ARCO 5544
Kent
LUST 59162

Atlantic Richfield Company

David White
Environmental Business Manager

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June 2, 2009

Ms. Gayle Garbush
Ecology NW Regional Office
3190 – 160th Avenue SE
Bellevue, WA 98008

Re: Former ARCO Facility No. 5544
19860 68th Ave S., Kent, WA

Ms. Garbush:

The following correspondence prepared by Delta Consultants is attached for your review:

- Ground Water Monitoring Report – June 1, 2009

Please contact me if you have additional questions or require additional information regarding the above referenced site.

Sincerely,

D il White

David White

cc: Markham C. Hurd, Delta Consultants
Derek Tornow, Delta Consultants

GROUND WATER MONITORING REPORT
Atlantic Richfield Company
Third and Fourth Quarters of 2008
June 1, 2009

Former ARCO Facility No.:	5544
Address:	19860 68th Avenue South, Kent, Washington
Atlantic Richfield Environmental Business Manager:	David White
Consulting Co./Contact Person:	Delta Consultants/Derek Tornow
Consultant Project Number:	05544OA091
Primary Agency/Regulatory ID No.:	Washington State Department of Ecology/523641 (ERTS)

WORK PERFORMED DURING THE THIRD AND FOURTH QUARTERS OF 2008:

- SAIC conducted third quarter ground water monitoring and sampling on August 6, 2008.
- Delta conducted fourth quarter ground water monitoring and sampling on October 8, 2008.
- Delta prepared this semi-annual ground water monitoring report.

WORK SCHEDULED FOR THE FIRST AND SECOND QUARTERS OF 2009:

- Delta will conduct quarterly ground water sampling and monitoring.
- Delta will prepare a semi-annual ground water monitoring report.

Current Phase of Project:	Monitoring	**(Phase I, Addt'l Assmnt RAP/CAP, Remed., etc)**
Frequency of Ground Water Sampling and Monitoring:	Quarterly	**(Quarterly, etc)**
Are LPH Present On-Site:	No	**(Yes/No)**
LPH Recovered this Reporting Period:	None	**(Gallons)**
Cumulative LPH Recovered to Date:	None	**(Gallons)**
Amount of Soil Removed to Date:	46.67 tons (drill cuttings and line upgrades)	**(Cubic yards/tons)**
Current Remediation Techniques:	Monitored Natural Attenuation	**(SVES/Sparge/Pump and Treat)**
Approximate Depth to Ground Water:	10.07 to 10.74 (08/06/08); 9.62 to 10.80 (10/08/08)	**(Feet)**
Ground Water Gradient:	East (08/06/08); Northeast (10/08/08)	**(Direction)**
	<0.01 ft/linear ft	**(Magnitude)**

a member of: Inogen Environmental Alliance

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The recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Delta's client and the Department of Ecology. Delta will not and cannot be liable for unauthorized reliance by any other party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report.

Derek Tornow
Senior Project Manager

Attachments:
- Table 1 – Summary of Ground Water Data
- Figure 1 – Site Location Map
- Figure 2 – Site Aerial Map
- Figure 3 – Inferred Water Table Contour Map – 8/06/08
- Figure 4 – Inferred Water Table Contour Map – 10/08/08
- Figure 5 – MW-2 Hydrocarbon Concentrations and Water Elevations vs. Time
- Figure 6 – MW-5 Hydrocarbon Concentrations and Water Elevations vs. Time
- Figure 7 – MW-6 Hydrocarbon Concentrations and Water Elevations vs. Time
- Test America Analytical Lab Reports
- Field Data Sheets

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TABLE 1
SUMMARY OF GROUND WATER DATA
FORMER ARCO FACILITY NO. 5544
19860 68TH AVENUE SOUTH
KENT, WASHINGTON

Well	TOC (feet)	Date Sampled	Depth to Water (feet)	LPH Thickness (feet)	GW Elevation (feet)	Dissolved Oxygen (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	1,2 Dibromo ethane (µg/L)	1,2 Dichloro ethane (µg/L)	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	Comments
MW-1	196.78	03/12/02	7.45	0.00	189.33	1.0	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	19.1	<1.00	P
MW-1	196.78	08/30/02	10.10	0.00	186.68	0.9	<0.500	<0.500	<0.500	<1.00	<2.00	<0.01	<1.00	<50.0	NA	NA	44.2	<1.00	P
MW-1	196.78	03/24/03	6.75	0.00	190.03	2.0	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	2.30	<1.00	P
MW-1	196.78	04/22/03	8.62	0.00	188.16	0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1	196.78	06/30/03	9.57	0.00	187.21	2.1	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	<1.00	<1.00	P
MW-1	196.78	09/15/03	10.27	0.00	186.51	1.3	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	<1.00	<1.00	P
MW-1	196.78	12/30/03	8.75	0.00	188.03	0.7	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	<1.00	<1.00	P
MW-1	196.78	07/13/04	9.85	0.00	186.93	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1	196.78	11/01/04	9.60	0.00	187.18	1.2	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	<1.00	NA	NP
MW-1	196.78	03/03/05	9.11	0.00	187.67	1.0	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	<1.00	NA	NP
MW-1	196.78	06/12/05	8.88	0.00	187.90	1.0	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	<1.00	NA	NP
MW-1	196.78	08/28/05	10.13	0.00	186.65	0.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1	196.78	11/17/05	8.88	0.00	187.90	1.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1	196.78	03/05/06	8.49	0.00	188.29	2.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1	196.78	10/24/06	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1	196.78	03/22/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1	196.78	05/30/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1	196.78	09/04/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1	196.78	11/13/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1	196.78	03/12/08	8.90	0.00	187.88	2.06	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-1	196.78	06/09/08	8.74	0.00	188.04	1.18	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-1	196.78	08/06/08	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1	196.78	10/08/08	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-2	198.02	03/12/02	8.60	0.00	189.42	0.5	40,800	39,700	4,240	19,900	2,250	NA	NA	201,000	NA	NA	50.4	<1.00	P
MW-2	198.02	08/30/02	11.04	0.00	186.98	0.1	24,300	4,590	2,270	7,530	2,620	<0.01	<100	74,000	NA	NA	121	<1.00	P
MW-2	198.02	03/24/03	8.45	0.00	189.57	0.7	12,800	2,550	1,680	4,870	1,950	NA	NA	47,900	NA	NA	13.9	<1.00	P
MW-2	198.02	04/22/03	9.31	0.00	188.71	0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-2	198.02	06/30/03	10.43	0.00	187.59	0.4	12,100	2,500	2,290	5,720	2,370	NA	NA	51,000	NA	NA	52.9	9.95	P
MW-2	198.02	09/15/03	11.33	0.00	186.69	0.9	6,000	1,390	1,840	4,320	1,590	NA	NA	33,600	NA	NA	14.7	<1.00	P
MW-2	198.02	12/30/03	9.36	0.00	188.66	0.8	10,100	12,800	1,980	8,510	1,070	NA	NA	74,000	NA	NA	8.74	<1.00	P
MW-2	198.02	07/13/04	10.71	0.00	187.31	0.5	12,700	3,890	1,710	6,860	1,630	NA	NA	68,200	NA	NA	<1.00	<1.00	NP
MW-2	198.02	11/01/04	9.11	0.00	188.91	6.3	25.5	<1.00	<1.00	<2.00	355	NA	NA	<80.0	NA	NA	<1.00	NA	NP
MW-2	198.02	03/03/05	12.20	0.00	185.82	8.9	<0.400	<1.00	<1.00	<2.00	229	NA	NA	<80.0	NA	NA	1.82	NA	NP
MW-2	198.02	06/12/05	10.00	0.00	188.02	0.5	616	33.0	523	490	117	NA	NA	4,020	NA	NA	<1.00	NA	NP
MW-2	198.02	08/28/05	11.14	0.00	186.88	0.4	1,500	3.57	66.6	63.9	229	NA	NA	5,400	NA	NA	<1.00	NA	NP
MW-2	198.02	11/17/05	10.25	0.00	187.77	7.7	0.72	<0.500	<0.500	<1.00	106	NA	NA	<50.0	NA	NA	<1.00	NA	NP
MW-2	198.02	03/05/06	9.05	0.00	188.97	6.2	3.14	<0.500	1.59	2.98	46.5	NA	NA	69.2	NA	NA	<1.00	NA	NP
MW-2	198.02	10/24/06	11.08	0.00	186.94	1.2	84.3	1.18	66.1	10.6	358	NA	NA	733	NA	NA	NA	NA	P
MW-2	198.02	03/22/07	8.43	0.00	189.59	1.48	2,380	4,810	3,350	13,700	<100	NA	NA	51,900	NA	NA	NA	NA	P
MW-2	198.02	05/30/07	9.97	0.00	188.05	1.98	1,650	3,390	2,360	7,650	119	NA	NA	51,900	NA	NA	NA	NA	P
MW-2	198.02	09/04/07	10.22	0.00	187.80	1.78	1,480	221	3,120	24,100	131	NA	NA	81,900	NA	NA	NA	NA	P
MW-2	198.02	11/13/07	10.32	0.00	187.70	1.02	426	89.9	594	1,760	65.5	NA	NA	21,200	NA	NA	NA	NA	P

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FORMER ARCO FACILITY NO. 5544
19860 68TH AVENUE SOUTH
KENT, WASHINGTON

Well	TOC (feet)	Date Sampled	Depth to Water (feet)	LPH Thickness (feet)	GW Elevation (feet)	Dissolved Oxygen (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	1,2 Dibromo ethane (µg/L)	1,2 Dichloro ethane (µg/L)	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	Comments
MW-2	198.02	03/12/08	9.15	0.00	188.87	1.69	304	2,240	3,750	16,700	6.41	NA	NA	91,100	NA	NA	NA	NA	NP
MW-2	198.02	06/09/08	6.65	0.00	191.37	1.68	11.7	963	632	3,360	<1.00	NA	NA	22,100	NA	NA	NA	NA	NP
MW-2	198.02	08/06/08	10.60	0.00	187.42	0.75	268	1,510	3,400	16,500	1.48	NA	NA	61,200	NA	NA	NA	NA	NP
MW-2	198.02	10/08/08	10.41	0.00	187.61	3.3	127	172	2,120	10,600	<1.00	NA	NA	52,300	NA	NA	NA	NA	NP
MW-3	197.49	03/12/02	7.90	0.00	189.59	0.4	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	55.7	<1.00	P
MW-3	197.49	08/30/02	10.50	0.00	186.99	0.5	<0.500	<0.500	<0.500	<1.00	<2.00	<0.01	<1.00	<50.0	NA	NA	63.8	<1.00	P
MW-3	197.49	03/24/03	7.60	0.00	189.89	1.1	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	1.80	<1.00	P
MW-3	197.49	04/22/03	8.60	0.00	188.89	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	197.49	06/30/03	9.45	0.00	188.04	0.8	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	13.4	3.63	P
MW-3	197.49	09/15/03	10.67	0.00	186.82	1.2	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	14.0	<1.00	P
MW-3	197.49	12/30/03	8.65	0.00	188.84	0.7	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	2.17	<1.00	P
MW-3	197.49	07/13/04	10.27	0.00	187.22	0.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	197.49	11/01/04	9.50	0.00	187.99	2.1	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	<1.00	NA	NP
MW-3	197.49	03/03/05	8.42	0.00	189.07	2.4	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	<1	NA	NP
MW-3	197.49	06/12/05	9.32	0.00	188.17	0.7	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	<1.00	NA	NP
MW-3	197.49	08/28/05	10.64	0.00	186.85	1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	197.49	11/17/05	9.15	0.00	188.34	1.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	197.49	03/05/06	8.28	0.00	189.21	4.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	197.49	10/24/06	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	197.49	03/22/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	197.49	05/30/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	197.49	09/04/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	197.49	11/13/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	197.49	03/12/08	8.85	0.00	188.64	2.71	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-3	197.49	06/09/08	7.56	0.00	189.93	2.42	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-3	197.49	08/06/08	10.07	0.00	187.42	0.77	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-3	197.49	10/08/08	9.62	0.00	187.87	3.0	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-4	197.68	03/12/02	7.38	0.00	190.30	0.7	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	23.2	<1.00	P
MW-4	197.68	08/30/02	10.97	0.00	186.71	0.5	48.0	1.05	0.743	124	9.57	<0.01	<1.00	1,400	NA	NA	61.0	<1.00	P
MW-4	197.68	03/24/03	8.65	0.00	189.03	1.6	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	5.53	<1.00	P
MW-4	197.68	04/22/03	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	197.68	06/30/03	10.61	0.00	187.07	0.5	28.9	<0.500	<0.500	16.7	<5.00	NA	NA	903	NA	NA	9.17	4.56	P
MW-4	197.68	09/15/03	11.16	0.00	186.52	1.0	20.5	<0.500	<0.500	3.73	<1.00	NA	NA	848	NA	NA	5.15	<1.00	P, a
MW-4	197.68	12/30/03	9.61	0.00	188.07	0.5	1	<0.500	<0.500	2.40	<1.00	NA	NA	144	NA	NA	15.1	<1.00	P
MW-4	197.68	07/13/04	9.98	0.00	187.70	0.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	197.68	11/01/04	10.60	0.00	187.08	2.7	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	2.30	NA	P
MW-4	197.68	03/03/05	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	197.68	06/12/05	9.78	0.00	187.90	0.4	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	<1.00	NA	NP
MW-4	197.68	08/28/05	11.00	0.00	186.68	0.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	197.68	11/17/05	9.81	0.00	187.87	1.1	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	<1.00	NA	NP
MW-4	197.68	03/05/06	9.31	0.00	188.37	1.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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SUMMARY OF GROUND WATER DATA
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19860 68TH AVENUE SOUTH
KENT, WASHINGTON

Well	TOC (feet)	Date Sampled	Depth to Water (feet)	LPH Thickness (feet)	GW Elevation (feet)	Dissolved Oxygen (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	1,2 Dibromo ethane (µg/L)	1,2 Dichloro ethane (µg/L)	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	Comments
MW-4	197.68	10/24/06	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	197.68	03/22/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	197.68	05/30/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	197.68	09/04/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	197.68	11/13/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	197.68	03/13/08	9.72	0.00	187.96	1.40	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-4	197.68	06/09/08	9.55	0.00	188.13	1.12	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-4	197.68	08/06/08	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS, b
MW-4	197.68	10/08/08	10.31	0.00	187.37	2.6	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-5	198.21	03/12/02	8.82	0.00	189.39	0.7	7,210	3,770	2,670	9,070	233	NA	NA	52,100	NA	NA	124	<1.00	P
MW-5	198.21	08/30/02	11.20	0.00	187.01	0.1	15,400	2,200	1,590	7,160	478	<0.01	<100	55,200	NA	NA	144	<1.00	P
MW-5	198.21	03/24/03	8.70	0.00	189.51	0.8	19,900	282	331	1,230	1,540	NA	NA	48,400	NA	NA	14.2	<1.00	P
MW-5	198.21	04/22/03	9.52	0.00	188.69	0.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	198.21	06/30/03	10.87	0.00	187.34	0.5	17,900	1,500	1,110	4,070	571	NA	NA	62,900	NA	NA	63.9	8.35	P
MW-5	198.21	09/15/03	11.60	0.00	186.61	0.9	19,300	554	1,250	4,640	520	NA	NA	61,600	NA	NA	9.75	<1.00	P
MW-5	198.21	12/30/03	9.70	0.00	188.51	0.7	12,500	1,630	1,910	7,180	307	NA	NA	52,600	NA	NA	9.85	<1.00	P
MW-5	198.21	07/13/04	10.83	0.00	187.38	0.4	6,090	3,230	2,680	10,500	<100	NA	NA	41,800	NA	NA	2.82	<1.00	P
MW-5	198.21	11/01/04	8.39	0.00	189.82	4.1	3,630	<10.0	26.0	139	925	NA	NA	6,090	NA	NA	<1.00	NA	NP
MW-5	198.21	03/03/05	10.83	0.00	187.38	7.4	1.80	<2.50	<2.50	<5.00	835	NA	NA	<80.0	NA	NA	<1	NA	NP
MW-5	198.21	06/12/05	10.30	0.00	187.91	1.0	129	0.820	33.1	289	196	NA	NA	1,110	NA	NA	<1.00	NA	NP
MW-5	198.21	08/28/05	11.30	0.00	186.91	0.8	116	<0.500	112	53.5	148	NA	NA	1,330	NA	NA	<1.00	NA	NP
MW-5	198.21	11/17/05	10.03	0.00	188.18	2.1	1.21	<2.50	<2.50	<5.00	161	NA	NA	<50.0	NA	NA	4.63	NA	NP
MW-5	198.21	03/05/06	9.23	0.00	188.98	1.4	8.54	<0.500	11.4	2.66	115	NA	NA	143	NA	NA	<1.00	NA	NP
MW-5	198.21	10/24/06	14.30	0.00	183.91	1.7	1.43	<0.500	<0.500	<3.00	91.8	NA	NA	104	NA	NA	NA	NA	P
MW-5	198.21	03/22/07	8.76	0.00	189.45	2.63	3.25	<0.500	<0.500	<3.00	79.0	NA	NA	<50.0	NA	NA	NA	NA	P
MW-5	198.21	05/30/07	10.19	0.00	188.02	0.15	2,220	6.83	1,210	969	57.6	NA	NA	3,080	NA	NA	NA	NA	P
MW-5	198.21	09/04/07	10.46	0.00	187.75	1.05	255	<0.500	8.34	4.99	16.0	NA	NA	1,180	NA	NA	NA	NA	P
MW-5	198.21	11/13/07	10.73	0.00	187.48	1.67	9.92	<0.500	<0.500	<3.00	17.4	NA	NA	225	NA	NA	NA	NA	P
MW-5	198.21	03/12/08	9.37	0.00	188.84	2.53	45.4	0.5	4.54	34.0	<1.00	NA	NA	511	NA	NA	NA	NA	NP
MW-5	198.21	06/09/08	8.27	0.00	189.94	2.22	4.18	17.9	3.09	66.7	<1.00	NA	NA	243	NA	NA	NA	NA	NP
MW-5	198.21	08/06/08	10.74	0.00	187.47	1.02	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-5	198.21	10/08/08	10.80	0.00	187.41	1.2	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-6	198.24	03/12/02	8.90	0.00	189.34	0.3	49,800	27,600	2,650	12,300	6,840	NA	NA	187,000	NA	NA	176	<1.00	P
MW-6	198.24	08/30/02	11.11	<0.02	187.13	0.0	36,900	6,910	1,410	6,770	1,230	<0.01	<200	105,000	NA	NA	157	<1.00	P
MW-6	198.24	03/24/03	8.60	0.00	189.64	0.8	26,800	7,090	1,690	7,780	2,480	NA	NA	101,000	NA	NA	19.7	<1.00	P
MW-6	198.24	04/22/03	9.33	0.00	188.91	0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	198.24	06/30/03	10.35	0.00	187.89	0.5	18,700	4,610	990	4,030	860	NA	NA	61,700	NA	NA	46.7	2.27	P
MW-6	198.24	09/15/03	11.50	0.00	186.74	0.7	29,000	8,690	1,720	7,310	1,390	NA	NA	109,000	NA	NA	12.6	<1.00	P
MW-6	198.24	12/30/03	9.60	0.20	188.80	NM	45,200	64,400	6,030	31,300	1,960	NA	NA	333,000	NA	NA	1.85	<1.00	P
MW-6	198.24	07/13/04	10.27	0.08	188.03	NM	52,500	98,600	8,300	43,600	3,620	NA	NA	513,000	NA	NA	<1.00	<1.00	NP
MW-6	198.24	11/01/04	10.32	0.00	187.92	6.8	29.6	10.4	<5.00	16.5	947	NA	NA	123	NA	NA	<1.00	NA	NP

TABLE 1
SUMMARY OF GROUND WATER DATA
FORMER ARCO FACILITY NO. 5544
19860 68TH AVENUE SOUTH
KENT, WASHINGTON

Well	TOC (feet)	Date Sampled	Depth to Water (feet)	LPH Thickness (feet)	GW Elevation (feet)	Dissolved Oxygen (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	1,2 Dibromo ethane (µg/L)	1,2 Dichloro ethane (µg/L)	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	Comments
MW-6	198.24	03/03/05	13.23	0.00	185.01	9.8	<0.400	<1.00	<1.00	<2.00	227	NA	NA	<80.0	NA	NA	<1	NA	NP
MW-6	198.24	06/12/05	10.17	0.00	188.07	0.3	431	919	978	4,170	349	NA	NA	7,780	NA	NA	<1.00	NA	NP
MW-6	198.24	08/28/05	11.26	0.00	186.98	0.8	760	207	385	1,660	579	NA	NA	10,400	NA	NA	<1.00	NA	NP
MW-6	198.24	11/17/05	10.93	0.00	187.31	4.7	0.6	<0.500	<0.500	<1.00	139	NA	NA	<50.0	NA	NA	<1.00	NA	NP
MW-6	198.24	03/05/06	9.22	0.00	189.02	6.4	<0.500	8.16	2.94	54.5	107	NA	NA	304	NA	NA	<1.00	NA	NP
MW-6	198.24	10/24/06	11.21	0.00	187.03	0.8	570	14.2	608	1,730	1,020	NA	NA	11,800	NA	NA	NA	NA	P
MW-6	198.24	03/22/07	8.55	0.00	189.69	2.95	1,100	2,380	2,400	16,300	961	NA	NA	41,500	NA	NA	NA	NA	P
MW-6	198.24	05/30/07	9.90	0.00	188.34	3.06	1,260	921	1,990	15,100	307	NA	NA	62,700	NA	NA	NA	NA	P
MW-6	198.24	09/04/07	10.41	0.00	187.83	1.40	1,350	2,500	3,480	14,900	<100	NA	NA	91,800	NA	NA	NA	NA	P
MW-6	198.24	11/13/07	10.54	0.00	187.70	6.06	196	<0.500	366	76.8	1,300	NA	NA	5,380	NA	NA	NA	NA	P
MW-6	198.24	03/12/08	9.45	0.00	188.79	1.57	1,030	2,270	2,470	17,100	555	NA	NA	85,300	NA	NA	NA	NA	NP
MW-6	198.24	06/09/08	7.99	0.00	190.25	1.48	238	NA	1,580	164	<1.00	NA	NA	139,000	NA	NA	NA	NA	NP
MW-6	198.24	08/06/08	10.56	0.00	187.68	0.94	678	34.0	2,350	18,900	22.9	NA	NA	69,700	NA	NA	NA	NA	NP
MW-6	198.24	10/08/08	10.58	0.00	187.66	2.8	470	24.7	1,130	12,500	95.0	NA	NA	68,900	NA	NA	NA	NA	NP
MW-7	197.32	04/22/03	9.24	0.00	188.08	2.7	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	15.8	NA	P
MW-7	197.32	06/30/03	10.33	0.00	186.99	3.0	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	25.0	7.06	P
MW-7	197.32	09/15/03	10.82	0.00	186.50	1.7	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	14.4	<1.00	P
MW-7	197.32	12/30/03	9.31	0.00	188.01	3.1	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	1.35	<1.00	P
MW-7	197.32	07/13/04	10.38	0.00	186.94	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	197.32	11/01/04	10.20	0.00	187.12	4.3	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	<1.00	NA	NP
MW-7	197.32	03/03/05	9.80	0.00	187.52	5.1	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	<1	NA	NP
MW-7	197.32	06/12/05	9.49	0.00	187.83	0.8	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	1.38	NA	NP
MW-7	197.32	08/28/05	10.63	0.00	186.69	1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	197.32	11/17/05	9.54	0.00	187.78	1.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	197.32	03/05/06	8.96	0.00	188.36	5.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	197.32	10/24/06	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	197.32	03/22/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	197.32	05/30/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	197.32	09/04/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	197.32	11/13/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	197.32	03/12/08	9.42	0.00	187.90	2.53	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-7	197.32	06/09/08	9.29	0.00	188.03	2.92	<0.500	3.18	1.67	32.5	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-7	197.32	08/06/08	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	197.32	10/08/08	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	196.68	04/22/03	8.45	0.00	188.23	0.3	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	14.7	NA	P
MW-8	196.68	06/30/03	9.61	0.00	187.07	0.5	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	12.8	4.24	P
MW-8	196.68	09/15/03	10.20	0.00	186.48	1.0	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	16.9	<1.00	P
MW-8	196.68	12/30/03	8.60	0.00	188.08	1.4	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	1.53	<1.00	P
MW-8	196.68	07/13/04	9.56	0.00	187.12	0.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	196.68	11/01/04	9.45	0.00	187.23	2.8	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	<1.00	NA	NP
MW-8	196.68	03/03/05	8.94	0.00	187.74	2.8	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	<1	NA	NP

TABLE 1
SUMMARY OF GROUND WATER DATA
FORMER ARCO FACILITY NO. 5544
19860 68TH AVENUE SOUTH
KENT, WASHINGTON

Well	TOC (feet)	Date Sampled	Depth to Water (feet)	LPH Thickness (feet)	GW Elevation (feet)	Dissolved Oxygen (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	1,2 Dibromo ethane (µg/L)	1,2 Dichloro ethane (µg/L)	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	Comments
MW-8	196.68	06/12/05	8.81	0.00	187.87	4.0	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	<1.00	NA	NP
MW-8	196.68	08/28/05	9.97	0.00	186.71	1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	196.68	11/17/05	8.85	0.00	187.83	4.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	196.68	03/05/06	8.16	0.00	188.52	2.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	196.68	10/24/06	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	196.68	03/22/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	196.68	05/30/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	196.68	09/04/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	196.68	11/13/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	196.68	03/12/08	8.68	0.00	188.00	4.45	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-8	196.68	06/09/08	8.51	0.00	188.17	4.19	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-8	196.68	08/06/08	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	196.68	10/08/08	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	197.42	04/22/03	8.77	0.00	188.65	0.3	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	17.2	NA	P
MW-9	197.42	06/30/03	10.25	0.00	187.17	0.7	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	47.3	4.67	P
MW-9	197.42	09/15/03	10.83	0.00	186.59	1.2	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	12.9	<1.00	P
MW-9	197.42	12/30/03	8.99	0.00	188.43	0.9	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	17.9	<1.00	P
MW-9	197.42	07/13/04	10.08	0.00	187.34	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	197.42	11/01/04	9.75	0.00	187.67	2.4	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	1.79	NA	NP
MW-9	197.42	03/03/05	8.98	0.00	188.44	1.7	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	<1	NA	NP
MW-9	197.42	06/12/05	9.49	0.00	187.93	0.4	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	<1.00	NA	NP
MW-9	197.42	08/28/05	10.59	0.00	186.83	1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	197.42	11/17/05	9.52	0.00	187.90	1.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	197.42	03/05/06	8.55	0.00	188.87	1.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	197.42	10/24/06	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	197.42	03/22/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	197.42	05/30/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	197.42	09/04/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	197.42	11/13/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	197.42	03/12/08	9.20	0.00	188.22	1.04	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-9	197.42	06/09/08	8.91	0.00	188.51	2.25	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-9	197.42	08/06/08	10.18	0.00	187.24	1.24	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-9	197.42	10/08/08	10.10	0.00	187.32	2.3	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-10	197.70	04/22/03	8.59	0.00	189.11	0.3	30.9	<0.500	<0.500	28.5	<2.00	NA	NA	278	NA	NA	5.92	NA	P, a
MW-10	197.70	06/30/03	10.48	0.00	187.22	0.9	38.0	<0.500	0.535	5.73	<5.00	NA	NA	195	NA	NA	19.8	11.7	P
MW-10	197.70	09/15/03	10.93	0.00	186.77	1.1	42.0	0.500	<0.500	4.18	<1.00	NA	NA	154	NA	NA	7.69	<1.00	P, a
MW-10	197.70	12/30/03	8.81	0.00	188.89	0.7	39.3	<0.500	<0.500	24.6	<1.00	NA	NA	312	NA	NA	8.78	<1.00	P, a
MW-10	197.70	07/13/04	10.35	0.00	187.35	0.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	197.70	11/01/04	8.55	0.00	189.15	3.25	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	<1.00	NA	NP
MW-10	197.70	03/03/05	9.40	0.00	188.30	3.5	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	<1	NA	NP
MW-10	197.70	06/12/05	9.59	0.00	188.11	1.8	<0.200	<0.500	<0.500	<1.00	<2.00	NA	NA	<80.0	NA	NA	<1.00	NA	NP

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19860 68TH AVENUE SOUTH
KENT, WASHINGTON

Well	TOC (feet)	Date Sampled	Depth to Water (feet)	LPH Thickness (feet)	GW Elevation (feet)	Dissolved Oxygen (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	1,2 Dibromo ethane (µg/L)	1,2 Dichloro ethane (µg/L)	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	Comments
MW-10	197.70	08/28/05	10.75	0.00	186.95	0.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	197.70	11/17/05	9.79	0.00	187.91	1.3	<0.500	<0.500	<0.500	<1.00	<1.00	NA	NA	<50.0	NA	NA	<1.00	NA	NP
MW-10	197.70	03/05/06	8.40	0.00	189.30	2.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	197.70	10/24/06	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	197.70	03/22/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	197.70	05/30/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	197.70	09/04/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	197.70	11/13/07	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	197.70	03/12/08	9.11	0.00	188.59	2.05	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-10	197.70	06/09/08	8.55	0.00	189.15	1.53	<0.500	<0.500	<0.500	<3.00	<1.00	NA	NA	<50.0	NA	NA	NA	NA	NP
MW-10	197.70	08/06/08	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	197.70	10/08/08	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes: Benzene, toluene, ethylbenzene, total xylenes, and methyl tert-butyl ether (MTBE) analyzed by EPA Method 8021B or EPA Method 8260B. Samples with MTBE detections above the laboratory method reporting limit using 821B were re-analyzed using 8260B to confirm the MTBE concentration. Analyses on 11/01/04 utilized EPA Method 8260B.

1,2-Dibromoethane (EDB) analyzed by EPA Method 8011.

1,2-Dichloroethane (EDC) analyzed by EPA Method 8260B.

TPH-G = Gasoline-range hydrocarbons analyzed by the Northwest method NWTPH-Gx.

TPH-D = Diesel-range hydrocarbons analyzed by the Northwest method NWTPH-Dx.

TPH-O = Oil-range hydrocarbons analyzed by the Northwest method NWTPH-Dx.

Total and dissolved lead analyzed by EPA Method 6020.

mg/L = Milligrams per liter.

ug/L = Micrograms per liter.

P = purge sampling methods were utilized.

NP = Non-purge sampling methods were used.

NA = Not analyzed.

NM = Not measured

NS = Not sampled.

LPH = Liquid Phase Hydrocarbons.

<1.00 = Concentrations were not detected above the stated reporting limit.

TOC = Top of Casing Elevation referenced to an arbitrary vertical datum.

a = MTBE false positive detected by Method 8021B and confirmed below method detection limits by Method 8260B.

b = Well inaccessible.

GW elevation = Ground Water elevation as calculated by TOC elevation - depth to water + (0.8 x LPH thickness).

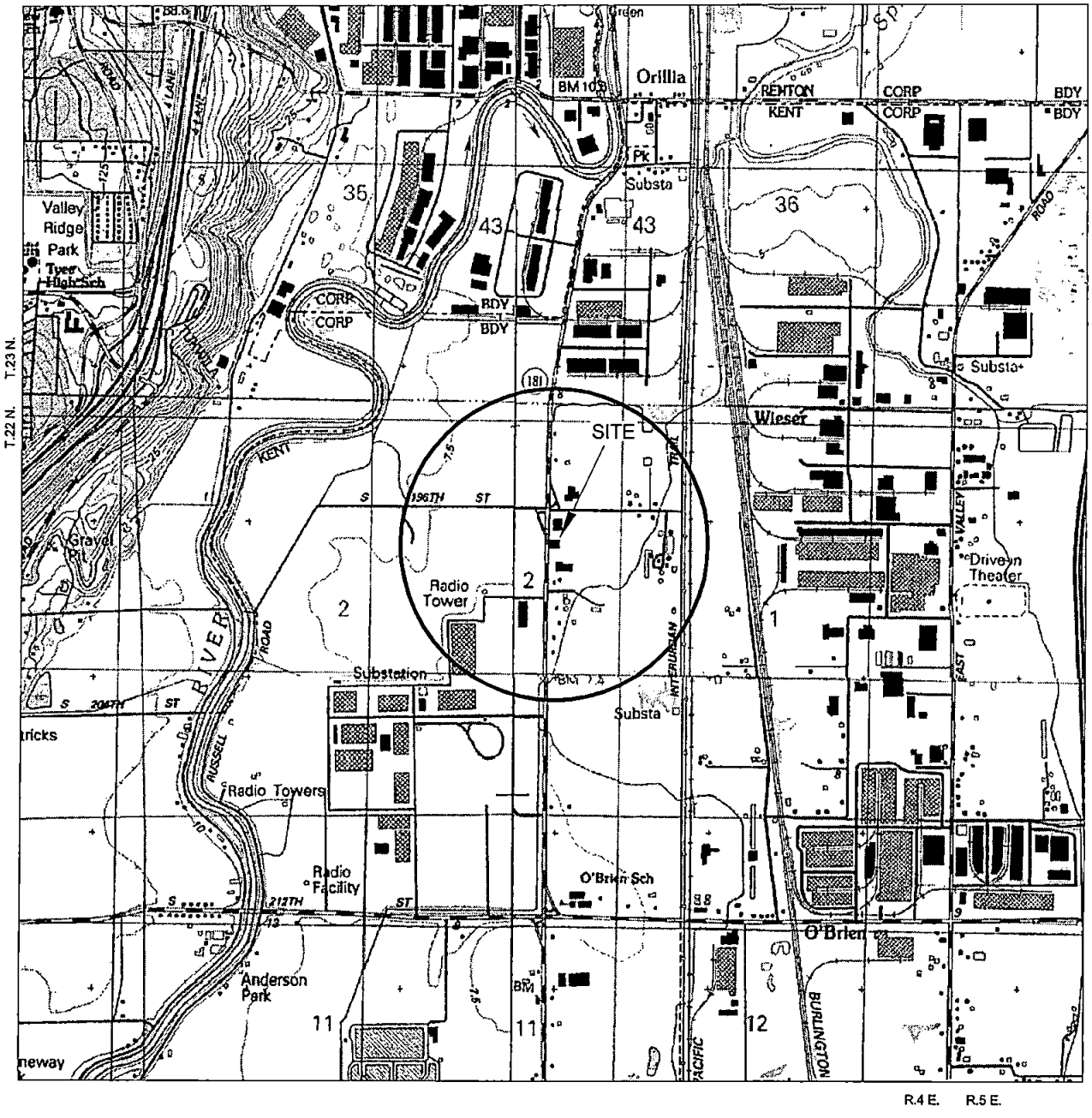
Sampling Frequency:

1Q 2009: MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10

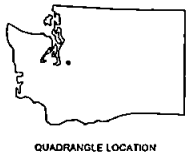
2Q 2009: MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10

3Q 2009: MW-2, MW-3, MW-4, MW-5, MW-6, MW-9

4Q 2009: MW-2, MW-3, MW-4, MW-5, MW-6, MW-9



GENERAL NOTES:
BASE MAP FROM U.S.G.S.
BURIEN & RENTON, WA.
7.5x15 MINUTE TOPOGRAPHIC
DATED 1983



SCALE 1:25,000

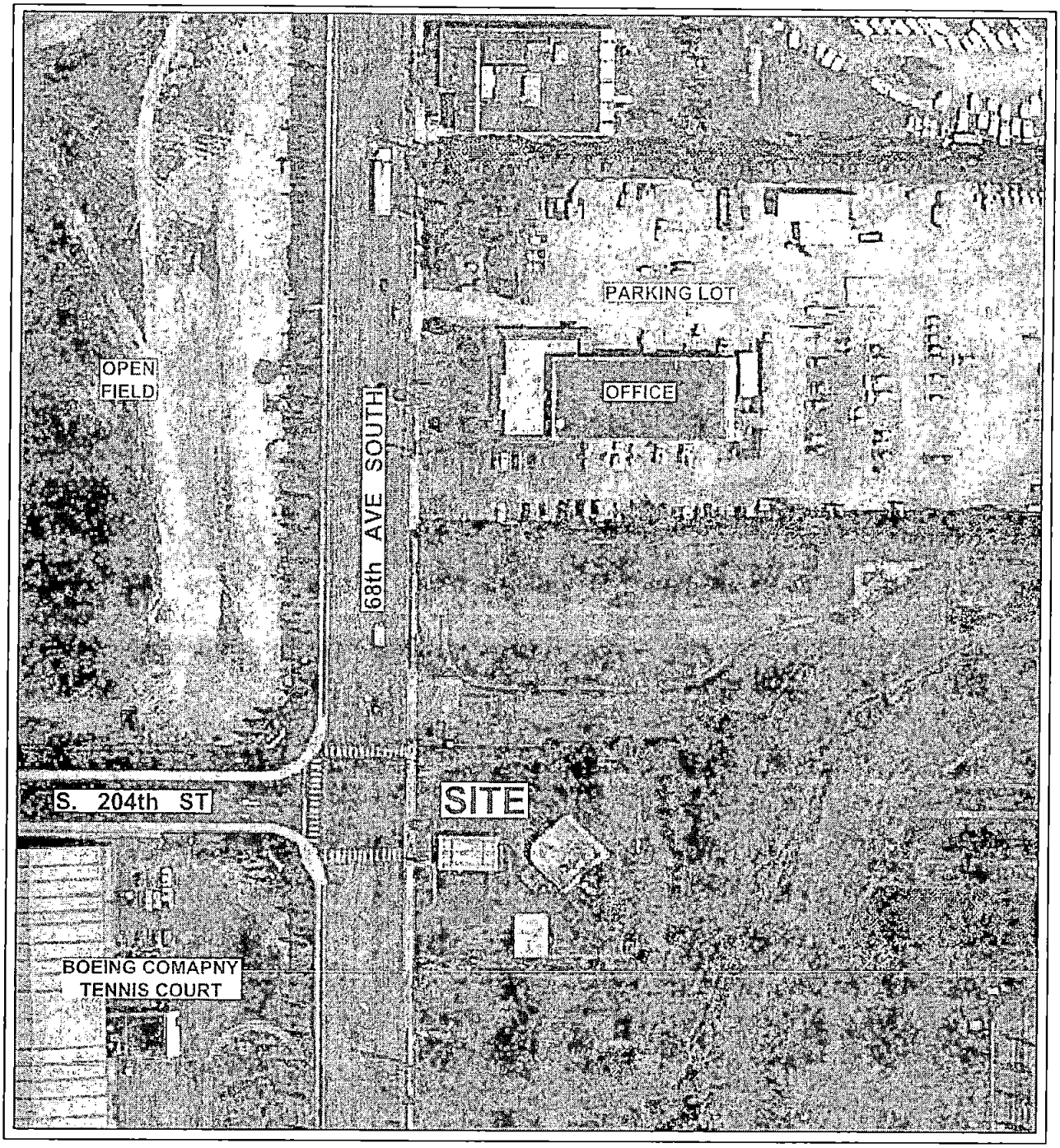
FIGURE 1

SITE LOCATION MAP

FORMER ARCO FACILITY NO. 5544
19860 68th AVENUE S.
KENT, WA.

PROJECT NO. 5544-M02	DRAWN BY M.L. 11/19/01
FILE NO. 5544 Topo	PREPARED BY K.R.
REVISION NO. 1	REVIEWED BY

DELTA



GENERAL NOTES:
AERIAL PHOTOGRAPH
DATED 6/13/02

N

0 150 FT

SCALE

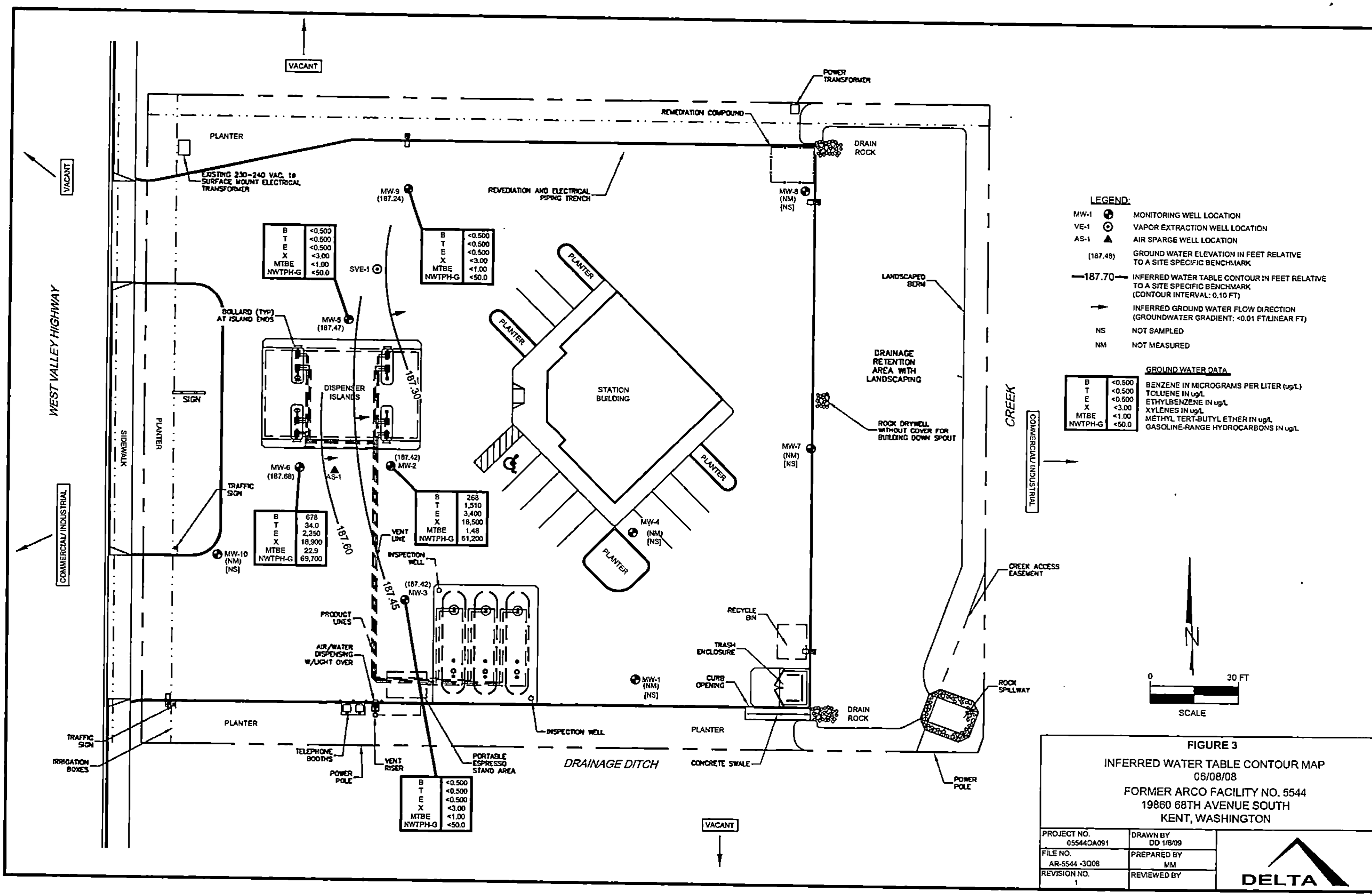
FIGURE 2

SITE AERIAL MAP

FORMER ARCO FACILITY NO. 5544
19860 68th AVENUE SOUTH
KENT, WA.

PROJECT NO. 5544OA091	DRAWN BY KYM 3/02/09
FILE NO. 5544-SAM	PREPARED BY SBM
REVISION NO. 1	REVIEWED BY

DELTA


VACANT
VACANT
WEST VALLEY HIGHWAY
COMMERCIAL/INDUSTRIAL
SIDEWALK
PLANTER
SIGN
TRAFFIC SIGN
IRRIGATION BOXES
EXISTING 230-240 VAC, 1ø SURFACE MOUNT ELECTRICAL TRANSFORMER
REMEDIATION COMPOUND
POWER TRANSFORMER
REMEDIATION AND ELECTRICAL PIPING TRENCH
DRAIN ROCK
MW-9 (187.24)
MW-8 (NM) [NS]
SVE-1
MW-5 (187.47)
BOLLARD (TYP) AT ISLAND ENDS
DISPENSER ISLANDS
STATION BUILDING
187.30
MW-6 (187.68)
AS-1
(187.42) MW-2
187.60
MW-10 (NM) [NS]
VENT LINE
INSPECTION WELL
187.45
(187.42) MW-3
PRODUCT LINES
AIR/WATER DISPENSING W/LIGHT OVER
TELEPHONE BOOTHS
POWER POLE
VENT RISER
PORTABLE ESPRESSO STAND AREA
INSPECTION WELL
DRAINAGE DITCH
CONCRETE SWALE
CURB OPENING
TRASH ENCLOSURE
RECYCLE BIN
MW-1 (NM) [NS]
MW-4 (NM) [NS]
MW-7 (NM) [NS]
LANDSCAPED BERM
DRAINAGE RETENTION AREA WITH LANDSCAPING
ROCK DRYWELL WITHOUT COVER FOR BUILDING DOWN SPOUT
CREEK
COMMERCIAL/INDUSTRIAL
CREEK ACCESS EASEMENT
ROCK SPILLWAY
POWER POLE
MW-5: B <0.500, T <0.500, E <0.500, X <3.00, MTBE <1.00, NWTPH-G <50.0
MW-9: B <0.500, T <0.500, E <0.500, X <3.00, MTBE <1.00, NWTPH-G <50.0
MW-6: B 678, T 34.0, E 2,350, X 18,900, MTBE 22.9, NWTPH-G 69,700
MW-2: B 268, T 1,510, E 3,400, X 16,500, MTBE 1.48, NWTPH-G 61,200
MW-3: B <0.500, T <0.500, E <0.500, X <3.00, MTBE <1.00, NWTPH-G <50.0
LEGEND:
MW-1 MONITORING WELL LOCATION
VE-1 VAPOR EXTRACTION WELL LOCATION
AS-1 AIR SPARGE WELL LOCATION
(187.48) GROUND WATER ELEVATION IN FEET RELATIVE TO A SITE SPECIFIC BENCHMARK
187.70 INFERRED WATER TABLE CONTOUR IN FEET RELATIVE TO A SITE SPECIFIC BENCHMARK (CONTOUR INTERVAL: 0.10 FT)
INFERRED GROUND WATER FLOW DIRECTION (GROUNDWATER GRADIENT: <0.01 FT/LINEAR FT)
NS NOT SAMPLED
NM NOT MEASURED
GROUND WATER DATA
B <0.500 BENZENE IN MICROGRAMS PER LITER (ug/L)
T <0.500 TOLUENE IN ug/L
E <0.500 ETHYLBENZENE IN ug/L
X <3.00 XYLENES IN ug/L
MTBE <1.00 METHYL TERT-BUTYL ETHER IN ug/L
NWTPH-G <50.0 GASOLINE-RANGE HYDROCARBONS IN ug/L
N
0 30 FT
SCALE
FIGURE 3
INFERRED WATER TABLE CONTOUR MAP
06/08/08
FORMER ARCO FACILITY NO. 5544
19860 68TH AVENUE SOUTH
KENT, WASHINGTON
PROJECT NO. 05544DA091
DRAWN BY DD 1/6/09
FILE NO. AR-5544 -3Q08
PREPARED BY MM
REVISION NO. 1
REVIEWED BY
DELTA

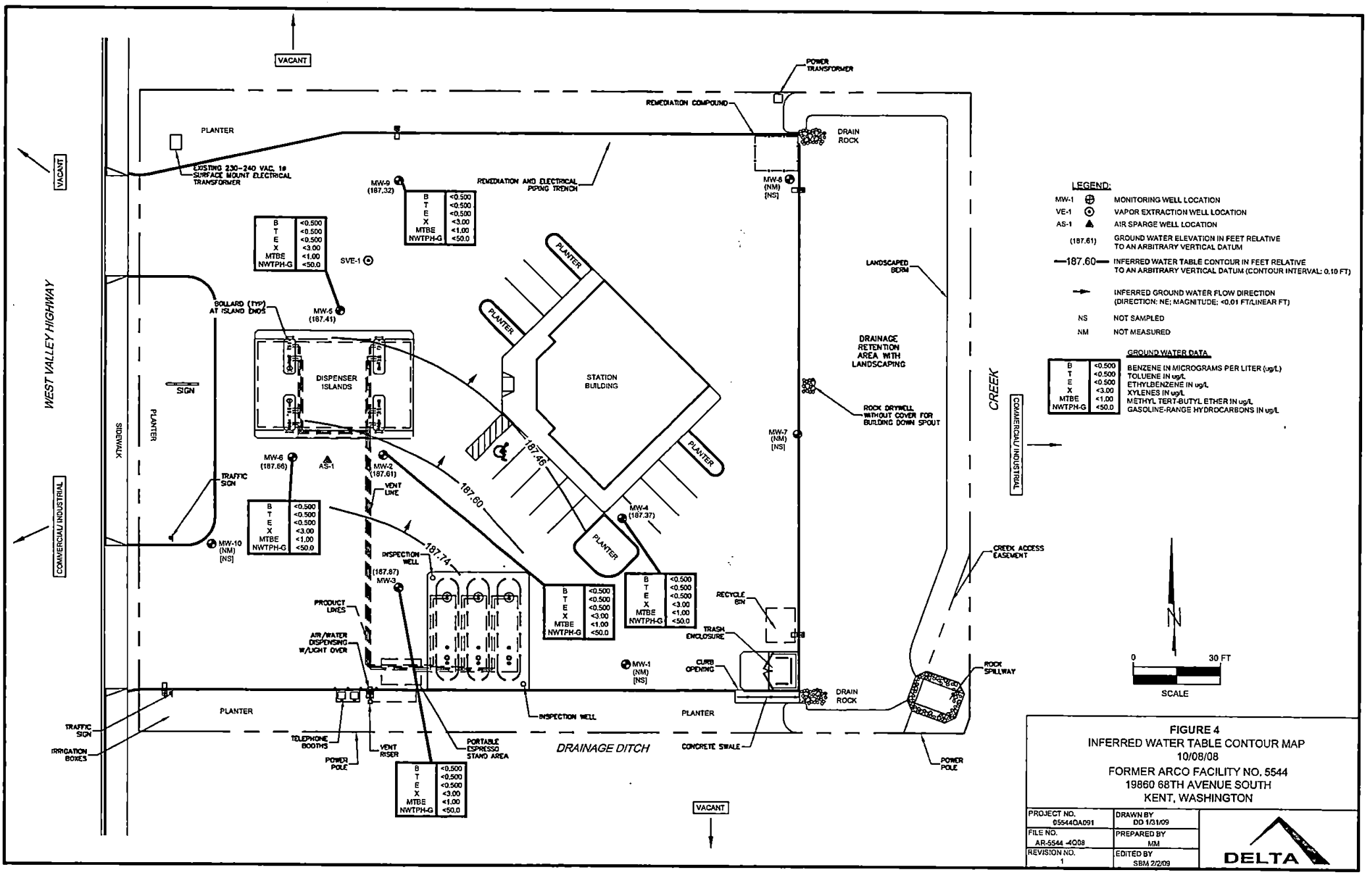


FIGURE 4
INFERRED WATER TABLE CONTOUR MAP
10/08/08
FORMER ARCO FACILITY NO. 5544
19860 68TH AVENUE SOUTH
KENT, WASHINGTON

PROJECT NO. 05544DA091	DRAWN BY DD 1/31/09
FILE NO. AR-5544 -4Q08	PREPARED BY MM
REVISION NO. 1	EDITED BY SBM 2/2/09

DELTA

Figure 5
MW-2 Hydrocarbon Concentrations and Water Elevations vs. Time
Former ARCO Facility No. 5544

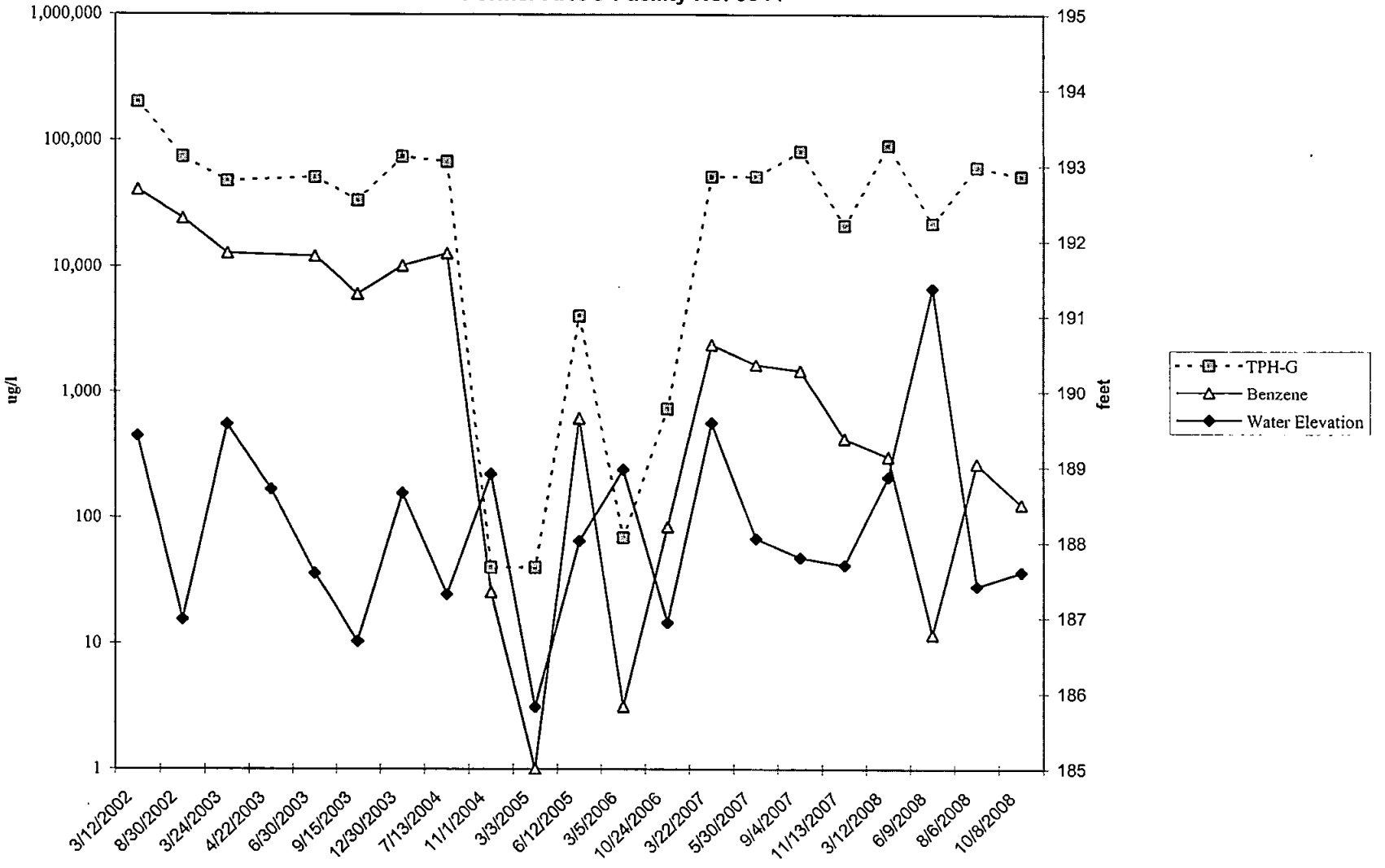


Figure 6
MW-5 Hydrocarbon Concentrations and Water Elevations vs. Time
Former ARCO Facility No. 5544

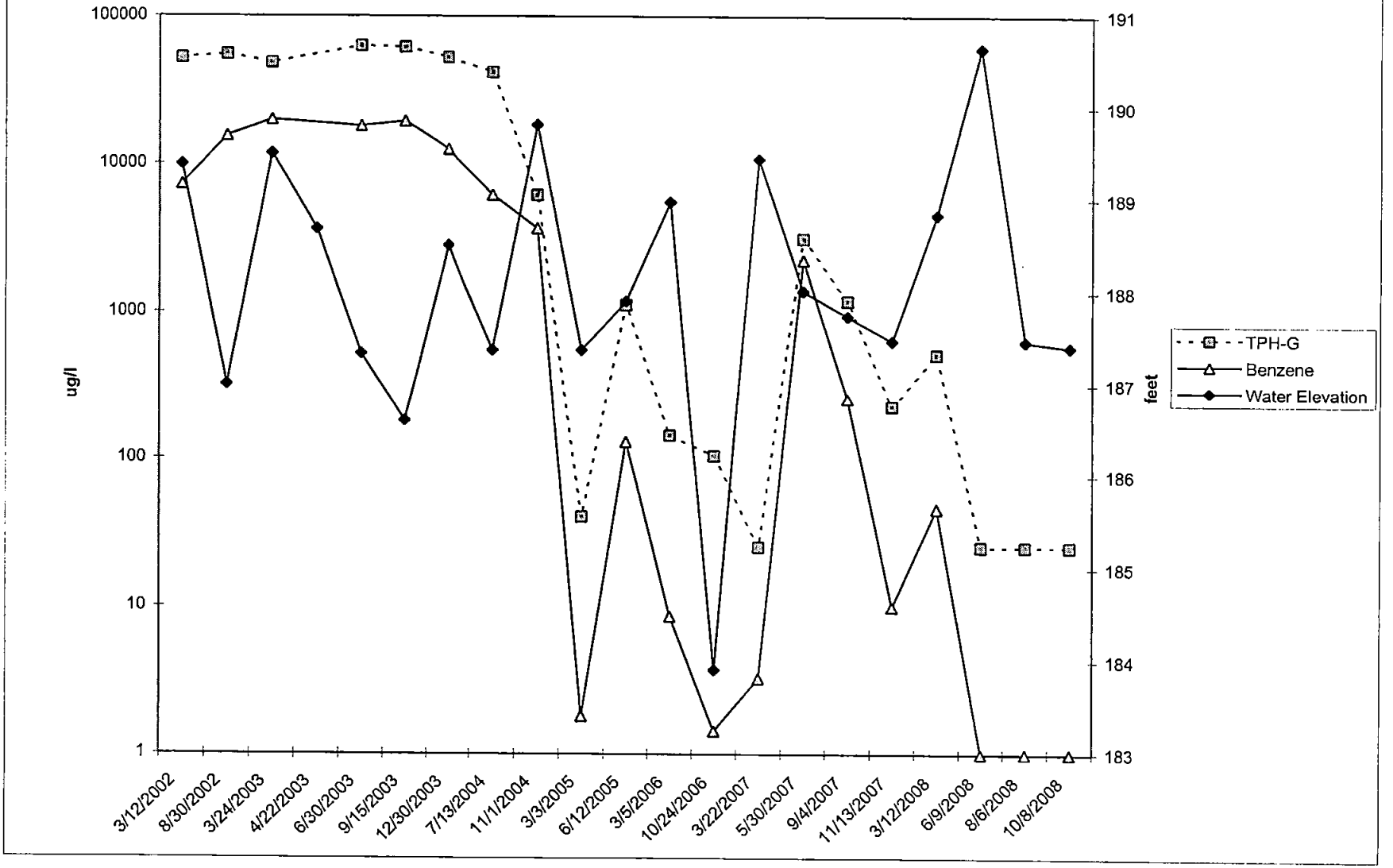
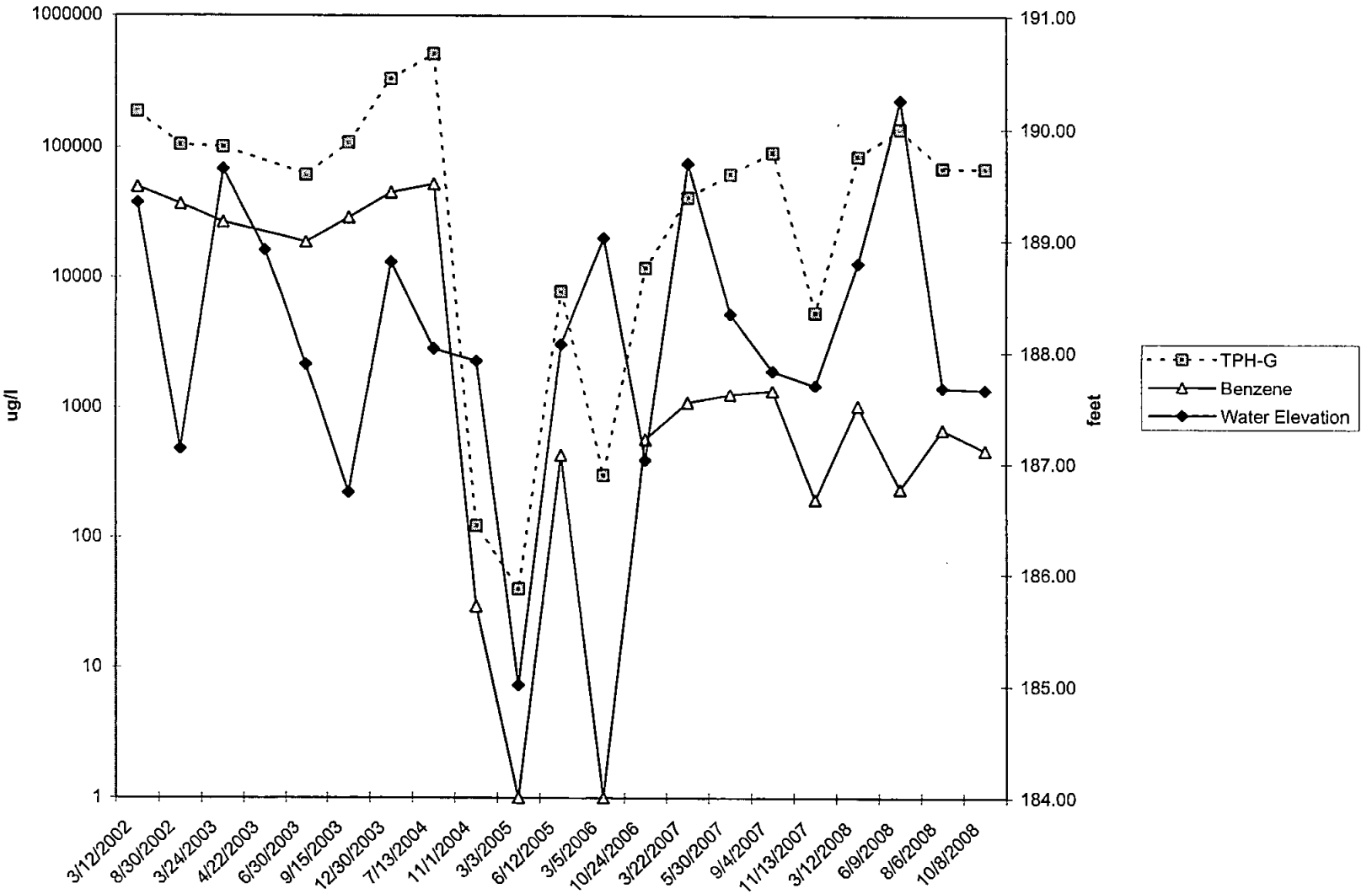


Figure 7
MW-6 Hydrocarbon Concentrations and Water Elevations vs. Time
Former ARCO Facility No. 5544



TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

August 18, 2008

Mike Lange
SAIC - Bothell
18912 North Creek Parkway South, Suite 101
Bothell, WA/USA 98011

RE: ARCO #5544

Enclosed are the results of analyses for samples received by the laboratory on 08/06/08 13:40. The following list is a summary of the Work Orders contained in this report, generated on 08/18/08 10:20.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
BRH0068	ARCO #5544	G0BKK-0013

TestAmerica Seattle

Sandra Yakamavich

Sandra Yakamavich, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

SAIC - Bothell	Project Name:	**ARCO #5544**	
18912 North Creek Parkway South, Suite 101	Project Number:	G0BKK-0013	Report Created:
Bothell, WA/USA 98011	Project Manager:	Mike Lange	08/18/08 10:20

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-2-10.60	BRH0068-01	Water	08/06/08 11:35	08/06/08 13:40
MW-3-10.07	BRH0068-02	Water	08/06/08 11:20	08/06/08 13:40
MW-5-10.74	BRH0068-03	Water	08/06/08 12:00	08/06/08 13:40
MW-6-10.56	BRH0068-04	Water	08/06/08 11:45	08/06/08 13:40
MW-9-10.18	BRH0068-05	Water	08/06/08 12:20	08/06/08 13:40
TB-1-08062008	BRH0068-06	Water	08/06/08 06:00	08/06/08 13:40

TestAmerica Seattle

Sandra Yakamavich

Sandra Yakamavich, Project Manager

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BOTHELL, WA 98011-8244
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SAIC - Bothell	Project Name:	ARCO #5544	
18912 North Creek Parkway South, Suite 101	Project Number:	G0BKK-0013	Report Created:
Bothell, WA/USA 98011	Project Manager:	Mike Lange	08/18/08 10:20

Volatile Petroleum Products by NWTPH-Gx

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRH0068-01 (MW-2-10.60)			Water		Sampled: 08/06/08 11:35					
Gasoline Range Hydrocarbons	NWTPH-Gx	**61200**	-----	1000	ug/l	20x	8H08022	08/08/08 10:53	08/09/08 09:09	
Surrogate(s): 4-BFB (FID)			*111%*		*58 - 144 %*	*1x*			"	
BRH0068-02 (MW-3-10.07)			Water		Sampled: 08/06/08 11:20					
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	-----	50.0	ug/l	1x	8H08022	08/08/08 10:53	08/08/08 18:29	
Surrogate(s): 4-BFB (FID)			*84.2%*		*58 - 144 %*	"			"	
BRH0068-03 (MW-5-10.74)			Water		Sampled: 08/06/08 12:00					
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	-----	50.0	ug/l	1x	8H08022	08/08/08 10:53	08/09/08 07:31	
Surrogate(s): 4-BFB (FID)			*85.9%*		*58 - 144 %*	"			"	
BRH0068-04 (MW-6-10.56)			Water		Sampled: 08/06/08 11:45					
Gasoline Range Hydrocarbons	NWTPH-Gx	**69700**	-----	5000	ug/l	100x	8H08022	08/08/08 10:53	08/09/08 09:42	
Surrogate(s): 4-BFB (FID)			*90.4%*		*58 - 144 %*	*1x*			"	
BRH0068-05 (MW-9-10.18)			Water		Sampled: 08/06/08 12:20					
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	-----	50.0	ug/l	1x	8H08022	08/08/08 10:53	08/08/08 19:34	
Surrogate(s): 4-BFB (FID)			*82.8%*		*58 - 144 %*	"			"	
BRH0068-06 (TB-1-08062008)			Water		Sampled: 08/06/08 06:00					
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	-----	50.0	ug/l	1x	8H08022	08/08/08 10:53	08/08/08 23:22	
Surrogate(s): 4-BFB (FID)			*84.3%*		*58 - 144 %*	"			"	

TestAmerica Seattle

Sandra Yakamavich

Sandra Yakamavich, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

SAIC - Bothell	Project Name:	ARCO #5544	
18912 North Creek Parkway South, Suite 101	Project Number:	G0BKK-0013	Report Created:
Bothell, WA/USA 98011	Project Manager:	Mike Lange	08/18/08 10:20

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRH0068-01 (MW-2-10.60)		**Water**			**Sampled: 08/06/08 11:35**					
Methyl tert-butyl ether	EPA 8260B	**1.48**	-----	1.00	ug/l	1x	8H13019	08/13/08 11:19	08/13/08 18:53	
Surrogate(s): 1,2-DCA-d4			*98.0%*		*70 - 130 %*	"			"	
Toluene-d8			*111%*		*75 - 125 %*	"			"	
4-BFB			*407%*		*75 - 125 %*	"			"	*ZX*
BRH0068-01RE1 (MW-2-10.60)		**Water**			**Sampled: 08/06/08 11:35**					
Benzene	EPA 8260B	**268**	-----	40.0	ug/l	80x	8H14052	08/14/08 08:00	08/14/08 21:12	
Ethylbenzene	"	**3400**	-----	40.0	"	"	"	"	"	
Toluene	"	**1510**	-----	40.0	"	"	"	"	"	
Total Xylenes	"	**16500**	-----	240	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4			*97.8%*		*70 - 130 %*	*1x*			"	
Toluene-d8			*103%*		*75 - 125 %*	"			"	
4-BFB			*101%*		*75 - 125 %*	"			"	
BRH0068-02 (MW-3-10.07)		**Water**			**Sampled: 08/06/08 11:20**					
Benzene	EPA 8260B	ND	-----	0.500	ug/l	1x	8H13019	08/13/08 11:19	08/13/08 17:36	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Total Xylenes	"	ND	-----	3.00	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4			*95.5%*		*70 - 130 %*	"			"	
Toluene-d8			*101%*		*75 - 125 %*	"			"	
4-BFB			*95.9%*		*75 - 125 %*	"			"	
BRH0068-03 (MW-5-10.74)		**Water**			**Sampled: 08/06/08 12:00**					
Benzene	EPA 8260B	ND	-----	0.500	ug/l	1x	8H13019	08/13/08 11:19	08/13/08 18:01	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Total Xylenes	"	ND	-----	3.00	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4			*97.6%*		*70 - 130 %*	"			"	
Toluene-d8			*100%*		*75 - 125 %*	"			"	
4-BFB			*96.2%*		*75 - 125 %*	"			"	

TestAmerica Seattle

Sandra Yakamavich

Sandra Yakamavich, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

SAIC - Bothell	Project Name:	ARCO #5544
18912 North Creek Parkway South, Suite 101	Project Number:	G0BKK-0013
Bothell, WA/USA 98011	Project Manager:	Mike Lange
		Report Created: 08/18/08 10:20

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRH0068-04 (MW-6-10.56)		Water			Sampled: 08/06/08 11:45					
Methyl tert-butyl ether	EPA 8260B	22.9	-----	1.00	ug/l	1x	8H13019	08/13/08 11:19	08/13/08 19:18	
Surrogate(s): 1,2-DCA-d4			*92.8%*		*70 - 130 %*	"			"	
Toluene-d8			*113%*		*75 - 125 %*	"			"	
4-BFB			*427%*		*75 - 125 %*	"			"	*ZX*
BRH0068-04RE1 (MW-6-10.56)		Water			Sampled: 08/06/08 11:45					
Toluene	EPA 8260B	34.0	-----	0.500	ug/l	1x	8H14052	08/14/08 08:00	08/15/08 03:00	
Surrogate(s): 1,2-DCA-d4			*104%*		*70 - 130 %*	"			"	
Toluene-d8			*101%*		*75 - 125 %*	"			"	
4-BFB			*116%*		*75 - 125 %*	"			"	
BRH0068-04RE2 (MW-6-10.56)		Water			Sampled: 08/06/08 11:45					
Benzene	EPA 8260B	678	-----	40.0	ug/l	80x	8H14052	08/14/08 08:00	08/14/08 21:39	
Ethylbenzene	"	2350	-----	40.0	"	"	"	"	"	
Total Xylenes	"	18900	-----	240	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4			*98.2%*		*70 - 130 %*	*1x*			"	
Toluene-d8			*102%*		*75 - 125 %*	"			"	
4-BFB			*102%*		*75 - 125 %*	"			"	
BRH0068-05 (MW-9-10.18)		Water			Sampled: 08/06/08 12:20					
Benzene	EPA 8260B	ND	-----	0.500	ug/l	1x	8H13019	08/13/08 11:19	08/13/08 18:27	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Total Xylenes	"	ND	-----	3.00	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4			*98.3%*		*70 - 130 %*	"			"	
Toluene-d8			*98.8%*		*75 - 125 %*	"			"	
4-BFB			*96.6%*		*75 - 125 %*	"			"	
BRH0068-06 (TB-1-08062008)		Water			Sampled: 08/06/08 06:00					
Benzene	EPA 8260B	ND	-----	0.500	ug/l	1x	8H13019	08/13/08 11:19	08/13/08 15:47	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Total Xylenes	"	ND	-----	3.00	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4			*98.1%*		*70 - 130 %*	"			"	
Toluene-d8			*101%*		*75 - 125 %*	"			"	
4-BFB			*96.5%*		*75 - 125 %*	"			"	

TestAmerica Seattle

Sandra Yakamavich

Sandra Yakamavich, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

SAIC - Bothell	Project Name:	ARCO #5544	
18912 North Creek Parkway South, Suite 101	Project Number:	G0BKK-0013	Report Created:
Bothell, WA/USA 98011	Project Manager:	Mike Lange	08/18/08 10:20

Volatile Petroleum Products by NWTPH-Gx - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8H08022 Water Preparation Method: EPA 5030B (P/T)

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8H08022-BLK1)							Extracted: 08/08/08 10:53							
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	---	50.0	ug/l	1x	--	--	--	--	--	--	08/08/08 17:56	
Surrogate(s): 4-BFB (FID)		*Recovery: 77.6%*			*Limits: 58-144%*	"							*08/08/08 17:56*	
LCS (8H08022-BS1)							Extracted: 08/08/08 10:53							
Gasoline Range Hydrocarbons	NWTPH-Gx	925	---	50.0	ug/l	1x	--	1000	92.5%	(80-120)	--	--	08/08/08 16:51	
Surrogate(s): 4-BFB (FID)		*Recovery: 94.6%*			*Limits: 58-144%*	"							*08/08/08 16:51*	
Duplicate (8H08022-DUP1)					QC Source: BRH0068-02		Extracted: 08/08/08 10:53							
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	---	50.0	ug/l	1x	ND	--	--	--	19.8%	(25)	08/08/08 19:02	
Surrogate(s): 4-BFB (FID)		*Recovery: 84.8%*			*Limits: 58-144%*	"							*08/08/08 19:02*	
Duplicate (8H08022-DUP2)					QC Source: BRH0068-05		Extracted: 08/08/08 10:53							
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	---	50.0	ug/l	1x	ND	--	--	--	NR	(25)	08/08/08 20:07	
Surrogate(s): 4-BFB (FID)		*Recovery: 84.9%*			*Limits: 58-144%*	"							*08/08/08 20:07*	
Matrix Spike (8H08022-MS1)					QC Source: BRH0068-02		Extracted: 08/08/08 10:53							
Gasoline Range Hydrocarbons	NWTPH-Gx	993	---	50.0	ug/l	1x	16.6	1000	97.6%	(75-131)	--	--	08/08/08 20:39	
Surrogate(s): 4-BFB (FID)		*Recovery: 94.3%*			*Limits: 58-144%*	"							*08/08/08 20:39*	
Matrix Spike Dup (8H08022-MSD1)					QC Source: BRH0068-02		Extracted: 08/08/08 10:53							
Gasoline Range Hydrocarbons	NWTPH-Gx	942	---	50.0	ug/l	1x	16.6	1000	92.6%	(75-131)	5.20%	(25)	08/08/08 21:12	
Surrogate(s): 4-BFB (FID)		*Recovery: 93.7%*			*Limits: 58-144%*	"							*08/08/08 21:12*	

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PH: (425) 420.9200 FAX: (425) 420.9210

SAIC - Bothell	Project Name:	ARCO #5544	
18912 North Creek Parkway South, Suite 101	Project Number:	G0BKK-0013	Report Created:
Bothell, WA/USA 98011	Project Manager:	Mike Lange	08/18/08 10:20

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8H13019 Water Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8H13019-BLK1)								Extracted: 08/13/08 11:19						
Benzene	EPA 8260B	ND	---	0.500	ug/l	1x	--	--	--	--	--	--	08/13/08 14:05	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Total Xylenes	"	ND	---	3.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 97.1%*			*Limits: 70-130%*	"							*08/13/08 14:05*	
Toluene-d8		*100%*			*75-125%*	"							"	
4-BFB		*97.4%*			*75-125%*	"							"	
LCS (8H13019-BS1)								Extracted: 08/13/08 11:19						
Benzene	EPA 8260B	39.6	---	0.500	ug/l	1x	--	40.0	99.0%	(80-120)	--	--	08/13/08 12:00	
Ethylbenzene	"	38.2	---	0.500	"	"	--	"	95.4%	(75-125)	--	--	"	
Methyl tert-butyl ether	"	40.0	---	1.00	"	"	--	"	100%	(75-126)	--	--	"	
Toluene	"	37.2	---	0.500	"	"	--	"	93.0%	(75-125)	--	--	"	
Total Xylenes	"	118	---	3.00	"	"	--	120	98.0%	"	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 98.4%*			*Limits: 70-130%*	"							*08/13/08 12:00*	
Toluene-d8		*96.6%*			*75-125%*	"							"	
4-BFB		*96.2%*			*75-125%*	"							"	
Matrix Spike (8H13019-MS1)					QC Source: BRH0068-02			Extracted: 08/13/08 11:19						
Benzene	EPA 8260B	39.8	---	0.500	ug/l	1x	ND	40.0	99.4%	(80-124)	--	--	08/13/08 12:25	
Ethylbenzene	"	38.5	---	0.500	"	"	ND	"	96.3%	(62-151)	--	--	"	
Methyl tert-butyl ether	"	38.2	---	1.00	"	"	ND	"	95.5%	(75-126)	--	--	"	
Toluene	"	38.0	---	0.500	"	"	ND	"	94.9%	(75-125)	--	--	"	
Total Xylenes	"	119	---	3.00	"	"	ND	120	99.0%	"	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 94.9%*			*Limits: 70-130%*	"							*08/13/08 12:25*	
Toluene-d8		*97.7%*			*75-125%*	"							"	
4-BFB		*98.8%*			*75-125%*	"							"	
Matrix Spike Dup (8H13019-MSD1)					QC Source: BRH0068-02			Extracted: 08/13/08 11:19						
Benzene	EPA 8260B	37.6	---	0.500	ug/l	1x	ND	40.0	94.0%	(80-124)	5.53%	(30)	08/13/08 12:51	
Ethylbenzene	"	36.6	---	0.500	"	"	ND	"	91.6%	(62-151)	4.98%	"	"	
Methyl tert-butyl ether	"	38.2	---	1.00	"	"	ND	"	95.4%	(75-126)	0.131%	"	"	
Toluene	"	36.0	---	0.500	"	"	ND	"	89.9%	(75-125)	5.41%	"	"	
Total Xylenes	"	112	---	3.00	"	"	ND	120	93.4%	"	5.79%	"	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 96.5%*			*Limits: 70-130%*	"							*08/13/08 12:51*	
Toluene-d8		*97.4%*			*75-125%*	"							"	
4-BFB		*97.6%*			*75-125%*	"							"	

TestAmerica Seattle

Sandra Yakamavich

Sandra Yakamavich, Project Manager

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BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

SAIC - Bothell	Project Name:	ARCO #5544	
18912 North Creek Parkway South, Suite 101	Project Number:	G0BKK-0013	Report Created:
Bothell, WA/USA 98011	Project Manager:	Mike Lange	08/18/08 10:20

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8H14052 Water Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8H14052-BLK1)								Extracted: 08/14/08 17:04						
Benzene	EPA 8260B	ND	---	0.500	ug/l	1x	--	--	--	--	--	--	08/14/08 19:25	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Total Xylenes	"	ND	---	3.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 100%*			*Limits: 70-130%*	"							*08/14/08 19:25*	
Toluene-d8		*103%*			*75-125%*	"							"	
4-BFB		*103%*			*75-125%*	"							"	
LCS (8H14052-BS1)								Extracted: 08/14/08 17:04						
Benzene	EPA 8260B	38.3	---	0.500	ug/l	1x	--	40.0	95.7%	(80-120)	--	--	08/14/08 17:19	
Ethylbenzene	"	41.9	---	0.500	"	"	--	"	105%	(75-125)	--	--	"	
Methyl tert-butyl ether	"	36.2	---	1.00	"	"	--	"	90.4%	(75-126)	--	--	"	
Toluene	"	39.0	---	0.500	"	"	--	"	97.4%	(75-125)	--	--	"	
Total Xylenes	"	124	---	3.00	"	"	--	120	103%	"	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 101%*			*Limits: 70-130%*	"							*08/14/08 17:19*	
Toluene-d8		*102%*			*75-125%*	"							"	
4-BFB		*102%*			*75-125%*	"							"	
Matrix Spike (8H14052-MS1)					QC Source: BRH0156-09RE1			Extracted: 08/14/08 17:04						
Benzene	EPA 8260B	38.6	---	0.500	ug/l	1x	ND	40.0	96.4%	(80-124)	--	--	08/14/08 17:45	
Ethylbenzene	"	43.2	---	0.500	"	"	ND	"	108%	(62-151)	--	--	"	
Methyl tert-butyl ether	"	34.0	---	1.00	"	"	ND	"	85.1%	(75-126)	--	--	"	
Toluene	"	39.0	---	0.500	"	"	ND	"	97.5%	(75-125)	--	--	"	
Total Xylenes	"	124	---	3.00	"	"	ND	120	103%	"	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 101%*			*Limits: 70-130%*	"							*08/14/08 17:45*	
Toluene-d8		*101%*			*75-125%*	"							"	
4-BFB		*103%*			*75-125%*	"							"	
Matrix Spike Dup (8H14052-MSD1)					QC Source: BRH0156-09RE1			Extracted: 08/14/08 17:04						
Benzene	EPA 8260B	38.1	---	0.500	ug/l	1x	ND	40.0	95.4%	(80-124)	1.12%	(30)	08/14/08 18:12	
Ethylbenzene	"	42.7	---	0.500	"	"	ND	"	107%	(62-151)	1.12%	"	"	
Methyl tert-butyl ether	"	34.8	---	1.00	"	"	ND	"	87.0%	(75-126)	2.18%	"	"	
Toluene	"	38.8	---	0.500	"	"	ND	"	97.1%	(75-125)	0.385%	"	"	
Total Xylenes	"	124	---	3.00	"	"	ND	120	103%	"	0.146%	"	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 101%*			*Limits: 70-130%*	"							*08/14/08 18:12*	
Toluene-d8		*101%*			*75-125%*	"							"	
4-BFB		*102%*			*75-125%*	"							"	

TestAmerica Seattle

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Sandra Yakamavich

Sandra Yakamavich, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

SAIC - Bothell	Project Name:	ARCO #5544	
18912 North Creek Parkway South, Suite 101	Project Number:	G0BKK-0013	Report Created:
Bothell, WA/USA 98011	Project Manager:	Mike Lange	08/18/08 10:20

Notes and Definitions

Report Specific Notes:

ZX - Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

Laboratory Reporting Conventions:

DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.

ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).

NR/NA - Not Reported / Not Available

dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.

wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.

RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).

MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.

MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.

Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.

Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.

Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy.* Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Sandra Yakamavich

Sandra Yakamavich, Project Manager

BRH0068 Page 1 of 1

Atlantic Richfield Company

bp
A BP affiliated company

Chain of Custody Record

Project Name: ARCO #5544
BP BU/AR Region/Enfos Segment: Washington Portfolio
State or Lead Regulatory Agency: Washington Dept. of Ecology
Requested Due Date (mm/dd/yy): Standard TAT

On-site Time: 0945	Temp: 69°F
Off-site Time: 1300	Temp: 77°F
Sky Conditions: Sunny and Clear	
Meteorological Events:	
Wind Speed: Light	Direction: SE

Lab Name: Test America	BP/AR Facility No.: 5544	Consultant/Contractor: SAIC
Address: 11720 North Creek Parkway N, Suite 400	BP/AR Facility Address: 19918 68th Ave S, Kent, WA	Address: 18912 North Creek Parkway, Ste 101
Bothell, Washington 98011-8244	Site Lat/Long: (blank)	Bothell, Washington 98011
Lab PM: Sandra Yakamavich	California Global ID No.: N/A	Consultant/Contractor Project No.: 06-6384-00-6832-970
Tele/Fax: (425) 420-9200/(425) 420-9210	Enfos Project No.: G0BKK-0013	Consultant/Contractor PM: Michael Lange
BP/AR PM Contact: Dave White	Provision or OOC (circle one)	Tele/Fax: (425) 482-3319 / 425-485-5566
Address: 4 Centerpointe Dr.	Phase/WBS: 04 -Monitoring Only	Report Type & QC Level: Level 1
La Palma, CA. 90623	Sub Phase/Task: 03 - Analytical	E-mail EDD To: langem@saic.com
Tele/Fax: (714) 228-6782 / (858) 776-1035) / (714) 228-6749	Cost Element: 05 -Subcontracted Cost	Invoice to: Consultant or BP or Atlantic Richfield Co. (circle one)

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: NWTPH-Gx	Requested Analysis: BTEX(8260)	Requested Analysis: BTEX+MTBE(8021 B)*	Requested Analysis: EDC(8260B)	Requested Analysis: EDB(8011B)	Requested Analysis: (NWTPH-Dx)	Requested Analysis: (NWTPH-Oil)	Requested Analysis: Total Lead	Requested Analysis: Dissolved Lead	Sample Point Lat/Long and Comments
1	MW-2- 10.60	1135	08/06/08		X		-01	6				X		X		X							BTEX/g, MTBE
2	MW-3- 10.09	1120	"		X		-02	6				X		X		X							BTEX/g, MTBE
~~3~~	~~MW-4~~				X			6				X		X		X							~~BTEX/g, MTBE~~ BB
4	MW-5- 10.74	1200			X		-03	6				X		X		X							BTEX/g, MTBE
5	MW-6- 10.56	1145			X		-04	6				X		X		X							BTEX/g, MTBE
6	MW-9- 10.18	1220			X		-05	6				X		X		X							BTEX/g, MTBE
~~7~~	~~FD-1- 2008~~				X			6				X		X		X							~~BTEX/g, MTBE~~ BB
8	TB-1-~~0806~~2008	0600	↓		X		-06	2				X		X	X								BTEX/g
9																							
10																							

Sampler's Name: B. Bickler + P. Hawing	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: SAIC	J Mendenhall / SAIC	8/6/08	1340	Beth Weaver / TAL-SEATTLE	080608	1340
Shipment Date:						
Shipment Method:						
Shipment Tracking No:						

Special Instructions: If NWTPH-Dx is requested, use Silica Gel Cleanup
If MTBE is detected by 8021, confirm by 8260

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 4.7 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP COC Rev. 5 10/11/2006

TAT: _____ Paperwork to PM – Date:_____ Time:_____ Non-Conformances? Circle (Y) or N 080708

Page Time & Initials:_____ (If Y, see other side)

TEST AMERICA SAMPLE RECEIPT CHECKLIST

Received By: (applies to temp at receipt)	**Logged-in By:**	**Unpacked/Labeled By:**	***Cooler ID:*** 357
Date: 08.06.08	Date: 08.06	Date: 08.07	Work Order No. BRH0068
Time: 1340	Time: 1738	Time: 1659	Client: SAIC-Bothell
Initials: CW	Initials: CW	Initials: CW	Project: ARCO #5544

Container Type:
X Cooler
___ Box
___ None/Other _____

COC Seals:
___ Ship Container ___ Sign By
___ On Bottles ___ Date
X None

Packing Material:
___ Bubble Bags ___ Styrofoam
___ Foam Packs
X None/(Other) voa holder

Refrigerant:
X Gel Ice Pack _____
___ Loose Ice _____
___ None/Other _____

Received Via: Bill#
___ Fed Ex ___ Client
___ UPS ___ TA Courier
___ DHL ___ Mid Valley
___ Senvoy ___ TDP
___ GS ___ Other_____

Cooler Temperature (*IR*): ____°C Plastic Glass (Frozen filters, Tedlars and aqueous Metals exempt)
(circle one)

Temperature Blank? 4.7 °C or NA Trip Blank? (Y) or N or NA

BP, OPLC,ARCO-Temperature monitoring every 15 minutes:
(initial/date/time): 2.1c @ 1659, 3.9c @ 1714
Comments:_____

Sample Containers:		ID			ID
Intact?	(Y) or N	_____	Metals Preserved?	Y or N or (NA)	_____
Provided by TA?	(Y) or N	_____	Client QAPP Preserved?	Y or N or (NA)	_____
Correct Type?	(Y) or N	_____	Adequate Volume? (for tests requested)	(Y) or N	_____
#Containers match COC?	(Y) or N	_____	Water VOAs: Headspace?	Y or N or (NA)	_____
IDs/time/date match COC?	(Y) or N	_____	Comments:		
Hold Times in hold?	(Y) or N	_____			

PROJECT MANAGEMENT

Is the Chain of Custody complete? (Y) or N If N, circle the items that were incomplete

Comments,Problems_____

Total access set up? Y or (N)
Has client been contacted regarding non-conformances? Y or (N) If Y, ____/____ Date Time

PM Initials: SJ Date: 8/6/08 Time: 1638

(rev 4, 01/24/07)

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Amended Report

March 13, 2009

Markham C Hurd
Delta Environmental
4006 148th Ave NE
Redmond, WA/USA 98052

RE: ARCO #5544

Enclosed are the results of analyses for samples received by the laboratory on 10/09/08 14:40. The following list is a summary of the Work Orders contained in this report, generated on 03/13/09 13:39.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
BRJ0144	ARCO #5544	G0BKK-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
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Amended Report

Delta Environmental	Project Name:	**ARCO #5544**	
4006 148th Ave NE	Project Number:	G0BKK-0014	Report Created:
Redmond, WA/USA 98052	Project Manager:	Markham C Hurd	03/13/09 13:39

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-2-10.41	BRJ0144-01	Water	10/08/08 13:15	10/09/08 14:40
MW-3-9.62	BRJ0144-02	Water	10/08/08 13:05	10/09/08 14:40
MW-4-10.31	BRJ0144-03	Water	10/08/08 12:50	10/09/08 14:40
MW-5-10.80	BRJ0144-04	Water	10/08/08 14:00	10/09/08 14:40
MW-9-10.10	BRJ0144-05	Water	10/08/08 14:20	10/09/08 14:40
MW-6-10.58	BRJ0144-06	Water	10/08/08 13:40	10/09/08 14:40
TB-1-10082008	BRJ0144-07	Water	10/08/08 06:00	10/09/08 14:40

TestAmerica Seattle

Curtis D. Armstrong, Project Manager

Amended Report

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Amended Report

Delta Environmental	Project Name:	**ARCO #5544**	
4006 148th Ave NE	Project Number:	G0BKK-0014	Report Created:
Redmond, WA/USA 98052	Project Manager:	Markham C Hurd	03/13/09 13:39

Analytical Case Narrative

TestAmerica - Seattle, WA

BRJ0144

Amended Report Issued 03/13/09

Volatile Organic Compounds by EPA Method 8260B

Samples BRJ0144-05 (MW-6-10.58) and BRJ0144-06 (MW-9-10.10) were mislabeled during the sample log in procedure. MW-9-10.10 was labeled as BEJ0144-05 and MW-6-10.58 was labeled as BRJ0144-06. The sample IDs have been reassigned to the correct sample in this amended report.

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4006 148th Ave NE	Project Number:	G0BKK-0014	Report Created:
Redmond, WA/USA 98052	Project Manager:	Markham C Hurd	03/13/09 13:39

Volatile Petroleum Products by NWTPH-Gx

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRJ0144-01 (MW-2-10.41)			**Water**			**Sampled: 10/08/08 13:15**				
Gasoline Range Hydrocarbons	NWTPH-Gx	**52300**	-----	5000	ug/l	100x	8J10012	10/10/08 10:41	10/11/08 06:42	
Surrogate(s): 4-BFB (FID)			*101%*		*58 - 144 %*	*1x*			"	
BRJ0144-02 (MW-3-9.62)			**Water**			**Sampled: 10/08/08 13:05**				
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	-----	50.0	ug/l	1x	8J10012	10/10/08 10:41	10/11/08 06:10	
Surrogate(s): 4-BFB (FID)			*102%*		*58 - 144 %*	"			"	
BRJ0144-03 (MW-4-10.31)			**Water**			**Sampled: 10/08/08 12:50**				
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	-----	50.0	ug/l	1x	8J10012	10/10/08 10:41	10/11/08 13:26	
Surrogate(s): 4-BFB (FID)			*106%*		*58 - 144 %*	"			"	
BRJ0144-04 (MW-5-10.80)			**Water**			**Sampled: 10/08/08 14:00**				
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	-----	50.0	ug/l	1x	8J10012	10/10/08 10:41	10/10/08 22:13	
Surrogate(s): 4-BFB (FID)			*102%*		*58 - 144 %*	"			"	
BRJ0144-05 (MW-9-10.10)			**Water**			**Sampled: 10/08/08 14:20**				
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	-----	50.0	ug/l	1x	8J10012	10/10/08 10:41	10/10/08 22:45	
Surrogate(s): 4-BFB (FID)			*102%*		*58 - 144 %*	"			"	
BRJ0144-06 (MW-6-10.58)			**Water**			**Sampled: 10/08/08 13:40**				
Gasoline Range Hydrocarbons	NWTPH-Gx	**68900**	-----	2500	ug/l	50x	8J10012	10/10/08 10:41	10/11/08 13:58	
Surrogate(s): 4-BFB (FID)			*107%*		*58 - 144 %*	*1x*			"	

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Redmond, WA/USA 98052	Project Manager:	Markham C Hurd	03/13/09 13:39

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRJ0144-01 (MW-2-10.41)		**Water**			**Sampled: 10/08/08 13:15**					
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	8J10026	10/10/08 14:01	10/10/08 20:22	
Surrogate(s): 1,2-DCA-d4		*96.4%*			*70 - 130 %*	"			"	
Toluene-d8		*96.0%*			*75 - 125 %*	"			"	
4-BFB		*124%*			*75 - 125 %*	"			"	
BRJ0144-01RE1 (MW-2-10.41)		**Water**			**Sampled: 10/08/08 13:15**					
Ethylbenzene	EPA 8260B	**2120**	-----	100	ug/l	200x	8J14038	10/14/08 13:43	10/14/08 19:55	
Toluene	"	**172**	-----	100	"	"	"	"	"	
Total Xylenes	"	**10600**	-----	600	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4		*106%*			*70 - 130 %*	*1x*			"	
Toluene-d8		*101%*			*75 - 125 %*	"			"	
4-BFB		*96.6%*			*75 - 125 %*	"			"	
BRJ0144-01RE2 (MW-2-10.41)		**Water**			**Sampled: 10/08/08 13:15**					
Benzene	EPA 8260B	**127**	-----	10.0	ug/l	20x	8J16040	10/16/08 14:22	10/16/08 19:27	
Surrogate(s): 1,2-DCA-d4		*104%*			*70 - 130 %*	*1x*			"	
Toluene-d8		*101%*			*75 - 125 %*	"			"	
4-BFB		*92.9%*			*75 - 125 %*	"			"	
BRJ0144-02RE1 (MW-3-9.62)		**Water**			**Sampled: 10/08/08 13:05**					
Benzene	EPA 8260B	ND	-----	0.500	ug/l	1x	8J13035	10/13/08 13:17	10/13/08 17:32	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Total Xylenes	"	ND	-----	3.00	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4		*95.6%*			*70 - 130 %*	"			"	
Toluene-d8		*95.9%*			*75 - 125 %*	"			"	
4-BFB		*99.6%*			*75 - 125 %*	"			"	
BRJ0144-03 (MW-4-10.31)		**Water**			**Sampled: 10/08/08 12:50**					
Benzene	EPA 8260B	ND	-----	0.500	ug/l	1x	8J10026	10/10/08 14:01	10/10/08 21:19	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Total Xylenes	"	ND	-----	3.00	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4		*91.4%*			*70 - 130 %*	"			"	
Toluene-d8		*96.0%*			*75 - 125 %*	"			"	
4-BFB		*99.6%*			*75 - 125 %*	"			"	

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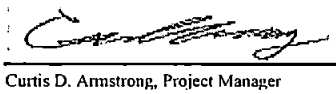
4006 148th Ave NE	Project Number:	G0BKK-0014	Report Created:
Redmond, WA/USA 98052	Project Manager:	Markham C Hurd	03/13/09 13:39

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRJ0144-04 (MW-5-10.80)			Water			Sampled: 10/08/08 14:00				
Benzene	EPA 8260B	ND	-----	0.500	ug/l	1x	8J10026	10/10/08 14:01	10/10/08 21:48	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Total Xylenes	"	ND	-----	3.00	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4			*91.3%*		*70 - 130 %*	"			"	
Toluene-d8			*94.1%*		*75 - 125 %*	"			"	
4-BFB			*98.8%*		*75 - 125 %*	"			"	
BRJ0144-05 (MW-9-10.10)			Water			Sampled: 10/08/08 14:20				
Benzene	EPA 8260B	ND	-----	0.500	ug/l	1x	8J10026	10/10/08 14:01	10/10/08 22:17	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Total Xylenes	"	ND	-----	3.00	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4			*90.0%*		*70 - 130 %*	"			"	
Toluene-d8			*95.4%*		*75 - 125 %*	"			"	
4-BFB			*100%*		*75 - 125 %*	"			"	
BRJ0144-06 (MW-6-10.58)			Water			Sampled: 10/08/08 13:40				
Toluene	EPA 8260B	**24.7**	-----	0.500	ug/l	1x	8J10026	10/10/08 14:01	10/10/08 23:14	
Surrogate(s): 1,2-DCA-d4			*91.4%*		*70 - 130 %*	"			"	
Toluene-d8			*94.8%*		*75 - 125 %*	"			"	
4-BFB			*196%*		*75 - 125 %*	"			"	*ZX*
BRJ0144-06RE1 (MW-6-10.58)			Water			Sampled: 10/08/08 13:40				
Methyl tert-butyl ether	EPA 8260B	**95.0**	-----	5.00	ug/l	5x	8J14038	10/14/08 13:43	10/14/08 23:16	
Surrogate(s): 1,2-DCA-d4			*96.8%*		*70 - 130 %*	*1x*			"	
Toluene-d8			*99.3%*		*75 - 125 %*	"			"	
4-BFB			*97.6%*		*75 - 125 %*	"			"	



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Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRJ0144-06RE2 (MW-6-10.58)		**Water**			**Sampled: 10/08/08 13:40**					
Benzene	EPA 8260B	**470**	-----	100	ug/l	200x	8J13035	10/13/08 13:17	10/14/08 00:42	
Ethylbenzene	"	**1130**	-----	100	"	"	"	"	"	
Total Xylenes	"	**12500**	-----	600	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4			*100%*		*70 - 130 %*	*1x*			"	
Toluene-d8			*94.8%*		*75 - 125 %*	"			"	
4-BFB			*96.2%*		*75 - 125 %*	"			"	
BRJ0144-07 (TB-1-10082008)		**Water**			**Sampled: 10/08/08 06:00**					
Benzene	EPA 8260B	ND	-----	0.500	ug/l	1x	8J13052	10/13/08 19:21	10/13/08 23:18	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Total Xylenes	"	ND	-----	3.00	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4			*104%*		*70 - 130 %*	"			"	
Toluene-d8			*101%*		*75 - 125 %*	"			"	
4-BFB			*186%*		*75 - 125 %*	"			"	*Z2*

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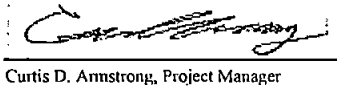

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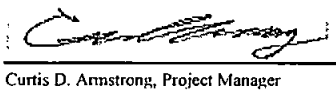
Volatile Petroleum Products by NWTPH-Gx - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8J10012 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8J10012-BLK1)								Extracted: 10/10/08 10:41						
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	---	50.0	ug/l	1x	--	--	--	--	--	--	10/10/08 14:27	
Surrogate(s): 4-BFB (FID)		*Recovery: 105%*			*Limits: 58-144%*	"							*10/10/08 14:27*	
LCS (8J10012-BS1)								Extracted: 10/10/08 10:41						
Gasoline Range Hydrocarbons	NWTPH-Gx	978	---	50.0	ug/l	1x	--	1000	97.8%	(80-120)	--	--	10/10/08 14:59	
Surrogate(s): 4-BFB (FID)		*Recovery: 109%*			*Limits: 58-144%*	"							*10/10/08 14:59*	
Duplicate (8J10012-DUP1)					QC Source: BRJ0144-01			Extracted: 10/10/08 10:41						
Gasoline Range Hydrocarbons	NWTPH-Gx	53300	---	5000	ug/l	100x	52300	--	--	--	1.73%	(25)	10/11/08 07:14	
Surrogate(s): 4-BFB (FID)		*Recovery: 104%*			*Limits: 58-144%*	*1x*							*10/11/08 07:14*	
Duplicate (8J10012-DUP2)					QC Source: BRJ0148-04			Extracted: 10/10/08 10:41						
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	---	50.0	ug/l	1x	ND	--	--	--	NR	(25)	10/11/08 04:35	
Surrogate(s): 4-BFB (FID)		*Recovery: 102%*			*Limits: 58-144%*	"							*10/11/08 04:35*	
Matrix Spike (8J10012-MS1)					QC Source: BRJ0148-05			Extracted: 10/10/08 10:41						
Gasoline Range Hydrocarbons	NWTPH-Gx	1070	---	50.0	ug/l	1x	41.6	1000	103%	(75-131)	--	--	10/10/08 19:01	
Surrogate(s): 4-BFB (FID)		*Recovery: 109%*			*Limits: 58-144%*	"							*10/10/08 19:01*	
Matrix Spike Dup (8J10012-MSD1)					QC Source: BRJ0148-05			Extracted: 10/10/08 10:41						
Gasoline Range Hydrocarbons	NWTPH-Gx	988	---	50.0	ug/l	1x	41.6	1000	94.6%	(75-131)	8.07%	(25)	10/10/08 19:33	
Surrogate(s): 4-BFB (FID)		*Recovery: 109%*			*Limits: 58-144%*	"							*10/10/08 19:33*	



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Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8J10026 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8J10026-BLK1)								Extracted: 10/10/08 14:01						
Benzene	EPA 8260B	ND	---	0.500	ug/l	1x	--	--	--	--	--	--	10/10/08 17:30	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Total Xylenes	"	ND	---	3.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 83.9%*			*Limits: 70-130%*	"							*10/10/08 17:30*	
Toluene-d8		*95.0%*			*75-125%*	"							"	
4-BFB		*102%*			*75-125%*	"							"	
LCS (8J10026-BS1)								Extracted: 10/10/08 14:01						
Benzene	EPA 8260B	40.0	---	0.500	ug/l	1x	--	40.0	99.9%	(80-120)	--	--	10/10/08 15:24	
Ethylbenzene	"	37.6	---	0.500	"	"	--	"	94.0%	(75-125)	--	--	"	
Methyl tert-butyl ether	"	40.8	---	1.00	"	"	--	"	102%	(75-126)	--	--	"	
Toluene	"	38.5	---	0.500	"	"	--	"	96.3%	(75-125)	--	--	"	
Total Xylenes	"	111	---	3.00	"	"	--	120	92.2%	"	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 92.7%*			*Limits: 70-130%*	"							*10/10/08 15:24*	
Toluene-d8		*95.4%*			*75-125%*	"							"	
4-BFB		*98.2%*			*75-125%*	"							"	
Matrix Spike (8J10026-MS1)					QC Source: BRJ0144-01			Extracted: 10/10/08 14:01						
Benzene	EPA 8260B	182	---	0.500	ug/l	1x	146	40.0	89.7%	(80-124)	--	--	10/10/08 15:53	
Ethylbenzene	"	378	---	0.500	"	"	385	"	-18.8%	(62-151)	--	--	"	MHA
Methyl tert-butyl ether	"	41.4	---	1.00	"	"	ND	"	103%	(75-126)	--	--	"	
Toluene	"	223	---	0.500	"	"	215	"	20.7%	(75-125)	--	--	"	MHA
Total Xylenes	"	1010	---	3.00	"	"	1030	120	-18.4%	"	--	--	"	MHA
Surrogate(s): 1,2-DCA-d4		*Recovery: 94.4%*			*Limits: 70-130%*	"							*10/10/08 15:53*	
Toluene-d8		*93.8%*			*75-125%*	"							"	
4-BFB		*127%*			*75-125%*	"							"	*ZX*
Matrix Spike Dup (8J10026-MSD1)					QC Source: BRJ0144-01			Extracted: 10/10/08 14:01						
Benzene	EPA 8260B	173	---	0.500	ug/l	1x	146	40.0	66.0%	(80-124)	5.34%	(30)	10/10/08 16:22	MHA, E
Ethylbenzene	"	358	---	0.500	"	"	385	"	-68.4%	(62-151)	5.39%	"	"	MHA, E
Methyl tert-butyl ether	"	39.6	---	1.00	"	"	ND	"	99.1%	(75-126)	4.32%	"	"	
Toluene	"	213	---	0.500	"	"	215	"	-5.80%	(75-125)	4.86%	"	"	MHA, E
Total Xylenes	"	943	---	3.00	"	"	1030	120	-72.8%	"	6.69%	"	"	MHA, E
Surrogate(s): 1,2-DCA-d4		*Recovery: 92.6%*			*Limits: 70-130%*	"							*10/10/08 16:22*	
Toluene-d8		*94.6%*			*75-125%*	"							"	
4-BFB		*119%*			*75-125%*	"							"	

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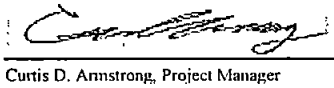

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4006 148th Ave NE	Project Number:	G0BKK-0014	Report Created:
Redmond, WA/USA 98052	Project Manager:	Markham C Hurd	03/13/09 13:39

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8J13035 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8J13035-BLK1)							Extracted: 10/13/08 13:17							
Benzene	EPA 8260B	ND	---	0.500	ug/l	1x	--	--	--	--	--	--	10/13/08 16:34	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Total Xylenes	"	ND	---	3.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 88.5%*			*Limits: 70-130%*	"							*10/13/08 16:34*	
Toluene-d8		*95.8%*			*75-125%*	"							"	
4-BFB		*100%*			*75-125%*	"							"	
LCS (8J13035-BS1)							Extracted: 10/13/08 13:17							
Benzene	EPA 8260B	40.3	---	0.500	ug/l	1x	--	40.0	101%	(80-120)	--	--	10/13/08 14:30	
Ethylbenzene	"	36.9	---	0.500	"	"	--	"	92.3%	(75-125)	--	--	"	
Methyl tert-butyl ether	"	40.8	---	1.00	"	"	--	"	102%	(75-126)	--	--	"	
Toluene	"	38.0	---	0.500	"	"	--	"	95.0%	(75-125)	--	--	"	
Total Xylenes	"	108	---	3.00	"	"	--	120	89.7%	"	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 90.9%*			*Limits: 70-130%*	"							*10/13/08 14:30*	
Toluene-d8		*91.3%*			*75-125%*	"							"	
4-BFB		*99.6%*			*75-125%*	"							"	
Matrix Spike (8J13035-MS1)					QC Source: BRJ0144-02RE1		Extracted: 10/13/08 13:17							
Benzene	EPA 8260B	41.3	---	0.500	ug/l	1x	ND	40.0	103%	(80-124)	--	--	10/13/08 14:58	
Ethylbenzene	"	38.8	---	0.500	"	"	ND	"	97.0%	(62-151)	--	--	"	
Methyl tert-butyl ether	"	39.7	---	1.00	"	"	0.280	"	98.6%	(75-126)	--	--	"	
Toluene	"	39.3	---	0.500	"	"	ND	"	98.2%	(75-125)	--	--	"	
Total Xylenes	"	112	---	3.00	"	"	ND	120	93.3%	"	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 89.4%*			*Limits: 70-130%*	"							*10/13/08 14:58*	
Toluene-d8		*93.2%*			*75-125%*	"							"	
4-BFB		*98.8%*			*75-125%*	"							"	
Matrix Spike Dup (8J13035-MSD1)					QC Source: BRJ0144-02RE1		Extracted: 10/13/08 13:17							
Benzene	EPA 8260B	40.1	---	0.500	ug/l	1x	ND	40.0	100%	(80-124)	3.00%	(30)	10/13/08 15:26	
Ethylbenzene	"	36.6	---	0.500	"	"	ND	"	91.6%	(62-151)	5.78%	"	"	
Methyl tert-butyl ether	"	40.7	---	1.00	"	"	0.280	"	101%	(75-126)	2.44%	"	"	
Toluene	"	37.2	---	0.500	"	"	ND	"	93.0%	(75-125)	5.39%	"	"	
Total Xylenes	"	106	---	3.00	"	"	ND	120	88.3%	"	5.49%	"	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 91.0%*			*Limits: 70-130%*	"							*10/13/08 15:26*	
Toluene-d8		*89.5%*			*75-125%*	"							"	
4-BFB		*99.6%*			*75-125%*	"							"	

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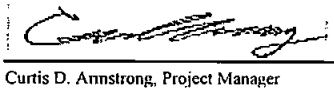

Curtis D. Armstrong, Project Manager

Amended Report

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
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Amended Report

Delta Environmental	Project Name:	**ARCO #5544**	
4006 148th Ave NE	Project Number:	G0BKK-0014	Report Created:
Redmond, WA/USA 98052	Project Manager:	Markham C Hurd	03/13/09 13:39

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8J13052 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8J13052-BLK1)								Extracted: 10/13/08 19:21						
Benzene	EPA 8260B	ND	---	0.500	ug/l	1x	--	--	--	--	--	--	10/13/08 22:18	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Total Xylenes	"	ND	---	3.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 96.2%*			*Limits: 70-130%*	"							*10/13/08 22:18*	
Toluene-d8		*105%*			*75-125%*	"							"	
4-BFB		*249%*			*75-125%*	"							"	*Z2*
LCS (8J13052-BS1)								Extracted: 10/13/08 18:21						
Benzene	EPA 8260B	40.6	---	0.500	ug/l	1x	--	40.0	102%	(80-120)	--	--	10/13/08 19:13	
Ethylbenzene	"	42.8	---	0.500	"	"	--	"	107%	(75-125)	--	--	"	
Methyl tert-butyl ether	"	39.8	---	1.00	"	"	--	"	99.5%	(75-126)	--	--	"	
Toluene	"	38.7	---	0.500	"	"	--	"	96.7%	(75-125)	--	--	"	
Total Xylenes	"	125	---	3.00	"	"	--	120	104%	"	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 102%*			*Limits: 70-130%*	"							*10/13/08 19:13*	
Toluene-d8		*99.0%*			*75-125%*	"							"	
4-BFB		*98.4%*			*75-125%*	"							"	
LCS Dup (8J13052-BSD1)								Extracted: 10/13/08 19:21						
Benzene	EPA 8260B	39.8	---	0.500	ug/l	1x	--	40.0	99.5%	(80-120)	2.06%	(20)	10/13/08 19:43	
Ethylbenzene	"	42.0	---	0.500	"	"	--	"	105%	(75-125)	1.77%	"	"	
Methyl tert-butyl ether	"	40.0	---	1.00	"	"	--	"	100%	(75-126)	0.526%	"	"	
Toluene	"	38.0	---	0.500	"	"	--	"	95.1%	(75-125)	1.62%	"	"	
Total Xylenes	"	123	---	3.00	"	"	--	120	102%	"	1.81%	"	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 103%*			*Limits: 70-130%*	"							*10/13/08 19:43*	
Toluene-d8		*98.9%*			*75-125%*	"							"	
4-BFB		*100%*			*75-125%*	"							"	
Matrix Spike (8J13052-MS1)					QC Source: BRJ0148-04			Extracted: 10/13/08 19:21						
Benzene	EPA 8260B	42.1	---	0.500	ug/l	1x	ND	40.0	105%	(80-124)	--	--	10/13/08 20:13	
Ethylbenzene	"	44.9	---	0.500	"	"	ND	"	112%	(62-151)	--	--	"	
Methyl tert-butyl ether	"	39.6	---	1.00	"	"	ND	"	99.1%	(75-126)	--	--	"	
Toluene	"	40.4	---	0.500	"	"	ND	"	101%	(75-125)	--	--	"	
Total Xylenes	"	131	---	3.00	"	"	ND	120	109%	"	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 101%*			*Limits: 70-130%*	"							*10/13/08 20:13*	
Toluene-d8		*100%*			*75-125%*	"							"	
4-BFB		*99.5%*			*75-125%*	"							"	

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Amended Report

Curtis D. Armstrong, Project Manager

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Amended Report

Delta Environmental	Project Name:	**ARCO #5544**	
4006 148th Ave NE	Project Number:	G0BKK-0014	Report Created:
Redmond, WA/USA 98052	Project Manager:	Markham C Hurd	03/13/09 13:39

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8J13052 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike Dup (8J13052-MSD1)				QC Source: BRJ0148-04				Extracted: 10/13/08 19:21						
Benzene	EPA 8260B	40.7	---	0.500	ug/l	1x	ND	40.0	102%	(80-124)	3.38%	(30)	10/13/08 20:43	
Ethylbenzene	"	43.0	---	0.500	"	"	ND	"	108%	(62-151)	4.25%	"	"	
Methyl tert-butyl ether	"	40.1	---	1.00	"	"	ND	"	100%	(75-126)	1.20%	"	"	
Toluene	"	38.8	---	0.500	"	"	ND	"	96.9%	(75-125)	4.22%	"	"	
Total Xylenes	"	126	---	3.00	"	"	ND	120	105%	"	3.94%	"	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 103%*			*Limits: 70-130%*	"							*10/13/08 20:43*	
Toluene-d8		*99.0%*			*75-125%*	"							"	
4-BFB		*100%*			*75-125%*	"							"	

QC Batch: 8J14038 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8J14038-BLK1)								Extracted: 10/14/08 15:43						
Benzene	EPA 8260B	ND	---	0.500	ug/l	1x	--	--	--	--	--	--	10/14/08 18:00	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Total Xylenes	"	ND	---	3.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 94.3%*			*Limits: 70-130%*	"							*10/14/08 18:00*	
Toluene-d8		*102%*			*75-125%*	"							"	
4-BFB		*102%*			*75-125%*	"							"	
LCS (8J14038-BS1)								Extracted: 10/14/08 15:43						
Benzene	EPA 8260B	38.7	---	0.500	ug/l	1x	--	40.0	96.8%	(80-120)	--	--	10/14/08 15:55	
Ethylbenzene	"	38.0	---	0.500	"	"	--	"	94.9%	(75-125)	--	--	"	
Methyl tert-butyl ether	"	38.9	---	1.00	"	"	--	"	97.2%	(75-126)	--	--	"	
Toluene	"	38.9	---	0.500	"	"	--	"	97.2%	(75-125)	--	--	"	
Total Xylenes	"	112	---	3.00	"	"	--	120	93.0%	"	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 97.9%*			*Limits: 70-130%*	"							*10/14/08 15:55*	
Toluene-d8		*96.4%*			*75-125%*	"							"	
4-BFB		*100%*			*75-125%*	"							"	

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Curtis D. Armstrong, Project Manager

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Amended Report

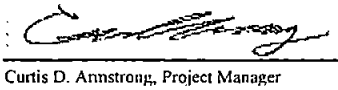
Delta Environmental	Project Name:	**ARCO #5544**	
4006 148th Ave NE	Project Number:	G0BKK-0014	Report Created:
Redmond, WA/USA 98052	Project Manager:	Markham C Hurd	03/13/09 13:39

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8J14038 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (8J14038-MS1)				QC Source: BRJ0182-01				Extracted: 10/14/08 15:43						
Benzene	EPA 8260B	40.2	---	0.500	ug/l	1x	ND	40.0	101%	(80-124)	--	--	10/14/08 16:24	
Ethylbenzene	"	39.4	---	0.500	"	"	ND	"	98.5%	(62-151)	--	--	"	
Methyl tert-butyl ether	"	37.4	---	1.00	"	"	ND	"	93.4%	(75-126)	--	--	"	
Toluene	"	39.9	---	0.500	"	"	ND	"	99.7%	(75-125)	--	--	"	
Total Xylenes	"	114	---	3.00	"	"	ND	120	95.0%	"	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 96.3%*			*Limits: 70-130%*	"							*10/14/08 16:24*	
Toluene-d8		*96.6%*			*75-125%*	"							"	
4-BFB		*97.6%*			*75-125%*	"							"	
Matrix Spike Dup (8J14038-MSD1)				QC Source: BRJ0182-01				Extracted: 10/14/08 15:43						
Benzene	EPA 8260B	37.4	---	0.500	ug/l	1x	ND	40.0	93.6%	(80-124)	7.18%	(30)	10/14/08 16:52	
Ethylbenzene	"	37.2	---	0.500	"	"	ND	"	93.0%	(62-151)	5.77%	"	"	
Methyl tert-butyl ether	"	37.5	---	1.00	"	"	ND	"	93.8%	(75-126)	0.374%	"	"	
Toluene	"	38.1	---	0.500	"	"	ND	"	95.2%	(75-125)	4.57%	"	"	
Total Xylenes	"	110	---	3.00	"	"	ND	120	92.0%	"	3.24%	"	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 95.4%*			*Limits: 70-130%*	"							*10/14/08 16:52*	
Toluene-d8		*96.2%*			*75-125%*	"							"	
4-BFB		*99.9%*			*75-125%*	"							"	



Curtis D. Armstrong, Project Manager

Amended Report

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Amended Report

Delta Environmental	Project Name:	**ARCO #5544**	
4006 148th Ave NE	Project Number:	G0BKK-0014	Report Created:
Redmond, WA/USA 98052	Project Manager:	Markham C Hurd	03/13/09 13:39

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8J16040 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8J16040-BLK1)								**Extracted: 10/16/08 14:22**						
Benzene	EPA 8260B	ND	---	0.500	ug/l	1x	--	--	--	--	--	--	10/16/08 18:30	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Total Xylenes	"	ND	---	3.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 100%*			*Limits: 70-130%*	"							*10/16/08 18:30*	
Toluene-d8		*102%*			*75-125%*	"							"	
4-BFB		*102%*			*75-125%*	"							"	
LCS (8J16040-BS1)								**Extracted: 10/16/08 14:22**						
Benzene	EPA 8260B	41.8	---	0.500	ug/l	1x	--	40.0	105%	(80-120)	--	--	10/16/08 15:55	
Ethylbenzene	"	40.5	---	0.500	"	"	--	"	101%	(75-125)	--	--	"	
Methyl tert-butyl ether	"	38.6	---	1.00	"	"	--	"	96.5%	(75-126)	--	--	"	
Toluene	"	40.1	---	0.500	"	"	--	"	100%	(75-125)	--	--	"	
Total Xylenes	"	117	---	3.00	"	"	--	120	97.2%	"	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 103%*			*Limits: 70-130%*	"							*10/16/08 15:55*	
Toluene-d8		*96.4%*			*75-125%*	"							"	
4-BFB		*96.4%*			*75-125%*	"							"	
LCS Dup (8J16040-BSD1)								**Extracted: 10/16/08 14:22**						
Benzene	EPA 8260B	40.8	---	0.500	ug/l	1x	--	40.0	102%	(80-120)	2.44%	(20)	10/16/08 16:24	
Ethylbenzene	"	38.9	---	0.500	"	"	--	"	97.4%	(75-125)	4.03%	"	"	
Methyl tert-butyl ether	"	37.9	---	1.00	"	"	--	"	94.8%	(75-126)	1.78%	"	"	
Toluene	"	39.3	---	0.500	"	"	--	"	98.2%	(75-125)	2.04%	"	"	
Total Xylenes	"	113	---	3.00	"	"	--	120	94.4%	"	3.00%	"	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 102%*			*Limits: 70-130%*	"							*10/16/08 16:24*	
Toluene-d8		*97.3%*			*75-125%*	"							"	
4-BFB		*96.6%*			*75-125%*	"							"	
Matrix Spike (8J16040-MS1)					**QC Source: BRJ0181-03**			**Extracted: 10/16/08 14:22**						
Benzene	EPA 8260B	42.2	---	0.500	ug/l	1x	ND	40.0	105%	(80-124)	--	--	10/16/08 16:53	
Ethylbenzene	"	40.4	---	0.500	"	"	ND	"	101%	(62-151)	--	--	"	
Methyl tert-butyl ether	"	39.0	---	1.00	"	"	ND	"	97.6%	(75-126)	--	--	"	
Toluene	"	41.7	---	0.500	"	"	ND	"	104%	(75-125)	--	--	"	
Total Xylenes	"	119	---	3.00	"	"	ND	120	99.4%	"	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 99.8%*			*Limits: 70-130%*	"							*10/16/08 16:53*	
Toluene-d8		*98.6%*			*75-125%*	"							"	
4-BFB		*98.6%*			*75-125%*	"							"	

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Amended Report

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Curtis D. Armstrong, Project Manager

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BOTHELL, WA 98011-8244
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Amended Report

Delta Environmental	Project Name:	**ARCO #5544**	
4006 148th Ave NE	Project Number:	G0BKK-0014	Report Created:
Redmond, WA/USA 98052	Project Manager:	Markham C Hurd	03/13/09 13:39

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8J16040 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike Dup (8J16040-MSD1)				QC Source: BRJ0181-03				Extracted: 10/16/08 14:22						
Benzene	EPA 8260B	40.4	---	0.500	ug/l	1x	ND	40.0	101%	(80-124)	4.31%	(30)	10/16/08 17:22	
Ethylbenzene	"	38.8	---	0.500	"	"	ND	"	97.1%	(62-151)	3.96%	"	"	
Methyl tert-butyl ether	"	37.5	---	1.00	"	"	ND	"	93.7%	(75-126)	4.03%	"	"	
Toluene	"	39.8	---	0.500	"	"	ND	"	99.5%	(75-125)	4.59%	"	"	
Total Xylenes	"	114	---	3.00	"	"	ND	120	94.8%	"	4.80%	"	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 99.8%*			*Limits: 70-130%*	"							*10/16/08 17:22*	
Toluene-d8		*97.8%*			*75-125%*	"							"	
4-BFB		*98.8%*			*75-125%*	"							"	

Curtis D. Armstrong, Project Manager

Amended Report

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Amended Report

Delta Environmental	Project Name:	**ARCO #5544**	
4006 148th Ave NE	Project Number:	G0BKK-0014	Report Created:
Redmond, WA/USA 98052	Project Manager:	Markham C Hurd	03/13/09 13:39

CERTIFICATION SUMMARY

TestAmerica Seattle

Method	Matrix	Nelac	Washington
EPA 8260B	Water	X	X
NWTPH-Gx	Water		X

Any abnormalities or departures from sample acceptance policy shall be documented on the 'Sample Receipt and Temperature Log Form' and 'Sample Non-conformance Form' (if applicable) included with this report.

For information concerning certifications of this facility or another TestAmerica facility, please visit our website at www.TestAmericaInc.com

Samples collected by TestAmerica Field Services personnel are noted on the Chain of Custody (COC) .

Curtis D. Armstrong, Project Manager

Amended Report

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Amended Report

Delta Environmental	Project Name:	**ARCO #5544**	
4006 148th Ave NE	Project Number:	G0BKK-0014	Report Created:
Redmond, WA/USA 98052	Project Manager:	Markham C Hurd	03/13/09 13:39

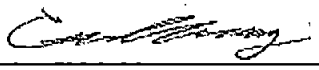
Notes and Definitions

Report Specific Notes:

E	-	Concentration exceeds the calibration range and therefore result is semi-quantitative.
MHA	-	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
Z2	-	Surrogate recovery was above the acceptance limits. Data not impacted.
ZX	-	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy.* Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.



Chain of Custody Record

Project Name: Routine Ground Water Sampling
BP BU/AR Region/Enfos Segment: West Coast/Retail
State or Lead Regulatory Agency: Washington Dept. of Ecology
Requested Due Date (mm/dd/yy): Standard TAT

On-site Time:	12:00	Temp:	55°F
Off-site Time:	14:45	Temp:	55°F
Sky Conditions:	Sunny, PC		
Meteorological Events:	—		
Wind Speed:	0mph	Direction:	—

Lab Name: Test America	BP/AR Facility No.: Former ARCO 5544	Consultant/Contractor: Delta Consultants	
Address: 11720 North Creek Parkway N., Suite 400	BP/AR Facility Address: 19860 68th Ave S., Kent, WA	Address: 4006 148th Ave NE	
Bothell, Washington 98011-8244	Site Lat/Long:	Redmond, WA 98052	
Lab PM: Sandra Yakamavich	California Global ID No.: NA	Consultant/Contractor Project No.: G0BKK	
Tele/Fax: (425) 420-9200 / (425) 420-9210	Enfos Project No.: G0BKK-0014/WR193201	Consultant/Contractor PM: Markham Hurd	
BP/AR PM Contact: David White	(Provision) or RCOP (circle one)	Tele/Fax: (425) 679-8074 / (425) 869-1892	
Address: 4 Centerpointe Dr.	Phase/WBS: 03-System O&M	Report Type & QC Level: BP Level 1	
La Palma, CA 90623-1066	Sub Phase/Task: 27-Sampling	E-mail EDD To: markhamhurd1@comcast.net	
Tele/Fax: (714) 228-6782 / (714) 228-6749	Cost Element: 05-Subcontracted Costs	Invoice to: (Consultant) or BP or Atlantic Richfield Co. (circle one)	

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: BTEX(8021B)	Requested Analysis: BTEX+MTBE(8021B)	Requested Analysis: EDC(8260B)	Requested Analysis: EDB(8011B)	Requested Analysis: NWTPH-Gx	Requested Analysis: NWTPH-Dx w/ silica gel	Requested Analysis: Total Lead	Requested Analysis: Dissolved Lead	Requested Analysis: Naphthalene	Sample Point Lat/Long and Comments
1	MW-2 - 10.41	1315	10/8/08		X			6				X			X			X					
2	MW-3 - 9.62	1305	10/8/08		X			6				X			X			X					
3	MW-4 - 10.31	1250	10/8/08		X			6				X			X			X					
4	MW-5 - 10.80	1400	10/8/08		X			6				X			X			X					
5	MW-6 - 10.58	1340	10/8/08		X			6				X			X			X					
6	MW-9 - 10.10	1420	10/8/08		X			6				X			X			X					
7	TB-1-10082008	0600	10/8/08		X			3				X		X									
8																							
9																							
10																							

Sampler's Name: M. Manivong & B. Bickler	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Delta Consultants	Mmanivong / Delta	10/08/08	1600			
Shipment Date:						
Shipment Method:						
Shipment Tracking No:						

Special Instructions:

Custody Seals In Place Yes No Temp Blank Yes No Cooler Temperature on Receipt ____ °F/C Trip Blank Yes No

Distribution: White Copy - Laboratory / Yellow Copy - BP/Atlantic Richfield Co. / Pink Copy - Consultant/Contractor

BP/ARCO Groundwater Sampling Form

Facility Location:	19918 68th Ave S, Kent, WA		
Station #:	5544	Field Technician:	Bickler + Manning
Well Identification:	MW-2	Date:	08/06/2008
Well Diameter (in):	(2) 3 4 6 8 ___	Depth to Water (DTW) (ft bgs):	10.60
Thickness of SPH (ft):	—	Depth to SPH (ft bgs):	—
Water Column Height(ft):	8.13	Total Depth of Well (ft bgs):	18.73

Purging Info and Calculations:

Purge Method: NP — Bailer / Disposable Bailer / Electric Submersible / Extraction Pump / Other:_____

Sample Method: NP — Bailer / (Disposable Bailer) / Extraction Port / Other:_____

Top pf Screen:_____ If well is listed as a no-purge ~~@XX feet~~, confirm that weter level is below the top of screen. Otherwise, the well must be purged.

Casing Volume (gal):_____ X Specified Volumes:_____ = Calculated Purge (gal):_____

Start Time: 1125 Stop Time: 1140

~~Conversion Factors (gal/ft): 2" = 0.17 3" = 0.38 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius^2 * 0.163~~

Purge:

Time	Temp (oC)	pH	Conductivity (mS)	Volume Removed (gal)	Turbidity	DO
1130	17.3	7.75	.378	0	25	0.75

D.O. (if req'd):	Pre-purge:	0.75	mg/L	Post-purge:	—	mg/L
O.R.P. (if req'd):	Pre-purge:	—	mV	Post-purge:	—	mV

Did Well dewater? Yes (No) — Actual Purge volume (gal): 0

Other Comments: See Field Log

Sample Info:

Sample ID:	MW-2-10.60	Sample Date and Time:	08062008 1135
Sample Containers and Selected Analysis:	6- 40 ML VOA'S		BTEX/G & MTBE

Purge Water Stored/Disposed of Where/How: 55 Gallon Drums on site.

Signature: Brandon Bickler Date: 08/06/2008

QA Signature: JMC Date: 8/13/08

BP/ARCO Groundwater Sampling For

Facility Location:	19918 68th Ave S, Kent, WA		
Station #:	5544	Field Technician:	Bickler + Manning
Well Identification:	MW-3	Date:	08/06/2008
Well Diameter (in):	(2) 3 4 6 8 ___	Depth to Water (DTW) (ft bgs):	10.07
Thickness of SPH (ft):	~~~	Depth to SPH (ft bgs):	~~~
Water Column Height(ft):	9.24	Total Depth of Well (ft bgs):	19.31

Purging Info and Calculations:

Purge Method: NP — Bailer / Disposable Bailer / Electric Submersible / Extraction Pump / Other:_____

Sample Method: NP — Bailer / (Disposable Bailer) / Extraction Port / Other:_____

Top pf Screen:_____ If well is listed as a ~~no-purge~~ @XX feet, confirm that weter level is below the top of screen. Otherwise, the well must be purged.

Casing Volume (gal):_____ X Specified Volumes:_____ = Calculated Purge (gal):_____

Start Time: 1110 Stop Time: 1125

~~Conversion Factors (gal/ft): 2" = 0.17 3" = 0.38 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius² * 0.163~~

BE BB

Purge:

Time	Temp (oC)	pH	Conductivity (mS)	Volume Removed (gal)	Turbidity	DO
1118	17.9	7.92	.341	0	119	0.77

BB

D.O. (if req'd):	Pre-purge:	0.77 mg/L	Post-purge:	~~~	mg/L
O.R.P. (if req'd):	Pre-purge:	~~~ mV	Post-purge:	~~~	mV

Did Well dewater? Yes (No) Actual Purge volume (gal): 0

Other Comments: See Field Log

Sample Info:

Sample ID:	MW-3-10.07	Sample Date and Time:	08062008 1120
Sample Containers and Selected Analysis:	6- 40 ML VOA'S		BTEX/G & MTBE

Purge Water Stored/Disposed of Where/How: 55 Gallon Drums on site

Signature: Brandon Bickler Date: 08/06/2008

QA Signature: TMP Date: 8/13/08

BP/ARCO Groundwater Sampling Form

Facility Location:	19918 68th Ave S, Kent, WA		
Station #:	5544	Field Technician:	Bickler & Manning
Well Identification:	MW-5	Date:	08/06/2008
Well Diameter (in):	(2) 3 4 6 8 ___	Depth to Water (DTW) (ft bgs):	10.74
Thickness of SPH (ft):	———	Depth to SPH (ft bgs):	———
Water Column Height(ft):	8.15	Total Depth of Well (ft bgs):	18.89

Purging Info and Calculations:

Purge Method: NP — Bailer / Disposable Bailer / Electric Submersible / Extraction Pump / Other:_____

Sample Method: NP — Bailer / (Disposable Bailer) / Extraction Port / Other:_____

Top pf Screen:_____ If well is listed as a no-purge @XX feet, confirm that weter level is below the top of screen. Otherwise, the well must be purged.

Casing Volume (gal):_____ X Specified Volumes:_____ = Calculated Purge (gal):_____

Start Time: 1050 Stop Time: 1205

~~Conversion Factors (gal/ft): 2" = 0.17 3" = 0.38 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius² * 0.163~~

BP BB

Purge:

Time	Temp (oC)	pH	Conductivity (mS)	Volume Removed (gal)	Turbidity	DO
1158	16.6	7.88	.247	0	36	1.02

BB

D.O. (if req'd):	Pre-purge:	1.02	mg/L	Post-purge:	———	mg/L
O.R.P. (if req'd):	Pre-purge:	———	mV	Post-purge:	———	mV

Did Well dewater? Yes (No) Actual Purge volume (gal): 0

Other Comments: See Field Log

Sample Info:

Sample ID:	MW-5-10.74	Sample Date and Time:	08062008 1200
Sample Containers and Selected Analysis:	6- 40 ML VOA'S		BTEX/G & MTBE

Purge Water Stored/Disposed of Where/How: 55 Gallon Drums on site.

Signature: Brandon Bickler Date: 08/06/2008

QA Signature: TMK Date: 8/18/08

BP/ARCO Groundwater Sampling Form

Facility Location:	19918 68th Ave S, Kent, WA		
Station #:	5544	Field Technician:	B. Bibler & P. Hennessy
Well Identification:	MW6	Date:	08/06/2008
Well Diameter (in):	(2) 3 4 6 8 ___	Depth to Water (DTW) (ft bgs):	10.56
Thickness of SPH (ft):	———	Depth to SPH (ft bgs):	———
Water Column Height(ft):	7.85	Total Depth of Well (ft bgs):	18.41

Purging Info and Calculations:

Purge Method: NP — Bailer / Disposable Bailer / Electric Submersible / Extraction Pump / Other:_____

Sample Method: NP — Bailer / Disposable Bailer / Extraction Port / Other:_____

Top pf Screen:_____ If well is listed as a no-purge @XX feet, confirm that weter level is below the top of screen. Otherwise, the well must be purged.

Casing Volume (gal):_____ X Specified Volumes:_____ = Calculated Purge (gal):_____

Start Time: 1140 Stop Time: 1150 RB

~~Conversion Factors (gal/ft): 2" = 0.17 3" = 0.38 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius^2 * 0.163~~ RB

Purge:

Time	Temp (oC)	pH	Conductivity (mS)	Volume Removed (gal)	Turbidity	DO
1143	17.5	7.80	.678	0	14	0.94
						RB

D.O. (if req'd):	Pre-purge:	0.94	mg/L	Post-purge:	———	mg/L
O.R.P. (if req'd):	Pre-purge:	———	mV	Post-purge:	———	mV

Did Well dewater? Yes (No) Actual Purge volume (gal): 0

Other Comments: See Field Log

Sample Info:

Sample ID:	MW-6-10.56	Sample Date and Time:	08062008 1145
Sample Containers and Selected Analysis:	6- 40 ML VOA'S		BTEX/G & MTBE

Purge Water Stored/Disposed of Where/How: 55 Gallon Drums on site.

Signature: Brandon Bibler Date: 08/06/2008

QA Signature: JMR Date: 8/13/08

BP/ARCO Groundwater Sampling Form

Facility Location:	19918 68th Ave S, Kent, WA		
Station #:	5544	Field Technician:	Bickler + Mooring
Well Identification:	MW-9	Date:	08/06/08
Well Diameter (in):	(2) 3 4 6 8 ___	Depth to Water (DTW) (ft bgs):	10.18
Thickness of SPH (ft):	———	Depth to SPH (ft bgs):	———
Water Column Height(ft):	8.00	Total Depth of Well (ft bgs):	18.18

Purging Info and Calculations:

Purge Method: NP — Bailer / Disposable Bailer / ~~Electric Submersible~~ / ~~Extraction Pump~~ / Other:_____

Sample Method: NP — Bailer / (Disposable Bailer) / Extraction Port / Other:_____

Top of Screen:_____ If well is listed as a no-purge @XX feet, confirm that weter level is below the top of screen. Otherwise, the well must be purged.

Casing Volume (gal):_____ X Specified Volumes:_____ =Calculated Purge (gal):_____

Start Time: 1205 Stop Time: 1225

~~Conversion Factors (gal/ft): 2" = 0.17 3" = 0.38 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius^2 * 0.163~~ BB

Purge:

Time	Temp (oC)	pH	Conductivity (mS)	Volume Removed (gal)	Turbidity	DO
1215	17.5	7.83	.563	0	7	1.24

BB

D.O. (if req'd):	Pre-purge:	1.24	mg/L	Post-purge:	———	mg/L
O.R.P. (if req'd):	Pre-purge:	———	mV	Post-purge:	———	mV

Did Well dewater? Yes (No) Actual Purge volume (gal): 0

Other Comments: See Field Log

Sample Info:

Sample ID:	MW-9-10.18	Sample Date and Time:	08062008 1220
Sample Containers and Selected Analysis:	6- 40 ML VOA'S		BTEX/G & MTBE

Purge Water Stored/Disposed of Where/How: 55 Gallon Drum on site.

Signature: Brandon Bickler Date: 08/06/2008

QA Signature: JMC Date: 8/13/08

SUBJECTIVE WELLHEAD EVALUATION

Site Name/Number: 5544 Address: 19860 68th AVE S, Kent, WA. Date 08/06/08

Project Number: 06-6384-00-6032-970 Field Tech(s): B. Baxter & P. Manivong

Calibration Record

TIME	INSTRUMENT I.D.	CAL GAS TYPE & CONCENTRATION	PRE-CAL READING	RE-ZERO Y/N	POST-CAL READING	BACKGROUND READING	REMARKS	FIELD TECH
1000	Horiba (#2)	4.0 pH	3.96	N	4.01	—	—	PM

	Well ID	MW-9	MW-5	MW-6	MW-2	MW-3
Exterior	Well Perimeter Seal Condition	G	G	G	G	G
	Well Structure Drainage	G	G	G	G	G
	Properly Secured	N	Y	Y	Y	Y
	Number/Size of Bolts	1 - 7/8	3 - 5/8	3 - 5/8	3 - 5/8	1 -
	Type of Well Vault	Manhole	Manhole	Manhole	Manhole	Manhole
	Well Marked "MONITORING WELL"	Y	Y	Y	Y	Y
	Well Manufacturer/Model Number	Morrison Dubuque	Morris Industries	Morris Industries	Morris Industries	Morrison Dubuque
	Diameter of Well Lid	6"	6"	6"	6"	6"
Interior	Well Casing Condition	G	G	F	G	G
	Locking Cap Condition	G	G	G	G	G
	Rubber Seal Condition	G	G	G	G	G
	Lock on Well	Enviro	Enviro	Enviro	Enviro	Enviro
	Liquid Present in Well Vault	N	Y	Y	Y	Y
Action	Corrective Action Required	N	N	N	N	N
	Well-box Components Cleaned	Y	Y	Y	Y	Y
	Cap Replaced	N	N	N	N	N
	Other Action Taken: explain	NA	NA	NA	NA	NA
	Repair Order Submitted	NA	NA	NA	NA	NA
Measurements	Casing Diameter (in)	2	2	2	2	2
	Depth to Water (ft)	10.18	10.74	10.56	10.60	10.07
	Depth to Bottom (ft)	18.18	18.89	18.41	18.73	19.31
	Depth to Floating Product (ft)	—	—	—	—	—
	Floating Product Thickness (ft)	—	—	—	—	—
	Dissolved Oxygen	1.24	1.02	0.94	0.75	0.79
	Temperature (°C or °F)	17.5	16.6	17.5	17.3	17.9
	pH	7.83	7.88	7.80	7.75	7.92
	Conductivity (mS)	.563	.247	.688	.378	.341
	Turbidity	7	36	14	25	19

Notes: G=Good, F=Fair, P=Poor, Y=Yes, and N=No

PM 8/6/08

DELTA

A member of: Inogen

WELL MONITORING & SAMPLING FIELD FORM

Project Name: Former ARCO 5544

Project #: G0BKK

Date: ~~10/1/2008~~ 10/08/08

Monitoring Well ID: MW-2

Field Personnel: Macki Manivong & Brandon Bickler

Start Time: 12:35

Weather Conditions: Sunny

Approx Air Temp (F): 55

INITIAL WELL DATA & WELL PURGING INFORMATION

Depth to Water (ft): 10.41

Depth to Water Measuring Technique: WLI

Total Well Depth (ft):

Detection Method of Free Product:

Depth to Free Product :

Conversion Factors (casing dia. = gallons/linear ft.) Circle One

Casing Diameter (in.): 2

0.75"=0.02 1"=0.04 2" = 0.17 3" = 0.37

4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88

Three Well Purge Volumes (gallons) = 3 X =

Method of Collecting Free Product:

Casing Volumes (#)	Gallons Purged (gallons)	Water Temperature (decree C)	Water pH (S.U.)	Specific Conductivity (µS)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
						3.3		

Total Purged =

Purge Pumping Rate (approx. gpm or ml/min):

Well Yield: High / Moderate / Low

Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristaltic Pump / Grunfos Pump / Other

Water Level After Purging (TOC - ft.):

Decontamination Methods:

Instrument Type & Number:

Instrument Notes:

Instrument Calibration Date & Time:

WELL CONDITION

Casing (circle one): Stainless Steel (SS) Carbon Steel (PVC) Other:

Casing Condition: (OK) / NA / Needs Repairs / Repaired

Lock Condition: (OK) / NA / Needs Repairs / Repaired

Cap Condition: (OK) / NA / Needs Repairs / Repaired

Inner Casing Condition: (OK) / NA / Needs Repairs / Repaired

Paint Condition: OK / NA / (Needs Repairs) / Repaired

Monument Condition: (OK) / NA / Needs Repairs / Repaired

Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 10/08/08

QA/QC Sample (circle one): YES / NO

Water Chemistry Sample: YES / NO

Time Sampled: 13:15

Sampling Method (circle One): SS Bailer ~~Poly Bailer~~ Grunfos Pump

Chain-of-Custody #:

Teflon Bailer Peristaltic Pump Other:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
MW-2-1041	6	40ml	HCL	TA	TA	BTEX & MTBE

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: (YES) / NO

Field Observation / Notes of Sampling Event: Samples contain a strong hydrocarbon odor

TOC - Top of Casing

Sampler (Print): Brandon Bickler, Macki Manivong

Sampler Signature: Brandon Bickler

Date Signed: 10/08/08

DELTA

A member of: Inogen

WELL MONITORING & SAMPLING FIELD FORM

Project Name: Former ARCO 5544

Project #: G0BKK

Date: ~~10/1/2008~~ 10/08/08

Monitoring Well ID: MW-3

Field Personnel: Macki Manivong & Brandon Bickler

Start Time: 1215

Weather Conditions: Sunny

Approx Air Temp (F): 55

INITIAL WELL DATA & WELL PURGING INFORMATION

Depth to Water (ft): 9.62

Depth to Water Measuring Technique: WLI

Total Well Depth (ft):

Detection Method of Free Product:

Depth to Free Product :

Conversion Factors (casing dia. = gallons/linear ft.) Circle One

Casing Diameter (in.): 2

0.75"=0.02 1"=0.04 2" = 0.17 3" = 0.37

4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88

Three Well Purge Volumes (gallons) = 3 X =

Method of Collecting Free Product:

Casing Volumes (#)	Gallons Purged (gallons)	Water Temperature (decree C)	Water pH (S.U.)	Specific Conductivity (µS)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
						3.0		

Total Purged =

Purge Pumping Rate (approx. gpm or ml/min):

Well Yield: High / Moderate / Low

Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristaltic Pump / Grunfos Pump / Other

Water Level After Purging (TOC - ft.):

Decontamination Methods:

Instrument Type & Number:

Instrument Notes:

Instrument Calibration Date & Time:

WELL CONDITION

Casing (circle one): Stainless Steel (SS) Carbon Steel (PVC) Other:

Casing Condition: (OK) / NA / Needs Repairs / Repaired

Lock Condition: (OK) / NA / Needs Repairs / Repaired

Cap Condition: (OK) / NA / Needs Repairs / Repaired

Inner Casing Condition: (OK) / NA / Needs Repairs / Repaired

Paint Condition: (OK) / NA / Needs Repairs / Repaired

Monument Condition: (OK) / NA / Needs Repairs / Repaired

Recommended Well Repairs: Water in well box

SAMPLING INFORMATION / DATA

Date Sampled: 10/08/08

QA/QC Sample (circle one): YES / NO

Water Chemistry Sample: YES / NO

Time Sampled: 1305

Sampling Method (circle One): SS Bailer (Poly Bailer) Grunfos Pump

Chain-of-Custody #:

Teflon Bailer Peristaltic Pump Other:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
MW-3-9.62	6	40ml	HCL	TA	TA	BTEX/g + MTBE

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: (YES) / NO

Field Observation / Notes of Sampling Event:

TOC - Top of Casing

Sampler (Print): Brandon Bickler, Macki Manivong

Sampler Signature: Brandon Bickler

Date Signed: 10/08/08

DELTA

A member of: Inogen

WELL MONITORING & SAMPLING FIELD FORM

Project Name: Former ARCO 5544

Project #: G0BKK

Date: ~~10/1/2008~~ 10/08/08

Monitoring Well ID: MW-4 | Field Personnel: Macki Manivong & Brandon Bickler

Start Time: 1240 | Weather Conditions: Sunny | Approx Air Temp (F): 55

INITIAL WELL DATA & WELL PURGING INFORMATION

Depth to Water (ft): 10.31 | Depth to Water Measuring Technique: WLI

Total Well Depth (ft): | Detection Method of Free Product:

Depth to Free Product : | Conversion Factors (casing dia. = gallons/linear ft.) Circle One

Casing Diameter (in.): 2 | 0.75"=0.02 1"=0.04 2" = 0.17 3" = 0.37 4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88

Three Well Purge Volumes (gallons) = 3 X =

Method of Collecting Free Product:

Casing Volumes (#)	Gallons Purged (gallons)	Water Temperature (decree C)	Water pH (S.U.)	Specific Conductivity (µS)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
						2.16		

Total Purged = | Purge Pumping Rate (approx. gpm or ml/min): | Well Yield: High / Moderate / Low

Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristaltic Pump / Grunfos Pump / Other

Water Level After Purging (TOC - ft.): | Decontamination Methods:

Instrument Type & Number: | Instrument Notes:

Instrument Calibration Date & Time:

WELL CONDITION

Casing (circle one): Stainless Steel (SS) Carbon Steel (PVC) Other:

Casing Condition: (OK) / NA / Needs Repairs / Repaired | Lock Condition: (OK) / NA / Needs Repairs / Repaired

Cap Condition: (OK) / NA / Needs Repairs / Repaired | Inner Casing Condition: (OK) / NA / Needs Repairs / Repaired

Paint Condition: (OK) / NA / Needs Repairs / Repaired | Monument Condition: (OK) / NA / Needs Repairs / Repaired

Recommended Well Repairs: Water in well box

SAMPLING INFORMATION / DATA

Date Sampled: 10/08/08 | QA/QC Sample (circle one): YES / NO | Water Chemistry Sample: YES / NO

Time Sampled: 1250 | Sampling Method (circle One): SS Bailer (Poly Bailer) Grunfos Pump

Chain-of-Custody #: | Teflon Bailer Peristaltic Pump Other:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
MW-4-10.31	6	40ml	HCL	TA	TA	BTEX/g + MTBE

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: (YES) / NO

Field Observation / Notes of Sampling Event:

TOC - Top of Casing

Sampler (Print): Brandon Bickler, Macki Manivong | Sampler Signature: Brandon Bickler | Date Signed: 10/08/08

DELTA

A member of: Inogen

WELL MONITORING & SAMPLING FIELD FORM

Project Name: Former ARCO 5544

Project #: G0BKK

Date: ~~10/1/2008~~ 10/08/08

Monitoring Well ID: MW-5 | Field Personnel: Macki Manivong & Brandon Bickler

Start Time: 1225 | Weather Conditions: Sunny | Approx Air Temp (F): 55

INITIAL WELL DATA & WELL PURGING INFORMATION

Depth to Water (ft): 10.80 | Depth to Water Measuring Technique: WLI

Total Well Depth (ft): | Detection Method of Free Product:

Depth to Free Product : | Conversion Factors (casing dia. = gallons/linear ft.) Circle One

Casing Diameter (in.): 2 | 0.75"=0.02 | 1"=0.04 | 2" = 0.17 | 3" = 0.37 | 4" = 0.66 | 6" = 1.47 | 8" = 2.61 | 12" = 5.88

Three Well Purge Volumes (gallons) = 3 X =

Method of Collecting Free Product:

Casing Volumes (#)	Gallons Purged (gallons)	Water Temperature (decree C)	Water pH (S.U.)	Specific Conductivity (µS)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
						1.2		

Total Purged = | Purge Pumping Rate (approx. gpm or ml/min): | Well Yield: High / Moderate / Low

Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristaltic Pump / Grunfos Pump / Other

Water Level After Purging (TOC - ft.): | Decontamination Methods:

Instrument Type & Number: | Instrument Notes:

Instrument Calibration Date & Time:

WELL CONDITION

Casing (circle one): Stainless Steel (SS) Carbon Steel (PVC) Other:

Casing Condition: (OK) / NA / Needs Repairs / Repaired | Lock Condition: (OK) / NA / Needs Repairs / Repaired

Cap Condition: (OK) / NA / Needs Repairs / Repaired | Inner Casing Condition: (OK) / NA / Needs Repairs / Repaired

Paint Condition: (OK) / NA / Needs Repairs / Repaired | Monument Condition: (OK) / NA / Needs Repairs / Repaired

Recommended Well Repairs: Water in well box

SAMPLING INFORMATION / DATA

Date Sampled: 10/08/08 | QA/QC Sample (circle one): YES / NO | Water Chemistry Sample: YES / NO

Time Sampled: 1400 | Sampling Method (circle One): SS Bailer (Poly Bailer) Grunfos Pump

Chain-of-Custody #: | Teflon Bailer Peristaltic Pump Other:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
MW-5-10.80	6	40ml	HCL	TA	TA	BTEX/g + MTBE

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: (YES) NO

Field Observation / Notes of Sampling Event: Sample is slightly turbid.

TOC - Top of Casing

Sampler (Print): Brandon Bickler, Macki Manivong

Sampler Signature: Brandon Bickler

Date Signed: 10/08/08

DELTA — A member of: Inogen

WELL MONITORING & SAMPLING FIELD FORM

Project Name: Former ARCO 5544
Project #: G0BKK
Date: ~~10/1/2008~~ 10/08/08

Monitoring Well ID: MW-6
Field Personnel: Macki Manivong & Brandon Bickler
Start Time: 1230
Weather Conditions: Sunny
Approx Air Temp (F): 55

INITIAL WELL DATA & WELL PURGING INFORMATION

Depth to Water (ft): 10.58
Depth to Water Measuring Technique: WLI
Total Well Depth (ft):
Detection Method of Free Product:
Depth to Free Product :
Conversion Factors (casing dia. = gallons/linear ft.) Circle One
Casing Diameter (in.): 2
0.75"=0.02 1"=0.04 2" = 0.17 3" = 0.37
4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Three Well Purge Volumes (gallons) = 3 X =
Method of Collecting Free Product:

Casing Volumes (#)	Gallons Purged (gallons)	Water Temperature (decree C)	Water pH (S.U.)	Specific Conductivity (µS)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
						2.8		

Total Purged =
Purge Pumping Rate (approx. gpm or ml/min):
Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristaltic Pump / Grunfos Pump / Other
Water Level After Purging (TOC - ft.):
Decontamination Methods:
Instrument Type & Number:
Instrument Notes:
Instrument Calibration Date & Time:

WELL CONDITION

Casing (circle one): Stainless Steel (SS) Carbon Steel (PVC) Other:
Casing Condition: (OK) / NA / Needs Repairs / Repaired
Lock Condition: (OK) / NA / Needs Repairs / Repaired
Cap Condition: (OK) / NA / Needs Repairs / Repaired
Inner Casing Condition: (OK) / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / (Needs Repairs) / Repaired
Monument Condition: (OK) / NA / Needs Repairs / Repaired
Recommended Well Repairs: Water in well box

SAMPLING INFORMATION / DATA

Date Sampled: ~~MW-6-08~~ 10/08/08
QA/QC Sample (circle one): YES / NO
Water Chemistry Sample: YES / NO
Time Sampled: 1340
Sampling Method (circle One): SS Bailer (Poly Bailer) Grunfos Pump
Chain-of-Custody #:
Teflon Bailer Peristaltic Pump Other:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
MW-6-1058	6	40ml	HCl	TA	TA	BTEX & MTBE

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: (YES) NO
Field Observation / Notes of Sampling Event: Sample has sediment in it.

TOC - Top of Casing

Sampler (Print): Brandon Bickler, Macki Manivong
Sampler Signature: Brandon Bickler
Date Signed: 10/08/08

DELTA

A member of: Inogen

WELL MONITORING & SAMPLING FIELD FORM

Project Name: Former ARCO 5544

Project #: G0BKK

Date: ~~10/1/2008~~ 10/08/08

Monitoring Well ID: MW-9 | Field Personnel: Macki Manivong & Brandon Bickler

Start Time: 1220 | Weather Conditions: Sunny | Approx Air Temp (F): 55

INITIAL WELL DATA & WELL PURGING INFORMATION

Depth to Water (ft): 10.10	Depth to Water Measuring Technique: WLI
Total Well Depth (ft):	Detection Method of Free Product:
Depth to Free Product :	Conversion Factors (casing dia. = gallons/linear ft.) Circle One
Casing Diameter (in.): 2	0.75"=0.02 1"=0.04 2" = 0.17 3" = 0.37
	4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
	Three Well Purge Volumes (gallons) = 3 X ____ =
	Method of Collecting Free Product:

Casing Volumes (#)	Gallons Purged (gallons)	Water Temperature (decree C)	Water pH (S.U.)	Specific Conductivity (µS)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
						2.3		

Total Purged =	Purge Pumping Rate (approx. gpm or ml/min):	Well Yield: High / Moderate / Low
Purge Method (circle one):	PVC Bailer / Poly Bailer / SS Bailer / Peristaltic Pump / Grunfos Pump / Other	
Water Level After Purging (TOC - ft.):	Decontamination Methods:	
Instrument Type & Number:	Instrument Notes:	
Instrument Calibration Date & Time:		

WELL CONDITION

Casing (circle one):	Stainless Steel (SS) Carbon Steel (PVC) Other:		
Casing Condition:	(OK) / NA / Needs Repairs / Repaired	Lock Condition:	(OK) / NA / Needs Repairs / Repaired
Cap Condition:	(OK) / NA / Needs Repairs / Repaired	Inner Casing Condition:	(OK) / NA / Needs Repairs / Repaired
Paint Condition:	(OK) / NA / Needs Repairs / Repaired	Monument Condition:	(OK) / NA / Needs Repairs / Repaired

Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 10/08/08	QA/QC Sample (circle one): YES / NO	Water Chemistry Sample: YES / NO
Time Sampled: 1420	Sampling Method (circle One): SS Bailer (Poly Bailer) Grunfos Pump	
Chain-of-Custody #:	Teflon Bailer Peristaltic Pump Other:	

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
MW-9-10.10	6	40 ml	HCL	TA	TA	BTEX/g + MTBE

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: (YES) / NO

Field Observation / Notes of Sampling Event:

TOC - Top of Casing

Sampler (Print): Brandon Bickler, Macki Manivong

Sampler Signature: Brandon Bickler

Date Signed: 10/08/08