

535 Route 38 East, Suite 355
Cherry Hill, New Jersey 08002

T: 856.382.7170
F: 201.236.1607



Sent via Email and Federal Express

July 2, 2014

Ms. Susan Bull
Maryland Department of the Environment
Oil Control Program
1800 Washington Boulevard
Baltimore, Maryland 21230

146282.007

Subject: Work Plan Scope Change
MDE Case No. 2011-0112-HA and 2013-0007-HA
Bel Air Xtra Fuels Station
2476 East Churchville Road, Bel Air, Harford County, Maryland

Dear Ms. Bull:

Brown and Caldwell (BC), on behalf of Drake Petroleum Company, Inc. (Drake), is submitting a summary of findings and our intentions of well screen placement with the newly drilled monitoring well MW-17. This work scope is a change from the approved MDE Work Plan (May 12, 2014).

BC has recently completed the drilling of monitoring well MW-17, located approximately 500 feet southwest of monitoring well MW-16 and approximately 1,100 feet downgradient of the station. Monitoring well MW-17 is located on the property of 2303 Churchville Road (Grace Assembly of God).

At this time, BC has directed the completion of the following activities in the monitoring well MW-17 borehole:

- Drilled to a depth of approximately 200 feet below ground surface (bgs), with continuous coring from the top of bedrock at approximately 29 feet bgs to the bottom of the borehole. A boring log describing the bedrock encountered in the cores is included as Attachment 1,
- Photographed the entire cored interval. Photographs of the cores have been previously provided to the MDE and are provided as Attachment 2,
- Conducted a downhole geophysical survey of the borehole. This survey included caliper, ambient flowmeter, fluid temperature, fluid conductivity, natural gamma, spontaneous potential, and resistivity (Attachment 3),
- Conducted packer tests at six (6) different depth intervals and collected groundwater samples for laboratory analysis of volatile organic compounds (VOCs) and fuel oxygenates using United States Environmental Protection Agency (USEPA) Method 8260. Packer testing was conducted at the following intervals:
 - 40-50 bgs (produced sufficient groundwater, sample collected)
 - 80-90 bgs (produced sufficient groundwater, sample collected)

- 120-130 bgs (did not produce water, not sampled)
- 130-140 bgs (did not produce water, not sampled)
- 160-170 bgs (produced limited volume of groundwater, sample collected)
- 185-197 bgs (produced limited volume of groundwater, sample collected)

Laboratory analytical results of the groundwater samples are included in Attachment 4 and summarized in Table 1.

- Conducted an optical televiewer survey of the borehole.

In summary, the rock cores, photographs, caliper log and optical televiewer survey all provide sufficient data to evaluate the placement of well screens. The information identified two (2) major fracture zones at approximately 40 to 50 ft bgs and 80 to 90 ft bgs and one (1) minor fracture zone was noted at approximately 180 to 195 ft bgs where there was also a change in bedrock type noted from gneiss to amphibole.

Each of these three (3) fracture zones were evaluated with packer testing, as well as three (3) additional zones with minor fracturing. It is significant to note that only two (2) of the fracture zones produced larger volumes of water (40 to 50 bgs and 80 to 90 ft bgs), and only two (2) other fracture zones produced enough water to collect a groundwater sample (160 to 170 bgs and 185 to 197 bgs). The 160 to 170 bgs and 185 to 197 bgs zones did not generate enough water during purging to allow for stabilization of geochemical parameters prior to sampling.

A review of collected rock cores, geophysical data (specifically the caliper log), packer testing data, and an optical televiewer log, indicate that the two (2) most appropriate intervals for well screen installation are approximately 70 to 90 feet bgs (MW-17I) and approximately 175 to 195 ft bgs (MW-17D). The approximately 70 to 90 foot interval has higher VOC concentrations than the shallower interval, and the approximately 175 to 195 foot interval is representative of the deeper zones of the potable drinking water supply wells. In addition, these two (2) depth intervals are very similar to the two (2) fracture zones that were screened at monitoring well MW-16, thereby allowing an evaluation of changes in plume concentrations based on distance from the source area.

Therefore, BC intends to install two (2) nested well screens each one (1)-inch in diameter within the existing three (3)-inch borehole.

The monitoring wells will be installed using one (1)-inch pre-packed screen and one (1)-inch polyvinyl chloride (PVC) riser. Additional sand pack will be added in the annular space around the pre-packed screen and at least two (2) feet above the screen. To assure a tight seal between the well screens, a bentonite seal consisting of at least two (2) feet of bentonite pellets will be placed above the sand pack of each monitoring well. Above the bentonite seal each monitoring well will be grouted with Portland cement/bentonite. Future sampling of the monitoring wells will be conducted using small diameter bladder pumps and low flow sampling methodology.

Ms. Susan bull
Maryland Department of the Environment
July 2, 2014
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The completion of the monitoring wells will be scheduled as soon as possible. Please call or email me with any questions. My direct line is 856-330-9406 and my cell is 302-545-4902.

Very truly yours,

Brown and Caldwell

A handwritten signature in black ink, appearing to read 'Carolyn Roth', with a stylized flourish at the end.

Carolyn Roth
Project Manager

cc: Jeannette DeBartolomeo, MDE (*via FedEx and email*)
Andrew Miller, MDE (*via FedEx and email*)
Eric Harvey, Drake Petroleum Company, Inc. (*via electronic submittal*)
Michele A. Alabiso, Drake Petroleum Company, Inc. (*via electronic submittal*)
Jeff Walker, Warren Equities Law Offices (*via electronic submittal*)
Ms. Florence Rosen (Rosen Assoc. Mgmt. Corp.) - "for notice and reimbursement provisions"

Attachments

Tables



TABLE 1
GROUNDWATER ANALYTICAL DATA SUMMARY
MW-17 I/D
BEL AIR XTRA FUELS
BEL AIR, MARYLAND

	Sample	MW-17I/D	MW-17I/D	MW-17I/D	MW-17I/D
	Depth	40-50	80-90	160-170	185-197
	Date	6/24/2014	6/24/2014	6/23/2014	6/23/2014
Constituent					
Benzene	5 µg/L	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)
Toluene	1000 µg/L	26.4	78.2	83.9	66.7
Ethylbenzene	700 µg/L	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)
Xylenes, total	10000 µg/L	ND (0.20)	0.32 J	ND (0.20)	ND (0.20)
BTEX	- µg/L	26.4	78.52	83.9	66.7
Methyl tert butyl ether (MTBE)	20 µg/L	3.1	2.3	0.83 J	5.3
TPH-GRO (C6-C10)	0.047 mg/L	NA	NA	NA	NA
TPH DRO(C10-C28)	0.047 mg/L	NA	NA	NA	NA

Notes:

MW = Groundwater monitoring well

Total BTEX = Sum of Benzene, Toluene, Ethylbenzene and Total Xylenes

MTBE = Methyl-tertiary Butyl Ether

TPH-GRO = Total Petroleum Hydrocarbons - Gasoline Range Organics

TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics

Bolded values indicate concentrations above site specific regulatory standards µg/L = micrograms per liter

mg/L = milligrams per liter

ND = Analyte was not detected


J = Estimated value between reporting limit and method detection limit

NA = Not analyzed

Attachment 1: Boring Log




DRAFT MONITORING WELL LOG

	Project Name: Bel Air Xtra Fuels	Permit Number:	Well No.
	Project Number: 146282	Deep Well HA-11-0348	17 D/I
	Project Location: Bel Air, MD	Page 1 of 5	

Geologist/Office HSW/Cherry Hill, NJ	Checked By:	Borehole Diameter: 3"	Screen Diameter and Type: NA" NA	Slot Size: NA"	Total Boring Depth (ft) 200.0 ft.
Start/Finish Date 6/3/14 - 6/12/14	Drilling Contractor: Eichelbergers	Sampling: Continuous Core	Development Method: NA		
Driller: Shane, Trevor	Drilling Method: Air Rotary	Drilling Equipment: Hollow Stem Auger	Horiz Datum/Proj: Vert Datum: Ground Surface Elev: --	Easting: -- Northing: -- TOC Elev: --	


Depth (feet)	Elevation (feet)	USC Soil Type	Description	Rock Quality Designation (RQD)	Graphic Log			Readings (ppm)	Remarks
					Sample No.	Sample Int Recovery	Lithology		
			Asphalt						
			Light brown silty CLAY, some f Sand, dry.				0.0		
5			Light brown Silty CLAY, trace f Clay, dry.				0.0		Blow Counts: 1,3,4,4
			White Gravel (Quartz)						
10			Light brown f SAND and CLAY, some Quartz Gravel, moist.				0.0		Blow Counts: 5,4,8,14
			Light brown CLAY, some Quartz Gravel, moist.						Wet at 13.5' BGS.
15			White/gray SAND, moist.				0.3		Blow Counts: 10,14,35,49
			Light brown CLAY, little f Sand, trace black Gravel, wet.						
20			Light brown f SAND, trace CLAY, wet.				0.4		Blow Counts: 50/4
			Dark brown Micaceous CLAY, trace f Sand, tiny bits of weathered bedrock.						
25			Light brown CLAY, little black gravel, trace f Sand, wet.				0.0		48, 50/1
			Light gray Saprolite (micaceous weathered gneiss)						
30			Light brown and gray saprolite, micaceous, wet.				0.0		
			Light gray, sandy saprolite, wet.						
			White quartz gravel pieces, 1" width.	40.8			0.0		29' BGS switch from split spoons to rock cores.
			White quartz gravel, same as above.						
			Light brown and gray weathered Gneiss (k-feldspar, quartz, biotite).						Breaks with red tint at 29.9', 30.5', 33.6' and highly weathered at 34.6'-35'.

DRAFT MONITORING WELL LOG

	Project Name: Bel Air Xtra Fuels Project Number: 146282 Project Location: Bel Air, MD	Permit Number: Deep Well HA-11-0348	Well No. 17 D/I Page 2 of 5
---	--	---	---


Depth (feet)	Elevation (feet)	USC Soil Type	Description	Rock Quality Designation (RQD)	Sample No.	Graphic Log			Readings (ppm)	Remarks
						Sample Int	Recovery	Lithology		
40			Light gray and pink gneiss (k-feldspar, quartz, biotite).							Fracture at 37.0-37.2 (highly weathered).
			Light gray and pink Gneiss (k-feldspar, quartz, biotite), more competent than above.	62.5					0.0	Weathered fracture at 40.9' and 42.5'.
45			Light gray and light pink gneiss, strongly foliated (k-feldspar, quartz, biotite).	50					0.0	Fracture along foliation at 45.0'.
50			White and light gray gneiss (Quartz, biotite, less k-feldspar), foliated.	47.7					0.0	Highly fractured and weathered at 48.0'-49.5'.
55										
60			Light to dark gray Gneiss (quartz and biotite).	60.5					0.0	
65										
70			Light to dark gray Gneiss (Quartz, biotite, hornblend), red tinted staining on fractures throughout core.	64.2					0.6	64.6'-65.2' Very brittle and weathered, red tinted staining.
75										
										Very brittle weathered

DRAFT MONITORING WELL LOG

	Project Name: Bel Air Xtra Fuels Project Number: 146282 Project Location: Bel Air, MD	Permit Number: Deep Well HA-11-0348	Well No. 17 D/I Page 3 of 5
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Depth (feet)	Elevation (feet)	USC Soil Type	Description	Rock Quality Designation (RQD)	Sample No.	Graphic Log			Readings (ppm)	Remarks
						Sample Int	recovery	Lithology		
80			Light gray to dark gray gneiss (Quartz, biotite, little k-feldspar, hornblende).	11.1					0.7	fractures 78.2'-78.7'
85										Competent 80'-81.0', becomes highly fractured and brittle from 81.0'-85.0 with red tinted staining.
90			Light to dark gray gneiss (Quartz, biotite, less k-feldspar).	47.5					0.0	85.0'-90.0' Becomes more competent with fractures along foliation. Brittle and weathered 90.0'-92.0'.
95										
100			Dark gray and pink Gneiss (quartz, k-feldspar, biotite), competent, less foliation than above.							Becomes more competent 92'-100'.
100			Dark gray and pink Gneiss (quartz, k-feldspar, biotite), harder than light gray gneiss around 90' BGS.	63.3					0.0	Red staining at 101.9'-102.3' BGS.
100			Light gray Gneiss (quartz, biotite, less k-feldspar), more brittle and weathered.							
105			Dark gray and pink Gneiss (Quartz, k-feldspar, biotite), not as foliated.	46.7					0.0	Weathered fractures from 105.7'-105.8'.
110										
115			Dark gray and dark pink Gneiss (quartz, k-feldspar, biotite), less foliation, not weathered.	51.9					0.0	113.0'-113.3' BGS very hard white quartz.
120			Dark gray Gneiss (quartz, k-feldspar, biotite).	96.3					0.0	
120			Dark gray Gneiss (quartz, biotite, less k-feldspar), competent rock, no weathered fractures, fractures along foliation.	86.1					0.0	Weathered fracture at 118.8' along foliation.

DRAFT MONITORING WELL LOG

	Project Name: Bel Air Xtra Fuels Project Number: 146282 Project Location: Bel Air, MD	Permit Number: Deep Well HA-11-0348	Well No. 17 D/I Page 4 of 5
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Depth (feet)	Elevation (feet)	USC Soil Type	Description	Rock Quality Designation (RQD)	Sample No.	Graphic Log			Readings (ppm)	Remarks
						Sample Int	Recovery	Lithology		
125			Dark gray and light gray Gneiss (quartz, biotite, less k-feldspar).	63.9					0.0	
			Dark gray and light gray Gneiss (Quartz, biotite, k-feldspar), fractures along foliation, not brittle.	70.8					0.0	Weathered fractures from 125.5'-126.0'.
130			Light to dark gray Gneiss (Quartz, biotite, less k-feldspar).	83.3					0.0	
135										
140			Dark to light gray Gneiss (Quartz, biotite, less k-feldspar), weathered fractures, less foliated than above.	93.8					0.0	136.4'-136.8' BGS brittle rock wth multiple fractures and more biotite present. Weathered fracture with red tinted staining at 140.2' BGS.
145			Dark gray to light gray Gneiss (Quartz, biotite, k-feldspar), competent.	94.6					0.0	Slightly weathered fracture at 144.5' BGS.
150			Dark gray and black Gneiss (Quartz, biotite, muscovite, no k-feldspar). Dark gray to light gray Gneiss (Quartz, k-feldspar, biotite), moderate foliation.	76.7					0.0	
155										
160			Dark gray to light gray Gneiss (Quartz, k-feldspar, biotite), more foliation and brittle in more places.	49.1					0.0	Brittle, weathered fracture at 153.2'-153.5' BGS and 155.3'-155.4' BGS.
165			Dark gray to light gray Gneiss (Quartz, k-feldspar, biotite), competent bedrock, weathered.	95.7					0.0	Multiple weathered fractures at 163.5'-164' BGS. Weathered, red tinted fracture at 164.3' BGS.

DRAFT MONITORING WELL LOG

	Project Name: Bel Air Xtra Fuels Project Number: 146282 Project Location: Bel Air, MD	Permit Number: Deep Well HA-11-0348	Well No. 17 D/I Page 5 of 5
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Depth (feet)	Elevation (feet)	USC Soil Type	Description	Rock Quality Designation (RQD)	Sample No.	Graphic Log			Readings (ppm)	Remarks
						Sample Int	Recovery	Lithology		
170			Dark to light gray Gneiss (Quartz, k-feldspar, biotite), competent.	92.5					0.0	Weathered fractures at 169.7' and 174.6' BGS.
175			Dark to light gray Gneiss (Quartz, k-feldspar, biotite), less foliation.						0.0	
180			Black amphibolite, little quartz and biotite, wave-like foliation.						0.0	Weathered fractures at 181.5'-181.8' BGS.
185			Dark to light gray Gneiss (quartz, k-feldspar, biotite, hornblende), competent.						0.0	
190			Black amphibolite, little quartz and biotite, brittle. Black amphibolite (hornblende, biotite, little quartz), strongly foliated (wave-like).	75.8					0.0	Weathered fracture at 195.3'-195.5' BGS. Weathered fractures at 196.6'-197.3' BGS and 197.6'-198.0' BGS.
195			Dark to light gray Gneiss (quartz, k-feldspar, biotite, hornblende) semi-competent.						0.0	
200			Dark to light gray gneiss (quartz, biotite, hornblende, less k-feldspar), competent, no weathered fractures.	95.8					0.0	End of boring at 200' Below ground surface.

Attachment 2: Core Photographs



MW-17 I/D

Drake Petroleum - Bel Air

29 - 48



87

62

89

NW 171/D

Drake Petroleum - Bel Air
Benton and Catwalk

48 $\frac{67.0}{-68.3}$

58

09

67.0
~~68.3~~ - 81.0

MW-17 I/P
Drake Petroleum - Bel Air
Brown, Caldwell

70

81.0

88

MW-17I/D
Dike Petroleum - Bel Air
Brown + Caldwell

81.0 - 97.0



06

tb

97' - 112'

MW-17E/D
Snake Petroleum - Bei Air
Brown + Caldwell



110

100

112

MW-17I/D
Drake Petroleum - Bel Air
Brown and Caldwell
112 - 123



6/9/14 - 6/10/14

MW. 17 I/D.
DRAKE PETRO. - BEL AIR
BROWN & CALDWELL
123' - 139'

126

130

138

139

123



6/10/14

MW-17 I/D
DRAKE PETRO. BEL AIR MD
BROWN + CALDWELL

139' - 152.6'

8h1

139



6/10/14

MW. 17 I/D

DRAKE PETROLEUM

BEL AFR MD

BROWN + CAIDWELL

152.6 → 167.0



6/10/14 - 6/11/14

MW-17 I/D
DRAKE PETRO BEL AIR MD
BROWN + CALDWELL
167 → 181.5'

168

178

167

151

6=11-14

MW-17 I/D
DRAKE PETRO. BEL AIR MD
BROWN + CALDWELL

181.5' → 195.5

181

181

MW-17 IID
DRAKE PETRO BELAIR MD
BROWN & CALDWELL
1955' to _____




175.5

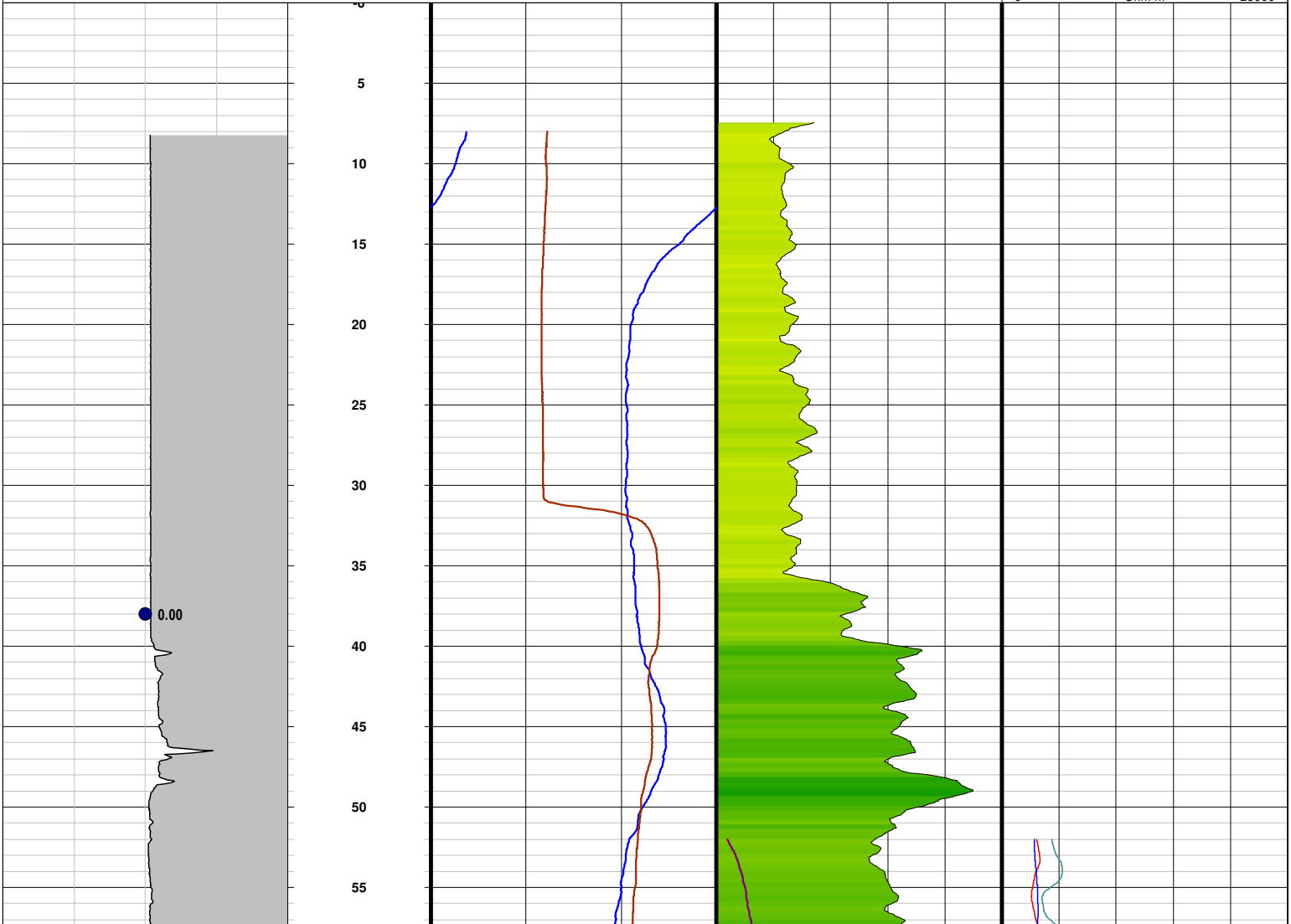
Attachment 3: Geophysical Survey

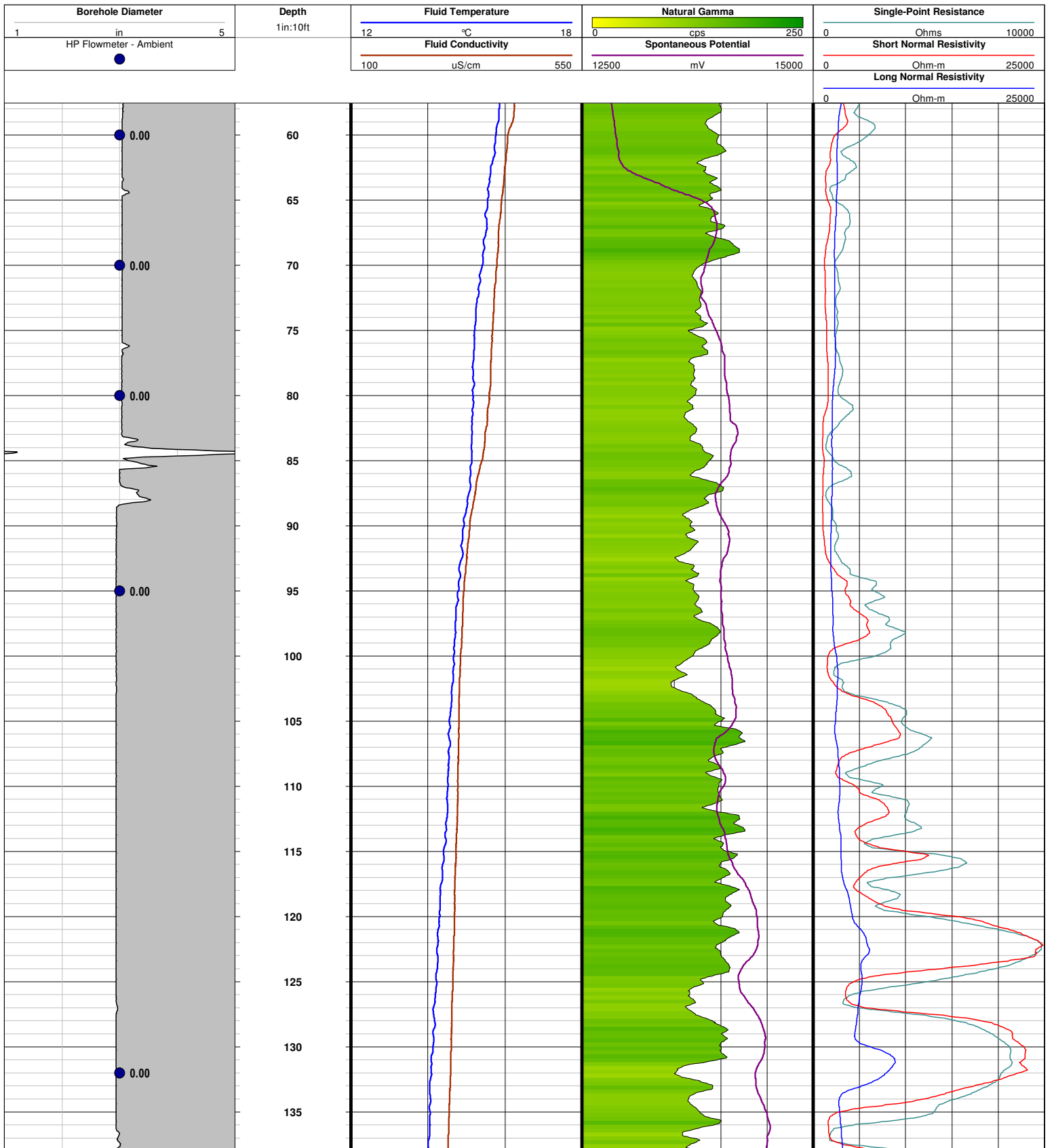


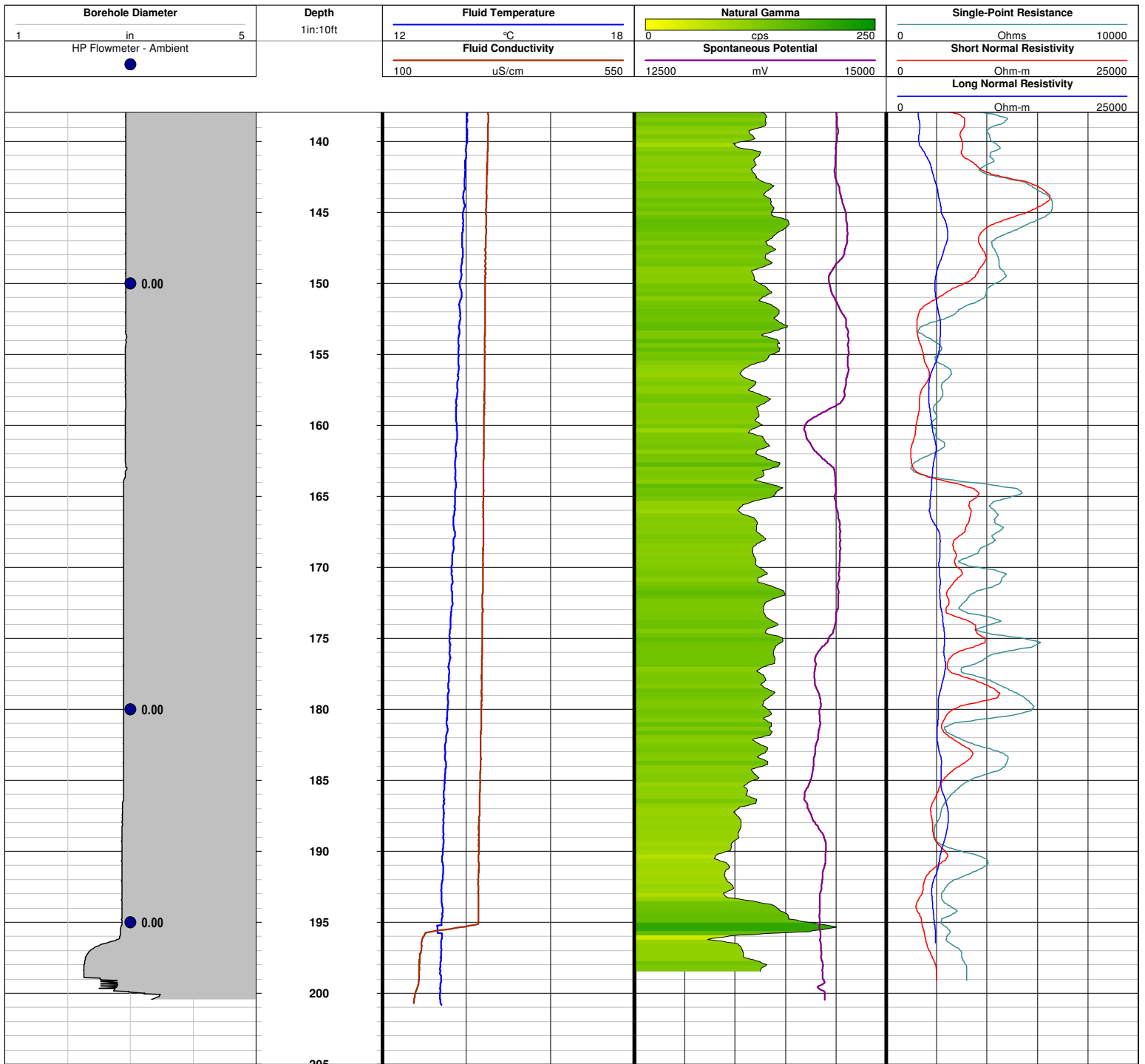
Client: **Brown & Caldwell**
 Location: **Bel Air, Maryland**
 Well Name: **MW-17 I/D**
 Date: **6-16-2014**
 Depth Reference: **Top of Casing (stick up = 1.3')**
 Magnetic Declination: **N/A**
 North reference: **N/A**

Borehole Diameter: **3" Nominal**
 Static Water Level: **7'**
 Casing Depth: **40'**
 Total Depth: **200'**

Borehole Diameter 1 _____ in _____ 5 HP Flowmeter - Ambient 	Depth 1in:10ft	Fluid Temperature 12 _____ °C _____ 18 Fluid Conductivity 100 _____ uS/cm _____ 550	Natural Gamma 0 _____ cps _____ 250 Spontaneous Potential 12500 _____ mV _____ 15000	Single-Point Resistance 0 _____ Ohms _____ 10000 Short Normal Resistivity 0 _____ Ohm-m _____ 25000 Long Normal Resistivity 0 _____ Ohm-m _____ 25000
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Attachment 4: Laboratory Analytical Results



Technical Report for

Drake Petroleum Company, Inc.

BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD
143732 PC#007805

Accutest Job Number: JB70235

Sampling Dates: 06/23/14 - 06/24/14

Report to:

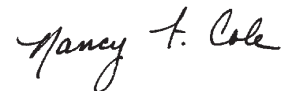
vickyp@accutest.com

ATTN: Distribution5

Total number of pages in report: **29**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



Nancy Cole
Laboratory Director

Client Service contact: Victoria Pushkova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), PA, RI, SC, TN, VA, WV, DoD ELAP (L-A-B L2248)

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Test results relate only to samples analyzed.

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Sample Summary

Drake Petroleum Company, Inc.

Job No: JB70235

BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD

Project No: 143732 PC#007805

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JB70235-1	06/24/14	14:06 TMB	06/25/14	AQ	Ground Water	MW-17I/D-80-90
JB70235-2	06/23/14	18:08 TMB	06/25/14	AQ	Ground Water	MW-17I/D-185-197
JB70235-3	06/23/14	19:10 TMB	06/25/14	AQ	Field Blank Water	FB-06232014
JB70235-4	06/23/14	00:00 TMB	06/25/14	AQ	Ground Water	DUP-06232014
JB70235-5	06/23/14	18:53 TMB	06/25/14	AQ	Ground Water	MW-17I/D-160-170
JB70235-6	06/24/14	15:40 TMB	06/25/14	AQ	Field Blank Water	FB-06242014
JB70235-7	06/24/14	15:05 TMB	06/25/14	AQ	Ground Water	MW-17I/D-40-50

Summary of Hits



Job Number: JB70235
Account: Drake Petroleum Company, Inc.
Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD
Collected: 06/23/14 thru 06/24/14

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
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JB70235-1 MW-17I/D-80-90

Bromodichloromethane	0.79 J	1.0	0.28	ug/l	SW846 8260B
Chloroform	12.6	1.0	0.20	ug/l	SW846 8260B
Dibromochloromethane	0.26 J	1.0	0.25	ug/l	SW846 8260B
Methyl Tert Butyl Ether	2.3	1.0	0.26	ug/l	SW846 8260B
Toluene	78.2	1.0	0.22	ug/l	SW846 8260B
Xylene (total)	0.32 J	1.0	0.20	ug/l	SW846 8260B

JB70235-2 MW-17I/D-185-197

Bromodichloromethane	0.63 J	1.0	0.28	ug/l	SW846 8260B
Chloroform	13.7	1.0	0.20	ug/l	SW846 8260B
Methyl Tert Butyl Ether	5.3	1.0	0.26	ug/l	SW846 8260B
Toluene	66.7	1.0	0.22	ug/l	SW846 8260B

JB70235-3 FB-06232014

No hits reported in this sample.

JB70235-4 DUP-06232014

Acetone	6.8 J	10	2.6	ug/l	SW846 8260B
Bromodichloromethane	1.6	1.0	0.28	ug/l	SW846 8260B
Chloroform	27.9	1.0	0.20	ug/l	SW846 8260B
Methyl Tert Butyl Ether	0.82 J	1.0	0.26	ug/l	SW846 8260B
Toluene	98.3	1.0	0.22	ug/l	SW846 8260B
Xylene (total)	0.30 J	1.0	0.20	ug/l	SW846 8260B

JB70235-5 MW-17I/D-160-170

Acetone	5.6 J	10	2.6	ug/l	SW846 8260B
Bromodichloromethane	1.6	1.0	0.28	ug/l	SW846 8260B
Chloroform	29.2	1.0	0.20	ug/l	SW846 8260B
Methyl Tert Butyl Ether	0.83 J	1.0	0.26	ug/l	SW846 8260B
Toluene	83.9	1.0	0.22	ug/l	SW846 8260B

JB70235-6 FB-06242014

No hits reported in this sample.

JB70235-7 MW-17I/D-40-50

Bromodichloromethane	0.29 J	1.0	0.28	ug/l	SW846 8260B
Chloroform	9.9	1.0	0.20	ug/l	SW846 8260B

Summary of Hits

Job Number: JB70235
Account: Drake Petroleum Company, Inc.
Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD
Collected: 06/23/14 thru 06/24/14



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Methyl Tert Butyl Ether		3.1	1.0	0.26	ug/l	SW846 8260B
Toluene		26.4	1.0	0.22	ug/l	SW846 8260B

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-171/D-80-90	Date Sampled:	06/24/14
Lab Sample ID:	JB70235-1	Date Received:	06/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B	Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D134554.D	1	06/26/14	BK	n/a	n/a	V2D5636
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.6	ug/l	
71-43-2	Benzene	ND	0.50	0.21	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.28	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.49	ug/l	
75-27-4	Bromodichloromethane	0.79	1.0	0.28	ug/l	J
75-25-2	Bromoform	ND	2.0	0.31	ug/l	
74-83-9	Bromomethane	ND	2.0	0.39	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.18	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.47	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.30	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.24	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.27	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	12.6	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.33	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.25	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.2	ug/l	
124-48-1	Dibromochloromethane	0.26	1.0	0.25	ug/l	J
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.16	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.26	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.73	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.35	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.33	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-171/D-80-90	Date Sampled:	06/24/14
Lab Sample ID:	JB70235-1	Date Received:	06/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	2.0	0.24	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	0.30	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.28	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.32	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.40	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.29	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.26	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.47	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.3	1.0	0.26	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.81	ug/l	
91-20-3	Naphthalene	ND	5.0	0.34	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.31	ug/l	
100-42-5	Styrene	ND	2.0	0.26	ug/l	
75-65-0	Tert Butyl Alcohol	ND	25	4.7	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	5.0	0.27	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	5.0	0.21	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.3	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.35	ug/l	
108-88-3	Toluene	78.2	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.26	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.32	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.25	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.28	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.98	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.19	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.17	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.17	ug/l	
	m,p-Xylene	ND	1.0	0.45	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	0.32	1.0	0.20	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		79-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-17I/D-80-90	Date Sampled: 06/24/14
Lab Sample ID: JB70235-1	Date Received: 06/25/14
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD	

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	88%		72-123%
2037-26-5	Toluene-D8	95%		78-119%
460-00-4	4-Bromofluorobenzene	86%		74-119%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-171/D-185-197	Date Sampled:	06/23/14
Lab Sample ID:	JB70235-2	Date Received:	06/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B	Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D134555.D	1	06/26/14	BK	n/a	n/a	V2D5636
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.6	ug/l	
71-43-2	Benzene	ND	0.50	0.21	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.28	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.49	ug/l	
75-27-4	Bromodichloromethane	0.63	1.0	0.28	ug/l	J
75-25-2	Bromoform	ND	2.0	0.31	ug/l	
74-83-9	Bromomethane	ND	2.0	0.39	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.18	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.47	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.30	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.24	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.27	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	13.7	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.33	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.25	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.25	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.16	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.26	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.73	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.35	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.33	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-171/D-185-197	Date Sampled:	06/23/14
Lab Sample ID:	JB70235-2	Date Received:	06/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	2.0	0.24	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	0.30	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.28	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.32	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.40	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.29	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.26	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.47	ug/l	
1634-04-4	Methyl Tert Butyl Ether	5.3	1.0	0.26	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.81	ug/l	
91-20-3	Naphthalene	ND	5.0	0.34	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.31	ug/l	
100-42-5	Styrene	ND	2.0	0.26	ug/l	
75-65-0	Tert Butyl Alcohol	ND	25	4.7	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	5.0	0.27	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	5.0	0.21	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.3	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.35	ug/l	
108-88-3	Toluene	66.7	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.26	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.32	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.25	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.28	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.98	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.19	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.17	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.17	ug/l	
	m,p-Xylene	ND	1.0	0.45	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%		79-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-17I/D-185-197	Date Sampled:	06/23/14
Lab Sample ID:	JB70235-2	Date Received:	06/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B	Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD	

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	88%		72-123%
2037-26-5	Toluene-D8	94%		78-119%
460-00-4	4-Bromofluorobenzene	87%		74-119%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-06232014	Date Sampled:	06/23/14
Lab Sample ID:	JB70235-3	Date Received:	06/25/14
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260B	Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V12074.D	1	06/26/14	TDN	n/a	n/a	V3V516
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.6	ug/l	
71-43-2	Benzene	ND	0.50	0.21	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.28	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.49	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.28	ug/l	
75-25-2	Bromoform	ND	2.0	0.31	ug/l	
74-83-9	Bromomethane	ND	2.0	0.39	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.18	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.47	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.30	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.24	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.27	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.33	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.25	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.25	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.16	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.26	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.73	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.35	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.33	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-06232014	Date Sampled:	06/23/14
Lab Sample ID:	JB70235-3	Date Received:	06/25/14
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260B	Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	2.0	0.24	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	0.30	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.28	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.32	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.40	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.29	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.26	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.47	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.26	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.81	ug/l	
91-20-3	Naphthalene	ND	5.0	0.34	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.31	ug/l	
100-42-5	Styrene	ND	2.0	0.26	ug/l	
75-65-0	Tert Butyl Alcohol	ND	25	4.7	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	5.0	0.27	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	5.0	0.21	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.3	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.35	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.26	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.32	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.25	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.28	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.98	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.19	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.17	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.17	ug/l	
	m,p-Xylene	ND	1.0	0.45	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		79-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis



Client Sample ID: FB-06232014	Date Sampled: 06/23/14
Lab Sample ID: JB70235-3	Date Received: 06/25/14
Matrix: AQ - Field Blank Water	Percent Solids: n/a
Method: SW846 8260B	
Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD	

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	97%		72-123%
2037-26-5	Toluene-D8	97%		78-119%
460-00-4	4-Bromofluorobenzene	95%		74-119%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-06232014	Date Sampled:	06/23/14
Lab Sample ID:	JB70235-4	Date Received:	06/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B	Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D134556.D	1	06/26/14	BK	n/a	n/a	V2D5636
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	6.8	10	2.6	ug/l	J
71-43-2	Benzene	ND	0.50	0.21	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.28	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.49	ug/l	
75-27-4	Bromodichloromethane	1.6	1.0	0.28	ug/l	
75-25-2	Bromoform	ND	2.0	0.31	ug/l	
74-83-9	Bromomethane	ND	2.0	0.39	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.18	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.47	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.30	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.24	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.27	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	27.9	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.33	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.25	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.25	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.16	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.26	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.73	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.35	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.33	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-06232014	Date Sampled:	06/23/14
Lab Sample ID:	JB70235-4	Date Received:	06/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B	Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	2.0	0.24	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	0.30	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.28	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.32	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.40	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.29	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.26	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.47	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.82	1.0	0.26	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.81	ug/l	
91-20-3	Naphthalene	ND	5.0	0.34	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.31	ug/l	
100-42-5	Styrene	ND	2.0	0.26	ug/l	
75-65-0	Tert Butyl Alcohol	ND	25	4.7	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	5.0	0.27	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	5.0	0.21	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.3	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.35	ug/l	
108-88-3	Toluene	98.3	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.26	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.32	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.25	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.28	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.98	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.19	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.17	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.17	ug/l	
	m,p-Xylene	ND	1.0	0.45	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	0.30	1.0	0.20	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%		79-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DUP-06232014	Date Sampled: 06/23/14
Lab Sample ID: JB70235-4	Date Received: 06/25/14
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD	

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	87%		72-123%
2037-26-5	Toluene-D8	95%		78-119%
460-00-4	4-Bromofluorobenzene	88%		74-119%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-171/D-160-170	Date Sampled:	06/23/14
Lab Sample ID:	JB70235-5	Date Received:	06/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B	Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V12077.D	1	06/26/14	TDN	n/a	n/a	V3V516
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	5.6	10	2.6	ug/l	J
71-43-2	Benzene	ND	0.50	0.21	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.28	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.49	ug/l	
75-27-4	Bromodichloromethane	1.6	1.0	0.28	ug/l	
75-25-2	Bromoform	ND	2.0	0.31	ug/l	
74-83-9	Bromomethane	ND	2.0	0.39	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.18	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.47	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.30	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.24	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.27	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	29.2	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.33	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.25	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.25	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.16	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.26	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.73	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.35	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.33	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-171/D-160-170	Date Sampled:	06/23/14
Lab Sample ID:	JB70235-5	Date Received:	06/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B	Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	2.0	0.24	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	0.30	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.28	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.32	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.40	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.29	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.26	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.47	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.83	1.0	0.26	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.81	ug/l	
91-20-3	Naphthalene	ND	5.0	0.34	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.31	ug/l	
100-42-5	Styrene	ND	2.0	0.26	ug/l	
75-65-0	Tert Butyl Alcohol	ND	25	4.7	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	5.0	0.27	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	5.0	0.21	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.3	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.35	ug/l	
108-88-3	Toluene	83.9	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.26	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.32	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.25	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.28	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.98	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.19	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.17	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.17	ug/l	
	m,p-Xylene	ND	1.0	0.45	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		79-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-17I/D-160-170	Date Sampled: 06/23/14
Lab Sample ID: JB70235-5	Date Received: 06/25/14
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD	

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	96%		72-123%
2037-26-5	Toluene-D8	97%		78-119%
460-00-4	4-Bromofluorobenzene	93%		74-119%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-06242014	Date Sampled:	06/24/14
Lab Sample ID:	JB70235-6	Date Received:	06/25/14
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260B	Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V12075.D	1	06/26/14	TDN	n/a	n/a	V3V516
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.6	ug/l	
71-43-2	Benzene	ND	0.50	0.21	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.28	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.49	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.28	ug/l	
75-25-2	Bromoform	ND	2.0	0.31	ug/l	
74-83-9	Bromomethane	ND	2.0	0.39	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.18	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.47	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.30	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.24	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.27	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.33	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.25	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.25	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.16	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.26	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.73	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.35	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.33	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-06242014	Date Sampled:	06/24/14
Lab Sample ID:	JB70235-6	Date Received:	06/25/14
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	2.0	0.24	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	0.30	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.28	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.32	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.40	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.29	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.26	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.47	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.26	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.81	ug/l	
91-20-3	Naphthalene	ND	5.0	0.34	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.31	ug/l	
100-42-5	Styrene	ND	2.0	0.26	ug/l	
75-65-0	Tert Butyl Alcohol	ND	25	4.7	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	5.0	0.27	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	5.0	0.21	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.3	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.35	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.26	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.32	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.25	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.28	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.98	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.19	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.17	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.17	ug/l	
	m,p-Xylene	ND	1.0	0.45	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		79-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-06242014	Date Sampled:	06/24/14
Lab Sample ID:	JB70235-6	Date Received:	06/25/14
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260B	Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD	

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%		72-123%
2037-26-5	Toluene-D8	97%		78-119%
460-00-4	4-Bromofluorobenzene	93%		74-119%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-171/D-40-50	Date Sampled:	06/24/14
Lab Sample ID:	JB70235-7	Date Received:	06/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B	Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V12076.D	1	06/26/14	TDN	n/a	n/a	V3V516
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.6	ug/l	
71-43-2	Benzene	ND	0.50	0.21	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.28	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.49	ug/l	
75-27-4	Bromodichloromethane	0.29	1.0	0.28	ug/l	J
75-25-2	Bromoform	ND	2.0	0.31	ug/l	
74-83-9	Bromomethane	ND	2.0	0.39	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.18	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.47	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.30	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.24	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.27	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	9.9	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.33	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.25	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.25	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.16	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.26	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.73	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.35	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.33	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-171/D-40-50	Date Sampled:	06/24/14
Lab Sample ID:	JB70235-7	Date Received:	06/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	2.0	0.24	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	0.30	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.28	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.32	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.40	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.29	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.26	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.47	ug/l	
1634-04-4	Methyl Tert Butyl Ether	3.1	1.0	0.26	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.81	ug/l	
91-20-3	Naphthalene	ND	5.0	0.34	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.31	ug/l	
100-42-5	Styrene	ND	2.0	0.26	ug/l	
75-65-0	Tert Butyl Alcohol	ND	25	4.7	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	5.0	0.27	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	5.0	0.21	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.3	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.35	ug/l	
108-88-3	Toluene	26.4	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.26	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.32	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.25	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.28	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.98	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.19	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.17	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.17	ug/l	
	m,p-Xylene	ND	1.0	0.45	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		79-120%

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N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: MW-17I/D-40-50		Date Sampled: 06/24/14
Lab Sample ID: JB70235-7		Date Received: 06/25/14
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%		72-123%
2037-26-5	Toluene-D8	97%		78-119%
460-00-4	4-Bromofluorobenzene	93%		74-119%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

2235 Route 130, Dayton, NJ 08810
 TEL: 732-329-0200 FAX: 732-329-3499/3480
 www.accutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job #
	JB70235

Client / Reporting Information		Project Information				Requested Analysis (see TEST CODE sheet)										Matrix Codes
Company Name Drake Petroleum Company, Inc. Attn: Eric Harvey		Project Name Bel Air Xtra Fuels PC#007805														DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WIP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank
Street Address P.O. Box 066 221 Quinebaug Road		Street 2476 Churchville Rd.														
City State Zip North Grosvenordale CT 6255		City State Bel Air MD														
Project Contact Carolyn Roth		Project # 143732														
E-mail croth@brwnald.com		Street Address														
Phone # 302-545-4902		Client Purchase Order # #007805														
Fax #		City State Zip														
Sampler(s) Name(s) Tonya Brubaker		Project Manager Carolyn Roth														
Attention:																
Turnaround Time (Business days)		Data Deliverable Information				Comments / Special Instructions										

<input type="checkbox"/> Std. 15 Business Days <input checked="" type="checkbox"/> Std. 10 Business Days (by Contract only) <input type="checkbox"/> 10 Day RUSH <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input checked="" type="checkbox"/> 1 Day EMERGENCY Emergency & Rush T/A data available VIA Lablink	Approved By (Accutest PM): / Date: 7 day by WEI contract 24 H-TAT	<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data	<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other
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Sample Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished by Sampler: Tonya Brubaker Date/Time: 6/25/14 1400	Received By: [Signature] Date/Time: 6/25/14 1735	Relinquished by: [Signature] Date/Time: 6/25/14	Received By: [Signature] Date/Time: 6/25/14
Relinquished by: [Signature] Date/Time:	Received By: [Signature] Date/Time:	Relinquished by: [Signature] Date/Time:	Received By: [Signature] Date/Time:
Relinquished by: [Signature] Date/Time:	Received By: [Signature] Date/Time:	Relinquished by: [Signature] Date/Time:	Received By: [Signature] Date/Time:

VOCs + 15 w/ Fuel Oxygenates

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