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

T: 856.382.7170
F: 201.236.1607

May 2, 2013

Mr. John Venturella
9 Meadow Spring Drive
Bel Air, Maryland 21015

143732.010

Subject: Water Well Sampling Results
9 Meadow Spring Drive
Bel Air, Maryland 21015

Dear Mr. Venturella:

Brown and Caldwell, on behalf of Drake Petroleum Company Inc. (Drake) would like to thank you for allowing us to conduct sampling of your drinking water well on March 13, 2013.

The water sample from your well was analyzed for volatile organic compounds (VOCs) including petroleum constituents, using the United States U.S. Environmental Protection Agency (USEPA) approved method for drinking water samples (US EPA Method 524.2). The following constituents were detected in your drinking water well: Methyl Tertiary Butyl Ether (estimated value of 0.21 micrograms per liter (µg/L)). All detected constituents were below Maryland Department of the Environment (MDE) drinking water standards. The MDE drinking water standard for Methyl Tertiary Butyl Ether is 20 µg/L, which can be found in the Code of Maryland (COMAR) 26.08.02.03-2. Your analytical results are attached.

This sampling completes the MDE sampling requirement for your property as directed in the September 25, 2012 MDE letter to Drake.

Again, thank you for your patience and cooperation. If you have any questions regarding the enclosed test results feel free to call Brown and Caldwell at (856) 324-0485.

Very truly yours,
**Brown and Caldwell**

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

# Attachment: Laboratory Data

New Jersey ACCUTEST LABORATORIES

04/15/13

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: JB31642A

Sampling Date: 03/13/13

Report to:

Brown and Caldwell
535 Route 38 East Suite 355
Cherry Hill, NJ 08034

ATTN: Carolyn Roth

Total number of pages in report: **12**

ACCREDITED IN ACCORDANCE WITH nelac

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 L. Cole

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

Sections: 1 2 3 4

# Table of Contents

# Sample Summary

Drake Petroleum Company, Inc.

**Job No:** JB31642A

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 |
|---|---|---|---|---|---|---|---|
| JB31642-2 | 03/13/13 | 10:40 | HW | 03/15/13 | DW | Drinking Water Inf | 9 MEADOW-INF |

# Summary of Hits



**Job Number:** JB31642A
**Account:** Drake Petroleum Company, Inc.
**Project:** BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD
**Collected:** 03/13/13

| Lab Sample ID / Analyte | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| **JB31642-2** | **9 MEADOW-INF** | | | | | |
| Methyl Tert Butyl Ether | | 0.21 J | 0.50 | 0.068 | ug/l | EPA 524.2 REV 4.1 |

## Sample Results

Report of Analysis

# Report of Analysis





**Client Sample ID:** 9 MEADOW-INF
**Lab Sample ID:** JB31642-2 **Date Sampled:** 03/13/13
**Matrix:** DW - Drinking Water Inf **Date Received:** 03/15/13
**Method:** EPA 524.2 REV 4.1 **Percent Solids:** n/a
**Project:** BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1B77191.D | 1 | 03/20/13 | MFH | n/a | n/a | V1B3604 |
| Run #2 | | | | | | | |

| | 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 | 1.6 | ug/l | |
| 78-93-3 | 2-Butanone | ND | | 5.0 | 1.6 | ug/l | |
| 71-43-2 | Benzene | ND | 5.0 | 0.50 | 0.047 | 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 | 0.088 | ug/l | |
| 75-25-2 | Bromoform | ND | | 0.50 | 0.11 | ug/l | |
| 74-83-9 | Bromomethane | ND | | 0.50 | 0.11 | ug/l | |
| 104-51-8 | n-Butylbenzene | ND | | 0.50 | 0.11 | ug/l | |
| 135-98-8 | sec-Butylbenzene | ND | | 0.50 | 0.12 | ug/l | |
| 98-06-6 | tert-Butylbenzene | ND | | 0.50 | 0.062 | ug/l | |
| 75-15-0 | Carbon disulfide | ND | | 0.50 | 0.10 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 100 | 0.50 | 0.046 | ug/l | |
| 75-00-3 | Chloroethane | ND | | 0.50 | 0.16 | ug/l | |
| 67-66-3 | Chloroform | ND | | 0.50 | 0.069 | ug/l | |
| 74-87-3 | Chloromethane | ND | | 0.50 | 0.095 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | | 0.50 | 0.069 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | | 0.50 | 0.048 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 5.0 | 0.50 | 0.083 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.50 | 0.067 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 7.0 | 0.50 | 0.14 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | | 0.50 | 0.095 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 0.20 | 1.0 | 0.22 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.050 | 0.50 | 0.082 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.0 | 0.50 | 0.11 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.0 | 0.50 | 0.080 | ug/l | |
| 142-28-9 | 1,3-Dichloropropane | ND | | 0.50 | 0.11 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | ND | | 0.50 | 0.17 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | | 0.50 | 0.075 | ug/l | |
| 74-95-3 | Dibromomethane | ND | | 0.50 | 0.11 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | | 1.0 | 0.10 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | | 0.50 | 0.11 | 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





**Client Sample ID:** 9 MEADOW-INF
**Lab Sample ID:** JB31642-2 **Date Sampled:** 03/13/13
**Matrix:** DW - Drinking Water Inf **Date Received:** 03/15/13
**Method:** EPA 524.2 REV 4.1 **Percent Solids:** n/a
**Project:** 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 | 0.073 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 75 | 0.50 | 0.063 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 100 | 0.50 | 0.10 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 70 | 0.50 | 0.13 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 0.50 | 0.094 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.50 | 0.10 | ug/l | |
| 108-20-3 | Di-Isopropyl ether | ND | | 0.50 | 0.062 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 700 | 0.50 | 0.14 | ug/l | |
| 637-92-3 | Ethyl tert Butyl Ether | ND | | 0.50 | 0.064 | ug/l | |
| 87-68-3 | Hexachlorobutadiene | ND | | 2.0 | 0.096 | ug/l | |
| 110-54-3 | Hexane | ND | | 0.50 | 0.28 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | | 2.0 | 0.37 | ug/l | |
| 98-82-8 | Isopropylbenzene | ND | | 0.50 | 0.11 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | ND | | 0.50 | 0.053 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 5.0 | 0.50 | 0.11 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 0.21 | | 0.50 | 0.068 | ug/l | J |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | 2.0 | 0.47 | ug/l | |
| 91-20-3 | Naphthalene | ND | | 0.50 | 0.060 | ug/l | |
| 103-65-1 | n-Propylbenzene | ND | | 0.50 | 0.12 | ug/l | |
| 100-42-5 | Styrene | ND | 100 | 0.50 | 0.058 | ug/l | |
| 994-05-8 | tert-Amyl Methyl Ether | ND | | 0.50 | 0.050 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | 0.50 | 0.097 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 200 | 0.50 | 0.059 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 0.50 | 0.041 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.0 | 0.50 | 0.075 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 0.50 | 0.053 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 0.50 | 0.20 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 70 | 0.50 | 0.073 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 0.50 | 0.12 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.50 | 0.091 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 5.0 | 0.50 | 0.12 | ug/l | |
| 108-88-3 | Toluene | ND | 1000 | 0.50 | 0.079 | ug/l | |
| 79-01-6 | Trichloroethylene | ND | 5.0 | 0.50 | 0.15 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | | 1.0 | 0.15 | ug/l | |
| 75-65-0 | Tertiary Butyl Alcohol | ND | | 5.0 | 2.4 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 2.0 | 0.50 | 0.12 | ug/l | |
| | m,p-Xylene | ND | | 1.0 | 0.18 | ug/l | |
| 95-47-6 | o-Xylene | ND | | 0.50 | 0.12 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 10000 | 0.50 | 0.12 | 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





| | | | |
|---|---|---|---|
| **Client Sample ID:** | 9 MEADOW-INF | | |
| **Lab Sample ID:** | JB31642-2 | **Date Sampled:** | 03/13/13 |
| **Matrix:** | DW - Drinking Water Inf | **Date Received:** | 03/15/13 |
| **Method:** | EPA 524.2 REV 4.1 | **Percent Solids:** | n/a |
| **Project:** | BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 Churchville Road, Bel Air, MD | | |

**VOA List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 2199-69-1 | 1,2-Dichlorobenzene-d4 | 93% | | 78-114% |
| 460-00-4 | 4-Bromofluorobenzene | 96% | | 77-115% |

| 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

New Jersey ACCUTEST LABORATORIES



## Misc. Forms

# Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

PW

# CHAIN OF CUSTODY

ACCUTEST Laboratories

495 Tech Center West, Bldg. 1, Marlboro, MA 01752
508-481-6200 FAX: 508-481-7753

FED-EX Tracking # | Bottle Order Control #

Accutest Quote # | Accutest Job # JB31642

**Client / Reporting Information**

Company Name: Drake Petroleum Company, Inc. Attn: Eric Harvey
Address: P.O. Box 866 221 Quinebaug Road
City: North Grosvenordale State: CT Zip: 06255
Project Contact: Carolyn Roth Croth@Brwncald.com
Phone #: 856-324-0485
Samplers's Name: Hunter White & Rob Jeffrey

**Project Information**

Project Name: Bel Air Xtra Fuels, PC #007805
Street: 2476 Churchville Road
City: Bel Air State: MD
Project #: 143732
Fax #:
Client Purchase Order #: #007805

**Requested Analysis**

Full Suite VOCs w/ Fuel Oxygenates and TICs via EPA method 524.2

**Matrix Codes**

DW- Drinking Water
GW- Ground Water
WW- Water
SW- Surface Water
SO- Soil
SL-Sludge
OI-Oil
LIQ- Other Liquid
AIR- Air
SOL-Other Solid
WP-Wipe

| Accutest Sample # | Field ID / Point of Collection | SUMMA # / MEOH Vial # | Collection Date | Collection Time | Sampled by | Matrix | # of bottles | Number of preserved Bottles: HCl | NaOH | HNO3 | H2SO4 | NaHSO4 | MEOH | BENZENE | Full Suite VOCs | LAB USE ONLY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ~~3 Meadow- Inf~~ | | | | | HW/ RJ | DW | 3 | ~~3~~ | | | | | | | X | |
| ~~5 Meadow- Inf~~ | | | | | HW/RJ | DW | 3 | ~~3~~ | | | | | | | X | 2211 |
| -1 | 7 Meadow- Inf | | 3/13/13 | 1000 | HW/RJ | DW | 3 | 3 | | | | | | | X | |
| -2 | 9 Meadow- Inf | | 3/13/13 | 1040 | HW/RJ | DW | 3 | 3 | | | | | | | X | |
| -3 | 10 Meadow- Inf | | 3/13/13 | 0955 | HW/ RJ | DW | 3 | 3 | | | | | | | X | |
| -4 | 2303 Churchville- Inf | | 3/13/13 | 1015 | HW/RJ | DW | 3 | 3 | | | | | | | X | |

Data Deliverable Information

- [X] Std. 10 Business Days — Approved By:/ Date:
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*
- [ ] Other

Emergency T/A data available VIA Lablink

- [X] Commercial "A"
- [ ] Commercial "B"
- [ ] NJ Reduced
- [ ] NJ Full
- [ ] Other
- [ ] FULL CLP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [X] EDD Format

Commercial "A" = Results Only

Comments / Remarks

EDD to Carolyn Roth when completed. croth@brwncald.com

Only 4 samples @ 3 bottles each.

No Trip Blank Received

Sample Custody must be documented below each time samples change possession, including courier delivery.

| | Relinquished by Sampler: | Date Time: | Received By: | Relinquished By: | Date Time: | Received By: |
|---|---|---|---|---|---|---|
| 1 | Hunter White | 3-15-13 | 1 | 2 | 3-15-13 1830 | 2 |
| 3 | Relinquished by: | Date Time: | Received By: | Relinquished By: 4 | Date Time: | Received By: 4 |
| 5 | Relinquished by: | Date Time: | Received By: 5 | Custody Seal # | Preserved where applicable ☐ | On Ice ☐ Cooler Temp. 2.0 C |

2A

4.1 4

**JB31642A: Chain of Custody**
**Page 1 of 3**

# Accutest Laboratories Sample Receipt Summary

**Accutest Job Number:** JB31642 **Client:** **Project:**

**Date / Time Received:** 3/15/2013 **Delivery Method:** **Airbill #'s:**

**Cooler Temps (Initial/Adjusted):** #1: (2/2); 0

| Cooler Security | Y | or | N | | Y | or | N |
|---|---|---|---|---|---|---|---|
| 1. Custody Seals Present: | ☑ | | ☐ | 3. COC Present: | ☑ | | ☐ |
| 2. Custody Seals Intact: | ☑ | | ☐ | 4. Smpl Dates/Time OK | ☑ | | ☐ |

| Cooler Temperature | Y | or | N |
|---|---|---|---|
| 1. Temp criteria achieved: | ☑ | | ☐ |
| 2. Cooler temp verification: | Bar Therm | | |
| 3. Cooler media: | Ice (Bag) | | |
| 4. No. Coolers: | 1 | | |

| Quality Control Preservation | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Trip Blank present / cooler: | ☐ | | ☑ | ☐ |
| 2. Trip Blank listed on COC: | ☐ | | ☑ | ☐ |
| 3. Samples preserved properly: | ☑ | | ☐ | |
| 4. VOCs headspace free: | ☑ | | ☐ | ☐ |

| Sample Integrity - Documentation | Y | or | N |
|---|---|---|---|
| 1. Sample labels present on bottles: | ☑ | | ☐ |
| 2. Container labeling complete: | ☑ | | ☐ |
| 3. Sample container label / COC agree: | ☑ | | ☐ |

| Sample Integrity - Condition | Y | or | N |
|---|---|---|---|
| 1. Sample recvd within HT: | ☑ | | ☐ |
| 2. All containers accounted for: | ☑ | | ☐ |
| 3. Condition of sample: | Intact | | |

| Sample Integrity - Instructions | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Analysis requested is clear: | ☑ | | ☐ | |
| 2. Bottles received for unspecified tests | ☐ | | ☑ | |
| 3. Sufficient volume recvd for analysis: | ☑ | | ☐ | |
| 4. Compositing instructions clear: | ☐ | | ☐ | ☑ |
| 5. Filtering instructions clear: | ☐ | | ☐ | ☑ |

Comments

## Job Change Order: JB31642_4_12_2013

| | | | |
|---|---|---|---|
| **Requested Date:** | 4/12/2013 | **Received Date:** | 3/15/2013 |
| **Account Name:** | Drake Petroleum Company, Inc. | **Due Date:** | 3/22/2013 |
| **Project** | BCNJCH:PC# 007805 Bel Air Xtra Fuels, 2476 | **Deliverable:** | COMMA |
| **CSR:** | kristinb | **TAT (Days):** | 1 |

==========

**Sample #:** JB31642-ALL
**Dept:**
**Dept:**

**Change:**
Please place each sample on a separate job so that separate reports will be generated. Revised reports needed Monday by noon.

==========

**Above Changes Per:** Client / Rob Jeffrey **Date:** 4/12/2013

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service





**JB31642A: Chain of Custody**
**Page 3 of 3**