



January 9, 2004

WWS, ACEH  
6/14/04

Alameda County  
JAN 15 2004  
Environmental Health

Mr. Scott Seery  
Alameda County Health Care Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

**Re: Fourth Quarter 2003 Groundwater Monitoring Report  
Former BP Service Station # 11120  
6400 Dublin Road  
Dublin, California  
URS Project #38486397**

Dear Mr. Seery:

On behalf of Atlantic Richfield Company (ARCO – a BP affiliated company), URS Corporation (URS) is submitting the *Fourth Quarter 2003 Groundwater Monitoring Report* for the Former BP Service Station #11120, located at 6400 Dublin Road, Dublin, California.

If you have any questions regarding this submission, please call me at (510) 874-1720.

Sincerely,

URS CORPORATION

*Leonard P. Niles*

Leonard P. Niles, R.G./C.H.G.  
Senior Geologist



Enclosure: Fourth Quarter 2003 Groundwater Monitoring Report

cc: Mr. Paul Supple, ARCO, (electronic copy uploaded to ENFOS)  
Ms. Liz Sewell, ConocoPhillips, 76 Broadway, Sacramento CA 95818

URS Corporation  
500 12th Street, Suite 200  
Oakland, CA 94607-4014  
Tel: 510.893.3600  
Fax: 510.874.3268



Atlantic Richfield Company  
(a BP affiliated company)

P.O. Box 6549  
Moraga, California 94570  
Phone: (925) 299-8891  
Fax: (925) 299-8872

January 9, 2004

RE: Fourth Quarter 2003 Groundwater Monitoring Report  
Former BP Service Station #11120  
6400 Dublin, CA  
URS Project #38486397

I declare, that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct.

Submitted by:

Paul Supple  
Environmental Business Manager

**REPORT**

Alameda County

JAN 15 2004

Environmental Health

**FOURTH QUARTER 2003  
GROUNDWATER MONITORING**

FORMER BP SERVICE STATION #11120  
6400 DUBLIN ROAD  
DUBLIN, CALIFORNIA

*Prepared for*  
Atlantic Richfield Company

January 9, 2003

**URS**

URS Corporation  
500 12th Street, Suite 200  
Oakland, California 94607

38486397

Date: January 9, 2003

Quarter: 4Q 03

### ATLANTIC RICHFIELD COMPANY QUARTERLY GROUNDWATER MONITORING REPORT

Former Facility No.: 11120 Address: 6400 Dublin Road, Dublin, CA  
ARCO Environmental Business Manager: Paul Supple  
Consulting Co./Contact Person: URS Corporation / Leonard Niles  
Consultant Project No.: 38486397  
Primary Agency: Alameda County Health Care Services

#### WORK PERFORMED THIS QUARTER (Fourth – 2003):

1. Performed fourth quarter groundwater monitoring event on December 5, 2003.
2. Prepared and submitted third quarter 2003 groundwater monitoring report.
3. Prepared and submitted fourth quarter 2003 groundwater monitoring report.

#### WORK PROPOSED FOR NEXT QUARTER (First – 2004):

1. Perform first quarter 2004 groundwater monitoring event.
2. Prepare and submit first quarter 2004 groundwater monitoring report.

Current Phase of Project: GW monitoring/sampling  
Frequency of Groundwater Sampling: Wells MW-8 through MW-11 quarterly  
Frequency of Groundwater Monitoring: Quarterly  
Is Free Product (FP) Present On-Site: No  
Current Remediation Techniques: None  
Approximate Depth to Groundwater: 5.89 (MW-8) to 7.21 (MW-9) Feet  
Groundwater Gradient (direction): South-Southeast  
Groundwater Gradient (magnitude): 0.035 feet per foot

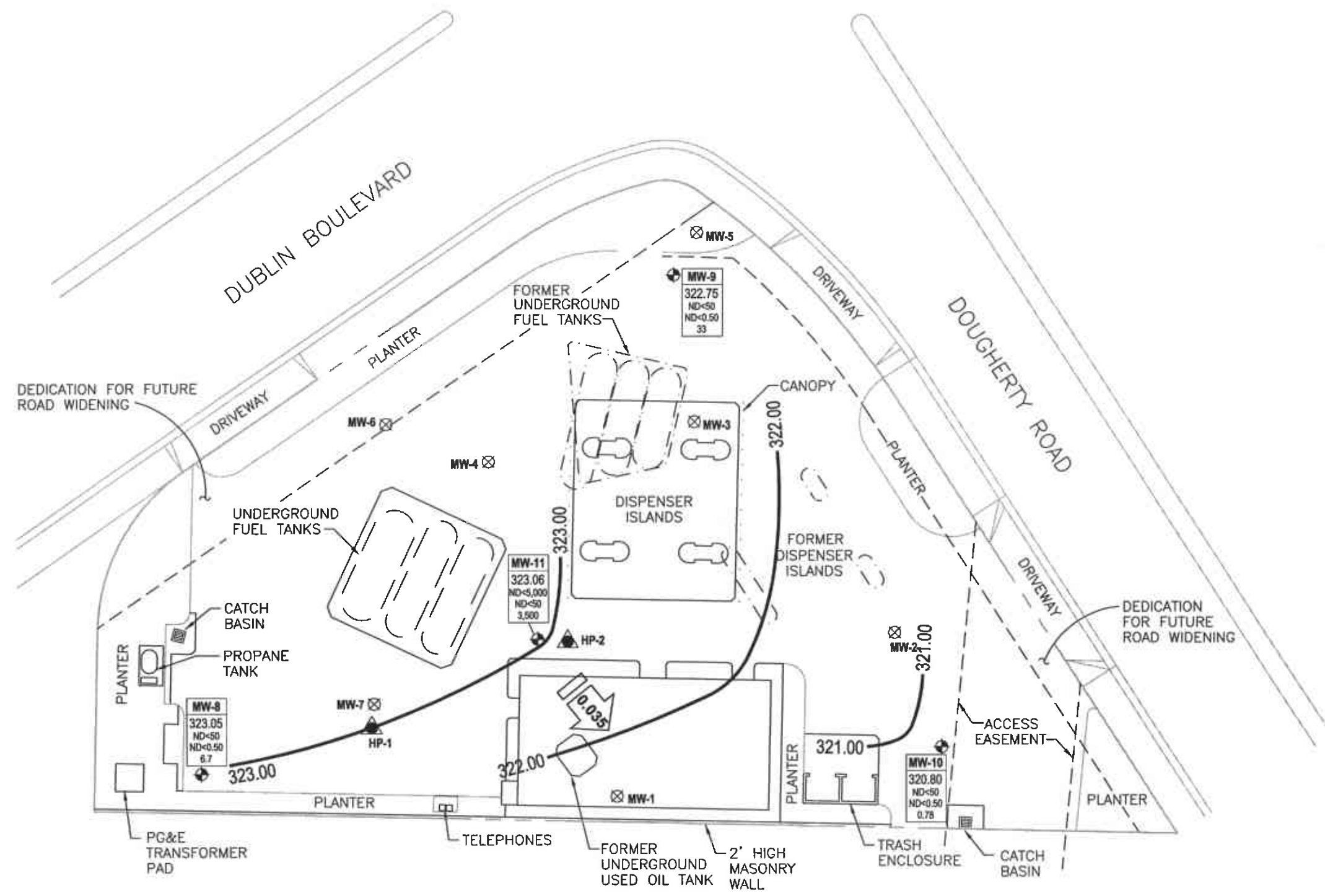
#### DISCUSSION:

This quarter samples were analyzed by EPA Method 8260B for TPH-g, BTEX, MTBE and fuel oxygenates. TPH-g and benzene were not detected above the laboratory reporting limit in any of the four wells sampled this quarter. MTBE was detected above the laboratory reporting limit in all four wells at concentrations ranging from 0.78 µg/L (MW-10) to 3,500 µg/L (MW-11). No fuel oxygenates were detected above the laboratory reporting limit, except for MTBE as described above.

**ATTACHMENTS:**

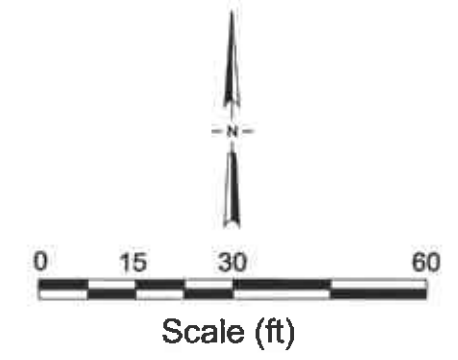
- Figure 1– Groundwater Elevation Contour and Analytical Summary Map – December 5, 2003
- Table 1 – Groundwater Elevation and Analytical Data
- Table 2 – Fuel Oxygenate Analytical Data
- Attachment A – Concentration and Water Level Trends (MW-11)
- Attachment B – Field Procedures and Field Data Sheets
- Attachment C – Laboratory Procedures, Certified Analytical Reports and Chain-of-Custody Records
- Attachment D – EDCC Report and EDF/Geowell Submittal Confirmation
- Attachment E – Historical Groundwater Analytical Data for Former Wells Abandoned in 1999 (Source Alisto Engineering)

X:\w\_env1\_waste\BP\_OEM\Site\Niles\_Sites\1120\Reports\Monitoring\Dir\_4\_2003\GWEC\_AS\_12-s.dwg, 01/05/2004 10:48:45 AM, JKMT, URS



**LEGEND**

- ⊗ Destroyed groundwater monitoring well
- ▲ Grab groundwater sample location May 14, 1999
- ⊕ Air sparge well
- Well ID: Well Designation
- ELEV: Groundwater Elevation above MSL
- TPHg: Concentration of TPH-g, Benzene and MTBE in groundwater in micrograms per liter (µg/L)
- Benzene
- MTBE
- ND: Not detected
- NS: Not sampled
- 321.00: Groundwater elevation contour
- ↔ 0.035: Approximate groundwater flow direction and gradient (ft/MSL)



<b>URS</b>	Project No. 38486397	<b>GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP</b> Fourth Quarter 2003 (December 5, 2003)	FIGURE <b>1</b>
	Former BP Station #1120 6400 Dublin Boulevard Dublin, California		

**Table 1**  
**Groundwater Elevation and Analytical Data**  
Former BP Service Station #11120  
6400 Dublin Road, Dublin, CA

WELL ID	DATE OF SAMPLING/ MONITORING	TOC (Feet)	DTW (a) (Feet)	GWE (b) (Feet)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (8021) (ug/l)	MTBE (8260 B) (ug/l)	Fuel Oxygenates & Pb Scavengers (ug/l)	DO (ppm)	LAB
MW-8	2/25/2002	328.94	6.02	322.92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.98	NA	NA	---	PACE
	9/30/2002	328.94	6.16	322.78	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.8	2.9	ND (c)	---	SEQ
	12/13/2002	328.94	5.81	323.13	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.4	5.9	ND (c)	---	SEQ
	3/12/2003	328.94	5.80	323.14	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.8	4.3	See Table 2	---	SEQ
	6/28/2003 (d)	328.94	5.70	323.24	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	4.1	See Table 2	---	SEQ
	9/30/2003	328.94	5.90	323.04	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	4.1	See Table 2	---	SEQ
	12/5/2003	328.94	5.89	323.05	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	6.7	See Table 2	---	SEQ
MW-9	2/25/2002	329.96	5.90	324.06	ND<250	ND<2.50	ND<2.50	ND<2.50	ND<5.00	ND<2.50	NA	NA	---	PACE
	9/30/2002	329.96	6.92	323.04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.3	1.4	ND (c)	---	SEQ
	12/13/2002	329.96	6.51	323.45	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	0.53	ND (c)	---	SEQ
	3/12/2003	329.96	6.86	323.10	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	0.59	See Table 2	---	SEQ
	6/28/2003 (d)	329.96	5.95	324.01	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	1.0	See Table 2	---	SEQ
	9/30/2003	329.96	6.24	323.72	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	16	See Table 2	---	SEQ
	12/5/2003	329.96	7.21	322.75	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	33	See Table 2	---	SEQ
MW-10	2/25/2002	327.44	4.21	323.23	53	2.58	ND<0.5	2.83	8.46	ND<0.5	NA	NA	---	PACE
	9/30/2002	327.44	4.71	322.73	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.8	0.51	ND (c)	---	SEQ
	12/13/2002	327.44	6.36	321.08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	ND<0.5	ND (c)	---	SEQ
	3/12/2003	327.44	7.96	319.48	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	0.76	See Table 2	---	SEQ
	6/28/2003 (d)	327.44	7.70	319.74	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	0.68	See Table 2	---	SEQ
	9/30/2003	327.44	7.57	319.87	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	0.71	See Table 2	---	SEQ
	12/5/2003	327.44	6.64	320.80	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	0.78	See Table 2	---	SEQ
MW-11	2/25/2002	329.75	6.02	323.73	1,800	1.34	ND<0.5	ND<0.5	ND<1.0	2,550	NA	NA	---	PACE
	9/30/2002	329.75	7.12	322.63	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1,400	1,500	ND (c)	---	SEQ
	12/13/2002	329.75	6.60	323.15	1,300	ND<10	ND<10	ND<10	ND<10	2,000	1,400	ND (c)	---	SEQ
	3/12/2003	329.75	5.79	323.96	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	2,900	650	See Table 2	---	SEQ
	6/28/2003 (d)	329.75	5.68	324.07	ND<5,000	ND<50	ND<50	ND<50	ND<50	NA	2,500	See Table 2	---	SEQ
	9/30/2003	329.75	6.68	323.07	5,100	ND<25	ND<25	ND<25	ND<25	NA	3,200	See Table 2	---	SEQ
	12/5/2003	329.75	6.69	323.06	ND<5,000	ND<50	ND<50	ND<50	ND<50	NA	3,500	See Table 2	---	SEQ

**Table 1**  
**Groundwater Elevation and Analytical Data**  
 Former BP Service Station #11120  
 6400 Dublin Road, Dublin, CA

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline by EPA method 8015 B Modified
B	Benzene by EPA method 8021 B (prior to 6/28/03)
T	Toluene by EPA method 8021 B (prior to 6/28/03)
E	Ethylbenzene by EPA method 8021 B (prior to 6/28/03)
X	Total xylenes by EPA method 8021 B (prior to 6/28/03)
MTBE	Methyl tert butyl ether by EPA method 8021 B (prior to 6/28/03)
DO	Dissolved oxygen
ug/l	Micrograms per liter
ppm	Parts per million
ND<	Not detected at or above reported detection limit
---	Not applicable/analyzed/measured
PACE	Pace, Inc.
SEQ	Sequoia Analytical Laboratory
TOC	Top of Casing
DTW	Depth to Water
GWE	Groundwater Elevation

NOTES:

- (a) Top of casing elevations surveyed relative to an elevation of 18.409 feet above mean sea level.
- (b) Groundwater elevations in feet above mean sea level.
- (c) Analyzed by EPA method 8260 B; fuel oxygenates include ethanol, tert-butyl alcohol (TBA), di-isopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), tert-amyl methyl ether (TAME); lead scavengers include: 1,2 dichloroethane (1,2-DCA) & ethylene dibromide (EDB)
- (d) Beginning on the second quarter 2003 monitoring event (6/28/03), TPHg, BTEX, MTBE and fuel oxygenates analyzed by EPA Method 8260B.

Source : The data within this table collected prior to June 2002 was provided to URS by Atlantic Richfield Company and their previous consultants. URS has not verified the accuracy of this information.



**Table 2**  
**Fuel Oxygenate Analytical Data**  
Former BP Service Station #11120  
6400 Dublin Blvd., Dublin CA

Well Number	Date Sampled	Ethanol (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-8	03/12/03	ND<100	ND<20	4.3	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-8	06/28/03	ND<100	ND<20	4.1	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-8	09/30/03	ND<100	ND<20	4.1	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
<b>MW-8</b>	<b>12/05/03</b>	<b>ND&lt;100</b>	<b>ND&lt;20</b>	<b>6.7</b>	<b>ND&lt;0.50</b>	<b>ND&lt;0.50</b>	<b>ND&lt;0.50</b>	<b>ND&lt;0.50</b>	<b>ND&lt;0.50</b>
MW-9	03/12/03	ND<100	ND<20	0.59	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-9	06/28/03	ND<100	ND<20	1.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-9	09/30/03	ND<100	ND<20	16	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
<b>MW-9</b>	<b>12/05/03</b>	<b>ND&lt;100</b>	<b>ND&lt;20</b>	<b>33</b>	<b>ND&lt;0.50</b>	<b>ND&lt;0.50</b>	<b>ND&lt;0.50</b>	<b>ND&lt;0.50</b>	<b>ND&lt;0.50</b>
MW-10	03/12/03	ND<100	ND<20	0.76	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-10	06/28/03	ND<100	ND<20	0.68	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-10	09/30/03	ND<100	ND<20	0.71	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
<b>MW-10</b>	<b>12/05/03</b>	<b>ND&lt;100</b>	<b>ND&lt;20</b>	<b>0.78</b>	<b>ND&lt;0.50</b>	<b>ND&lt;0.50</b>	<b>ND&lt;0.50</b>	<b>ND&lt;0.50</b>	<b>ND&lt;0.50</b>
MW-11	03/12/03	ND<1,000	ND<200	650	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
MW-11	06/28/03	ND<10,000	ND<2,000	2,500	ND<50	ND<50	ND<50	ND<50	ND<50
MW-11	09/30/03	ND<5,000	ND<1,000	3,200	ND<25	ND<25	ND<25	ND<25	ND<25
<b>MW-11</b>	<b>12/05/03</b>	<b>ND&lt;10,000</b>	<b>ND&lt;2,000</b>	<b>3,500</b>	<b>ND&lt;50</b>	<b>ND&lt;50</b>	<b>ND&lt;50</b>	<b>ND&lt;50</b>	<b>ND&lt;50</b>

NOTE:

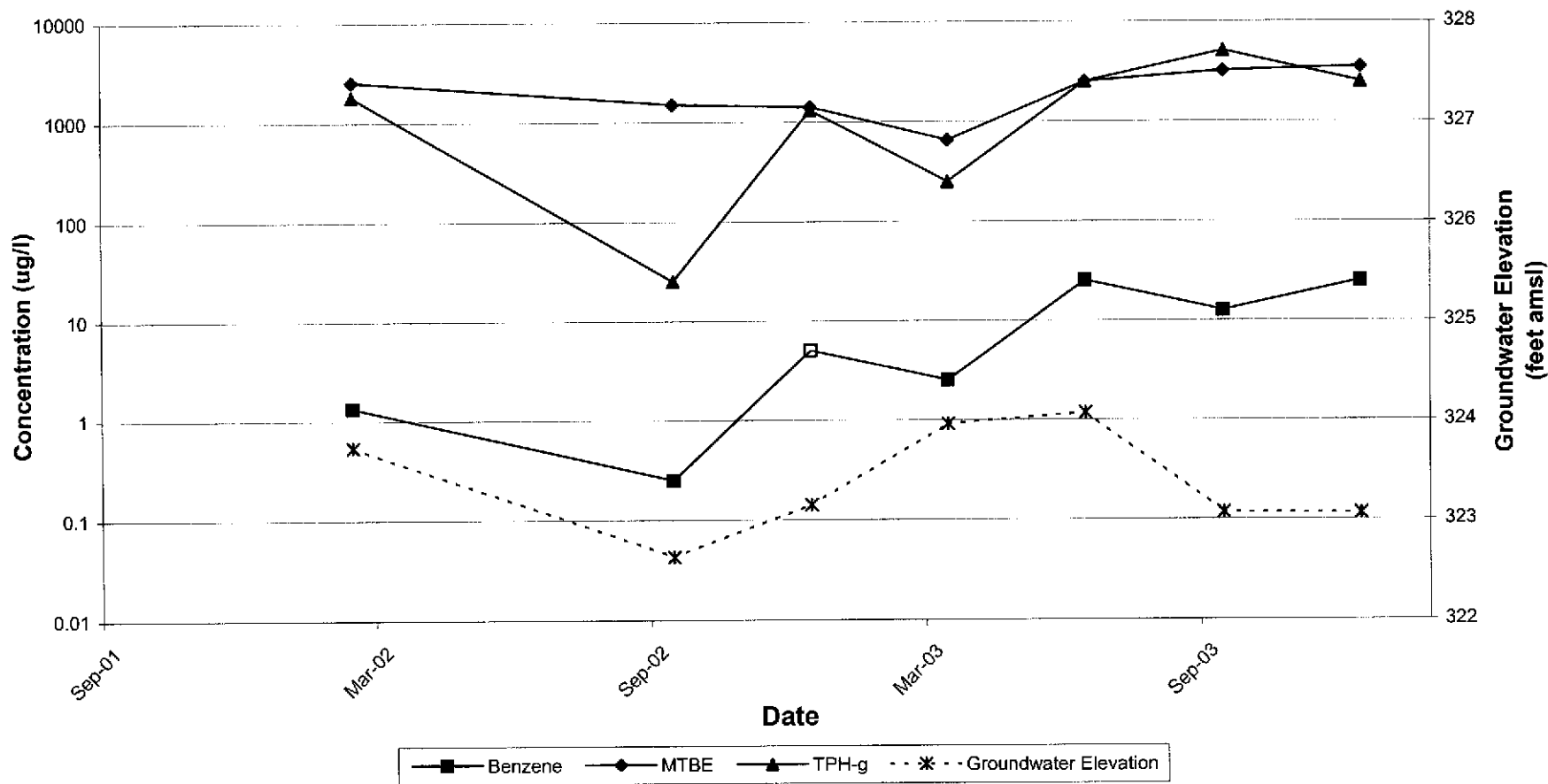
All volatile organic compounds (Ethanol, TBA, MTBE, DIPE, ETBE, TAME, EDC, and EDB) analyzed using EPA Method 8260B

ABBREVIATIONS:

- TBA = tert-Butyl alcohol
- MTBE = Methyl tert-butyl ether
- DIPE = Di-isopropyl ether
- ETBE = Ethyl tert-butyl ether
- TAME = tert-Amyl methyl ether
- 1,2-DCA = 1,2-Dichloroethane
- EDB = 1,2-Dibromoethane
- µg/L = Micrograms per liter
- ND< = Not detected at or above laboratory reporting limits.

**ATTACHMENT A**  
**CONCENTRATION AND WATER LEVEL TRENDS**  
**(MW-11)**

### Concentration and Water Level Trends (Well MW-11)



Former BP Service Station #11114  
4997 Stevenson Boulevard  
Fremont, CA

**Chart 1**

**ATTACHMENT B**  
**FIELD PROCEDURES AND FIELD DATA SHEETS**

## FIELD PROCEDURES

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### Sampling Procedures

The sampling procedure for each well consists first of measuring the water level and depth to bottom, and checking for the presence of free phase petroleum product (free product), using either an electronic indicator and a clear Teflon<sup>TM</sup> bailer or an oil-water interface probe.

Wells not containing free product are purged approximately three casing volumes of water (or until dewatered) using a centrifugal pump, gas displacement pump, or bailer. Equipment and purging method used for the current sampling event is noted on the attached field data sheets. During purging, temperature, pH, and electrical conductivity are monitored to document that these parameters are stable prior to collecting samples. After purging, water levels are allowed to partially (approximately 80%) recover. Groundwater samples (both purge and no purge) are collected using a Teflon bailer, placed into appropriate Environmental Protection Agency- (EPA) approved containers, labeled, logged onto chain-of-custody records, and transported on ice to a California State-certified laboratory. Wells with free product are not sampled and free product is removed according to California Code of Regulation, Title 23, Div. 3, Chap. 16, Section 2655, UST Regulations.



## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>031205-SP2</u>	Station # <u>11120</u>
Sampler: <u>M. Pynch</u>	Date: <u>12/5/03</u>
Well I.D.: <u>MW-8</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth: <u>19.600</u>	Depth to Water: <u>5.89</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method: <u>Bailer</u>	Sampling Method: <u>Bailer</u>
<u>Disposable Bailer</u>	<u>Disposable Bailer</u>
Positive Air Displacement	Extraction Port
Electric Submersible	Other: _____
Extraction Pump	
Other: _____	

Top of Screen: \_\_\_\_\_ If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

<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	Conductivity (mS or <u>µS</u> )	Gals. Removed	Observations
1224	68.7	7.5	3637	2	<u>cloudy, light tan</u>
1226	69.2	7.1	3529	4	"
1229	69.3	7.2	3463	6.5	"

Did well dewater? Yes <u>(No)</u>	Gallons actually evacuated: <u>6.5</u>
Sampling Time: <u>1230</u>	Sampling Date: <u>12/5/03</u>
Sample I.D.: <u>MW-8</u>	Laboratory: Pace <u>Sequoia</u> Other _____
Analyzed for: <u>TPH-G</u> <u>BTEX</u> MTBE TPH-D Other: <u>Oxy's; Ethanol; 1,2-DCA; EPB</u>	
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

## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>031205-SP2</u>	Station # <u>11120</u>
Sampler: <u>M. Pyrch</u>	Date: <u>12/5/03</u>
Well I.D.: <u>MW-9</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth: <u>19.65</u>	Depth to Water: <u>7.21</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method: <u>Bailer</u>	Sampling Method: <u>Bailer</u>
<u>Disposable Bailer</u>	<u>Disposable Bailer</u>
Positive Air Displacement	Extraction Port
Electric Submersible	Other: _____
Extraction Pump	
Other: _____	

Top of Screen: \_\_\_\_\_ If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

<u>1.9</u>	X	<u>3</u>	=	<u>5.7</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
<u>1315</u>	<u>69.7</u>	<u>8.3</u>	<u>1295</u>	<u>2.0</u>	<u>cloudy, light foam</u>
<u>1319</u>	<u>69.0</u>	<u>7.6</u>	<u>1228</u>	<u>4.0</u>	<u>"</u>
<u>1325</u>	<u>69.1</u>	<u>7.6</u>	<u>1197</u>	<u>6.0</u>	<u>"</u>

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>6.0</u>
Sampling Time: <u>1325</u>	Sampling Date: <u>12/5/03</u>
Sample I.D.: <u>MW-9</u>	Laboratory: Pace <u>Sequoia</u> Other _____
Analyzed for: <u>TPH-G</u> <u>BTEX</u> MTBE TPH-D Other: <u>oxy's; Ethanol; 1,2-DCI; EOB</u>	
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



## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>031205-JP2</u>	Station # <u>11120</u>
Sampler: <u>M. Pyrch</u>	Date: <u>12/5/03</u>
Well I.D.: <u>MW-10</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth: <u>19.60</u>	Depth to Water: <u>6.64</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method: <u>Bailer</u> <u>Disposable Bailer</u> Positive Air Displacement Electric Submersible Extraction Pump Other: _____	Sampling Method: <u>Bailer</u> <u>Disposable Bailer</u> Extraction Port Other: _____
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Top of Screen: \_\_\_\_\_ If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

<u>2.0</u>	X	<u>3</u>	=	<u>6.0</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or <u>µS</u> )	Gals. Removed	Observations
<u>1209</u>	<u>68.9</u>	<u>7.2</u>	<u>7153</u>	<u>2.0</u> <del>3.0</del> <u>JP</u>	<u>cloudy, tan</u>
<u>1211</u>	<u>69.2</u>	<u>7.1</u>	<u>7401</u>	<u>4.0</u>	"
<u>1213</u>	<u>69.8</u>	<u>7.1</u>	<u>7954</u>	<u>6.0</u>	"

Did well dewater? Yes <u>(No)</u>	Gallons actually evacuated: <u>6.0</u>
Sampling Time: <u>1213</u>	Sampling Date: <u>12/5/03</u>
Sample I.D.: <u>MW-10</u>	Laboratory: Pace <u>Sequoia</u> Other _____
Analyzed for: <u>TPH-G</u> <u>BTEX</u> MTBE TPH-D Other: <u>Oxy's; Ethanol; 1,2-DCA; EPB</u>	
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

## ARCO / BP WELL MONITORING DATA SHEET

BTS #: 031205-SP2	Station # 11120
Sampler: M. Pyrch	Date: 12/5/03
Well I.D.: MW-11	Well Diameter: (2) 3 4 6 8
Total Well Depth: 19.42	Depth to Water: 6.69
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method:  Bailer      Sampling Method:  Bailer

Disposable Bailer       Disposable Bailer

Positive Air Displacement       Extraction Port

Electric Submersible      Other: \_\_\_\_\_

Extraction Pump

Other: \_\_\_\_\_

Top of Screen: \_\_\_\_\_ If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

<u>2.0</u>	x	<u>3</u>	=	<u>6.0</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
1241	68.6	7.3	2697	2	clear
1244	68.8	7.2	2604	4	cloudy, light tan
1248	69.4	7.2	2334	6	"

Did well dewater? Yes  No  Gallons actually evacuated: 6.0

Sampling Time: 1250      Sampling Date: 12/5/03

Sample I.D.: MW-11      Laboratory: Pace  Sequoia      Other \_\_\_\_\_

Analyzed for:  TPH-G  BTEX      MTBE      TPH-D      Other: oxy's; Ethanol; 1,2-DCA; EDB

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

**BP GEM OIL COMPANY TYPE A BILL OF LADING**

SOURCE RECORD **BILL OF LADING** FOR NON-  
HAZARDOUS PURGEWATER RECOVERED FROM  
GROUNDWATER WELLS AT BP GEM OIL COMPANY  
FACILITIES IN THE STATE OF CALIFORNIA. THE NON-  
HAZARDOUS PURGE- WATER WHICH HAS BEEN  
RECOVERED FROM GROUND- WATER WELLS IS  
COLLECTED BY THE CONTRACTOR, MADE UP INTO  
LOADS OF APPROPRIATE SIZE AND HAULED BY  
DILLARD ENVIRONMENTAL TO THE ALTAMONT  
LANDFILL AND RESOURCE RECOVERY FACILITY IN  
LIVERMORE, CALIFORNIA.

The contractor performing this work is PLAINTECH  
SERVICES, INC. (BTS), 1680 Rogers Avenue, San Jose, CA  
95112 (phone [408] 573-0555). Blaine Tech Services, Inc. is  
authorized by BP GEM OIL COMPANY to recover, collect,  
apportion into loads the Non-Hazardous Well Purgewater that is  
drawn from wells at the BP GEM Oil Company facility indicated  
below and deliver that purgewater to BTS. Transport routing of  
the Non-Hazardous Well Purgewater may be direct from one BP  
GEM facility to the designated destination point; from one BP  
GEM facility to the designated destination point via another BP  
GEM facility; from a BP GEM facility to the designated  
destination point via the contractor's facility, or any combination  
thereof. The Non-Hazardous Well Purgewater is and remains the  
property of BP GEM Oil Company.

This Source Record **BILL OF LADING** was initiated to  
cover the recovery of Non-Hazardous Well Purgewater from wells  
at the BP GEM Oil Company facility described below:

1120

Station # \_\_\_\_\_

6400 Dublin Blvd, Dublin

Station Address \_\_\_\_\_

Total Gallons Collected From Groundwater Monitoring Wells:  
24

added equip. \_\_\_\_\_ any other adjustments \_\_\_\_\_  
rinse water 6 \_\_\_\_\_

TOTAL GALS. RECOVERED 30 loaded onto BTS vehicle # \_\_\_\_\_

BTS event # \_\_\_\_\_ time \_\_\_\_\_ date \_\_\_\_\_  
03/20/05-SP2 1345 12/5/03

signature [Signature]

\*\*\*\*\*

REC'D AT \_\_\_\_\_ time \_\_\_\_\_ date \_\_\_\_\_  
\_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

unloaded by \_\_\_\_\_  
signature \_\_\_\_\_

**ATTACHMENT C**

**LABORATORY PROCEDURES,  
CERTIFIED ANALYTICAL REPORTS,  
AND CHAIN-OF-CUSTODY RECORDS**

## **LABORATORY PROCEDURES**

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### **Laboratory Procedures**

The groundwater samples were analyzed for the presence of the chemicals mentioned in the chain of custody using standard EPA methods. The methods of analysis for the groundwater samples are documented in the certified analytical report. The certified analytical reports and chain-of-custody record are presented in this attachment. The analytical data provided by the laboratory approved by Atlantic Richfield Company have been reviewed and verified by that laboratory.



18 December, 2003

Leonard Niles  
URS Corporation [Arco]  
500 12th Street, Suite 200  
Oakland, CA 94607

RE: BP Heritage #11120, Dublin, CA  
Work Order: MML0228

Enclosed are the results of analyses for samples received by the laboratory on 12/08/03 16:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Theresa Allen  
Project Manager

CA ELAP Certificate #1210

URS Corporation [Arco]  
500 12th Street, Suite 200  
Oakland CA, 94607

Project: BP Heritage #11120, Dublin, CA  
Project Number: N/P  
Project Manager: Leonard Niles

MML0228  
Reported:  
12/18/03 12:09

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-8	MML0228-01	Water	12/05/03 12:30	12/08/03 16:20
MW-9	MML0228-02	Water	12/05/03 13:25	12/08/03 16:20
MW-10	MML0228-03	Water	12/05/03 12:15	12/08/03 16:20
MW-11	MML0228-04	Water	12/05/03 12:50	12/08/03 16:20

There were no custody seals that were received with this project.

URS Corporation [Arco]  
 500 12th Street, Suite 200  
 Oakland CA, 94607

 Project: BP Heritage #11120, Dublin, CA  
 Project Number: N/P  
 Project Manager: Leonard Niles

 MML0228  
**Reported:**  
 12/18/03 12:09

**Volatile Organic Compounds by EPA Method 8260B**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-8 (MML0228-01) Water Sampled: 12/05/03 12:30 Received: 12/08/03 16:20</b>									
Ethanol	ND	100	ug/l	1	3L15001	12/13/03	12/14/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	"
<b>Methyl tert-butyl ether</b>	<b>6.7</b>	<b>0.50</b>	"	"	"	"	"	"	"
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	"
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	"
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	"
Benzene	ND	0.50	"	"	"	"	"	"	"
Toluene	ND	0.50	"	"	"	"	"	"	"
Ethylbenzene	ND	0.50	"	"	"	"	"	"	"
Xylenes (total)	ND	0.50	"	"	"	"	"	"	"
Gasoline Range Organics	ND	50	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		<i>107 %</i>		<i>78-129</i>					
<b>MW-9 (MML0228-02) Water Sampled: 12/05/03 13:25 Received: 12/08/03 16:20</b>									
Ethanol	ND	100	ug/l	1	3L15002	12/15/03	12/15/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	"
<b>Methyl tert-butyl ether</b>	<b>33</b>	<b>0.50</b>	"	"	"	"	"	"	"
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	"
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	"
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	"
Benzene	ND	0.50	"	"	"	"	"	"	"
Toluene	ND	0.50	"	"	"	"	"	"	"
Ethylbenzene	ND	0.50	"	"	"	"	"	"	"
Xylenes (total)	ND	0.50	"	"	"	"	"	"	"
Gasoline Range Organics	ND	50	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		<i>116 %</i>		<i>78-129</i>					



URS Corporation [Arco]  
500 12th Street, Suite 200  
Oakland CA, 94607

Project: BP Heritage #11120, Dublin, CA  
Project Number: N/P  
Project Manager: Leonard Niles

MML0228  
Reported:  
12/18/03 12:09

**Volatile Organic Compounds by EPA Method 8260B  
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**MW-10 (MML0228-03) Water** Sampled: 12/05/03 12:15 Received: 12/08/03 16:20

Ethanol	ND	100	ug/l	1	3L15002	12/15/03	12/15/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>0.78</b>	<b>0.50</b>	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics	ND	50	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4

114 % 78-129

**MW-11 (MML0228-04) Water** Sampled: 12/05/03 12:50 Received: 12/08/03 16:20

Ethanol	ND	10000	ug/l	100	3L15002	12/15/03	12/15/03	EPA 8260B	
tert-Butyl alcohol	ND	2000	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>3500</b>	<b>50</b>	"	"	"	"	"	"	
Di-isopropyl ether	ND	50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	50	"	"	"	"	"	"	
Benzene	ND	50	"	"	"	"	"	"	
Toluene	ND	50	"	"	"	"	"	"	
Ethylbenzene	ND	50	"	"	"	"	"	"	
Xylenes (total)	ND	50	"	"	"	"	"	"	
Gasoline Range Organics	ND	5000	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4

111 % 78-129

URS Corporation [Arco]  
 500 12th Street, Suite 200  
 Oakland CA, 94607

 Project: BP Heritage #11120, Dublin, CA  
 Project Number: N/P  
 Project Manager: Leonard Niles

 MML0228  
 Reported:  
 12/18/03 12:09

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3L15001 - EPA 5030B P/T**
**Blank (3L15001-BLK1)**

Prepared &amp; Analyzed: 12/13/03

Ethanol	ND	100	ug/l							
tert-Butyl alcohol	ND	20	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Gasoline Range Organics	ND	50	"							

*Surrogate: 1,2-Dichloroethane-d4*

5.43

"

5.00

109

78-129

**Laboratory Control Sample (3L15001-BS1)**

Prepared &amp; Analyzed: 12/13/03

Ethanol	189	100	ug/l	200		94.5	31-186			
tert-Butyl alcohol	45.9	20	"	50.0		91.8	0-206			
Methyl tert-butyl ether	9.74	0.50	"	10.0		97.4	63-137			
Di-isopropyl ether	9.08	0.50	"	10.0		90.8	76-130			
Ethyl tert-butyl ether	9.36	0.50	"	10.0		93.6	61-141			
tert-Amyl methyl ether	9.26	0.50	"	10.0		92.6	56-140			
1,2-Dichloroethane	10.5	0.50	"	10.0		105	77-136			
1,2-Dibromoethane (EDB)	9.41	0.50	"	10.0		94.1	77-132			
Benzene	9.84	0.50	"	10.0		98.4	78-124			
Toluene	9.24	0.50	"	10.0		92.4	78-129			
Ethylbenzene	8.88	0.50	"	10.0		88.8	84-117			
Xylenes (total)	25.4	0.50	"	30.0		84.7	83-125			

*Surrogate: 1,2-Dichloroethane-d4*

5.37

"

5.00

107

78-129

URS Corporation [Arco]  
500 12th Street, Suite 200  
Oakland CA, 94607

Project: BP Heritage #11120, Dublin, CA  
Project Number: N/P  
Project Manager: Leonard Niles

MML0228  
Reported:  
12/18/03 12:09

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3L15001 - EPA 5030B P/T**
**Laboratory Control Sample (3L15001-BS2)**

Prepared &amp; Analyzed: 12/13/03

Methyl tert-butyl ether	8.51	0.50	ug/l	9.92		85.8	63-137			
Benzene	5.63	0.50	"	6.40		88.0	78-124			
Toluene	30.3	0.50	"	29.7		102	78-129			
Ethylbenzene	6.98	0.50	"	6.96		100	84-117			
Xylenes (total)	33.2	0.50	"	33.7		98.5	83-125			
Gasoline Range Organics	424	50	"	440		96.4	70-113			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.25		"	5.00		105	78-129			

**Laboratory Control Sample Dup (3L15001-BSD1)**

Prepared &amp; Analyzed: 12/13/03

Ethanol	208	100	ug/l	200		104	31-186	9.57	37	
tert-Butyl alcohol	44.1	20	"	50.0		88.2	0-206	4.00	22	
Methyl tert-butyl ether	9.88	0.50	"	10.0		98.8	63-137	1.43	13	
Di-isopropyl ether	9.29	0.50	"	10.0		92.9	76-130	2.29	9	
Ethyl tert-butyl ether	9.47	0.50	"	10.0		94.7	61-141	1.17	9	
tert-Amyl methyl ether	9.68	0.50	"	10.0		96.8	56-140	4.44	12	
1,2-Dichloroethane	11.1	0.50	"	10.0		111	77-136	5.56	13	
1,2-Dibromoethane (EDB)	9.56	0.50	"	10.0		95.6	77-132	1.58	9	
Benzene	10.1	0.50	"	10.0		101	78-124	2.61	12	
Toluene	9.34	0.50	"	10.0		93.4	78-129	1.08	10	
Ethylbenzene	9.27	0.50	"	10.0		92.7	84-117	4.30	10	
Xylenes (total)	26.7	0.50	"	30.0		89.0	83-125	4.99	11	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.30		"	5.00		106	78-129			

**Laboratory Control Sample Dup (3L15001-BSD2)**

Prepared &amp; Analyzed: 12/13/03

Methyl tert-butyl ether	8.46	0.50	ug/l	9.92		85.3	63-137	0.589	13	
Benzene	5.62	0.50	"	6.40		87.8	78-124	0.178	12	
Toluene	30.4	0.50	"	29.7		102	78-129	0.329	10	
Ethylbenzene	7.34	0.50	"	6.96		105	84-117	5.03	10	
Xylenes (total)	33.4	0.50	"	33.7		99.1	83-125	0.601	11	
Gasoline Range Organics	405	50	"	440		92.0	70-113	4.58	9	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.48		"	5.00		110	78-129			

URS Corporation [Arco]  
 500 12th Street, Suite 200  
 Oakland CA, 94607

 Project: BP Heritage #11120, Dublin, CA  
 Project Number: N/P  
 Project Manager: Leonard Niles

 MML0228  
 Reported:  
 12/18/03 12:09

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3L15002 - EPA 5030B P/T**
**Blank (3L15002-BLK1)**

Prepared &amp; Analyzed: 12/15/03

Ethanol	ND	100	ug/l							
tert-Butyl alcohol	ND	20	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Gasoline Range Organics	ND	50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.48		"	5.00		110	78-129			

**Laboratory Control Sample (3L15002-BS1)**

Prepared &amp; Analyzed: 12/15/03

Ethanol	203	100	ug/l	200		102	31-186			
tert-Butyl alcohol	41.6	20	"	50.0		83.2	0-206			
Methyl tert-butyl ether	9.80	0.50	"	10.0		98.0	63-137			
Di-isopropyl ether	9.16	0.50	"	10.0		91.6	76-130			
Ethyl tert-butyl ether	9.51	0.50	"	10.0		95.1	61-141			
tert-Amyl methyl ether	9.43	0.50	"	10.0		94.3	56-140			
1,2-Dichloroethane	11.2	0.50	"	10.0		112	77-136			
1,2-Dibromoethane (EDB)	9.30	0.50	"	10.0		93.0	77-132			
Benzene	9.94	0.50	"	10.0		99.4	78-124			
Toluene	9.53	0.50	"	10.0		95.3	78-129			
Ethylbenzene	9.13	0.50	"	10.0		91.3	84-117			
Xylenes (total)	26.0	0.50	"	30.0		86.7	83-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.42		"	5.00		108	78-129			

Sequoia Analytical - Morgan Hill

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.*

URS Corporation [Arco]  
 500 12th Street, Suite 200  
 Oakland CA, 94607

 Project: BP Heritage #11120, Dublin, CA  
 Project Number: N/P  
 Project Manager: Leonard Niles

 MML0228  
 Reported:  
 12/18/03 12:09

### Volatile Organic Compounds by EPA Method 8260B - Quality Control

#### Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3L15002 - EPA 5030B P/T**
**Laboratory Control Sample (3L15002-BS2)**

Prepared &amp; Analyzed: 12/15/03

Methyl tert-butyl ether	8.01	0.50	ug/l	9.92		80.7	63-137			
Benzene	5.38	0.50	"	6.40		84.1	78-124			
Toluene	29.0	0.50	"	29.7		97.6	78-129			
Ethylbenzene	6.84	0.50	"	6.96		98.3	84-117			
Xylenes (total)	32.1	0.50	"	33.7		95.3	83-125			
Gasoline Range Organics	408	50	"	440		92.7	70-113			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.58</i>		<i>"</i>	<i>5.00</i>		<i>112</i>	<i>78-129</i>			

**Laboratory Control Sample Dup (3L15002-BS1)**

Prepared: 12/15/03 Analyzed: 12/16/03

Ethanol	186	100	ug/l	200		93.0	31-186	8.74	37	
tert-Butyl alcohol	41.5	20	"	50.0		83.0	0-206	0.241	22	
Methyl tert-butyl ether	9.78	0.50	"	10.0		97.8	63-137	0.204	13	
Di-isopropyl ether	8.93	0.50	"	10.0		89.3	76-130	2.54	9	
Ethyl tert-butyl ether	9.55	0.50	"	10.0		95.5	61-141	0.420	9	
tert-Amyl methyl ether	9.64	0.50	"	10.0		96.4	56-140	2.20	12	
1,2-Dichloroethane	10.9	0.50	"	10.0		109	77-136	2.71	13	
1,2-Dibromoethane (EDB)	9.41	0.50	"	10.0		94.1	77-132	1.18	9	
Benzene	10.1	0.50	"	10.0		101	78-124	1.60	12	
Toluene	9.16	0.50	"	10.0		91.6	78-129	3.96	10	
Ethylbenzene	9.24	0.50	"	10.0		92.4	84-117	1.20	10	
Xylenes (total)	25.9	0.50	"	30.0		86.3	83-125	0.385	11	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.46</i>		<i>"</i>	<i>5.00</i>		<i>109</i>	<i>78-129</i>			

**Laboratory Control Sample Dup (3L15002-BS2)**

Prepared: 12/15/03 Analyzed: 12/16/03

Methyl tert-butyl ether	8.15	0.50	ug/l	9.92		82.2	63-137	1.73	13	
Benzene	5.24	0.50	"	6.40		81.9	78-124	2.64	12	
Toluene	29.0	0.50	"	29.7		97.6	78-129	0.00	10	
Ethylbenzene	6.59	0.50	"	6.96		94.7	84-117	3.72	10	
Xylenes (total)	30.9	0.50	"	33.7		91.7	83-125	3.81	11	
Gasoline Range Organics	379	50	"	440		86.1	70-113	7.37	9	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.57</i>		<i>"</i>	<i>5.00</i>		<i>111</i>	<i>78-129</i>			



URS Corporation [Arco]  
500 12th Street, Suite 200  
Oakland CA, 94607

Project: BP Heritage #11120, Dublin, CA  
Project Number: N/P  
Project Manager: Leonard Niles

MML0228  
**Reported:**  
12/18/03 12:09

### 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



# Chain of Custody Record

Project Name: 1120 GWM  
 BP BU/GEM CO Portfolio Retail  
 BP Laboratory Contract Number: Atlantic Richfield Company

MML 0228

On-site Time: 1125 Temp: 66°  
 Off-site Time: 1345 Temp: 66°  
 Sky Conditions: Cloudy  
 Meteorological Events: -  
 Wind Speed: - Direction: -

Date: 12/5/03

Requested Due Date (mm/dd/yy): 14 day TAT

Send To:	BP/GEM Facility No.: <u>11120</u>	Consultant/Contractor: <u>URS</u>
Lab Name: <u>SEQUOIA</u>	BP/GEM Facility Address: <u>6400 Dublin Ave., Dublin, CA</u>	Address: <u>500 12th St., Ste. 200</u>
Lab Address: <u>885 Jarvis Dr.</u>	Site ID No.: <u>11120</u>	<u>Oakland, CA 94609-4014</u>
<u>Morgan Hill, CA 95037</u>	Site Lat/Long:	e-mail EDD: <u>donna.cosper@URSCorp.com</u>
	California Global ID #: <u>T0600101432</u>	Consultant/Contractor Project No.:
Lab PM <u>Theresa Allen</u>	BP/GEM PM Contact: <u>PAUL SUPPLE</u>	Consultant Tele/Fax: <u>510-893-3600/510-874-3268</u>
Tele/Fax: <u>408-776-9600 / 408-782-6308</u>	Address: <u>P.O. Box 6549</u>	Consultant/Contractor PM: <u>Leonard Miles</u>
Report Type & QC Level: <u>1 Send EDP Reports</u>	<u>Moraga, CA 94570</u>	Invoice to: <u>Consultant/Contractor of BP/GEM (circle one)</u>
BP/GEM Account No.: <u>400-6-21124</u>	Tele/Fax: <u>925-299-8891/925-299-8872</u>	BP/GEM Work Release No:

Item No.	Sample Description	Time	Matrix				Laboratory No.	No. of containers	Preservatives			Requested Analysis							Sample Point Lat/Long and Comments
			Soil/Solid	Water/Liquid	Sediments	Air			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	TPH-G/BTEX 58015/80121-58260	TPH-D (8015)	MTBE (8021)	MTBE (8260)	MTBE, TAMS, ETBS DIFS, TSA (8260)	1,2-DCA & RDB (8260)	
1	MW-8	1230		X			61	3				X			X	X	X		
2	MW-9	1325		X			62	3				X			X	X	X		
3	MW-10	1215		X			63	3				X			X	X	X		
4	MW-11	1250		X			64	3				X			X	X	X		
5																			
6																			
7																			
8																			
9																			
10																			

Sampler's Name: <u>Matthew Pyrd</u>	Relinquished By / Affiliation: <u>Matthew Pyrd</u>	Date: <u>12/8/03</u>	Time: <u>15:22</u>	Accepted By / Affiliation: <u>[Signature]</u>	Date: <u>12/8/03</u>	Time: <u>1620</u>
Sampler's Company: <u>Blaine Tech Services</u>						
Shipment Date:						
Shipment Method:						
Shipment Tracking No:						

Special Instructions: Address Invoice to BP/GEM but send to URS for approval

Body Seals In Place Yes  No  Temperature Blank Yes  No  Cooler Temperature on Receipt: 4.6°C Trip Blank Yes  No

# SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: URS  
 REC. BY (PRINT): AS  
 WORKORDER: MW0228

DATE REC'D AT LAB: 12-8-03  
 TIME REC'D AT LAB: 1:020  
 DATE LOGGED IN: 12-4-03

DRINKING WATER for regulatory purposes: YES  NO  
 WASTE WATER for regulatory purposes: YES  NO

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / <input checked="" type="radio"/> Absent Intact / Broken*			MW-8	3-Vials	HA	L	12-5-03	101-HA 32401
2. Chain-of-Custody <input checked="" type="radio"/> Present / Absent*			MW-9	↓	↓	↓	↓	
3. Traffic Reports or Packing List: Present / <input checked="" type="radio"/> Absent			MW-10	↓	↓	↓	↓	
4. Airbill: Airbill / Sticker Present / <input checked="" type="radio"/> Absent			MW-11	↓	↓	↓	↓	
5. Airbill #:								
6. Sample Labels: <input checked="" type="radio"/> Present / Absent								
7. Sample IDs: <input checked="" type="radio"/> Listed / Not Listed on Chain-of-Custody								
8. Sample Condition: <input checked="" type="radio"/> Intact / Broken* / Leaking*								
9. Does information on chain-of-custody, traffic reports and sample labels agree? <input checked="" type="radio"/> Yes / No*								
10. Sample received within hold time: <input checked="" type="radio"/> Yes / No*								
11. Adequate sample volume received? <input checked="" type="radio"/> Yes / No*								
12. Proper Preservatives used: <input checked="" type="radio"/> Yes / No*								
13. Temp Rec. at Lab: Is temp 4 +/- 2°C? <input checked="" type="radio"/> Yes / No**								
(Acceptance range for samples requiring thermal pres.) **Exception (if any): METALS / DEF ON ICE or Problem COC								

12-8-03 AS



**ATTACHMENT D**

**EDCC REPORT AND EDF/GEOWELL SUBMITTAL CONFIRMATION**

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## Error Summary Log

12/22/03

EDF 1.2i All files present in deliverable.

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Laboratory:	Sequoia Analytical Laboratories, Inc., Morgan Hill, CA
Project Name:	BP Heritage #11120, Dubli
Work Order Number:	MML0228
Global ID:	T0600101432
Lab Report Number:	MML0228121820031209

## Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotcl	Run Sub
MML02281218200 MW-10 31209		MML022803	W	CS	8260TPH	SW5030B	12/05/03	12/15/03	12/15/03	3L15002	1
MML02281218200 MW-11 31209		MML022804	W	CS	8260TPH	SW5030B	12/05/03	12/15/03	12/15/03	3L15002	1
MML02281218200 MW-8 31209		MML022801	W	CS	8260TPH	SW5030B	12/05/03	12/13/03	12/14/03	3L15001	1
MML02281218200 MW-9 31209		MML022802	W	CS	8260TPH	SW5030B	12/05/03	12/15/03	12/15/03	3L15002	1
		3L15001BSD1	WQ	BD1	8260TPH	SW5030B	//	12/13/03	12/13/03	3L15001	1
		3L15001BSD2	WQ	BD2	8260TPH	SW5030B	//	12/13/03	12/13/03	3L15001	1
		3L15001BS1	WQ	BS1	8260TPH	SW5030B	//	12/13/03	12/13/03	3L15001	1
		3L15001BS2	WQ	BS2	8260TPH	SW5030B	//	12/13/03	12/13/03	3L15001	1
		3L15001BLK1	WQ	LB1	8260TPH	SW5030B	//	12/13/03	12/13/03	3L15001	1
		3L15002BSD1	WQ	BD1	8260TPH	SW5030B	//	12/15/03	12/16/03	3L15002	1
		3L15002BSD2	WQ	BD2	8260TPH	SW5030B	//	12/15/03	12/16/03	3L15002	1
		3L15002BS1	WQ	BS1	8260TPH	SW5030B	//	12/15/03	12/15/03	3L15002	1
		3L15002BS2	WQ	BS2	8260TPH	SW5030B	//	12/15/03	12/15/03	3L15002	1
		3L15002BLK1	WQ	LB1	8260TPH	SW5030B	//	12/15/03	12/15/03	3L15002	1

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## EDFSAMP: Error Summary Log

12/22/03

Error type	Logcode	Projname	Npdlwo	Sampid	Matrix
There are no errors in this data file					

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## EDFTEST: Error Summary Log

12/22/03

Error type	Labsampid	Qccode	Anmcode	Exmcode	Anadate	Run number
There are no errors in this data file					//	0

# EDFRES: Error Summary Log

12/22/03

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
There are no errors in this data file						//	0	

---

## EDFQC: Error Summary Log

12/22/03

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Error type	Lablctcl	Anmcode	Parlabel	Qccode	Labqid
There are no errors in this data files					

---

# EDFCL: Error Summary Log

12/22/03

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Error type	Clredate	Anmcode	Exmcode	Parlabel	Clcode
There are no errors in this data file	//				



## AB2886 Electronic Delivery

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### UPLOADING A GEO\_WELL FILE

**Processing is complete. No errors were found!  
Your file has been successfully submitted!**

**Submittal Title:** Fourth Quarter 2003 Geowell for Site #11120

**Submittal Date/Time:** 12/21/2003 1:32:53 PM

**Confirmation Number:** 1079578995

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(CONTRACTOR)

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Your EDF file has been successfully uploaded!

**Confirmation Number:** 7196366310

**Date/Time of Submittal:** 12/21/2003 1:30:25 PM

**Facility Global ID:** T0600101432

**Facility Name:** BP

**Submittal Title:** Fourth Quarter 2003 Groundwater Monitoring Report for Site #11120

**Submittal Type:** GW Monitoring Report

Logged in as URSCORP-OAKLAND (CONTRACTOR)

CONTACT SITE ADMINISTRATOR

**ATTACHMENT E**

**HISTORICAL GROUNDWATER ANALYTICAL DATA FOR FORMER  
WELLS ABANDONDED IN 1999 (SOURCE ALISTO ENGINEERING)**

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING  
 BP OIL COMPANY SERVICE STATION NO. 11120  
 6400 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-170

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet) (a)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet) (b)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-1 (c)	10/27/92	328.96	8.19	320.77	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—
MW-1	04/09/93	328.96	4.79	324.17	ND<50	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PACE
MW-1	08/25/93	328.96	6.85	322.11	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PACE
MW-1	11/22/93	328.96	7.38	321.58	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PACE
MW-1	03/07/94	328.96	5.89	323.07	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PACE
MW-1	06/09/94	328.96	6.42	322.54	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	4.3	PACE
MW-1	09/12/94	328.96	7.33	321.63	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	8.8	PACE
MW-1	12/20/94	328.96	6.34	322.62	—	—	—	—	—	—	—	7.8	PACE
MW-1	03/16/95	328.96	4.37	324.59	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	—	—
MW-1	06/28/95	328.96	5.35	323.61	—	—	—	—	—	—	—	5.6	ATI
MW-1	09/06/95	328.96	6.44	322.52	ND<50	340	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	—	—
MW-1	12/22/95	328.96	6.04	322.92	—	—	—	—	—	—	ND<5.0	7.4	ATI
MW-1	08/20/96	328.96	5.65	323.31	—	—	—	—	—	—	—	—	—
MW-1	08/21/96	328.96	—	—	—	—	—	—	—	—	—	—	—
MW-1	10/31/96	328.96	5.99	322.97	ND<50	160	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.8	SPL
MW-1 (d)	12/02/96	328.96	—	—	—	—	—	—	—	—	—	—	—
MW-1 (d)	06/26/98	328.96	—	—	—	—	—	—	—	—	—	—	—
MW-2	10/27/92	328.50	7.64	320.86	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—
MW-2	04/09/93	328.50	4.12	324.38	ND<50	80	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PACE
MW-2	08/25/93	328.50	6.31	322.19	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PACE
MW-2	11/22/93	328.50	7.12	321.38	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PACE
MW-2	03/07/94	328.50	5.60	322.90	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PACE
MW-2	06/09/94	328.50	5.91	322.59	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	4.3	PACE
MW-2	09/12/94	328.50	6.87	321.63	ND<50	160	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	8.2	PACE
MW-2	12/20/94	328.50	5.86	322.64	—	—	—	—	—	—	—	7.5	PACE
MW-2	03/16/95	328.50	3.77	324.73	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	—	—
MW-2	03/16/95	328.50	3.77	324.73	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	6.6	ATI
MW-2	06/28/95	328.50	4.33	324.17	—	—	—	—	—	—	—	6.6	ATI
MW-2	09/06/95	328.50	5.85	322.65	ND<50	—	—	—	—	—	—	—	—
MW-2	12/22/95	328.50	5.50	323.00	ND<50	210	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	7.0	ATI
MW-2	08/20/96	328.50	5.07	323.43	—	—	—	—	—	—	—	—	—
MW-2	08/21/96	328.50	—	—	—	—	—	—	—	—	—	—	—
MW-2	10/31/96	328.50	5.44	323.06	ND<50	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	7.0	SPL
MW-2	12/02/96	328.50	5.50	323.00	—	—	—	—	—	—	—	—	—
MW-2	03/27/97	328.50	4.61	323.89	—	—	—	—	—	—	—	—	—
MW-2	06/03/97	328.50	7.14	321.36	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.8	SPL
MW-2	09/16/97	328.50	6.10	322.40	—	—	—	—	—	—	—	—	—
MW-2	12/03/97	328.50	6.22	322.28	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.2	SPL
MW-2	06/26/98	328.50	4.86	323.64	ND<50	—	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.6	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING  
 BP OIL COMPANY SERVICE STATION NO. 11120  
 6400 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-170

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-3	10/27/92	329.36	8.43	320.93	210	ND<50							
MW-3	04/09/93	329.36	4.90	324.46	400	260	3	0.7	0.9	30	—	—	PACE
MW-3	08/25/93	329.36	7.13	322.23	2000	440	6.1	ND<0.5	ND<0.5	ND<0.5	—	—	PACE
MW-3	11/22/93	329.36	7.60	321.76	1800	360	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PACE
MW-3	03/07/94	329.36	6.08	323.28	1300	5000	ND<2.5	ND<2.5	ND<2.5	ND<2.5	3300	(e)	PACE
MW-3	06/09/94	329.36	6.51	322.85	8500	2600	22	4.0	2.2	3.8	7200	(e)	PACE
QC-1 (f)	06/09/94	—	—	—	8800	—	25	8.3	0.5	15	13000	(e)	PACE
MW-3	09/12/94	329.36	7.63	321.73	2100	3200	23	6.3	0.5	10	13000	(e)	PACE
QC-1 (f)	09/12/94	—	—	—	1800	—	ND<5.0	ND<5.0	8.8	20	3800	(e)	PACE
MW-3	12/20/94	329.36	6.41	322.95	18000	9600	ND<5.0	ND<5.0	8.0	10	3900	(e)	PACE
QC-1 (f)	12/20/94	—	—	—	17000	—	79	28	89	9.3	—	—	PACE
MW-3	03/16/95	329.36	4.39	324.97	6300	7000	79	33	80	ND<2.5	—	7.3	PACE
QC-1 (f)	03/16/95	—	—	—	6300	—	470	ND<5.0	210	9.9	—	—	PACE
MW-3	06/28/95	329.36	5.50	323.86	9000	3000	500	ND<5.0	230	13	—	5.5	ATI
QC-1 (f)	06/28/95	—	—	—	8800	—	(g) ND<10	ND<10	ND<10	ND<20	—	—	ATI
MW-3	09/06/95	329.36	6.66	322.70	10000	2800	(g) ND<10	ND<10	ND<10	ND<20	—	7.4	ATI
QC-1 (f)	09/06/95	—	—	—	9700	—	ND<50	ND<50	ND<50	ND<100	37000	7.1	ATI
MW-3	12/22/95	329.36	6.31	323.05	9200	2500	ND<50	ND<50	ND<50	ND<100	36000	—	ATI
MW-3	08/20/96	329.36	5.87	323.49	—	—	ND<50	ND<50	ND<50	ND<100	29000	6.7	ATI
MW-3	08/21/96	329.36	—	—	3700	1900	—	—	—	—	—	—	—
QC-1 (f)	08/21/96	—	—	—	—	—	ND<25	ND<50	ND<50	ND<50	4100	6.8	SPL
MW-3	10/31/96	329.36	6.20	323.16	3500	—	ND<25	ND<50	ND<50	ND<50	4000	—	SPL
QC-1 (f)	10/31/96	—	—	—	ND<250	ND<500	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	6.8	SPL
MW-3	12/02/96	329.36	6.27	323.09	ND<250	—	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	—	—
QC-1 (f)	12/02/96	—	—	—	ND<250	50	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	—	—
MW-3	03/27/97	329.36	5.39	323.97	ND<250	—	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	—	SPL
MW-3	06/03/97	329.36	7.92	321.44	470	ND<100	ND<0.5	ND<1.0	ND<5.0	ND<5.0	ND<50	—	—
QC-1 (f)	06/03/97	—	—	—	ND<250	100	ND<2.5	ND<5.0	ND<1.0	ND<1.0	490	6.2	SPL
MW-3	09/16/97	329.36	6.67	322.69	ND<250	—	ND<2.5	ND<5.0	ND<5.0	ND<5.0	84	5.9	SPL
MW-3	12/03/97	329.36	6.81	322.55	ND<50	330	ND<2.5	ND<5.0	ND<5.0	ND<5.0	74.0	—	—
QC-1 (f)	12/03/97	—	—	—	ND<50	ND<200	ND<0.5	ND<1.0	ND<5.0	ND<5.0	ND<50	5.5	SPL
MW-3	06/26/98	329.36	5.08	324.28	ND<50	—	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.0	SPL
					ND<250	—	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<10	—	SPL
											ND<50	4.8	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING  
 BP OIL COMPANY SERVICE STATION NO. 11120  
 6400 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-170

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-4	10/27/92	329.45	8.61	320.84	2300	190							
MW-4	04/09/93	329.45	5.25	324.20	1600	500	23	54	50	320			PACE
MW-4	08/25/88	329.45	7.32	322.13	1800	380	78	3.5	68	1.0			PACE
QC-1 (f)	08/25/93				1600		ND<0.5	ND<0.5	ND<0.5	ND<0.5	2100	(e)	PACE
MW-4	11/22/93	329.45	7.83	321.62			ND<0.5	ND<0.5	ND<0.5	ND<0.5	2100	(e)	PACE
QC-1 (f)	11/22/93				610	260	ND<0.5	ND<0.5	ND<0.5	ND<0.5			PACE
MW-4	03/07/94	329.45	6.29	323.16	1700		ND<2.5	ND<2.5	ND<2.5	ND<2.5	3500	(e)	PACE
QC-1 (f)	03/07/94				710	1400	0.5	0.8	ND<0.5	ND<0.5	5900	(e)	PACE
MW-4	06/09/94	329.45	6.76	322.69	1600		ND<0.5	ND<0.5	1.4	0.6	4200	(e)	PACE
MW-4	09/12/94	329.45	7.83	321.62	6400	1800	ND<10	ND<10	ND<10	ND<10	10000	(e)	7.5 PACE
MW-4	12/20/94	329.45	6.68	322.77	2000	2700	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4200	(e)	7.2 PACE
MW-4	03/16/95	329.45	4.66	324.79	9200	2400	ND<5.0	ND<5.0	ND<5.0	ND<5.0			6.1 PACE
MW-4	06/28/95	329.45	5.93	323.52	1400	960	140	ND<2.5	58	14			5.5 ATI
MW-4	09/06/95	329.45	6.83	322.62	5000	5400	240	ND<5.0	220	ND<10			7.4 ATI
MW-4	12/22/95	329.45	6.42	323.03	4400	4500	ND<13	ND<13	ND<13	ND<13	12000		7.6 ATI
QC-1 (f)	12/22/95				3800	4700	15	ND<13	ND<13	ND<25	9200		7.1 ATI
MW-4	08/20/96	329.45	6.01	323.44			16	ND<13	ND<13	ND<25	8600		ATI
MW-4	08/21/96	329.45											
MW-4	10/31/96	329.45	6.37	323.08	ND<250	470	ND<12	ND<25	ND<25	ND<25	ND<250		7.7 SPL
MW-4	12/02/96	329.45	6.71	322.74	ND<50	1600	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50		7.1 SPL
MW-4	03/27/97	329.45	5.70	323.75	ND<50	13000	ND<5	ND<10	ND<10	ND<10	2200		7.3 SPL
QC-1 (f)	03/27/97				8300	1500	44	ND<25	ND<25	ND<25	8000		6.2 SPL
MW-4	06/03/97	329.45	8.37	321.08	6900		51	ND<25	ND<25	ND<25	8500		SPL
MW-4	09/16/97	329.45	6.91	322.54	2600	270	62	ND<1.0	ND<1.0	ND<1.0	7000		7.1 SPL
QC-1 (f)	09/16/97				110	1800	0.80	ND<1.0	ND<1.0	ND<1.0	7700		6.2 SPL
MW-4	12/03/97	329.45	7.16	322.29	130		1.2	ND<1.0	ND<1.0	1.1	7100		SPL
MW-4	06/26/98	329.45	5.15	324.30	ND<50	ND<200	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10		6.0 SPL
					520		0.52	ND<1.0	ND<1.0	ND<1.0	1100		5.3 SPL
MW-5	04/09/93	329.60	5.18	324.42	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5			
MW-5	08/25/93	329.60	7.28	322.32	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5			PACE
MW-5	11/22/93	329.60	7.82	321.78	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5			PACE
MW-5	03/07/94	329.60	6.27	323.33	ND<50	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5			PACE
MW-5	08/09/94	329.60	6.73	322.87	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5			5.7 PACE
MW-5	09/12/94	329.60	7.78	321.82	ND<50	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5			7.7 PACE
MW-5	12/20/94	329.60	6.63	322.97	ND<50		ND<0.5	ND<0.5	ND<0.5	ND<0.5			7.2 PACE
MW-5	03/16/95	329.60	4.65	324.95									
MW-5	06/28/95	329.60	5.69	323.81	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0			
MW-5	09/06/95	329.60	6.82	322.78									4.9 ATI
MW-5	12/22/95	329.60	6.40	323.20	ND<50	200	ND<0.50	ND<0.50	ND<0.50	ND<1.0			
MW-5	08/20/96	329.60	5.98	323.62							ND<5.0		7.3 ATI
MW-5	08/21/96	329.60											
MW-5	10/31/96	329.60	6.29	323.31	ND<50	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0			
MW-5	12/02/96	329.60	6.37	323.23							ND<10		6.9 SPL
MW-5	03/27/97	329.60	5.33	324.27									
MW-5	06/03/97	329.60	8.00	321.60	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10		5.8 SPL
MW-5	09/16/97	329.60	6.89	322.71	ND<50								
MW-5	12/03/97	329.60	6.99	322.61	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	27		5.4 SPL
MW-5	06/26/98	329.60	5.11	324.49	ND<50								
							ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10		4.7 SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING  
 BP OIL COMPANY SERVICE STATION NO. 11120  
 6400 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-170

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet) (a)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet) (b)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
MW-6	04/09/93	329.55	5.37	324.18	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---
MW-6	08/25/93	329.55	7.42	322.13	ND<50	170	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	11/22/93	329.55	7.93	321.62	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	03/07/94	329.55	6.25	323.30	ND<50	90	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-6	06/09/94	329.55	6.85	322.70	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	4.2	PACE
MW-6	09/12/94	329.55	7.91	321.64	ND<50	240	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	7.0	PACE
MW-6	12/20/94	329.55	6.82	322.73	---	---	---	---	ND<0.5	ND<0.5	---	6.7	PACE
MW-6	03/16/95	329.55	4.78	324.77	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---
MW-6	06/28/95	329.55	5.97	323.58	---	---	---	---	---	---	---	6.1	ATI
MW-6	09/06/95	329.55	6.94	322.61	ND<50	340	ND<0.50	ND<0.50	---	---	---	---	---
MW-6	12/22/95	329.55	6.53	323.02	---	---	---	---	ND<0.50	ND<1.0	ND<5.0	7.2	ATI
MW-6	08/20/96	329.55	6.18	323.37	---	---	---	---	---	---	---	---	---
MW-6	08/21/96	329.55	---	---	ND<50	---	---	---	---	---	---	---	---
MW-6	10/31/96	329.55	6.52	323.03	---	120	ND<0.5	ND<1.0	ND<1.0	ND<1.0	---	---	---
MW-6	12/02/96	329.55	6.55	323.00	---	---	---	---	ND<1.0	ND<1.0	ND<10	---	SPL
MW-6	03/27/97	329.55	5.50	324.05	---	---	---	---	---	---	---	---	---
MW-6	06/03/97	329.55	8.19	321.36	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	---	---	---
MW-6	09/16/97	329.55	6.95	322.60	---	---	---	---	ND<1.0	ND<1.0	ND<10	6.3	SPL
MW-6	12/03/97	329.55	7.22	322.33	ND<250	680	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	---	---
MW-6	06/26/98	329.55	5.20	324.35	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.5	SPL
MW-7	04/09/93	329.49	5.36	324.13	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	4.6	SPL
MW-7	08/25/93	329.49	7.44	322.05	ND<50	150	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-7	11/22/93	329.49	7.92	321.57	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-7	03/07/94	329.49	6.20	323.29	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-7	06/09/94	329.49	6.89	322.60	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	3.7	PACE
MW-7	09/12/94	329.49	7.87	321.62	ND<50	50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	6.8	PACE
MW-7	12/20/94	329.49	6.77	322.72	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	6.8	PACE
MW-7	03/16/95	329.49	4.77	324.72	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	6.5	PACE
MW-7	06/28/95	329.49	5.94	323.55	ND<50	320	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	5.9	ATI
MW-7	09/06/95	329.49	6.98	322.51	ND<50	240	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	7.8	ATI
MW-7	12/22/95	329.49	6.65	322.84	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	8.5	7.5	ATI
MW-7	08/20/96	329.49	6.22	323.27	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	7.2	6.9	ATI
MW-7	08/21/96	329.49	---	---	ND<50	ND<50	---	---	---	---	---	---	---
MW-7	10/31/96	329.49	6.56	322.93	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	SPL
MW-7	12/02/96	329.49	6.13	323.36	ND<50	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	86	6.8	SPL
MW-7	03/27/97	329.49	5.08	324.41	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	59	7.3	SPL
MW-7	06/03/97	329.49	7.80	321.69	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.6	SPL
MW-7	09/16/97	329.49	6.50	322.99	---	120	ND<0.5	ND<1.0	ND<1.0	ND<1.0	830	6.8	SPL
MW-7	12/03/97	329.49	6.66	322.83	ND<50	ND<200	ND<0.5	ND<1.0	ND<1.0	ND<1.0	2200	6.0	SPL
MW-7 (h)	06/26/98	329.49	4.96	324.53	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.0	SPL
												5.1	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING  
 BP OIL COMPANY SERVICE STATION NO. 11120  
 6400 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA

ALISTO PROJECT NO. 10-170

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DO (ppm)	LAB
QC-2 (i)	08/25/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---
QC-2 (i)	11/22/93	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (i)	03/07/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (i)	06/09/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (i)	09/12/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (i)	12/20/94	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (i)	03/16/95	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
QC-2 (i)	06/28/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	RACE
QC-2 (i)	09/06/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	ATI
QC-2 (i)	12/22/95	---	---	---	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	ATI

ABBREVIATIONS:

TPH-G Total petroleum hydrocarbons as gasoline  
 TPH-D Total petroleum hydrocarbons as diesel  
 B Benzene  
 T Toluene  
 E Ethylbenzene  
 X Total xylenes  
 MTBE Methyl tert butyl ether  
 DO Dissolved oxygen  
 ug/l Micrograms per liter  
 ppm Parts per million  
 ND Not detected above reported detection limit  
 --- Not analyzed/applicable/measured  
 PACE Pace, Inc.  
 ATI Analytical Technologies, Inc.  
 SPL Southern Petroleum Laboratories

NOTES:

- (a) Top of casing elevations surveyed to an arbitrary datum.
- (b) Groundwater elevations relative to an arbitrary datum.
- (c) Analysis did not detect total oil and grease and halogenated volatile organic compounds above reported detection limits.
- (d) Well inaccessible.
- (e) A copy of the documentation for this data is included in Appendix C of Alisto report 10-170-05-001.
- (f) Blind duplicate.
- (g) MTBE peak. Refer to documentation for this data in Appendix C of Alisto report 10-170-05-001.
- (h) Analysis did not detect volatile organic compounds above reported detection limits.
- (i) Travel blank.

F301110-170170-5-4.W02



TABLE 2 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING FOR EPA METHOD 8260 ANALYSIS  
 BP OIL COMPANY SERVICE STATION NO. 11120  
 6400 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA

\*ALISTO PROJECT NO. 10-170

WELL ID	DATE OF SAMPLING/ MONITORING	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	DIPE (ug/l)	ETBE (ug/l)	TBA (ug/l)	TAME (ug/l)	LAB
MW-4	06/26/98	ND<5	ND<5	ND<5	ND<5	ND<10	ND<10	ND<10	ND<500	ND<10	SPL
MW-7	06/26/98	ND<5	ND<5	ND<5	ND<5	ND<10	ND<10	ND<10	ND<500	ND<10	SPL

ABBREVIATIONS:

B Benzene  
 T Toluene  
 E Ethylbenzene  
 X Total xylenes  
 MTBE Methyl tert butyl ether  
 DIPE Di-isopropyl ether  
 ETBE Ethyl t-butyl ether  
 TBA t-butyl ether  
 TAME tert-amyl methyl ether  
 ug/l Micrograms per liter  
 ND Not detected above reported detection limit  
 SPL Southern Petroleum Laboratories

FA01\10-170\10-170EC.WQ2