

ConocoPhillips 2611096
Edmonds
Release 591967

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TCP-NWRO



Antea USA, Inc.
4006 148th Avenue NE
Redmond, Washington 98052 USA
www.anteagroup.com

February 25, 2011

Ms. Gayle Garbush
Washington Department of Ecology
Northwest Regional Office
3190 – 160th Avenue SE
Bellevue, WA 98008

Subject: Former BP Facility No. 11096
7601 Lake Ballinger Way, Edmonds, WA

Ms. Garbush:

The following correspondence is attached for your review:

- Groundwater Monitoring Report – February 24, 2011

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

Sincerely,

A handwritten signature in blue ink, appearing to read 'Markham Hurd'.

Markham Hurd
Senior Project Manager
ANTEA GROUP

cc: Paul Supple, Atlantic Richfield Company
Markham Hurd, Antea Group

ANNUAL GROUNDWATER MONITORING REPORT

Year of 2010

Former BP Facility No. 11096

7601 Lake Ballinger way, Edmonds, WA

AnteaTM Group Project No. 11096EA111

February 24, 2011

Prepared for:

Atlantic Richfield Company

2010 Crow Canyon Place, Suite 150

San Ramon, CA 94583

Prepared by:

AnteaTM Group

4006 148th Avenue NE

Redmond, WA 98052

800 477 4711

ANNUAL GROUNDWATER MONITORING REPORT

Atlantic Richfield Company

Year of 2010

February 24, 2011

Former BP Facility No.: 11096
Address: 7601 Lake Ballinger Way, Edmonds, WA
Atlantic Richfield Project Manager: Paul Supple
Consulting Co./Contact Person: Antea Group / Markham Hurd
Consultant Project Number: 11096EA111
Primary Agency/Regulatory ID No.: Washington State Department of Ecology / UST ID# 10182

WORK PERFORMED DURING 2010:

- Delta Consultants conducted annual groundwater monitoring and sampling on December 10, 2010.
- Antea Group (formerly Delta Consultants) prepared this annual groundwater monitoring report.

WORK SCHEDULED FOR THE FIRST HALF OF 2011:

- Antea Group will conduct annual groundwater monitoring and sampling.
- Antea Group will prepare as annual groundwater monitoring report.

Current Phase of Project:	Monitoring
Frequency of Groundwater Sampling and Monitoring:	Annual
Are LPH Present On-Site:	No
LPH Recovered this Reporting Period:	None
Cumulative LPH Recovered to Date:	None
Amount of Soil Removed to Date:	550 cubic yards (RZA-AGRA, Subsurface Investigation 1991) 500 cubic yards (RZA-AGRA, UST Removal Activities 1991)
Current Remediation Techniques:	Natural Attenuation
Approximate Depth to Groundwater:	46.58 to 48.92 ft
Groundwater Gradient:	Northwest
	<0.01 ft/linear ft

The recommendations contained in this report represent Antea USA, Inc.'s professional opinions based upon the currently available information and are arrived at in accordance with currently accepted professional standards. This report is based upon a specific scope of work requested by the client. The contract between Antea USA, Inc. 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 Antea USA, Inc.'s client and anyone else specifically identified in writing by Antea USA, Inc. as a user of this report. Antea USA, Inc. will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Antea USA, Inc. makes no express or implied warranty as to the contents of this report.

Sincerely,



Markham Hurd
Senior Project Manager
ANTEA GROUP

Enclosures: Table 1 - Summary of Ground Water Data
 Figure 1 - Site Location Map
 Figure 2 - Site Aerial Map
 Figure 3 - Inferred Water Table Contour Map – 12/10/10
 Test America Analytical Lab Report
 Field Data Sheets

TABLE 1
SUMMARY OF GROUND WATER DATA
FORMER BP FACILITY NO. 11096
7601 LAKE BALLINGER WAY
EDMONDS, WASHINGTON

Well	TOC (feet)	Date Sampled	Depth to Water (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	97.64	05/19/93	46.78	50.86	NM	<0.5	<0.5	<0.5	<1	NA	NA	NA	<50	1,500	NA	4	<3	
MW-1	97.64	08/16/93	46.76	50.88	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<50	<50	NA	16	<3	
MW-1	97.64	10/19/93	50.24	47.40	NM	<0.5	<0.5	<0.5	<1	NA	NA	NA	<50	<250	NA	43	<2	
MW-1	97.64	03/08/94	47.36	50.28	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	6.1	<3	
MW-1	97.64	06/22/94	47.44	50.20	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	<250	NA	NA	NA	
MW-1	97.64	09/23/94	47.74	49.90	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-1	97.64	12/09/94	47.85	49.79	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-1	97.64	03/01/95	48.40	49.24	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-1	97.64	06/07/95	47.11	50.53	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-1	97.64	08/28/95	47.21	50.43	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-1	97.64	11/29/95	47.22	50.42	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-1	97.64	03/06/96	46.69	50.95	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-1	97.64	06/04/96	46.15	51.49	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-1	97.64	08/29/96	46.15	51.49	NM	<0.5	<0.5	<0.5	<0.5	<1.0	NA	NA	<100	NA	NA	NA	NA	
MW-1	97.64	12/05/96	46.06	51.58	NM	<0.5	<0.5	<0.5	<0.5	<1.0	NA	NA	<100	NA	NA	NA	NA	
MW-1	97.64	03/10/97	45.19	52.45	NM	<0.5	<0.5	<0.5	<1.5	<5	NA	NA	<100	NA	NA	NA	NA	
MW-1	97.64	05/27/97	44.55	53.09	NM	<0.5	<0.5	<0.5	<1.5	<5	NA	NA	<100	<250	NA	NA	NA	
MW-1	97.64	09/03/97	44.75	52.89	NM	<0.5	<0.5	<0.5	<1.5	<5	NA	NA	<100	<250	NA	NA	NA	
MW-1	97.64	12/10/10	47.00	50.64	11.9	<0.50	<0.50	<0.50	<1.0	<1.0	NA	NA	<50	NA	NA	2.0	<2.0	NP
MW-2	99.46	05/19/93	49.08	50.38	NM	<0.5	<0.5	<0.5	<1	NA	NA	NA	<50	4,200	NA	4	<3	
MW-2	99.46	08/16/93	49.07	50.39	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<50	<50	NA	14	<3	
MW-2	99.46	10/19/93	48.43	51.01	NM	<0.5	<0.5	<0.5	<1	NA	NA	NA	<50	<250	NA	54	<2	
MW-2	99.46	03/08/94	49.24	50.22	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	6.6	<3	
MW-2	99.46	06/22/94	47.00	52.46	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	<250	NA	NA	NA	
MW-2	99.46	09/23/94	49.60	49.86	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-2	99.46	12/09/94	49.73	49.73	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-2	99.46	03/01/95	49.29	50.17	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-2	99.46	06/07/95	48.98	50.48	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-2	99.46	08/28/95	49.06	50.40	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-2	99.46	11/29/95	49.12	50.34	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-2	99.46	03/06/96	48.58	50.88	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-2	99.46	06/04/96	48.04	51.42	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-2	99.46	08/29/96	48.00	51.46	NM	<0.5	<0.5	<0.5	<0.5	<1.0	NA	NA	<100	NA	NA	NA	NA	
MW-2	99.46	12/05/96	47.98	51.48	NM	<0.5	<0.5	<0.5	<0.5	<1.0	NA	NA	<100	NA	NA	NA	NA	
MW-2	99.46	03/10/97	47.06	52.40	NM	<0.5	<0.5	<0.5	<1.5	<5	NA	NA	<100	NA	NA	NA	NA	
MW-2	99.46	05/27/97	46.38	53.08	NM	<0.5	<0.5	<0.5	<1.5	<5	NA	NA	<100	<250	NA	NA	NA	
MW-2	99.46	09/03/97	46.55	52.91	NM	<0.5	<0.5	<0.5	<1.5	<5	NA	NA	<100	<250	NA	NA	NA	
MW-2	99.46	12/10/10	48.92	50.54	10.3	<0.50	<0.50	<0.50	<1.0	<1.0	NA	NA	<50	NA	NA	5.2	<2.0	NP
MW-3	97.26	05/19/93	47.24	50.02	NM	<0.5	<0.5	<0.5	<1	NA	NA	NA	<50	1,700	NA	9	5	
MW-3	97.26	08/16/93	47.20	50.06	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<50	<50	NA	18	<3	
MW-3	97.26	10/19/93	48.02	49.24	NM	<0.5	<0.5	<0.5	<1	NA	NA	NA	<50	<250	NA	111	4.9	

TABLE 1
SUMMARY OF GROUND WATER DATA
FORMER BP FACILITY NO. 11096
7601 LAKE BALLINGER WAY
EDMONDS, WASHINGTON

Well	TOC (feet)	Date Sampled	Depth to Water (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-3	97.26	03/08/94	46.92	50.34	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	6.2	<3	
MW-3	97.26	06/22/94	49.30	47.96	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	<250	NA	NA	NA	
MW-3	97.26	09/23/94	47.30	49.96	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-3	97.26	12/09/94	47.41	49.85	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-3	97.26	03/01/95	46.95	50.31	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-3	97.26	06/07/95	46.68	50.58	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-3	97.26	08/28/95	46.74	50.52	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-3	97.26	11/29/95	46.76	50.50	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-3	97.26	03/06/96	46.25	51.01	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-3	97.26	06/04/96	45.71	51.55	NM	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<100	NA	NA	NA	NA	
MW-3	97.26	08/29/96	45.70	51.56	NM	<0.5	<0.5	<0.5	<0.5	<1.0	NA	NA	<100	NA	NA	NA	NA	
MW-3	97.26	12/05/96	45.62	51.64	NM	0.9	3.2	<0.5	2.7	<1.0	NA	NA	<100	NA	NA	NA	NA	
MW-3	97.26	03/10/97	44.75	52.51	NM	<0.5	<0.5	<0.5	<1.5	<5	NA	NA	<100	NA	NA	NA	NA	
MW-3	97.26	05/27/97	44.10	53.16	NM	<0.5	<0.5	<0.5	<1.5	<5	NA	NA	<100	<250	NA	NA	NA	
MW-3	97.26	09/03/97	44.30	52.96	NM	<0.5	<0.5	<0.5	<1.5	<5	NA	NA	<100	<250	NA	NA	NA	
MW-3	97.26	12/10/10	46.58	50.68	11.6	<0.50	<0.50	<0.50	<1.0	<1.0	NA	NA	<50	NA	NA	<2.0	<2.0	NP
MTCA Method A Cleanup Levels						5.0	1,000	700	1,000	20	0.01	5	1,000/800*	500	500	15		

*1,000 ug/l if no detectable levels of Benzene in the sample- otherwise 800 ug/l

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 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-Ox.

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

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

Total and dissolved lead analyzed by EPA Method 6020.

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

mg/L = Milligrams per liter (ppm).

µg/L = Micrograms per liter (ppb).

NM = Not measured.

NS = Not sampled.

NA = Not analyzed.

P = Purge sampling methods were utilized.

NP = Non-purge sampling methods were used.

TOC = Top of Casing Elevation relative to a site specific benchmark assigned an elevation of 100.00 feet established by Charles A. Gove & Associates, Inc.

Historical Data from 1993-1997 from Charles A. Gove & Associates, Inc.

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

Sampling Frequency:

4Q10: MW-1, MW-2, MW-3



GENERAL NOTES:
 BASE MAP FROM TERRAIN NAVIGATOR PRO
 EDMONDS, WA. QUADRANGLE
 7.5 MINUTE TOPOGRAPHIC MAP
 1953
 PHOTOREVISED 1981



QUADRANGLE LOCATION

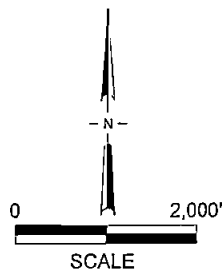


FIGURE 1

SITE LOCATION MAP
 FORMER BP FACILITY NO. 11096
 7601 LAKE BALLINGER WAY
 EDMONDS, WASHINGTON

PROJECT NO. 110960A101		DRAWN BY K. MARTIN	
FILE NO. 11096-SLM		PREPARED BY M. MANIVONG	
DATE 14 JAN 11	REV. 1	REVIEWED BY	





GENERAL NOTES:
AERIAL PHOTOGRAPH
DATED 2008

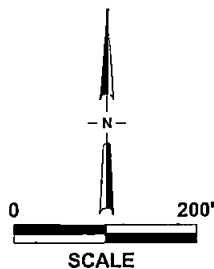


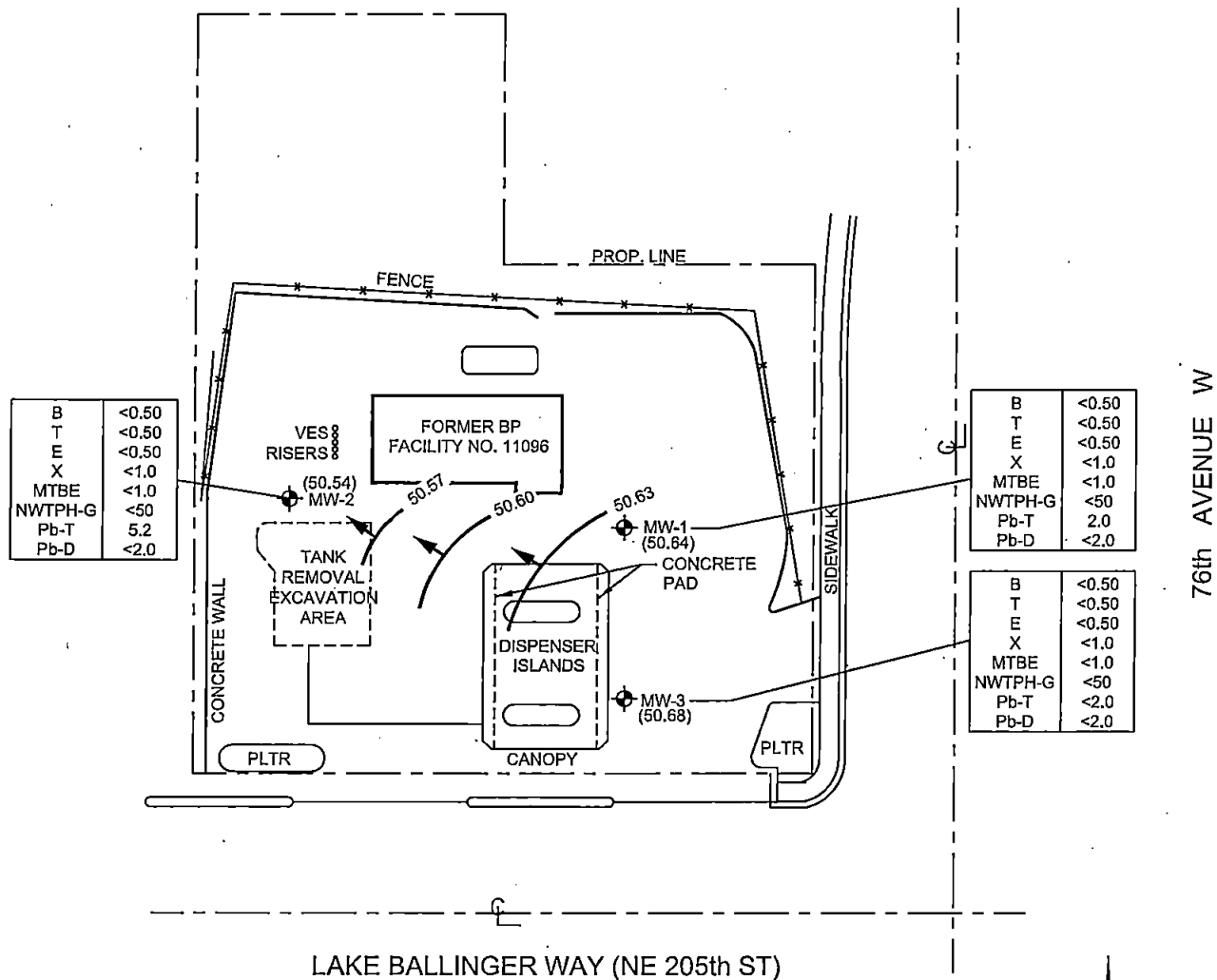
FIGURE 2

SITE AERIAL MAP

FORMER BP FACILITY NO. 11096
7601 LAKE BALLINGER WAY
EDMONDS, WASHINGTON

PROJECT NO. 11096OA101	DRAWN BY KYM 2/24/11
FILE NO. 11096-SAM	PREPARED BY MM
REVISION NO. 3	REVIEWED BY





LEGEND

- MW-3  GROUNDWATER MONITORING WELL LOCATION
- (50.64) GROUNDWATER ELEVATION IN FEET
RELATIVE TO THE NATIONAL GEODETIC VERTICAL DATUM (NGVD)
- 50.63 — INFERRED WATER TABLE CONTOUR IN FEET
RELATIVE TO THE NGVD
(CONTOUR INTERVAL: 0.03 ft)
- ← INFERRED GROUNDWATER FLOW DIRECTION; NW
(GROUNDWATER GRADIENT: <0.01 ft/linear ft)

GROUNDWATER DATA

B	<0.50	BENZENE IN MICROGRAMS PER LITER (ug/L)
T	<0.50	TOLUENE IN ug/L
E	<0.50	ETHYLBENZENE IN ug/L
X	<1.0	XYLENES IN ug/L
MTBE	<1.0	METHYL TERT BUTYL ETHER IN ug/L
NWTPH-G	<50	GASOLINE-RANGE HYDROCARBONS IN ug/L
Pb-T	<2.0	TOTAL LEAD IN ug/L
Pb-D	<2.0	DISSOLVED LEAD IN ug/L

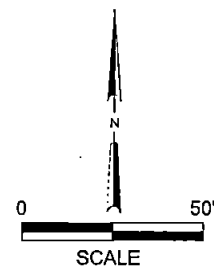


FIGURE 3
INFERRED WATER TABLE CONTOUR MAP
12/10/10

FORMER BP FACILITY NO. 11096
7601 LAKE BALLINGER WAY
EDMONDS, WASHINGTON

PROJECT NO. 11096OA111	DRAWN BY K. MARTIN
FILE NO. BP-11096	PREPARED BY M. MANIVONG
DATE 24 FEB 11	REV. 1
LAYER 4Q10	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

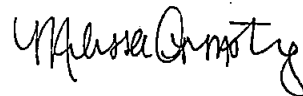
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-23473-1
Client Project/Site: BP 11096

For:
Delta Consultants
4006 148th Ave NE
Redmond, Washington 98052

Attn: Markham Hurd



Authorized for release by:
12/29/2010 2:24 PM

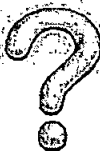
Melissa Armstrong
Project Manager I
melissa.armstrong@testamericainc.com

LINKS

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The
Expert**

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www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Sample Receipt Checklist	15



Case Narrative

Client: Delta Consultants
Project/Site: BP 11096

TestAmerica Job ID: 580-23473-1

Job ID: 580-23473-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-23473-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

GC Semi VOA - Method NWTPH-Dx

The method blank for preparation batch 580-77614 contained #2 Diesel (C10-C24) above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

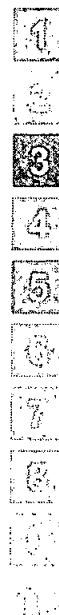
No other analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.



Qualifier Definition/Glossary

Client: Delta Consultants
Project/Site: BP 11096

TestAmerica Job ID: 580-23473-1

Glossary

Glossary	Glossary Description
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.



Analytical Data

Client: Delta Consultants
Project/Site: BP 11096

TestAmerica Job ID: 580-23473-1

Client Sample ID: MW-1-47.0

Date Collected: 12/10/10 15:20

Date Received: 12/13/10 14:15

Lab Sample ID: 580-23473-1

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			12/17/10 01:07	1
Toluene	ND		0.50		ug/L			12/17/10 01:07	1
Ethylbenzene	ND		0.50		ug/L			12/17/10 01:07	1
Xylenes, Total	ND		1.0		ug/L			12/17/10 01:07	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/17/10 01:07	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 130		12/17/10 01:07	1
a,a,a-Trifluorotoluene	115		50 - 150		12/17/10 01:07	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		50		ug/L			12/17/10 01:07	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		50 - 150					12/17/10 01:07	1
Trifluorotoluene (Surr)	99		50 - 150					12/17/10 01:07	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.12		mg/L		12/16/10 15:32	12/20/10 13:17	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		12/16/10 15:32	12/20/10 13:17	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	97		50 - 150				12/16/10 15:32	12/20/10 13:17	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.0		2.0		ug/L		12/22/10 11:43	12/23/10 11:16	5

Method: 6020 - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0		ug/L		12/22/10 11:43	12/23/10 11:29	5

Analytical Data

Client: Delta Consultants
Project/Site: BP 11096

TestAmerica Job ID: 580-23473-1

Client Sample ID: MW-2-48.92

Lab Sample ID: 580-23473-2

Date Collected: 12/10/10 15:40

Matrix: Water

Date Received: 12/13/10 14:15

Method: 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			12/17/10 01:29	1
Toluene	ND		0.50		ug/L			12/17/10 01:29	1
Ethylbenzene	ND		0.50		ug/L			12/17/10 01:29	1
Xylenes, Total	ND		1.0		ug/L			12/17/10 01:29	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/17/10 01:29	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 130					12/17/10 01:29	1
a,a,a-Trifluorotoluene	112		50 - 150					12/17/10 01:29	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		50		ug/L			12/17/10 01:29	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		50 - 150					12/17/10 01:29	1
Trifluorotoluene (Surr)	97		50 - 150					12/17/10 01:29	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.12		mg/L		12/16/10 15:32	12/20/10 13:37	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		12/16/10 15:32	12/20/10 13:37	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	99		50 - 150				12/16/10 15:32	12/20/10 13:37	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.2		2.0		ug/L		12/22/10 11:43	12/23/10 11:20	5

Method: 6020 - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0		ug/L		12/22/10 11:43	12/23/10 11:33	5

Analytical Data

Client: Delta Consultants
Project/Site: BP 11096

TestAmerica Job ID: 580-23473-1

Client Sample ID: MW-3-46.58

Lab Sample ID: 580-23473-3

Date Collected: 12/10/10 14:45

Matrix: Water

Date Received: 12/13/10 14:15

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			12/17/10 01:50	1
Toluene	ND		0.50		ug/L			12/17/10 01:50	1
Ethylbenzene	ND		0.50		ug/L			12/17/10 01:50	1
Xylenes, Total	ND		1.0		ug/L			12/17/10 01:50	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/17/10 01:50	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 130		12/17/10 01:50	1
a,a,a-Trifluorotoluene	115		50 - 150		12/17/10 01:50	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		50		ug/L			12/17/10 01:50	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		50 - 150		12/17/10 01:50	1
Trifluorotoluene (Surr)	100		50 - 150		12/17/10 01:50	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.12		mg/L		12/16/10 15:32	12/20/10 13:57	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		12/16/10 15:32	12/20/10 13:57	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	100		50 - 150	12/16/10 15:32	12/20/10 13:57	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0		ug/L		12/22/10 11:43	12/23/10 11:25	5

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0		ug/L		12/22/10 11:43	12/23/10 11:45	5

Quality Control Data

Client: Delta Consultants
Project/Site: BP 11096

TestAmerica Job ID: 580-23473-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 580-77626/4
Matrix: Water
Analysis Batch: 77626

Client Sample ID: MB 580-77626/4
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			12/16/10 17:51	1
Toluene	ND		0.50		ug/L			12/16/10 17:51	1
Ethylbenzene	ND		0.50		ug/L			12/16/10 17:51	1
m-Xylene & p-Xylene	ND		1.0		ug/L			12/16/10 17:51	1
o-Xylene	ND		1.0		ug/L			12/16/10 17:51	1
Xylenes, Total	ND		1.0		ug/L			12/16/10 17:51	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/16/10 17:51	1

Surrogate	MB % Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 130		12/16/10 17:51	1
a,a,a-Trifluorotoluene	114		50 - 150		12/16/10 17:51	1

Lab Sample ID: LCS 580-77626/5
Matrix: Water
Analysis Batch: 77626

Client Sample ID: LCS 580-77626/5
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Benzene	50.0	51.4		ug/L		103	80 - 125
Toluene	50.0	52.7		ug/L		105	80 - 120
Ethylbenzene	50.0	52.7		ug/L		105	80 - 125
m-Xylene & p-Xylene	100	106		ug/L		106	75 - 120
o-Xylene	50.0	52.3		ug/L		105	75 - 120
Methyl tert-butyl ether	50.0	50.2		ug/L		100	80 - 120

Surrogate	LCS % Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		80 - 130
a,a,a-Trifluorotoluene	107		50 - 150

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-77625/5
Matrix: Water
Analysis Batch: 77625

Client Sample ID: MB 580-77625/5
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		50		ug/L			12/16/10 17:51	1

Surrogate	MB % Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		50 - 150		12/16/10 17:51	1
Trifluorotoluene (Surr)	101		50 - 150		12/16/10 17:51	1

Lab Sample ID: LCS 580-77625/6
Matrix: Water
Analysis Batch: 77625

Client Sample ID: LCS 580-77625/6
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Gasoline	1000	951		ug/L		95	79 - 110

Quality Control Data

Client: Delta Consultants
Project/Site: BP 11096

TestAmerica Job ID: 580-23473-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-77625/6
Matrix: Water
Analysis Batch: 77625

Client Sample ID: LCS 580-77625/6
Prep Type: Total/NA

	LCS	LCS	
Surrogate	% Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		50 - 150
Trifluorotoluene (Surr)	95		50 - 150

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Lab Sample ID: MB 580-77614/1-B
Matrix: Water
Analysis Batch: 77737

Client Sample ID: MB 580-77614/1-B
Prep Type: Total/NA
Prep Batch: 77614

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	Result	Qualifier	0.12		mg/L		12/16/10 15:32	12/20/10 09:21	1
Motor Oil (>C24-C36)	ND		0.25		mg/L		12/16/10 15:32	12/20/10 09:21	1
Surrogate	MB	MB	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	% Recovery	Qualifier	50 - 150				12/16/10 15:32	12/20/10 09:21	1

Lab Sample ID: LCS 580-77614/2-B
Matrix: Water
Analysis Batch: 77737

Client Sample ID: LCS 580-77614/2-B
Prep Type: Total/NA
Prep Batch: 77614

Analyte	Spike	LCS	LCS	Unit	D	% Rec	Limits
#2 Diesel (C10-C24)	Added	Result	Qualifier	mg/L		125	70 - 130
Motor Oil (>C24-C36)	5.00	6.25		mg/L		128	70 - 130
Surrogate	LCS	LCS	Limits				
o-Terphenyl	% Recovery	Qualifier	50 - 150				

Lab Sample ID: LCSD 580-77614/3-B
Matrix: Water
Analysis Batch: 77737

Client Sample ID: LCSD 580-77614/3-B
Prep Type: Total/NA
Prep Batch: 77614

Analyte	Spike	LCSD	LCSD	Unit	D	% Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	Added	Result	Qualifier	mg/L		128	70 - 130	2	30
Motor Oil (>C24-C36)	5.00	6.37		mg/L		127	70 - 130	0	30
Surrogate	LCSD	LCSD	Limits						
o-Terphenyl	% Recovery	Qualifier	50 - 150						

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-77821/20-D
Matrix: Water
Analysis Batch: 78161

Client Sample ID: MB 580-77821/20-D
Prep Type: Total Recoverable
Prep Batch: 77988

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	Result	Qualifier	2.0		ug/L		12/22/10 11:43	12/23/10 10:10	5

Quality Control Data

Client: Delta Consultants
Project/Site: BP 11096

TestAmerica Job ID: 580-23473-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 580-77988/22-A Client Sample ID: LCS 580-77988/22-A
Matrix: Water Prep Type: Total Recoverable
Analysis Batch: 78161 Prep Batch: 77988

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Lead	1000	1020		ug/L		102	80 - 120

Lab Sample ID: LCSD 580-77988/23-A Client Sample ID: LCSD 580-77988/23-A
Matrix: Water Prep Type: Total Recoverable
Analysis Batch: 78161 Prep Batch: 77988

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Lead	1000	1020		ug/L		102	80 - 120	0	20

Lab Sample ID: LCS 580-77998/25-A Client Sample ID: LCS 580-77998/25-A
Matrix: Water Prep Type: Total Recoverable
Analysis Batch: 78161 Prep Batch: 77998

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Lead	1000	1030		ug/L		103	80 - 120

Lab Sample ID: LCSD 580-77998/26-A Client Sample ID: LCSD 580-77998/26-A
Matrix: Water Prep Type: Total Recoverable
Analysis Batch: 78161 Prep Batch: 77998

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Lead	1000	1040		ug/L		104	80 - 120	1	20

Lab Sample ID: MB 580-77917/17-B Client Sample ID: MB 580-77917/17-B
Matrix: Water Prep Type: Dissolved
Analysis Batch: 78161 Prep Batch: 77998

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.40		ug/L		12/22/10 13:08	12/23/10 08:35	1

Lab Chronicle

Client: Delta Consultants
Project/Site: BP 11096

TestAmerica Job ID: 580-23473-1

Client Sample ID: MW-1-47.0

Date Collected: 12/10/10 15:20

Date Received: 12/13/10 14:15

Lab Sample ID: 580-23473-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	NWTPH-Gx		1	77625	12/17/10 01:07	MAT	TestAmerica Seattle
Total/NA	Analysis	8021B		1	77626	12/17/10 01:07	MAT	TestAmerica Seattle
Total/NA	Prep	3520C			77614	12/16/10 15:32	MT	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Dx		1	77737	12/20/10 13:17	EK	TestAmerica Seattle
Total Recoverable	Prep	3005A			77988	12/22/10 11:43	PAB	TestAmerica Seattle
Total Recoverable	Analysis	6020		5	78161	12/23/10 11:16	FCW	TestAmerica Seattle
Dissolved	Prep	3005A			77988	12/22/10 11:43	PAB	TestAmerica Seattle
Dissolved	Analysis	6020		5	78161	12/23/10 11:29	FCW	TestAmerica Seattle

Client Sample ID: MW-2-48.92

Date Collected: 12/10/10 15:40

Date Received: 12/13/10 14:15

Lab Sample ID: 580-23473-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	NWTPH-Gx		1	77625	12/17/10 01:29	MAT	TestAmerica Seattle
Total/NA	Analysis	8021B		1	77626	12/17/10 01:29	MAT	TestAmerica Seattle
Total/NA	Prep	3520C			77614	12/16/10 15:32	MT	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Dx		1	77737	12/20/10 13:37	EK	TestAmerica Seattle
Total Recoverable	Prep	3005A			77988	12/22/10 11:43	PAB	TestAmerica Seattle
Total Recoverable	Analysis	6020		5	78161	12/23/10 11:20	FCW	TestAmerica Seattle
Dissolved	Prep	3005A			77988	12/22/10 11:43	PAB	TestAmerica Seattle
Dissolved	Analysis	6020		5	78161	12/23/10 11:33	FCW	TestAmerica Seattle

Client Sample ID: MW-3-46.58

Date Collected: 12/10/10 14:45

Date Received: 12/13/10 14:15

Lab Sample ID: 580-23473-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	NWTPH-Gx		1	77625	12/17/10 01:50	MAT	TestAmerica Seattle
Total/NA	Analysis	8021B		1	77626	12/17/10 01:50	MAT	TestAmerica Seattle
Total/NA	Prep	3520C			77614	12/16/10 15:32	MT	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Dx		1	77737	12/20/10 13:57	EK	TestAmerica Seattle
Total Recoverable	Prep	3005A			77988	12/22/10 11:43	PAB	TestAmerica Seattle
Total Recoverable	Analysis	6020		5	78161	12/23/10 11:25	FCW	TestAmerica Seattle
Dissolved	Prep	3005A			77988	12/22/10 11:43	PAB	TestAmerica Seattle
Dissolved	Analysis	6020		5	78161	12/23/10 11:45	FCW	TestAmerica Seattle

Certification Summary

Client: Delta Consultants
Project/Site: BP 11096

TestAmerica Job ID: 580-23473-1

Laboratory	Authority	Program	EPA Region	Certification ID	Expiration Date
TestAmerica Seattle		USDA		P330-08-00099	05/22/11
TestAmerica Seattle	Alaska	Alaska UST	10	UST-022	03/04/11
TestAmerica Seattle	California	NELAC Secondary AB	9	1115CA	01/31/11
TestAmerica Seattle	Florida	NELAC Secondary AB	4	E871074	06/30/11
TestAmerica Seattle	L-A-B	DoD ELAP	0	L2236	01/19/13
TestAmerica Seattle	L-A-B	ISO/IEC 17025	0	L2236	01/19/13
TestAmerica Seattle	Montana	State Program	8		04/30/20
TestAmerica Seattle	Oregon	NELAC Primary AB	10	WA100007	11/06/11
TestAmerica Seattle	Washington	State Program	10	C553	02/17/11

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Sample Summary

Client: Delta Consultants
Project/Site: BP 11096

TestAmerica Job ID: 580-23473-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-23473-1	MW-1-47.0	Water	12/10/10 15:20	12/13/10 14:15
580-23473-2	MW-2-48.92	Water	12/10/10 15:40	12/13/10 14:15
580-23473-3	MW-3-46.58	Water	12/10/10 14:45	12/13/10 14:15



12/29/2010

Login Sample Receipt Check List

Client: Delta Consultants

Job Number: 580-23473-1

Login Number: 23473

List Source: TestAmerica Seattle

Creator: Luna, Francisco

List Number: 1

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	



A member of:



WELL MONITORING &

Project Name: Former BP 11096

Project #: 11096-AA10-1

SAMPLING FIELD FORM GWS-NP

Date: 12/3/2010 12/10/10

Monitoring Well ID: MW-1

Field Personnel: Brandon Bickler and Bryan Pauley

Start Time:

Weather Conditions:

Approx Air Temp (F):

INITIAL WELL DATA & WELL PURGING INFORMATION

Depth to Water (ft): 47.0				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				
Depth to Water (ft) after ELR:				0.75"=0.02 1"=0.04 2"=0.17 3"=0.37				
Depth to Free Product after ELR:				4"=0.66 6"=1.47 8"=2.61 12"=5.88				
Casing Diameter (in.):				Three Well Purge Volumes (gallons) = 3 X =				
Quantity of Free Product Removed:				Method of Collecting Free Product:				
Casing Volumes (#)	Gallons Purged (gallons)	Water Temperature (degree-C)	Water pH (S.U.)	Specific Conductivity (µS)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
						119		
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: Liquinox Solution					
Instrument Type & Number:			Instrument Notes:					
Instrument Calibration Date & Time:								

WELL CONDITION

Material (circle one):	Stainless Steel (SS)	Carbon Steel	PVC	Other:	Vault
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:	12/3/2010	QA/QC Sample (circle one): YES / NO	Water Chemistry Sample: YES / NO		
Time Sampled:	1520	Sampling Method (circle One): SS Bailer	Poly Bailer Grunfos Pump		
Chain-of-Custody #:		Teflon Bailer	Peristaltic Pump Other:		
Sample ID	Bottles (total) (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
MW-1-47.0	6 40 mL	HCl	Test America	Test America	BTEX/g and MTBE
"	2 1 L	HCl	"	"	TPH-Dx and TPH-Ox
"	1 250 mL	HNO3	"	"	Pb-T
"	1 250 mL	---	"	"	Pb-D

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: Sediment was clear, no odor

TOC - Top of Casing

Sampler (Print): Brandon Bickler
Bryan Pauley

Sampler Signature:

Date Signed: 12/3/2010



A member of:



WELL MONITORING &

Project Name: Former BP 11096

Project #: 11096-AA10-1

SAMPLING FIELD FORM GWS-NP

Date: 12/3/2010 12/10/10

Monitoring Well ID: MW-2

Field Personnel: Brandon Bickler and Bryan Pauley

Start Time:

Weather Conditions:

Approx Air Temp (F):

INITIAL WELL DATA & WELL PURGING INFORMATION

Depth to Water (ft): 48.92				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				
Depth to Water (ft) after ELR:				0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37				
Depth to Free Product after ELR:				4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88				
Casing Diameter (in.):				Three Well Purge Volumes (gallons) = 3 X =				
Quantity of Free Product Removed:				Method of Collecting Free Product:				
Casing Volumes (#)	Gallons Purged (gallons)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (µS)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
						0.3		
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: Liquinox Solution					
Instrument Type & Number:				Instrument Notes:				
Instrument Calibration Date & Time:								

WELL CONDITION

Casing (circle one):	Stainless Steel (SS)	Carbon Steel	PVC	Other:	Vault
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:	12/3/2010	QA/QC Sample (circle one): YES / NO	Water Chemistry Sample: YES / NO		
Time Sampled:	1540	Sampling Method (circle One): SS Bailer	Poly Bailer Grunfos Pump		
Chain-of-Custody #:		Teflon Bailer	Peristaltic Pump Other:		
Sample ID	Bottles (total) (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
MW-2-4892	6 40 mL	HCl	Test America	Test America	BTEX/g and MTBE
"	2 1 L	HCl	"	"	TPH-Dx and TPH-Ox
"	1 250 mL	HNO3	"	"	Pb-T
"	1 250 mL	---	"	"	Pb-D

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: sediment was clear, no gas

TOC - Top of Casing

Sampler (Print): Brandon Bickler
Bryan Pauley

Sampler Signature:

Date Signed: 12/3/2010



A member of:



WELL MONITORING &

Project Name: Former BP 11096

Project #: 11096-AA10-1

SAMPLING FIELD FORM GWS-NP

Date: 12/3/2010

12/10/10

Monitoring Well ID: MW-3

Field Personnel: Brandon Bickler and Bryan Pauley

Start Time:

Weather Conditions:

Approx Air Temp (F):

INITIAL WELL DATA & WELL PURGING INFORMATION

Depth to Water (ft): 46.58	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
Depth to Water (ft) after ELR:	0.75"=0.02 1"=0.04 2"=0.17 3"=0.37
Depth to Free Product after ELR:	4"=0.66 6"=1.47 8"=2.61 12"=5.88
Casing Diameter (in.):	Three Well Purge Volumes (gallons) = 3 X =
Quantity of Free Product Removed:	Method of Collecting Free Product:

Casing Volumes (#)	Gallons Purged (gallons)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (µS)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
						11.6		

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: Liquinox Solution	
Instrument Type & Number:	Instrument Notes:	
Instrument Calibration Date & Time:		

WELL CONDITION

Casing (circle one):	Stainless Steel (SS) Carbon Steel PVC Other: Vault
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:	2" J-plug

SAMPLING INFORMATION / DATA

Date Sampled: 12/3/2010	QA/QC Sample (circle one): YES / NO	Water Chemistry Sample: YES / NO
Time Sampled: 1445	Sampling Method (circle One): SS Bailer Poly Bailer Grunfos Pump	
Chain-of-Custody #:	Teflon Bailer Peristaltic Pump Other:	

Sample ID	Bottles		Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
	(total)	(size)				
MW-3 - 46.58	6	40 mL	HCl	Test America	Test America	BTEX/g and MTBE
"	2	1 L	HCl	"	"	TPH-Dx and TPH-Ox
"	1	250 mL	HNO3	"	"	Pb-T
"	1	250 mL	---	"	"	Pb-D

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 was clear w/ no debris

TOC - Top of Casing

Sampler (Print): Brandon Bickler
Bryan Pauley

Sampler Signature:

Date Signed: 12/3/2010