` -

GROUND WATER MONITORING REPORT

Atlantic Richfield Company Annual Report for 2005 September 9, 2005 ALCO 6175

AUSVEN

WET # 8812

www.deltaenv.com

Solving environment-related business problems worldwide

Consultants, Inc.

4006 148th Avenue NE Redmond, Washington 98052 USA 425.882.3528 800.477.7411 Fax 425.869.1892

ARCO Facility No.:	6175
Address:	3910 South 320th Street, Auburn, WA
Atlantic Richfield Company	
Environmental Business Manager:	Scott Hooton
Consulting Co./Contact Person:	Delta Environmental Consultants, Inc./Matt Miller MM
Consultant Project Number:	G0BKM
Primary Agency/Regulatory ID No.:	Washington State Department of Ecology/8812

WORK PERFORMED DURING 2005:

- · Delta conducted annual ground water monitoring and sampling on March 28, 2005.
- Delta prepared this 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:	Annual	(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:	Unknown	(Cubic yards/tons)
Current Remediation Techniques:	Natural Attenuation	(SVES/Sparge/Pump and Treat)
Approximate Depth to Ground Water:	7.10 to 8.73	(Feet)
Ground Water Gradient:	East	(Direction)
	0.03 ft/linear ft	(Magnitude)

RECEIVED

OCT 1 4 2005

DEPT OF ECOLOGY



Annual Ground Water Monitoring Report 2005 ARCO Facility No. 6175 3910 South 320th Street Auburn, Washington Delta Project No. G0BKM

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.

Matt Miller 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 3/28/05

· North Creek Analytical Lab Report

· Field Data Sheets



TABLE-1-

SUMMARY OF GROUND WATER DATA

ARCO FACILITY NO. 6175 3910 SOUTH 320TH STREET AUBURN, WASHINGTON

Well	TOC (feet)	Date Sampled	Depth to Water (feet)	GW Elevation (feet)	Dissolved Oxygen (mg/L)		Toluene (µg/L)	Ethyl- Benzene (µg/L)	Total Xylenes (µg/L)	MTBE (μg/L)	1,2 Dibromo ethane (µg/L)			TPH-D (μg/L)	TPH-O (μg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	Comments
VE-1	98.61	04/08/04	7.51	91.10	4.6	<0.500	<0.500	<0.500	<1.00	<1.00	<0.010	<0.200	<50.0	NA	NA	8.36	<1.00	Р .
VE-1	98.61	03/28/05	7.95	90.66	3.2	0.490 🖊	<0.500	<0.500	<1.00	<2.00	<0.500	<0.500	<80.0	NA	NA	<1.00	<1.00	P
VE-2	98.97	04/08/04	6,85	92.12	5.4	<0.500	<0.500	<0.500	<1.00	<1.00	<0.010	<0.200	<50.0	NA	NA	6.17	<1.00	P
VE-2	98.97	03/28/05	8.13	90.84	1.3	0.320	<0.500	<0.500	<1.00	<2.00	<0.500	<0.500	<80.0	NA	NA	<1.00	<1.00	P
VE-3	99.22	04/08/04	7.41	91.81	5.9	<0.500	<0.500	<0.500	<1.00	<1.00	<0.010	<0.200	<50.0	NA	NA	3.76	<1.00	P
VE-3	99.22	03/28/05	7.10	92.12	5.2	<0.200 ,	<0,500	<0.500	<1.00	<2.00	<0.500	<0.500	<80.0	NA	NA	<1.00	<1.00	P
VE-4	99.51	04/08/04	6.67	92.84	5.4	<0.500	<0.500	<0.500	<1.00	<1.00	<0.010	<0.200	<50.0 ′	NA	NA	9.84	<1.00	P
VE-4	99.51	03/28/05	7.53	91.98	4.9	0.200 /	<0.500	<0.500	<1.00	<2.00	<0.500	<0.500	<80.0 ¹	NA	NA	<1.00	<1.00	P
VE-5	99.88	04/08/04	8.38	91.50	1.0	<0.500	<0.500	<0.500	<1.00	<1.00	<0.010	<0.200	<50.0	, NA	NA	4.22	<1.00	P
VE-5	99.88	03/28/05	8.73	91.15	1.4	<0.200 /	<0.500	<0.500	<1.00	<2.00	<0.500	<0.500	<80.0	NA	NA	<1.00	<1.00	P

Notes: Benzene, toluene, ethylbenzene, total xylenes, and methyl tert-butyl ether (MTBE) analyzed by EPA Method 8260B. Analyses prior to 4/8/04 utilized EPA Method 8021B. Samples with MTBE detections above the laboratory method reporting limit using 8021B were re-analyzed using 8260B to confirm the MTBE concentration.

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.

1,2-Dibromoethane (EDB) analyzed by EPA Method 8260B. Analyses on 4/8/04 utilized EPA Method 8011.

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

Total and dissolved lead analyzed by EPA Method 6020.

NA = Not analyzed.

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

TOC = Top of casing elevations and ground water elevations referenced to a site specific benchmark, assigned an elevation of 100.00 feet.

ug/L = Micrograms per liter.

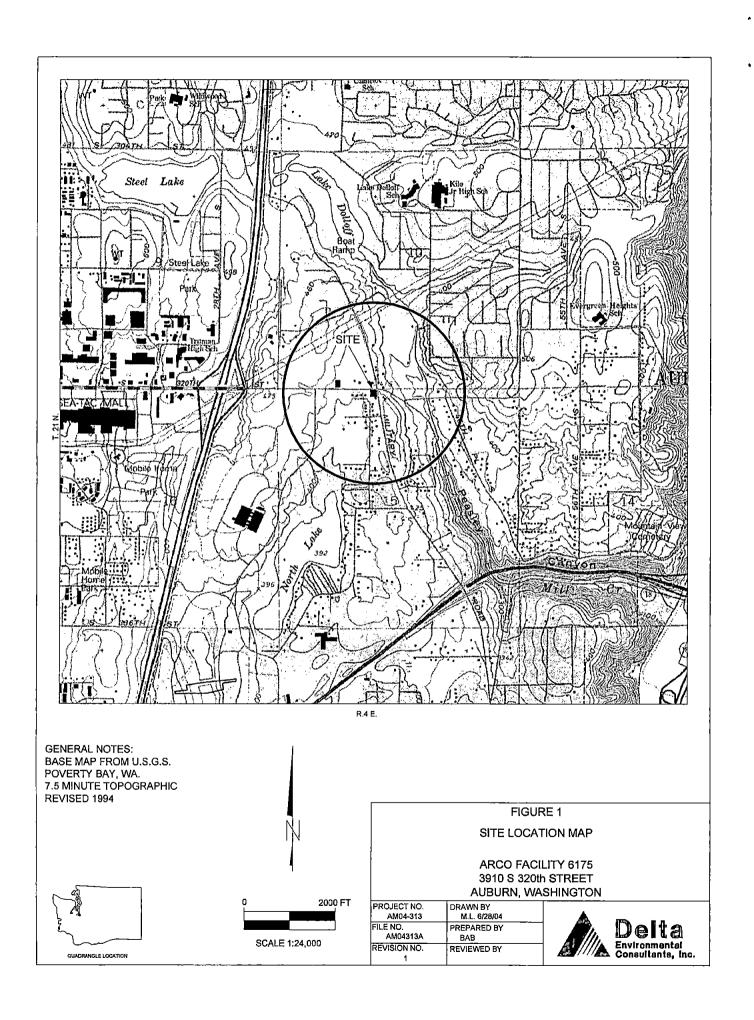
mg/L = Milligrams per liter.

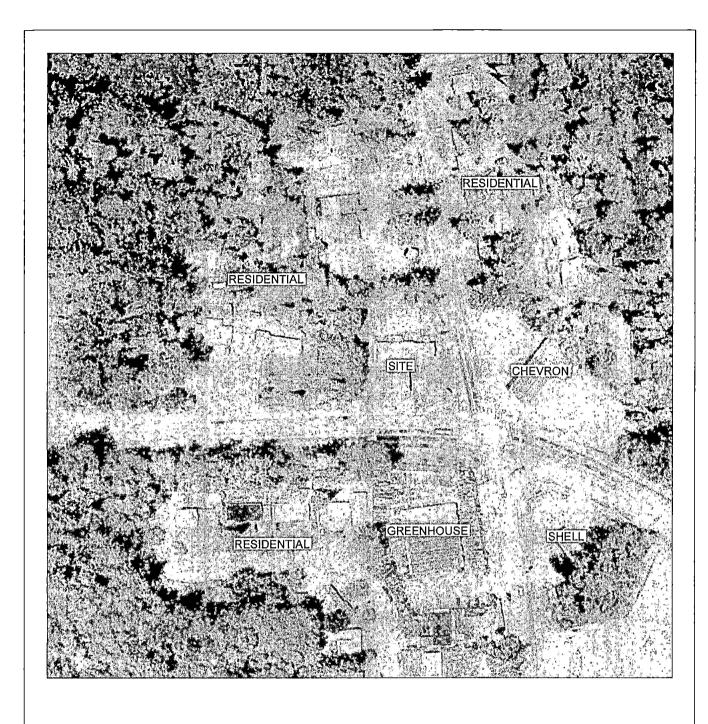
P = Purge sampling methods were utilized.

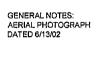
GW elevation = Ground water elevation as calculated by TOC elevation - depth to water.

Sampling Frequency:

1Q 2005: VE-1, VE-2, VE-3, VE-4, VE-5







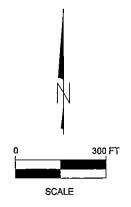


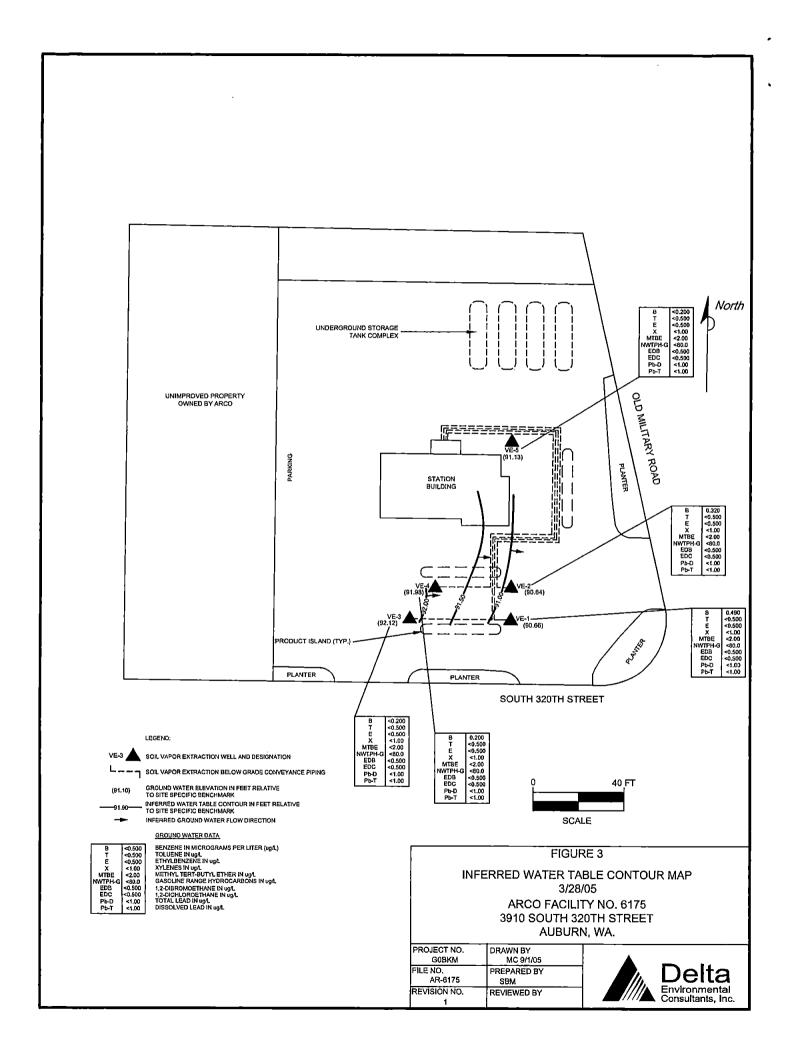
FIGURE 2

SITE AERIAL MAP

ARCO FACILITY 6175 3910 S 320th STREET AUBURN, WASHINGTON

l .	ACDOMIN, TW
PROJECT NO.	DRAWN BY
-	7/18/05
FILE NO.	PREPARED BY
AM00431B	SBM
REVISION NO.	REVIEWED BY







11720 North Creek Pkwy N, Sulte 400, Bothell, WA 98011-8244 425.420.9200 fax 425.420.9210 East 11115 Montgomery, Sulte B, Spokane, WA 99206-4776

Spokane

Portland

509.924.9200 fax 509.924.9290 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 Bend

20332 Empire Avenue, Sulte F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Anchorage 2000 W International Airport Road, Suite A-10, Anchorage, AK 99502-1119 907.563.9200 fax 907.563.9210

May 02, 2005

Matt Miller Delta Environmental Consultants - Bellevue 1200 112th Ave. NE Ste. C-210 Bellevue, WA 98004

RE: ARCO #6175, Aburn, WA

Enclosed are the results of analyses for samples received by the laboratory on 04/01/05 09:50. The following list is a summary of the NCA Work Orders contained in this report. If you have any questions concerning this report, please feel free to contact me.

<u>Work</u>	<u>Project</u>	<u>ProjectNumber</u>	
P5D0126	ARCO #6175, Aburn, WA	G0BKMRP51	
			

Thank You,

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sarah Passarge, Project Manager



Delta Environmental Consultants - Bellevue

1200 112th Ave. NE Ste. C-210 Bellevue, WA 98004

Project Name:

ARCO #6175, Aburn, WA

Project Number: Project Manager: G0BKMRP51 Matt Miller

Report Created: 05/02/05 17:42

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
VE-1 -7 .95	P5D0126-01	Water	03/28/05 13:00	04/01/05 09:50
VE-2-8.13	P5D0126-02	Water	03/28/05 12:25	04/01/05 09:50
VE-3-7.10	P5D0126-03	Water	03/28/05 14:10	04/01/05 09:50
VE-5-8.73	P5D0126-04	Water	03/28/05 11:43	04/01/05 09:50
VE-4-7.53	P5D0126-05	Water	03/28/05 13:37	04/01/05 09:50



Delta Environmental Consultants - Bellevue

1200 112th Ave. NE Ste. C-210 Bellevue, WA 98004

Project Name:

ARCO #6175, Aburn, WA

Project Number: Project Manager: G0BKMRP51

Matt Miller

Report Created: 05/02/05 17:42

Gasoline Hydrocarbons per NW TPH-Gx Method

North Creek Analytical - Portland

			North Cre	ek Analytic	ai - Porti	NIIU			-		
Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
P5D0126-01	Water	VE-1-7.95	Sampled: 03/2	8/05 13:00							
Gasoline Range Hy	ydrocarbons	NW TPH-Gx	ND		80,0	ug/l	lx	5040288	04/07/05	04/08/05 00:07	
Surrogate(s):	4-BFB		Recovery: 92.4%		Limits:	Limits: 50 - 150 %				н	
P5D0126-02	Water	VE-2-8.13	Sampled: 03/2	8/05 12:25							
Gasoline Range Hy	ydrocarbons	NW TPH-Gx	ND		80,0	ug/l	lx	5040288	04/07/05	04/08/05 01:08	
Surrogate(s):	4-BFB		Recovery: 91.2%	;	Limits:	50 - 150 %	"			"	
P5D0126-03	Water	VE-3-7.10	Sampled: 03/2	8/05 14:10							
Gasoline Range Hy	ydrocarbons	NW TPH-Gx	ND		80.0	ug/l	lx	5040288	04/07/05	04/08/05 01:39	
Surrogate(s):	4-BFB		Recovery: 92.0%	;	Limits:	50 - 150 %	"			tt .	
P5D0126-04	Water	VE-5-8.73	Sampled: 03/2	8/05 11:43							
Gasoline Range Hy	ydrocarbons	NW TPH-Gx	ND		80.0	ug/l	lx	5040288	04/07/05	04/08/05 02:09	
Surrogate(s):	4-BFB		Recovery: 97.4%		Limits:	50 - 150 %	н			ti .	•
P5D0126-05	Water	VE-4-7.53	Sampled: 03/28	8/05 13:37							
Gasoline Range Hy	ydrocarbons	NW TPH-Gx	ND		80,0	ug/l	lx	5040288	04/07/05	04/08/05 02:39	
Surrogate(s):	4-BFB		Recovery: 92.4%		Limits:	50 - 150 %	n			υ	

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sarah Passarge, Project Manager

North Creek Analytical, Inc. Environmental Laboratory Network

Page 2 of 12



Delta Environmental Consultants - Bellevue

1200 112th Ave. NE Ste. C-210 Bellevue, WA 98004

Project Name:

ARCO #6175, Aburn, WA

Project Number: Project Manager: G0BKMRP51

Report Created: 05/02/05 17:42

Matt Miller

Total Metals per EPA 6000/7000 Series Methods

North Creek Analytical - Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
P5D0126-01	Water	VE-1-7.95	Sampled: 03/2	Sampled: 03/28/05 13:00							
Lead		EPA 6020	ND		0.00100	mg/l	İx	5040160	04/05/05	04/30/05 22:52	-
P5D0126-02	Water	VE-2-8.13	Sampled: 03/2	8/05 12:25							
Lead		EPA 6020	ND		0.00100	mg/l	lx	5040160	04/05/05	04/30/05 22:58	
P5D0126-03	Water	VE-3-7.10	Sampled: 03/2								
Lead		EPA 6020	ND		0.00100	mg/l	1x	5040160	04/05/05	04/30/05 23:05	
P5D0126-04	Water	VE-5-8.73	Sampled: 03/2	8/05 11:43							
Lead		EPA 6020	ND	**	0.00100	mg/l	lx	5040160	04/05/05	04/30/05 23:11	
P5D0126-05	Water	VE-4-7.53	Sampled: 03/28/05 13:37								
Lead		EPA 6020	ND		0.00100	mg/l	lx	5040160	04/05/05	04/30/05 23:18	

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



 Seattla
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 phone: (425) 420,9200 fax: (425) 420,9210

 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 phone: (509) 924,9200 fax: (509) 924,9290

 Portland
 9405 SW Mimbus Avenue, Beaverton, OR 97008-7132 phone: (503) 906,9200 fax: (503) 906,9210

 Bend
 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 phone: (541) 383,9310 fax: 541,382,7588

 Anchorage
 2000 W International Airport Road, Suite A-10, Anchorage, AK 99502-1119 phone: (907) 563,9200 fax: (907) 563,9210

Delta Environmental Consultants - Bellevue

1200 112th Ave. NE Ste. C-210 Bellevue, WA 98004

Project Name:

ARCO #6175, Aburn, WA

Project Number: Project Manager: G0BKMRP51

Matt Miller

Report Created: 05/02/05 17:42

Dissolved Metals per EPA 6000/7000 Series Methods

North Creek Analytical - Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
P5D0126-01	Water	VE-1-7.95	Sampled: 03/2	28/05 13:00							
Lead		EPA 6020	ИD		0.00100	mg/l	lx	5040309	04/07/05	05/01/05 00:49	M-04
P5D0126-02	Water	VE-2-8.13	Sampled: 03/2	Sampled: 03/28/05 12:25							
Lead		EPA 6020	ND		0.00100	mg/l	lx	5040309	04/07/05	05/01/05 01:03	M-04
P5D0126-03	Water	VE-3-7.10	Sampled: 03/2	8/05 14:10							
Lead		EPA 6020	ND		0.00100	mg/l	1x	5040309	04/07/05	05/01/05 01:22	M-04
P5D0126-04	Water	VE-5-8.73	Sampled: 03/2	8/05 11:43							
Lead		EPA 6020	ND		0.00100	mg/l	lx	5040309	04/07/05	05/01/05 01:29	M-04
P5D0126-05	Water	VE-4-7.53	Sampled: 03/28/05 13:37								
Lead		EPA 6020	ND		0.00100	mg/l	lx	5040309	04/07/05	05/01/05 01:35	M-04

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sarah Passarge, Project Manager



Delta Environmental Consultants - Bellevue

1200 112th Ave. NE Ste. C-210 Bellevue, WA 98004

Project Name:

ARCO #6175, Aburn, WA

Project Number: Project Manager: G0BKMRP51 Matt Miller

Report Created: 05/02/05 17:42

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

North Creek Analytical - Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
P5D0126-01	Water	VE-1-7.95	Sampled: 03/28	/05 13:00							
1,2-Dibromoetha	ine	EPA 8260B	ND		0,500	ug/l	lx	5040346	04/08/05	04/09/05 00:09	
1,2-Dichloroetha	ine	•	ND		0.500	**	"	н	п	TT TT	
Benzene		*	0.490		0.200	v		u	11		
Toluene		u	ND		0.500	u	"	н	"	n	
Ethylbenzene		u	ND		0.500	n	30	0	11	н	
Xylenes (total)		"	ND		1.00	19		11	n	u	
Methyl tert-butyl	lether	п	ND		2.00			н		н	
Surrogate(s):	4-BFB		Recovery: 89.5%		Limits:	75 - 120 %	"			"	
	1,2-DCA-d4		114%			77 - 129 %	"			n	
	Dibromofluoromethane		109%			80 - 121 %	"			"	
	Toluene-d8		104%			80 - 120 %	"			n	
P5D0126-02	Water	VE-2-8.13	Sampled: 03/28	/05 12:25							
1,2-Dibromoetha	nne	EPA 8260B	ND		0.500	ug/l	1x	5040346	04/08/05	04/09/05 00:36	
1,2-Dichloroetha	ine	įŧ	ND		0.500	**	n	*		•	
Benzene		R	0,320		0.200		n	n	*	"	
Toluene		Ir.	ND		0,500	*	"	Ħ	a	n	
Ethylbenzene		v	ND		0.500	Ħ	н	п	n	н	
Xylenes (total)		ч	ND		1.00	tt	н	п	u	н	
Methyl tert-butyl	l ether	я	ND		2.00	n	и	n	н	n	
Surrogate(s):	4-BFB		Recovery: 91.0%		Limits:	75 - 120 %	"			"	
	1,2-DCA-d4		115%			77 - 129 %	"			"	
	Dibromofluoromei	thane	110%			80 - 121 %	"			"	
	Toluene-d8		104%			80 - 120 %	"			"	
P5D0126-03	Water	VE-3-7.10	Sampled: 03/28/	/05 14:10							
1,2-Dibromoetha	ine	EPA 8260B	ND		0.500	սց/I	lx	5040346	04/08/05	04/09/05 01:03	
1,2-Dichloroetha	ine	и	ND		0.500	"	H	**	**		
Benzene		u	ND		0.200	n	"	**	"	•	
Toluene		u	ND		0.500	**	**	**	**	•	
Ethylbenzene		U	ND		0.500	•	11	*	**	н	
Xylenes (total)		rt .	ND		1.00	•		н	H	a	
Methyl tert-butyl	l ether	n	ND		2.00	n	11	u	н	н	
Surrogate(s):	4-BFB		Recovery: 89.5%		Limits:	75 - 120 %	"			"	
	1,2-DCA-d4		115%			77 - 129 %	"			"	
	Dibromofluoromet	thane	110%			80 - 121 %	"			n	
	Toluene-d8		103%			80 - 120 %	"			"	

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sarah Passarge, Project Manager



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244

Seattle 11/20 North Creek Pkwy N, Suite 400, Bothell, WA 99011-82 phone: (425) 420, 9210 of ax: (425) 420, 9210 Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 phone: (509) 924.9200 fax: (509) 924.9290 Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 phone: (503) 906.9200 fax: (503) 906.9210

printer (503) 905-320 (787) 905-320 (787) 905-321 (787) 905-321 (787) 905-321 (787) 905-321 (787) 905-321 (787) 905-321 (787) 905-321 (787) 905-321 (787) 905-321 (787) 905-321 (787) 905-321 (787) 905-321 (787) 905-321

Delta Environmental Consultants - Bellevue

1200 112th Ave. NE Ste. C-210

Believue, WA 98004

ARCO #6175, Aburn, WA Project Name:

Project Number: Project Manager: G0BKMRP51

Matt Miller

Report Created: 05/02/05 17:42

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

North Creek Analytical - Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
P5D0126-04	Water	VE-5-8.73	Sampled: 03/2	8/05 11:43						 	
1,2-Dibromoethar	ne	EPA 8260B	ND		0.500	· ug/l	lx	5040346	04/08/05	04/09/05 01:29	
1,2-Dichloroethan	ne	Ħ	ND		0.500	#	**	п	#	11	
Benzene		U	ND		0,200	*	11	"	Ħ	н	
Toluene		II .	ND		0.500	11			17	n	
Ethylbenzene		и	ND		0.500	P	н		**	n	
Xylenes (total)		n	ND		1.00	If	b	ti	н	n	
Methyl tert-butyl	ether	n	ND		2.00	п	"	H	*	и	
Surrogate(s):	4-BFB		Recovery: 90.59	<u></u>	Limits:	75 - 120 %	"			"	
1,2-DCA-d4 Dibromofluoroi			113%	6		77 - 129 %	"			II .	
		ethane	1072	6		80 - 121 %	"			"	
	Toluene-d8		99.07	6		80 - 120 %	"			n	
P5D0126-05	Water	VE-4-7.53	Sampled: 03/2	28/05 13:37							
1,2-Dibromoethar	ne	EPA 8260B	ND		0.500	ug/l	Iх	5040346	04/08/05	04/09/05 01:56	
1,2-Dichloroethar	ne	11	ND		0,500	*	,,	**	v	a	
Benzene		11	0.200		0.200	n	Ħ	**	11	Ħ	
Toluene		11	ND		0.500	я	r	*	ti	ti	
Ethylbenzene		11	ND		0.500	18		10	n	71	
Xylenes (total)		n	ND		1.00	**	13		tt	η	
Methyl tert-butyl	ether	It	ND		2.00	IF.	n	н	u	11	
Surrogate(s):	4-BFB		Recovery: 92.59	6	Limits	75 - 120 %	"			"	
Ü 17	1,2-DCA-d4		1169	%		77 - 129 %	"			"	
	Dibromofluorome	ethane	1149	6		80 - 121 %	"			n	
	Toluene-d8		1059	6		80 - 120 %	"			"	

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sarah Passarge, Project Manager

North Creek Analytical, Inc. Environmental Laboratory Network

Page 6 of 12



11720 North Creek Pkwy N, Sulte 400, Bothell, WA 98011-8244 phone: (425) 420.9200 fax: (425) 420.9210

East 11115 Montgomery, Sulte B, Spokane, WA 99206-4776 phone: (509) 924,9200 fax: (509) 924,9290 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

Portland

phone: (503) 906,9200 fax: (503) 906,9210
20332 Empire Avenue, Sulte F-1, Bend, OR 97701-5711
phone: (541) 383.9310 fax: 541.382.7588

W International Airport Road, Sulta A-10, Anchorage, AK 99502-1119 phone: (907) 563.9200 fax: (907) 563.9210

Delta Environmental Consultants - Belleyue

Project Name:

ARCO #6175, Aburn, WA

1200 112th Ave. NE Ste. C-210 Bellevue, WA 98004

Gasoline Range Hydrocarbons

Surrogate(s): 4-BFB

Project Number: Project Manager: G0BKMRP51 Matt Miller

Report Created: 05/02/05 17:42

04/07/05 17:21

Gasoline Hydrocarbons per NW TPH-Gx Method - Laboratory Quality Control Results

North Creek Analytical - Portland

QC Batch: 5040288 Water Preparation Method: EPA 5030B Spike % (Limits) Amt REC Analyte Method Result MDL* MRL Units Dil Source (Limits) Analyzed Result Blank (5040288-BLK1) Extracted: 04/07/05 13:24 Gasoline Range Hydrocarbons NW TPH-Gx ND 80.0 ug/l lх 04/07/05 14:05 " Surrogate(s): 4-BFB Limits: 50-150% 04/07/05 14:05 Recovery: 97.2% Extracted: 04/07/05 13:24 LCS (5040288-BS1) Gasoline Range Hydrocarbons NW TPH-Gx 430 80.0 ug/l lx 86.0% (70-130) 04/07/05 14:39 Surrogate(s): 4-BFB 04/07/05 14:39 Recovery: 102% Limits: 50-150% LCS Dup (5040288-BSD1) Extracted: 04/07/05 13:27 NW TPH-Gx 417 80.0 (70-130) Gasoline Range Hydrocarbons ug/l 3.07% (40) 04/07/05 15:10 Surrogate(s): 4-BFB Recovery: 106% Limits: 50-150% 04/07/05 15:10 Duplicate (5040288-DUP1) QC Source: P5D0062-01 Extracted: 04/07/05 13:24 Gasoline Range Hydrocarbons NW TPH-Gx ND ug/l ND 84.7% (40) 04/07/05 19:34 Q-06 Surrogate(s): 4-BFB Recovery: Limits: 50-150% 04/07/05 19:34 **Duplicate** (5040288-DUP2) QC Source: P5D0117-03 Extracted: 04/07/05 13:24 NW TPH-Gx 61000 4.02% (40) 04/07/05 17:21

ug/l

Limits: 50-150%

Recovery: 103%

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sarah Passarge, Project Manager



Delta Environmental Consultants - Bellevue

1200 112th Ave. NE Ste. C-210 Bellevue, WA 98004

Project Name:

ARCO #6175, Aburn, WA

Project Number: Project Manager: G0BKMRP51 Matt Miller

Report Created: 05/02/05 17:42

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

North Creek Analytical - Portland

QC Batch: 5040160	Water	Preparation M	ethod: E	PA 200/30	05								
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike % Amt REC	(Limits)	% RPD	(Limit	ts) Analyzed	Notes
Blank (5040160-BLK1)								Extracted:	04/05/05 11	1:15			
Lead	EPA 6020	ND	•	0.00100	mg/l	lx						04/30/05 20:54	
LCS (5040160-BS1)								Extracted:	04/05/05 11	1:15			
Lead	EPA 6020	0.0973		0,00100	mg/l	lx		0.100 97.3%	(80-120)			04/30/05 21:00	
LCS Dup (5040160-BSD1)								Extracted:	04/05/05 11	1:15			
Lead	EPA 6020	0.0983		0,00100	mg/l	lx		0.100 98,3%	(80-120)	1,02%	(20)	04/30/05 21:07	
Duplicate (5040160-DUP1)				QC Source:	P5D0052-11			Extracted:	04/05/05 11	:15		_	
Lead	EPA 6020	ND		0.00100	mg/l	lx	ND			NR	(20)	04/30/05 21:33	
Matrix Spike (5040160-MS1)				QC Source:	P5D0052-12			Extracted:	04/05/05 11	1:15			
Lead	EPA 6020	0.0961		0,00100	mg/l	lx	ND	0.100 96.1%	(75-125)			04/30/05 21:53	
Matrix Spike (5040160-MS2)				QC Source:	P5D0052-13			Extracted:	04/05/05 11	:15			
Lead	EPA 6020	0.0939		0,00100	mg/l	lx	0.000581	0.100 93,3%	(75-125)	-		04/30/05 22:06	

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sarah Passarge, Project Manager

North Creek Analytical, Inc. Environmental Laboratory Network

Page 8 of 12



Delta Environmental Consultants - Bellevue

Project Name:

ARCO #6175, Aburn, WA

1200 112th Ave. NE Ste. C-210 Bellevue, WA 98004

Project Number:

G0BKMRP51

Report Created:

Project Manager: Matt Miller 05/02/05 17:42

	Dissolved Me	tals per EPA			<u>1ethods - </u> ytical - Por		oratory (<u>Quality</u>	Con	trol Rest	<u>ılts</u>			
QC Batch: 5040309	Water	Preparation M	lethod: E	PA 200/30	05 Diss									
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (5040309-BLK1)								Extra	cted:	04/07/05 18	;37			
Lead	EPA 6020	ND		0.00100	mg/l	lx							04/30/05 23:24	M-04
LCS_(5040309-BS1)		.i						Extra	cted:	04/07/05 18	:37			
Lead	EPA 6020	0.100		0.00100	mg/l	lx		0,100	100%	(80-120)			04/30/05 23:31	M-04
LCS Dup (5040309-BSD1)		,						Extra	cted:	04/07/05 18	:37			
Lead	EPA 6020	0.100		0.00100	mg/l	lx		0.100	100%	(80-120)	0.00%	(20)	04/30/05 23:37	M-04
Duplicate (5040309-DUP1)		İ		QC Source:	P5D0057-02			Extra	cted:	04/07/05 18	:37			
Lead	EPA 6020	0:00127		0.00100	mg/l	lx	0.00127				0.00%	(20)	05/01/05 00:04	M-04
Matrix Spike (5040309-MS1)		:		QC Source:	P5D0057-02			Extra	cted:	04/07/05 18	:37			
Lead	EPA 6020	0.0948		0.00100	mg/l	lx	0.00127	0.100	93.5%	(75-125)			05/01/05 00:17	M-04
Matrix Spike (5040309-MS2)				QC Source:	P5D0126-01			Extra	cted:	04/07/05 18	:37			
Lead	EPA 6020	0,0950		0.00100	mg/l	lx	ND	0.100	95.0%	(75-125)			05/01/05 00:56	M-04

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sarah Passarge, Project Manager



 Seattle
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 phone: (425) 420,9200 fax: (425) 420,9210

 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 phone: (509) 924,9200 fax: (509) 924,9290

 Portland
 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 phone: (503) 906.9200 fax: (503) 906.9210

 Bend
 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 phone: (541) 383,9310 fax: 541,382,7588

 Anchorage
 2000 W International Airport Road, Suite A-10, Anchorage, AK 99502-1119 phone: (907) 563,9200 fax: (907) 563,9210

Delta Environmental Consultants - Bellevue

1200 112th Ave. NE Ste. C-210

Bellevue, WA 98004

Project Name:

ARCO #6175, Aburn, WA

Project Number: Project Manager: G0BKMRP51

Matt Miller

Report Created: 05/02/05 17:42

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B - Laboratory Quality Control Results

North Creek Analytical - Portland

Analyte		Method	Result	MDL	* MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (504034	16-BLK1)								Exti	acted:	04/08/05 15	i:02			
1,2-Dibromoethan	e	EPA 8260B	ND		0.500	ug/l	İx		••				(04/08/05 20:36	
1,2-Dichloroethan	e		ND		0.500		ii				••			fr	
Benzene		п	ND		0.200	и	n								
Foluene		rr .	ND		0.500		n							II .	
Ethylbenzene		n	ND		0.500										
Xylenes (total)			ND		1.00	к	n							H.	
Methyl tert-butyl	ether	n	ND		2.00	н	P							P	
Naphthalene		u	ND		2.00	ıt	н							R	
1,2,4-Trimethylbe	nzene	n	ND		1.00	n	N								
1,3,5-Trimethylbe		n	ND		0.500	"								H .	
sopropylbenzene		u	ND		2.00	"	н								
n-Propylbenzene		n	ND		0.500		н			-				н	
Surrogate(s):	4-BFB		Recovery:	94.0%	Lin	its: 75-120%	,							04/08/05 20:36	
2111 0 8410 (15)	1,2-DCA-d4			114%		77-129%	"							"	
	Dibromofluoromethane			110%		80-121%	"							"	
	Toluene-d8			104%		80-120%	n							17	
CC (504034)	DC1)								Evt	·acted:	04/08/05 15	:·n2			
LCS (5040346 Benzene	-БЗ1)	EPA 8260B	20.6		0.200	ug/l	lx		20.0	103%	(80-120)		(04/08/05 18:49	
Foluene		0	20,4		0.500	"				102%	(80-124)			n	
Ethylbenzene		н	18,3		0,500	0			ш	91.5%	(80-120)				
Xylenes (total)		#1	55.3	•••	1.00	11			60.0	92.2%	(73-124)			n	
		**	21.1		2,00	"	11		20.0	106%	(80-129)				
Methyl tert-butyl	emer	**	18,1		2.00	•			#	90.5%				н	
Naphthalene										70.574	(12 112)			04/08/05 18:49	
Surrogate(s):	4-BFB 1,2-DCA-d4		Recovery:	94.5% 116%	Lin	nits: 75-120% 77-129%								<i>04/06/03 16:49</i>	
	Dibromofluoromethane			113%		80-121%	"							"	
	Toluene-d8			107%		80-120%	tr							"	
Matrix Spike	(5040 <u>346-MS1)</u>					P5D0283-01					04/08/05 15		-		
Вепхепе		EPA 8260B	19.9		0.200	ug/l	lx	ND	20.0	99.5%	•		•	04/08/05 19:15	
l'oluene		B	\ 18.9		0,500		*	ND			(79.7-131)				
Ethylbenzene			16.3		0.500	11	н	ND		81.5%	(80-124)			4	
Xylenes (total)		it	43.4		1.00	u	"	ND	60.0	72.3%				"	
Methyl tert-butyl	ether	at .	20.7		2,00	O	0	ND	20.0	104%	(80-130)			II .	
Naphthalene		n	16.7		2,00	4	n	ND		83,5%	(69-163)			"	
Surrogate(s):	4-BFB		Recovery:	90.0%	Lin	rits: 75-120%	"							04/08/05 19:15	
	1,2-DCA-d4			116%		77-129%	"							"	
	Dibromofluoromethane			112%		80-121%	*							"	
	Toluene-d8			102%		80-120%	rt							*	

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sarah Passarge, Project Manager



Delta Environmental Consultants - Bellevue

1200 112th Ave. NE Ste. C-210

Bellevue, WA 98004

Project Name:

ARCO #6175, Aburn, WA

Project Number: Project Manager: G0BKMRP51

Matt Miller

Report Created: 05/02/05 17:42

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B - Laboratory Quality Control Results

North Creek Analytical - Portland

QC Batel	h: 5040346	Water	Preparation	Method: E	PA 5030B										
Analyte		Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike D	up (5040346-MS	D1)			QC Source:	P5D0283-01			Ext	racted:	04/08/05 15	:02			_
Benzene		EPA 8260B	20.1		0.200	ug/l	lx	ND	20.0	100%	(80-124)	1.00%	(25)	04/08/05 19:42	
Toluene		#	19.8		0.500	4		ND		99.0%	(79.7-131)	4.65%	11	н	
Ethylbenzene		**	17.4		0.500	"		ND	*	87.0%	(80-124)	6.53%	,,		
Xylenes (total)		**	49,5		1.00	n		ND	60.0	82.5%	(44.6-154)	13.1%	ų	et.	
Methyl tert-butyl e	ether	e	□ 20.9		2.00			ND	20.0	104%	(80-130)	0.962%	5 "		
Naphthalene		n	17.3		2.00	u		ND	es	86.5%	(69-163)	3.53%	*1	u	
Surrogate(s):	4-BFB		Recovery:	93.0%	Lin	its: 75-120%	"		· · · · · · · · · · · · · · · · · · ·					04/08/05 19:42	
	1.2-DCA-d4			115%		77-129%	н							"	
	Dibromofluoromethane	!		111%		80-121%	"							**	
	Toluene-d8			104%		80-120%	rt							"	

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 ne: (425) 420.9200 fax: (425) 420.9210

East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 phone: (509) 924-9200 fax: (509) 924.9290 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 phone: (503) 906-9200 fax: (503) 906-9210

20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 phone: (541) 383.9310 fax: 541.382.7588

2000 W International Airport Road, Suite A-10, Anchorage, AK 99502-1119 phone: (907) 563.9200 fax: (907) 563.9210

Delta Environmental Consultants - Bellevue

1200 112th Ave. NE Ste. C-210

Project Name:

ARCO #6175, Aburn, WA

Project Number: Project Manager: G0BKMRP51

Matt Miller

Report Created: 05/02/05 17:42

Notes and Definitions

Report Specific Notes:

Bellevue, WA 98004

M-04

Sample Filtered through 0.45 micron filter in Laboratory prior to analysis.

Q-06

RPD is not applicable for analyte concentrations less than 5 times the MRL.

Laboratory Reporting Conventions:

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

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

NR / NA - Not Reported / Not Available

- Sample results reported on a dry weight basis. Reporting Limits are corrected for %Solids when %Solids are <50%. dry

- Sample results and reporting limits reported on a wet weight basis (as received). wet

<u>RPD</u> - 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.

METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. MDL* *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 <u>limits</u>

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

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Standard TAT

Requested Due Date (mm/dd/yy):

			<u></u>
On-site Time:	1030	Temp: L,	C
Off-site Time:	1406	Temp: 1	7
Sky Conditions:	Ka	10	
Meteorological Ev	ents:		
Wind Speed:		Direction:	

Lab	Name: North Creek Analytical, Inc	ıc.				\neg	BP/AR Facility No	0 · 6	175			 -		—					16-			=								
Add	ress: 9405 SW Nimbus Avenue					_	BP/AR Facility A			10 Sc		320 5	Sr Al	հուր	- W/		—									Environn			ts	
	Beaverton, Oregon 97008						Site Lat/Long:		300,_	10 ~			<u> </u>), TT 2:	<u>. </u>	—		Auc	Iress						Northeas		C-210		
	PM: Sarah Passarge					\neg	California Global	IDN	 Vo.: 1	–– NA									<u></u>							ton 98004				
Tele	/Fax: (503) 906-9200/(503) 906-92	210					Enfos Project No.:				01								Cor	isuna enite	anve	Onn	acto	PM-	Ject M	No.:G0B	KMKr	51		
BP/A	AR PM Coritact: Scott Hooton			_		_	Provision or RCO									—		—	╙											
	ress: 295 SW 41st Street, Bldg. 13,	, Ste N					Phase/WBS: 04-M	loni	torin	o Or	nlv						—									5)450-88	37			
	Renton, WA 98055	-					Sub Phase/Task: 2				,							-								Level I Odeltaen			—–	
Tele/	/Fax: (425) 251-0689/(425) 251-07	736					Cost Element: 05-	Sub	contr	acte	d Co	osts														gdeltaen or Atlanti				
Lab	Bottle Order No:			N	Matri				7			ervat	tive	===	┰		—	Requ					uttar	II.ei i		or Atlanti	c Kichii	ela Co.	(Circi	le one)
Item No.	Sample Description	Time	Date	Soil/Soli l	Water/Liquid	Air	Laboratory No.	No. of Containers	Unpreserved				ianoi		NWTPH-Gx	BTEX(8021B)	BTEX+MTBE(8021B)*	B)	B CHICLE	×	Total Lead	ead				Samp		t Lat/Lo	ng at	ad
1	VE-1-795	1300	3/2601	===	N	٦į		i	F	干	Ħ	17	 -	 		19		<u> </u>		_	_		┿	┿	屵					ightharpoonup
2	UF-2-6.13	┪───	-	_	/}	┰		9	!	├	1	+-′-	\vdash	├	×	$\vdash \vdash$	×	A	1	\dashv	人	メ	—	₩	<u> </u>	1 114	re u	<u>od m.</u>	<u>-></u>	
$\overline{}$	· · · · · · · · · · · · · · · · · · ·		129101	\parallel	爿	-∦		9	<u> </u>	├	<u> </u>	17	 	\sqcup	X	<u> </u>	×	+	1	\Box	X	X	上	<u> </u>	Ľ	<u>broke</u>	<u>in</u>	train	۱ <u>، کد</u>	+
3	VE-3 7.10	14/0	1/211/6:	\sqcup	X	4		9	L	L		17			1		1	1	4	-	X	V]			plans			 703	ઢ
4	H-E-S-1410	<u> </u>	3/25%+	\vdash	+	-#		9	╂┰╌		┼	 	F	\vdash	1	$\overline{}$	7	7	1			<u>x</u>		\top		64				
5	UE-5-8:13	1143	1/21/15	\Box	Ĺ			c_1	1	一	1	7	\vdash		H	\Box	$\frac{1}{i}$		']		$\dot{ o}$		\vdash	+	╟─		Uire	<u>ک۔</u>		
6	U5-4- 7.53		3/25/65	1		#		-	H	 	H	+-	\vdash	$\vdash \vdash$	┝┸┤		4	1	-4	\neg	\neg	*	\vdash	┼╌ ┦	#					
	 	135/	2/2001	\vdash	*	╬		9	1	<u> </u>	1	\Box	\sqcup	\square		\vdash	*		ᅺ	4	メ	X	<u></u>	$oxed{oxed}$	_					
7		<u> </u> '	 	\vdash	4	_ -		Ш											- 1				ĺ							
8	├ ──	<u> </u> '	<u> </u>	\bigsqcup														\Box	T	\neg		\Box		\Box						
9	i Y	[\Box	\top	\Box			\Box				\Box	$\neg \neg$		\dashv	\dashv	\dashv	\dashv	十	7	\dashv		\vdash	╟─					$-\!\!-\!\!\!-\!\!\!\!-$
10				广	十	╁		\dashv	-			 	\vdash	\dashv	-	\rightarrow	\dashv	\dashv	-+	\dashv	\dashv		—	├ ─-	 -					
	pler's Name: Keyr	17.1	 1		_	╬	Polin au	<u></u> _	<u> </u>		<u></u>			4		_		<u> </u>			<u>_</u>				<u>L</u>					
	pler's Company: Delta Environme		<u>'</u>	—		╬	Relinqu	ished	1 By /	/ Afti	liatio	<u>)n</u>		_#	Da		Tin		_		A	ccep	ted !	By / A				Date		Time
	nent Date: 3/25/05	Entai		—		╬	/-k 10	_			٦٠	- 17		∦	3/29/	101	50	ړلن	Li	سك	<u>L.</u>	Ç	<u> </u>			1X24		4.1-0	3 4	. ' 50
	nent Method: UP		——			╬	' //~// /	<u>_</u>			1/	e It	<u>"1</u>		—			-	<u> </u>		!		<u>\</u>					┦	L	
	nent Tracking No:				—	╬	<u> </u>	—		—	—					-					_							┦——	1	
_	al Instructions:					_!_								<u>l</u>			 -	<u>L</u>				_							<u></u>	
	*If positive for MTBE or if MTE	BE is no	ot detecte	 -da bs		an l	MRI exceeding 2		/1 +h			- <u>-</u>	. 926	<u> </u>																
Custo	dy Seals In Place Yes No			Tem				oug/	1, 1110	CII al																				
	Distribution 1571 in C. 1			- CIU	h 1215	allK	Yes No	==-				C001	er 16	empe	eratu	ire on	ı Ke	ceipt	<u> 14.</u>	<u>±</u>	F/C		_	Trip	Bla	ank Yes	No	o		J.

	Delta	A member of:			Proje	ect Name: _	ARCO Facility #	6175 Aubu	ırn
	Environmental Consultants, Inc.	Inogen'	WELL MO	NITORING &	Proje	ect#:	G0BKMRP51		
No and the sales on the	•			FIELD FORM	Mon	itoring/Samp	oling Date: 3	28105	
Monitoring V		VE-1	Field Perso						
Start Time:	1237	<u></u>	Weather Co	onditions:	_R	417	Appro	ox Air Temp (F): t. A
]		INITIA	L WELL DAT	A & WELL PUR			ION		' 40 -
Top of Casin	ng Elevation (Depth to Wate				 	
Total Well D		13	-	Detection Met	hod of	Free Produc	ilque. L.L.	, -	·
Depth to Wa		7,65		Conversion E	actors (rasing dia	= gallons/linear ft.)	Circle One	
Free Produc				0.75"=0.	02	1"=0.04	2" = 0.17	3" = (
Depth to Fre	e Product :	<u> </u>		4" = 0.66		6" = 1.47	8" = 2.61		5.88
Casing Dian	neter (in.):	V		Three Well Pu	ırae Vo			=	3.09.
Quantity of F	ree Product I	Bailed (gal):		Method of Col	lecting	Free Produc	ot:		
Casing	Gallons	Water	Water	Specific		Turbidity	Dissolved	ORP	Time
Volumes	Purged	Temperature	Hq	Conductivit	v	,	Oxygen	010	(0:00 -
(#)	(gallons)	(decree C)	(S.U.)	(μS)	·	(NTUs)	(mg/L)	(mV)	23:59)
				, ,			3,2	13/2	12.59
<u> </u>									1231
<u></u>								·	 -
								 	+
	<u> </u>	<u> </u>	<u></u>						
Total Purgeo		Purg	e Pumping R	ate (approx. gp	m or m	l/min):	Well Yield: Hi	gh / Moderate	e / Low
Purge Metho	d (circle one)	PVC	Bailer / Pery	Bailer / SS Bail	er / Per	istaltic Pump	/ Grunfos Pump	Other	
vvater Level	After Purging	(TOC - ft.):	Decontamin	ation Methods:					
	ype & Numbe alibration Dat			Instrument I	Notes:				
instrument C	alibration Dat	e & Time:							
				WELL CONDI	TION			-	
Casing (circle	e one):	Stainless Steel	(SS) Car	bon Steel	<u> </u>	Other:			
Casing Cond		/OK / NA / Needs		epaired Loc	Cond		PR/NA/Nee	de Renaire / I	Popoirod
Cap Conditio		OK / NA / Need:	s Repairs / R	epaired Inne		ng Condition	: OK/NA/Nee	ds Repairs / F	Renaired
Paint Conditi		OK / NA / Needs	s Repairs / Re	epaired Mor		Condition:	OK/NA/Nee	ds Repairs / F	Renaired
Recommend	ed Well Repa	irs					U	<u> </u>	Topullou
			SAMPL	ING INFORMA	TION /	DATA			
Date Sample	d: '` \	24/02		mple (circle on		_	Into a Chamainta a O	1 200	
Time Sample		00	Sampling	Method (circle 0), IE	S Bailer	ater Chamistry Sa		
Chain-of-Cus				n Bailer		altic Pump	Poly Bailer Other	Grunfos I	Pump
Sample		Bottles Pre	eservative	Destin		allic Fullip	Sample	^ b - 45 1 D	
ID.	(total)	(size)	355.144.15	Labora			ransporter	Analytical P	arameters
1E-1-1.	95 7		CL	Labor	atory		Gx, BTEX, MTBE, ED(
			NONE				VED LEAD	'	
			CL			EDB	-VED CEAD		
			103			TOTAL	LEAD		<u> </u>
All samples w	ere immediate	ely placed into a co	oler and pack	ked with ice or "	Blue Ic	e" unless of	herwise noted:	(YES) NO	
ield Observa	ation / Notes o	f Sampling Event:				<u> </u>	morwide noted.	(ILO) NO	
								<u> </u>	
				001	56	mple			
						· · · · ·			
								TOC - Top o	f Casing
		- 							
			_		4				
	1/	,, ~		. /	1	11			
ampler (Prin	n: K?\	$N_{\rm col}$	Sampler	Signature:	//		Detc Of 1	15 0.16	·~
1 (" <i>["</i> "	1151	Jampiei	oignature.		\setminus // \bigcirc	Date Signed:	1/1/10/	'
	•	HV'		,		11	_	-	

(#) (gallons) (decree C) (S.U.) (µS) (NTUs) (mg/L) (mV) 2	` 											
Monitoring Well ID: VE-1 Field Personnel: Kevin Hill Start Time: IIS 9 Weather Conditions: Kevin Hill Start Time: IIS 9 Weather Conditions: Kevin Hill Start Time: IIS 9 Weather Conditions: Kevin Hill Start Time: IIS 9 Weather Conditions: Kevin Hill Start Time: IIS 9 Weather Conditions: Kevin Hill Top of Casing Elevation (ft): Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Method of Free Product: Conversion Factors (casing data: gallons) size 2.61 12" 5.84 12"		Delta	•				Proje	ect Name:	ARCO Facilit	y#	6175 Aubu	
Monitoring Well ID: VE-1 Field Personnel: Kevin Hill Start Time: IIS 9 Weather Conditions: Kevin Hill Start Time: IIS 9 Weather Conditions: Kevin Hill Start Time: IIS 9 Weather Conditions: Kevin Hill Start Time: IIS 9 Weather Conditions: Kevin Hill Start Time: IIS 9 Weather Conditions: Kevin Hill Top of Casing Elevation (ft): Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Measuring Technique: LL Depth to Weter Method of Free Product: Conversion Factors (casing data: gallons) size 2.61 12" 5.84 12"		Environmente Consultants	lnoge	n'				ect #:	G0BKMRP51			
Start Time: 150 Weather Conditions: 150 Weather Conditions 150 Weather Weather Measuring Technique: 150 Weather Conditions 150 Weather Weathe		•					l Moni	toring/Sam			126105	
Initial Well Data & Well Purging (IPOP 15.50 Depth to Water Measuring Technique: L Depth (fi): Depth to Water (ft): Depth t				- 1	Field Perso	nnel: Ke	evin Hill		pang Date.		1.1100	
Top of Casing Elevation (ft): Total Well Depth (ft): Depth to Water Measuring Technique: Depth to Water (ft): Conversion Factors (casing dia. = gallons/linear ft.) Conversion Factors (casing dia. = gallons/linear ft.) Free Product Detected: Depth to Water Detected: Depth to Water Detected: Depth to Water Detected: Deconstruction: Deconst	Start Time:	——————————————————————————————————————					B	440		Appro	X Air Temp (F	1112
Inp of Casing Elevation (ft): Depth to Water Measuring Technique: L Depth to Water (ft): Depth to Water (ft): Depth to Water (ft): Conversion Factors (casing dia. = pallions/linear ft.) Circle One				INITIAL	- WELL DAT	A & WELL	PURGING	INFORMA	TION			~40 -
Depth to Water (n): Free Product Detected: Conversion Factors (casing dia. = gallons/linear ft.) Conversion Factors (casing dia. = gallons/linear ft.) Conversion Factors (casing dia. = gallons/linear ft.) Conversion Factors (casing dia. = gallons/linear ft.) Conversion Factors (casing dia. = gallons/linear ft.) Conversion Factors (casing dia. = gallons/linear ft.) Conversion Factors (casing dia. = gallons/linear ft.) Casing Diameter (n.): Casing Gellons Water Conversion Factors (casing dia. = gallons/linear ft.) Three Well Purge Octumes (gallons) = 3 x Three Well Purge Volumes (gallons) = 3 x Three Well Purge Volumes (gallons) = 3 x Method of Collecting Free Product: Casing Gellons Water Vater Specific Conductivity Conductivity Conductivity Conductivity Conductivity Conductivity (gallons) (gallons) Turbidity Dissolved Oxygen O	Top of Casir	ng Elevation	n (ft):			Depth to V	Vater Meas	uring Tech	nique:	15		
Free Product Detected:	Depth to We	epth (ft):		.50		_[Detection	Method of i	Free Produ	ict:	<u> </u>		
Depth to Free Product:	Free Produc	t Detected:		ــــــــــــــــــــــــــــــــــــــ		Conversio	n Factors (casing dia.	= gallons/line	ar ft.)	Circle One	
Casing Clameter (in.): Quantity of Free Product Bailed (gal): Casing Gallons Water Purged Temperature pH (Geree C) (S.U.) (µS) (NTUs) (mg/L) (my/L) (my/L) (mg/L)	Depth to Fre	e Product :		<u> </u>		0.75"	=0.02	1"=0.04	2" = 0	.17		.37
Quantity of Free Product Bailed (gal): Casing Gallons Water Water Specific Turbidity Dissolved Oxygen (myl) (gallons) (decree C) (S.U.) (J.S.) (NTUs) (myl)	Casing Diam	eter (in.):						6" = 1.4	7 8" = 2	.61		
Casing Gallons Water Purged Temperature (decree C) (S.U.) (INTUs) (INTUs) (INTUS) (INT	Quantity of F	ree Produc	t Bailed (gal):	- i		Method of	Purge Vol	umes (gall	ons) = 3 X			1.1
Volumes Purged (gallons) (decree C) (S.U.) (HS) (NTUs) (myL)	Casing			r I	Water	Speci	Collecting					
(##) (gallons) (decree C) (S.U.) (µS) (NTUs) (mg/L) (my/L) (mV) 2 Total Purged =	Volumes	Purged	T.					urbialty			ORP	Time
Total Purged = 1. Purge Pumping Rate (approx. gpm or ml/min); Well Yield: High / Moderate / Low Water Level After Purging (TOC - ft.): Decontamination Methods: Instrument Type & Number: Instrument Notes: Instrument Calibration Date & Time: WELL CONDITION	(#)	(gallons)			•		• 1	(MTHe)				(0:00 -
Total Purge Pumping Rate (approx. gpm or mi/min): Well Yield: High / Moderate / Low Mater Level After Purging (TOC - ft.): Decontamination Methods: Instrument Type & Number: Instrument Type & Number: Instrument Type & Number: Instrument Calibration Date & Time: WELL CONDITION				i		- <u>\fi</u>	'	(11103)	(IIIg/L	.)	(mV)	23:59)
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristaltic Pump / Grunfos Pump / Other Water Level After Purging (TOC - ft.): Instrument Type & Number: Instrument Type & Number: Instrument Calibration Date & Time: WELL CONDITION Casing (circle one): Stainless Steel (SS) Carbon Steel PVC Other: Casing Condition: OK / NA / Needs Repairs / Repaired Cap Condition: OK / NA / Needs Repairs / Repaired Paint Condition											 -	1521
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristaltic Pump / Grunfos Pump / Other Water Level After Purging (TOC - ft.): Instrument Type & Number: Instrument Calibration Date & Time: WELL CONDITION		·									 	┼──
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristaltic Pump / Grunfos Pump / Other Water Level After Purging (TOC - ft.): Instrument Type & Number: Instrument Calibration Date & Time: WELL CONDITION											 	 -
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristaltic Pump / Grunfos Pump / Other Water Level After Purging (TOC - ft.): Instrument Type & Number: Instrument Calibration Date & Time: WELL CONDITION	Total Purged	<u> </u>				<u> </u>	[-
Water Level After Purging (TOC - ft.): Decontamination Methods: Instrument Type & Number: Instrument Notes: Instrument	Purge Method	ا ما احادا		[Purge	Poilor (Polls	ate (approx.	gpm or ml/	min):	Well Yiel	d: Hig	h / Moderate	/ Low
Instrument Type & Number: Instrument Notes: Instrument Notes: Instrument Calibration Date & Time: WELL CONDITION	Water Level	After Purgir	og (TOC = ft)	- 7001	Decentering	Ballen/ SS E	Bailer / Peri	staltic Pum	p / Grunfos Pi	ump /	Other	-
Sampled: Casing (circle one): Stainless Steel (SS) Carbon Steel PVC Other:	Instrument Ty	pe & Numb	oer:	; '	Decomaning							
Casing (circle one): Stainless Steel (SS) Carbon Steel PVC Other: Casing Condition: OK / NA / Needs Repairs / Repaired Lock Condition: OK / NA / Needs Repairs / Repaired Inner Casing Condition: OK / NA / Needs Repairs / NA / Needs Repairs / NA / Needs Repairs / NA / Needs Repairs / NA / Needs Repairs / NA / Needs Repairs / NA / Need	Instrument Ca	alibration D	ate & Time:	-		msuume	nt Notes:					
Casing (circle one): Stainless Steel (SS) Carbon Steel PVC Other: Casing Condition: OK / NA / Needs Repairs / Repaired Lock Condition: OK / NA / Needs Repairs / Repaired Inner Casing Condition: OK / NA / Needs Repairs / Needs Repa				. 1		MELL COL	IDITION					
Casing Condition: OK / NA / Needs Repairs / Repaired Cap Condition: OK / NA / Needs Repairs / Repaired Cap Condition: OK / NA / Needs Repairs / Repaired Cap Condition: OK / NA / Needs Repairs / Repaired Condition: OK / NA / Needs Repairs / Needs Repairs / Needs Repairs / Needs Repairs / Na / Needs Repairs / Needs Repairs / Needs Repairs / Needs Repairs / NA / Needs Repairs / Needs Repairs / NA / Needs Repairs / NA / Needs Repairs / Needs Repairs / NA / Needs Repairs / Needs Rep	Casing (circle	one):	Steinless	Cha al /	00)							
Cap Condition: Olf / NA / Needs Repairs / Repaired Inner Casing Condition: OK / NA / Needs Repairs / Nepaired Inner Casing Condition: OK / NA / Needs Repairs / Nepaired Inner Casing Condition: OK / NA / Needs Repairs / Nepaired Inner Casing Condition: OK / NA / Needs	Casing Condi	tion:	OK / NA /	Neede	SS) Carl							
Paint Condition: OK / NA / Needs Repairs / Repaired Monument Condi			OK / NA /	Needs	Repairs / Re				OK/(NA)	Need	ls Repairs / Re	epaired
SAMPLING INFORMATION / DATA Date Sampled: QA/QC Sample (circle one): YES / NO Water Chemistry Sample: YES / NO Chain-of-Custody #: Teflon Bailer Peristaltic Pump Other. Sample Bottles Preservative Destination Laboratory Transporter (total) (size) HCL NWTPH-Gx, BTEX, MTBE, EDC J 500ml HNO3 TOTAL LEAD Il samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO SAMPLING INFORMATION / DATA QA/QC Sample (circle one): YES / NO Water Chemistry Sample: YES / NO Water Chemistry Sample: YES / NO Water Chemistry Sample: YES / NO Water Chemistry Sample: YES / NO Water Chemistry Sample: YES / NO Water Chemistry Sample: YES / NO Water Chemistry Sample: YES / NO Water Chemistry Sample: YES / NO Teflon Bailer Peristaltic Pump Other. Analytical Param Transporter In None DISSOLVED LEAD Il samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO SAMPLING INFORMATION / DATA Samples Water Chemistry Sample: YES / NO Samples Water Chemistry Sample: YES / NO Samples Water Chemistry Sample: YES / NO Samples Water Chemistry Sample: YES / NO Samples Water Chemistry Sample: YES / NO Samples Water Chemistry Sample: YES / NO Samples Water Chemistry Sample: YES / NO Samples Water Chemistry Sample: YES / NO Samples Water Chemistry Samples: YES / NO Samples Water Chemistry Samples: YES / NO Samples Water Chemistry Samples: YES / NO Samples Water Chemistry Samples: YES / NO Samples Water Chemistry Samples: YES / NO Samples Water Chemistry Samples: YES / NO Samples Water Chemistry Samples: YES / NO Samples Water Chemistry Samples: YES / NO Samples Water Chemistry Samples: YES / NO Samples Water Chemistry Samples: YES / NO Samples Water Chemistry Samples: YES / NO Samples Water Chemistry Samples: YES / NO Samples Water Chemistry Samples: YES / NO Samples Water Chemistry Samples: YES / NO Samples Water Chemistry Samples: YES / NO Samples Water Chemistry Samples: YES / NO Samples Water Chemist			OK/NA/	Needs	Repairs / Re				<u>1: /axk{/</u> NA/	Need	ls Repairs / Re	epaired
Date Sampled: Calculation Chain-of-Custody #: Calculation Chain-of-Custody #: Calculation Recommende	d Well Rep	pairs:	1		panca II	nonument (Jonation:	UK/NA/	Need	s Repairs / Re	epaired	
Date Sampled: Calculation Chain-of-Custody #: Calculation Chain-of-Custody #: Calculation Chain-of-Custody #: Calculation Calc												
Date Sampled: Calculation Chain-of-Custody #: Calculation Chain-of-Custody #: Calculation Chain-of-Custody #: Calculation Calc				1	SAMPL	ING INFOR	VIATION / F	λΤΔ		 -		
Sampled: Chain-of-Custody #: Sample Bottles Preservative Destination Laboratory Tender HCL NWTPH-Gx, BTEX, MTBE, EDC DISSOLVED LEAD Iliter HCL Somples Were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: Sample Poly Bailer Other. Sample Poly Bailer Other. Sample Poly Bailer Other. Sample Poly Bailer Other. Sample Sample Analytical Param Transporter NWTPH-Gx, BTEX, MTBE, EDC DISSOLVED LEAD Iliter HCL Somples Were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: Sample Poly Bailer Poly Bailer Other. Sample Sample Analytical Param Transporter NWTPH-Gx, BTEX, MTBE, EDC DISSOLVED LEAD TOTAL LEAD Iliter HCL Somples Were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: Sample Poly Bailer Poly Bailer Poly Bailer Other. Transporter Transporter NONE DISSOLVED LEAD TOTAL LEAD Iliter HCL Somples Were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: Sample Poly Bailer Poly Bailer Poly Bailer Other. Sample Analytical Param Transporter Transporter None DISSOLVED LEAD Iliter HCL Somples Were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES/NO	ate Sampled	: 1	28108									
Sample Bottles Preservative Destination Sample ID (total) (size) Laboratory Transporter Laboratory Transporter NWTPH-Gx, BTEX, MTBE, EDC DISSOLVED LEAD EDB TOTAL LEAD Il samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: Sound	ime Sampled	1: T	(2 7 1	1. 12:15	Sampling I	Method (circl	One): YES	/ NO JV	Vater Chemistr	<u>cy San</u>		
Destination Sample Analytical Param Laboratory Transporter NWTPH-Gx, BTEX, MTBE, EDC Sound NONE DISSOLVED LEAD DISSOLVED LEAD EDB TOTAL LEAD		ody#:	- 	- 12.1	Teflo	nourou (onc. n Bailer	Perieta	o Dallei Ific Dump	<u> </u>	5)	Ghunfos Pi	nmb
Laboratory Transporter VOA HCL NWTPH-Gx, BTEX, MTBE, EDC DISSOLVED LEAD Liter HOL Somi NONE DISSOLVED LEAD EDB TOTAL LEAD Il samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: Somethic Parama Analytical Parama Anal	Sample		Bottles	Pres	servative			luc rump			Am all all a l D	
VOA HCL NWTPH-Gx, BTEX, MTBE, EDC 1500ml NONE DISSOLVED LEAD Liter HCL EDB TOTAL LEAD Il samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO Sampling Event:		(tota	l) (size)		ĺ] "	Analytical Par	rameters
South NONE DISSOLVED LEAD	15-6-8.	15 7								EDC		
If samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: Samples Were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: Samples Were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: Samples Were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: Samples Were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: Samples Were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: Samples Were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted:										T		
Il samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: Samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: Samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: Samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: Samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: Samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: Samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted:								EDB				
Sample Cler		- '	SUUMI	HNO	<u>U3</u>			TOTAL	LEAD	\top		
Sample Cler	li samples we	re immedia	ately placed int	0.2.000	lor and no ale	- d td t						
Sample Clear	eld Observat	ion / Notes	of Sampling F	vent:	ner and pack	ed with ice o	or "Blue Ice	", unless o	therwise noted	<u>: (</u>	YES// NO	<u>-</u>
			or ouriping E	vent.				- 77-1-	· - ·-			
						 S 4	whi-		· w			
				1								
				,								
T00 T (0									-		TOO T	
TOC - Top of Cas				- 1			 -			'	100 - 10p of (∪asing
]
1/0.11/		1/0.1	1 ^	•		^	1					
sampler (Print): Keun Date Signed: 3/28/07	ampler (Print)	: KK'n	·		Sampler	Signaturo	1	. /	D : 5:	. 7	12 al -	ľ
Date Signed: 31 L8/05	•	· !	71V 1		Campion	orginalui C.	MMI	\mathcal{N}	Date Signe	a:) ,	1 LOIDT	}

_									
	Balla	A member of:			Proje	ct Name: AR	CO Facility#	6175 Aubu	ırn
	Environmental Consultants, Inc.	XInogen'	WELL MO	NITORING &	Proje		BKMRP51		· · ·
Monitorina		45		FIELD FORM	Monit	oring/Sampling	Date: 7	17 810	5
Monitoring V Start Time:	vell in:	<u> </u>	Field Perso		Hill			, , , , , , , , , , , , , , , , , , , 	<u> </u>
Start Titile.	\5\	40 -	Weather Co			240	Appro	ox Air Temp (i	F): (4 ?)
- 10 .			_ WELL DAT	A & WELL PUR		=			
Top of Casir	g Elevation (f	t):		Depth to Wate	r Meas	uring Techniqu	e: ~(<u> </u>	
Total Well D Depth to Wa		14.30		Detection Met	hod of F	ree Product:			
Free Produc		1.10		Conversion Fa	actors (c	casing dia. = ga	illons/linear ft.)		
Depth to Fre			 	0.75"=0.0		1"=0.04	2" = 0.17	3" = 0	
Casing Diam				4" = 0.66		6" = 1.47	8" = 2.61	12" =	5.88
	ree Product B	Pailed (dal).	 -	Method of Coll	rge voil	umes (gallons)) = 3 X		
Casing	Gallons	Water	Water	Specific	ecarig r	Turbidity	Dissolved	T 000	
Volumes	Purged	Temperature	pH	Conductivity	,	raibidity		ORP	Time
(#)	(gallons)	(decree C)	(S.U.)	(μS)	' I	(NTUs)	Oxygen (mg/L)	(m) ()	(0:00 -
			(=/	(40)		(11103)	\(\sqrt{\cdot\)}	(mV)	23:59)
				<u> </u>			3,6		1410
					$\overline{}$		ļ		
									+
									
Total Purged	-	Purg	e Pumping B	ate (approx. gpr	n or ml/	min);	Well Yield: Hi	gh / Moderate	e/Low
Purge Metho	d (circle one):	PVC	Bailer (Pøly	Bailer / SS Baile	r / Peris	staltic Pump / C	Frunfos Pump	Other	77 2011
vvater Level	After Purging	(10C - ft.):	Decontamina	ation Methods:					
	ype & Number alibration Date			Instrument N	lotes:				
mstrument C	alibration Date	e & Time:							
				WELL CONDIT	ИӨИ				-
Casing (circle	one):	Stainless Steel		bon Steel (P	VØ	Other:			
Casing Cond		PKY NA / Needs	Repairs / Re	epaired Lock	Condit		ON / NA / Nee	ds Renairs / F	Renaired
Cap Conditio		OK// NA / Needs	Repairs / Re	epaired Inne	r Casing	g Condition:	OK / NA / Nee	ds Repairs / F	Repaired
Paint Condition		OK / NA / Needs	Repairs / Re	epaired Mon	ument (Condition:	OK / NA / Nee	ds Repairs / F	Repaired
Recommend	ed Well Repair	rs:	4411	Of war	-9/			· · · · · ·	
			0.44501		<u> </u>				
Date Sample	4. 2101	4		ING INFORMAT					
Time Sample		10.7	QA/QC Sa	mple (circle one): YES		r Chemistry Sa		
Chain-of-Cus				Method (circle O			Poly Baile?	Grunfos F	^o ump
Sample		ottles Pre	eservative			ltic Pump	Other:		
ID	(total)	(size)	sservative	Destina			mple	Analytical Pa	arameters
VF-3-7	10 5		CL -	Labora	atory		sporter		
	1		VONE			DISSOLVE	BTEX, MTBE, EDG	-	 .
			<u>CL</u>			EDB	D LEAD		
	1		103			TOTAL LE	<u> </u>		
All samples w	ere immediate	ly placed into a co	oler and pacl	ked with ice or "I	Blue Ice	". unless other	wise noted:	AES/NO	
ield Observa	ition / Notes of	Sampling Event:				7 4111000 541151	wide floted.	71297 NO	
						 -			
						4.1			
			~ 1			140	2		
	· ——-			<u> </u>	<u>, r</u>	70-1			
			$\frac{1}{2}$						
		·						TOC - Top o	f Casing
								<u> </u>	<u>-</u>
						-			
	1			/ }.	ما	,			
Sampler (Print): [\ <i>Q</i>	'\ <i>\</i> \'\	Sampler	Signature: //	, <u>[]</u>	_ /	Date Signed:	1201-	_
	1) ($\sim M_{\odot} I \sim$	1		V) (f	V -		16010(ſ
	•	1-4-1 ' I		/ *	,	-		, - 3	

	Dolla	A member of:	•			Proj	ect Name:	ARCO F	acilitv#	6175	Aubur	'n
	Environmenta	XInoger	n'	WELL MO	NITORING &		ect#:	GOBKM		<u> </u>	Aubui	<u>''</u>
	Consultants, I	nc.	COMPANIE COMPANIES	SAMPLING	FIELD FORM	-				1.		
Monitoring V		VE-4		Field Perso		ivion evin Hill	itoring/Sam	pling Da	te: 5	42 8	105	
Start Time:	130	7		Weather Co		Ž.			Appe	ον Δi - T		
	, ,		INITIAL	- WELL DAT		TIBGING	INFORMA	TION	Appr	ox Air T	emp (F	24-0-
Top of Casin	g Elevation) (ft):										
Total Well D	epth (ft):	12			Detection I	Method of	suring Tech Free Produ	inique:	<u> </u>	<u>r</u>		
Depth to Wa	ter (ft):	7.52		·· · · ·	Conversion	Factors (casing dia.	= gallon	c/linear # \		- 0	
Free Product	Detected:				0.75"	=0.02	.0.04="1"	- gallon	3/11/ea/ 1(.) 2" = 0.17	Circi	e One 3" = 0,	27
Depth to Fre] 4" = C	0.66	6" = 1.4	-	B" = 2.61		12" = 8	
Casing Diam	eter (in.):	A Daile I (B			Three Well	Purge Vo	lumes (gali	ons) = 3	X		=	1.7
Casing	Gallons	t Bailed (gal):		100	Method of	Collecting	Free Produ	ict:				
Volumes	Purged	Wate Tempera		Water	Specif		Turbidity		issolved		DRP	Time
(#)	(galions)			pH (S.U.)	Conduct	•	,		Oxygen			(0:00 -
- `~	(395)	- (acorec	"	(3.0.)	(μS)		(NTUs)		(mg/L)	(<u>mV)</u>	23:59)
			\neg		 		 -	 '	7.9			
												ļ
					 			-+-		- -		
Fatal Disass 1										+		
Total Purged Purge Method	= '\.\		Purge	Pumping R	ate (approx.	gpm or m	/min):	Wel	l Yield: Hi	ah / Mo	derate	/ [0W/
Nater Level	tor Durain	<u>e):</u> g (TOC - ft.):	PVC	Bailer / Poly	Bailer / SS B	ailer / Per	istaltic Pum	p / Grunt	fos Pump /	Other	gorato,	
nstrument Ty	ne & Numb	ig (100 - π.):		Deconta min	mon Method	S:						
nstrument Ca	dibration Da	ate & Time			Instrume	nt Notes:					·	
	D.	ato a Time.										
Casing (circle					WELL CON							
Casing Condi	lion:	Stainless	Steel (SS) Carl	oon Steel	(PVC)	Other:					
Cap Condition):	OK NA /	Meeds	Repairs / Re Repairs / Re		ock Condi		(OK)	NA / Nee	ds Repa	airs / Re	epaired
Paint Conditio	n:	OK/NA/	Needs	Repairs / Re		iner Casir	g Condition Condition:	1: (OK)/	<u> NA /</u> Need	ds Repa	airs / Re	epaired
Recommende	d Well Rep	airs:		pano//t	ppuned 11	onument	Condition.	- TORY	NA / Need	ds Repa	airs / Re	paired
											——	
				SAMPL	ING INFORM	/ATION /	 DΔΤΔ					
ate Sampled	: 211	707			mple (circle			Votes Ob			\supset	
ime Sampled	l: 7.1	337		Sampling	Method (circle	e One): S	S Bailer	<i>-</i>	emistry Sa			
hain-of-Cust	ody#:		,	Teflo	n Bailer	Perist	altic Pump		Baller ther:	Gru	nfos Pu	ımp
Sample		Bottles	Pre	servative		tination	and t dirip	Sample		Analyt	ical Dor	ameters
15-4-75	(tota				Lab	oratory	1	ransport		Allalyt	icai Fai	ameters
1-4-15	3 1	VOA	НС						MTBE, EDC			
		500ml		IONE			DISSO	LVED LE				
		500ml	HN	25			EDB		$ \bot$			
	- 						TOTAL					
l samples we	re immedia	itely placed into	o a coc	er and pack	ed with ice o	r "Blue Ice	a" unless o	thonvine		VEA		
eld Observat	ion / Notes	of Sampling E	vent:		04 11111 100 0	Diac ice	, unicss 0	uleiwise	noted: (YES/I	<u> </u>	
						 -		 -		<u> </u>		
			,									
												
	 .											
												
										TOC -	Top of (Casing
						Λ						
						/ 						
ampler (Print)	1/01	ハー			Signature: (I_{I}	. A I		~	í		
יייאיפו (בנוטנ)	· 174,	ican		Sampler	Signature: {	11.1	3 Jest	Date 9	Signed: 🖔	120	1162	_
	سا	<i>\</i> \`\				/	YUV		·)	ILX	. 1 () :[

					_	٠				
	Delta		A member of:			Proje	ct Name: AR	CO Facility #	6175 Aubu	ırn
	Environment	al	XInogen	WELL MOI	VITORING &	Proje		BKMRP51		
	Consultants,	inc.	C) Divisioners	SAMPLING	FIELD FORM	•	oring/Sampling		128/03	
Monitoring V	Vell ID:	V	5(Field Person	nnel: Kevi	n Hill	oning/Sampling	g Date:	16010	
Start Time:		1	121	Weather Co			210	Appro	ox Air Temp (F	E): G 7
			INI	TIAL WELL DAT	A & WELL PU	RGING	NEORMATION		sx / iii Temp (i	1. 7 U
Top of Casir	ng Elevatio	n (ft):				uring Techniqu			
Total Well D	epth (ft):		74		Detection Me	thod of F	ree Product:	ie: WL		
Depth to Wa	iter (ft):		4,71		Conversion F	actors (asing dia = ga	allons/linear ft.)	Circle One	
Free Produc					0.75"=0	.02	1"=0.04	2" = 0.17	3" = 0	
Depth to Fre		_			4" = 0.6		6" = 1.47	8" = 2.61	12"=	
Casing Diam			<u></u>		Three Well P	urge Vol	umes (gallons	$0 = 3 \times 0$.) =	J. 6
Quantity of F					Method of Co	lecting F	ree Product:	<u> </u>		
Casing	Gallons		Water	Water	Specific		Turbidity	Dissolved	ORP	Time
Volumes	Purged		Temperature	e pH	Conductivi	ity		Oxygen) 0111	(0:00 -
(#)	(gallons)	(decree C)	(S.U.)	(μS)	·	(NTUs)	(mg/L)	(mV)	23:59)
								1.4	- (1117)	
								 		1143
		_						 		
		⅃.				1				+-
									 	 -
Total Purged		<u>_a_</u>	P	urge Pumping R	ate (approx. gr	om or ml/	min):	Well Yield: Hi	gh / Moderate	/ Low
Purge Metho	<u>d (circle on</u>	<u>ie):</u>	Ъ.	VC Bailer ∦ Pol ∮ I	BailerV SS Bai	ler / Peris	staltic Pump / (Grunfos Pumn /	Other	7 LOW
Water Level	After Purgii	ng (ΓΟC - ft.):	Decontamina	tion Methods:			ramoot ampr	Other	
Instrument Ty	<u>/pe & Num</u>	ber:			Instrument	Notes:				
nstrument C	alibration D)ate	& Time:							
					WELL COND	ITION			<u>~</u>	
Casing (circle	ono):	_	Ct-inland						•	
Casing Condi			Stainless Ste			PVC	Other:			
Cap Condition			OK INA INE	eds Repairs / Re		k Condit		OK/MA/Nee	ds Repairs / R	Repaired
Paint Condition			OK/NA/NE	eds Repairs / Re		er Casino	g Condition:	1014 / Nee	ds Repairs / R	lepaired
Recommende		noire	OX / NA / Ne	eds Repairs / Re	epaired Moi	nument (Condition:	OK/NA/Need	Js Repairs / R	epaired
tooommenae	o vveii rve	palis	·							
				SAMPL	ING INFORMA	TION / [DATA		_	
Date Sample		28	105	QA/QC Sa	mple (circle on	e): YES	/NO Wate	r Chemistry Sa	mple: YES) N	10
Time Sample		11	4.3	Sampling N	Method (circle	One): SS		Poly Batter)	Grunfos P	
Chain-of-Cust	ody#:			Teflor	n Bailer	Perista	ltic Pump	Other:	Grunios P	rump
Sample		Во	ttles	Preservative	Destir			mple	Analytical Da	
ID	(tota	al)	(size)	ĺ	Labor			sporter	Analytical Pa	ırameters
VE-5-8	,74	1	VOA	HCL		<u>utory</u>		BTEX, MTBE, EDC		
		7	500ml	NONE		 -	DISSOLVE	DIEX, MIBE, EDC		
		-	liter	Het			EDB	D LEAD		
		1	500ml	Ниоз			TOTAL LE			
ll samples w	ere immedi	atel	placed into a	cooler and pack	ed with ice or	'Blue Ico	" unless other	wiso pata di	XIEO UNI	
ield Observa	tion / Notes	s of	Sampling Ever	nt:	od With loc of	Dide (Ce	, unless other	wise noted:	(YES)/ NO	
			, 5						<u> </u>	
						Par		01-		
						FW	- 501	to him		
										
										
										
									TOC - Top of	Casing
						<u> </u>				
	1/01	11	~ \			h	fı	_		
ampler (Print)): Kej	, ((1)	Sampler	Signature: '	1/2 /	`# (/	ate Signed:	176/80	
	•	17	,	•	/	$\Lambda_{+,J}$	u v	Signou.	1 - 1100	,
		17			,					