



Atlantic Richfield Company  
(a BP affiliated company)

P.O. Box 1257  
San Ramon, CA 94583  
Phone: (925) 275-3801  
Fax: (925) 275-3815

July 25, 2008

Re: Second Quarter, 2008 Ground-Water Monitoring Report  
Former BP Station #11120  
6400 Dublin Boulevard  
Dublin, California  
ACEH Case #RO0002431



**RECEIVED**

1:33 pm, Jul 31, 2008

Alameda County  
Environmental Health

“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

**Second Quarter, 2008 Ground-Water Monitoring Report**

Former BP Station #11120  
6400 Dublin Boulevard  
Dublin, California

Prepared for

Mr. Paul Supple  
Environmental Business Manager  
Atlantic Richfield Company  
P.O. Box 1257  
San Ramon, California 94583

Prepared by



1324 Mangrove Avenue, Suite 212  
Chico, California 95926  
(530) 566-1400  
*www.broadbentinc.com*

July, 2008

Project No. 06-02-651

Broadbent & Associates, Inc.  
1324 Mangrove Ave., Suite 212  
Chico, CA 95926  
Voice (530) 566-1400  
Fax (530) 566-1401



July 25, 2008

Project No. 06-02-651

Atlantic Richfield Company  
P.O. Box 1257  
San Ramon, California 94583  
Submitted via ENFOS

Attn.: Mr. Paul Supple

Re: Second Quarter, 2008 Ground-Water Monitoring Report, Former BP Station #11120,  
6400 Dublin Boulevard, Dublin California. ACEH Case #RO0002431.

Dear Mr. Supple:

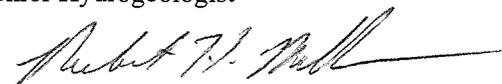
Provided herein is the *Second Quarter, 2008 Ground-Water Monitoring Report* for the Former BP Station #11120 (herein referred to as Station #11120) located at 6400 Dublin Boulevard, Dublin, California (Property). This report presents a summary of Second Quarter, 2008 ground-water monitoring results.

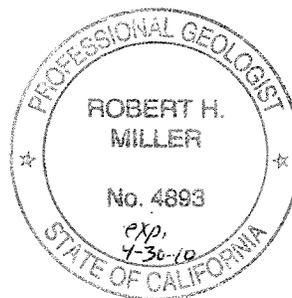
Should you have questions regarding the work performed or results obtained, please do not hesitate to contact us at (530) 566-1400.

Sincerely,

BROADBENT & ASSOCIATES, INC.

  
Matthew G. Herrick, P.G.  
Senior Hydrogeologist

  
Robert H. Miller, P.G., C.H.G.  
Principal Hydrogeologist



Enclosures

cc: Mr. Paresh Khatri, Alameda County Environmental Health (submitted via ACEH ftp site)  
Ms. Shelby Lathrop, ConocoPhillips, 76 Broadway, Sacramento, CA 95818  
GeoTracker

## STATION #11120 QUARTERLY GROUND-WATER MONITORING REPORT

Facility: #11120	Address: 6400 Dublin Boulevard, Dublin, CA
Station #11120 Environmental Business Manager:	Mr. Paul Supple
Consulting Co./Contact Persons:	Broadbent & Associates, Inc. (BAI) / Rob Miller & Matt Herrick
Primary Agency/Regulatory ID No.:	Alameda County Environmental Health (ACEH) / ACEH Case # RO0002431
Consultant Project No.:	06-02-651
Facility Permits/Permitting Agency.:	NA

### WORK PERFORMED THIS QUARTER (Second Quarter, 2008):

1. Submitted First Quarter, 2008 Ground-Water Monitoring Report. Work performed by BAI.
2. Conducted ground-water monitoring/sampling for Second Quarter, 2008. Work performed by Stratus Environmental, Inc.

### WORK PROPOSED FOR NEXT QUARTER (Third Quarter, 2008):

1. Submit Second Quarter, 2008 Ground-Water Monitoring Report (contained herein).
2. Conduct quarterly ground-water monitoring/sampling for Third Quarter, 2008.

### QUARTERLY RESULTS SUMMARY:

Current phase of project:	<b>Ground-water monitoring/sampling</b>
Frequency of ground-water sampling:	<b>Wells MW-8, MW-10, and MW-11: Quarterly</b>
Frequency of ground-water monitoring:	<b>Wells MW-8, MW-10, and MW-11: Quarterly</b>
Is free product (FP) present on-site:	<b>No</b>
Current remediation techniques:	<b>None</b>
Depth to ground water (below TOC):	<b>6.51 (MW-8) to 7.25(MW-11) feet</b>
General ground-water flow direction:	<b>East-Southeast</b>
Approximate hydraulic gradient:	<b>0.018</b>

### DISCUSSION:

Gasoline range organics (GRO) were not detected in any wells during Second Quarter, 2008. Methyl tert-butyl ether (MTBE) was detected in wells MW-8 and MW-11 at 95 µg/L and 15 µg/L, respectively. No other analytes were detected in ground-water sampled collected during Second Quarter, 2008.

Analytes detected during Second Quarter, 2008 were all within the historic minimum and maximum concentration ranges recorded for each well. Ground-water elevations measured during Second Quarter, 2008 were also within historic minimum and maximum ranges for each well.

Drawing 1 depicts the ground-water elevation contour and analytical summary map for the Second Quarter, 2008. Table 1 includes a summary of ground-water monitoring data including relative water elevations and laboratory analyses. Table 2 provides a summary of fuel additives analytical data. Table 3 presents historical ground-water flow direction and gradient.

The *Evaluation Residual MTBE, Review Historic Gradient, and Conduit and Sensitive Receptor Survey Report* was submitted on December 20, 2006. The report recommended that a formal closure

request be completed and submitted to the ACEH for review. A response from the ACEH has not been received regarding this recommendation.

### **CLOSURE:**

The findings presented in this report are based upon: observations of Stratus Environmental, Inc. field personnel and/or their subcontractor(s) (see Appendix A), the points investigated, and results of laboratory tests performed by Calscience Environmental Laboratories, Inc. of Garden Grove, California. Our services were performed in accordance with the generally accepted standard of practice at the time this report was written. No other warranty, expressed or implied was made. This report has been prepared for the exclusive use of Atlantic Richfield Company. It is possible that variations in soil or ground-water conditions could exist beyond points explored in this investigation. Also, changes in site conditions could occur in the future due to variations in rainfall, temperature, regional water usage, or other factors.

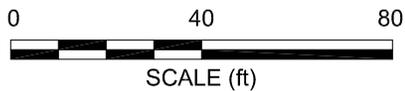
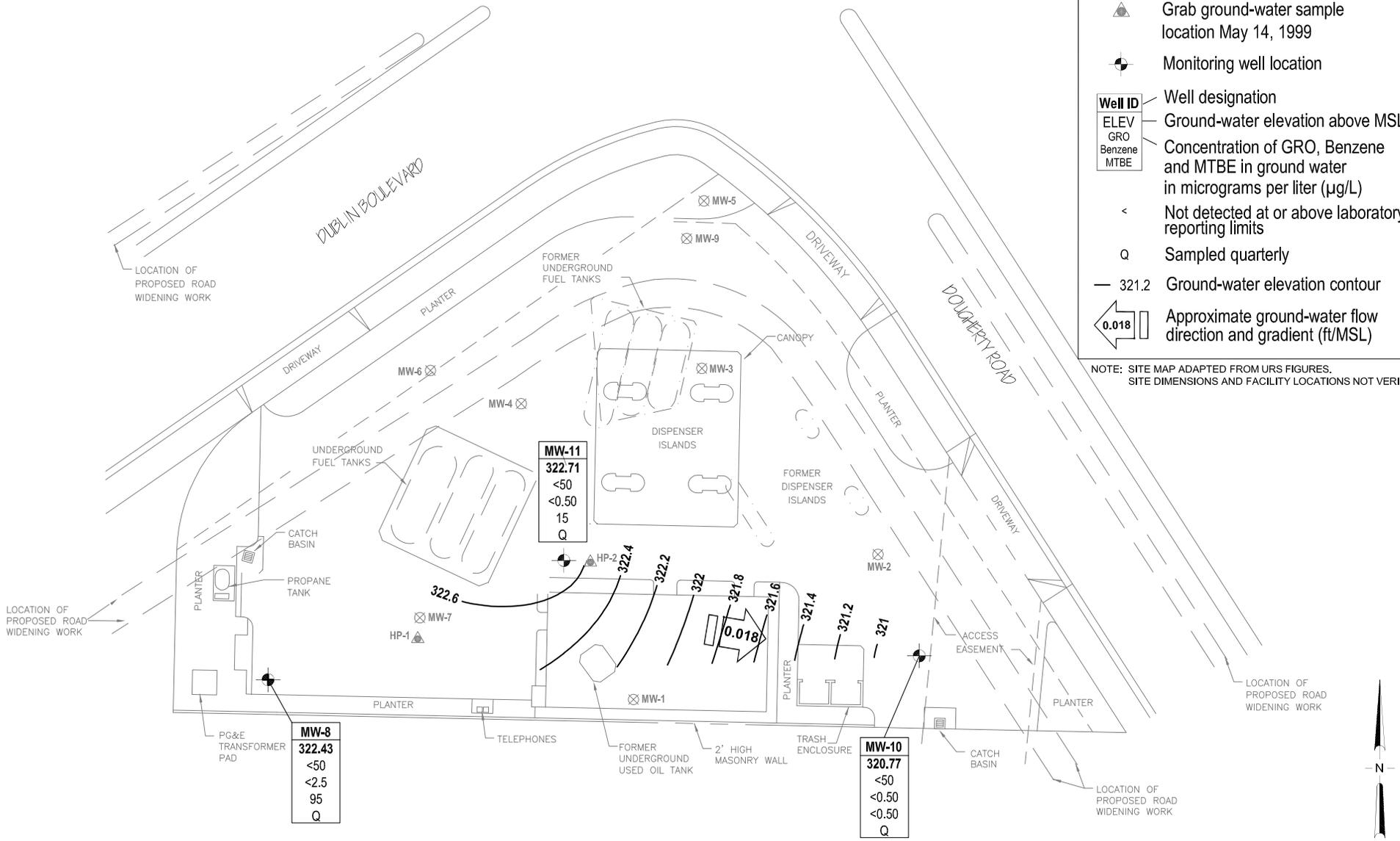
### **ATTACHMENTS:**

- Drawing 1. Ground-Water Elevation Contour and Analytical Summary Map, Station #11120, Dublin CA
- Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses, Station #11120, Dublin CA
- Table 2. Summary of Fuel Additives Analytical Data, Station #11120, Dublin CA
- Table 3. Historical Ground-Water Flow Direction and Gradient, Station #11120, Dublin, CA
- Appendix A. Stratus Environmental, Inc. Ground-Water Sampling Data Package (Includes Field Data Sheets, Non-Hazardous Waste Data Form, Chain of Custody Documentation, Certified Analytical Results, and Field Procedures for Ground-Water Sampling)
- Appendix B. Historical Ground-Water Analytical Data for Former Wells Abandoned in 1999 (Source: Alisto Engineering)
- Appendix C. GeoTracker Upload Confirmation

### LEGEND

- ⊗ Destroyed ground-water monitoring well
- ▲ Grab ground-water sample location May 14, 1999
- ⊙ Monitoring well location
- Well ID — Well designation
- ELEV — Ground-water elevation above MSL
- GRO — Concentration of GRO, Benzene and MTBE in ground water in micrograms per liter (µg/L)
- MTBE
- < — Not detected at or above laboratory reporting limits
- Q — Sampled quarterly
- 321.2 — Ground-water elevation contour
- ← 0.018 — Approximate ground-water flow direction and gradient (ft/MSL)

NOTE: SITE MAP ADAPTED FROM URS FIGURES. SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.



**Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses  
Station #11120, 6400 Dublin Blvd., Dublin, CA**

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>MW-8</b>															
02/25/2002	--	328.94	6.02	--	322.92	<50	<0.5	<0.5	<0.5	<0.5	1.98	--	PACE	--	
09/30/2002	--	328.94	6.16	--	322.78	<50	<0.5	<0.5	<0.5	<0.5	2.9/4.8	--	SEQM	--	a
12/13/2002	--	328.94	5.81	--	323.13	<50	<0.5	<0.5	<0.5	<0.5	5.9/6.4	--	SEQM	--	a
03/12/2003	--	328.94	5.80	--	323.14	<50	<0.50	<0.50	<0.50	<0.50	4.3/3.8	--	SEQM	--	
06/28/2003	--	328.94	5.70	--	323.24	<50	<0.50	<0.50	<0.50	<0.50	4.1	--	SEQM	--	b
09/30/2003	--	328.94	5.90	--	323.04	<50	<0.50	<0.50	<0.50	<0.50	4.1	--	SEQM	--	
12/05/2003	P	328.94	5.89	--	323.05	<50	<0.50	<0.50	<0.50	<0.50	6.7	--	SEQM	7.2	
03/10/2004	P	328.94	4.74	--	324.20	<50	<0.50	<0.50	<0.50	<0.50	5.1	--	SEQM	6.7	
06/21/2004	P	328.94	6.12	--	322.82	<50	<0.50	<0.50	<0.50	<0.50	7.5	--	SEQM	7.0	
09/17/2004	P	328.94	6.38	--	322.56	<50	<0.50	<0.50	<0.50	<0.50	6.6	--	SEQM	7.2	
12/13/2004	P	328.94	5.47	--	323.47	<50	<0.50	<0.50	<0.50	<0.50	6.7	--	SEQM	6.8	
03/03/2005	P	328.94	4.43	--	324.51	<50	<0.50	<0.50	<0.50	<0.50	5.6	--	SEQM	6.9	
06/10/2005	P	328.94	5.35	--	323.59	<50	<0.50	<0.50	<0.50	<0.50	6.2	--	SEQM	6.9	
09/16/2005	P	328.94	6.58	--	322.36	<50	<0.50	<0.50	<0.50	<0.50	5.7	--	SEQM	6.9	
12/15/2005	P	328.94	8.54	--	320.40	<50	<0.50	<0.50	<0.50	<0.50	2.6	--	SEQM	7.0	
03/01/2006	P	328.94	7.55	--	321.39	<50	<0.50	<0.50	<0.50	<0.50	2.8	--	SEQM	7.1	
6/23/2006	P	328.94	8.14	--	320.80	<50	<0.50	<0.50	<0.50	<0.50	35	--	TAMC	7.2	
9/19/2006	P	328.94	7.33	--	321.61	82	<1.0	<1.0	<1.0	<1.0	130	--	TAMC	7.2	c
12/19/2006	P	328.94	7.55	--	321.39	82	<1.0	<1.0	<1.0	<1.0	120	3.28	TAMC	7.51	
3/29/2007	P	328.94	7.44	--	321.50	120	<0.50	<0.50	<0.50	<0.50	180	3.19	TAMC	7.51	
6/5/2007	P	328.94	7.58	--	321.36	77	<1.0	<1.0	<1.0	<1.0	130	4.87	TAMC	7.59	c
9/11/2007	P	328.94	8.00	--	320.94	76	<0.50	<0.50	<0.50	<0.50	130	2.43	TAMC	--	c, d (MTBE)
12/26/2007	P	328.94	6.45	--	322.49	97	<0.50	<0.50	<0.50	<0.50	150	4.32	TAMC	7.53	c
3/25/2008	P	328.94	5.82	--	323.12	<50	<0.50	<0.50	<0.50	<0.50	100	4.85	CEL	7.96	
<b>6/10/2008</b>	<b>P</b>	<b>328.94</b>	<b>6.51</b>	<b>--</b>	<b>322.43</b>	<b>&lt;50</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>95</b>	<b>4.71</b>	<b>CEL</b>	<b>6.89</b>	
<b>MW-9</b>															
02/25/2002	--	329.96	5.90	--	324.06	<250	<2.50	<2.50	<2.50	<5.00	<2.50	--	PACE	--	
09/30/2002	--	329.96	6.92	--	323.04	<50	<0.5	<0.5	<0.5	<0.5	1.4/3.3	--	SEQM	--	a
12/13/2002	--	329.96	6.51	--	323.45	<50	<0.5	<0.5	<0.5	<0.5	0.53/<2.5	--	SEQM	--	a
03/12/2003	--	329.96	6.86	--	323.10	<50	<0.50	<0.50	<0.50	<0.50	0.59/<2.5	--	SEQM	--	

**Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses  
Station #11120, 6400 Dublin Blvd., Dublin, CA**

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>MW-9 Cont.</b>															
06/28/2003	--	329.96	5.95	--	324.01	<50	<0.50	<0.50	<0.50	<0.50	1.0	--	SEQM	--	b
09/30/2003	--	329.96	6.24	--	323.72	<50	<0.50	<0.50	<0.50	<0.50	16	--	SEQM	--	
12/05/2003	P	329.96	7.21	--	322.75	<50	<0.50	<0.50	<0.50	<0.50	33	--	SEQM	7.6	
03/10/2004	P	329.96	5.37	--	324.59	<50	<0.50	<0.50	<0.50	<0.50	2.4	--	SEQM	7.1	
06/21/2004	P	329.96	6.67	--	323.29	<50	<0.50	<0.50	<0.50	<0.50	1.6	--	SEQM	7.8	
09/17/2004	P	329.96	7.89	--	322.07	<50	<0.50	<0.50	<0.50	<0.50	0.72	--	SEQM	7.5	
12/13/2004	P	329.96	5.22	--	324.74	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.6	
03/03/2005	P	329.96	5.12	--	324.84	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.6	
06/10/2005	P	329.96	5.90	--	324.06	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.5	
09/16/2005	P	329.96	6.99	--	322.97	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.6	
12/15/2005	P	329.96	8.52	--	321.44	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.7	
03/01/2006	P	329.96	8.06	--	321.90	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.7	
6/23/2006	P	329.96	8.56	--	321.40	<50	<0.50	<0.50	<0.50	<0.50	1.1	--	TAMC	7.3	
7/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well Abandoned
<b>MW-10</b>															
02/25/2002	--	327.44	4.21	--	323.23	53	2.58	<0.5	2.83	8.46	<0.5	--	PACE	--	
09/30/2002	--	327.44	4.71	--	322.73	<50	<0.5	<0.5	<0.5	<0.5	0.51/2.8	--	SEQM	--	a
12/13/2002	--	327.44	6.36	--	321.08	<50	<0.5	<0.5	<0.5	<0.5	<0.5/<2.5	--	SEQM	--	a
03/12/2003	--	327.44	7.96	--	319.48	<50	<0.50	<0.50	<0.50	<0.50	0.76/<2.5	--	SEQM	--	
06/28/2003	--	327.44	7.70	--	319.74	<50	<0.50	<0.50	<0.50	<0.50	0.68	--	SEQM	--	b
09/30/2003	--	327.44	7.57	--	319.87	<50	<0.50	<0.50	<0.50	<0.50	0.71	--	SEQM	--	
12/05/2003	P	327.44	6.64	--	320.80	<50	<0.50	<0.50	<0.50	<0.50	0.78	--	SEQM	7.1	
03/10/2004	P	327.44	5.20	--	322.24	<50	<0.50	<0.50	<0.50	<0.50	0.58	--	SEQM	6.4	
06/21/2004	P	327.44	7.45	--	319.99	<50	<0.50	<0.50	<0.50	<0.50	1.1	--	SEQM	7.0	
09/17/2004	P	327.44	7.49	--	319.95	<50	<0.50	<0.50	<0.50	<0.50	0.82	--	SEQM	7.0	
12/13/2004	P	327.44	5.19	--	322.25	<50	<0.50	<0.50	<0.50	<0.50	0.73	--	SEQM	6.8	
03/03/2005	P	327.44	4.86	--	322.58	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	6.9	
06/10/2005	P	327.44	4.00	--	323.44	<50	<0.50	<0.50	<0.50	<0.50	1.2	--	SEQM	6.8	
09/16/2005	P	327.44	4.78	--	322.66	<50	<0.50	<0.50	<0.50	<0.50	0.98	--	SEQM	6.9	
12/15/2005	P	327.44	6.67	--	320.77	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.0	

**Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses**  
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Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>MW-10 Cont.</b>															
03/01/2006	P	327.44	5.67	--	321.77	<50	<0.50	<0.50	<0.50	<0.50	0.59	--	SEQM	7.1	
6/23/2006	P	327.44	5.83	--	321.61	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	TAMC	7.0	
9/19/2006	P	327.44	6.87	--	320.57	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	TAMC	7.1	
12/19/2006	--	327.44	7.10	--	320.34	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.61	TAMC	7.29	
3/29/2007	P	327.44	5.25	--	322.19	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.85	TAMC	7.25	
6/5/2007	P	327.44	6.94	--	320.50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.65	TAMC	7.31	
9/11/2007	P	327.44	5.88	--	321.56	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.68	TAMC	--	
12/26/2007	P	327.44	5.02	--	322.42	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.75	TAMC	7.31	
3/25/2008	P	327.44	6.46	--	320.98	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.22	CEL	7.83	
<b>6/10/2008</b>	<b>P</b>	<b>327.44</b>	<b>6.67</b>	<b>--</b>	<b>320.77</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>3.10</b>	<b>CEL</b>	<b>7.05</b>	
<b>MW-11</b>															
02/25/2002	--	329.75	6.02	--	323.73	1,800	1.34	<0.5	<0.5	<1.0	2,550	--	PACE	--	
09/30/2002	--	329.75	7.12	--	322.63	<50	<0.5	<0.5	<0.5	<0.5	1,500/1,400	--	SEQM	--	a
12/13/2002	--	329.75	6.60	--	323.15	1,300	<10	<10	<10	<10	1,400/2,000	--	SEQM	--	a
03/12/2003	--	329.75	5.79	--	323.96	<500	<5.0	<5.0	<5.0	<5.0	650/2,900	--	SEQM	--	
06/28/2003	--	329.75	5.68	--	324.07	<5,000	<50	<50	<50	<50	2,500	--	SEQM	--	b
09/30/2003	--	329.75	6.68	--	323.07	5,100	<25	<25	<25	<25	3,200	--	SEQM	--	
12/05/2003	P	329.75	6.69	--	323.06	<5,000	<50	<50	<50	<50	3,500	--	SEQM	7.2	
03/10/2004	P	329.75	5.29	--	324.46	3,000	<25	<25	<25	<25	1,800	--	SEQM	6.8	
06/21/2004	P	329.75	6.65	--	323.10	<5,000	<50	<50	<50	<50	1,900	--	SEQM	7.1	
09/17/2004	P	329.75	7.02	--	322.73	<2,500	<25	<25	<25	<25	1,700	--	SEQM	7.1	
12/13/2004	P	329.75	6.01	--	323.74	650	<5.0	<5.0	<5.0	<5.0	610	--	SEQM	6.9	
03/03/2005	P	329.75	5.13	--	324.62	250	<2.5	<2.5	<2.5	<2.5	190	--	SEQM	7.0	c
06/10/2005	P	329.75	6.00	--	323.75	<100	4.1	<1.0	<1.0	<1.0	100	--	SEQM	7.0	
09/16/2005	P	329.75	7.24	--	322.51	<100	<1.0	<1.0	<1.0	<1.0	52	--	SEQM	7.0	
12/15/2005	P	329.75	8.91	--	320.84	<50	<0.50	<0.50	<0.50	<0.50	9.0	--	SEQM	7.1	
03/01/2006	P	329.75	8.05	--	321.70	<50	<0.50	<0.50	<0.50	<0.50	21	--	SEQM	7.2	
6/23/2006	P	329.96	8.65	--	321.31	<50	<0.50	<0.50	<0.50	<0.50	23	--	TAMC	7.2	
9/19/2006	P	329.96	8.07	--	321.89	<50	<0.50	<0.50	<0.50	<0.50	26	--	TAMC	7.3	
12/19/2006	P	329.96	8.17	--	321.79	<50	<0.50	<0.50	<0.50	<0.50	42	3.07	TAMC	7.47	

**Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses  
Station #11120, 6400 Dublin Blvd., Dublin, CA**

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>MW-11 Cont.</b>															
3/29/2007	P	329.96	8.05	--	321.91	<50	<0.50	<0.50	<0.50	<0.50	65	1.84	TAMC	7.46	
6/5/2007	P	329.96	8.22	--	321.74	53	<0.50	<0.50	<0.50	<0.50	74	2.23	TAMC	7.53	c
9/11/2007	P	329.96	8.62	--	321.34	<50	<0.50	<0.50	<0.50	<0.50	55	2.94	TAMC	--	
12/26/2007	P	329.96	7.12	--	322.84	<50	<0.50	<0.50	<0.50	<0.50	45	4.81	TAMC	7.45	
3/25/2008	P	329.96	6.51	--	323.45	<50	<0.50	<0.50	<0.50	<0.50	22	3.50	CEL	7.93	
<b>6/10/2008</b>	<b>P</b>	<b>329.96</b>	<b>7.25</b>	<b>--</b>	<b>322.71</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>15</b>	<b>3.38</b>	<b>CEL</b>	<b>7.16</b>	

ABBREVIATIONS AND SYMBOLS:

TOC = Top of casing in ft MSL  
DTW = Depth to water in ft bgs  
GWE = Groundwater elevation in ft MSL  
GRO = Gasoline range organics  
TPH-g = Total petroleum hydrocarbons as gasoline  
MTBE = Methyl tert butyl ether by EPA method 8021B (prior to 6/28/03) or 8260B  
DO = Dissolved oxygen  
µg/L = Micrograms per liter  
mg/L = Milligrams per liter  
< = Not detected at or above laboratory reporting limit  
-- = Not sampled/applicable/analyzed/measured  
PACE = Pace, Inc.  
SEQM = Sequoia Analytical Laboratory  
TAMC = TestAmerica  
CEL = Calscience Environmental Laboratories, Inc.  
P/NP = Well purged/not purged prior to sampling  
ft bgs = Feet below ground surface  
ft MSL = Feet above mean sea level

FOOTNOTES:

a = Analyzed by EPA method 8260 B; fuel oxygenates include ethanol, tert-butyl alcohol, di-isopropyl ether, ethyl tert-butyl ether, tert-amyl methyl ether; lead scavengers include: 1,2-dichloroethane & ethylene dibromide.  
b = Beginning on the second quarter 2003 monitoring event (6/28/03), TPH-g, benzene, toluene, ethylbenzene, total xylenes, MTBE and fuel oxygenates analyzed by EPA method 8260B.  
c = The hydrocarbon result for GRO was partly due to individual peaks in the quantitative range.  
d = Sample > 4x spike concentration.

NOTES:

TOC elevations surveyed relative to an elevation of 18.409 ft MSL.

Beginning in the fourth quarter 2003, the laboratory modified the reported analyte list. TPH-g was changed to GRO. The resulting data may be impacted by the potential inclusion of non-TPH-g analytes within the requested fuel range resulting in a higher concentration being reported.

Beginning in the second quarter 2004, the carbon range for GRO was changed from C6-C10 to C4-C12.

Note: The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information.

**Table 2. Summary of Fuel Additives Analytical Data  
Station #11120, 6400 Dublin Blvd., Dublin, CA**

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>MW-8</b>									
03/12/2003	<100	<20	4.3/3.8	<0.50	<0.50	<0.50	<0.50	<0.50	
06/28/2003	<100	<20	4.1	<0.50	<0.50	<0.50	<0.50	<0.50	
09/30/2003	<100	<20	4.1	<0.50	<0.50	<0.50	<0.50	<0.50	
12/05/2003	<100	<20	6.7	<0.50	<0.50	<0.50	<0.50	<0.50	
03/10/2004	<100	<20	5.1	<0.50	<0.50	<0.50	<0.50	<0.50	a
06/21/2004	<100	<20	7.5	<0.50	<0.50	<0.50	<0.50	<0.50	
09/17/2004	16	<20	6.6	<0.50	<0.50	<0.50	<0.50	<0.50	b
12/13/2004	<100	<20	6.7	<0.50	<0.50	<0.50	<0.50	<0.50	
03/03/2005	<100	<20	5.6	<0.50	<0.50	<0.50	<0.50	<0.50	
06/10/2005	<100	<20	6.2	<0.50	<0.50	<0.50	<0.50	<0.50	
09/16/2005	<100	<20	5.7	<0.50	<0.50	<0.50	<0.50	<0.50	
12/15/2005	<100	<20	2.6	<0.50	<0.50	<0.50	<0.50	<0.50	
03/01/2006	<300	<20	2.8	<0.50	<0.50	<0.50	<0.50	<0.50	
6/23/2006	<300	<20	35	<0.50	<0.50	<0.50	<0.50	<0.50	
9/19/2006	<600	<40	130	<1.0	<1.0	<1.0	<1.0	<1.0	a (ethanol)
12/19/2006	<600	<40	120	<1.0	<1.0	<1.0	<1.0	<1.0	a, c (ethanol)
3/29/2007	<300	<20	180	<0.50	<0.50	<0.50	<0.50	<0.50	
6/5/2007	<600	<40	130	<1.0	<1.0	<1.0	<1.0	<1.0	
9/11/2007	<300	<20	130	<0.50	<0.50	<0.50	<0.50	<0.50	d (ethanol), e (MTBE)
12/26/2007	<300	<20	150	<0.50	<0.50	<0.50	<0.50	<0.50	
3/25/2008	<300	<10	100	<0.50	<0.50	<0.50	<0.50	<0.50	
<b>6/10/2008</b>	<b>&lt;1,500</b>	<b>&lt;50</b>	<b>95</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	
<b>MW-9</b>									
03/12/2003	<100	<20	0.59/<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	
06/28/2003	<100	<20	1.0	<0.50	<0.50	<0.50	<0.50	<0.50	
09/30/2003	<100	<20	16	<0.50	<0.50	<0.50	<0.50	<0.50	
12/05/2003	<100	<20	33	<0.50	<0.50	<0.50	<0.50	<0.50	
03/10/2004	<100	<20	2.4	<0.50	<0.50	<0.50	<0.50	<0.50	a
06/21/2004	<100	<20	1.6	<0.50	<0.50	<0.50	<0.50	<0.50	
09/17/2004	13	<20	0.72	<0.50	<0.50	<0.50	<0.50	<0.50	b
12/13/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

**Table 2. Summary of Fuel Additives Analytical Data  
Station #11120, 6400 Dublin Blvd., Dublin, CA**

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>MW-9 Cont.</b>									
03/03/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
06/10/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/16/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
12/15/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/01/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/23/2006	<300	<20	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	
7/21/2006	--	--	--	--	--	--	--	--	Well Abandoned
<b>MW-10</b>									
03/12/2003	<100	<20	0.76/<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	
06/28/2003	<100	<20	0.68	<0.50	<0.50	<0.50	<0.50	<0.50	
09/30/2003	<100	<20	0.71	<0.50	<0.50	<0.50	<0.50	<0.50	
12/05/2003	<100	<20	0.78	<0.50	<0.50	<0.50	<0.50	<0.50	
03/10/2004	<100	<20	0.58	<0.50	<0.50	<0.50	<0.50	<0.50	a
06/21/2004	<100	<20	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	
09/17/2004	9.4	<20	0.82	<0.50	<0.50	<0.50	<0.50	<0.50	b
12/13/2004	<100	<20	0.73	<0.50	<0.50	<0.50	<0.50	<0.50	
03/03/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
06/10/2005	<100	<20	1.2	<0.50	<0.50	<0.50	<0.50	<0.50	
09/16/2005	<100	<20	0.98	<0.50	<0.50	<0.50	<0.50	<0.50	
12/15/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/01/2006	<300	<20	0.59	<0.50	<0.50	<0.50	<0.50	<0.50	
6/23/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/19/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a (ethanol)
12/19/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a, c (ethanol)
3/29/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/5/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/11/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	d (ethanol)
12/26/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
3/25/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
<b>6/10/2008</b>	<b>&lt;300</b>	<b>&lt;10</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	

**Table 2. Summary of Fuel Additives Analytical Data  
Station #11120, 6400 Dublin Blvd., Dublin, CA**

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>MW-11</b>									
03/12/2003	<1,000	<200	650/2,900	<5.0	<5.0	<5.0	<5.0	<5.0	
06/28/2003	<10,000	<2,000	2,500	<50	<50	<50	<50	<50	
09/30/2003	<5,000	<1,000	3,200	<25	<25	<25	<25	<25	
12/05/2003	<10,000	<2,000	3,500	<50	<50	<50	<50	<50	
03/10/2004	<5,000	<1,000	1,800	<25	<25	<25	<25	<25	a
06/21/2004	<10,000	<2,000	1,900	<50	<50	<50	<50	<50	
09/17/2004	13	<1,000	1,700	<25	<25	<25	<25	<25	b
12/13/2004	<1,000	<200	610	<5.0	<5.0	<5.0	<5.0	<5.0	
03/03/2005	<500	<100	190	<2.5	<2.5	<2.5	<2.5	<2.5	
06/10/2005	<200	<40	100	<1.0	<1.0	<1.0	<1.0	<1.0	a, c
09/16/2005	<200	<40	52	<1.0	<1.0	<1.0	<1.0	<1.0	
12/15/2005	<100	<20	9.0	<0.50	<0.50	<0.50	<0.50	<0.50	
03/01/2006	<300	<20	21	<0.50	<0.50	<0.50	<0.50	<0.50	
6/23/2006	<300	<20	23	<0.50	<0.50	<0.50	<0.50	<0.50	
9/19/2006	<300	<20	26	<0.50	<0.50	<0.50	<0.50	<0.50	a (ethanol)
12/19/2006	<300	<20	42	<0.50	<0.50	<0.50	<0.50	<0.50	a, c (ethanol)
3/29/2007	<300	<20	65	<0.50	<0.50	<0.50	<0.50	<0.50	
6/5/2007	<300	<20	74	<0.50	<0.50	<0.50	<0.50	<0.50	
9/11/2007	<300	<20	55	<0.50	<0.50	<0.50	<0.50	<0.50	d (ethanol)
12/26/2007	<300	<20	45	<0.50	<0.50	<0.50	<0.50	<0.50	
3/25/2008	<300	<10	22	<0.50	<0.50	<0.50	<0.50	<0.50	
<b>6/10/2008</b>	<b>&lt;300</b>	<b>&lt;10</b>	<b>15</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	

ABBREVIATIONS AND SYMBOLS:

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

< = Not detected at or above laboratory reporting limits

FOOTNOTES:

a = The continuing calibration verification was outside of client contractual acceptance limits. However, it was within method acceptance limits. The data should still be useful for its intended purpose.

b = Split samples were analyzed for ethanol by EPA Method 8260B SIM; ethanol was detected in trip blank at 34 micrograms per liter. Ethanol was not detected in confirmatory analysis of samples and trip blank on a different instrument; however, holding time had expired by then.

c = LCS recorded above methanol control limits. Analyte not detected. Data not impacted.

d = CCV recovery above limit; analyte not detected.

e = Sample > 4x spike concentration.

NOTES:

All volatile organic compounds analyzed using EPA Method 8260B.

Note: The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information.

**Table 3. Historical Ground-Water Flow Direction and Gradient  
Station #11120, 6400 Dublin Blvd., Dublin, CA**

<b>Date Sampled</b>	<b>Approximate Flow Direction</b>	<b>Approximate Hydraulic Gradient</b>
8/25/1993	Southwest	0.002
11/22/1993	Southwest	0.002
3/7/1994	South-Southwest	0.002
6/9/1994	Southwest	0.003
9/12/1994	Southwest	0.002
12/20/1994	Southwest	0.004
3/16/1995	Southwest	0.003
6/28/1995	West	0.005
9/6/1995	Southwest	0.002
12/22/1995	Southwest	0.005
6/26/1996	Southeast	0.01
8/20/1996	West-Southwest	0.004
10/31/1996	Southwest	0.002
12/2/1996	Northeast	0.01
3/27/1997	Northeast and Southwest	0.007 to 0.01
6/3/1997	North-Northeast	0.008
9/16/1997	North and Southeast	0.001 to 0.009
2/25/2002	South	0.009
9/30/2002	South-Southeast	0.004
12/13/2002	Southeast	0.022
3/12/2003	Southeast	0.04
6/28/2003	Southeast	0.042
9/30/2003	Southeast	0.042
12/5/2003	South-Southeast	0.036
3/10/2004	Southeast	0.021
6/21/2004	Southeast	0.034
9/17/2004	Southeast	0.027
12/13/2004	South-Southeast	0.02
3/3/2005	South-Southwest	0.02
6/10/2005	Southwest	0.004
9/16/2005	Southwest	0.004
12/15/2005	Southwest	0.007
3/1/2006	Southwest	0.003
6/23/2006	West	0.004
9/19/2006	East-Southeast	0.012
12/19/2006	East-Southeast	0.014
3/29/2007	West	0.004
6/5/2007	East-Southeast	0.012
9/11/2007	West	0.004
12/26/2007	Southwest and Southeast	0.004
3/25/2008	Southeast	0.022
<b>6/10/2008</b>	<b>East-Southeast</b>	<b>0.018</b>

**Table 3. Historical Ground-Water Flow Direction and Gradient  
Station #11120, 6400 Dublin Blvd., Dublin, CA**

<b>Date Sampled</b>	<b>Approximate Flow Direction</b>	<b>Approximate Hydraulic Gradient</b>
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Note: The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information.

**APPENDIX A**

STRATUS ENVIRONMENTAL, INC. GROUND-WATER SAMPLING DATA PACKAGE  
(INCLUDES FIELD DATA SHEETS, NON-HAZARDOUS WASTE DATA FORM,  
CHAIN OF CUSTODY DOCUMENTATION, CERTIFIED ANALYTICAL RESULTS,  
AND FIELD PROCEDURES FOR GROUNDWATER SAMPLING)



3330 Cameron Park Drive, Ste 550  
Cameron Park, California 95682  
(530) 676-6004 ~ Fax: (530) 676-6005

June 24, 2008

Mr. Rob Miller  
Broadbent & Associates, Inc.  
2000 Kirman Avenue  
Reno, NV 89502

Re: Groundwater Sampling Data Package, BP Service Station No. 11120, located at  
6400 Dublin Boulevard, Dublin, California.

**General Information**

*Data Submittal Prepared / Reviewed by:* Becky Carroll / Jay Johnson

*Phone Number:* (530) 676-6000

*On-Site Supplier Representative:* Roberto Heimlich

*Sampling Date:* June 10, 2008

*Arrival:* 6:20 *Departure:* 8:00

*Weather Conditions:* Clear

*Unusual Field Conditions:* None noted.

*Scope of Work Performed:* Quarterly monitoring and sampling.

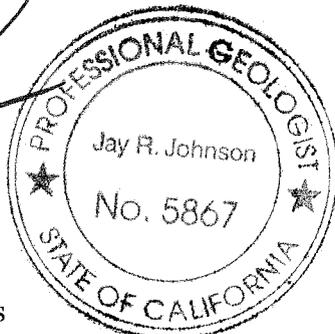
*Variations from Work Scope:* None noted.

This submittal presents the tabulation of data collected in association with routine groundwater monitoring. The attachments include field data sheets, non-hazardous waste data form, chain of custody documentation, certified analytical results, and field procedures for groundwater sampling documentation. The information is being provided to BP-ARCO's Scoping Supplier for use in preparing a report for regulatory submittal. This submittal is limited to presentation of collected data and does not include data interpretation or conclusions or recommendations. Any questions concerning this submittal should be addressed to the Preparer/Reviewer identified above.

Sincerely,

**STRATUS ENVIRONMENTAL, INC.**

Jay R. Johnson, P.G.  
Project Manager



**Attachments:**

- Field Data Sheets
- Non-Hazardous Waste Data Form
- Chain of Custody Documentation
- Certified Analytical Results
- Field Procedures for Groundwater Sampling

CC: Mr. Paul Supple, BP/ARCO



# BP VALLEY PORTFOLIO

## WATER SAMPLE FIELD DATA SHEET

PROJECT #: 11120 PURGED BY: RH WELL I.D.: MW-8  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: RH SAMPLE I.D.: MW-8  
 LOCATION: Dublin - 6400 Dublin Blvd. QA SAMPLES: \_\_\_\_\_

DATE PURGED 6/10/08 START (2400hr) 6:50 END (2400hr) 7:05  
 DATE SAMPLED 6/10/08 SAMPLE TIME (2400hr) 7:03  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" ✓ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = 19.52 CASING VOLUME (gal) = 2.2  
 DEPTH TO WATER (feet) = 6.51 CALCULATED PURGE (gal) = 6.6  
 WATER COLUMN HEIGHT (feet) = 13.0 ACTUAL PURGE (gal) = 7

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>6/10/08</u>	<u>6:52</u>	<u>2</u>	<u>19.7</u>	<u>2450</u>	<u>6.74</u>	<u>clear</u>	_____
<u>✓</u>	<u>6:53</u>	<u>5</u>	<u>19.8</u>	<u>2635</u>	<u>6.85</u>	<u>✓</u>	_____
<u>✓</u>	<u>7:03</u>	<u>7</u>	<u>20.1</u>	<u>2660</u>	<u>6.89</u>	<u>✓</u>	_____

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 14.33 SAMPLE TURBIDITY: clear

80% RECHARGE:  YES  NO ANALYSES: SWO  
 ODOR: NO SAMPLE VESSEL / PRESERVATIVE: 6 VOLS / HCL

#### PURGING EQUIPMENT

- Bladder Pump
- Centrifugal Pump
- Submersible Pump
- Peristaltic Pump
- Bailer (Teflon)
- Bailer (PVC)
- Bailer (Stainless Steel)
- Dedicated \_\_\_\_\_

Other: \_\_\_\_\_  
 Pump Depth: 19

#### SAMPLING EQUIPMENT

- Bladder Pump
- Centrifugal Pump
- Submersible Pump
- Peristaltic Pump
- Bailer (Teflon)
- Bailer (  PVC or  disposable)
- Bailer (Stainless Steel)
- Dedicated \_\_\_\_\_

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

WELL INTEGRITY: GOOD LOCK#: MASTER

REMARKS: 00 4.71

SIGNATURE: [Signature] Page \_\_\_\_\_ of \_\_\_\_\_

**BP VALLEY PORTFOLIO**  
**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 11120 PURGED BY: RH WELL I.D.: MW-10  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: RH SAMPLE I.D.: PW-10  
 LOCATION: Dublin - 6400 Dublin Blvd. QA SAMPLES: \_\_\_\_\_

DATE PURGED 6/10/08 START (2400hr) 7:31 END (2400hr) 7:44  
 DATE SAMPLED 6/10/08 SAMPLE TIME (2400hr) 7:42  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2"  3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = 19.50 CASING VOLUME (gal) = 2.1  
 DEPTH TO WATER (feet) = 6.67 CALCULATED PURGE (gal) = 1.5  
 WATER COLUMN HEIGHT (feet) = 12.8 ACTUAL PURGE (gal) = 7

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>6/10/08</u>	<u>7:33</u>	<u>2</u>	<u>20.2</u>	<u>7.40</u>	<u>7.27</u>	<u>clear</u>	_____
<u>✓</u>	<u>7:34</u>	<u>3</u>	<u>21.2</u>	<u>7.45</u>	<u>7.11</u>	<u>✓</u>	_____
<u>✓</u>	<u>7:35</u>	<u>7</u>	<u>21.5</u>	<u>7.49</u>	<u>7.05</u>	<u>✓</u>	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

SAMPLE DEPTH TO WATER: 8.06 SAMPLE INFORMATION SAMPLE TURBIDITY: clear

80% RECHARGE:  YES  NO ANALYSES: GWD  
 ODOR: NO SAMPLE VESSEL / PRESERVATIVE: 6 VOORS INC

PURGING EQUIPMENT

Bladder Pump \_\_\_\_\_ Bailer (Teflon) \_\_\_\_\_  
 Centrifugal Pump \_\_\_\_\_ Bailer (PVC) \_\_\_\_\_  
 Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel) \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_

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

Pump Depth: 19

SAMPLING EQUIPMENT

Bladder Pump \_\_\_\_\_ Bailer (Teflon) \_\_\_\_\_  
 Centrifugal Pump \_\_\_\_\_ Bailer ( \_\_\_\_\_ PVC or \_\_\_\_\_ disposable)  
 Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel) \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_

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

WELL INTEGRITY: GOOD LOCK#: MAILED

REMARKS: DO 3.10

SIGNATURE: [Signature]

**BP VALLEY PORTFOLIO**  
**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 11120 PURGED BY: RH WELL I.D.: MW-11  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: RH SAMPLE I.D.: MW-11  
 LOCATION: Dublin - 6400 Dublin Blvd. QA SAMPLES: \_\_\_\_\_

DATE PURGED 6/10/08 START (2400hr) 7:11 END (2400hr) 7:25  
 DATE SAMPLED 6/10/08 SAMPLE TIME (2400hr) 7:23  
 SAMPLE TYPE: Groundwater x Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" ✓ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = 19.35 CASING VOLUME (gal) = 2.0  
 DEPTH TO WATER (feet) = 7.25 CALCULATED PURGE (gal) = 6.1  
 WATER COLUMN HEIGHT (feet) = 12.1 ACTUAL PURGE (gal) = 1.5

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>6/10/08</u>	<u>7:13</u>	<u>2</u>	<u>19.5</u>	<u>2429</u>	<u>7.60</u>	<u>clear</u>	_____
<u>✓</u>	<u>7:14</u>	<u>4</u>	<u>19.4</u>	<u>2568</u>	<u>7.25</u>	<u>✓</u>	_____
<u>✓</u>	<u>7:15</u>	<u>6.5</u>	<u>19.6</u>	<u>2641</u>	<u>7.15</u>	<u>✓</u>	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 9.01 SAMPLE TURBIDITY: clear

80% RECHARGE: ✓ YES NO ANALYSES: SWO  
 ODOR: NO SAMPLE VESSEL / PRESERVATIVE: 4 VOAS INCK

PURGING EQUIPMENT

- Bladder Pump
- Centrifugal Pump
- Submersible Pump
- Peristaltic Pump
- Bailer (Teflon)
- Bailer (PVC)
- Bailer (Stainless Steel)
- Dedicated \_\_\_\_\_

Other: \_\_\_\_\_  
 Pump Depth: 19

SAMPLING EQUIPMENT

- Bladder Pump
- Centrifugal Pump
- Submersible Pump
- Peristaltic Pump
- Bailer (Teflon)
- Bailer ( \_\_\_\_\_ PVC or ✓ disposable)
- Bailer (Stainless Steel)
- Dedicated \_\_\_\_\_

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

WELL INTEGRITY: GOOD LOCK#: MASTER

REMARKS: PO 3.38

SIGNATURE: [Signature] Page \_\_\_\_\_ of \_\_\_\_\_

# WELLHEAD OBSERVATION FORM



Site Name/Number: 1120

Date: 6/10/08 Technician: ROBERTO

Well I.D.	Box in Good Condition? <small>X = Yes Blank = No</small>	Lock Missing? <small>X = Yes (uphead) Blank = No</small>	Water in Wellbox? <small>X = Yes Blank = No</small>	Water Level Relative to Cap? <small>A = Above cap B = Below cap L = Level w/cap</small>	Well Cap? <small>T = Intact M = Missing or Compromised (uphead)</small>	Bolts Missing? <small>X = Yes Blank = No</small>	Bolts Stripped? <small>X = Yes Blank = No</small>	Bolt Holes Stripped? <small>X = Yes Blank = No</small>	Cracked or Broken Lid? <small>X = Yes Blank = No</small>	Cracked or Broken Box? <small>X = Yes Blank = No</small>	Grout Level more than 1ft below TOC? <small>X = Yes Blank = No</small>	Additional Comments <small>(such as missing lid, concrete cracks, up/down, or other - explain)</small>
MW-8	/	—	—	B	T	NA	—	—	—	—	—	NO BOLTS NEEDED ON THESE LIDS.
MW-10	/	—	—	B	T	NA	—	/	—	—		
MW-11	/	—	—	B	T	NA	—	—	—	—		

**DRUM INVENTORY**

Drums on site? Yes  No  (circle)  
 Type and # Steel: \_\_\_\_\_ Plastic: \_\_\_\_\_

Note whether drums are full or empty, solids or liquids:

\_\_\_\_\_

Drum label info (description, date, contact info):

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**GENERAL SITE CONDITIONS**

Make notes on housekeeping conditions (such as trash) around remediation system enclosure/compound, bent or missing bollards, signs missing from compound fences, graffiti on compound, etc.)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(updated 3-28-08, 63)



NO. 666749

# NON-HAZARDOUS WASTE DATA FORM

TO BE COMPLETED BY GENERATOR	SITE:		EPA I.D. NO.	NOT REGISTERED													
	NAME <u>BP WEST COAST PRODUCTS LLC ARCO # 11120</u>		EPA I.D. NO.														
	ADDRESS <u>P.O. BOX 80249</u> <u>RANCHO SANTA MARGARITA</u>		EPA I.D. NO.														
	CITY, STATE, ZIP <u>CA 92688</u>		PHONE NO.	( ) ( ) ( )													
	CONTAINERS: No. _____ VOLUME <u>20.5 GAL</u> WEIGHT _____																
	TYPE: <input type="checkbox"/> TANK TRUCK <input type="checkbox"/> DUMP TRUCK <input type="checkbox"/> DRUMS <input type="checkbox"/> CARTONS <input type="checkbox"/> OTHER _____																
	WASTE DESCRIPTION <u>NON-HAZARDOUS WATER</u>		GENERATING PROCESS <u>WELL DRUGING/DECON WATER</u>														
	COMPONENTS OF WASTE		COMPONENTS OF WASTE														
	1. <u>WATER</u> <u>99-100%</u>		5. _____														
	2. <u>TBN</u> <u>&lt;1%</u>		6. _____														
3. _____		7. <u>SEDS</u>															
4. _____		8. _____															
PROPERTIES: <u>7-14</u> <input type="checkbox"/> SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> SLUDGE <input type="checkbox"/> SLURRY <input type="checkbox"/> OTHER _____																	
HANDLING INSTRUCTIONS: <u>WEAR ALL APPROPRIATE PROTECTIVE CLOTHING</u>																	
THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.		<u>Larry Neesham DEE1 for BP</u> TYPED OR PRINTED FULL NAME & SIGNATURE															
		<u>6/10/82</u> DATE															
TRANSPORTER	Transporter #1 NAME <u>STRATUS ENVIRONMENTAL</u>		Transporter #2 NAME _____														
	ADDRESS <u>3330 CAMERON PARK DR</u>		SERVICE ORDER NO. _____														
	CITY, STATE, ZIP <u>CAMERON PARK, CA 95602</u>		PICK UP DATE _____														
	PHONE NO. <u>530-676-2021</u>		<u>LARRY NEESHAM</u> TYPED OR PRINTED FULL NAME & SIGNATURE														
	TRUCK, UNIT, I.D. NO. _____																
		<u>6/10/82</u> DATE															
TSD FACILITY	NAME <u>INSTAL, INC</u>		EPA I.D. NO. _____														
	ADDRESS <u>1105 AIRPORT RD #C</u>		DISPOSAL METHOD														
	CITY, STATE, ZIP <u>RIO VISTA, CA 94371</u>		<input type="checkbox"/> LANDFILL <input type="checkbox"/> OTHER _____														
	PHONE NO. <u>530-753-1829</u>																
			TYPED OR PRINTED FULL NAME & SIGNATURE _____ DATE _____														
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>GEN</td> <td rowspan="2">OLD/NEW</td> <td>L</td> <td>A</td> <td rowspan="2">TONS</td> </tr> <tr> <td>TRANS</td> <td>S</td> <td>B</td> </tr> <tr> <td>CK</td> <td></td> <td>RTCD</td> <td>HWDF</td> <td>NONE</td> </tr> </table>		GEN	OLD/NEW	L	A	TONS	TRANS	S	B	CK		RTCD	HWDF	NONE	DISCREPANCY _____		
GEN	OLD/NEW	L		A	TONS												
TRANS		S	B														
CK		RTCD	HWDF	NONE													



June 23, 2008

Jay Johnson  
Stratus Environmental, inc.  
3330 Cameron Park Drive, Suite 550  
Cameron Park, CA 95682-8861

Subject: **Calscience Work Order No.: 08-06-1157**  
Client Reference: **ARCO 11120**

Dear Client:

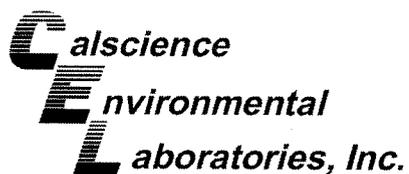
Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 6/12/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental  
Laboratories, Inc.  
Linda Scharpenberg  
Project Manager



## CASE NARRATIVE – 08-06-1157

### Data Qualifiers - EPA 8260:

080614L01:

The RPD for TBA was outside criteria in the LCS/LCSD. The % recoveries for both analytes were within acceptance criteria in the LCS/LCSD. The % recoveries and the RPDs were within limits in the associated MS/MSD. The LCS/LCSD has been flagged "X" within the report.

### Data Qualifiers - EPA 8015 GRO:

080611S03:

The % recovery for GRO was above acceptance criteria in the MSD. The % recoveries were within criteria in the LCS/LCSD. The MS/MSD has been flagged "3" within the report.

"3" = LM, AY

"X" = BA

LM = MS and/or MSD above acceptance limits. See Blank Spike (LCS)

BA – Relative Percent Difference out of Control

AY = Matrix Interference Suspected

A handwritten signature in black ink, appearing to be "M. J. ...", is located at the bottom left of the page.



## Analytical Report



Stratus Environmental, inc.  
3330 Cameron Park Drive, Suite 550  
Cameron Park, CA 95682-8861

Date Received: 06/12/08  
Work Order No: 08-06-1157  
Preparation: EPA 5030B  
Method: EPA 8015B (M)

Project: ARCO 11120

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>MW-8</b>	<b>08-06-1157-1-D</b>	<b>06/10/08 07:03</b>	<b>Aqueous</b>	<b>GC 29</b>	<b>06/12/08</b>	<b>06/13/08 00:17</b>	<b>080611B03</b>

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	59	38-134			

<b>MW-10</b>	<b>08-06-1157-2-D</b>	<b>06/10/08 07:42</b>	<b>Aqueous</b>	<b>GC 29</b>	<b>06/12/08</b>	<b>06/13/08 00:51</b>	<b>080611B03</b>
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	58	38-134			

<b>MW-11</b>	<b>08-06-1157-3-D</b>	<b>06/10/08 07:23</b>	<b>Aqueous</b>	<b>GC 29</b>	<b>06/12/08</b>	<b>06/13/08 01:25</b>	<b>080611B03</b>
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	76	38-134			

<b>Method Blank</b>	<b>099-12-695-166</b>	<b>N/A</b>	<b>Aqueous</b>	<b>GC 29</b>	<b>06/12/08</b>	<b>06/12/08 18:40</b>	<b>080611B03</b>
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	77	38-134			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

## Analytical Report



Stratus Environmental, inc.  
 3330 Cameron Park Drive, Suite 550  
 Cameron Park, CA 95682-8861

Date Received: 06/12/08  
 Work Order No: 08-06-1157  
 Preparation: EPA 5030B  
 Method: EPA 8260B  
 Units: ug/L

Project: ARCO 11120

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>MW-8</b>	<b>08-06-1157-1-A</b>	<b>06/10/08 07:03</b>	<b>Aqueous</b>	<b>GC/MS Z</b>	<b>06/14/08</b>	<b>06/14/08 21:45</b>	<b>080614L01</b>

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	2.5	5		Methyl-t-Butyl Ether (MTBE)	95	2.5	5	
1,2-Dibromoethane	ND	2.5	5		Tert-Butyl Alcohol (TBA)	ND	50	5	
1,2-Dichloroethane	ND	2.5	5		Diisopropyl Ether (DIPE)	ND	2.5	5	
Ethylbenzene	ND	2.5	5		Ethyl-t-Butyl Ether (ETBE)	ND	2.5	5	
Toluene	ND	2.5	5		Tert-Amyl-Methyl Ether (TAME)	ND	2.5	5	
Xylenes (total)	ND	2.5	5		Ethanol	ND	1500	5	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	97	73-157			Dibromofluoromethane	100	82-142		
Toluene-d8	95	82-112			1,4-Bromofluorobenzene	82	75-105		

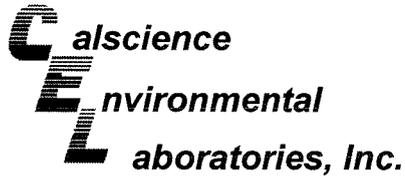
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>MW-10</b>	<b>08-06-1157-2-A</b>	<b>06/10/08 07:42</b>	<b>Aqueous</b>	<b>GC/MS Z</b>	<b>06/14/08</b>	<b>06/14/08 22:16</b>	<b>080614L01</b>

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	115	73-157			Dibromofluoromethane	109	82-142		
Toluene-d8	93	82-112			1,4-Bromofluorobenzene	82	75-105		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>MW-11</b>	<b>08-06-1157-3-A</b>	<b>06/10/08 07:23</b>	<b>Aqueous</b>	<b>GC/MS Z</b>	<b>06/14/08</b>	<b>06/14/08 22:46</b>	<b>080614L01</b>

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	15	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	118	73-157			Dibromofluoromethane	115	82-142		
Toluene-d8	96	82-112			1,4-Bromofluorobenzene	82	75-105		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Stratus Environmental, inc.  
 3330 Cameron Park Drive, Suite 550  
 Cameron Park, CA 95682-8861

Date Received: 06/12/08  
 Work Order No: 08-06-1157  
 Preparation: EPA 5030B  
 Method: EPA 8260B  
 Units: ug/L

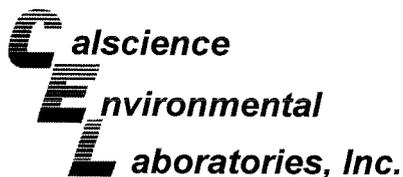
Project: ARCO 11120

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-703-279	N/A	Aqueous	GC/MS Z	06/14/08	06/14/08 18:12	080614L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	111	73-157			Dibromofluoromethane	111	82-142		
Toluene-d8	94	82-112			1,4-Bromofluorobenzene	82	75-105		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - Spike/Spike Duplicate



Stratus Environmental, inc.  
 3330 Cameron Park Drive, Suite 550  
 Cameron Park, CA 95682-8861

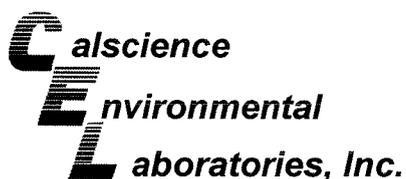
Date Received: 06/12/08  
 Work Order No: 08-06-1157  
 Preparation: EPA 5030B  
 Method: EPA 8015B (M)

Project ARCO 11120

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-06-0986-1	Aqueous	GC 29	06/12/08	06/12/08	080611S03

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	120	181	38-134	17	0-25	3

RPD - Relative Percent Difference , CL - Control Limit



## Quality Control - Spike/Spike Duplicate



Stratus Environmental, inc.  
3330 Cameron Park Drive, Suite 550  
Cameron Park, CA 95682-8861

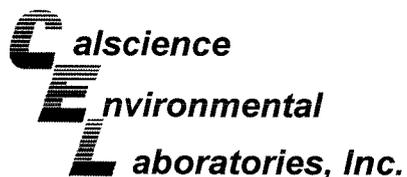
Date Received: 06/12/08  
Work Order No: 08-06-1157  
Preparation: EPA 5030B  
Method: EPA 8260B

Project ARCO 11120

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-06-1304-3	Aqueous	GC/MS Z	06/14/08	06/14/08	080614S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	106	107	86-122	1	0-8	
Carbon Tetrachloride	109	108	78-138	1	0-9	
Chlorobenzene	110	105	90-120	5	0-9	
1,2-Dibromoethane	114	118	70-130	4	0-30	
1,2-Dichlorobenzene	117	119	89-119	2	0-10	
1,1-Dichloroethene	96	98	52-142	2	0-23	
Ethylbenzene	117	127	70-130	8	0-30	
Toluene	105	108	85-127	3	0-12	
Trichloroethene	106	109	78-126	3	0-10	
Vinyl Chloride	95	96	56-140	1	0-21	
Methyl-t-Butyl Ether (MTBE)	86	93	64-136	8	0-28	
Tert-Butyl Alcohol (TBA)	118	128	27-183	8	0-60	
Diisopropyl Ether (DIPE)	93	94	78-126	2	0-16	
Ethyl-t-Butyl Ether (ETBE)	87	92	67-133	5	0-21	
Tert-Amyl-Methyl Ether (TAME)	96	102	63-141	5	0-21	
Ethanol	130	118	11-167	10	0-64	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



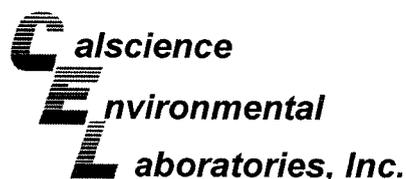
Stratus Environmental, inc.	Date Received:	N/A
3330 Cameron Park Drive, Suite 550	Work Order No:	08-06-1157
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project: ARCO 11120

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-166	Aqueous	GC 29	06/12/08	06/12/08	080611B03

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	106	109	78-120	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit



## Quality Control - LCS/LCS Duplicate



Stratus Environmental, inc.	Date Received:	N/A
3330 Cameron Park Drive, Suite 550	Work Order No:	08-06-1157
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project: ARCO 11120

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-279	Aqueous	GC/MS Z	06/14/08	06/14/08	080614L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	99	103	87-117	4	0-7	
Carbon Tetrachloride	105	109	78-132	3	0-8	
Chlorobenzene	102	106	88-118	4	0-8	
1,2-Dibromoethane	108	114	80-120	6	0-20	
1,2-Dichlorobenzene	113	120	88-118	6	0-8	X
1,1-Dichloroethene	93	99	71-131	6	0-14	
Ethylbenzene	110	114	80-120	3	0-20	
Toluene	101	103	85-127	2	0-7	
Trichloroethene	107	109	85-121	2	0-11	
Vinyl Chloride	92	97	64-136	5	0-10	
Methyl-t-Butyl Ether (MTBE)	85	89	67-133	5	0-16	
Tert-Butyl Alcohol (TBA)	99	121	34-154	20	0-19	X
Diisopropyl Ether (DIPE)	89	94	80-122	5	0-8	
Ethyl-t-Butyl Ether (ETBE)	86	90	73-127	5	0-11	
Tert-Amyl-Methyl Ether (TAME)	96	100	69-135	4	0-12	
Ethanol	118	115	34-124	3	0-44	

RPD - Relative Percent Difference, CL - Control Limit



Work Order Number: 08-06-1157

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.



### Chain of Custody Record

Project Name: ARCO 11120  
 BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > Alameda > 1  
 State or Lead Regulatory Agency: \_\_\_\_\_  
 Requested Due Date (mm/dd/yy): \_\_\_\_\_

1157

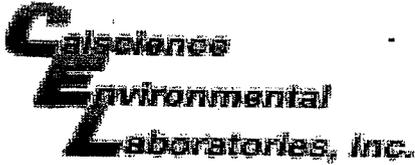
On-site Time:	6:20	Temp:	68
Off-site Time:	8:00	Temp:	70
Sky Conditions:	clear		
Meteorological Events:	NA		
Wind Speed:	0	Direction:	NA

Lab Name: Calscience Address: 7440 Lincoln Way Garden Grove, CA 92841 Lab PM: Linda Scharpenberg Tele/Fax: 714-895-5444 714-895-7501(fax)	BP/AR Facility No.: 11120 BP/AR Facility Address: 6400 Dublin Blvd., Dublin Site Lat/Long: California Global ID No.: T0600101432 Enfos Project No.: G07TM-0030	Consultant/Contractor: Stratus Environmental, Inc. Address: 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682 Consultant/Contractor Project No.: Consultant/Contractor PM: Jay Johnson Tele/Fax: (530) 676-6000 / (530) 676-6005 Report Type & QC Level: Level 1 with EDF E-mail EDD To: shaves@stratusinc.net Invoice to: Atlantic Richfield Co.
BP/AR PM Contact: Paul Supple Address: 2010 Crow Canyon Place, Suite 150 San Ramon, CA Tele/Fax: 925-275-3506	Provision or OOC (circle one) Provision Phase/WBS: 04-Monitoring Sub Phase/Task: 03-Analytical Cost Element: 01-Contractor labor	

Item No.	Sample Description	Time	Date	Matrix			Laboratory No.	No. of Containers	Preservative					Requested Analysis					Sample Point Lat/Long and Comments *Oxy= MTBE, TAME, ETBE, DIPE, TBA				
				Soil/Solid	Water/Liquid	Air			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	Methanol	BTEX/Oxy* by 8260	1,2-DCA	Ethanol BY 8260	EIDB	GRO by 8015m					
1	MW-8	7:03	6/10/08	X				6						X	X	X	X	X					
2	MW-10	7:42	6/10/08	X				6						X	X	X	X	X					
3	MW-11	7:23	6/10/08	X				6						X	X	X	X	X					
4	TB 11120	6:00	6/10/08	X				2						X	X	X	X	X					HOLD
5																							
6																							
7																							
8																							
9																							
10																							

Sampler's Name: ROBERTO HEIMLICH	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: DOULOS ENV.						
Shipment Date:						
Shipment Method:						
Shipment Tracking No: 105867164						
Special Instructions: Results to rmiller@broadbentinc.com						

Custody Seals In Place: Yes / No	Temp Blank: Yes / No	Cooler Temp on Receipt: °F/C	Trip Blank: Yes / No	MS/MSD Sample Submitted: Yes / No
----------------------------------	----------------------	------------------------------	----------------------	-----------------------------------



WORK ORDER #: 08 - 06 - 1157

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Strahy

DATE: 6/12/08

TEMPERATURE - SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- Chilled, cooler with temperature blank provided.
Chilled, cooler without temperature blank.
Chilled and placed in cooler with wet ice.
Ambient and placed in cooler with wet ice.
Ambient temperature (For Air & Filter only).

LABORATORY (Other than Calscience Courier):

- 03.8 C Temperature blank.
C IR thermometer.
Ambient temperature (For Air & Filter only).

C Temperature blank.

Initial: [Signature]

CUSTODY SEAL INTACT:

Sample(s): Cooler: [checked] No (Not Intact): Not Present:

Initial: [Signature]

SAMPLE CONDITION:

Table with 4 columns: Description, Yes, No, N/A. Rows include Chain-Of-Custody document(s), Sampler's name, Sample container label(s), Sample container(s) intact, Correct containers and volume, Proper preservation, VOA vial(s) free of headspace, Tedlar bag(s) free of condensation.

Initial: [Signature]

COMMENTS:

Blank lines for handwritten comments.

## ATTACHMENT

### FIELD PROCEDURES FOR GROUNDWATER SAMPLING

The sampling procedures for groundwater monitoring events are contained in this appendix.

#### Equipment Calibration

Standard groundwater sampling equipment – pH/Conductivity/Temperature meter, and dissolved oxygen (DO) meters are calibrated prior to all field work. All calibration is conducted in accordance with equipment manufacturer's recommended procedure and buffer solutions. MSDS for all buffer solutions are maintained in Stratus vehicles. Calibration is completed everyday prior to field work and also once a week. The pH probe is calibrated for a pH of 7.0 daily and for 4.0, 7.0 and 10.0 weekly. The conductivity probe is calibrated for 1413  $\mu$ s daily and 1413  $\mu$ s and 447  $\mu$ s weekly. The temperature probe is calibrated weekly with a NIST-traceable thermometer. The DO probe is calibrated for 100% oxygen daily and 0% and 100% oxygen weekly. All calibration logs are maintained in the Stratus office.

#### Groundwater and Liquid-Phase Petroleum Hydrocarbon Depth Assessment

Prior to measuring the depth to liquid in the well, the well caps are removed and the liquid level allowed to stabilize. A water/hydrocarbon interface probe is used to assess the liquid-phase petroleum hydrocarbon (LPH) thickness, if present, and a water level indicator is used to measure the groundwater depth in monitoring wells that do not contain LPH. Depth to groundwater or LPH is measured from a datum point at the top of each monitoring well casing. The datum point is typically a notch cut in the north side of the casing edge. If a water level indicator is used, the tip is subjectively analyzed for hydrocarbon sheen.

#### Subjective Analysis of Groundwater

Prior to purging, a water sample is collected from the monitoring well for subjective assessment. The sample is retrieved by gently lowering a clean, disposable bailer to approximately one-half the bailer length past the air/liquid interface. The bailer is then retrieved, and the sample contained within the bailer is examined for floating LPH and the appearance of a LPH sheen.

#### Monitoring Well Sampling

In many cases, determining whether to purge or not to purge wells prior to sample collection is made in the field and is often based on depth to water relative to the screen interval of the well. Site-specific field data sheets present details associated with the purge method and equipment used.

Monitoring wells, when purged, use a pump or bailer until pH, temperature, and conductivity of the purge water has stabilized and a minimum of three well volumes of water has been removed. Field measuring equipment is calibrated and maintained according to the manufacturer's instructions. If three well volumes cannot be removed in one half hour's time the well is allowed to recharge to 80% of original level. After recharging, a groundwater sample is then collected from each of the wells using disposable bailers.

A Teflon bailer, electric submersible or bladder pump will be the only equipment used for well sampling. When samples for volatile organic analysis are being collected, the pump flow will be regulated at approximately 100 milliliters per minute to minimize pump effluent turbulence and aeration. Glass bottles of at least 40-milliliters volume and fitted with Teflon-lined septa will be used in sampling for volatile organics. These bottles will be filled completely to prevent air accumulation in the bottle. A positive meniscus forms when the bottle is completely full. A convex Teflon septum will be placed over the positive meniscus to eliminate air. After the bottle is capped, it is inverted and tapped to verify that it contains no air bubbles. The sample containers for other parameters will be filled, filtered as required, and capped. Glass and plastic bottles used by Stratus to collect groundwater samples are supplied by the laboratory.

### **Groundwater Sample Labeling and Preservation**

Samples are collected in appropriate containers supplied by the laboratory. All required chemical preservation is added to the bottles prior to delivery to Stratus. Sample label information includes a unique sample identification number, job identification number, date, and time. After labeling, all groundwater samples are placed in a Ziploc® type bag and placed in an ice chest cooled to approximately 4° Celsius. Upon arriving at Stratus' office the samples are transferred to a locked refrigerator cooled to approximately 4° Celsius. Chemical preservation is controlled by the required analysis and is noted on the chain-of-custody form. Trip and temperature blanks supplied by the laboratory accompany the groundwater sample containers and groundwater samples.

### **Sample Identification and Chain-of-Custody Procedures**

Sample identification and chain-of-custody procedures document sample possession from the time of collection to ultimate disposal. Each sample container submitted for analysis has a label affixed to identify the job number, sampler, date and time of sample collection, and a sample number unique to that sample. This information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel, and any other pertinent field observations, is recorded in the field records. The samples are analyzed by a California-certified laboratory.

A chain-of-custody form is used to record possession of the sample from time of collection to its arrival at the laboratory. When the samples are shipped, the person in custody of them relinquishes the samples by signing the chain-of-custody form and noting the time. The sample-control officer at the laboratory verifies sample integrity and confirms that the samples are collected in the proper containers, preserved correctly, and

contain adequate volumes for analysis. These conditions are noted on a Laboratory Sample Receipt Checklist that becomes part of the laboratory report upon request.

If these conditions are met, each sample is assigned a unique log number for identification throughout analysis and reporting. The log number is recorded on the chain-of-custody form and in the legally-required log book maintained by the laboratory. The sample description, date received, client's name, and other relevant information is also recorded.

### **Equipment Cleaning**

All reusable sampling equipments are cleaned using phosphate-free detergents and rinsed with de-ionized water.

## **APPENDIX B**

HISTORICAL GROUND-WATER ANALYTICAL DATA FOR FORMER WELLS  
ABANDONED 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 (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-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	4.97	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	5.89	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	---	---	---	---	---	ND<0.5	---	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	06/28/95	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	09/06/95	328.50	4.33	324.17	---	---	---	---	---	ND<1.0	---	6.6	ATI
MW-2	12/22/95	328.50	5.85	322.65	ND<50	210	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---
MW-2	08/20/96	328.50	5.50	323.00	---	---	---	---	---	---	ND<5.0	7.0	ATI
MW-2	08/21/96	328.50	5.07	323.43	---	---	---	---	---	---	---	---	---
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	08/26/98	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

AUSTO PROJECT NO. 10-170

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (e) (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-3	10/27/92	329.36	8.43	320.93	210	ND<50	3	0.7	0.9	30	—	—	PACE
MW-3	04/09/93	329.36	4.90	324.46	400	260	6.1	ND<0.5	ND<0.5	ND<0.5	—	—	PACE
MW-3	08/25/93	329.36	7.13	322.23	2000	440	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PACE
MW-3	11/22/93	329.36	7.60	321.76	1800	360	ND<2.5	ND<2.5	ND<2.5	ND<2.5	3300	(e)	PACE
MW-3	03/07/94	329.36	6.08	323.28	1300	5000	22	4.0	2.2	3.8	910	(e)	PACE
MW-3	06/09/94	329.36	6.51	322.85	8500	2600	25	8.3	0.5	15	7200	(e)	PACE
QC-1 (f)	06/09/94	—	—	—	8800	—	23	6.3	0.5	10	13000	(e)	PACE
MW-3	09/12/94	329.36	7.63	321.73	2100	3200	ND<5.0	ND<5.0	8.8	20	3800	(e)	PACE
QC-1 (f)	09/12/94	—	—	—	1800	—	ND<5.0	ND<5.0	8.0	10	3900	(e)	PACE
MW-3	12/20/94	329.36	6.41	322.95	18000	9600	79	28	89	9.3	—	(e)	PACE
QC-1 (f)	12/20/94	—	—	—	17000	—	79	33	80	ND<2.5	—	7.3	PACE
MW-3	03/18/95	329.36	4.39	324.97	6300	7000	470	ND<5.0	210	—	—	—	PACE
QC-1 (f)	03/18/95	—	—	—	6300	—	500	ND<5.0	80	—	—	5.5	ATI
MW-3	06/28/95	329.36	5.50	323.86	8000	3000	(g) ND<10	ND<10	230	13	—	—	ATI
QC-1 (f)	06/28/95	—	—	—	8800	—	(g) ND<10	ND<10	ND<10	ND<20	—	7.4	ATI
MW-3	09/06/95	329.36	6.66	322.70	10000	—	ND<50	ND<50	ND<50	ND<20	—	—	ATI
QC-1 (f)	09/06/95	—	—	—	9700	2800	ND<50	ND<50	ND<50	ND<100	37000	7.1	ATI
MW-3	12/22/95	329.36	6.31	323.05	9200	—	ND<50	ND<50	ND<50	ND<100	36000	—	ATI
MW-3	08/20/96	329.36	5.87	323.49	—	2500	ND<50	ND<50	ND<50	ND<100	29000	6.7	ATI
MW-3	08/21/96	329.36	—	—	3700	1900	—	—	—	—	—	—	ATI
QC-1 (f)	08/21/96	—	—	—	—	—	ND<25	ND<50	ND<50	ND<50	—	—	—
MW-3	10/31/96	329.36	6.20	323.16	3500	—	ND<25	ND<50	ND<50	ND<50	4100	6.8	SPL
QC-1 (f)	10/31/96	—	—	—	ND<250	ND<500	ND<2.5	ND<5.0	ND<5.0	ND<5.0	4000	—	SPL
MW-3	12/02/96	329.36	—	—	ND<250	—	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	6.8	SPL
QC-1 (f)	12/02/96	—	6.27	323.09	ND<250	50	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	—	—
MW-3	03/27/97	329.36	—	—	ND<250	—	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	6.4	SPL
MW-3	06/03/97	329.36	5.39	323.97	470	ND<100	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	—	—
QC-1 (f)	06/03/97	—	7.92	321.44	321.44	—	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<50	—	—
MW-3	09/16/97	329.36	—	—	ND<250	100	ND<2.5	ND<5.0	ND<5.0	ND<1.0	490	6.2	SPL
MW-3	12/03/97	329.36	6.67	322.69	ND<50	—	ND<2.5	ND<5.0	ND<5.0	ND<5.0	84	5.9	SPL
QC-1 (f)	12/03/97	—	6.81	322.55	ND<50	330	ND<2.5	ND<5.0	ND<5.0	ND<5.0	74.0	—	—
MW-3	06/26/98	329.36	—	—	ND<50	ND<200	ND<0.5	ND<1.0	ND<5.0	ND<5.0	ND<50	5.5	SPL
			5.08	324.28	ND<250	—	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.0	SPL
							ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	—	SPL
												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			
MW-4	08/25/88	329.45	7.32	322.13	1800	380		78	3.5	68			PACE
QC-1 (f)	08/25/93	—	—	—	1600	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PACE
MW-4	11/22/93	329.45	7.83	321.62	610	260	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2100	(e)	PACE
QC-1 (f)	11/22/93	—	—	—	1700	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2100	(e)	PACE
MW-4	03/07/94	329.45	6.29	323.16	710	—	ND<2.5	ND<2.5	ND<2.5	ND<2.5	—	—	PACE
QC-1 (f)	03/07/94	—	—	—	1600	1400	0.5	0.8	ND<0.5	ND<0.5	3500	(e)	PACE
MW-4	06/09/94	329.45	6.76	322.69	6400	1800	ND<0.5	ND<0.5	1.4	0.6	5900	(e)	PACE
MW-4	09/12/94	329.45	7.83	321.62	2000	2700	ND<10	ND<10	ND<10	ND<10	4200	(e)	PACE
MW-4	12/20/94	329.45	6.68	322.77	9200	2400	ND<0.5	ND<0.5	ND<0.5	ND<0.5	10000	(e)	PACE
MW-4	03/16/95	329.45	4.66	324.79	1400	960	ND<5.0	ND<5.0	ND<5.0	ND<5.0	4200	(e)	PACE
MW-4	06/28/95	329.45	5.93	323.52	5000	5400	140	ND<2.5	58	14	—	—	PACE
MW-4	09/06/95	329.45	6.83	322.62	4400	4500	240	ND<5.0	220	ND<10	—	—	ATI
MW-4	12/22/95	329.45	6.42	323.03	3800	4700	ND<13	ND<13	ND<13	ND<25	12000	—	ATI
QC-1 (f)	12/22/95	—	—	—	3900	—	15	ND<13	ND<13	ND<25	9200	—	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	—	—	—
MW-4	12/02/96	329.45	6.71	322.74	ND<250	1600	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<250	—	7.7 SPL
MW-4	03/27/97	329.45	5.70	323.75	ND<50	13000	ND<5	ND<10	ND<10	ND<10	ND<50	—	7.1 SPL
QC-1 (f)	03/27/97	—	—	—	8300	1500	44	ND<25	ND<25	ND<25	2200	—	7.3 SPL
MW-4	06/03/97	329.45	8.97	321.08	6900	—	51	ND<25	ND<25	ND<25	8000	—	6.2 SPL
MW-4	09/16/97	329.45	6.91	322.54	2800	270	62	ND<1.0	ND<1.0	ND<1.0	8500	—	SPL
QC-1 (f)	09/16/97	—	—	—	110	1800	0.80	ND<1.0	ND<1.0	ND<1.0	7000	—	7.1 SPL
MW-4	12/03/97	329.45	7.16	322.29	130	—	1.2	ND<1.0	ND<1.0	ND<1.0	7700	—	6.2 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	1.1	7100	—	SPL
MW-5	04/09/93	329.60	5.18	324.42	520	—	0.52	ND<1.0	ND<1.0	ND<1.0	ND<10	—	6.0 SPL
MW-5	08/25/93	329.60	7.28	322.32	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1100	—	5.3 SPL
MW-5	11/22/93	329.60	7.82	321.78	ND<50	70	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	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PACE
MW-5	06/09/94	329.60	6.73	322.87	ND<50	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PACE
MW-5	09/12/94	329.60	7.78	321.82	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	5.7 PACE
MW-5	12/20/94	329.60	6.63	322.97	ND<50	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	7.7 PACE
MW-5	03/16/95	329.60	4.65	324.95	—	—	—	—	—	—	—	—	7.2 PACE
MW-5	06/28/95	329.60	5.69	323.91	ND<50	ND<500	ND<0.50	ND<0.50	—	—	—	—	—
MW-5	09/06/95	329.60	6.82	322.78	—	—	—	—	ND<0.50	ND<1.0	—	—	—
MW-5	12/22/95	329.60	6.40	323.20	ND<50	200	ND<0.50	—	—	—	—	—	4.9 ATI
MW-5	08/20/96	329.60	5.98	323.62	—	—	—	ND<0.50	ND<0.50	ND<1.0	—	—	—
MW-5	08/21/96	329.60	—	—	—	—	—	—	—	—	ND<5.0	—	7.3 ATI
MW-5	10/31/96	329.60	—	—	ND<50	ND<50	—	—	—	—	—	—	—
MW-5	12/02/96	329.60	6.29	323.31	—	—	ND<0.50	ND<1.0	ND<1.0	ND<1.0	—	—	—
MW-5	03/27/97	329.60	6.97	323.23	—	—	—	—	ND<1.0	ND<1.0	ND<10	—	6.9 SPL
MW-5	06/03/97	329.60	5.33	324.27	—	—	—	—	—	—	—	—	—
MW-5	09/16/97	329.60	8.00	321.60	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	—	—	—
MW-5	09/16/97	329.60	6.89	322.71	—	—	—	—	—	—	ND<10	—	5.8 SPL
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	—	—	—
MW-5	06/26/98	329.60	5.11	324.49	—	—	—	—	ND<1.0	ND<1.0	27	—	—
					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	—	—	—	—	—	—	—	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	—	—	—	—	—	—
MW-6	12/22/95	329.55	6.53	323.02	—	—	—	—	—	—	—	—	—
MW-6	08/20/96	329.55	6.18	323.37	—	—	—	—	—	—	—	7.2	ATI
MW-6	08/21/96	329.55	—	—	—	—	—	—	—	—	—	—	—
MW-6	10/31/96	329.55	6.52	323.03	ND<50	120	ND<0.5	—	—	—	—	—	—
MW-6	12/02/96	329.55	6.55	323.00	—	—	—	—	—	—	—	—	—
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	—	—	—	—	—	—
MW-6	09/16/97	329.55	6.95	322.60	—	—	—	—	—	—	—	—	—
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<10	6.3	SPL
MW-6	06/26/98	329.55	5.20	322.33	—	—	—	—	—	—	—	—	—
MW-7	04/09/93	329.49	5.36	324.13	ND<50	—	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.6	SPL
MW-7	08/25/93	329.49	7.44	322.05	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—
MW-7	11/22/93	329.49	7.92	321.57	ND<50	150	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	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	PACE
MW-7	09/12/94	329.49	7.07	321.62	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	3.7	PACE
MW-7	12/20/94	329.49	6.77	322.72	ND<50	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<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	6.8	PACE
MW-7	06/28/95	329.49	5.94	323.55	ND<50	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	—	6.5	PACE
MW-7	09/06/95	329.49	6.98	322.51	ND<50	320	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	5.9	ATI
MW-7	12/22/95	329.49	6.65	322.84	ND<50	240	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	7.8	ATI
MW-7	08/20/96	329.49	6.22	323.27	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	8.5	7.5	ATI
MW-7	08/21/96	329.49	—	—	—	—	—	—	—	—	7.2	6.9	ATI
MW-7	10/31/96	329.49	6.56	322.93	ND<50	ND<50	ND<0.5	ND<1.0	—	—	—	—	—
MW-7	12/02/96	329.49	6.13	323.36	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	—	SPL
MW-7	03/27/97	329.49	5.08	324.41	ND<50	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	86	6.8	SPL
MW-7	06/03/97	329.49	7.00	321.69	ND<50	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	59	7.3	SPL
MW-7	09/16/97	329.49	6.50	322.99	650	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.6	SPL
MW-7	12/03/97	329.49	6.66	322.83	120	ND<100	ND<0.5	ND<1.0	ND<1.0	ND<1.0	630	6.8	SPL
MW-7 (h)	06/26/98	329.49	4.96	324.53	ND<50	ND<200	ND<0.5	ND<1.0	ND<1.0	ND<1.0	2200	6.0	SPL
					—	—	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.0	SPL
							ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	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	---	---	ATI
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.

FOI 110-170170-5-4.WC22

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

**APPENDIX C**

**GEOTRACKER UPLOAD CONFIRMATION**

# Electronic Submittal Information

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## UPLOADING A GEO\_WELL FILE

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

<b><u>Submittal Title:</u></b>	<b>2Q08 GEO_WELL 11120</b>
<b><u>Facility Global ID:</u></b>	<b>T0600101432</b>
<b><u>Facility Name:</u></b>	<b>BP #11120</b>
<b><u>Submittal Date/Time:</u></b>	<b>7/1/2008 9:49:19 AM</b>
<b><u>Confirmation Number:</u></b>	<b>5835050821</b>

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# Electronic Submittal Information

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**Confirmation Number:** 5280510544

**Date/Time of Submittal:** 7/1/2008 9:52:11 AM

**Facility Global ID:** T0600101432

**Facility Name:** BP #11120

**Submittal Title:** 2Q08 GW Monitoring

**Submittal Type:** GW Monitoring Report

[Click here](#) to view the detections report for this upload.

<b>BP #11120</b> 6400 DUBLIN DUBLIN, CA 94568	<b>Regional Board - Case #: 01-1556</b> SAN FRANCISCO BAY RWQCB (REGION 2) <b>Local Agency (lead agency) - Case #: RO0002431</b> ALAMEDA COUNTY LOP - (PK)
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<u>CONF #</u>	<u>TITLE</u>	<u>QUARTER</u>
5280510544	2Q08 GW Monitoring	Q2 2008
<u>SUBMITTED BY</u>	<u>SUBMIT DATE</u>	<u>STATUS</u>
Broadbent & Associates, Inc.	7/1/2008	PENDING REVIEW

## SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	3
# FIELD POINTS WITH DETECTIONS	2
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	0
SAMPLE MATRIX TYPES	WATER

## METHOD QA/QC REPORT

METHODS USED	M8015,SW8260B
TESTED FOR REQUIRED ANALYTES?	Y
LAB NOTE DATA QUALIFIERS	Y

## QA/QC FOR 8021/8260 SERIES SAMPLES

TECHNICAL HOLDING TIME VIOLATIONS	0
METHOD HOLDING TIME VIOLATIONS	0
LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT	0
LAB BLANK DETECTIONS	0
DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING?	
- LAB METHOD BLANK	Y
- MATRIX SPIKE	Y
- MATRIX SPIKE DUPLICATE	Y
- BLANK SPIKE	Y
- SURROGATE SPIKE	Y

## WATER SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	Y
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	Y
<b>SURROGATE SPIKES % RECOVERY BETWEEN 85-115%</b>	<b>N</b>
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	Y

## SOIL SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	n/a
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	n/a

SURROGATE SPIKES % RECOVERY BETWEEN 70-125% n/a  
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% n/a

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**FIELD QC SAMPLES**

<u>SAMPLE</u>	<u>COLLECTED</u>	<u>DETECTIONS &gt; REPD</u>
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

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