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November 6, 2013

Mr. Michael T. Axelsson & Ms. Krystin Porcella  
1 Meadow Spring Drive  
Bel Air, Maryland 21015

144514.005.002

Subject: Point of Entry Treatment System Sampling Results  
September 16, 2013 Sampling Event  
1 Meadow Spring Drive, Bel Air, Maryland

Dear Mr. Axelsson and Ms. Porcella:

Brown and Caldwell (BC), on behalf of Drake Petroleum Company Inc. (Drake) would like to thank you for allowing us to conduct sampling of your point of entry treatment (POET) system on September 16, 2013. The sampling was conducted to evaluate the effectiveness of the POET system that was installed to treat the potable drinking water coming into your home.

To help better understand the results, the following information is supplied:

- **Pre-carbon filtration** – water sample of the untreated water coming directly into your home from your potable drinking water supply well; referred to as influent and denoted as “1 MEADOW-INF” on the laboratory report.
- **Mid-carbon filtration** – water sample collected between the granular activated carbon (GAC) vessels, this sample is collected between the second and third GAC vessels; referred to as mid-fluent and denoted as “1 MEADOW-MID2” on the laboratory report.
- **Post-carbon filtration** – water sample of the finished treated water; referred to as effluent and denoted as “1 MEADOW-EFF” on the laboratory report.

Potable drinking water supply well samples were collected pre-, mid- and post-carbon filtration and were analyzed for volatile organic compounds (VOCs) including petroleum constituents, using a United States (US) Environmental Protection Agency (EPA) approved method for drinking water samples (US EPA Method 524.2). One constituent was detected from the effluent post-carbon filtration sample: Carbon disulfide at an estimated 0.16 µg/L. Carbon disulfide is used in a number of industrial applications and was below the Maryland Department of the Environment (MDE) groundwater standard of 100 µg/L. The MDE groundwater standards can be found in MDE Cleanup Standards for Soil and Groundwater, Interim Final Guidance (June 2008). The sample results demonstrated that no petroleum-containing compounds were detected in the effluent water sample in exceedance of the regulatory limits, indicating that the POET system is functioning properly. Your analytical results of the pre-carbon, mid-carbon, and post-carbon filtration points are attached.

As you know, sampling of your water filtration system was conducted by Drake as part of a groundwater investigation being conducted in cooperation with the MDE and the Harford County Health Department. Drake would like to sample the potable drinking water from your water filtration system again in the month of December 2013 as directed by the MDE. BC will contact you regarding the next round of sampling.

Again, thank you for your patience and cooperation. If you have any questions regarding the enclosed test results feel free to call me at 856-330-9406.

Very truly yours,  
**Brown and Caldwell**

A handwritten signature in black ink, appearing to read 'CAROLYN ROTH', with a large, sweeping flourish at the end.

Carolyn Roth  
Project Manager

cc: Eric Harvey, Drake, (*via electronic submittal*)  
Susan Bull, Maryland Department of the Environment (*via email and FedEx*)  
Jeanette DeBartolomeo, Maryland Department of the Environment (*via email and FedEx*)  
Peter Smith, Harford County Health Department (*via email and FedEx*)

Attachments (1)

## Attachment: Laboratory Data

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**Technical Report for**

**Drake Petroleum Company, Inc.**

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

**144514 PC#007805**

**Accutest Job Number: JB47536**

**Sampling Date: 09/16/13**

**Report to:**

**Brown & Caldwell**

**JMaciejewski@brwnald.com**

**ATTN: Jen Maciejewski**

**Total number of pages in report: 18**



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



**Nancy Cole**  
**Laboratory Director**

**Client Service contact: Kristin Beebe 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

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Test results relate only to samples analyzed.

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## Sample Summary

Drake Petroleum Company, Inc.

**Job No:** JB47536

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

Project No: 144514 PC#007805

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
JB47536-1	09/16/13	11:45 HW	09/17/13	DW	Drinking Water Inf	1 MEADOW-INF
JB47536-2	09/16/13	11:40 HW	09/17/13	DW	Drinking Water	1 MEADOW-MID
JB47536-3	09/16/13	11:35 HW	09/17/13	DW	Drinking Water Eff	1 MEADOW-EFF

## Summary of Hits

**Job Number:** JB47536

**Account:** Drake Petroleum Company, Inc.

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

**Collected:** 09/16/13

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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### JB47536-1 1 MEADOW-INF

Benzene	31.9	0.50	0.10	ug/l	EPA 524.2 REV 4.1
sec-Butylbenzene	0.14 J	0.50	0.067	ug/l	EPA 524.2 REV 4.1
tert-Butylbenzene	0.097 J	0.50	0.031	ug/l	EPA 524.2 REV 4.1
Carbon disulfide	0.099 J	0.50	0.065	ug/l	EPA 524.2 REV 4.1
Ethylbenzene	0.054 J	0.50	0.021	ug/l	EPA 524.2 REV 4.1
Isopropylbenzene	0.48 J	0.50	0.054	ug/l	EPA 524.2 REV 4.1
Methylene chloride	0.23 J	0.50	0.072	ug/l	EPA 524.2 REV 4.1
Methyl Tert Butyl Ether	355	10	2.1	ug/l	EPA 524.2 REV 4.1
Naphthalene	0.88	0.50	0.029	ug/l	EPA 524.2 REV 4.1
1,2,4-Trimethylbenzene	0.61	0.50	0.064	ug/l	EPA 524.2 REV 4.1
m,p-Xylene	0.48 J	0.50	0.045	ug/l	EPA 524.2 REV 4.1
o-Xylene	0.51	0.50	0.030	ug/l	EPA 524.2 REV 4.1
Xylenes (total)	0.99	0.50	0.030	ug/l	EPA 524.2 REV 4.1
Total TIC, Volatile	27.21 J			ug/l	

### JB47536-2 1 MEADOW-MID

Carbon disulfide	0.52	0.50	0.065	ug/l	EPA 524.2 REV 4.1
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### JB47536-3 1 MEADOW-EFF

Carbon disulfide	0.16 J	0.50	0.065	ug/l	EPA 524.2 REV 4.1
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Sample Results

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Report of Analysis

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## Report of Analysis

<b>Client Sample ID:</b>	1 MEADOW-INF	<b>Date Sampled:</b>	09/16/13
<b>Lab Sample ID:</b>	JB47536-1	<b>Date Received:</b>	09/17/13
<b>Matrix:</b>	DW - Drinking Water Inf	<b>Percent Solids:</b>	n/a
<b>Method:</b>	EPA 524.2 REV 4.1		
<b>Project:</b>	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	1B82559.D	1	09/18/13	MFH	n/a	n/a	V1B3860
Run #2	1B82575.D	20	09/18/13	MFH	n/a	n/a	V1B3860

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

## VOA List

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
67-64-1	Acetone	ND		5.0	0.90	ug/l	
78-93-3	2-Butanone	ND		5.0	0.74	ug/l	
71-43-2	Benzene	31.9	5.0	0.50	0.10	ug/l	
108-86-1	Bromobenzene	ND		0.50	0.13	ug/l	
74-97-5	Bromochloromethane	ND		0.50	0.13	ug/l	
75-27-4	Bromodichloromethane	ND		0.50	0.049	ug/l	
75-25-2	Bromoform	ND		0.50	0.062	ug/l	
74-83-9	Bromomethane	ND		0.50	0.10	ug/l	
104-51-8	n-Butylbenzene	ND		0.50	0.048	ug/l	
135-98-8	sec-Butylbenzene	0.14		0.50	0.067	ug/l	J
98-06-6	tert-Butylbenzene	0.097		0.50	0.031	ug/l	J
75-15-0	Carbon disulfide	0.099		0.50	0.065	ug/l	J
108-90-7	Chlorobenzene	ND	100	0.50	0.033	ug/l	
75-00-3	Chloroethane	ND		0.50	0.091	ug/l	
67-66-3	Chloroform	ND		0.50	0.041	ug/l	
74-87-3	Chloromethane	ND		0.50	0.12	ug/l	
95-49-8	o-Chlorotoluene	ND		0.50	0.044	ug/l	
106-43-4	p-Chlorotoluene	ND		0.50	0.034	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	0.053	ug/l	
75-34-3	1,1-Dichloroethane	ND		0.50	0.040	ug/l	
75-35-4	1,1-Dichloroethylene	ND	7.0	0.50	0.079	ug/l	
563-58-6	1,1-Dichloropropene	ND		0.50	0.065	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.20	1.0	0.098	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.050	0.50	0.055	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	0.053	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	0.061	ug/l	
142-28-9	1,3-Dichloropropane	ND		0.50	0.048	ug/l	
594-20-7	2,2-Dichloropropane	ND		0.50	0.046	ug/l	
124-48-1	Dibromochloromethane	ND		0.50	0.055	ug/l	
74-95-3	Dibromomethane	ND		0.50	0.075	ug/l	
75-71-8	Dichlorodifluoromethane	ND		0.50	0.064	ug/l	
541-73-1	m-Dichlorobenzene	ND		0.50	0.028	ug/l	

ND = Not detected MDL - Method Detection Limit

MCL = Maximum Contamination Level (40 CFR 141)

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

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<b>Client Sample ID:</b> 1 MEADOW-INF		<b>Date Sampled:</b> 09/16/13
<b>Lab Sample ID:</b> JB47536-1		<b>Date Received:</b> 09/17/13
<b>Matrix:</b> DW - Drinking Water Inf		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 524.2 REV 4.1		
<b>Project:</b> BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD		

**VOA List**

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	600	0.50	0.036	ug/l	
106-46-7	p-Dichlorobenzene	ND	75	0.50	0.050	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	100	0.50	0.12	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	70	0.50	0.066	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.042	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.068	ug/l	
100-41-4	Ethylbenzene	0.054	700	0.50	0.021	ug/l	J
87-68-3	Hexachlorobutadiene	ND		0.50	0.037	ug/l	
110-54-3	Hexane	ND		0.50	0.15	ug/l	
591-78-6	2-Hexanone	ND		2.0	0.36	ug/l	
98-82-8	Isopropylbenzene	0.48		0.50	0.054	ug/l	J
99-87-6	p-Isopropyltoluene	ND		0.50	0.025	ug/l	
75-09-2	Methylene chloride	0.23	5.0	0.50	0.072	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	355 <sup>a</sup>		10	2.1	ug/l	
108-10-1	4-Methyl-2-pentanone	ND		2.0	0.15	ug/l	
91-20-3	Naphthalene	0.88		0.50	0.029	ug/l	
103-65-1	n-Propylbenzene	ND		0.50	0.055	ug/l	
100-42-5	Styrene	ND	100	0.50	0.028	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.047	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	200	0.50	0.064	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.025	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	0.033	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND		0.50	0.068	ug/l	
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.064	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	70	0.50	0.047	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.61		0.50	0.064	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.047	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	0.50	0.052	ug/l	
108-88-3	Toluene	ND	1000	0.50	0.045	ug/l	
79-01-6	Trichloroethylene	ND	5.0	0.50	0.063	ug/l	
75-69-4	Trichlorofluoromethane	ND		1.0	0.072	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.50	0.065	ug/l	
	m,p-Xylene	0.48		0.50	0.045	ug/l	J
95-47-6	o-Xylene	0.51		0.50	0.030	ug/l	
1330-20-7	Xylenes (total)	0.99	10000	0.50	0.030	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	94%	91%	78-114%
460-00-4	4-Bromofluorobenzene	94%	94%	77-115%

ND = Not detected      MDL - Method Detection Limit  
MCL = Maximum Contamination Level (40 CFR 141)  
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

<b>Client Sample ID:</b>	1 MEADOW-INF	<b>Date Sampled:</b>	09/16/13
<b>Lab Sample ID:</b>	JB47536-1	<b>Date Received:</b>	09/17/13
<b>Matrix:</b>	DW - Drinking Water Inf	<b>Percent Solids:</b>	n/a
<b>Method:</b>	EPA 524.2 REV 4.1		
<b>Project:</b>	BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD		

## VOA List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	4.08	7.4	ug/l	J
	alkane	4.51	1.4	ug/l	J
	alkene	4.75	4.2	ug/l	J
	alkane	7.31	1.3	ug/l	J
	alkane	8.08	.92	ug/l	J
75-65-0	2-Propanol, 2-methyl-	8.33	5	ug/l	JN
108-20-3	Diisopropyl ether	9.21	1.6	ug/l	JN
75-85-4	Amylene Hydrate	11.13	2.1	ug/l	JN
	alcohols	13.00	.75	ug/l	J
	alcohols	13.41	.61	ug/l	J
	ketones	14.13	.63	ug/l	J
	C3 alkyl benzene	16.88	.79	ug/l	J
	C3 alkyl benzene	17.53	.51	ug/l	J
	Total TIC, Volatile		27.21	ug/l	J

(a) Result is from Run# 2

ND = Not detected      MDL - Method Detection Limit  
MCL = Maximum Contamination Level (40 CFR 141)  
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

<b>Client Sample ID:</b>	1 MEADOW-MID	<b>Date Sampled:</b>	09/16/13
<b>Lab Sample ID:</b>	JB47536-2	<b>Date Received:</b>	09/17/13
<b>Matrix:</b>	DW - Drinking Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	EPA 524.2 REV 4.1		
<b>Project:</b>	BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B82560.D	1	09/18/13	MFH	n/a	n/a	V1B3860
Run #2							

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

## VOA List

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
67-64-1	Acetone	ND		5.0	0.90	ug/l	
78-93-3	2-Butanone	ND		5.0	0.74	ug/l	
71-43-2	Benzene	ND	5.0	0.50	0.10	ug/l	
108-86-1	Bromobenzene	ND		0.50	0.13	ug/l	
74-97-5	Bromochloromethane	ND		0.50	0.13	ug/l	
75-27-4	Bromodichloromethane	ND		0.50	0.049	ug/l	
75-25-2	Bromoform	ND		0.50	0.062	ug/l	
74-83-9	Bromomethane	ND		0.50	0.10	ug/l	
104-51-8	n-Butylbenzene	ND		0.50	0.048	ug/l	
135-98-8	sec-Butylbenzene	ND		0.50	0.067	ug/l	
98-06-6	tert-Butylbenzene	ND		0.50	0.031	ug/l	
75-15-0	Carbon disulfide	0.52		0.50	0.065	ug/l	
108-90-7	Chlorobenzene	ND	100	0.50	0.033	ug/l	
75-00-3	Chloroethane	ND		0.50	0.091	ug/l	
67-66-3	Chloroform	ND		0.50	0.041	ug/l	
74-87-3	Chloromethane	ND		0.50	0.12	ug/l	
95-49-8	o-Chlorotoluene	ND		0.50	0.044	ug/l	
106-43-4	p-Chlorotoluene	ND		0.50	0.034	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	0.053	ug/l	
75-34-3	1,1-Dichloroethane	ND		0.50	0.040	ug/l	
75-35-4	1,1-Dichloroethylene	ND	7.0	0.50	0.079	ug/l	
563-58-6	1,1-Dichloropropene	ND		0.50	0.065	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.20	1.0	0.098	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.050	0.50	0.055	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	0.053	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	0.061	ug/l	
142-28-9	1,3-Dichloropropane	ND		0.50	0.048	ug/l	
594-20-7	2,2-Dichloropropane	ND		0.50	0.046	ug/l	
124-48-1	Dibromochloromethane	ND		0.50	0.055	ug/l	
74-95-3	Dibromomethane	ND		0.50	0.075	ug/l	
75-71-8	Dichlorodifluoromethane	ND		0.50	0.064	ug/l	
541-73-1	m-Dichlorobenzene	ND		0.50	0.028	ug/l	

ND = Not detected MDL - Method Detection Limit

MCL = Maximum Contamination Level (40 CFR 141)

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

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<b>Client Sample ID:</b> 1 MEADOW-MID		<b>Date Sampled:</b> 09/16/13
<b>Lab Sample ID:</b> JB47536-2		<b>Date Received:</b> 09/17/13
<b>Matrix:</b> DW - Drinking Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 524.2 REV 4.1		
<b>Project:</b> BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD		

**VOA List**

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	600	0.50	0.036	ug/l	
106-46-7	p-Dichlorobenzene	ND	75	0.50	0.050	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	100	0.50	0.12	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	70	0.50	0.066	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.042	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.068	ug/l	
100-41-4	Ethylbenzene	ND	700	0.50	0.021	ug/l	
87-68-3	Hexachlorobutadiene	ND		0.50	0.037	ug/l	
110-54-3	Hexane	ND		0.50	0.15	ug/l	
591-78-6	2-Hexanone	ND		2.0	0.36	ug/l	
98-82-8	Isopropylbenzene	ND		0.50	0.054	ug/l	
99-87-6	p-Isopropyltoluene	ND		0.50	0.025	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.50	0.072	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND		0.50	0.11	ug/l	
108-10-1	4-Methyl-2-pentanone	ND		2.0	0.15	ug/l	
91-20-3	Naphthalene	ND		0.50	0.029	ug/l	
103-65-1	n-Propylbenzene	ND		0.50	0.055	ug/l	
100-42-5	Styrene	ND	100	0.50	0.028	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.047	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	200	0.50	0.064	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.025	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	0.033	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND		0.50	0.068	ug/l	
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.064	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	70	0.50	0.047	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.064	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.047	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	0.50	0.052	ug/l	
108-88-3	Toluene	ND	1000	0.50	0.045	ug/l	
79-01-6	Trichloroethylene	ND	5.0	0.50	0.063	ug/l	
75-69-4	Trichlorofluoromethane	ND		1.0	0.072	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.50	0.065	ug/l	
	m,p-Xylene	ND		0.50	0.045	ug/l	
95-47-6	o-Xylene	ND		0.50	0.030	ug/l	
1330-20-7	Xylenes (total)	ND	10000	0.50	0.030	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	90%		78-114%
460-00-4	4-Bromofluorobenzene	90%		77-115%

ND = Not detected      MDL - Method Detection Limit  
MCL = Maximum Contamination Level (40 CFR 141)  
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

<b>Client Sample ID:</b> 1 MEADOW-MID		<b>Date Sampled:</b> 09/16/13
<b>Lab Sample ID:</b> JB47536-2		<b>Date Received:</b> 09/17/13
<b>Matrix:</b> DW - Drinking Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 524.2 REV 4.1		
<b>Project:</b> BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD		

**VOA List**

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected      MDL - Method Detection Limit  
MCL = Maximum Contamination Level (40 CFR 141)  
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

<b>Client Sample ID:</b>	1 MEADOW-EFF	<b>Date Sampled:</b>	09/16/13
<b>Lab Sample ID:</b>	JB47536-3	<b>Date Received:</b>	09/17/13
<b>Matrix:</b>	DW - Drinking Water Eff	<b>Percent Solids:</b>	n/a
<b>Method:</b>	EPA 524.2 REV 4.1		
<b>Project:</b>	BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B82561.D	1	09/18/13	MFH	n/a	n/a	V1B3860
Run #2							

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

## VOA List

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
67-64-1	Acetone	ND		5.0	0.90	ug/l	
78-93-3	2-Butanone	ND		5.0	0.74	ug/l	
71-43-2	Benzene	ND	5.0	0.50	0.10	ug/l	
108-86-1	Bromobenzene	ND		0.50	0.13	ug/l	
74-97-5	Bromochloromethane	ND		0.50	0.13	ug/l	
75-27-4	Bromodichloromethane	ND		0.50	0.049	ug/l	
75-25-2	Bromoform	ND		0.50	0.062	ug/l	
74-83-9	Bromomethane	ND		0.50	0.10	ug/l	
104-51-8	n-Butylbenzene	ND		0.50	0.048	ug/l	
135-98-8	sec-Butylbenzene	ND		0.50	0.067	ug/l	
98-06-6	tert-Butylbenzene	ND		0.50	0.031	ug/l	
75-15-0	Carbon disulfide	0.16		0.50	0.065	ug/l	J
108-90-7	Chlorobenzene	ND	100	0.50	0.033	ug/l	
75-00-3	Chloroethane	ND		0.50	0.091	ug/l	
67-66-3	Chloroform	ND		0.50	0.041	ug/l	
74-87-3	Chloromethane	ND		0.50	0.12	ug/l	
95-49-8	o-Chlorotoluene	ND		0.50	0.044	ug/l	
106-43-4	p-Chlorotoluene	ND		0.50	0.034	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	0.053	ug/l	
75-34-3	1,1-Dichloroethane	ND		0.50	0.040	ug/l	
75-35-4	1,1-Dichloroethylene	ND	7.0	0.50	0.079	ug/l	
563-58-6	1,1-Dichloropropene	ND		0.50	0.065	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.20	1.0	0.098	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.050	0.50	0.055	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	0.053	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	0.061	ug/l	
142-28-9	1,3-Dichloropropane	ND		0.50	0.048	ug/l	
594-20-7	2,2-Dichloropropane	ND		0.50	0.046	ug/l	
124-48-1	Dibromochloromethane	ND		0.50	0.055	ug/l	
74-95-3	Dibromomethane	ND		0.50	0.075	ug/l	
75-71-8	Dichlorodifluoromethane	ND		0.50	0.064	ug/l	
541-73-1	m-Dichlorobenzene	ND		0.50	0.028	ug/l	

ND = Not detected MDL - Method Detection Limit

MCL = Maximum Contamination Level (40 CFR 141)

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

<b>Client Sample ID:</b> 1 MEADOW-EFF		<b>Date Sampled:</b> 09/16/13
<b>Lab Sample ID:</b> JB47536-3		<b>Date Received:</b> 09/17/13
<b>Matrix:</b> DW - Drinking Water Eff		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 524.2 REV 4.1		
<b>Project:</b> BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD		

**VOA List**

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	600	0.50	0.036	ug/l	
106-46-7	p-Dichlorobenzene	ND	75	0.50	0.050	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	100	0.50	0.12	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	70	0.50	0.066	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.042	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.068	ug/l	
100-41-4	Ethylbenzene	ND	700	0.50	0.021	ug/l	
87-68-3	Hexachlorobutadiene	ND		0.50	0.037	ug/l	
110-54-3	Hexane	ND		0.50	0.15	ug/l	
591-78-6	2-Hexanone	ND		2.0	0.36	ug/l	
98-82-8	Isopropylbenzene	ND		0.50	0.054	ug/l	
99-87-6	p-Isopropyltoluene	ND		0.50	0.025	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.50	0.072	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND		0.50	0.11	ug/l	
108-10-1	4-Methyl-2-pentanone	ND		2.0	0.15	ug/l	
91-20-3	Naphthalene	ND		0.50	0.029	ug/l	
103-65-1	n-Propylbenzene	ND		0.50	0.055	ug/l	
100-42-5	Styrene	ND	100	0.50	0.028	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.047	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	200	0.50	0.064	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.025	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	0.033	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND		0.50	0.068	ug/l	
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.064	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	70	0.50	0.047	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.064	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.047	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	0.50	0.052	ug/l	
108-88-3	Toluene	ND	1000	0.50	0.045	ug/l	
79-01-6	Trichloroethylene	ND	5.0	0.50	0.063	ug/l	
75-69-4	Trichlorofluoromethane	ND		1.0	0.072	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.50	0.065	ug/l	
	m,p-Xylene	ND		0.50	0.045	ug/l	
95-47-6	o-Xylene	ND		0.50	0.030	ug/l	
1330-20-7	Xylenes (total)	ND	10000	0.50	0.030	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	93%		78-114%
460-00-4	4-Bromofluorobenzene	95%		77-115%

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MCL = Maximum Contamination Level (40 CFR 141)  
E = Indicates value exceeds calibration range

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N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> 1 MEADOW-EFF		<b>Date Sampled:</b> 09/16/13
<b>Lab Sample ID:</b> JB47536-3		<b>Date Received:</b> 09/17/13
<b>Matrix:</b> DW - Drinking Water Eff		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 524.2 REV 4.1		
<b>Project:</b> BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD		

**VOA List**

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected      MDL - Method Detection Limit  
 MCL = Maximum Contamination Level (40 CFR 141)  
 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

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody

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

FED-EX Tracking # **8034-7629 9310** Bottle Order Control #  
Accutest Quote # \_\_\_\_\_ Accutest Job # **JB47536**

Client / Reporting Information		Project Information		Requested Analysis ( see TEST CODE sheet)												Matrix Codes
Company Name <b>Drake Petroleum Company, Inc. Attn: Eric Harvey</b>		Project Name <b>Bel Air Xtra Fuels PC#007805</b>														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 <b>P.O. Box 066 221 Quinebaug Road</b>		Street <b>2476 Churchville Rd.</b>														
P.O. Box # <b>066</b> State <b>CT</b> Zip <b>6255</b>		City <b>Bel Air</b> State <b>MD</b>														
City <b>North Grosvenordale</b>		Billing Information ( if different from Report to ) Company Name														
Project Contact <b>Carolyn Roth</b> E-mail <b>croth@brwncaid.com</b>		Project # <b>144514</b>		VOCs <b>715</b>												<b>LAB USE ONLY</b>  <b>2117</b>
Phone # <b>302-545-4902</b> Fax # _____		Client Purchase Order # <b>#007805</b>														
Sampler(s) Name(s) <b>Hunter White</b> Phone # _____		Project Manager <b>Carolyn Roth</b>														
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 type="checkbox"/> 1 Day EMERGENCY Emergency & Rush T/A data available VIA Lablink		Approved By (Accutest PMI) / Date: / day by W-1 contract		<input type="checkbox"/> Commercial "A" ( Level 1 ) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" ( Level 2 ) <input type="checkbox"/> NYASP Category B <input type="checkbox"/> FULLT1 ( Level 3+4 ) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "C" <input type="checkbox"/> Other _____ Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data												
Sample Custody must be documented below each time samples change possession, including courier delivery.																
Reinquished by Sampler: <b>1 Hunter</b>		Date Time: <b>9/16/13</b>		Received By: <b>1 FEDEX</b>		Reinquished By: <b>2 FEDEX</b>		Date Time: <b>9-17-13 8/10</b>		Received By: <b>2</b>						
Reinquished by Sampler: <b>3</b>		Date Time:		Received By: <b>3</b>		Reinquished By: <b>4</b>		Date Time:		Received By: <b>4</b>						
Reinquished by: <b>5</b>		Date Time:		Received By: <b>5</b>		Custody Seal: <b>No</b>		<input type="checkbox"/> Intact    Preserved where applicable <input type="checkbox"/> Not Intact		<input checked="" type="checkbox"/> On Ice    Cooler Temp. <b>2.0 C</b>						

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**JB47536: Chain of Custody**

**Page 1 of 3**

## Accutest Laboratories Sample Receipt Summary

**Accutest Job Number:** JB47536      **Client:** DRAKE PETROLEUM      **Project:** BEL AIR XTRA FUELS PC#007805  
**Date / Time Received:** 9/17/2013 8:10      **Delivery Method:** FedEx      **Airbill #s:** 8034-7529-9310

**Cooler Temps (Initial/Adjusted):** 0

<u>Cooler Security</u>		<u>Y or N</u>		<u>Y or N</u>	
1. Custody Seals Present:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<u>Cooler Temperature</u>		<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Cooler temp verification:	Bar Therm		
3. Cooler media:	Ice (bag)		
4. No, Coolers			

<u>Quality Control Preservation</u>			
	<u>Y</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. VOCs headspace free:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<u>Sample Integrity - Documentation</u>		<u>Y or N</u>	
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Sample container label / COC agree:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

<u>Sample Integrity - Condition</u>		<u>Y or N</u>	
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Condition of sample:	Intact		

<u>Sample Integrity - Instructions</u>			
	<u>Y</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments -1 SAMPLE ID: 1 MEADOW-EFF LABELED "INF"  
 -3 SAMPLE ID: 1 MEADOW-INF LABELED "EFF"  
  
 SAMPLES ID'S ARE SWITCHED AROUND DATES AND TIMES ARE OK. -1 THRU -3 MATRIX IS DW.

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## Sample Receipt Summary - Problem Resolution

Accutest Job Number: JB47536

CSR: Kristin Beebe

Response Date: 9/18/2013

Response: ID's on bottle labels are correct, per Hunter White.

4.1

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Accutest Laboratories  
V: 732.329.0200

2235 US Highway 130  
F: 732.329.3499

Dayton, New Jersey  
www.accutest.com

**JB47536: Chain of Custody**  
**Page 3 of 3**