359	68.8	6.8	1089	2200	30	

Did well dewater? Yes  (No)      Gallons actually evacuated: 30

Sampling Time: 1403      Sampling Date: 1/11/02

Sample I.D.: MW-1      Laboratory: Sequoia BC Other KIFF

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

D.O. (if req'd):	<u>Pre-purge:</u> <u>5.4</u> mg/L	<u>Post-purge:</u> <u>2.0</u> mg/L
O.R.P. (if req'd):	<u>Pre-purge:</u> _____ mV	<u>Post-purge:</u> _____ mV

## EQUIVA WELL MONITORING DATA SHEET

Project #: <u>02 0111-50-1</u>	Job # <u>9899 5328</u>
Sampler: <u>O. Bryan</u>	Date: <u>1/11/02</u>
Well I.D.: <u>MW-2</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth: <u>32.53</u>	Depth to Water: <u>18.72</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius <sup>2</sup> * 0.163

Purge Method: Bailer      Sampling Method: Bailer  
Middleburg      Extraction Port  
Electric Submersible  
Extraction Pump      Other: \_\_\_\_\_  
 Other: \_\_\_\_\_

<u>9.0</u>	x	<u>3</u>	=	<u>27.0</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1421	65.4	6.7	1073	189	10	
1422	67.3	6.7	1052	79	20	
1423	67.5	6.7	1047	3200	30	Grey

Did well dewater? Yes  No       Gallons actually evacuated: 30

Sampling Time: 1427      Sampling Date: 1/11/02

Sample I.D.: MW-2      Laboratory: Sequoia BC Other KIFF

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

D.O. (if req'd):	Pre-purge:	5.1	mg/L	Post-purge:	meter	> 20.0	mg/L
O.R.P. (if req'd):	Pre-purge:		mV	Post-purge:			mV

*D.O. meter was functional*

## EQUIVA WELL MONITORING DATA SHEET

Project #: <u>02 0111-50-1</u>	Job # <u>9899 5328</u>
Sampler: <u>O'Byrne</u>	Date: <u>1/11/02</u>
Well I.D.: <u>MW-3</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth: <u>32.65</u>	Depth to Water: <u>18.88</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius <sup>2</sup> * 0.163

Purge Method: Bailer      Sampling Method: Bailer  
Middleburg      Extraction Port  
Electric Submersible      Other: \_\_\_\_\_  
Extraction Pump  
 Other: \_\_\_\_\_

<u>9.0</u>	x	<u>3</u>	=	<u>27.0</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1410	65.3	6.8	1156	7200	10	
1411	66.4	6.7	1195	77	20	
1412	65.7	6.7	1190	89	30	

Did well dewater? Yes  No       Gallons actually evacuated: 30

Sampling Time: 1416      Sampling Date: 1/11/02

Sample I.D.: MW-3      Laboratory: Sequoia BC Other KIFF

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

D.O. (if req'd):	Pre-purge: <u>1.1</u> mg/L	Post-purge: <u>3.2</u> mg/L
O.R.P. (if req'd):	Pre-purge: _____ mV	Post-purge: _____ mV

## EQUIVA WELL MONITORING DATA SHEET

Project #: <u>02 0111-50-1</u>	Job # <u>9899 5328</u>
Sampler: <u>O. Borjan</u>	Date: <u>1/11/02</u>
Well I.D.: <u>MW-4</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth: <u>35.20</u>	Depth to Water: <u>22.25</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius <sup>2</sup> * 0.163

Purge Method: <u>Bailer</u> <u>Middleburg</u> Electric Submersible Extraction Pump Other: _____	Sampling Method: <u>Bailer</u> Extraction Port Other: _____
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<u>2.1</u>	x	<u>3</u>	=	<u>6.3</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1332	66.4	6.9	1170	7200	2.5	
1334	67.6	6.8	1066	7200	4.5	
1336	67.6	6.8	1000	7200	6.5	

Did well dewater? Yes  No  Gallons actually evacuated: 6.5

Sampling Time: 1340 Sampling Date: 1/11/02

Sample I.D.: MW4 Laboratory: Sequoia BC Other KIFF

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

D.O. (if req'd): Pre-purge: 7.9 mg/L Post-purge: 3.0 mg/L

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