

Via Electronic Mail (NPDES.Generalpermits@epa.gov)

November 24, 2010

US Environmental Protection Agency Five Post Office Square, Suite 100 Mail Code OEPO6-4 Boston, Massachusetts 02109-3912 ATTN: Remedaiton General Permit NOI Processing

RE: USEPA Remediation General Permit - Notice of Intent

Brimfield Sunoco Intersection of Route 19 and Route 20 Brimfield, MA 01010 Authorization No. MAG910017 MADEP Release Tracking No. 1-0319 CEA Project No. 5745-05

To Whom It May Concern:

On behalf of Drake Petroleum Company, Inc., (Drake) Corporate Environmental Advisors, Inc. (CEA) is submitting this Notice of Intent (NOI)) to treat and discharge petroleum-impacted groundwater under the USEPA Remediation General Permit (RGP) at the above referenced location (the "Site"). This work is being conducted as part of Phase V Remedy Operation Status (ROS) activities at the Site in accordance with section 310 CMR 40.0890 of the Massachusetts Contingency Plan (MCP). Curently, a high vacuum extraction (HVE) system is in use at the Site for the extraction, treatment, and discharge of contaminated groundwater. The HVE system has been operating since February 2, 2007, and has been discharging under the RGP since that time. Petroleum-impacted groundwater is currently being treated and discharged under RGP MAG910000, authorization number MAG910017. The authorization is attached for reference.

Figure 1, Site Locus Map and Figure 2, Area Map, show the Site with respect to surrounding topography and area. Figure 3, HVE System and Trenching Layout, depicts pertinent site features as wells as the current system layout.

Select groundwater monitoring wells are manifolded and connected to the HVE system. Groundwater, vapor, and light non-aqueous phase liquid (LNAPL) are removed from the subsurface using an oil-sealed liquid ring vacuum pump capable of an air flow of two hundred eighty (280) actual cubic feet per minute (acfm) at a vacuum of twenty (20) inches of mercury (in Hg). Groundwater, LNAPL, and vapors extracted from the HVE well network are processed through a 140-gallon capacity phase separator.

Recovered groundwater and LNAPL pass through an oil water separator; the LNAPL is collected in a 55gallon capacity storage tank for off-site recycling or disposal. Recovered groundwater passes through

ADDRESS Hartwell Business Park 127 Hartwell Street, Suite 2 West Boylston, MA TEL 508.835.8822 | 800.358.7960 FAX 508.835.8812 WEB www.cea-inc.com two (2) 25-micron bag filters and two (2) 1,000-pound capacity liquid-phase granular activiated carbon adsorption (GACA) units piped in series. Recovered vapor is treated by two (2) 2,000-pound vapor-phase GACA units prior to discharge to the ambient air.

Treated groundwater is discharged to a a drainage swale behind the Site building which ultimately discharges to the East Brook. Refer to **Figure 3** for the location of the discharge line trench, discharge outfall, and the East Brook discharge point. A process and instrumentation diagram (P&ID) of the HVE system is included as **Figure 4**.

The HVE system is designed to treat and discharge groundwater at an approximate flow rate of twenty (20) gallons per minute (GPM). Between July and September 2010, the system flow rate ranged from 0.4 to 1.3 GPM. Treated water discharge will be monitored according to the guidelines described in the RGP which includes weekly system operation and maintanace inspections, and a comprehensive sampling schedule. In-line sample ports for groundwater sample collection are located at the GACA influent, midpoint, and effluent discharge points. In addition, a totalizer and flow meter are located along the discharge line for proper recording of groundwater discharge volume and flow rates. The applicable NOI form and supporting documentation are attached.

If you have any questions or require additional information, please do not hesitate to contact the undersigned at (508) 835-8822.

Sincerely,

CORPORATE ENVIRONMENTAL ADVISORS, INC.

Jason C. Frigon Senior Environmental Scientist

Figures

| Figure 1 | Site Locus |
|----------|-------------------------------------|
| Figure 2 | Area Map |
| Figure 3 | HVE System and Trenching Layout |
| Figure 4 | Process and Instrumentation Diagram |

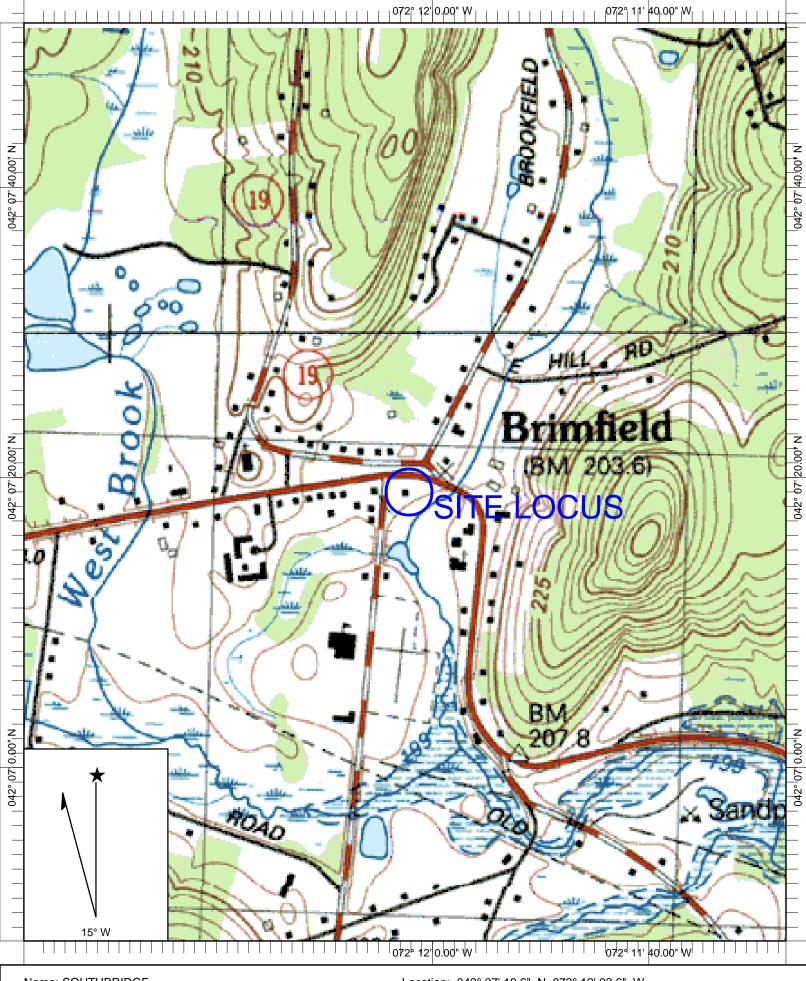
Attachments

Attachment A: Notice of Intent Form Attachment B: Laboratory Analytical Data

cc: Michele Alabiso, Drake Petroleum Company, Inc. MADEP - CERO

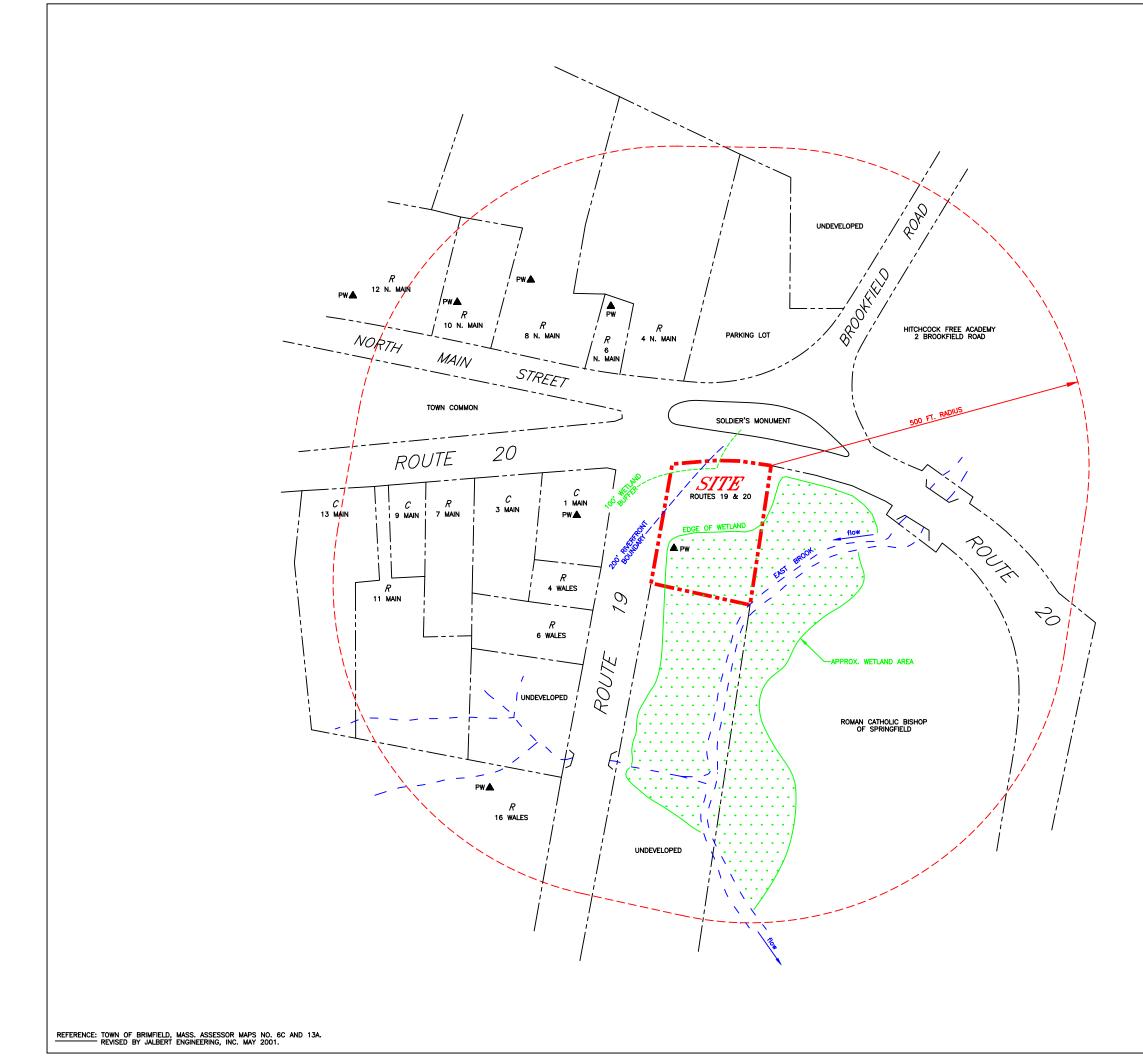


Site Locus



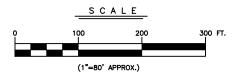
Name: SOUTHBRIDGE Date: 2/9/2005 Scale: 1 inch equals 666 feet Location: 042° 07' 19.6" N 072° 12' 02.6" W Caption: Brimfield Xtra Mart State Routes 19 and 20 Brimfield, MA

Area Map



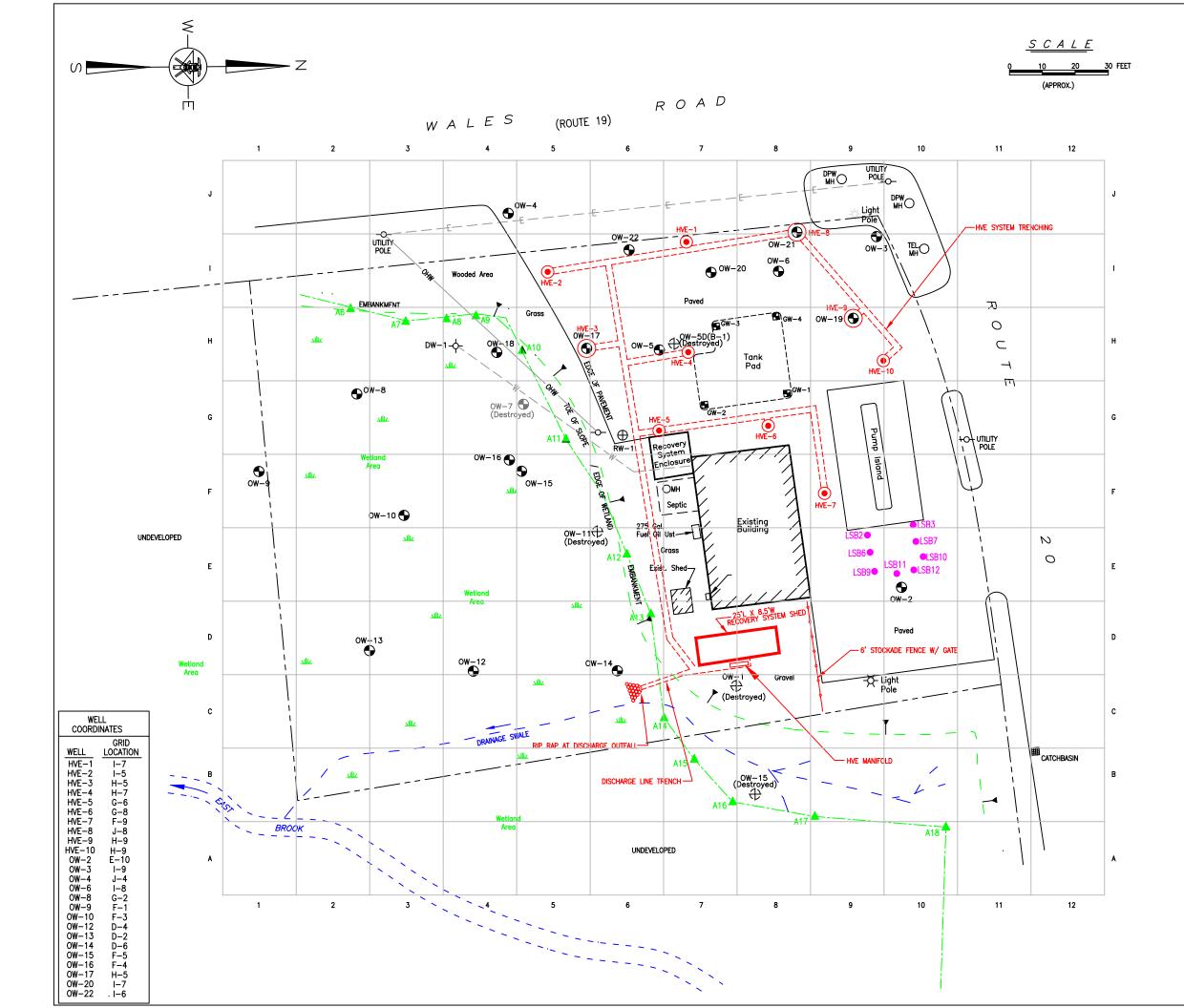






| Groundwat | ADVISOR | and Environmental Services |
|--|--------------|----------------------------|
| SCALE: AS SHOWN | | DR. BY: K. HAZEL |
| DATE: 5/10/06 | APP. BY: SEV | JOB NO.: 5745-05 |
| | REA MA | P |
| DRAKE PETROLEUM RTES. 19 & 20 BRIMFIE | FIGURE- 2 | |

HVE System and Trenching Layout

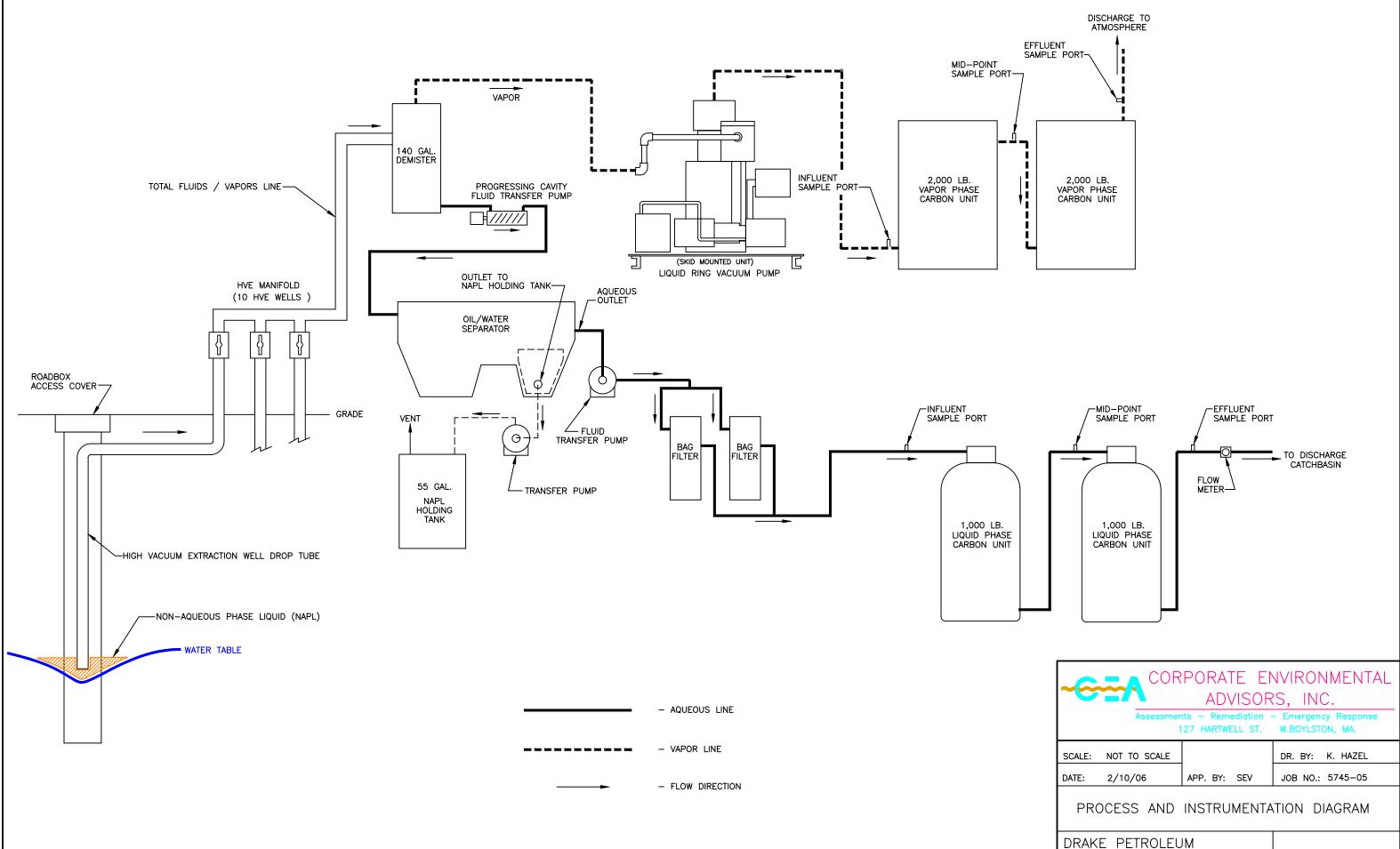




| A18 🔺 | WETLAND | FLAGS |
|-------|---------|-------|
|-------|---------|-------|

| Assessmer | | NVIRONMENTAL S, INC. - Emergency Response w.Boylston, MA. |
|--|--------------|--|
| SCALE: AS SHOWN | | DR. BY: K. HAZEL |
| DATE: 5/18/07 | APP. BY: SEV | JOB NO.: 5745–05 |
| HVE SYSTEM | & TRENCH | HING LAYOUT |
| DRAKE PETROLEU ROUTES 19 & 20 BRIMFIELD | | FIGURE-3 |

Process and Instrumentation Diagram



| SCALE: | NOT TO SCALE | | | DR. BY: K. HAZEL |
|--------|--------------|----------|-------|------------------|
| DATE: | 2/10/06 | APP. BY: | SEV | JOB NO.: 5745-05 |
| PR | DCESS AND | INSTRU | MENTA | TION DIAGRAM |
| | E PETROLEU | | | FIGURE-4 |

ATTACHMENT A Notice of Intent Form

B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

1. General facility/site information. Please provide the following information about the site:

| a) Name of facility/site: Brimfield Sunoco | | Facility/site mailing address: | | | | | |
|--|----------------------------------|---|-------------------------------------|--|--|--|--|
| Location of facility/site : longitude: -72, 12', 0.81" latitude: 42, 7', 19.38" | Facility SIC code(s): 5541 | Street: Intersection of Rou | ite 19 and Route 20 | | | | |
| b) Name of facility/site owner: Khalid P | roperties | Town: Brimfield | | | | | |
| Email address of facility/site owner: | | State: | Zip: County: | | | | |
| Telephone no. of facility/site owner: 860-62 | 21-5800 | МА | 01010 Hampden | | | | |
| Fax no. of facility/site owner: 860-628-9512 | | Owner is (check one): 1. Federal <u>O</u> 2. State/Tribal <u>O</u> | | | | | |
| Address of owner (if different from site): | | 3. Private • 4. Other • if so, describe: | | | | | |
| Street: 2138 Silas Deane Highway | | | | | | | |
| Town: Rocky Hill | State: CT | Zip: 06067 | County: Hartford | | | | |
| c) Legal name of operator : | Operator tele | ephone no: 508-835-8822 | | | | | |
| Corporate Environmental Advisors, Inc. | Operator fax | no.: 508-835-8812 | Operator email: jbriggs@cea-inc.com | | | | |
| Operator contact name and title: John Brigg | S | | | | | | |
| Address of operator (if different from owner): | Street: 127 Hartwell Street | | | | | | |
| Town: West Boylston | State: MA | Zip: 01583 | County: Worcester | | | | |

Remediation General Permit Appendix V - NOI Page 10 of 22

| d) Check Y for "yes" or N for "no" for the following: | |
|---|---|
| 1 Has a prior NPDES permit evolution here prosted for | |
| 1. Has a prior NPDES permit exclusion been granted for | the discharge? Y O NO, if Y, number: |
| 2. Has a prior NPDES application (Form 1 & 2C) ever be | een filed for the discharge? |
| Y O N O, if Y, date and tracking #: | |
| 3. Is the discharge a "new discharge" as defined by 40 Cl | FR 122.2? Y <u>O</u> N <u>O</u> |
| 4. For sites in Massachusetts, is the discharge covered un | der the Massachusetts Contingency Plan (MCP) and exempt from state |
| permitting? Y O N O | |
| e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y O NO If Y, please list: site identification # assigned by the state of NH or MA: permit or license # assigned: state agency contact information: name, location, and telephone number: | f) Is the site/facility covered by any other EPA permit, including: 1. Multi-Sector General Permit? Y O NO, if Y, number: 2. Final Dewatering General Permit? Y O NO, if Y, number: 3. EPA Construction General Permit? Y O NO, if Y, number: 4. Individual NPDES permit? Y O NO, if Y, number: 5. any other water quality related individual or general permit? Y O |
| | N_O, if Y, number: MAG910017 |
| | |
| | an Area of Critical Environmental Concern (ACEC)? Y_O_N_O_ |
| h) Based on the facility/site information and any historica | al sampling data, identify the sub-category into which the potential |
| discharge falls. | |
| Activity Category | Activity Sub-Category |
| I - Petroleum Related Site Remediation | A. Gasoline Only Sites 🗵 |
| | B. Fuel Oils and Other Oil Sites (including Residential Non-Business |
| | Remediation Discharges) |
| | C. Petroleum Sites with Additional Contamination |
| II - Non Petroleum Site Remediation | A. Volatile Organic Compound (VOC) Only Sites |
| | B. VOC Sites with Additional Contamination |
| | C. Primarily Heavy Metal Sites |
| III - Contaminated Construction Dewatering | A. General Urban Fill Sites D |
| | B. Known Contaminated Sites |

| HI MI DI LETTI | |
|---------------------------------------|---|
| IV - Miscellaneous Related Discharges | A. Aquifer Pump Testing to Evaluate Formerly Contaminated Sites |
| | B. Well Development/Rehabilitation at Contaminated/Formerly |
| | Contaminated Sites |
| | C. Hydrostatic Testing of Pipelines and Tanks |
| | D. Long-Term Remediation of Contaminated Sumps and Dikes |
| | E. Short-term Contaminated Dredging Drain Back Waters (if not covered |
| | by 401/404 permit) |

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as necessary) including:

| a) Describe the discharge activities for which the owner/applicant is seeking coverage: |
|---|
| Discharging extracted and treated groundwater from an operating high vacuum extraction (HVE) system |
| b) Provide the following information about each discharge: |
| 1) Number of discharge 2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)? points: 1 1 Max. flow 0.00223 Is maximum flow a design value? Y O N O Average flow (include units) 1 gpm Is average flow a design value or estimate? |
| 3) Latitude and longitude of each discharge within 100 feet: $pt.1: lat \frac{42, 7', 19.38''}{10 \text{ ng}}$ $long \frac{72, 12', 0.81''}{10 \text{ ng}}$ $pt.2: lat.long 1000000000000000000000000000000000000$ |
| 4) If hydrostatic testing, total volume of the discharge (gals): 5) Is the discharge intermittentO or seasonal _O ? N 0 |
| c) Expected dates of discharge (mm/dd/yy): start Jan 1, 2011 end Dec 31, 2015 |
| d) Please attach a line drawing or flow schematic showing water flow through the facility including: 1. sources of intake water. 2. contributing flow from the operation. 3. treatment units, and 4. discharge points and receiving waters(s). See Attachments |

3. Contaminant information.

a) Based on the sub-category selected (see Appendix III), indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

| | | | | | Sample | Analytical | Minimum | Maximum dai | ily value | Average daily | value |
|--|---|--------------------|---------------------|------------------------|--------------------------------|------------------------------|------------------------------------|-------------------------|---------------------|--------------------------------|---------------------|
| Parameter * | <u>CAS</u> <u>Number</u> | Believed Absent | Believed Present | <u># of</u> Samples | <u>Type</u> (e.g., grab) | Method Used (method #) | Level (ML) of Test Method | concentration (ug/l) | <u>mass</u> (kg) | <u>concentration</u> (ug/l) | <u>mass</u> (kg) |
| 1. Total Suspended Solids (TSS) | | | X | 16 | Grab | SM21 2540D | 4,000 | 133,000 | | | |
| 2. Total Residual Chlorine (TRC) | | X | | | | | | | | | |
| 3. Total Petroleum Hydrocarbons (TPH) | | × | | 16 | Grab | EPA 1664 | 4,100 | <4,100 | | | |
| 4. Cyanide (CN) | 57125 | X | | | | | | | | | |
| 5. Benzene (B) | 71432 | | and and a | 16 | Grab | 8260B | 0.5 | 1.3 | | | - |
| 6. Toluene (T) | 108883 | | | 16 | Grab | 82608 | 1.0 | 7.2 | | | |
| 7. Ethylbenzene (E) | 100414 | | | 16 | Grab | 8260B | | 5.7 | | | |
| 8. (m,p,o) Xylenes (X) | 108883; 106423; 95476; 1330207 | | X | 16 | Grab | 8260B | 1.0 | 28.2 | | | |
| 9. Total BTEX ² | n/a | | × | 16 | Grab | 82608 | 3.5 | 46.9 | | | |
| 10. Ethylene Dibromide (EDB) (1,2- Dibromoethane) ³ | 106934 | × | 0 | 16 | | 8260B | 2.0 | <2.0 | | | |
| 11. Methyl-tert-Butyl Ether (MtBE) | 1634044 | | X | 16 | Grab | 8260B | 1.0 | 9.4 | | | |
| 12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol) | 75650 | | X | 16 | Grab | 8260B | 20 | 93.8 | | | |

^{*} Numbering system is provided to allow cross-referencing to Effluent Limits and Monitoring Requirements by Sub-Category included in Appendix III, as well as the Test Methods and Minimum Levels associated with each parameter provided in Appendix VI.

 $^{^{2}}$ BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

³ EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

| | | | | | Sample | Analytical | Minimum | Maximum dai | ily value | Average daily | value |
|--------------------------------------|-----------------------------|--------------------|---------------------|-------------------------------|--------------------------------|--|------------------------------------|--------------------------------|---------------------|--------------------------------|---------------------|
| Parameter * | <u>CAS</u> <u>Number</u> | Believed Absent | Believed Present | <u># of</u> <u>Samples</u> | <u>Type</u> (e.g., grab) | <u>Method</u> <u>Used</u> (method #) | Level (ML) of Test Method | <u>concentration</u> (ug/l) | <u>mass</u> (kg) | <u>concentration</u> (ug/l) | <u>mass</u> (kg) |
| 13. tert-Amyl Methyl Ether (TAME) | 9940508 | × | | 16 | Grab | 8260B | 2.0 | <2.0 | | | |
| 14. Naphthalene | 91203 | | X | 16 | Grab | 82608 | 5.0 | 10 | | | |
| 15. Carbon Tetrachloride | 56235 | X | | | | | | | | | |
| 16. 1,2 Dichlorobenzene (o-DCB) | 95501 | X | | | | | | | | | |
| 17. 1,3 Dichlorobenzene (m-DCB) | 541731 | X | | | | | | | | | |
| 18. 1,4 Dichlorobenzene (p-DCB) | 106467 | X | | | | | | | | | |
| 18a. Total dichlorobenzene | | × | | | | | | | | | |
| 19. 1,1 Dichloroethane (DCA) | 75343 | X | | | | | | | | | |
| 20. 1,2 Dichloroethane (DCA) | 107062 | X | | | | | | | | | |
| 21. 1,1 Dichloroethene (DCE) | 75354 | X | | | | | | | | | |
| 22. cis-1,2 Dichloroethene (DCE) | 156592 | X | | | | | | | | | |
| 23. Methylene Chloride | 75092 | X | | | | | | | | | |
| 24. Tetrachloroethene (PCE) | 127184 | X | | | | | | | | | |
| 25. 1,1,1 Trichloro-ethane (TCA) | 71556 | X | | | | 1.22 | | | | | |
| 26. 1,1,2 Trichloro-ethane (TCA) | 79005 | X | | | | | | | | | |
| 27. Trichloroethene (TCE) | 79016 | X | | | | | | | | | |

| | | | | | Sample | Analytical | Minimum | Maximum da | ily value | Average daily | value |
|---|-----------------------------|--------------------|---------------------|-------------------------------|--------------------------------|--|---|--------------------------------|---------------------|--------------------------------|-----------------------|
| <u>Parameter *</u> | <u>CAS</u> <u>Number</u> | Believed Absent | Believed Present | <u># of</u> <u>Samples</u> | <u>Type</u> (e.g., grab) | <u>Method</u> <u>Used</u> (method #) | Level (ML) of <u>Test</u> Method | <u>concentration</u> (ug/l) | <u>mass</u> (kg) | <u>concentration</u> (ug/l) | <u>mass</u> (kg) |
| 28. Vinyl Chloride (Chloroethene) | 75014 | × | | | | | | | | | |
| 29. Acetone | 67641 | X | | | | | | | - | | |
| 30. 1,4 Dioxane | 123911 | X | | | | 1 | 1 | | | 1 | |
| 31. Total Phenols | 108952 | X | | | | | | | | | |
| 32. Pentachlorophenol (PCP) | 87865 | X | | | | | | | | | |
| 33. Total Phthalates (Phthalate esters) ⁴ | | × | | | | | | | | | |
| 34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate] | 117817 | × | | | | | | | | | |
| 35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH) | | X | | | | | | | | | |
| a. Benzo(a) Anthracene | 56553 | X | | | | | | | | | |
| b. Benzo(a) Pyrene | 50328 | X | | | | | | | | | and the second second |
| c. Benzo(b)Fluoranthene | 205992 | × | | | | | | | | | |
| d. Benzo(k)Fluoranthene | 207089 | × | | | | | | | | | |
| e. Chrysene | 21801 | X | | | | | | | | | |
| f. Dibenzo(a,h)anthracene | 53703 | X | | | | | 1.1.2.4 | | | | |
| g. Indeno(1,2,3-cd) Pyrene | 193395 | X | | | | | | | | | |
| 36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH) | | X | | | | | | | | | |

⁴ The sum of individual phthalate compounds.

| | | | | 1.2 | Sample | Analytical | Minimum | Maximum dai | ily value | Average daily | value |
|---|---|--------------------|---|--|--------------------------------|--|------------------------------------|--------------------------------|--|--------------------------------|---------------------|
| <u>Parameter *</u> | <u>CAS</u> <u>Number</u> | Believed Absent | Believed Present | <u># of</u> <u>Samples</u> | <u>Type</u> (e.g., grab) | <u>Method</u> <u>Used</u> (method #) | Level (ML) of Test Method | <u>concentration</u> (ug/l) | <u>mass</u> (kg) | <u>concentration</u> (ug/l) | <u>mass</u> (kg) |
| h. Acenaphthene | 83329 | × | | | | 1 | | | | | |
| i. Acenaphthylene | 208968 | × | | | 1 | 1 | 1 | | | | |
| j. Anthracene | 120127 | × | | | | | | | | | |
| k. Benzo(ghi) Perylene | 191242 | X | | | 1 | | | | | 1 | - |
| I. Fluoranthene | 206440 | × | | | 1 | | 1 | | | | - |
| m. Fluorene | 86737 | X | | | T | 1 | 1 | | | | - |
| n. Naphthalene | 91203 | × | | | 1 | 1 | | | | | - |
| o. Phenanthrene | 85018 | X | | | | 1 | | | | | |
| p. Pyrene | 129000 | × | П | | - | 1 | function of the second second | 1 | for the second s | | Contraction of the |
| 37. Total Polychlorinated Biphenyls (PCBs) | 85687; 84742; 117840; 84662; 131113; 117817. | X | | | | | | | | | |
| 38. Chloride | 16887006 | X | | and the second s | | | | | | | |
| 39. Antimony | 7440360 | XX | | | 1 | 1 | 1 | | | | |
| 40. Arsenic | 7440382 | X | | | | | | | | | |
| 41. Cadmium | 7440439 | X | | | | | 1 | | | | |
| 42. Chromium III (trivalent) | 16065831 | X | | 16 | Grab | SW846 3010A | 20 | <20 | | | |
| 43. Chromium VI (hexavalent) | 18540299 | × | | 16 | Grab | SW846 3010A | 10 | <10 | | | |
| 44. Copper | 7440508 | × | | | 1 | | - | | | | |
| 45. Lead | 7439921 | | × | 16 | Grab | SW846 3010A | 5.0 | 23.8 | | | |
| 46. Mercury | 7439976 | X | | | | | | | | | |
| 47. Nickel | 7440020 | X | | 16 | Grab | SW846 3010A | 40 | <40 | | | |
| 48. Selenium | 7782492 | X | | | | | | | | | |
| 49. Silver | 7440224 | X | | | | | | | | | |
| 50. Zinc | 7440666 | × | | | | | | | | | |
| 51. Iron | 7439896 | | the second se | 16 | Grab | SW846 3010A | 100 | 57,300 | | | |
| Other (describe): | | X | Π | | | | | | | | |

| | | | | | Sample | Analytical | <u>Minimum</u> <u>Level</u> (<u>ML) of</u> <u>Test</u> Method | Maximum daily value | | Average daily value | |
|--------------------|---------------|--------------------|-----------------------------------|-------------------------------|--------------------------------|--|--|--------------------------------|---------------------|--------------------------------|---------------------|
| <u>Parameter *</u> | CAS Number | Believed Absent | <u>Believed</u> <u>Present</u> | <u># of</u> <u>Samples</u> | <u>Type</u> (e.g., grab) | <u>Method</u> <u>Used</u> (method #) | | <u>concentration</u> (ug/l) | <u>mass</u> (kg) | <u>concentration</u> (ug/l) | <u>mass</u> (kg) |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

b) For discharges where metals are believed present, please fill out the following (attach results of any calculations):

| Step 1: Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? $Y \odot N O$ | If ves, which metals? Lead and Iron | | | |
|--|---|--|--|--|
| Step 2: For any metals which exceed the Appendix III limits, calculate the dilution factor (DF) using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metal DF 5.94 Metal: DF 5.94 | Look up the limit calculated at the corresponding dilution factor in Appendix IV. Do any of the metals in the influent have the potential to exceed the corresponding effluent limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y \bigcirc N \bigcirc If Y, list which metals: Lead and Iron | | | |

4. Treatment system information. Please describe the treatment system using separate sheets as necessary, including:

| a) A description of the t | reatment system | n, including a sche | ematic of the proposed or exi | sting treatment system: | | |
|---|-----------------|---------------------|-------------------------------|-------------------------|--------------|--------------|
| See attached Figures 3 and 4 | | | | | | |
| b) Identify each | Frac. tank | Air stripper 🗖 | Oil/water separator | Equalization tanks | Bag filter 🗵 | GAC filter 🗵 |
| applicable treatment unit (check all that apply): | Chlorination | De- chlorination | Other (please describe): | | | |

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| c) Proposed average and maximum the treatment system: Average flow rate of discharge ^{1.0} Design flow rate of treatment system | gpm N | | for the discharge a e of treatment sys | | w rate(s) (gallons per minute) of gpm | | | | | |
|---|---|--|---|--------------------|--|--|--|--|--|--|
| d) A description of chemical additiv | es being used or | planned to be use | ed (attach MSDS s | sheets): | | | | | | |
| Not applicable | | | | | | | | | | |
| 5. Receiving surface water(s). Please | se provide infor | mation about the r | eceiving water(s), | using separate sh | eets as necessary: | | | | | |
| a) Identify the discharge pathway: | 5. Receiving surface water(s). Please provide information about the receiving water(s), using separate sheets as necessary: a) Identify the discharge pathway: Direct to receiving water(s) water Within facility (sewer) | | | | | | | | | |
| b) Provide a narrative description of | the discharge pa | athway, including | the name(s) of the | e receiving waters | | | | | | |
| Site abuts wetland area to south, riprap out | fall at edge of wet | and, drainage swale | which discharges to | East Brook | | | | | | |
| c) Attach a detailed map(s) indicating 1. For multiple discharges, number to 2. For indirect dischargers, indicate to The map should also include the location USGS topographical mapping), so | he discharges se he location of thation and distance | quentially. he discharge to the se to the nearest sa | indirect conveyar initary sewer as w | nce and the discha | arge to surface water nearby sensitive receptors (based | | | | | |
| d) Provide the state water quality cla | ssification of the | e receiving water | | | | | | | | |
| e) Provide the reported or calculated Please attach any calculation sheets u | seven day-ten y ised to support s | ear low flow (7Q) tream flow and di | 0) of the receiving lution calculations | g water 0.22 s. | cfs | | | | | |
| f) Is the receiving water a listed 303(| d) water quality | impaired or limited | ed water? Y_O_ | N O If yes, for | which pollutant(s)? | | | | | |
| Is there a final TMDL? Y O N O | If yes, for wh | nich pollutant(s)? | | | | | | | | |

6. ESA and NHPA Eligibility.

Please provide the following information according to requirements of Permit Parts I.A.4 and I.A.5 Appendices II and VII.

a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit?

A O B O C O D O E O F O

b) If you selected Criterion D or F, has consultation with the federal services been completed? Y O N O Underway O

c) If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received? Y_O_N_O

d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.

e) Using the instructions in Appendix VII, under which criterion listed in Part II.C are you eligible for coverage under this general permit? 1 • 2 • 0 3 • 0

f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.

7. Supplemental information.

Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| Facility/Site Name: Brimfield Sunoco |
|--|
| Operator signature: |
| Printed Name & Title: John Briggs, Operation and Maintenance Manager |
| Date: 11-24-10 |

ATTACHMENT B Laboratory Analytical Data





10/22/09

Technical Report for

Drake Petroleum Co., Inc.

CEA: Sunoco Routes 19 and 20 Brimfield MA

PC# 007280

Accutest Job Number: M86494

Sampling Date: 10/14/09

Report to:

Corporate Environmental Advisors

KDuprey@cea-inc.com

ATTN: Kimberly Duprey

Total number of pages in report: 16



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.

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Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (2502) RI (00071) ME (MA0136) FL (E87579) NY (11791) NJ (MA926) NC (653) IL (200018) NAVY USACE This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.





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Sample Summary

Drake Petroleum Co., Inc.

Job No: M86494

CEA:Sunoco Routes 19 and 20 Brimfield MA Project No: PC# 007280

| Sample Number | Collected Date | l Time By | Received | Matr Code | | Client Sample ID |
|------------------|-------------------|--------------|----------|--------------|--------------|---------------------|
| M86494-1 | 10/14/09 | 13:05 JB | 10/14/09 | AQ | Effluent | EFFLUENT |
| M86494-2 | 10/14/09 | 13:20 JB | 10/14/09 | AQ | Ground Water | MIDPOINT |
| M86494-3 | 10/14/09 | 13:35 JB | 10/14/09 | AQ | Influent | INFLUENT |





Sample Results

Report of Analysis



| Client San Lab Samj Matrix: Method: Project: | ple ID: M864 AQ - SW84 | Effluent 46 8260B | utes 19 and 20 I | Brimfield | Date Sample Date Receive Percent Solic MA | d: 10/14/09 | |
|--|------------------------------|----------------------|------------------|-----------|--|--------------------|------------------|
| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
| Run #1 | G94038.D | 1 | 10/15/09 | EL | n/a | n/a | MSG3803 |
| Run #2 | | | | | | | |
| | Purge Volum | e | | | | | |
| Run #1 | 5.0 ml | | | | | | |
| Run #2 | | | | | | | |

Report of Analysis

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|--|---|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75 65 0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tart Butyl Alashal | ND ND ND ND ND ND ND | 0.50 1.0 1.0 1.0 1.0 5.0 2.0 2.0 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| 75-65-0 CAS No. 1868-53-7 2037-26-5 460-00-4 | Tert Butyl Alcohol Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | ND Run# 1 120% 97% 107% | 20 Run# 2 | ug/l Limits 70-130% 70-130% |

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

Page 1 of 1



Accutest Laboratories

| Client Sample ID: | EFFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86494-1 | Date Sampled: | 10/14/09 |
| Matrix: | AQ - Effluent | Date Received: | 10/14/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|----------|--------|-----|-------|----|----------|-------------|--------------------------|--------------------------|
| Chromium | < 10 | 10 | ug/l | 1 | 10/19/09 | 10/19/09 py | SW846 6010B ¹ | SW846 3010A ² |
| Iron | 493 | 100 | ug/l | 1 | 10/19/09 | 10/19/09 py | SW846 6010B ¹ | SW846 3010A ² |
| Lead | < 5.0 | 5.0 | ug/l | 1 | 10/19/09 | 10/19/09 py | SW846 6010B ¹ | SW846 3010A ² |
| Nickel | < 40 | 40 | ug/l | 1 | 10/19/09 | 10/19/09 py | SW846 6010B ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA11086

(2) Prep QC Batch: MP14270

Page 1 of 1

2.1

N



Accutest Laboratories

| Client Sample ID: | EFFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86494-1 | Date Sampled: | 10/14/09 |
| Matrix: | AQ - Effluent | Date Received: | 10/14/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
| General Chemistry | | | |

Report of Analysis

' y

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 10/14/09 16:50 | CF | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 10/19/09 21:55 | PY | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 10/20/09 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 10/16/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

2.1

N



| Client Sat Lab Samj Matrix: Method: Project: | ple ID: M86 AQ SW8 | DPOINT 5494-2 - Ground Wa 846 8260B A:Sunoco Ro | ater utes 19 and 20 I | Brimfield | Percent Soli | ed: 10/14/09 | |
|--|--------------------------|---|--------------------------|-----------|--------------|--------------|------------------|
| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
| Run #1 Run #2 | G94039.D | 1 | 10/15/09 | EL | n/a | n/a | MSG3803 |
| | Purge Volu | ne | | | | | |
| Run #1 Run #2 | 5.0 ml | | | | | | |

Report of Analysis

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|---|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | ND ND ND 3.1 ND ND ND | $\begin{array}{c} 0.50 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 5.0 \\ 2.0 \\ 2.0 \\ 20 \end{array}$ | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
| 1868-53-7 2037-26-5 460-00-4 | Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | 118% 97% 109% | | 70-130% 70-130% 70-130% |

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



Page 1 of 1

Accutest Laboratories

| Client Sample ID: | MIDPOINT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86494-2 | Date Sampled: | 10/14/09 |
| Matrix: | AQ - Ground Water | Date Received: | 10/14/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|----------|--------|-----|-------|----|----------|-------------|--------------------------|--------------------------|
| Chromium | < 10 | 10 | ug/l | 1 | 10/19/09 | 10/19/09 py | SW846 6010B 1 | SW846 3010A ² |
| Iron | 654 | 100 | ug/l | 1 | 10/19/09 | 10/19/09 py | SW846 6010B ¹ | SW846 3010A ² |
| Lead | < 5.0 | 5.0 | ug/l | 1 | 10/19/09 | 10/19/09 py | SW846 6010B ¹ | SW846 3010A ² |
| Nickel | < 40 | 40 | ug/l | 1 | 10/19/09 | 10/19/09 py | SW846 6010B ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA11086

(2) Prep QC Batch: MP14270

2.2

N



Accutest Laboratories

| Client Sample ID: | | | 10/14/00 |
|-------------------|--|-----------------|----------|
| Lab Sample ID: | M86494-2 | Date Sampled: | 10/14/09 |
| Matrix: | AQ - Ground Water | Date Received: | 10/14/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
| | | | |

Report of Analysis

General Chemistry

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 10/14/09 16:50 | CF | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 10/19/09 22:00 | PY | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 10/20/09 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 10/16/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

Page 1 of 1

2.2

N



| Client San Lab Samj Matrix: Method: Project: | ple ID: M86 AQ - SW8 | LUENT 494-3 Influent 46 8260B :Sunoco Ro | utes 19 and 20 I | Brimfield | Percent Solid | ed: 10/14/09 | |
|--|------------------------------|--|--------------------------|-----------------|-------------------------|--------------------------|-----------------------------|
| Run #1 Run #2 | File ID G94040.D | DF 1 | Analyzed 10/15/09 | By EL | Prep Date n/a | Prep Batch n/a | Analytical Batch MSG3803 |
| Run #1 Run #2 | Purge Volun 5.0 ml | ne | | | | | |

Report of Analysis

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|--|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | 1.0 ND ND 4.8 ND ND ND 54.0 | $\begin{array}{c} 0.50 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 5.0 \\ 2.0 \\ 2.0 \\ 20 \end{array}$ | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 2037-26-5 460-00-4 | Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | Run# 1 115% 95% 104% | Run# 2 | Limits 70-130% 70-130% 70-130% |

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



Page 1 of 1

| Client Sample ID: | INFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86494-3 | Date Sampled: | 10/14/09 |
| Matrix: | AQ - Influent | Date Received: | 10/14/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|----------|--------|-----|-------|----|----------|-------------|--------------------------|--------------------------|
| Chromium | < 10 | 10 | ug/l | 1 | | 10/19/09 PY | SW846 6010B 1 | SW846 3010A ² |
| Iron | 35400 | 100 | ug/l | 1 | 10/19/09 | 10/19/09 py | SW846 6010B 1 | SW846 3010A ² |
| Lead | < 5.0 | 5.0 | ug/l | 1 | 10/19/09 | 10/19/09 py | SW846 6010B ¹ | SW846 3010A ² |
| Nickel | < 40 | 40 | ug/l | 1 | 10/19/09 | 10/19/09 py | SW846 6010B ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA11086

(2) Prep QC Batch: MP14270

Page 1 of 1

2.3

N



Accutest Laboratories

| Lab Sample ID: M86494-3 Date Sampled: 10/14/09 Matrix: AQ - Influent Date Received: 10/14/09 Project: CEA:Sunoco Routes 19 and 20 Brimfield MA | INFLUENT | | |
|--|--|---|---|
| Percent Solids: n/a | | Date Sampled: | 10/14/09 |
| | AQ - Influent | Date Received: | 10/14/09 |
| Project: CEA:Sunoco Routes 19 and 20 Brimfield MA | | Percent Solids: | n/a |
| U U | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
| General Chemistry | | AQ - Influent CEA:Sunoco Routes 19 and 20 Brimfield MA | M86494-3 Date Sampled: AQ - Influent Date Received: Percent Solids: CEA:Sunoco Routes 19 and 20 Brimfield MA |

Report of Analysis

| Result | RL | Units | DF | Analyzed | By | Method |
|--------|-----------------------|---------------------------------------|--|--|--|--|
| 0.010 | 0.010 | mg/l | 1 | 10/14/09 16:50 | CF | SW846 7196A |
| 0.020 | 0.020 | mg/l | 1 | 10/19/09 22:13 | PY | 6010/7196A M/200.7 |
| 4.1 | 4.1 | mg/l | 1 | 10/20/09 | BF | EPA 1664 |
| 6.0 | 4.0 | mg/l | 1 | 10/16/09 | BF | SM21 2540D |
| | 0.010 0.020 4.1 | 0.010 0.010 0.020 0.020 4.1 4.1 | 0.010 0.010 mg/l 0.020 0.020 mg/l 4.1 4.1 mg/l | 0.010 0.010 mg/l 1 0.020 0.020 mg/l 1 4.1 4.1 mg/l 1 | 0.010 0.010 mg/l 1 10/14/09 16:50 0.020 0.020 mg/l 1 10/19/09 22:13 4.1 mg/l 1 10/20/09 10/20/09 | 0.010 0.010 mg/l 1 10/14/09 16:50 CF 0.020 0.020 mg/l 1 10/19/09 22:13 PY 4.1 mg/l 1 10/20/09 BF |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

Page 1 of 1

2.3

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Section 3

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Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody



Parameter Certifications

| Job Number: | M86494 |
|-------------|--|
| Account: | DRAKEPET Drake Petroleum Co., Inc. |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA |

roject: CEA: Sunoco Routes 19 and 20 Brimheid MA

The following parameters included in this report are certified by the state of MA.

| Parameter | CAS# | Method | Mat | Certification Status |
|-------------------------|------|------------|-----|---|
| Solids, Total Suspended | | SM21 2540D | AQ | Accutest is certified for this parameter. |



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|---|----------|--|
| 3 | ACCUTEST | |

CHAIN OF CUSTODY

| | | | TER WEST * BUILDING OF | NE | | |
|---|--------------------------|---|---|----------------------------|--|--------------------------------|
| EACCUTEST | | | UGH. MA 01752) * FAX: 508-481-7753 | Accut | est Job # | 1~186494 |
| 化合物 化合合合合合合合合合合合合合合合合合合合合合合合合合合合合合合合合合合 | | the fact of the second s | | Accut | est Quote # | |
| Client / Reporting Information | Proi | ect Information | | | Requested Analysis | Matrix Codes |
| Company Name | Project Name: | | | | | DW- Drinking Water |
| Drake Petroleum Company, Inc. | P.C. No007280/ | Brimfield Sunoco | | | | GW- Ground Water WW- Water |
| Address | Street | | | Naph | | |
| P.O. Box 866 221 Quinebaug Road City State Zip | Routes 19 and 20 City | 0 State | | l z | | SW- Surface Water SO Soil |
| | | | | TAME, | | SL-Sludge OI-Oil |
| North Grosvenordale CT 6255 Project Contact: E-mail, | Brimfield Project # | MA | | ¥ | | LIQ- Other Liquid |
| Mrs. Brenda Grawford 2011 GMITH | 5745-05 | | | TBA, | | alen |
| Phone # | Fax # | | | EDB | ivaler | AIR-Air AIR-Air |
| Samplers's Name JOHN BRILLS | Client Purchase Orde | | | MTBE, | TSS TPH 1664 Chromiumr III trivalent | 프 SOL-Other Solid 도 WP-Wipe |
| Accutest | Collection | | f preserved Bottles | ≥ ×a | 1664 mium | |
| Sample # Field ID / Point of SUMMA # Dat | to Time Sampled by | # of 공 영 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 | H2SO4 NONE NaHSO4 MEOH None | BTEX, | TPH TSS | E Z LAB USE ONLY |
| -1 EFFLUENT 10- | | 6.1 9 4 1 | | X | TXXX | XX |
| | | (W 8 8 1 | | x | 7450 | |
| -2 MIDPOINT /2. | | | | | | |
| -3 INFLUENT 1074 | 4 133 JA | 601 3 6 1 | | | X X X X | |
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| | | | | | | |
| Turnaround Time (Business days) | | Data Deliverable Information | | | Comments / Remark | KS |
| Std. 14 Business Days Approved By:/ Date | | | | P.C. No007280/ Brimfie | dd Sunnen, Routee 10 | and 20 Brimfield MA |
| 10 Day RUSH 5 Day RUSH 7 Day Per USE | | ercial "B" eliverable | | P.C. (N0007280/ Britinic | su suloco, Roules 17 | and 20, Diminicial Max |
| 3 Day RUSH 7 Day Per USE | State F | | | Email lab reports to: Ism | hith@warreneq.com, k | kduprey@cea-inc.com and |
| 2 Day EMERGENCY | Other | | | | | CIE, ISB, SB, SB, 444 |
| 1 Day EMERGENCY | | | | | | · |
| 0thof | | | | | | |
| Emergency TA data available VIA Lablink | | | ing including pounts of the | Must meet MADEP GV | W-1 Standards | |
| Relinguished by Sample Custody must be doc Date Tim | e: Received By | e samples change possess | Relinquished By: | Date Time: | Received By: | |
| 1 1/1/1/ 1532/0 | -14 1 | | 2 | | 2 | |
| Poly of Usheef by: Date Tim | e: Received By | | Relinquished By: | Date Time: | Received By: | |
| 3 Relinquished by: Date Tim | a: Received By | c | 4 Custody Seal # | Preserved where applicable | 4 | On Ice Cooler Temp. 1 900 |
| 5 | 5 | | | | | y 100 |

M86494: Chain of Custody Page 1 of 1







10/21/09

Technical Report for

Drake Petroleum Co., Inc.

CEA:Sunoco Routes 19 and 20 Brimfield MA

PC# 007280

Accutest Job Number: M86565

Sampling Date: 10/16/09

Report to:

Corporate Environmental Advisors

lsmith@warreneq.com KDuprey@cea-inc.com ATTN: Distribution

Total number of pages in report: 16



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.

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Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (2502) RI (00071) ME (MA0136) FL (E87579) NY (11791) NJ (MA926) NC (653) IL (200018) NAVY USACE This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.





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| 2.3: M86565-3: INFLUENT | 11 |
| Section 3: Misc. Forms | 14 |
| 3.1: Parameter Certifications (MA) | 15 |
| 3.2: Chain of Custody | 16 |



Sample Summary

Drake Petroleum Co., Inc.

Job No: M86565

CEA:Sunoco Routes 19 and 20 Brimfield MA Project No: PC# 007280

| Sample Number | Collected Date | Time By | Received | Matr Code | | Client Sample ID |
|------------------|-------------------|-----------|----------|--------------|--------------|---------------------|
| M86565-1 | 10/16/09 | 10:00 COT | 10/16/09 | AQ | Effluent | EFFLUENT |
| M86565-2 | 10/16/09 | 10:15 COT | 10/16/09 | AQ | Ground Water | MIDPOINT |
| M86565-3 | 10/16/09 | 10:30 COT | 10/16/09 | AQ | Influent | INFLUENT |





Sample Results

Report of Analysis



| Client Sat Lab Samj Matrix: Method: Project: | ple ID: M86 AQ SW8 | LUENT 565-1 · Effluent 46 8260B .:Sunoco Ro | utes 19 and 20 I | Brimfield N | Date Sample Date Receive Percent Solic 1A | ed: 10/16/09 | |
|--|------------------------------|---|--------------------------|------------------|--|--------------------------|-----------------------------|
| Run #1 Run #2 | File ID P40792.D | DF 1 | Analyzed 10/19/09 | By AMY | Prep Date n/a | Prep Batch n/a | Analytical Batch MSP1345 |
| Run #1 Run #2 | Purge Volun 5.0 ml | ne | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|--|---|--|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether | ND ND ND ND ND ND ND | $\begin{array}{c} 0.50 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 5.0 \\ 2.0 \\ 2.0 \end{array}$ | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| 75-65-0 | Tert Butyl Alcohol | ND | 20 | ug/l |
| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
| 1868-53-7 2037-26-5 460-00-4 | Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | 106% 100% 108% | | 70-130% 70-130% 70-130% |

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



| Client Sample ID: | EFFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86565-1 | Date Sampled: | 10/16/09 |
| Matrix: | AQ - Effluent | Date Received: | 10/16/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|------------------|---------------|-----------|--------------|--------|----------------------|----------------------------|--|--|
| Chromium Iron | < 10 167 | 10 100 | ug/l ug/l | 1 1 | | | SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² |
| Lead Nickel | < 5.0 < 40 | 5.0 40 | ug/l ug/l | 1 1 | 10/19/09 10/19/09 | 10/19/09 PY 10/19/09 PY | SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² |

(1) Instrument QC Batch: MA11086

(2) Prep QC Batch: MP14270

Page 1 of 1

2.1

N



| Client Sample ID: | EFFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86565-1 | Date Sampled: | 10/16/09 |
| Matrix: | AQ - Effluent | Date Received: | 10/16/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
| Conorol Chomistry | | | |
| General Chemistry | | | |

| Report | of Analysis | |
|--------|-------------|---|
| | | _ |

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 10/17/09 | MA | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 10/19/09 22:17 | PY | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 10/20/09 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 10/19/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

2.1 2



| Client Sa Lab Sam Matrix: Method: Project: | ple ID: M8 AQ SW | DPOINT 6565-2 9 - Ground Wa 846 8260B A:Sunoco Ro | ater utes 19 and 20 H | Brimfield N | Percent Soli | ed: 10/16/09 | |
|--|-----------------------------|---|--------------------------|------------------|-------------------------|--------------------------|-----------------------------|
| Run #1 Run #2 | File ID P40793.D | DF 1 | Analyzed 10/19/09 | By AMY | Prep Date n/a | Prep Batch n/a | Analytical Batch MSP1345 |
| Run #1 Run #2 | Purge Volu 5.0 ml | me | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|--|---|---|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether | ND ND ND 9.6 ND ND ND | $\begin{array}{c} 0.50 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 5.0 \\ 2.0 \\ 2.0 \end{array}$ | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| 75-65-0 | Tert Butyl Alcohol | ND | 20 | ug/l |
| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
| 1868-53-7 2037-26-5 460-00-4 | Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | 113% 101% 111% | | 70-130% 70-130% 70-130% |

- $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$
- N = Indicates presumptive evidence of a compound



| Client Sample ID: | MIDPOINT | | |
|-------------------|--|-----------------|----------|
| Lab Sample ID: | M86565-2 | Date Sampled: | 10/16/09 |
| Matrix: | AQ - Ground Water | Date Received: | 10/16/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|------------------|-------------|-----------|--------------|--------|----------------------|----------------------------|--|--|
| Chromium Iron | < 10 732 | 10 100 | ug/l ug/l | 1 1 | 10/19/09 | 10/19/09 py | SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² |
| Lead Nickel | 9.1 < 40 | 5.0 40 | ug/l ug/l | 1 1 | 10/19/09 10/19/09 | 10/19/09 py 10/19/09 py | SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² |

(1) Instrument QC Batch: MA11086

(2) Prep QC Batch: MP14270

2.2

N



| Client Sample ID: | MIDPOINT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86565-2 | Date Sampled: | 10/16/09 |
| Matrix: | AQ - Ground Water | Date Received: | 10/16/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

General Chemistry

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 10/17/09 | MA | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 10/19/09 22:22 | PY | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 10/20/09 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 10/19/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

N N

2.2





| Client San Lab Sam Matrix: Method: Project: | ple ID: 1 | INFLUENT M86565-3 AQ - Influent SW846 8260B CEA:Sunoco Re | outes 19 and 20 I | Brimfield N | Percent Solid | ed: 10/16/09 | |
|---|----------------------------|---|--------------------------|------------------|-------------------------|--------------------------|-----------------------------|
| Run #1 Run #2 | File ID P40794.I | DF D 1 | Analyzed 10/19/09 | By AMY | Prep Date n/a | Prep Batch n/a | Analytical Batch MSP1345 |
| Run #1 Run #2 | Purge V 5.0 ml | olume | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|---|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | ND ND ND 8.2 ND ND ND ND | $\begin{array}{c} 0.50 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 5.0 \\ 2.0 \\ 2.0 \\ 20 \end{array}$ | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
| 1868-53-7 2037-26-5 460-00-4 | Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | 112% 104% 108% | | 70-130% 70-130% 70-130% |

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



| Client Sample ID: | INFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86565-3 | Date Sampled: | 10/16/09 |
| Matrix: | AQ - Influent | Date Received: | 10/16/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|----------|--------|-----|-------|----|----------|-------------|--------------------------|--------------------------|
| Chromium | < 10 | 10 | ug/l | 1 | | 10/19/09 PY | SW846 6010B 1 | SW846 3010A ² |
| Iron | 5350 | 100 | ug/l | I | 10/19/09 | 10/19/09 py | SW846 6010B 1 | SW846 3010A ² |
| Lead | < 5.0 | 5.0 | ug/l | 1 | 10/19/09 | 10/19/09 py | SW846 6010B ¹ | SW846 3010A ² |
| Nickel | < 40 | 40 | ug/l | 1 | 10/19/09 | 10/19/09 py | SW846 6010B ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA11086

(2) Prep QC Batch: MP14270

2.3

N



| Client Sample ID: | INFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86565-3 | Date Sampled: | 10/16/09 |
| Matrix: | AQ - Influent | Date Received: | 10/16/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 10/17/09 | MA | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 10/19/09 22:26 | PY | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 10/20/09 | BF | EPA 1664 |
| Solids, Total Suspended | 9.0 | 4.0 | mg/l | 1 | 10/19/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

2.3 1





Section 3

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Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody



Parameter Certifications

| Job Number: | M86565 |
|-------------|--|
| Account: | DRAKEPET Drake Petroleum Co., Inc. |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA |

roject: CEA: Sunoco Routes 19 and 20 Brimfield MA

The following parameters included in this report are certified by the state of MA.

| Parameter | CAS# | Method | Mat | Certification Status |
|-------------------------|------|------------|-----|---|
| Solids, Total Suspended | | SM21 2540D | AQ | Accutest is certified for this parameter. |





| EA | C | UT | Constant Manual | 19 |
|-----------|---|-------------------|-----------------|----|
| | 1 | 1 A 1 A 1 A 1 A 1 | + | |

CHAIN OF CUSTODY

| | | ings sectorized | | | | | 495 T | ECHNO | | | | | | * BUI 01752 | LDIN | IG ON | Е | | | | | | | | | | |
|-------------|---|-----------------|--------------|----------------------|--------|------------------|---------|------------|--------|-----------|-------|-----------------|--------|----------------|--------|---------|-----------|------------|----------|--------------------------|-----------|--------------|-------------------------|---------------|---------|---------|-------------------------------|
| | ACCUTES | | | | | | | | | | | | | 08-481 | -7757 | | | | | Accute | st Job \$ | , | | | M | 65 | 10 |
| | Laborator | 1.6.5 | | | | | | 11.1. | 508- | +01-0 | 1200 | 10 | A | 00-401 | -77.). | | | | | Accute | st Quot | c# | | | 11 | 63 | భు |
| | Client / Reporting Information | | | | | Proi | oct Inf | ormatio | | т | | | | | | | | | | | Remu | ested | Analys | ie | | | Matrix Codes |
| Company M | | | | Project I | Name: | 1 110 | cerm | onnauo | • | - I | | | | | | 1 | | | | | l | | | Ī | | | DW- Drinking Water |
| | troleum Company, Inc. | | | | 0007 | 7280/ | Brimfi | eld Sur | ioco | | | | | | | | | | | | | | | | | | GW- Ground Water |
| Address | | | | Street | | | | | | | | | | | | | | | | hqe | | | | | | | WW- Water |
| City | 866 221 Quinebaug Road State | | Zip | Routes City | s 19 i | and 2 | 0 | | | Stat | te | | | | | Į. | | | | ž | | | | | | | SW- Surface Water SO- Soil |
| North Cr | osvenordale CT | 0055 | | | | | | | | | | | | | | | | | | AME | | | | | | | SL-Sludge |
| Project Cor | | 6255 E-m | ail | Brimfie Project # | | | | | | MA | 4 | | | | | - | | | | 1 2 | | | | | | | OI-OII LIQ- Other Liquid |
| | nda Crawford | | | 5745-0 | | | | | | | | | | | | | | | | EDB, TBA, TAME, Naph | | | | lent | | | |
| Phone # | | | | Fax # | | | | | | | | | | | | | | | | m | } | | alen | ava | | | AIR- Air |
| Samplers's | Name | | | Client Pu | urchas | e Orde | r# | | | | | | | | | | | | | BTEX, MTBE, EC (8260) | | | Chromiumr III trivalent | VI Hexavalent | | | |
| Accutest | | | | Collect | tion | | T | - I · · · | INu | imbe | er of | pres | erve | d Bottl | es | | | | | E E | | 5 | l L | Ē | å | | SOL-Other Solid WP-Wipe |
| Sample # | | | | | T | | 1 | | | 1 | | Í I | | - 1 | | 1 | | | | , X () | | TPH 1664 | omit | Chromiumr | ž | | |
| Sample # | Field ID / Point of SUMMA# | | Date | Time | San | npled by | Matrio | bottles | Ϋ́ | NaOH | HNO3 | H2SO4 | NONE | MEOH | Nore | | | | | BTE (82(| TSS | đ | Chr | Chr. | Ρġ | | LAB USE ONLY |
| -1 | EFFLUENT | | 10/16 | 10 Am | 16 | + Feb | GW | 8 | 6 | 1 | Ň | | _ | | 1 | | | | | X | × | 17 | X | X | X | | |
| -2 | MIDPOINT | | 1 | 1015 m | |) | 1 | 8 | 6 | | ι | | + | | 1 | | | | | X | × | X | × | × | × | | |
| -3 | INFLUENT | | 1 | 10 44 | | l. | | 8 | 6 | | 1 | | -+- | | - | | | | | $\overline{\lambda}$ | X | × | Í. | X | \prec | | |
| | INFLOENT | | Y | 10 44 | 1 | <u>r</u> | * | 0 | E | | Ľ | | _ | _ | 1 | | | | | ^ | \sim | 1 | 1^ | <u> </u> ^ | ľ. | | |
| | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | ļ | | | | | | | | | | | | | | | | |
| | | | | | Τ | | | | | | | | | | | | | | | | | | | | | | |
| | | | 1 | | | | | 1 | 1 | + | | | | | | | | | | | | | | 1 | - | | |
| | | | | | 1 | | | | - | | | | | -+ | - | | + | | | | | | - | | | | |
| | | | | | | | | | - | \square | | | - | _ | | | | | | | | | - | | - | | |
| | | | 1 | | | | | | 1_ | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Turnaround Time (Business days) | | | | | | | eliverable | Infor | matio | n | | | | | | | | | | С | ommen | ts / Rem | arks | | | |
| | Std. 14 Business Days 10 Day <i>RUSH</i> | Approved | f By:/ Date: | | | Standa | | | | | | | | | | | | 00000 | | ~ . | | | | | 1.80 | | |
| | 5 Day RUSH | 7 Day F | Per USEP/ | | | Comme Disk De | | | | | | | | | | | [P.C. N | 000728 | 0/ Bn | mhei | 1 Sun | oco. R | outes | 19 ar | d 20. | Brim | ield, MA |
| | 3 Day EMERGENCY | , Day i | | • | | State F | | le | | | | | | | | | Fmail | lah reno | orts to: | Ismit | hŵw | arrene | a com | kdu | prevá | i)cea-i | inc.com and |
| | 2 Day EMERGENCY | | | | | Other_ | | _ | | | | | | | | | | | | | | | | | 1 | | |
| | 1 Day EMERGENCY | ~ | | | | | | | | | | | | | | | | | | | | | | | | | 1F,1A,5C, 4N4 |
| | Other | | | | | | | | | | | | | | | | | | | | | | | | | | 4114 |
| Emer | gency T/A data available VIA Lab | | | | | | | | | | | | | | | | Musti | neet M. | ADEI | ' GW | -1 Sta | andar | ds | | | | |
| Relinquist | Sample Cu | stody mus | t be docum | ented belo | w ead | ch time | e sapop | les char | vere p | osse | ssic | n, in Reling | cludi | ng cou | rier c | deliver | <u>γ.</u> | Date Time: | | | | Receive | d Rv | | | | |
| 1 12 | TAMMUN | 14:15 | 10/16 | 109 | 10 | 1 | 1. | H. | ~ | | - | 2 | | -,. | | | | | | | | 2 | -,. | | | | |
| Relinguist | hed by: | 1 | Date Time:/ | | Rece | ived By | - ser | / | | | | Reling | üishee | d By: | | | | Date Time: | | | •••• | Z Receive | d By: | | | | |
| 3 | - | | | | 3 | | | | | | | 4 | | | | | | | | | | 4 | | _ | | _ | |
| Relinquist | ied by: | | Date Time: | | | ived By: | | | | | | Custo | ly Sea | 1# | | | Preserved | d where ap | plicable | | | | | On | | Coole | gue_ |
| L - | | | | | 5 | | | | | | | | | | | | | | | | | | | - | - | (1 | (|

M86565: Chain of Custody Page 1 of 1









10/22/09

Technical Report for

Drake Petroleum Co., Inc.

CEA:Sunoco Routes 19 and 20 Brimfield MA

PC# 007280

Accutest Job Number: M86592

Sampling Date: 10/19/09

Report to:

Warren Equities, Inc.

KDuprey@cea-inc.com lsmith@warreneq.com ATTN: Distribution

Total number of pages in report: 16



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.

tal

Lab Director

ACCUTEST LABORATORIES Y E A R S 1956-2006

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (2502) RI (00071) ME (MA0136) FL (E87579)

NY (11791) NJ (MA926) NC (653) IL (200018) NAVY USACE

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Sample Summary

Drake Petroleum Co., Inc.

Job No: M86592

CEA:Sunoco Routes 19 and 20 Brimfield MA Project No: PC# 007280

| Sample Number | Collected Date | Time By | Received | Matr Code | | Client Sample ID |
|------------------|-------------------|----------|----------|--------------|--------------|---------------------|
| M86592-1 | 10/19/09 | 09:45 MH | 10/19/09 | AQ | Effluent | EFFLUENT |
| M86592-2 | 10/19/09 | 09:55 MH | 10/19/09 | AQ | Ground Water | MIDPOINT |
| M86592-3 | 10/19/09 | 10:05 MH | 10/19/09 | AQ | Influent | INFLUENT |





Sample Results

Report of Analysis



| Client San Lab Samj Matrix: Method: Project: | ple ID: M86 AQ SW8 | LUENT 592-1 · Effluent 46 8260B .:Sunoco Ro | utes 19 and 20 H | Brimfield N | Date Receive Percent Solie | Date Sampled:10/19/09Date Received:10/19/09Percent Solids:n/a | | | | |
|--|----------------------------|---|--------------------------|------------------|-------------------------------|---|-----------------------------|--|--|--|
| Run #1 Run #2 | File ID P40829.D | DF 1 | Analyzed 10/19/09 | By AMY | Prep Date n/a | Prep Batch n/a | Analytical Batch MSP1346 | | | |
| Run #1 Run #2 | Purge Volum 5.0 ml | ne | | | | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|--|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | ND ND ND ND ND ND ND ND | $\begin{array}{c} 0.50 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 5.0 \\ 2.0 \\ 2.0 \\ 20 \end{array}$ | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 2037-26-5 460-00-4 | Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | Run# 1 113% 107% 107% | Run# 2 | Limits 70-130% 70-130% 70-130% |

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



| Client Sample ID: | | | 10/10/00 |
|-------------------|--|-----------------|----------|
| Lab Sample ID: | M86592-1 | Date Sampled: | 10/19/09 |
| Matrix: | AQ - Effluent | Date Received: | 10/19/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|----------|--------|-----|-------|----|----------|--------------|--------------------------|--------------------------|
| Chromium | < 10 | 10 | ug/l | 1 | | | 1 | SW846 3010A ² |
| Iron | 111 | 100 | ug/l | 1 | 10/20/09 | 10/20/09 EAL | SW846 6010B 1 | SW846 3010A ² |
| Lead | < 5.0 | 5.0 | ug/l | 1 | 10/20/09 | 10/20/09 EAL | SW846 6010B ¹ | SW846 3010A ² |
| Nickel | < 40 | 40 | ug/l | 1 | 10/20/09 | 10/20/09 EAL | SW846 6010B ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA11094

(2) Prep QC Batch: MP14274

Page 1 of 1

2.1

N



| Client Sample ID: | EFFLUENT | | |
|-------------------------------|---|------------------------|----------|
| Lab Sample ID: | M86592-1 | Date Sampled: | 10/19/09 |
| Matrix: | AQ - Effluent | Date Received: | 10/19/09 |
| | | Percent Solids: | n/a |
| Project: | CEA: Sunoco Routes 19 and 20 Brimfield MA | | |
| | | | |
| Project: General Chemistry | | Percent Solids: | n/a |

Report of Analysis

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|-----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 10/19/09 16:50 | CF | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 10/20/09 21:58 | EAL | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 10/20/09 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 10/20/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

2.1 N



| Client Sat Lab Samj Matrix: Method: Project: | ple ID: M86 AQ - SW8 | MIDPOINT M86592-2 AQ - Ground Water SW846 8260B CEA:Sunoco Routes 19 and 20 Brimfield MA | | | | Date Sampled: 10/19/09 Date Received: 10/19/09 Percent Solids: n/a A | | |
|--|------------------------------|--|--------------------------|------------------|-------------------------|--|-----------------------------|--|
| Run #1 Run #2 | File ID P40871.D | DF 1 | Analyzed 10/20/09 | By AMY | Prep Date n/a | Prep Batch n/a | Analytical Batch MSP1347 | |
| Run #1 Run #2 | Purge Volum 5.0 ml | ne | | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|---|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | ND ND ND 9.6 ND ND ND ND | $\begin{array}{c} 0.50\\ 1.0\\ 1.0\\ 1.0\\ 1.0\\ 5.0\\ 2.0\\ 2.0\\ 20\\ \end{array}$ | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
| 1868-53-7 2037-26-5 460-00-4 | Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | 112% 102% 109% | | 70-130% 70-130% 70-130% |

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



| Client Sample ID: | MIDPOINT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86592-2 | Date Sampled: | 10/19/09 |
| Matrix: | AQ - Ground Water | Date Received: | 10/19/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|----------|--------|-----|-------|----|----------|--------------|--------------------------|--------------------------|
| Chromium | < 10 | 10 | ug/l | 1 | 10/20/09 | 10/20/09 EAL | SW846 6010B ¹ | SW846 3010A ² |
| Iron | < 100 | 100 | ug/l | 1 | 10/20/09 | 10/20/09 EAL | SW846 6010B ¹ | SW846 3010A ² |
| Lead | < 5.0 | 5.0 | ug/l | 1 | 10/20/09 | 10/20/09 EAL | SW846 6010B ¹ | SW846 3010A ² |
| Nickel | < 40 | 40 | ug/l | 1 | 10/20/09 | 10/20/09 EAL | SW846 6010B ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA11094

(2) Prep QC Batch: MP14274

Page 1 of 1

2.2

N



| Client Sample ID: Lab Sample ID: | MIDPOINT M86592-2 | Date Sampled: | 10/10/00 |
|-------------------------------------|--|-----------------|----------|
| 1 | | - | |
| Matrix: | AQ - Ground Water | Date Received: | 10/19/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
| | | | |

Report of Analysis

General Chemistry

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|-----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 10/19/09 16:50 | CF | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 10/20/09 22:11 | EAL | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 10/20/09 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 10/20/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)





| Client San Lab Samp Matrix: Method: Project: | ple ID: Ma A(SW | FLUENT 86592-3 Q - Influent V846 8260B EA:Sunoco Rot | utes 19 and 20 H | Brimfield N | Date Sampleo Date Receiveo Percent Solid 1A | d: 10/19/09 | |
|--|----------------------------|--|--------------------------|------------------|--|--------------------------|-----------------------------|
| Run #1 Run #2 | File ID P40872.D | DF 1 | Analyzed 10/20/09 | By AMY | Prep Date n/a | Prep Batch n/a | Analytical Batch MSP1347 |
| Run #1 Run #2 | Purge Vol 5.0 ml | ıme | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|--|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | 0.67 ND 1.9 9.1 ND ND ND 93.8 | $\begin{array}{c} 0.50 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 5.0 \\ 2.0 \\ 2.0 \\ 20 \end{array}$ | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 | Surrogate Recoveries Dibromofluoromethane | Run# 1 112% | Run# 2 | Limits 70-130% |
| 2037-26-5 460-00-4 | Toluene-D8 4-Bromofluorobenzene | 99% 105% | | 70-130% 70-130% |

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



| Client Sample ID: | INFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86592-3 | Date Sampled: | 10/19/09 |
| Matrix: | AQ - Influent | Date Received: | 10/19/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|------------------|--------------|-----------|--------------|--------|----------|------------------------------|---------------------------|--|
| Chromium Iron | < 10 4060 | 10 100 | ug/l ug/l | 1 1 | | 10/20/09 EAL 10/20/09 EAL | | SW846 3010A ² SW846 3010A ² |
| Lead | < 5.0 | 5.0 | ug/l | 1 | 10/20/09 | 10/20/09 EAL | SW846 6010B 1 | SW846 3010A ² |
| Nickel | < 40 | 40 | ug/l | 1 | 10/20/09 | 10/20/09 EAL | SW846 6010B ⁻¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA11094

(2) Prep QC Batch: MP14274

Page 1 of 1

2.3

N



| Client Sample ID: | INFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86592-3 | Date Sampled: | 10/19/09 |
| Matrix: | AQ - Influent | Date Received: | 10/19/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
| General Chemistry | | | |

Report of Analysis

' y

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|-----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 10/19/09 16:50 | CF | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 10/20/09 22:24 | EAL | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.2 | 4.2 | mg/l | 1 | 10/20/09 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 10/20/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

2.3 N





Section 3

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Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody



Parameter Certifications

| Job Number: | M86592 |
|-------------|--|
| Account: | DRAKEPET Drake Petroleum Co., Inc. |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA |

The following parameters included in this report are certified by the state of MA.

| Parameter | CAS# | Method | Mat | Certification Status |
|-------------------------|------|------------|-----|---|
| Solids, Total Suspended | | SM21 2540D | AQ | Accutest is certified for this parameter. |





| | <u>S</u> T | | | ſ | CH A 495 1 | TECHNC | N C Ology Mari: | Y CEN | NTER | R WEST | ST * BI | BUILDI | D) ING C | NE | | | | | | | | | | | |
|----------------------------------|----------------|--------------|----------------------|-------------------|-------------------------|-----------------|-----------------------|--------------|-------------------------|-----------|------------|--------------|----------------|-----------------|--------------|------------------------------------|-------------------------|----------------|--------------------|---|---------------|------------------|---|--|------------------------------|
| | | | | | | | | | | 481-775 | 53 | | | | | Accutest Job # Accutest Quote # | | | | | | M86542 | | | |
| Client / Reporting Information | | | <u> </u> | P: | roject Inf | formatic | on | | | | | | - - | | | | \perp | - | | | | | | | _ |
| ke Petroleum Company, Inc. | | | | t Name: | | | · · · · · · | | | | | | + | | — | | + | Req | jueste | ed Anal | alysis | .5 | \pm | | Matrix Codes |
| ress | | | P.C. N Street | No007280 | // Brimfi | eld Sur | 1000 | | | | | | | | | | | | | | | 1 | | | DW- Drinking Wat |
|). Box 866 221 Quinebaug Road | | | | | ~~~ | | | | - | _ | | | 1 | | | | E | | | | - 1 | 1 | | | GW- Ground Wate WW- Water |
| State | | Zip | City | es 19 and 2 | 20 | | | State | | | | | _ | | | | Naph | | | | | 1 | | | SW- Surface Water |
| rth Grosvenordale CT | 6255 | | | | | | | | | | | | | | | | ų | | | | | 1 | | | SO- Soil |
| ject Contact: | E-ma | ail | Brimfie Project a | | | | ' | MA | | | | | _ | | | 1 ' | TAME, | | | | | 1 | | | SL-Sludge OI-Oil |
| 6. Brenda Crawford Lee Smit | h. | | 5745-0 | | | | | | | | | | | | | 1 1 | TBA, | 1 | | | | . ب | | | UI Oil LIQ- Other Liquid |
| | | | Fax # | | | | | | | | | | - | | | | E. | | | + | ± | alen | 1 | | |
| ulest MARIC HOGIE | | | Client P | Purchase Orde | Jer# | | | | | | | | - | | | | E, EDB, | | | Chromiumr III trivalent | triva | l Hexavalent | | | AIR- Air |
| | · · · · , | | Collect | tion | Τ | T | INum | ber c | fore | eserved | -d Bo | Hies | - | | | 1 1 | Ē | | 4 | . ≣ | É | r Z | 1 ' | | SOL-Other Solid |
| nple # | 1 | | Τ- | <u> </u> | 1 | | | | | T T . | 8 | | 1 | | | 1 1 | BTEX, MTBE, 1 (8260) | _ | 1664 | in i | i l | Chromiumr | å | 1 | WP-Wipe |
| Field ID / Point of SUMMA# | ' | Date | Time | Sampled b | hv Matrix | # of bottles | E P | NaOH HN03 | 12SO4 | NONE | MECH | MEOH None | | | 1 ' | 1 | IEX 192 | TSS | TPH 1 | LIO, | į | , non | ž | 1 | LAB USE ONL |
| EFFLUENT | 1 | 10/19/09 | | 5 mill | | - | | 4 | ┼┸┥ | | Ž Z | - ZJ | t - | + | +' | } −-+′ | in er | <u> </u> | ∔ ⊨ | <u>– – – – – – – – – – – – – – – – – – – </u> | <u>i</u> | 5 | á | <u> </u> | |
| MIDPOINT | + | 110 | 1 | 1 1 | 400 | | | + | + | +4 | - | +' | 1 | | ' | | K_' | X | X | 12 | X | X | X | 1 ' | 1 |
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| S INFLUENT | | 1 | 1005 | 1 🗸 🗉 | \mathbf{V} | | 6 | i | \square | 11 | + | 1-1 | \square | + | ++ | ++ | \bigcirc | 1 , | + C | + | 4 | ΑĮ. | A | t' | + |
| | | 1 | | + | <u>+</u> | 10 | 14 | + | +++ | ++- | +- | + | <u>+</u> | +' | | ↓ | .X .1 | ↓ ∆ ⊥ | $\perp \mathbf{X}$ | $\downarrow \gamma$ | 4 | X | ĽX' | <u> </u> | |
| | + | r | + | + | <u>+'</u> | ↓ ′ | ++ | ' | $\downarrow \downarrow$ | ++ | | \downarrow | L | | | 1_1 | , _ J | 1 1 | 1 | 1 | | <u> </u> | \cap | (\Box) | |
| | | ⊢ ' | | | <u> </u> | L' | 1.1 | 1 ' | 11 | (| | | 1 | Γ' | | | | | \square | + | + | \rightarrow | 1-+ | ·+ | |
| |] | i' | 1 ' | Ē. | [· | <u> </u> | \Box | + | \square | 1 | + | +-+ | (` | + | ++ | r+ | -+ | <u>├</u> ──┤ | | + | + | \rightarrow | \rightarrow | <u>ا</u> | ł |
| | 1 | 1 | 1 | | + | <u> </u> | r+ | + | ++ | -+- | +-' | ++ | ·' | +' | ++ | ⊢ –∔ | | <u>ل</u> | 4 | - | | | | | I |
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| Turnaround Time (Business days) | <u> </u> | L | · | | Data De | liverable In | informa' | <u> </u> | <u> </u> | | \perp | | / | \vdash | 1 | | | | | | | | | | |
| Std. 14 Business Days | Approved By | 3y:/ Date: | | Standar | | 761000- | Jurnas. | <u></u> | | · | | | l | ──- | | | | Cor | minent | nts / Rem | .mark/ | | | | |
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| 5 Day RUSH | 7 Day Per | | F | Disk Del | | | | | | | | | Ľ | <u>P.C. N</u> C | lo007280 |)∕ Brim | <u>ifield</u> | Sunor | co, R | outes | <u>, 19</u> ; | and [~] | 20, <u>B</u> | srimfic | eld. MA |
| 2 Day EMERGENCY | Hr T | EAT- | , ji | State Fo | | | | | | | | | | | | | | | | | | | | | |
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| - and available VIA Lac | link | | | | | | | | | | | | | i., , | | | | | | | | | 11 | 1 | I CI CR |
| guished by Sampler: A Sample Cu | ustody must be | e document | ited below | v each time | sampler | s changr | e poss | essior | n inc | hidin | - cou | -lor dr | -X-I | <u>Must m</u> | aeet MA | DEP C | <u>GW-</u> J | 1 Stan | <u>adar</u> ð | is 🚽 | K. | | 4 | 4/1 | 16,50,5B |
| I. O Ideal | 1 | ion 19 | A [| Received By: | 0 | | <u></u> , | R | elinqui | uished By | sy: | ier ue. | Jivery. | F | Date Time: | | | | Received | я By: | | | | | |
| iquished by | | ate Time: 14 | 1:15 | 1 (1900 | <u>15an</u> | ~2~ | \leq | 2 | | | | | | | | | | 2 | - | ъ <u>р</u> . | | | | | |
| <u> </u> | | <i>A</i> | | ecemea by: | · / | 1 | | Re | alinquis | uished By | y: | | | D | Date Time: | | | R | 2 Received | б Ву: | | | — | | |
| quished by: | + | ate Time: | | 3 Received By: | | | | 4 | | | | _ | | | | | | 4 | | - | | | | | |
| | | | 1 | eceived cy. | | | | Cu | ustody S | Seal # | | | ъ, | reserved | where applie | licable | | -17 | | | Or | Dn Ice | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | Cooler To | Omp. |
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M86592: Chain of Custody Page 1 of 1



3.2 3





11/02/09

Technical Report for

Drake Petroleum Co., Inc.

CEA: Sunoco Routes 19 and 20 Brimfield MA

PC# 007280

Accutest Job Number: M86779

Sampling Date: 10/26/09

Report to:

Warren Equities, Inc.

KDuprey@cea-inc.com lsmith@warreneq.com **ATTN:** Distribution

Total number of pages in report: 16



F A R S

56-2006



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.

tal

Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (2502) RI (00071) ME (MA0136) FL (E87579) NY (11791) NJ (MA926) NC (653) IL (200018) NAVY USACE This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.

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Sample Summary

Drake Petroleum Co., Inc.

Job No: M86779

CEA:Sunoco Routes 19 and 20 Brimfield MA Project No: PC# 007280

| Sample Number | Collected Date | Time By | Received | Matr Code | | Client Sample ID |
|------------------|-------------------|----------|----------|--------------|--------------|---------------------|
| M86779-1 | 10/26/09 | 09:30 MH | 10/26/09 | AQ | Effluent | EFFLUENT |
| M86779-2 | 10/26/09 | 09:35 MH | 10/26/09 | AQ | Ground Water | MIDPOINT |
| M86779-3 | 10/26/09 | 09:40 MH | 10/26/09 | AQ | Influent | INFLUENT |





Sample Results

Report of Analysis



| Client Sat Lab Samj Matrix: Method: Project: | ple ID: M8 AQ SW | FLUENT 6779-1 - Effluent 846 8260B A:Sunoco Rot | utes 19 and 20 H | Brimfield | Date Sample Date Receive Percent Solic MA | d: 10/26/09 | |
|--|----------------------------|---|--------------------------|-----------|--|--------------------------|-----------------------------|
| Run #1 Run #2 | File ID N37526.D | DF 1 | Analyzed 10/27/09 | By WC | Prep Date n/a | Prep Batch n/a | Analytical Batch MSN1405 |
| Run #1 Run #2 | Purge Volu 5.0 ml | me | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|--|---|--|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether | 2.5 4.2 1.7 8.3 ND ND ND | 0.50 1.0 1.0 1.0 5.0 2.0 2.0 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| 75-65-0 | Tert Butyl Alcohol | ND | 20 | ug/l |
| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
| 1868-53-7 2037-26-5 460-00-4 | Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | 96% 91% 91% | | 70-130% 70-130% 70-130% |

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



| Client Sample ID: | EFFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86779-1 | Date Sampled: | 10/26/09 |
| Matrix: | AQ - Effluent | Date Received: | 10/26/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|--------------------------|----------------------|------------------|----------------------|-------------|----------------------------------|---|--|--|
| Chromium Iron Lead | < 10 128 < 5.0 | 10 100 5.0 | ug/l ug/l ug/l | 1 1 1 | 10/29/09 10/29/09 10/29/09 | 10/30/09 py 10/30/09 py 10/30/09 py | SW846 6010B ¹ SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² SW846 3010A ² |
| Nickel | < 3.0 < 40 | 3.0 40 | ug/1 ug/1 | 1 | 10/29/09 | 10/30/09 PY 10/30/09 PY | SW846 6010B ⁻¹ SW846 6010B ⁻¹ | SW846 3010A ² SW846 3010A ² |

(1) Instrument QC Batch: MA11123

(2) Prep QC Batch: MP14329

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2.1

N



| Client Sample ID: | EFFLUENT | | | | | |
|-------------------|--|------------------------|----------|--|--|--|
| Lab Sample ID: | M86779-1 | Date Sampled: | 10/26/09 | | | |
| Matrix: | AQ - Effluent | Date Received: | 10/26/09 | | | |
| | | Percent Solids: | n/a | | | |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | | | | |
| General Chemistry | | | | | | |

| Report o | f Analysis |
|----------|------------|
| | |

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 10/26/09 17:33 | CF | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 10/30/09 13:07 | PY | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 10/30/09 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 10/29/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

2.1 N



| Client Sa Lab Sam Matrix: Method: Project: | ple ID: M8 AQ SW | DPOINT 6779-2 - Ground W 846 8260B A:Sunoco Ro | ater utes 19 and 20 I | Brimfield | Percent Solie | ed: 10/26/09 | |
|--|----------------------------|--|--------------------------|-----------|-------------------------|--------------------------|-----------------------------|
| Run #1 Run #2 | File ID N37527.D | DF 1 | Analyzed 10/27/09 | By WC | Prep Date n/a | Prep Batch n/a | Analytical Batch MSN1405 |
| Run #1 Run #2 | Purge Volu 5.0 ml | me | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|-----------|-------------------------|--------|--|---------|
| 71-43-2 | Benzene | 0.99 | $\begin{array}{c} 0.50 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 5.0 \\ 2.0 \\ 2.0 \\ 20 \end{array}$ | ug/l |
| 108-88-3 | Toluene | 2.2 | | ug/l |
| 100-41-4 | Ethylbenzene | ND | | ug/l |
| 1330-20-7 | Xylene (total) | 4.7 | | ug/l |
| 1634-04-4 | Methyl Tert Butyl Ether | 5.1 | | ug/l |
| 91-20-3 | Naphthalene | ND | | ug/l |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/l |
| 994-05-8 | tert-Amyl Methyl Ether | ND | | ug/l |
| 75-65-0 | Tert Butyl Alcohol | ND | | |
| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
| 1868-53-7 | Dibromofluoromethane | 100% | | 70-130% |
| 2037-26-5 | Toluene-D8 | 90% | | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 91% | | 70-130% |

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



N

| Client Sample ID: | MIDPOINT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86779-2 | Date Sampled: | 10/26/09 |
| Matrix: | AQ - Ground Water | Date Received: | 10/26/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|----------|--------|-----|-------|----|----------|-------------|---------------------------|--------------------------|
| Chromium | < 10 | 10 | ug/l | 1 | | 10/30/09 PY | SW846 6010B 1 | SW846 3010A ² |
| Iron | 102 | 100 | ug/l | 1 | 10/29/09 | 10/30/09 py | SW846 6010B ⁻¹ | SW846 3010A ² |
| Lead | < 5.0 | 5.0 | ug/l | 1 | 10/29/09 | 10/30/09 py | SW846 6010B ¹ | SW846 3010A ² |
| Nickel | < 40 | 40 | ug/l | 1 | 10/29/09 | 10/30/09 py | SW846 6010B ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA11123

(2) Prep QC Batch: MP14329

Page 1 of 1

2.2

N



| Client Sample ID: | | Data Complede | 10/26/00 | |
|-------------------|--|-----------------|----------|--|
| Lab Sample ID: | M86779-2 | Date Sampled: | 10/20/09 | |
| Matrix: | AQ - Ground Water | Date Received: | 10/26/09 | |
| | | Percent Solids: | n/a | |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | | |

Report of Analysis

General Chemistry

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 10/26/09 17:33 | CF | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 10/30/09 13:29 | PY | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 10/30/09 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 10/29/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

Page 1 of 1

2.2

N



| Client San Lab Samj Matrix: Method: Project: | ple ID: M8 AQ SW | FLUENT 6779-3 - Influent 846 8260B A:Sunoco Ro | utes 19 and 20 I | Brimfield | Date Sample Date Receive Percent Solic MA | d: 10/26/09 | |
|--|-----------------------------|--|--------------------------|-----------|--|--------------------------|-----------------------------|
| Run #1 Run #2 | File ID N37528.D | DF 1 | Analyzed 10/27/09 | By WC | Prep Date n/a | Prep Batch n/a | Analytical Batch MSN1405 |
| Run #1 Run #2 | Purge Volu 5.0 ml | me | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|--|---|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | 5.8 7.2 5.7 28.2 9.4 ND ND ND | 0.50 1.0 1.0 1.0 5.0 2.0 2.0 2.0 20 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 2037-26-5 460-00-4 | Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | Run# 1 102% 89% 96% | Run# 2 | Limits 70-130% 70-130% 70-130% |

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



| Client Sample ID: | INFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86779-3 | Date Sampled: | 10/26/09 |
| Matrix: | AQ - Influent | Date Received: | 10/26/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|----------|--------|-----|-------|----|----------|-------------|--------------------------|--------------------------|
| Chromium | < 10 | 10 | ug/l | 1 | 10/29/09 | 10/30/09 py | SW846 6010B ¹ | SW846 3010A ² |
| Iron | 7190 | 100 | ug/l | 1 | 10/29/09 | 10/30/09 py | SW846 6010B ¹ | SW846 3010A ² |
| Lead | 21.7 | 5.0 | ug/l | 1 | 10/29/09 | 10/30/09 py | SW846 6010B ¹ | SW846 3010A ² |
| Nickel | < 40 | 40 | ug/l | 1 | 10/29/09 | 10/30/09 py | SW846 6010B ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA11123

(2) Prep QC Batch: MP14329

2.3

N



| Client Sample ID: | INFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86779-3 | Date Sampled: | 10/26/09 |
| Matrix: | AQ - Influent | Date Received: | 10/26/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
| | | | |
| General Chemistry | | | |

Report of Analysis

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 10/26/09 17:33 | CF | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 10/30/09 13:34 | PY | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 10/30/09 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 10/29/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

2.3 N





Section 3

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Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody



Parameter Certifications

| Job Number: | M86779 |
|-------------|--|
| Account: | DRAKEPET Drake Petroleum Co., Inc. |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA |

Toject. CEA. Sunoco Routes 19 and 20 Brinnleid MA

The following parameters included in this report are certified by the state of MA.

| Parameter | CAS# | Method | Mat | Certification Status |
|-------------------------|------|------------|-----|---|
| Solids, Total Suspended | | SM21 2540D | AQ | Accutest is certified for this parameter. |





| GAC | C | :U | T | =5 | |
|-----|-----|----|--------|-----|-----|
| | L a | bo | ic a t | ori | 0.5 |

CHAIN OF CUSTODY

| 134AV | | | | | | | | 495 1 | ECHN | | | | | | | | LDIN | IG ON | NE | | | | | | | | | | |
|-------------|------------------------------------|-----------|----------|--------|---------------------|-----------|--------------------|--------------|---------------|-------------------------|--------|----------|------|-------|---------|--------------------|---------|--------|----------|----------------------|----------|-----------------|--------|----------|-------------------------|------------|----------------|--------------|-------------------------------|
| Ser. | ACCUTES | | | | | | | | | | | | | | MA 0 | | | | | | | Accute | st Job | | | | 4.0 | | |
| | Laboratori | e s | | | | | | | TEL | : 50 | 8-481 | -62 | 00 * | FA | X: 50 | 8-481 | -7753 | 3 | | | | | st Quo | . # | | 1 | 180 | 077 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | Accute | | | | | | | |
| _ | Client / Reporting Information | | | | | | Proje | ect In | formati | on | | | | | | | | | - | 1 | 1 | | Requ | ested | Analys | is | F | | Matrix Codes |
| Company N | | | | | Project N P.C. N | | | . | | | | | | | | | | | | | | | | | | | | | DW- Drinking Water |
| Address | troleum Company, Inc. | | | | P.C. N Street | 00072 | 280/ 6 | Srimt | ieia Si | uno | co | | | | | | | 1 | | | | L | | | | | | | GW- Ground Water WW- Water |
| | 866 221 Quinebaug Road | | | | Routes | 10 | ~ ~ ~ | | | | | | | | | | | | | | | Naph | | | | 1 | | | SW- Sufface Water |
| City | State | | Zip | | City | 515 a | | | | | 5 | tate | | | | | _ | | | | | ĺωĩ | | | 1 | 1 | | | SO- Soil |
| North Gr | osvenordale CT | 6255 | | | Brimfie | Ini | | | | | | лА | | | | | | | | | | TAM | | | | | | | SL-Sludge Ol+Oil |
| Project Con | taot: | Emai | il | | Project # | | | | | | | 1/7 | | | | | | | | | | A,T | | ļ | | | | | LIQ- Other Liquid |
| | ada-Orantoro Lee Smith | 5 | | | 5745-0 | | | | | | | | | | | | | | | | | 1 <u>B</u> | | | 1 | fent | | | |
| Phone # | | | | | Fax # | | | | | | | | | | | | | | | | | EDB, | | | Chromiumr III trivalent | Hexavalent | | | AIR- Air |
| Samplers's | Name MARK HAGE | | | | Client Pu | | Order | # | | | | | | | | | | | | | | TBE, | | 4 | nr III tu | 5 | | | SOL-Other Solid |
| Accutest | 1 | | | | Collect | ion T | | | | | Num | ber | - | | | <u>Botti</u> ≰I | es | | | 1 | | LW C | | 166 | l i | niur | , Fe | | WP-Wipe |
| Sample # | Field ID / Point of SUMMA# | | D | ate | Time | Samp | oled by | Matri | # d x bott | es | P | NaCH | HN03 | H2SO4 | NONE | MEOH | None | | | | | BTEX, (8260) | TSS | TPH 1664 | Chror | Chromiumr | Pb, Ni, | | LAB USE ONLY |
| -1 | EFFLUENT | | 10.3 | 26.199 | 0930 | m | · H. | 61 | 38 | r | 6 | | ı | | i | | | | | * | | X | X | X | X | X | X | | |
| -2 | MIDPOINT | | | | Ø935 | | | | 8 | | 6 | | L | _ | | | | | | | | X | X | X | X | X | x | | |
| -3 | INFLUENT | | 1 | 1 | 0940 | | 1 | \downarrow | 8 | | 6 | | 1 | | 1 | | | | | | | X | X | X | X | X | X | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | T | | | | |
| | | | — | | | | | | | -+ | | ╈ | | | | | | | | | + • • | | | | | | +-+ | | |
| | | | | | | | | | | + | | + | + | + | | | | | + | | | · · · | | | | | + | | |
| | | | | | | | | | | + | ╈ | - | + | + | | | | | | | | | | | - | | + | | |
| | | | | | | 1 | | | + | | | | + | | - | + | | | + | 1 | | | | | 1 | | + | | |
| | | | | | | | _ | | | + | -+- | + | + | - | + | + | | | | - | - | | | | - | + | + | | UD TAVE |
| | | | - | | | | | | _ | | | -+- | _ | | | _ | | | | | <u> </u> | L | | ļ | - | | \vdash | | 4D, 3A, 165 |
| | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | GA |
| | Turnaround Time (Business days) | | | | | | | | Delivera | ble Ir | nforma | ation | | | | | | | - | | | | (| ommen | its / Rer | narks | | | |
| | Std. 14 Business Days | Approved | By:/ Da | ite: | | | tandar | | | | | | | | | | | | | | | | | | | | | . . , | |
| | 10 Day RUSH 5 Day RUSH | 7 0 0 | | | | | omme | | | | | | | | | | | | P.C. M | 1000/2 | 80/ Br | imfiel | d Sun | осо, к | outes | 19 an | <u>a 20, i</u> | Brimi | ield, MA |
| | 3 Day EMERGENCY | 7 Day P | er ua | DEPA | | | lisk De tate Fo | | ble | | | | | | | | | | Email | lah ren | orte to | v lemi | th@u | arrene | acon | , kdu | nrevía | lcea-i | nc.com and |
| | 2 Day EMERGENCY | | | | | | ther_ | | | | | | | | | | | | | | | | | | | | | | |
| | 1 Day EMERGENCY | | | | i | - | | | | | | | | | | | | | × | 1000 (Sci | nea | Mu | 1 8 | ang | ۱es | ó | 540 | ×r≁ | wp |
| | Other | | | | | 1 | | | | | | | | | | | | | | Sei | red | લાદ. | i (i | veel | n k | 2) | | | - |
| Emerg | gency T/A data available VIA Labli | ink | | | | | | | | | | | | | | | | | Must | meet N | 1ADE | P GW | /-1 St | andar | ds | | | | |
| | C Sample Cust | tody must | be do | cume | nted belo | w eacl | h time | sam | ples ch | ang | e pos | ses | sion | ı, in | ludin | ig cou | irier (| delive | | | | | | | | | | | |
| Relinquist | Yran (De | | VC/: | 2ilo | 13 70 | Receiv | red By: | | m | $\overline{\mathbf{a}}$ | | - | J. | eling | uished | By: | | | | Date Tim | e: | | | Receiv | ea By: | | | | |
| Relinquish | ted by: | 1 | Date Ti | me: | | Receiv | red By: | ~ | | _ | | <u> </u> | -# | elinq | uished | By: | | | | Date Tim | e: | | | Receiv | ed By: | | | | |
| 3 | <u>``</u> | | | | | 3 | | | | | | | 4 | | | | | | | | | | | 4 | | | | | |
| Relinquist | ed by: | | Date Ti | me: | | Receiv | red By: | | | | | | C | usto | ly Seal | * | | | Preserve | id where a | pplicab | e | | | | On I | | Cooler | |
| 5 | | | | | | 5 | | | | | | | | | | | | | | - | | | | | | | | | $\sim \sim \sim$ |

M86779: Chain of Custody Page 1 of 1







11/10/09

Technical Report for

Drake Petroleum Co., Inc.

CEA: Sunoco Routes 19 and 20 Brimfield MA

PC# 007280

Accutest Job Number: M86957

Sampling Date: 11/02/09

Report to:

Corporate Environmental Advisors

KDuprey@cea-inc.com

ATTN: Kimberly Duprey

Total number of pages in report: 17



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.

tal

Lab Director



Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (2502) RI (00071) ME (MA0136) FL (E87579) NY (11791) NJ (MA926) NC (653) IL (200018) NAVY USACE This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.



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Sample Summary

Drake Petroleum Co., Inc.

Job No: M86957

CEA:Sunoco Routes 19 and 20 Brimfield MA Project No: PC# 007280

| Sample Number | Collected Date | Time By | Received | Matr Code | | Client Sample ID |
|------------------|-------------------|----------|----------|--------------|--------------|---------------------|
| M86957-1 | 11/02/09 | 08:50 MH | 11/02/09 | AQ | Effluent | EFFLUENT |
| M86957-2 | 11/02/09 | 08:55 MH | 11/02/09 | AQ | Ground Water | MIDPOINT |
| M86957-3 | 11/02/09 | 09:05 MH | 11/02/09 | AQ | Influent | INFLUENT |



M86957 Laboratories



Sample Results

Report of Analysis



| Client San Lab Samj Matrix: Method: Project: | ple ID: M86 AQ SW8 | LUENT 5957-1 - Effluent 846 8260B A:Sunoco Ro | utes 19 and 20 I | Brimfield | Percent Solie | ed: 11/02/09 | |
|--|------------------------------|---|-----------------------------|-----------------|-------------------------|--------------------------|----------------------------|
| Run #1 Run #2 | File ID R10961.D | DF 1 | Analyzed 11/09/09 | By AT | Prep Date n/a | Prep Batch n/a | Analytical Batch MSR414 |
| Run #1 Run #2 | Purge Volun 5.0 ml | ne | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|--|---|--|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether | ND ND ND ND ND ND ND ND | 0.50 1.0 1.0 1.0 5.0 2.0 2.0 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| 75-65-0 | Tert Butyl Alcohol | ND | 20 | ug/l |
| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
| 1868-53-7 2037-26-5 460-00-4 | Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | 117% 119% 127% | | 70-130% 70-130% 70-130% |

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



| Client Sample ID: | EEEI LIENT | | |
|-------------------|--|------------------------|----------|
| Chefft Sample ID. | EFFLUENT | | |
| Lab Sample ID: | M86957-1 | Date Sampled: | 11/02/09 |
| Matrix: | AQ - Effluent | Date Received: | 11/02/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|------------------|---------------|-----------|--------------|--------|----------|----------------------------|--|--|
| Chromium Iron | < 10 < 100 | 10 100 | ug/l ug/l | 1 1 | | 11/04/09 py 11/04/09 py | SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² |
| Lead | < 5.0 | 5.0 | ug/1 ug/1 | 1 | | 11/04/09 PY | SW846 6010B ¹ | SW846 3010A SW846 3010A ² |
| Nickel | < 40 | 40 | ug/l | 1 | 11/03/09 | 11/04/09 py | SW846 6010B ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA11143

(2) Prep QC Batch: MP14354

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| Client Sample ID: | EFFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86957-1 | Date Sampled: | 11/02/09 |
| Matrix: | AQ - Effluent | Date Received: | 11/02/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
| | | | |
| General Chemistry | , | | |

Report of Analysis

General Chemistry

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 11/02/09 17:20 | MA | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 11/04/09 19:50 | PY | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 11/04/09 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 11/04/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

| Client San Lab Samj Matrix: Method: Project: | ple ID: M86 AQ - SW8 | POINT 957-2 Ground Wa 46 8260B :Sunoco Ro | ater utes 19 and 20 H | Brimfield | Percent Solie | ed: 11/02/09 | |
|--|----------------------------|---|--------------------------|-----------|---------------|--------------|------------------|
| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
| Run #1 | R10962.D | 1 | 11/09/09 | AT | n/a | n/a | MSR414 |
| Run #2 | | | | | | | |
| | Purge Volun | ie | | | | | |
| Run #1 | 5.0 ml | | | | | | |
| Run #2 | | | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|---|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | ND ND ND 5.7 ND ND ND ND | $\begin{array}{c} 0.50 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 5.0 \\ 2.0 \\ 2.0 \\ 20 \end{array}$ | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 2037-26-5 460-00-4 | Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | Run# 1 118% 119% 130% | 20 Run# 2 | ug/l Limits 70-130% 70-130% |

N = Indicates presumptive evidence of a compound





| Client Sample ID: | MIDPOINT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86957-2 | Date Sampled: | 11/02/09 |
| Matrix: | AQ - Ground Water | Date Received: | 11/02/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|------------------------------------|--------------------------------|------------------------|------------------------------|-------------|----------------------|--|--|--|
| Chromium Iron Lead Nickel | < 10 < 100 < 5.0 < 40 | 10 100 5.0 40 | ug/l ug/l ug/l ug/l | 1 1 1 | 11/03/09 11/03/09 | 11/04/09 PY 11/04/09 PY 11/04/09 PY 11/04/09 PY | SW846 6010B ¹ SW846 6010B ¹ SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² SW846 3010A ² SW846 3010A ² |

(1) Instrument QC Batch: MA11143

(2) Prep QC Batch: MP14354

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| Client Sample ID: Lab Sample ID: | MIDPOINT M86957-2 | Date Sampled: | 11/02/09 |
|-------------------------------------|--|-----------------------------------|--------------|
| Matrix: | AQ - Ground Water | Date Received: Percent Solids: | 11/02/09 |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | i ci cent Sonus. | 1 <i>0</i> a |

Report of Analysis

General Chemistry

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 11/02/09 17:20 | MA | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 11/04/09 19:55 | PY | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 11/04/09 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 11/04/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

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| Client Sat Lab Samj Matrix: Method: Project: | ple ID: M80 AQ SW3 | LUENT 5957-3 - Influent 846 8260B A:Sunoco Ro | utes 19 and 20 H | Brimfield | Date Sampled Date Received Percent Solid MA | d: 11/02/09 | |
|--|-----------------------------|---|--------------------------|-----------------|--|--------------------------|----------------------------|
| Run #1 Run #2 | File ID R10963.D | DF 1 | Analyzed 11/09/09 | By AT | Prep Date n/a | Prep Batch n/a | Analytical Batch MSR414 |
| Run #1 Run #2 | Purge Volu 5.0 ml | ne | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|--------------------|---|--------------|---------------------|-------------|
| 71-43-2 | Benzene | ND | 0.50 | ug/l |
| 108-88-3 | Toluene | ND | 1.0 | ug/l |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l |
| 1330-20-7 | Xylene (total) | ND | 1.0 | ug/l |
| 1634-04-4 | Methyl Tert Butyl Ether | 4.0 | 1.0 | ug/l |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/l |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | ug/l |
| 994-05-8 | tert-Amyl Methyl Ether | ND | 2.0 | ug/l |
| 75-65-0 CAS No. | Tert Butyl Alcohol Surrogate Recoveries | ND Run# 1 | 20 Run# 2 | ug/l Limits |
| 1868-53-7 | Dibromofluoromethane | 120% | | 70-130% |
| 2037-26-5 | Toluene-D8 | 120% | | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 128% | | 70-130% |

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

| Client Sample ID: | INFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86957-3 | Date Sampled: | 11/02/09 |
| Matrix: | AQ - Influent | Date Received: | 11/02/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|--------------------------|---------------|------------------|--------------|--------|----------|---|--|--|
| Chromium Iron Lead | < 10 2920 | 10 100 5.0 | ug/l ug/l | 1 1 | 11/03/09 | 11/04/09 py 11/04/09 py 11/04/09 py | SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² SW846 3010A ² |
| Nickel | < 5.0 < 40 | 3.0 40 | ug/l ug/l | 1 | | 11/04/09 PY 11/04/09 PY | SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² |

(1) Instrument QC Batch: MA11143

(2) Prep QC Batch: MP14354





| Client Sample ID: | INFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M86957-3 | Date Sampled: | 11/02/09 |
| Matrix: | AQ - Influent | Date Received: | 11/02/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
| | | | |
| General Chemistry | | | |

Report of Analysis

General Chemistry

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 11/02/09 17:20 | MA | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 11/04/09 19:59 | PY | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.2 | 4.2 | mg/l | 1 | 11/04/09 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 11/04/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

2.3 N





Section 3

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Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody



Parameter Certifications

| Job Number: | M86957 |
|-------------|--|
| Account: | DRAKEPET Drake Petroleum Co., Inc. |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA |

The following parameters included in this report are certified by the state of MA.

| Parameter | CAS# | Method | Mat | Certification Status |
|-------------------------|------|------------|-----|---|
| Solids, Total Suspended | | SM21 2540D | AQ | Accutest is certified for this parameter. |





| West | | | | | С | HA 495 te | CHNOL | .0GY | CENT | rer i | WES | 1" * BL | ILDIN | | | | | | | | | | | | | |
|-------------------------------|--|------------------------|----------------------------------|------------------|--------------------|--|-----------|------------------|---------------|-----------|------------------|---------|---------|----|-----------|--------------------------|----------|-----------------------|----------------------|--------------|-------------------------|---|----------------|-----------|---|--|
| 53 | ACCUTE: | | | | | | TEL: 5 | | 30RO 1-620 | | | | | | | | | | st Job # st Quote | | - | | П | 869! | 6957 | |
| | ke Petroleum Company, Inc. P.C. ress Street | | | | | Project Information ct Name: No007280/ Brimfield Sunoco | | | | | | | | | | | | ų | Requi | ested A | nalys | is | | | t rix Codes DW- Drinking Water GW- Ground Water WW- Water | |
| ity Iorth Gr roject Cor | rth Grosvenordale CT 6255 Brimfi ject Contact: E-mail Project | | | | | 0 | | | State MA | | | | | | | | | EDB, TBA, TAME, Naph | | : | | Ŧ | | | SW- Surface Water SO- Soil SL-Sludge OI-Oil Q- Other Liquid | |
| ione # | | | | 5745-0 Fax # |)5 urchase Orde | c# | | | | | | | | | | | | E, EDB, TE | | | trivalent | V! Hexavalent | | | AIR- Air | |
| cutest | MARK HAGIS | <u> </u> | | Collect | | | # of | 1 | iber o | | 1 | 21 | | | | | | BTEX, MTBE, (8260) | s | TPH 1664 | Chromiumr III trivalent | Chromiumr VI | Nì, Fe | - | SOL-Other Solid WP-Wipe | |
| - 1 | Field ID / Point of SUMMA# | | Date | Time PI & SSC | Sampled b | Matrix 6W | bottles | ₽ F | NaOH HNO3 | | ۱ NONE | NaHSC | None | | | | | | TSS | 1P | v [₩] | Chi | P ^p | | | |
| -2 .3 | | | ļ | ୭୫ଟର ଜ୍ୟୁତ୍ୟ | | ł | 8 | 6 | 1 | | ۱ ۱ | | | | | | | ~ | レレ | レレ | ~ | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | - U- U- | _ | | |
| | | | | - | | | | $\left \right $ | _ | - | | - | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | + | | | + | | | | | | | | | | | | | | |
| | Turnaround Time (Business days) | | | | | Data De | liverable | Inform | ation | | | | | | | | | | C | omment | s / Rem | harks | | | | |
| |] Std. 14 Business Days] 10 Day <i>RUSH</i>] 5 Day <i>RUSH</i> | Approved | By:/ Date: | ۵ | | rd ercial "B' eliverable | | | | | | | | l | P.C. N | 000728 | 0/ Bri | mfield | d Suno | oco, R | outes | 19 and | l 20, Br | rimfield | I, MA | |
| | 3 Day EMERGENCY 2 Day EMERGENCY 1 Day EMERGENCY Other | | | | State F | | _ | | | | | | | | Email | lab repo | rts to | : Ismit | th@w | arrene | q.com | , kdup | | | com and 113, 66, 41 | |
| Emer | gency T/A data available VIA La | ablink Custody must | be docum | nented beic | ow each tim | e sample | es chan | ge po | ssessi | ion, i | incluc | ling co | urier d | | | neet M. | | P GW | '-1 Sta | nda re | | | | | | |
| Jul | ul dra | 12:15 | Date Time: VZCT Date Time: | _ | Received By | wood | Hu | ~ | 1 | 2 | nquish nquish | | | | | Date Time: Date Time: | | | | 2 Receive | - | | | | | |
| Relinquis | hed by: | _ | Date Time: | . | 3 Received By | | | | | 4 Cust | tody S | a # | | -, | Preserved | d where ap | plicable | , | | 4 | | On lo | ° | eoler Ter | | |

M86957: Chain of Custody Page 1 of 2



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Accutest Laboratories Sample Receipt Summary

| Accutest Job Number: M86957 Client: Date / Time Received: 11/2/2009 No. Coolers: | | | Immediate Client Services Action Required: Client Service Action Required at Login: | | | |
|---|-------------|-------------------|--|---|----------|-----|
| | | No. Coolers: | | | | |
| Project: | | | | Airbill #'s: | | |
| Cooler Security Y o | or N | | Y or N | Sample Integrity - Documentation | Y or N | L |
| 1. Custody Seals Present: | | COC Present: | | 1. Sample labels present on bottles: | ☑ [| |
| 2. Custody Seals Intact: | □ 4. Sn | npl Dates/Time OK | | 2. Container labeling complete: | ✓ | |
| Cooler Temperature | Y or N | | | 3. Sample container label / COC agree: | ✓ | |
| 1. Temp criteria achieved: | | | | Sample Integrity - Condition | Y or N | L |
| 2. Cooler temp verification: | Infared gun | | | 1. Sample recvd within HT: | ☑ [| |
| 3. Cooler media: | Ice (bag) | | | 2. All containers accounted for: | • | |
| Quality Control Preservation | Y or N | N/A | | 3. Condition of sample: | Intact | |
| 1. Trip Blank present / cooler: | | | | Sample Integrity - Instructions | Y or N | N/A |
| 2. Trip Blank listed on COC: | | | | 1. Analysis requested is clear: | v | |
| 3. Samples preserved properly: | | | | 2. Bottles received for unspecified tests | | |
| 4. VOCs headspace free: | | | | 3. Sufficient volume rec'd for analysis: | ✓ | |
| | | | | 4. Compositing instructions clear: | | ✓ |
| | | | | 1 | | • |

Accutest Laboratories V:508.481.6200 495 Technology Center West, Bldg One F: 508.481.7753 Marlborough, MA www/accutest.com

M86957: Chain of Custody Page 2 of 2







11/16/09

Technical Report for

Drake Petroleum Co., Inc.

CEA: Sunoco Routes 19 and 20 Brimfield MA

PC# 007280

Accutest Job Number: M87144

Sampling Date: 11/09/09

Report to:

Corporate Environmental Advisors

KDuprey@cea-inc.com

ATTN: Kimberly Duprey

Total number of pages in report: 17



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.

tal

Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (2502) RI (00071) ME (MA0136) FL (E87579) NY (11791) NJ (MA926) NC (653) IL (200018) NAVY USACE This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.





New England • 495 Tech Center West • Building 1 • Marlborough, MA 01752 • tel: 508-481-6200 • fax: 508-481-7753 • http://www.accutest.com



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Sample Summary

Drake Petroleum Co., Inc.

Job No: M87144

CEA:Sunoco Routes 19 and 20 Brimfield MA Project No: PC# 007280

| Sample Number | Collected Date | Time By | Received | Matr Code | | Client Sample ID |
|------------------|-------------------|----------|----------|--------------|--------------|---------------------|
| M87144-1 | 11/09/09 | 11:20 MH | 11/09/09 | AQ | Effluent | EFFLUENT |
| M87144-2 | 11/09/09 | 11:25 MH | 11/09/09 | AQ | Ground Water | MIDPOINT |
| M87144-3 | 11/09/09 | 11:30 MH | 11/09/09 | AQ | Influent | INFLUENT |





Sample Results

Report of Analysis



| Client Sat Lab Samj Matrix: Method: Project: | ple ID: M87 AQ SW8 | LUENT 144-1 - Effluent 46 8260B A:Sunoco Ro | utes 19 and 20 H | Brimfield N | Percent Soli | ed: 11/09/09 | |
|--|------------------------------|---|--------------------------|------------------|-------------------------|--------------------------|-----------------------------|
| Run #1 Run #2 | File ID P41619.D | DF 1 | Analyzed 11/13/09 | By AMY | Prep Date n/a | Prep Batch n/a | Analytical Batch MSP1372 |
| Run #1 Run #2 | Purge Volur 5.0 ml | ne | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|--|---|--|---|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether | ND ND ND ND ND ND ND | $\begin{array}{c} 0.50\\ 1.0\\ 1.0\\ 1.0\\ 1.0\\ 5.0\\ 2.0\\ 2.0\\ \end{array}$ | ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| 75-65-0 | Tert Butyl Alcohol | ND | 20 | ug/l |
| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
| 1868-53-7 2037-26-5 460-00-4 | Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | 91% 91% 111% | | 70-130% 70-130% 70-130% |

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound





| Client Sample ID:EFFLUENTLab Sample ID:M87144-1Date Sampled:Matrix:AO - EffluentDate Received: | | | | |
|--|--------------------------|---|------------------------|----------|
| 1 | Client Sample ID: | EFFLUENT | | |
| Matrix: AO - Effluent Date Received: 11/09/09 | Lab Sample ID: | M87144-1 | Date Sampled: | 11/09/09 |
| Dute Received: 11/0/07 | Matrix: | AQ - Effluent | Date Received: | 11/09/09 |
| Percent Solids: n/a | | | Percent Solids: | n/a |
| Project: CEA: Sunoco Routes 19 and 20 Brimfield MA | Project: | CEA: Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|--------------------------|------------------------|------------------|----------------------|-------------|----------------------|--|--|--|
| Chromium Iron Lead | < 10 < 100 < 5.0 | 10 100 5.0 | ug/l ug/l ug/l | 1 1 1 | 11/11/09 11/11/09 | 11/12/09 EAL 11/12/09 EAL 11/12/09 EAL | SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² SW846 3010A ² |
| Nickel | < 40 | 40 | ug/l | 1 | 11/11/09 | 11/12/09 eal | SW846 6010B ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA11179

(2) Prep QC Batch: MP14407

Page 1 of 1

2.1

N



| Client Sample ID: | EFFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M87144-1 | Date Sampled: | 11/09/09 |
| Matrix: | AQ - Effluent | Date Received: | 11/09/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
| | | | |
| General Chemistry | | | |

Report of Analysis

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|-----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 11/09/09 15:38 | CF | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 11/12/09 12:53 | EAL | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 11/10/09 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 11/11/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

2.1



| Client Sa Lab Sam Matrix: Method: Project: | ple ID: M8 AQ SW | DPOINT 37144-2 2 - Ground Wa 7846 8260B A:Sunoco Ro | ater utes 19 and 20 I | Brimfield N | Percent Soli | ed: 11/09/09 | |
|--|-----------------------------|---|--------------------------|------------------|-------------------------|--------------------------|-----------------------------|
| Run #1 Run #2 | File ID P41618.D | DF 1 | Analyzed 11/13/09 | By AMY | Prep Date n/a | Prep Batch n/a | Analytical Batch MSP1372 |
| Run #1 Run #2 | Purge Volu 5.0 ml | me | | | | | |

un #2

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|---|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | ND ND ND 3.7 ND ND ND | $\begin{array}{c} 0.50 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 5.0 \\ 2.0 \\ 2.0 \\ 20 \end{array}$ | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 2037-26-5 460-00-4 | Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | Run# 1 93% 91% 111% | Run# 2 | Limits 70-130% 70-130% 70-130% |

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



| Client Sample ID: | MIDPOINT | | |
|-------------------|--|-----------------|----------|
| Lab Sample ID: | M87144-2 | Date Sampled: | 11/09/09 |
| Matrix: | AQ - Ground Water | Date Received: | 11/09/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|------------------------------------|------------------------------|------------------------|------------------------------|------------------|----------------------|--|--|--|
| Chromium Iron Lead Nickel | < 10 108 < 5.0 < 40 | 10 100 5.0 40 | ug/l ug/l ug/l ug/l | 1 1 1 1 | 11/11/09 11/11/09 | 11/12/09 EAL 11/12/09 EAL 11/12/09 EAL 11/12/09 EAL | SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² SW846 3010A ² SW846 3010A ² |

(1) Instrument QC Batch: MA11179

(2) Prep QC Batch: MP14407

Page 1 of 1

2.2

N



| Lab Sample ID: M87144-2 Date Sampled: 11/09/09 Matrix: AQ - Ground Water Date Received: 11/09/09 Project: CEA:Sunoco Routes 19 and 20 Brimfield MA n/a | Client Sample ID: | | | 11/00/00 |
|--|-------------------|--|-----------------|----------|
| Percent Solids: n/a | Lab Sample ID: | M87144-2 | Date Sampled: | 11/09/09 |
| | Matrix: | AQ - Ground Water | Date Received: | 11/09/09 |
| Project: CEA:Sunoco Routes 19 and 20 Brimfield MA | | | Percent Solids: | n/a |
| | Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

General Chemistry

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|-----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 11/09/09 15:38 | CF | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 11/12/09 12:59 | EAL | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 11/10/09 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 11/11/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

Page 1 of 1

2.2



| Client San Lab Samj Matrix: Method: Project: | ple ID: M A S | NFLUENT A87144-3 AQ - Influent W846 8260B EA:Sunoco Rou | utes 19 and 20 H | Brimfield N | Date Sample Date Receive Percent Solid 1A | d: 11/09/09 | |
|--|----------------------------|---|--------------------------|------------------|--|--------------------------|-----------------------------|
| Run #1 Run #2 | File ID P41617.D | DF D 1 | Analyzed 11/13/09 | By AMY | Prep Date n/a | Prep Batch n/a | Analytical Batch MSP1372 |
| Run #1 Run #2 | Purge Vo 5.0 ml | blume | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|---|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | ND ND ND 2.8 ND ND ND ND | 0.50 1.0 1.0 1.0 5.0 2.0 2.0 20 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 2037-26-5 460-00-4 | Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | Run# 1 92% 91% 107% | Run# 2 | Limits 70-130% 70-130% 70-130% |

N = Indicates presumptive evidence of a compound



B = Indicates analyte found in associated method blank

| Client Sample ID: | INFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M87144-3 | Date Sampled: | 11/09/09 |
| Matrix: | AQ - Influent | Date Received: | 11/09/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|------------------|---------------|-----------|--------------|--------|------|------------------------------|--------|--|
| Chromium Iron | < 10 3170 | 10 100 | ug/l ug/l | 1 1 | | 11/12/09 EAL 11/12/09 EAL | | SW846 3010A ² SW846 3010A ² |
| Lead Nickel | < 5.0 < 40 | 5.0 40 | ug/l ug/l | 1 1 | | 11/12/09 EAL 11/12/09 EAL | | SW846 3010A ² SW846 3010A ² |

(1) Instrument QC Batch: MA11179

(2) Prep QC Batch: MP14407

Page 1 of 1

2.3

N



| Client Sample ID: | INFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M87144-3 | Date Sampled: | 11/09/09 |
| Matrix: | AQ - Influent | Date Received: | 11/09/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
| General Chemistry | | | |

Report of Analysis

5

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|-----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 11/09/09 15:38 | CF | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 11/12/09 13:06 | EAL | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 11/10/09 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 11/11/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)





Section 3

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Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody



Parameter Certifications

| Job Number: | M87144 |
|-------------|--|
| Account: | DRAKEPET Drake Petroleum Co., Inc. |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA |

The following parameters included in this report are certified by the state of MA.

| Parameter | CAS# | Method | Mat | Certification Status |
|-------------------------|------|------------|-----|---|
| Solids, Total Suspended | | SM21 2540D | AQ | Accutest is certified for this parameter. |





| 7 | | | | | | | | | | |
|---|---|---|---|---|--|------|--------------|--|---|--|
| A | С | C | a | - | | | C | | ē | |

CHAIN OF CUSTODY

| ACCUTEST | | | | 495 11 | CHNOI M | | | OUGH | | | | DING | UNE | | | | | | | | | | |
|--|--|-----------|-------------------|--------------|-----------------|--------|---------|---------------|--------|---------------|--------|----------|---------|------------|---------|-----------------|--------------|--------------|-------------------------|-------------------------|--------------|---------------------|--------|
| | | | | | TEL: 5 | | | | | | | 7753 | | | | Accute | st Job # | , | | | | 118714 | u |
| Laboratories | | | | | | | | | | | | | | | | Accute | st Quot | e # | | | | _//0//// | 4 |
| Client / Reporting Information | | | Pro | ect Info | rmation | | | | | | | | | | | | Requ | ested / | Analys | is | | Matrix Code: | s |
| Company Name | | Project N | | | | | | | | | | | | | | | | T | 1 | | | DW- Drinking W | /ater |
| Drake Petroleum Company, Inc. | | P.C. N | 0007280/ | Brimfie | ld Sund | осо | | | | | | | | | | | | | | | | GW- Ground W | /ater |
| Address | | Street | | | | | | | | | | | | | | E. | | | | | | WW- Water | · |
| P.O. Box 866 221 Quinebaug Road | | Routes | 19 and 2 | 0 | | | | | | | | | | | | Naph | | | | | | SW- Surface W | /ater |
| City State | Zip | City | | | | | State | | | | | | | | | Ш | 1 | | 1 | | | SO- Soil | |
| North Grosvenordale CT 6255 | | Brimfie | dd | | | | ма | | | | | | | | | TAME, | | | | | | SL-Sludge Ol-Oil | |
| Project Contact: | mail | Project # | | | | | W/A | | | | | | | | | 5 | | | 1 | 1 | | LIQ- Other Liquid | |
| Mrs. Bronda Grawford Lee Smith | | 5745-0 | | | | | | | | | | | | | | TBA, | | | | ert | | | |
| Phone # | | Fax # | ž | | | | | | | | | | | | | m | | | Ē | vaf | | AIR- Air | |
| | | | | | | | | | | | | | | | | ā | | 1 | iva i | lexe | | | |
| Samplers's Name MARCK HAGEE | | Client Pu | ırchase Orde | r# | | | | | | | | | | | | щ | | | Chromiumr III trivalent | Chromiumr VI Hexavalent | | SOL-Other So | blid |
| Accutest | | Collect | ion | 1 | | Nur | nber | of pre | serv | ed E | Bottle | S | | | | Ew . | | 364 | L. | Ē | Ee. | WP-Wipe | 110 |
| Sample # | | | |] | | | тÌ | 5 0 | u | 204 | Ŧ | | | | | Хĝ | 6 | TPH 1664 | , m | ä | ź | 1 4 1 10 7 0 | |
| Field ID / Point of SUMMA # | Date | Time | Sampled by | Matrix | # of bottles | Ŷ | NaOH | HN03 H2SO4 | NONE | NaHSO4 | MEOH | None | | | | BTEX, (8260) | TSS | ТР | Chr | ÷ | , P. | LAB USE OF | NLY |
| C EFFLUENT | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | 1120 | M.H. | 600 | 6 | 4 | | 1 | 1 | | | | | | | \vee | ĺν | 10 | 1 | 1~ | V | | |
| -2 MIDPOINT | | 1125 | | 1 | 6 | 4 | T | 1 | 1 | | | | | | | V | V | 1~ | V | V | 1 | | |
| -3 INFLUENT | V | 1130 | V | \downarrow | 6 | ц | | 1 | 1 | | | | | | | V | \checkmark | 1 | \checkmark | 1 | \checkmark | | |
| | - | | | | | | | | 1 | | | | | | | 1 | - | | 1 | | | | |
| | | | | | | | | - | + | | | | | | | - | | 1 | | | | | |
| | | | | | | | + | + | | | | _ | | - | - | | | | | - | | | |
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| | | | | | | | | | ļ | | | | | | | | | L | ļ | | | | |
| | | L | | | | | | | | | | | | | ļ | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | L | | 10C,GE 44,233 | : / |
| | | | | | | | | | | | | | | | | | | | | | | 44,253 | 1 |
| Turnaround Time (Business days) Std. 14 Business Days Approx | | | Standa | | liverable | Inform | nation | | | | | | | | | | С | ommen | ts / Rem | harks | | | |
| 10 Day RUSH | ved By:/ Date: | | | ercial "B' | | | | | | | | | P.C. | No0072 | ۹0/ D+ | imfiel | d Sun | oco P | outes | 10 and | 120 Br | imfield, MA | |
| | / Per USEPA | | - · · | eliverable | | | | | | | | | 1.0.1 | 100072 | 00/ 01 | miner | u oun | 000, R | outos | 17 un | 120, 01 | inficia, Mit | |
| 3 Day EMERGENCY | FUIDGEFA | | State F | | | | | | | | | | Emai | l lab ran | orto to | . Iomi | പരംപ | orrana | | kdur | mantida | ea-inc.com and | |
| 2 Day EMERGENCY | | | Other | | | | | | | | | | | | | | | | _ | | ney (aje | a-me.com and | |
| 1 Day EMERGENCY | | | | | - | | | | | | | | 10 | UERI | K d | Щų | 50 | mp |)\e> | ۱. | | | |
| Other | | | | | | | | | | | | | | | | | | • | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Emergency T/A data available VIA Lablink | | | | | | | | | | | | | | meet N | 1ADE | PGW | -1 St | andar | ds | | | | |
| Relinguished by Sampler: | Ist be docume | nted belo | Received By | e sampl | es chan | ge po | osses | sion, i | nclu | ding ned B | cour | ier deli | very. | Date Tim | e: | | | Receive | d By: | | | | |
| 1 Mal 12 13:3 | 0 14/0 | 1 | I.C. K | L | 11. | ~ | | | | | | | | | | | | | | | | | |
| Relinquished by: | Date Time: | | Receiver By | NOT P | 1- | ~ | · · · · | 2 Reli | iquist | ed B | y; | • | | Date Tim | e: | | | 2 Receive | d By: | | | | |
| , 0 | | | V ··· | | | | | | | | | | | 1 | | | | | - | | | | |
| 3 Relinguished by: | Date Time: | | 3 Received By: | | | | | 4 Cust | tody S | eal # | | | Preserv | ed where a | pplicab | le | | 4 | | On la | e _ C | poler Temp. | |
| 5 | | | 5 | | | | | | -, 0 | | | | | | | | | | | D | | ⇒ ¢ 2.5 ¢ | - |
| | | | 14 | | | | | | | | | - | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |

M87144: Chain of Custody Page 1 of 2





Accutest Laboratories Sample Receipt Summary

| Laboratories | | | | | |
|---------------------------------|-----------------------|--------|---|----------------------|-----|
| Accutest Job Number: M8714 | 44 Client: DRAKE | | Immediate Client Servi | ces Action Required: | No |
| Date / Time Received: 11/9/2 | 009 1:30:00 PM No. Co | olers: | 1 Client Service Action | n Required at Login: | No |
| Project: BRIMFIELD SUNOCC |) | | Airbill #'s: N/A | | |
| | or N | Y or N | Sample Integrity - Documentation | Y or N | |
| 1. Custody Seals Present: | | | 1. Sample labels present on bottles: | | |
| 2. Custody Seals Intact: | | | 2. Container labeling complete: | | |
| Cooler Temperature | Y or N | | 3. Sample container label / COC agree: | | |
| 1. Temp criteria achieved: | | | Sample Integrity - Condition | Y or N | |
| 2. Cooler temp verification: | Infared gun | | 1. Sample recvd within HT: | | |
| 3. Cooler media: | Ice (bag) | | 2. All containers accounted for: | | |
| Quality Control Preservation | Y or N N/A | | 3. Condition of sample: | Intact | |
| 1. Trip Blank present / cooler: | | | Sample Integrity - Instructions | Y or N | N/A |
| 2. Trip Blank listed on COC: | | | 1. Analysis requested is clear: | | |
| 3. Samples preserved properly: | | | 2. Bottles received for unspecified tests | | |
| 4. VOCs headspace free: | | | 3. Sufficient volume rec'd for analysis: | | |
| | | | 4. Compositing instructions clear: | | ✓ |
| I | | | 5. Filtering instructions clear: | | ✓ |

Accutest Laboratories V:508.481.6200

Comments

495 Technology Center West, Bldg One F: 508.481.7753 Marlborough, MA www/accutest.com

M87144: Chain of Custody Page 2 of 2







12/16/09

Technical Report for

Drake Petroleum Co., Inc.

CEA:Sunoco Routes 19 and 20 Brimfield MA

PC# 007280

Accutest Job Number: M87733

Sampling Date: 12/02/09

Report to:

Corporate Environmental Advisors

KDuprey@cea-inc.com

ATTN: Kimberly Duprey

Total number of pages in report: 15



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.

tand

Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (2502) RI (00071) ME (MA0136) FL (E87579) NY (11791) NJ (MA926) NC (653) IL (200018) NAVY USACE This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.







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| 2.2: M87733-2: MIDPOINT | 8 |
| 2.3: M87733-3: INFLUENT | 9 |
| Section 3: Misc. Forms | 12 |
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| 3.2: Chain of Custody | 14 |



Sample Summary

Drake Petroleum Co., Inc.

Job No: M87733

CEA:Sunoco Routes 19 and 20 Brimfield MA Project No: PC# 007280

| Sample Number | Collected Date | Time By | Received | Matr Code | | Client Sample ID |
|------------------|-------------------|----------|----------|--------------|--------------|---------------------|
| M87733-1 | 12/02/09 | 08:45 MH | 12/02/09 | AQ | Effluent | EFFLUENT |
| M87733-2 | 12/02/09 | 08:50 MH | 12/02/09 | AQ | Ground Water | MIDPOINT |
| M87733-3 | 12/02/09 | 08:55 MH | 12/02/09 | AQ | Influent | INFLUENT |





Sample Results

Report of Analysis



| Client Sa Lab Samj Matrix: Method: Project: | ple ID: M87 AQ - SW8 | LUENT 733-1 · Effluent 46 8260B .:Sunoco Ro | utes 19 and 20 I | Brimfield I | Date Sample Date Receive Percent Solid MA | d: 12/02/09 | |
|---|------------------------------|---|--------------------------|------------------|--|--------------------------|-----------------------------|
| Run #1 Run #2 | File ID N38528.D | DF 1 | Analyzed 12/12/09 | By DFT | Prep Date n/a | Prep Batch n/a | Analytical Batch MSN1444 |
| Run #1 Run #2 | Purge Volun 5.0 ml | ne | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|--|---|----------------------------------|---|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane | ND ND ND ND ND ND | $\begin{array}{c} 0.50 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 5.0 \\ 2.0 \end{array}$ | ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| 994-05-8 | tert-Amyl Methyl Ether | ND | 2.0 | ug/l |
| 75-65-0 | Tert Butyl Alcohol | ND | 20 | ug/l |
| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
| 1868-53-7 | Dibromofluoromethane | 86% | | 70-130% |
| 2037-26-5 | Toluene-D8 | 95% | | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 88% | | 70-130% |

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



| Client Sample ID: EFFLUENT | |
|--|--|
| Lab Samula ID: M97722.1 Data Samulad: 12/02/00 | |
| Lab Sample ID: M87733-1 Date Sampled: 12/02/09 | |
| Matrix: AQ - Effluent Date Received: 12/02/09 | |
| Percent Solids: n/a | |
| Project: CEA:Sunoco Routes 19 and 20 Brimfield MA | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|----------|--------|-----|-------|----|----------|-------------|--------------------------|--------------------------|
| Chromium | < 10 | 10 | ug/l | 1 | | 12/03/09 py | SW846 6010B 1 | SW846 3010A ² |
| Iron | < 100 | 100 | ug/l | 1 | 12/03/09 | 12/03/09 py | SW846 6010B ¹ | SW846 3010A ² |
| Lead | < 5.0 | 5.0 | ug/l | 1 | 12/03/09 | 12/03/09 ру | SW846 6010B ¹ | SW846 3010A ² |
| Nickel | < 40 | 40 | ug/l | 1 | 12/03/09 | 12/03/09 PY | SW846 6010B ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA11253

(2) Prep QC Batch: MP14532

Page 1 of 1

2.1

N



| General Chemistry | | | | |
|-------------------|---|------------------------|----------|--|
| Project: | CEA: Sunoco Routes 19 and 20 Brimfield MA | | | |
| | | Percent Solids: | n/a | |
| Matrix: | AQ - Effluent | Date Received: | 12/02/09 | |
| Lab Sample ID: | M87733-1 | Date Sampled: | 12/02/09 | |
| Client Sample ID: | EFFLUENT | | | |

| Report o | f Analysis |
|----------|------------|
| | |

Page 1 of 1

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 12/02/09 16:49 | CF | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 12/03/09 18:31 | PY | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 12/04/09 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 12/04/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

| Client Sa Lab Sam Matrix: Method: Project: | ple ID: M8' AQ SW | DPOINT 7733-2 - Ground Wa 846 8260B A:Sunoco Ro | ater utes 19 and 20 F | Brimfield 1 | Percent Soli | ed: 12/02/09 | |
|--|-----------------------------|---|--------------------------|------------------|-------------------------|--------------------------|-----------------------------|
| Run #1 Run #2 | File ID N38529.D | DF 1 | Analyzed 12/12/09 | By DFT | Prep Date n/a | Prep Batch n/a | Analytical Batch MSN1444 |
| Run #1 Run #2 | Purge Volu 5.0 ml | ne | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|-----------|-------------------------|--------|------------------------------------|---------|
| 71-43-2 | Benzene | ND | $0.50 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0$ | ug/l |
| 108-88-3 | Toluene | ND | | ug/l |
| 100-41-4 | Ethylbenzene | ND | | ug/l |
| 1330-20-7 | Xylene (total) | ND | | ug/l |
| 1634-04-4 | Methyl Tert Butyl Ether | 3.6 | 1.0 | ug/l |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/l |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | ug/l |
| 994-05-8 | tert-Amyl Methyl Ether | ND | 2.0 | ug/l |
| 75-65-0 | Tert Butyl Alcohol | ND | 20 | ug/l |
| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
| 1868-53-7 | Dibromofluoromethane | 86% | | 70-130% |
| 2037-26-5 | Toluene-D8 | 95% | | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 87% | | 70-130% |

- B = Indicates analyte found in associated method blank
- $N = \ Indicates \ presumptive \ evidence \ of \ a \ compound$

| Client San Lab Samj Matrix: Method: Project: | ple ID: M A S' | NFLUENT 187733-3 Q - Influent W846 8260B EA:Sunoco Rot | utes 19 and 20 H | Brimfield N | Date Sampled Date Received Percent Solid MA | d: 12/02/09 | |
|--|----------------------------|--|--------------------------|------------------|--|--------------------------|-----------------------------|
| Run #1 Run #2 | File ID N38530.D | DF 0 1 | Analyzed 12/12/09 | By DFT | Prep Date n/a | Prep Batch n/a | Analytical Batch MSN1444 |
| Run #1 Run #2 | Purge Vol 5.0 ml | lume | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|-----------|-------------------------|--------|--------|---------|
| 71-43-2 | Benzene | 3.3 | 0.50 | ug/l |
| 108-88-3 | Toluene | 4.2 | 1.0 | ug/l |
| 100-41-4 | Ethylbenzene | 4.0 | 1.0 | ug/l |
| 1330-20-7 | Xylene (total) | 20.0 | 1.0 | ug/l |
| 1634-04-4 | Methyl Tert Butyl Ether | 5.4 | 1.0 | ug/l |
| 91-20-3 | Naphthalene | 10 | 5.0 | ug/l |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | ug/l |
| 994-05-8 | tert-Amyl Methyl Ether | ND | 2.0 | ug/l |
| 75-65-0 | Tert Butyl Alcohol | ND | 20 | |
| | 5 | | | ug/l |
| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
| 1868-53-7 | Dibromofluoromethane | 87% | | 70-130% |
| 2037-26-5 | Toluene-D8 | 95% | | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 87% | | 70-130% |

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



| Client Sample ID: | INFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M87733-3 | Date Sampled: | 12/02/09 |
| Matrix: | AQ - Influent | Date Received: | 12/02/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|------------------|--------------|-----------|--------------|-------------|----------------------|----------------------------|--|--|
| Chromium Iron | < 10 4720 | 10 100 | ug/l ug/l | 1 1 | | 12/03/09 py 12/03/09 py | SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² |
| Lead Nickel | 5.7 < 40 | 5.0 40 | ug/l ug/l | 1 1 1 | 12/03/09 12/03/09 | 12/03/09 PY | SW846 6010B ¹ SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² |

(1) Instrument QC Batch: MA11253

(2) Prep QC Batch: MP14532

Page 1 of 1

2.3

N



| Client Sample ID: | INFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M87733-3 | Date Sampled: | 12/02/09 |
| Matrix: | AQ - Influent | Date Received: | 12/02/09 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
| General Chemistry | | | |

| Report of Analys | is |
|-------------------------|----|
|-------------------------|----|

Page 1 of 1

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 12/02/09 16:49 | CF | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 12/03/09 18:36 | PY | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 12/04/09 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 12/04/09 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)



Section 3

ω

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody



Parameter Certifications

| Job Number: | M87733 |
|-------------|--|
| Account: | DRAKEPET Drake Petroleum Co., Inc. |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA |

The following parameters included in this report are certified by the state of MA.

| Parameter | CAS# | Method | Mat | Certification Status |
|-------------------------|------|------------|-----|---|
| Solids, Total Suspended | | SM21 2540D | AQ | Accutest is certified for this parameter. |





| | | 5Т. | | | C | 495 TÉ | | LOGY (IARLB | CENT | TER V UGH | WES1 H, MA | ST * B 0175 | BUILD 52 | DING | | ; | | ." [| Accuter | st Job # | | | | | <u>r</u> ~ | 182732 |
|--|---|----------------|--------------------------|--------------|---|-----------------------------------|-----------------|-----------------|--------------|--------------|---------------|-------------------|-------------|--------------|--------|------------|------------|--------------------|---|----------|------------------------------|-------------------------|-------------------------|---------|------------|--|
| | Laboratori | es | | | | | TEL: 50 |)8-4 0 1 | -6200 |) * r, | AX: J | jU8- 4 | 81-71 | 155 | | | | ł | Accute | st Quote | * | | — | | | 01127 |
| Company Na Drake Petr Address P.O. Box City North Gro Project Cont | troleum Company, Inc. (866 221 Quinebaug Road State osvenordale CT | 6255 E-mail | Zip | Street | Name: 10007280/ 1 s 19 and 20 eld | | | 10C0 \$1 | State MA | | | | | | 9 | | | | EDB, TBA, TAME, Naph | Reque | ested A | | | | | Matrix Codes DW- Drinking Water GW- Ground Water WW- Water SW- Surface Water SO- Soil SL-Sludge OI-Oil LIO- Other Liquid |
| Mrs. Bron Phone # Samplers's P | | | | Fax # | urchase Order | :r# | | | nber of | of pre | eserv | red B | ottle | | | | | | MTBE, | | 664 | Chromiumr III trivalent | Chromiumr VI Hexavalent | Fe | | AIR- Air SOL-Other Solid WP-Wipe |
| Sample # | Field ID / Point of SUMMA # | | Date | Time | Sampled by | y Matrix | # of bottles | | NaOH HNO3 | 1-1- | | 41 | - | None | | | | | BTEX, (8260) | | TPH 1664 | Chrom | Chrom | Pb, Ni, | | LAB USE ONLY |
| -) | EFFLUENT | ! | 12/2/05 | fi 0845 | | GW | 6 | 4 | | \perp | \perp | Ц | -+ | \downarrow | | <u> </u> | <u> </u> | | X | X | X | X | 쓰 | X | ــــ | |
| -2 | MIDPOINT | | | 0850 | | 1 | 3 | 3 | | \perp | | \square | | _ | | \square' | | | X | • | <u> </u> | | | 1 | ╞ | <u> </u> |
| -3 | INFLUENT | <u> </u> | $\overline{\mathbf{V}}$ | 0855 | ↓ | 4 | 6 | 4 | 1 | + | 11 | ₋∔ | + | + | | ' | <u> </u> ' | \square | X | X | X | X | X | Þ | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ļ | | | <u> </u> | +' | | | <u> </u> _' | \mathbb{H} | +- | + | + | H | + | + | | <u> </u> ' | –' | $\left - \right $ | | \vdash | | | \vdash | ┢ | \vdash | |
| · | | | <u> </u> | + | <u> </u> | <u> </u> | <u>+</u> ! | \uparrow | + | t | ++ | \square | 1 | \pm | - | | | | | | | | | | | |
| | Turneround Time (Business days) Std. 14 Business Days 10 Day RUSH 5 Day RUSH 3 Day EMERGENCY | Approved | i By:/Date: Per USEPA | | h | ard nercial "B" Deliverable | | Informa | tion | <u> </u> | | | | | i | Ī | | | | d Sund | | outes | 19 an | | ~ . | field, MA |
| Emer |] 2 Day EMERGENCY] 1 Day EMERGENCY] Other gency T/A data available VIA Labl | | | | Other_ | | - ` | - | | | | | | | | | meet M | IADE | <u>P G </u> | /-1 St: | andar | ds | | | Ц] G | DIBA-15A, PA, 414 |
| Relinquish 1 Relinquish | thed by Sampler: | - | | nented below | each time Received By: 1 Received By | sample | Ban | <u>je pos</u> | sessio | Relin | Includ | hed By: | y: . | er de | livery | | Date Time | | | | Receive 2 Receive 4 | - | | | | |
| 3 Relinguish | hed by: | +-+ | Date Time: | | 3 Received By: 5 | | | — | | 4 Cus | istody Se | eal# | | | | Preserve | ed where a | pplicable | 0 | | 4 | | 0n1 | | Coole | ζ.Υ |

M87733: Chain of Custody Page 1 of 2



3.2 3



Accutest Laboratories Sample Receipt Summary

| Laboratories | | | | | | |
|---------------------------------|-----------------|--------------|---|--------------|-----------|-----|
| Accutest Job Number: M8773 | 33 Client: Cl | EA | Immediate Client Servi | ces Action I | Required: | No |
| Date / Time Received: 12/2/2 | 009 1:30:00 PM | No. Coolers: | 1 Client Service Action | on Required | at Login: | No |
| Project: BRIMFIELD SUNOCC |) | | Airbill #'s: N/A | | | |
| Cooler Security Y | or N | Y or N | Sample Integrity - Documentation | Yo | or N | |
| 1. Custody Seals Present: | 3. COC Pres | | 1. Sample labels present on bottles: | ~ | | |
| 2. Custody Seals Intact: | 4. Smpl Dates/1 | Time OK 🔽 🗌 | 2. Container labeling complete: | ✓ | | |
| Cooler Temperature | Y or N | | 3. Sample container label / COC agree: | | | |
| 1. Temp criteria achieved: | | | Sample Integrity - Condition | Y | or N | |
| 2. Cooler temp verification: | Infared gun | | 1. Sample recvd within HT: | ✓ | | |
| 3. Cooler media: | Ice (bag) | | 2. All containers accounted for: | ✓ | | |
| Quality Control Preservation | Y or N N/A | | 3. Condition of sample: | In | tact | |
| 1. Trip Blank present / cooler: | | | Sample Integrity - Instructions | Yc | or N | N/A |
| 2. Trip Blank listed on COC: | | | 1. Analysis requested is clear: | ✓ | | |
| 3. Samples preserved properly: | | | 2. Bottles received for unspecified tests | | ✓ | |
| 4. VOCs headspace free: | | | 3. Sufficient volume rec'd for analysis: | ✓ | | |
| | | | 4. Compositing instructions clear: | | | ✓ |
| | | | 5. Filtering instructions clear: | | | - |

Comments

Accutest Laboratories V:508.481.6200 495 Technology Center West, Bldg One F: 508.481.7753 Marlborough, MA www/accutest.com

M87733: Chain of Custody Page 2 of 2









01/14/10

Technical Report for

Drake Petroleum Co., Inc.

CEA:Sunoco Routes 19 and 20 Brimfield MA

PC# 007280

Accutest Job Number: M88411

Sampling Date: 01/04/10

Report to:

Corporate Environmental Advisors

KDuprey@cea-inc.com

ATTN: Kimberly Duprey

Total number of pages in report: 15



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.

tand

Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (2502) RI (00071) ME (MA0136) FL (E87579) NY (11791) NJ (MA926) NC (653) IL (200018) NAVY USACE This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.







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Sample Summary

Drake Petroleum Co., Inc.

Job No: M88411

CEA:Sunoco Routes 19 and 20 Brimfield MA Project No: PC# 007280

| Sample Number | Collected Date | Time By | Received | Matr Code | | Client Sample ID |
|------------------|-------------------|----------|----------|--------------|--------------|---------------------|
| M88411-1 | 01/04/10 | 09:00 MH | 01/04/10 | AQ | Effluent | EFFLUENT |
| M88411-2 | 01/04/10 | 09:04 MH | 01/04/10 | AQ | Ground Water | MIDPOINT |
| M88411-3 | 01/04/10 | 09:08 MH | 01/04/10 | AQ | Influent | INFLUENT |





Sample Results

Report of Analysis



| Client Sa Lab Sam Matrix: Method: Project: | ple ID: M A(SV | FLUENT 88411-1 Q - Effluent V846 8260B EA:Sunoco Ro | utes 19 and 20 I | Brimfield | Date Sample Date Receive Percent Solid MA | d: 01/04/10 | |
|--|----------------------------|---|--------------------------|-----------------|--|--------------------------|------------------------------------|
| Run #1 Run #2 | File ID G96193.D | DF 1 | Analyzed 01/05/10 | By EL | Prep Date n/a | Prep Batch n/a | Analytical Batch MSG3893 |
| Run #1 Run #2 | Purge Vol 5.0 ml | ume | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|--|---|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | ND ND ND ND ND ND ND ND | $\begin{array}{c} 0.50 \\ 1.0 \\ 1.0 \\ 1.0 \\ 5.0 \\ 2.0 \\ 2.0 \\ 20 \end{array}$ | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 2037-26-5 460-00-4 | Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | Run# 1 102% 107% 117% | 20 Run# 2 | Limits 70-130% 70-130% 70-130% |

N = Indicates presumptive evidence of a compound



| Client Sample ID: | EEEI HENT | | |
|-------------------|--|------------------------|----------|
| Chefft Sample ID: | EFFLUENI | | |
| Lab Sample ID: | M88411-1 | Date Sampled: | 01/04/10 |
| Matrix: | AQ - Effluent | Date Received: | 01/04/10 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|----------|--------|-----|-------|----|----------|--------------|--------------------------|--------------------------|
| Chromium | < 10 | 10 | ug/l | 1 | | 01/06/10 EAL | 1 | SW846 3010A ² |
| Iron | < 100 | 100 | ug/l | 1 | 01/05/10 | 01/06/10 EAL | SW846 6010B ¹ | SW846 3010A ² |
| Lead | < 5.0 | 5.0 | ug/l | 1 | 01/05/10 | 01/06/10 Eal | SW846 6010B ¹ | SW846 3010A ² |
| Nickel | < 40 | 40 | ug/l | 1 | 01/05/10 | 01/06/10 Eal | SW846 6010B ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA11360

(2) Prep QC Batch: MP14660

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2.1

N



| Client Sample ID: | EFFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M88411-1 | Date Sampled: | 01/04/10 |
| Matrix: | AQ - Effluent | Date Received: | 01/04/10 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
| | | | |
| General Chemistry | | | |

Report of Analysis

_____**y**

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 01/04/10 15:40 | | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | | | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbons | | 4.1 | mg/l | l | 01/07/10 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 01/05/10 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)



| Client Sa Lab Samj Matrix: Method: Project: | ple ID: M8 AQ SW | DPOINT 8411-2 - Ground Wa 846 8260B A:Sunoco Ro | ater utes 19 and 20 I | Brimfield | Date Receive Percent Solie | Date Sampled:01/04/10Date Received:01/04/10Percent Solids:n/a | | |
|---|-----------------------------|---|--------------------------|-----------------|-------------------------------|---|-----------------------------|--|
| Run #1 Run #2 | File ID G96194.D | DF 1 | Analyzed 01/05/10 | By EL | Prep Date n/a | Prep Batch n/a | Analytical Batch MSG3893 | |
| Run #1 Run #2 | Purge Volu 5.0 ml | me | | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|------------------------|---|-----------|-------------|--------------|
| 71-43-2 108-88-3 | Benzene Toluene | ND ND | 0.50 1.0 | ug/l ug/l |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l |
| 1330-20-7 1634-04-4 | Xylene (total) Methyl Tert Butyl Ether | ND 2.4 | 1.0 1.0 | ug/l ug/l |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/l |
| 106-93-4 994-05-8 | 1,2-Dibromoethane tert-Amyl Methyl Ether | ND ND | 2.0 2.0 | ug/l ug/l |
| 75-65-0 | Tert Butyl Alcohol | ND | 20 | ug/l |
| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
| 1868-53-7 | Dibromofluoromethane | 102% | | 70-130% |
| 2037-26-5 | Toluene-D8 | 108% | | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 118% | | 70-130% |

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

| Client Sat Lab Samj Matrix: Method: Project: | ple ID: M A(SV | IFLUENT 88411-3 Q - Influent V846 8260B EA:Sunoco Ro | outes 19 and 20 I | Brimfield | Percent Solid | d: 01/04/10 | |
|--|----------------------------|--|--------------------------|-----------------|-------------------------|--------------------------|------------------------------------|
| Run #1 Run #2 | File ID G96195.D | DF 1 | Analyzed 01/05/10 | By EL | Prep Date n/a | Prep Batch n/a | Analytical Batch MSG3893 |
| Run #1 Run #2 | Purge Vol 5.0 ml | ume | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---------------------|--|----------|------------------|--------------|
| 71-43-2 | Benzene | ND | 0.50 | ug/l |
| 108-88-3 | Toluene | 2.3 | 1.0 | ug/l |
| 100-41-4 | Ethylbenzene | 2.1 | 1.0 | ug/l |
| 1330-20-7 | Xylene (total) | ND | 1.0 | ug/l |
| 1634-04-4 | Methyl Tert Butyl Ether | 2.9 | 1.0 | ug/l |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/l |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | ug/l |
| 994-05-8 75-65-0 | tert-Amyl Methyl Ether Tert Butyl Alcohol | ND ND | 2.0 2.0 20 | ug/l ug/l |
| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
| 1868-53-7 | Dibromofluoromethane | 104% | | 70-130% |
| 2037-26-5 | Toluene-D8 | 107% | | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 109% | | 70-130% |

N = Indicates presumptive evidence of a compound



M88411

| Client Sample ID: | INFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M88411-3 | Date Sampled: | 01/04/10 |
| Matrix: | AQ - Influent | Date Received: | 01/04/10 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|------------------------------------|-------------------------------|------------------------|------------------------------|-------------|----------------------|--|--|--|
| Chromium Iron Lead Nickel | < 10 2320 < 5.0 < 40 | 10 100 5.0 40 | ug/l ug/l ug/l ug/l | 1 1 1 | 01/05/10 01/05/10 | 01/06/10 EAL 01/06/10 EAL 01/06/10 EAL 01/06/10 EAL | SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² SW846 3010A ² SW846 3010A ² |

(1) Instrument QC Batch: MA11360

(2) Prep QC Batch: MP14660

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2.3

N



Accutest Laboratories

| Client Sample ID: | INFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M88411-3 | Date Sampled: | 01/04/10 |
| Matrix: | AQ - Influent | Date Received: | 01/04/10 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
| General Chemistry | | | |

| Report of Analys | is |
|-------------------------|----|
|-------------------------|----|

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|-----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 01/04/10 15:40 | CF | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 01/06/10 13:21 | EAL | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 01/07/10 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 01/05/10 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

2.3

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M88411 Laboratories



Section 3

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Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody



Parameter Certifications

| Job Number: | M88411 |
|-------------|--|
| Account: | DRAKEPET Drake Petroleum Co., Inc. |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA |

The following parameters included in this report are certified by the state of MA.

| Parameter | CAS# | Method | Mat | Certification Status |
|-------------------------|------|------------|-----|---|
| Solids, Total Suspended | | SM21 2540D | AQ | Accutest is certified for this parameter. |





| | | | | | Cl | HA 195 TEC | IN CHNOLO | GY CE | ENTE | R W | EST | * BUIL | | Y ; ONE | | | | | | | | | | |
|-----------------------------|---|----------------|-----------------------|---------------------------|-----------------|----------------------|-----------------|------------------|----------|--------------|------------------|--------------------|--------|------------|------------|---------------|-----------------------|--------------|------------|-------------------------|-------------------------|---------|----------|--|
| | ACCUTES | œ | | | | | MA TEL: 50 | RLBO | | | | | 7753 | | | | Accute | st Job # | | | | MS | 884 | 11 |
| | Laboratori | e s | | | | | IEL. 30 | 8481-0 | 200 | 17 | A. 50 | 0 101 | | | | | Accute | st Quote | * | | | | | |
| | | | | | Proje | ct Infor | mation | | | | | | | | | | | Reque | ested A | nalysi | 5 | - 1 | | Matrix Codes |
| Company Na | Client / Reporting Information | 1 | | | | | | со | | | | | | | | | e. | | | | | | | DW- Unnking Water GW- Ground Water WW- Water |
| Address P.O. Box City | 866 221 Quinebaug Road State | | | Street Routes_ City | 19 and 20 | | | Sta | te | | | | _ | | | | ME, Nar | | | | | | | SW- Surface Water SO- Soil SL-Sludge |
| 0) | svenordale CT | 6255 E-mail | | Brimfield Project # | d | | | M/ | ۹ | | | | _ | 9 | | | BA, TAI | | | | ŧ | | | OI-Oil LIQ- Other Liquid |
| MrsBren Phone # | de Grewhord Lee Smith | | | 5745-05 Fax # | 5 | | | | | | | | - | | | | EDB, TBA, TAME, Naph | | | Chromiumr III trivalent | Chromiumr VI Hexavalent | | | AIR- Air |
| Samplers's I | Name MARK HAGIE | | | | chase Order | # | | Numb | er of | pres | erve | d Bott | es | | | | BTEX, MTBE, (8260) | | 664 | iumr 111 t | iumr VI | Fe | | SOL-Other Solid WP-Wipe |
| Accutest Sample # | | | Date | Collecti | Sampled by | Matrix | # of bottles | HOH NaOH | 1 | H2SO4 | | MEOH NaHSO4 | None | | | | - | | TPH 1664 | Chrom | | Pb, Ni, | | LAB USE ONLY |
| -1 | Field ID / Point of SUMMA# | | 1/4/10 | 0900 | | 64 | 6 | 4 | 1 | | 1 | | | _ | | | X | X | X | X | X | X | | |
| -2 | MIDPOINT | | | 0904 | | \downarrow | 3 | 3 11 | + | | $\left \right $ | | | | + | - + | x | X | X | X | X | x | | |
| -3 | INFLUENT | | | ମଜ | V_ | v | 6 | 4 | 1 | - | 1. | | - | | | | 1 | 1 | | | | 1 | | |
| | | | | | | | <u> </u> | $\left \right $ | ┢ | + | | | | | | | | | | | | | | |
| | | | | | | | | | T | ŀ | | | | | · | | | | | | | L | | |
| | | | | | | | | | | i | | | | | | | \ \ | _ | | | <u> </u> | | | <u> </u> |
| | | | | | | | | | | | | | 1 | | | _ | - | - | | | + | - | | |
| | | | | | | | | | | | | | | | | | + | - | | | | | <u> </u> | |
| | | | | | | | eliverable | | ling | <u> </u> | | | L | I | ┥┯┸ | | | | Commer | nts / Rei | marks | | | |
| | Turnaround Time (Business days) Std. 14 Business Days | Approved | By:/ Date: | | Standa | | | njoima | | 1 | | | | | P.C. No | 007280/1 | Brimfi | ld Su | noco, I | Routes | 19 ar | nd 20, | Brim | ificid, MA |
| |] 10 Day RUSH] 5 Day RUSH] 3 Day EMERGENCY | 7 Day P | er USEPA | | Disk D | eliverabi Forms | | | | | | | | | Email I | ab reports | to: lsn | nith@• | warren | eq.cor | n, kdı | prey(| ii)cea- | -inc.com and |
| | 2 Day EMERGENCY 1 Day EMERGENCY | | | | Other | | _ | | | | | | | | | | | | | | | ur | IOB | ,5D,2H3 |
| Emar | Other gency T/A data available VIA Lab | link | | _ | | ~ | | <u> </u> | | | | | | | | neet MAI | DEP G | <u>w-1 s</u> | tanda | rds | | | | |
| - | Sample Cus | stody must | be docume | ented belo | Received B | ne samp | les char | ige pos | sess | ion, Reli | inclu | ding co ned By: | ourier | delive | <u>ry.</u> | Date Time: | | | Récei | ved By: | | | | |
| | shed by Singpler | 12:45 | 1/4/10 Opte / ime: | | 1 Received | lin | H | | <u> </u> | 2 Reli | inquis | ied By: | | | | Date Time: | | | 2 Recei | ved By: | | | | |
| 3 Relinqui | shed by: | | Date Time: | | 3 Received B | y: | | | | 4 Cus | itody S | ieal # | | | Preserved | i where appli | cable | | 4 | | | | | ail |
| 5 | | | | | 5 | | | | | | | | _ | | | | | | - | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |

M88411: Chain of Custody Page 1 of 2



3.2

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Accutest Laboratories Sample Receipt Summary

| Accutest Job Number: M88411 Client: DRAKE Immediate Client Services Action Requires No Date / Time Received: 1/4/2010 12:45:00 PM No. Coolers: 1 Client Services Action Requires No Project: BRIMFIELD SUNCCO Active Action Requires Mo No 1. Custody Seals Present: Immediate Client Services Action Requires Immediate Client Services Action Requires Immediate Client Services Action Requires No 1. Custody Seals Present: Immediate Client Services Action Requires Immediate Services Action Requires Immediate Services Action Requires Actio Requires Action Requires Action Requires A | Laboratories | | | | | | | | |
|--|---------------------------------|------------------------|--|---|--------------------------|--|--|--|--|
| Project: BRIMFIELD SUNOCO Airbill #'s: NA Cooler Security Y or N Y or N 1. Custody Seals Present: 3. COC Present: 1 2. Custody Seals Intact: 4. Smpl Dates/Time OK 1 2. Custody Seals Intact: 4. Smpl Dates/Time OK 1 3. Cooler Temperature Y or N 1. Temp criteria achieved: 1 2. Cooler temp verification: Infared gun 3. Cooler media: Ice (bag) Quality Control Preservation Y or N N/A 1. Trip Blank present / cooler: 1 2. Trip Blank listed on COC: 1 3. Samples preserved properly: 1 4. VOCs headspace free: 1 Y or Samples 3. Sufficient volume rec'd for analysis: 4. Compositing instructions clear: 1 | Accutest Job Number: M884 | 11 Client: DRAKE | Immediate Client Services Action Required: | | | | | | |
| Cooler Security Y or N Y or N 1. Custody Seals Present: 3. COC Present: 4. Smpl Dates/Time OK Custody Seals Intact: 4. Smpl Dates/Time OK Cooler Temperature Y or N Sample Integrity - Documentation Sample Integrity - Documentation | Date / Time Received: 1/4/20 |)10 12:45:00 PM No. Co | olers: | 1 Client Service Acti | on Required at Login: No | | | | |
| 1. Custody Seals Present: 3. COC Present: 1. Sample labels present on bottles: 2. Container labeling complete: 3. Sample labels present on bottles: 2. Container labeling complete: 3. Sample labels present on bottles: 2. Container label, COC agree: 1. Sample labels present on bottles: 2. Container label, COC agree: 1. Sample labels present on bottles: 2. Container label, COC agree: 1. Sample labels present on bottles: 2. Container label, COC agree: 1. Sample labels present on bottles: 2. Container label, COC agree: 1. Sample present on bottles: 2. Container label, COC agree: 2. All container label, COC agree: 2. All containers accounted for: 3. Sample present, cooler: 1. Analysis requested is clear: | Project: BRIMFIELD SUNOCO |) | Airbill #'s: N/A | | | | | | |
| 1. Outstudy Seals Present. Image: Control Present on bottles: Image: Container labels present on bottles: Image: Container labels present on bottles: 2. Custody Seals Intact: Image: Container labels present on bottles: Image: Container labels present on bottles: Image: Container labels present on bottles: 2. Custody Seals Intact: Image: Container labels present on bottles: Image: Container labels present on bottles: Image: Container labels present on bottles: 1. Temp criteria achieved: Image: Container labels present on bottles: Image: Container labels present on bottles: Image: Container labels present on bottles: 2. Cooler temp verification: Infared gun Image: Container label, COC agree: Image: Container label, COC agree: Image: Container label, COC agree: 3. Cooler media: Ice (bag) Image: Container label, COC agree: Image: Container label, COC a | Cooler Security Y | or N | Y or N | Sample Integrity - Documentation | Y or N | | | | |
| 2. Container labeling complete: 2. Container labeling complete: 2. Container labeling complete: 2. Container labeling complete: 2. Container labeling complete: 2. Container labeling complete: 1. Temp criteria achieved: ✓ 1 2. Cooler temp verification: Infared gun 3. Cooler media: Ice (bag) Quality Control Preservation Y or N 1. Trip Blank present / cooler: 1 2. Trip Blank listed on COC: 1 3. Samples preserved properly: ✓ 4. VOCs headspace free: ✓ ✓ 1 Sufficient volume rec'd for analysis: ✓ 4. Compositing instructions clear: ✓ | 1. Ouslody Oculs 1 resont. | | | 1. Sample labels present on bottles: | | | | | |
| Sample Integrity - Condition Y or N 1. Temp criteria achieved: Image: Sample Integrity - Condition Y or N 2. Cooler temp verification: Infared gun 1. Sample Integrity - Condition Image: Sample Integrity - Condition 3. Cooler media: Ice (bag) Image: Sample Integrity - Condition Image: Sample Integrity - Condition Image: Sample Integrity - Condition Quality Control Preservation Y or N N/A Image: Sample Integrity - Instructions Image: Sample Integrity - Instructions Y or N N/A 1. Trip Blank present / cooler: Image: Sample Integrity - Instructions Y or N N/A 2. Trip Blank listed on COC: Image: Sample Integrity - Instructions Y or N N/A 3. Samples preserved properly: Image: Sample Integrity - Instructions Image: Sample Integrity - Instructions Image: Sample Integrity - Instructions 4. VOCs headspace free: Image: Sample Integrity - Instructions clear: 4. VOCs headspace free: Image: Sample Integrity - Instructions clear: Image: Sample Integrity - Instructions clear: Image: Sample Integrity - Instructions clear: Image: Sample Integrity - Instructions clear: < | 2. Custody Seals Intact: | 4. Smpl Dates/Time OK | | 2. Container labeling complete: | | | | | |
| 2. Cooler temp verification: Infared gun 3. Cooler media: Ice (bag) Quality Control Preservation Y or N N/A 1. Trip Blank present / cooler: Image: Condition of sample: 2. Trip Blank listed on COC: Image: Condition of sample: 3. Samples preserved properly: Image: Condition of sample: 4. VOCs headspace free: Image: Condition of sample: 3. Sufficient volume rec'd for analysis: Image: Condition of sample: 4. VOCs headspace free: Image: Condition of sample: 5. Sufficient volume rec'd for analysis: Image: Condition of sample: 6. Compositing instructions clear: Image: Condition of sample: | Cooler Temperature | Y or N | | 3. Sample container label / COC agree: | | | | | |
| 3. Cooler media: Ice (bag) 3. Cooler media: Ice (bag) Quality Control Preservation Y or N N/A 1. Trip Blank present / cooler: Image: Control Preservation in the second secon | 1. Temp criteria achieved: | | | Sample Integrity - Condition | Y or N | | | | |
| 3. Cooler media: Ice (bag) Quality Control Preservation Y Y or N/A 1. Trip Blank present / cooler: 2. Trip Blank listed on COC: 3. Samples preserved properly: V I. VOCs headspace free: V I. VOCs headspace free: I. VOCs headspace free: <td>2. Cooler temp verification:</td> <td>Infared gun</td> <td></td> <td>1. Sample recyd within HT:</td> <td></td> | 2. Cooler temp verification: | Infared gun | | 1. Sample recyd within HT: | | | | | |
| 1. Trip Blank present / cooler: Image: Sample Integrity - Instructions Y or N N/A 2. Trip Blank listed on COC: Image: Sample Integrity - Instructions Image: Sample Integrity - Instructions Image: Sample Integrity - Instructions 3. Samples preserved properly: Image: Sample Integrity - Instructions 3. Samples preserved properly: Image: Sample Integrity - Instructions 4. VOCs headspace free: Image: Sample Integrity - Instructions clear: Image: Sample Integrity - Instructions Image: Sample Integrity - Instructions Image: Sample Integrity - Instructions 4. VOCs headspace free: Image: Sample Integrity - Instructions clear: Image: Sample Integrity - Instructions clear: Image: Sample Integrity - Instructions 4. Compositing Instructions clear: Image: Sample Integrity - Instructions clear: Image: Sample Integrity - Instructions Image: Sample Integrity - Instructions | 3. Cooler media: | Ice (bag) | | | | | | | |
| 2. Trip Blank listed on COC: Image: Integray instructions Image: Integray instructions 3. Samples preserved properly: Image: Image | Quality Control Preservation | Y or N N/A | | 3. Condition of sample: | Intact | | | | |
| 2. The blank hold of PODOL Image: Second of Podol < | 1. Trip Blank present / cooler: | | | Sample Integrity - Instructions | Y or N N/A | | | | |
| 4. VOCs headspace free: Image: Composition of the second seco | 2. Trip Blank listed on COC: | | | 1. Analysis requested is clear: | | | | | |
| 4. Compositing instructions clear: | 3. Samples preserved properly: | | | 2. Bottles received for unspecified tests | | | | | |
| | 4. VOCs headspace free: | | | 3. Sufficient volume rec'd for analysis: | | | | | |
| 5. Filtering instructions clear: | | | | 4. Compositing instructions clear: | | | | | |
| | | | | 5. Filtering instructions clear: | | | | | |

Comments

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M88411: Chain of Custody Page 2 of 2



15 of 15 ACCUTEST. M88411 Laboratories





02/11/10

Technical Report for

Drake Petroleum Co., Inc.

CEA:Sunoco Routes 19 and 20 Brimfield MA

PC# 007280

Accutest Job Number: M89086

Sampling Date: 02/03/10

Report to:

CEA dazukauskas@cea-inc.com

ATTN: Debra Zukauskas

Total number of pages in report: 15



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.

. fal Reza Pand

Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (2502) RI (00071) ME (MA0136) FL (E87579) NY (11791) NJ (MA926) NC (653) IL (200018) NAVY USACE This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.





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Sample Summary

Drake Petroleum Co., Inc.

Job No: M89086

CEA:Sunoco Routes 19 and 20 Brimfield MA Project No: PC# 007280

| Sample Number | Collected Date | Time By | Received | Matr Code | | Client Sample ID |
|------------------|-------------------|----------|----------|--------------|--------------|---------------------|
| M89086-1 | 02/03/10 | 08:30 MH | 02/03/10 | AQ | Effluent | EFFLUENT |
| M89086-2 | 02/03/10 | 08:45 MH | 02/03/10 | AQ | Ground Water | MIDPOINT |
| M89086-3 | 02/03/10 | 08:50 MH | 02/03/10 | AQ | Influent | INFLUENT |





Sample Results

Report of Analysis



| Client Sat Lab Samj Matrix: Method: Project: | ple ID: M A S | EFFLUENT M89086-1 AQ - Effluent SW846 8260B CEA:Sunoco Ro | outes 19 and 20 I | Brimfield | Percent Solie | ed: 02/03/10 | |
|--|----------------------------|---|--------------------------|-----------|-------------------------|--------------------------|-----------------------------|
| Run #1 Run #2 | File ID N39811.I | DF D 1 | Analyzed 02/05/10 | By WC | Prep Date n/a | Prep Batch n/a | Analytical Batch MSN1496 |
| Run #1 Run #2 | Purge Vo 5.0 ml | olume | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|-----------|-------------------------|--------|---------------|---------|
| 71-43-2 | Benzene | ND | $0.50 \\ 1.0$ | ug/l |
| 108-88-3 | Toluene | ND | | ug/l |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l |
| 1330-20-7 | Xylene (total) | ND | 1.0 | ug/l |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/l |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | ug/l |
| 994-05-8 | tert-Amyl Methyl Ether | ND | 2.0 | ug/l |
| 75-65-0 | Tert Butyl Alcohol | ND | 20 | ug/l |
| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
| 1868-53-7 | Dibromofluoromethane | 99% | | 70-130% |
| 2037-26-5 | Toluene-D8 | 101% | | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 105% | | 70-130% |

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



Accutest Laboratories

| Client Sample ID: | EFFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M89086-1 | Date Sampled: | 02/03/10 |
| Matrix: | AQ - Effluent | Date Received: | 02/03/10 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|--------------|----------------|-----------|--------------|----|----------|------------------------------|--|--|
| Chromium | < 10 | 10 100 | ug/l | 1 | | 02/04/10 EAL 02/05/10 EAL | | SW846 3010A ³ SW846 3010A ³ |
| Iron Lead | < 100 < 5.0 | 5.0 | ug/l ug/l | 1 | | 02/03/10 EAL 02/04/10 EAL | SW846 6010B ⁻ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ³ |
| Nickel | < 40 | 40 | ug/l | 1 | 02/04/10 | 02/04/10 Eal | SW846 6010B ¹ | SW846 3010A ³ |

(1) Instrument QC Batch: MA11438

(2) Instrument QC Batch: MA11441

(3) Prep QC Batch: MP14771

Accutest Laboratories

| Client Sample ID: | EFFLUENT | | |
|-------------------|--|------------------------|----------|
| Lab Sample ID: | M89086-1 | Date Sampled: | 02/03/10 |
| Matrix: | AQ - Effluent | Date Received: | 02/03/10 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
| | | | |
| General Chemistry | | | |

Report of Analysis

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|-----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 02/03/10 17:58 | CF | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 02/04/10 23:15 | EAL | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 02/10/10 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 02/08/10 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

2.1 N



| Client Sa Lab Samj Matrix: Method: Project: | ple ID: M3 A(SV | DPOINT 89086-2 Q - Ground W V846 8260B EA:Sunoco Ro | ater outes 19 and 20 I | Brimfield 1 | Date Sample Date Receive Percent Solie MA | ed: 02/03/10 | |
|---|----------------------------|---|---------------------------|-------------|--|--------------------------|-----------------------------|
| Run #1 Run #2 | File ID N39810.D | DF 1 | Analyzed 02/05/10 | By WC | Prep Date n/a | Prep Batch n/a | Analytical Batch MSN1496 |
| Run #1 Run #2 | Purge Vol 5.0 ml | ıme | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|--|---|---|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether | ND ND ND 1.9 ND ND ND | $\begin{array}{c} 0.50 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 5.0 \\ 2.0 \\ 2.0 \end{array}$ | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| 75-65-0 | Tert Butyl Alcohol | ND | 20 | ug/l |
| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
| 1868-53-7 2037-26-5 460-00-4 | Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | 99% 101% 103% | | 70-130% 70-130% 70-130% |

N = Indicates presumptive evidence of a compound



| Client Sat Lab Samj Matrix: Method: Project: | ple ID: M8 AQ SW | ELUENT 9086-3 - Influent 846 8260B A:Sunoco Ro | utes 19 and 20 I | Brimfield 1 | Date Sample Date Receive Percent Solie MA | ed: 02/03/10 | |
|--|-----------------------------|--|--------------------------|-------------|--|--------------------------|-----------------------------|
| Run #1 Run #2 | File ID N39809.D | DF 1 | Analyzed 02/05/10 | By WC | Prep Date n/a | Prep Batch n/a | Analytical Batch MSN1496 |
| Run #1 Run #2 | Purge Volu 5.0 ml | me | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|--|---|---|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether | ND ND ND 2.3 ND ND ND | 0.50 1.0 1.0 1.0 5.0 2.0 2.0 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| 75-65-0 CAS No. 1868-53-7 | Tert Butyl Alcohol Surrogate Recoveries Dibromofluoromethane | ND Run# 1 99% | 20 Run# 2 | ug/l Limits 70-130% |
| 2037-26-5 460-00-4 | Toluene-D8 4-Bromofluorobenzene | 102% 103% | | 70-130% 70-130% |

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



2.3 2



| Client Sample ID: Lab Sample ID: | INFLUENT M89086-3 | Date Sampled: | 02/03/10 |
|-------------------------------------|--|------------------------|----------|
| Matrix: | AQ - Influent | Date Received: | 02/03/10 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|----------|--------|-----|-------|----|----------|--------------|--------------------------|--------------------------|
| Chromium | < 10 | 10 | ug/l | 1 | | 02/04/10 EAL | | SW846 3010A ³ |
| Iron | 2560 | 100 | ug/l | 1 | 02/04/10 | 02/05/10 EAL | SW846 6010B ² | SW846 3010A ³ |
| Lead | < 5.0 | 5.0 | ug/l | 1 | 02/04/10 | 02/04/10 EAL | SW846 6010B ¹ | SW846 3010A ³ |
| Nickel | < 40 | 40 | ug/l | 1 | 02/04/10 | 02/04/10 EAL | SW846 6010B ¹ | SW846 3010A ³ |

(1) Instrument QC Batch: MA11438

(2) Instrument QC Batch: MA11441

(3) Prep QC Batch: MP14771

Accutest Laboratories

| Client Sample ID: | | | | | | |
|-------------------|--|------------------------|----------|--|--|--|
| Lab Sample ID: | M89086-3 | Date Sampled: | 02/03/10 | | | |
| Matrix: | AQ - Influent | Date Received: | 02/03/10 | | | |
| | | Percent Solids: | n/a | | | |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | | | | |
| General Chemistry | | | | | | |

Report of Analysis

5

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|----------------------------------|---------|-------|-------|----|----------------|-----|--------------------|
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 02/03/10 17:58 | CF | SW846 7196A |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 02/04/10 23:20 | EAL | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbon | s < 4.1 | 4.1 | mg/l | 1 | 02/10/10 | BF | EPA 1664 |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 02/08/10 | BF | SM21 2540D |

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

2.3 N





Section 3

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Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody



Parameter Certifications

| Job Number: | M89086 |
|-------------|--|
| Account: | DRAKEPET Drake Petroleum Co., Inc. |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA |

Toject: CEA. Sunoco Routes 19 and 20 Brinnleid MA

The following parameters included in this report are certified by the state of MA.

| Parameter | CAS# | Method | Mat | Certification Status |
|-------------------------|------|------------|-----|---|
| Solids, Total Suspended | | SM21 2540D | AQ | Accutest is certified for this parameter. |



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| | . (| 495 TECHNOLOGY MARL | OF CUSTOD GY CENTER WEST * BUILDING RLBOROUGH, MA 01752 | Y | Accutest Job # | <u>r</u> | 789086 |
|---|------------------------|--|---|-----------------------|---------------------------------------|--|-------------------------------|
| Laboratories | | TEL 508-47 | -481-6200 * FAX: 508-481-7753 | | Accutest Quote # | 1_ | 10 10 00 |
| | | | | | Requested A | Analysis | Matrix Codes |
| Client / Reporting Information | Project Name: | Project Information | | | | | DW- Drinking Water |
| Company Name Drake Petroleum Company, Inc. | P.C. No00728 | 280/ Brimfield Sunoco | 0 | | | | GW- Ground Water WW- Water |
| Address | Street | | | | TBA, TAME, Naph | | SW- Surface Water |
| P.O. Box 866 221 Quinebaug Road | Routes 19 and City | nd 20 | State | | | | SO- Soil SL-Sludge |
| | | | MA | | LAM | | Oi-Oil |
| North Grosvenordale CT 6255 Project Contact: E-mail | Brimfield Project # | | MA | ê | ×. | ₂ ' | LIQ- Other Liquid |
| Mrs. Bronda Grawford Lee Smith | 5745-05 | | | | | | AIR- Air |
| Phone # | Fax # | | | | EDB, | Chromiumr III trivalent Chromiumr VI Hexavalent Pb, Ni, Fe | |
| | Client Purchase C | o Order # | | | ш́ | 5 5 | SOL-Other Solid |
| Samplers's Name MARK HAGIE | | | Number of preserved Bottles | | MTBE, I | Le nu le | WP-Wipe |
| Accutest | Collection | | | | BTEX, MT (8260) TSS TPH 1664 | Chromiumr III Chromiumr VI Pb, Ni, Fe | LAB USE ONLY |
| Sample # | | noled by Matrix bottles 무 | HCI NaOH H2SO4 NONE MEOH None None | | BTEX, I (8260) TSS TPH 16 | Chrc Chrc | LAB OUL ONE |
| Field ID / Point of SUMMA # Date | | | | | 11/1 | 1114 | |
| - EFFLUENT 7/3/1C | | 11/ 12W 4 7 | ┇_{┢╸╎╴┝╸}╎╶┝╸╎╶┝╸ ┼ | -+ | | | |
| | 0845 | | 3 | | | | + |
| -3 INFLUENT | 0650 V | 1 4 6 4 | 4 1 1 | | V V V | | |
| | + | | | | | | 1 |
| | + | | | | | TII_ | |
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| | | | | | | \downarrow \downarrow \downarrow \downarrow \downarrow | |
| | + | | | | | | |
| _ | | | | | | | Τ |
| Turnaround Time (Business days) | | Data Deliverable Info | nformation | | Commer | ents / Remarks | |
| Std. 14 Business Days Approved By:/ Date: 10 Day RUSH 10 Day RUSH | | Standard Commercial "B" Disk Deliverable | | | | Routes 19 and 20, Brim | |
| 5 Day RUSH 7 Day Per USEP | ··· [| State Forms | | Email lab reports | s to: lsmith@warren/ | neq.com, kduprey@cea- | -inc.com and |
| 2 Day EMERGENCY | | Other | | | | LE | 5,14F,GF,452 |
| 1 Day ÉMERGENCY | | | | | | • - • | |
| Other | | | | | - op cuit 1 Standa | - J.a | |
| Emergency T/A data available VIA Lablink | | | the including courier | | DEP GW-1 Standar | | |
| Relinguised by Sampled | nented below each | eived By | ge possession, including courier d Relinquished By: | Date Time: | Receiv | ived By: | |
| Relinquisted by sampler Date Time: 1 Relinquisted by: Date Time: 2/3/1/ | 10/4:05 1 1 Receiv | that's | 2 Relinquished By: | Date Time: | 2 | ived By: | |
| | 3 | eived By: | 4 Custody Seal # | Preserved where appli | d Ilicable | | oler Temp. |
| Relinquished by: Date Time: 5 | 5 | wed By: | | | | | |
| <u> </u> | | | | | | | |

M89086: Chain of Custody Page 1 of 2



3.2 3



Accutest Laboratories Sample Receipt Summary

| Accutest Job Number: M8908 | G Client: DRAKE | | Immediate Client Services | s Action I | Required: | No |
|--|---|--------|--|---------------|-------------|-----|
| Date / Time Received: 2/3/20 | 10 2:05:00 PM No. Co | olers: | 1 Client Service Action I | Required | at Login: | No |
| Project: BRIMFIELD SUNOCO |) | | Airbill #'s: N/A | | | |
| Cooler Security Y o | or N | Y or N | Sample Integrity - Documentation | Yo | or N | |
| 1. Custody Seals Present:2. Custody Seals Intact: | 3. COC Present: 4. Smpl Dates/Time OK | | Sample labels present on bottles: Container labeling complete: | > | | |
| Cooler Temperature | Y or N | | 3. Sample container label / COC agree: | ✓ | | |
| Temp criteria achieved: Cooler temp verification: Cooler media: | ✔ □ Infared gun Ice (bag) | | Sample Integrity - Condition 1. Sample recvd within HT: 2. All containers accounted for: | <u>ү</u> Г | <u>or N</u> | |
| Quality Control Preservation | Y or N N/A | | 3. Condition of sample: | | tact | |
| Trip Blank present / cooler: Trip Blank listed on COC: Samples preserved properly: VOCs backgroup from: | | | Sample Integrity - Instructions 1. Analysis requested is clear: 2. Bottles received for unspecified tests 3. Sufficient volume coold for englying: | | or N | N/A |
| 4. VOCs headspace free: | | | Sufficient volume rec'd for analysis: Compositing instructions clear: | | | ✓ |
| Comments | | | 5. Filtering instructions clear: | | | • |

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M89086: Chain of Custody Page 2 of 2







07/15/10

Technical Report for

Drake Petroleum Co., Inc.

CEA:Sunoco Routes 19 and 20 Brimfield MA

PC# 007280

Accutest Job Number: M92775

Sampling Date: 07/07/10

Report to:

ndescoteaux@cea-inc.com

ATTN: Distribution5

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.

tand

Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (002) ND (R-188) CO MN (11546AA) NC (653) IL (002337) DoD/ISO/IEC 17025:2005 (L2235) This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.





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Sample Summary

Drake Petroleum Co., Inc.

Job No: M92775

CEA:Sunoco Routes 19 and 20 Brimfield MA Project No: PC# 007280

| Sample Number | Collected Date | Time By | Received | Matr Code | | Client Sample ID |
|------------------|-------------------|----------|----------|--------------|--------------|---------------------|
| M92775-1 | 07/07/10 | 12:58 MH | 07/07/10 | AQ | Effluent | EFFLUENT |
| M92775-2 | 07/07/10 | 13:01 MH | 07/07/10 | AQ | Ground Water | MIDPOINT |
| M92775-3 | 07/07/10 | 13:05 MH | 07/07/10 | AQ | Influent | INFLUENT |







SAMPLE DELIVERY GROUP CASE NARRATIVE

| Client: | Drake Petroleum Co., Inc. | Job No | M92775 |
|---------|--|-------------|-----------------------|
| Site: | CEA:Sunoco Routes 19 and 20 Brimfield MA | Report Date | 7/15/2010 10:55:11 AM |

3 Sample(s) were collected on 07/07/2010 and were received at Accutest on 07/07/2010 properly preserved, at 1.9 Deg. C and intact. These Samples received an Accutest job number of M92775. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

| Matrix AQ Batch ID: MSL1398 |
|-----------------------------|
|-----------------------------|

All samples were analyzed within the recommended method holding time.

- All method blanks for this batch meet method specific criteria.
- Sample(s) M92717-1MS, M92717-1MSD were used as the QC samples indicated.
- Matrix Spike Duplicate Recovery(s) for Benzene, Ethylbenzene, Toluene, Xylene (total) are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- RPD(s) for MSD for Benzene, Ethylbenzene, Toluene, Xylene (total) are outside control limits for sample M92717-1MSD. High RPD due to possible matrix interference and/or sample non-homogeneity.
- Only selected compounds requested.

Metals By Method SW846 6010B

| | Matrix AQ | Batch ID: MP1557 | , | | |
|---|---|------------------|---|--|--|
| = | All samples were digested within the recommended method holding time. | | | | |

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M92759-1DUP, M92759-1MS, M92759-1SDL, M92759-1DUP were used as the QC samples for metals.
- RPD(s) for Duplicate for Nickel are outside control limits for sample MP15577-D1. RPD acceptable due to low duplicate and sample concentrations.
- RPD(s) for Serial Dilution for Nickel are outside control limits for sample MP15577-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).</p>
- Only selected metals requested.

Wet Chemistry By Method 6010/7196A M/200.7

| Matrix AQ Batch ID: R27095 |
|----------------------------|
|----------------------------|

M92775-1,3 for Chromium, Trivalent: Calculated as: (Chromium) - (Chromium, Hexavalent)

Wet Chemistry By Method EPA 1664

| Matrix AQ | Batch ID: GP11804 | | | | | | | |
|--|--------------------------------|--|--|--|--|--|--|--|
| All samples were distilled within the recommended method holding time. | | | | | | | | |
| All samples were analyzed within the reco | commended method holding time. | | | | | | | |

All method blanks for this batch meet method specific criteria.

Sample(s) M92817-3DUP, M92817-3MS were used as the QC samples for HEM Petroleum Hydrocarbons.



Wet Chemistry By Method SM21 2540D

| Matrix AQ | Batch ID: GN32347 | | | | | | |
|---|-------------------|--|--|--|--|--|--|
| All samples were analyzed within the recommended method holding time. | | | | | | | |

- All method blanks for this batch meet method specific criteria.
- Sample(s) M92757-1DUP were used as the QC samples for Solids, Total Suspended.

Wet Chemistry By Method SW846 7196A

| Matrix AQ Batch ID: GN32332 |
|-----------------------------|
|-----------------------------|

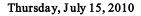
All samples were analyzed within the recommended method holding time.

- All method blanks for this batch meet method specific criteria.
- Sample(s) M92775-1DUP, M92775-1MS were used as the QC samples for Chromium, Hexavalent.

Accutest may not have met all requested limits due to methodology limitations, sample matrix, dilutions, or percents solids.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M92775).





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Section 3

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Sample Results

Report of Analysis



| | | | | Repo | ort of A | nalysis | | Page 1 of 1 |
|--|-------------------|-------|---------|----------------------|-----------|------------------|-------------------|-----------------------------|
| Client Sat Lab Samj Matrix: Method: Project: | - | | | | | | | |
| Run #1 Run #2 | File ID L42738 | | DF 1 | Analyzed 07/08/10 | By AMY | Prep Date n/a | Prep Batch n/a | Analytical Batch MSL1398 |
| Run #1 Run #2 | Purge 5.0 ml | Volum | e | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|-----------|-------------------------|--------|--------|---------|
| 71-43-2 | Benzene | ND | 0.50 | ug/l |
| 108-88-3 | Toluene | ND | 1.0 | ug/l |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l |
| 1330-20-7 | Xylene (total) | ND | 1.0 | ug/l |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/l |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | ug/l |
| 994-05-8 | tert-Amyl Methyl Ether | ND | 2.0 | ug/l |
| 75-65-0 | Tert Butyl Alcohol | ND | 20 | ug/l |
| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
| 1868-53-7 | Dibromofluoromethane | 107% | | 70-130% |
| 2037-26-5 | Toluene-D8 | 106% | | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 103% | | 70-130% |

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

7 of 18 ACCUTEST. M92775

Page 1 of 1

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| Client Sample ID: | | D / G 11 | 07/07/40 | | | |
|---|---------------|------------------------|----------|--|--|--|
| Lab Sample ID: | M92775-1 | Date Sampled: | 07/07/10 | | | |
| Matrix: | AQ - Effluent | Date Received: | 07/07/10 | | | |
| | | Percent Solids: | n/a | | | |
| Project: CEA:Sunoco Routes 19 and 20 Brimfield MA | | | | | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|------------------------------------|------------------------------|------------------------|------------------------------|------------------|----------------------|--|--|--|
| Chromium Iron Lead Nickel | < 10 420 < 5.0 < 40 | 10 100 5.0 40 | ug/l ug/l ug/l ug/l | 1 1 1 1 | 07/09/10 07/09/10 | 07/09/10 PY 07/09/10 PY 07/09/10 PY 07/09/10 PY | SW846 6010B ¹ SW846 6010B ¹ SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² SW846 3010A ² SW846 3010A ² |

(1) Instrument QC Batch: MA11997

(2) Prep QC Batch: MP15577

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Solids, Total Suspended

| Client Sample ID: Lab Sample ID: Matrix: | NT l uent | Date I Percer | Date Sampled: 07/07/10 Date Received: 07/07/10 Percent Solids: n/a | | | | | |
|---|---|-----------------------------|--|----------------------|-------------|--|----|---|
| Project: | Project: CEA:Sunoco Routes 19 and 20 Brimfield MA | | | | | | | |
| General Chemistry | | | | | | | | |
| Analyte | | Result | RL | Units | DF | Analyzed | By | Method |
| Chromium, Hexaval Chromium, Trivaler HEM Petroleum Hy | nt ^a | < 0.010 < 0.020 < 4.1 | 0.010 0.020 4.1 | mg/l mg/l mg/l | 1 1 1 | 07/07/10 17:00 07/09/10 20:53 07/14/10 | | SW846 7196A 6010/7196A M/200.7 EPA 1664 |

mg/l

1

07/09/10

BF

SM21 2540D

Report of Analysis

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

< 4.0

4.0

Page 1 of 1

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| | | | | Repo | ort of A | nalysis | | Page 1 of 1 |
|---|-------------------|--------|---------------------------|----------------------|--|------------------|-------------------|-----------------------------|
| Client Sample ID: Lab Sample ID: Matrix: Method: Project: | | SW846 | 5-2 Fround Wa 8260B | | Date Sampled: Date Received: Percent Solids: nd 20 Brimfield MA | | | |
| Run #1 Run #2 | File ID L42739 | | DF 1 | Analyzed 07/08/10 | By AMY | Prep Date n/a | Prep Batch n/a | Analytical Batch MSL1398 |
| Run #1 Run #2 | Purge V 5.0 ml | /olume | | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|---|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | ND ND ND 3.4 ND ND ND ND | 0.50 1.0 1.0 1.0 5.0 2.0 2.0 20 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 2037-26-5 460-00-4 | Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | Run# 1 104% 108% 106% | Run# 2 | Limits 70-130% 70-130% 70-130% |

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



D, av .f 1 3 2

| | | | | Repo | ort of A | nalysis | | Page 1 of 1 | |
|--|-------------------|--------|----------------------------|----------------------|-------------|--|-------------------|-----------------------------|--|
| Client Sample ID Lab Sample ID: Matrix: Method: Project: | | SW84 | 75-3 nfluent 6 8260B | utes 19 and 20 I | Brimfield N | Date Sampled: Date Received: Percent Solids: AA | ved: 07/07/10 | | |
| Run #1 Run #2 | File ID L42740 | .D | DF 1 | Analyzed 07/08/10 | By AMY | Prep Date n/a | Prep Batch n/a | Analytical Batch MSL1398 | |
| Run #1 Run #2 | Purge V 5.0 ml | /olume | 1 | | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|---|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | 0.74 ND ND 3.4 ND ND ND 39.2 | 0.50 1.0 1.0 1.0 5.0 2.0 2.0 20 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 2037-26-5 460-00-4 | Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | Run# 1 102% 107% 104% | Run# 2 | Limits 70-130% 70-130% 70-130% |

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



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| Client Sample ID: | | Data Samuladi | 07/07/10 |
|-------------------|--|-----------------|----------|
| Lab Sample ID: | M92775-3 | Date Sampled: | 07/07/10 |
| Matrix: | AQ - Influent | Date Received: | 07/07/10 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|------------------------------------|--------------------------------|------------------------|------------------------------|------------------|----------------------|--|--|--|
| Chromium Iron Lead Nickel | < 10 15200 < 5.0 < 40 | 10 100 5.0 40 | ug/l ug/l ug/l ug/l | 1 1 1 1 | 07/09/10 07/09/10 | 07/09/10 PY 07/09/10 PY 07/09/10 PY 07/09/10 PY | SW846 6010B ¹ SW846 6010B ¹ SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² SW846 3010A ² SW846 3010A ² |

(1) Instrument QC Batch: MA11997

(2) Prep QC Batch: MP15577

Page 1 of 1

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Solids, Total Suspended

| Client Sample ID: Lab Sample ID: Matrix: Project: | INFLUEI M92775-3 AQ - Infl CEA:Sun | 3 | 9 and 20 Bi | rimfield M. | Date 1 Percer | Sampled: 07/07/2 Received: 07/07/2 nt Solids: n/a | | |
|--|---|-------------------------------|-----------------------|----------------------|------------------|---|----|---|
| General Chemistry | , | | | | | | | |
| Analyte | | Result | RL | Units | DF | Analyzed | Ву | Method |
| Chromium, Hexava Chromium, Trivaler HEM Petroleum Hy | nt ^a | < 0.010 < 0.020 5 < 4.1 | 0.010 0.020 4.1 | mg/l mg/l mg/l | 1 1 1 | 07/07/10 17:00 07/09/10 20:57 07/14/10 | | SW846 7196A 6010/7196A M/200.7 EPA 1664 |

mg/l

1

07/09/10

BF

SM21 2540D

Report of Analysis

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

76.0

4.0

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Section 4

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody
- MCP Form



Parameter Certifications

| Job Number: | M92775 |
|-------------|--|
| Account: | DRAKEPET Drake Petroleum Co., Inc. |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA |

The following parameters included in this report are certified by the state of MA.

| | | | | | - |
|-------------------------|------|------------|-----|---|---|
| Parameter | CAS# | Method | Mat | Certification Status | |
| Solids, Total Suspended | | SM21 2540D | AQ | Accutest is certified for this parameter. | |





| |) ACCUTES | | | | С | HA 495 TEO | CHNOL | OGY | | ER V | ves1 | * BL | ILDIN | | | | | | | | | | ,* | |
|--|---|----------|------------------------------------|-----------------|----------------------------|---------------|-----------------|--------|--------|------------|--------|--------|--------|--------|----------|-----------|----------|-------------------|-------------|-------------------------|------------------|----------------|--------------|--|
| | Laboratori | | | | | | TEL: 50 | 8-48 | 1-6200 | • F/ | AX: 5 | 08-48 | 1-775 | 3 | | | | Accute | st Quote | | | _/ | <u> 1</u> 97 | 775 |
| Clia | ent / Reporting Information | | | | Droi | ect Infor | mation | | | | | | | - | | | | | | ested A | Analys | is | · | Matrix Codes |
| Company Name Drake Petrole Address | um Company, Inc. 5 221 Quinebaug Road State | L | Zip | Street | | Brimfiel | | 000 | State | | | | | | | | | TBA, TAME, Naph | | | | | | DW- Drinking Water GW- Ground Water WW- Water SW- Surface Water SO- Soil |
| North Grosve | enordale CT | 6255 | i, û | Brimfie | ld | | | ľ | MA | | | | | | | | 1 | TAW | | | | | | SL-Sludge Ol-Oil |
| Project Contact: | | E-ma | 11 | Project # | - | | | | | | | | | | | | ŀ | Å | | | | Ţ | | LIQ- Other Liquid |
| Mrs. Bronda Phone # | Grewtord Lee Smith | | | 5745-0 Fax # | 5 | | | | | | | | | | | | | EDB, T | | | alent | Hexavalent | | AJR- Air |
| Samplers's Name | Morek Hacig | È | | | rchase Orde | # | | | | | | | | | | | | MTBË, El | | 4 | nr III trivalent | nr VI Hex | | SOL-Other Solid |
| Accutest | | | | Collect | on | | | | | 1 | ГТ | - | | 1 | | | | BTEX, M (8260) | <i>"</i> | TPH 1664 | Chromium | Chromiumr VI | Ni, Fe | WP-Wpe |
| Sample # | ield ID / Point of SUMMA # | | Date | Time | Sampled by | Matrix | # of bottles | Ŷ | HNO3 | H2SO4 | NON | NaHSO | None | | ļ | | | | TSS | Ē | ÷δ | Ť | đ | |
| ~) EFI | FLUENT | | 7/7/10 | 1258 | Milt | 60 | Ģ | 4 | | _ | 1 | | _ | | | | | X | Y | X | X | K. | X | |
| -2 MIC | POINT | | | Bal | | | 3 | 3 | | <u> </u> . | | _ | | ļ | | | | X | | - | | | | |
| -3 INF | LUENT | | V | 1305 | \mathbf{V} | \checkmark | 6 | 4 | 1 | | 1 | _ | | L | <u> </u> | | | X | X | X | $ \mathcal{X} $ | $\downarrow X$ | X | |
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| | maround Time (Business days) . 14 Business Days | Ļ | Burl Date: | - | Standa | Data De | liverable | Inform | ation | L. | | | | | - | | | | C | mment | s / Ken | BIKS | <u> </u> | |
| | Day RUSH | Approved | by:/ Date: | | Comme | | | | | | | | | | P.C. N | 1000728 | 80/ Br | imfiel | d Sund | oco, R | outes | 19 and | 1 20, B | rimfield, MA |
| 50 | ay RUSH | 7 Day P | er USEPA | | Disk D | | | | | | | | | | | | | | | | | ledu- | | an inc com and |
| | ay EMERGENCY ay EMERGENCY | | | | State F | orms | | | | | | | | | Email | ian rep | orts to | . ismi | | ancie | 4.com | <u>, καα</u> | 25 | C.UA |
| 10 | ay EMERGENCY | | | _ | | | | | | | | | | | | | | | - I | SB | <i>. (</i> | \mathcal{C} | 50 | GJUA |
| Othe | | | - | - | | | | | | | | | | | | | | D C 11 | | | | | | - 1 - 1 |
| | cy T/A data available VIA Lablin | | be docume | nted belo | w each tim | sample | s chang | je po: | ssessi | on, ir | nclud | ling c | ourier | delive | | meet M | | r G W | | | | | | |
| Relinguished by | und log | | Date Time: 7/9/10 Date Time: | 14:25 | Received By Received By | K | | > | | Relin 2 | quish | ed By: | | | | Date Time | | | | Receive 2 Receive | - | | | |
| 3 Relinquished by | | | Date Time: | | 3 d Received By: | | | | | 4 Cust | ody Se | a) # | | | Preserve | d where a | pplicabl | • | | 4 | <u> </u> | - 0710 | | Cooler Temp. |
| | | | | | 5 | | | | | L | | | | | | | | | | | | -7 | | <u> </u> |

M92775: Chain of Custody Page 1 of 2



4.2 **4**



Accutest Laboratories Sample Receipt Summary

| Accutest Job Number: M9277 | 5 Client | : DRAKE | | Immediate Client Servi | ces Action | Required: | No |
|---------------------------------|---------------|-----------------|------|---|--------------|--------------|-----|
| Date / Time Received: 7/7/201 | 10 2:25:00 PM | No. Coolers: | 1 | Client Service Actio | on Required | at Login: | No |
| Project: BRIMFIELD SUNOCO | | | | Airbill #'s: N/A | | | |
| Cooler Security Y o | or N | <u>Y</u> o | or N | Sample Integrity - Documentation | Y | or N | |
| 1. Custody Seals Present: | 3. COC | | | 1. Sample labels present on bottles: | ✓ | | |
| 2. Custody Seals Intact: | ∐ 4. Smpl Da | tes/Time OK 🖌 🖌 | | 2. Container labeling complete: | \checkmark | | |
| <u>Cooler Temperature</u> | Y or N | | | 3. Sample container label / COC agree: | \checkmark | | |
| 1. Temp criteria achieved: | | | | Sample Integrity - Condition | Y | or N | |
| 2. Cooler temp verification: | Infared gun | | | 1. Sample recvd within HT: | ✓ | | |
| 3. Cooler media: | Ice (bag) | | | 2. All containers accounted for: | ✓ | | |
| Quality Control Preservation | Y or N | <u>N/A</u> | | 3. Condition of sample: | I | ntact | |
| 1. Trip Blank present / cooler: | | | | Sample Integrity - Instructions | Y | or N | N/A |
| 2. Trip Blank listed on COC: | | | | 1. Analysis requested is clear: | \checkmark | | |
| 3. Samples preserved properly: | | | | 2. Bottles received for unspecified tests | | \checkmark | |
| 4. VOCs headspace free: | | | | 3. Sufficient volume rec'd for analysis: | ✓ | | |
| | | | | 4. Compositing instructions clear: | | | ✓ |
| | | | | 5. Filtering instructions clear: | | | ✓ |

Comments

Accutest Laboratories V:508.481.6200 495 Technology Center West, Bldg One F: 508.481.7753 Marlborough, MA www/accutest.com 4.2

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M92775: Chain of Custody Page 2 of 2





| WSC-CAM | Exhibit VII A |
|--------------|----------------|
| July 1, 2010 | Revision No. 1 |
| Final | Page 13 of 38 |

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

| | Ma | ssDEP Analytical I | Protocol Certifica | atio | n Form | | | | |
|--|----------------------------------|---|---------------------------------------|--------------|-----------------------------------|-----------------------|------|-----------------------|----|
| Laboratory Name: <u>Accut</u> | est Laboratorie | es of New England | | | Project #: | M9277 | 75 | | |
| Project Location: CEA: | Sunoco Route | s 19 and 20 Brimfield | AMA | | MADEP RTN | None | | | |
| This form provides certifications for M92775-1,M92775-2,M9277 | |) data set: list Labora | atory Sample ID N | lum | bers(s) | | | | |
| Matrices: Groundwater/Surfac | () | Soil/Sediment () | Drinking Water | () | Air () | | | Other | () |
| CAM Protocol (check all that apply b | elow): | 1 | 1 | | I | | | 1 | |
| | 0 () | |) 8081 Pesticides | () | | (X) | | Mass DEP APH | () |
| CAM IIA CAM | | | CAM V B | \sim | CAM VI B 8330 Explosives | () | | CAM IX A TO-15 VOC | () |
| 8270 SVOC () 7010 CAM II B CAM I | ., | MassDEP EPH (| CAM V C | 5 () | CAM VIII A | () | | CAM IX B | () |
| 6010 Metals (X) 6020 M CAM III A CAM I | | 8082 PCB () CAM V A | 9014 Total Cyanide/PAC CAM VI A | () | 6860 Perchlorate CAM VIII B | () | | | |
| Affirmative Responses to | Questions A | Through F are requ | ired for "Presum | nptiv | e Certainty status | 3 | | | |
| Were all samples received i properly preserved (includin method holding times? | n a condition o g temperature | consistent with those) in the field or labora | described on the atory, and prepare | Cha ed/ar | ain-of Custody, nalyzed within | v | Yes | No | |
| Were the analytical method protocol(s) followed? | (s) and all asso | ociated QC requirem | ents specified in t | he s | elected CAM | ~ | Yes | 🗌 No | |
| Were all required corrective | actions and a | nalytical response ac | tions specified in | the | selected CAM | | 103 | | |
| C protocol(s) implemented for Does the laboratory report c | | | | | | \checkmark | Yes | No | |
| D "Quality Assurance and Qua Reporting of Analytical Data | ality Control Gu | | • | ΤCP | IM VII A, | 7 | Yes | No | |
| VPH, EPH, APH, and TO-15 E a. VPH, EPH, and APH Met modification(s)? (Refer to th | hods only: Wa | | • | | | \checkmark | Yes | No | |
| b. APH and TO-15 Methods | only: Was the | e complete analyte li | st reported for eac | ch m | ethod? | √ | Yes | No | |
| Were all applicable CAM pro F and evaluated in a laborator | | • | | | | ✓ | Yes | No | |
| Responses to questions (| G, H, and I bel | ow is required for " | Presumptive Cel | rtair | nty" status | | | | |
| G Were the reporting limits at selected CAM protocols | or below all CA | AM reporting limits sp | pecified in the | | | | Yes | ✓ No 1 | 1 |
| Data User Note: Data that and representativeness re | | | | | | data u | seab | ility | |
| H Were all QC performance s | | | | | WSC-07-350. | | Yes | ⊡ No 1 | 1 |
| I Were results reported for the | | | | | otocol(s)? | | Yes | | |
| ¹ All Negative responses m | ust be addres | sed in an attached | Environmental L | .abc | oratory case narra | tive. | | | |
| I the undersigned, attest under inquiry of those responsible for analytical report is, to the best o | obtaining the | e information, the n | naterial containe | d in | • • | | | | |
| | pol | - | Position: | | boratory Director | | | | |
| Printed Name: Reza | Tand | | Date: | | 07/15/2010 | | | | |







07/16/10

Technical Report for

Drake Petroleum Co., Inc.

CEA:Sunoco Routes 19 and 20 Brimfield MA

PC# 007280

Accutest Job Number: M92825

Sampling Date: 07/09/10

Report to:

ndescoteaux@cea-inc.com

ATTN: Distribution5

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.

tand

Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (002) ND (R-188) CO MN (11546AA) NC (653) IL (002337) DoD/ISO/IEC 17025:2005 (L2235) This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.





New England • 495 Tech Center West • Building 1 • Marlborough, MA 01752 • tel: 508-481-6200 • fax: 508-481-7753 • http://www.accutest.com



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Sample Summary

Drake Petroleum Co., Inc.

Job No: M92825

CEA:Sunoco Routes 19 and 20 Brimfield MA Project No: PC# 007280

| Sample Number | Collected Date | Time By | Received | Matr Code | | Client Sample ID |
|------------------|-------------------|----------|----------|--------------|--------------|---------------------|
| M92825-1 | 07/09/10 | 09:00 MH | 07/09/10 | AQ | Effluent | EFFLUENT |
| M92825-2 | 07/09/10 | 09:04 MH | 07/09/10 | AQ | Ground Water | MIDPOINT |
| M92825-3 | 07/09/10 | 09:08 MH | 07/09/10 | AQ | Influent | INFLUENT |





SAMPLE DELIVERY GROUP CASE NARRATIVE

| Client: | Drake Petroleum Co., Inc. | Job No | M92825 |
|---------|--|-------------|----------------------|
| Site: | CEA:Sunoco Routes 19 and 20 Brimfield MA | Report Date | 7/16/2010 6:01:18 PM |

3 Sample(s) were collected on 07/09/2010 and were received at Accutest on 07/09/2010 properly preserved, at 0.7 Deg. C and intact. These Samples received an Accutest job number of M92825. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

| Matrix AQ | Batch ID: | MSL1404 |
|----------------------------------|------------------------|---------------|
| All samples were analyzed within | the recommended method | holding time. |

All method blanks for this batch meet method specific criteria.

Only selected compounds requested.

Metals By Method SW846 6010B

| Matrix AQ | Batch ID: MP15589 | |
|--------------------------------|-------------------------------------|--|
| All samples were digested with | he recommended method holding time. | |

- All samples were analyzed within the recommended method holding time.
- An samples were analyzed within the recommended method norm
- All method blanks for this batch meet method specific criteria.
- Sample(s) M92808-2FDUP, M92808-2FMS, M92808-2FSDL, M92808-2FDUP were used as the QC samples for metals.
- RPD(s) for Duplicate for Chromium are outside control limits for sample MP15589-D1. RPD acceptable due to low duplicate and sample concentrations.
- RPD(s) for Serial Dilution for Nickel are outside control limits for sample MP15589-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).</p>

Wet Chemistry By Method 6010/7196A M/200.7

| Matrix AQ | Batch ID: | R27099 | |
|-----------|-----------|--------|--|
| | | | |

M92825-1, 3 for Chromium, Trivalent: Calculated as: (Chromium) - (Chromium, Hexavalent)

Wet Chemistry By Method EPA 1664

| | Matrix | AQ | Batch ID: GP11804 | |
|---|--------|----|-------------------|--|
| _ | | | | |

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M92817-3DUP, M92817-3MS were used as the QC samples for HEM Petroleum Hydrocarbons.

Wet Chemistry By Method SM21 2540D

| | Matrix AQ | Batch ID: | GN32357 |
|---|------------------------------------|------------------------|---------------|
| - | All samples were analyzed within t | the recommended method | holding time. |

- All method blanks for this batch meet method specific criteria.
- Sample(s) M92825-1DUP were used as the QC samples for Solids, Total Suspended.

Page 1 of 2



Wet Chemistry By Method SW846 7196A

| | Matrix AQ | Batch ID: GN32344 | |
|---|----------------------------------|--|--|
| - | All samples were analyzed within | n the recommended method holding time. | |

- All method blanks for this batch meet method specific criteria.
- Sample(s) M92806-2DUP, M92806-2MS were used as the QC samples for Chromium, Hexavalent.

Accutest may not have met all requested limits due to methodology limitations, sample matrix, dilutions, or percents solids.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M92825).







Section 3

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Sample Results

Report of Analysis



| | | | Repo | ort of A | nalysis | | Page 1 of 1 |
|---|------------------------|--|----------------------|-------------|--------------------------------------|-------------------|-----------------------------|
| Client San Lab Sam Matrix: Method: Project: | ple ID: M9 AQ SW | FLUENT 2825-1 - Effluent 846 8260B A:Sunoco Ro | utes 19 and 20 1 | Brimfield N | 1: 07/09/10 d: 07/09/10 s: n/a | | |
| Run #1 Run #2 | File ID L42890.D | DF 1 | Analyzed 07/12/10 | By AMY | Prep Date n/a | Prep Batch n/a | Analytical Batch MSL1404 |
| Run #1 Run #2 | Purge Volu 5.0 ml | me | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|--|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | ND ND ND ND ND ND ND ND | 0.50 1.0 1.0 1.0 5.0 2.0 2.0 20 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 2037-26-5 460-00-4 | Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | Run# 1 107% 108% 106% | Run# 2 | Limits 70-130% 70-130% 70-130% |

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



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| CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
|--|-----------------|---|
| | Percent Solids: | n/a |
| AQ - Effluent | Date Received: | 07/09/10 |
| M92825-1 | Date Sampled: | 07/09/10 |
| | AQ - Effluent | M92825-1Date Sampled:AQ - EffluentDate Received:Percent Solids: |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|------------------------------------|--------------------------------|------------------------|------------------------------|------------------|----------------------|--|--|--|
| Chromium Iron Lead Nickel | < 10 < 100 < 5.0 < 40 | 10 100 5.0 40 | ug/l ug/l ug/l ug/l | 1 1 1 1 | 07/12/10 07/12/10 | 07/12/10 DA 07/12/10 DA 07/12/10 DA 07/12/10 DA | SW846 6010B ¹ SW846 6010B ¹ SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² SW846 3010A ² SW846 3010A ² |

(1) Instrument QC Batch: MA12004

(2) Prep QC Batch: MP15589

Page 1 of 1

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Solids, Total Suspended

| • • • • | EFFLUE M92825-1 AQ - Effl | l | | | Date] | Sampled: 07/09/1 Received: 07/09/1 nt Solids: n/a | | |
|--|--|-------------------------------|-----------------------|----------------------|-------------|---|----|---|
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | | | | | | |
| General Chemistry | | | | | | | | |
| Analyte | | Result | RL | Units | DF | Analyzed | By | Method |
| Chromium, Hexaval Chromium, Trivalen HEM Petroleum Hyd | t ^a | < 0.010 < 0.020 s < 4.1 | 0.010 0.020 4.1 | mg/l mg/l mg/l | 1 1 1 | 07/09/10 15:56 07/12/10 17:19 07/14/10 | | SW846 7196A 6010/7196A M/200.7 EPA 1664 |

mg/l

1

07/12/10

BF

SM21 2540D

Report of Analysis

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

< 4.0

4.0

Page 1 of 1

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| | | | | Repo | ort of A | nalysis | | Page 1 of 1 |
|--|-------------------|--------|---------|----------------------|-----------|------------------|-------------------|-----------------------------|
| Client Sample ID:MIDPOINTLab Sample ID:M92825-2Date Sampled:07/Matrix:AQ - Ground WaterDate Received:07/Method:SW846 8260BPercent Solids:n/aProject:CEA:Sunoco Routes 19 and 20 Brimfield MA | | | | | | 07/09/10 | | |
| Run #1 Run #2 | File ID L42891 | .D | DF 1 | Analyzed 07/12/10 | By AMY | Prep Date n/a | Prep Batch n/a | Analytical Batch MSL1404 |
| Run #1 Run #2 | Purge V 5.0 ml | /olume | | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|---|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | ND ND ND 3.5 ND ND ND ND | 0.50 1.0 1.0 1.0 5.0 2.0 2.0 20 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 2037-26-5 460-00-4 | Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | Run# 1 108% 111% 108% | Run# 2 | Limits 70-130% 70-130% 70-130% |

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



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3 2

| | | | | Repo | ort of A | nalysis | | Page 1 of 1 |
|------------------|---|--------|---------|----------------------|-----------|------------------|-------------------|-----------------------------|
| | Method: SW846 8260B Percent Solids: n/a | | | | | | | |
| Run #1 Run #2 | File ID L42892 | .D | DF 1 | Analyzed 07/12/10 | By AMY | Prep Date n/a | Prep Batch n/a | Analytical Batch MSL1404 |
| Run #1 Run #2 | Purge V 5.0 ml | /olume | | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|--|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | 0.61 ND 1.3 2.1 ND ND 28.4 | 0.50 1.0 1.0 1.0 5.0 2.0 2.0 20 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 2037-26-5 460-00-4 | Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | Run# 1 109% 106% 105% | Run# 2 | Limits 70-130% 70-130% 70-130% |

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



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| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | i di conti bollabi | |
|-------------------------------------|--|-----------------------------------|--|
| Matrix: | AQ - Influent | Date Received: Percent Solids: | |
| Client Sample ID: Lab Sample ID: | INFLUENT M92825-3 | Date Sampled: | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|------------------------------------|-------------------------------|------------------------|------------------------------|------------------|----------------------|----------------------------|--|--|
| Chromium Iron Lead Nickel | < 10 3750 < 5.0 < 40 | 10 100 5.0 40 | ug/l ug/l ug/l ug/l | 1 1 1 1 | 07/12/10 07/12/10 | 07/12/10 DA 07/12/10 DA | SW846 6010B ¹ SW846 6010B ¹ SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² SW846 3010A ² SW846 3010A ² |

(1) Instrument QC Batch: MA12004

(2) Prep QC Batch: MP15589

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Solids, Total Suspended

| Client Sample ID: Lab Sample ID: Matrix: | INFLUEN M92825-3 AQ - Influ | 3 | | | Date 1 | Sampled: 07/09/ Received: 07/09/ nt Solids: n/a | | |
|--|-----------------------------------|-------------------------------|-----------------------|----------------------|-------------|---|----|---|
| Project: | CEA:Sun | oco Routes 1 | 9 and 20 Bi | rimfield M | A | | | |
| General Chemistry | | | | | | | | |
| Analyte | | Result | RL | Units | DF | Analyzed | By | Method |
| Chromium, Hexava Chromium, Trivaler HEM Petroleum Hy | nt ^a | < 0.010 < 0.020 5 < 4.1 | 0.010 0.020 4.1 | mg/l mg/l mg/l | 1 1 1 | 07/09/10 15:56 07/12/10 17:24 07/14/10 | | SW846 7196A 6010/7196A M/200.7 EPA 1664 |

mg/l

1

07/12/10

BF

SM21 2540D

Report of Analysis

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

< 4.0

4.0

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Section 4

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody
- MCP Form



Parameter Certifications

Job Number:M92825Account:DRAKEPET Drake Petroleum Co., Inc.Project:CEA:Sunoco Routes 19 and 20 Brimfield MA

The following parameters included in this report are certified by the state of MA.

| Parameter | CAS# | Method | Mat | Certification Status |
|-------------------------|------|------------|-----|---|
| Solids, Total Suspended | | SM21 2540D | AQ | Accutest is certified for this parameter. |



Page 1 of 1



| | | 95 TECHNOLOGY CEN | CUSTOD | | | | |
|---|---|---------------------------------------|---|--------------------------|--|---|--|
| Laboratories | | | DUGH, MA 01752 00 * FAX: 508-481-7753 | | Accutest Job # | Mg | 2825 |
| Client 7 Reporting Information | Project Name: | t Information | | | Requested | Analysis | Matrix Codes DW- Drinking Water |
| Drake Petroleum Company, Inc. Address P.O. Box 866 221 Quinebaug Road City State Zip North Grosvenordale CT 6255 Project Contact: Mre. Bronda-Growford Lee Sm/th Phone # | P.C. No007280/ Bi Street Routes 19 and 20 City Brimfield Project # 5745-05 Fax # | State MA | | • | EDB, TBA, TAME, Naph | trivalent Hexavalent | GW- Ground Water WW- Water SW- Surface Water SO- Soil SL-Studge OI-Oil LIQ- Other Liquid AJR- Alr |
| Samplers's Name March Hagi & | Client Purchase Order # Collection | Number o | of preserved Bottles | | BTEX, MTBE, (8260) TSS TPH 1664 | Chromiumr III trivalent Chromiumr VI Hexaval Pb, NI, Fe | SOL-Other Solid WP-Wipe |
| Field ID / Point of SUMMA# Date Date Date Date | | Matrix bottles シーレーレー 4 1 | None None None | | | 551 XXX | |
| | 0907 | <u> </u> | | | XXX | XXX | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Turnaround Time (Business days) Skt. 14 Business Days Approved By:/ Date: 10 Day RUSH 5 Day: RUSH 3 Day EMERGENCY | Standard Commerci Disk Deliv | erable | | 1 | rimfield Sunoco, Re | s / Remarks outes 19 and 20, Brimf q.com, kduprey@cea-i | |
| 2 Day EMERGENCY 1 Day EMERGENCY Other Emergency T/A data available VIA Lablink | Other | | | Must meet MAD | 3 SANPLE | | 15 <i>P, 3H</i> 4 |
| Ralinquished by sampler Alloquished by: | Acceleration of the sector of | | ion, including courier de Relinquished By: 2 Relinquished By: 4 | Date Time: | Receive 2 Receive | | |
| Relinquisited by: Ab Date Time: 5 | Received By: 5 | · · · · · · · · · · · · · · · · · · · | Custody Seal # | Preserved where applicat | ble | On Ice Cooler | S. 7°C |

M92825: Chain of Custody Page 1 of 2



4.2 4



Accutest Laboratories Sample Receipt Summary

| La DUTATUTI | | | | | | | | |
|---------------------------------|----------------|-------------|----------------|-----------------------|--|---------------|--------------|--------------|
| Accutest Job Number: M9282 | 25 Client | : DRAKE | | | Immediate Client Serv | ices Action R | equired: | No |
| Date / Time Received: 7/9/20 | 10 12:10:00 PM | No. Coole | No. Coolers: 1 | | Client Service Action Required at Login: | | | No |
| Project: N/A | | | | Airbill #'s: | | | | |
| Cooler Security Y o | or N | <u> </u> | <u>Yor N</u> | Sample Integrity | - Documentation | Y or | N | |
| 1. Custody Seals Present: 🛛 🗹 | | - | | 1. Sample labels p | resent on bottles: | ✓ | | |
| 2. Custody Seals Intact: | 4. Smpl Da | tes/Time OK | | 2. Container labelin | g complete: | ✓ | | |
| Cooler Temperature | Y or N | | | 3. Sample containe | rlabel / COC agree: | \checkmark | | |
| 1. Temp criteria achieved: | | | | Sample Integrity | - Condition | Y or | N | |
| 2. Cooler temp verification: | Infared gun | | | 1. Sample recvd wi | thin HT: | ✓ | | |
| 3. Cooler media: | Ice (bag) | | | 2. All containers ac | | √ | | |
| Quality Control Preservation | Y or N | N/A | | 3. Condition of sam | nple: | Inta | act | |
| 1. Trip Blank present / cooler: | | | | Sample Integrity | - Instructions | <u>Y</u> or | N | N/A |
| 2. Trip Blank listed on COC: | | | | 1. Analysis reques | ted is clear: | √ | | |
| 3. Samples preserved properly: | \checkmark | | | 2. Bottles received | I for unspecified tests | | \checkmark | |
| 4. VOCs headspace free: | | | | 3. Sufficient volum | e rec'd for analysis: | ✓ | | |
| | | | | 4. Compositing ins | structions clear: | | | \checkmark |
| | | | | 5. Filtering instruct | ions clear: | | | ✓ |

Comments

Accutest Laboratories V:508.481.6200 495 Technology Center West, Bldg One F: 508.481.7753 Marlborough, MA www/accutest.com 4.2

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M92825: Chain of Custody Page 2 of 2





| WSC-CAM | Exhibit VII A |
|--------------|----------------|
| July 1, 2010 | Revision No. 1 |
| Final | Page 13 of 38 |

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

| | | | Ma | ssDEP Analytica | al Pr | otocol Certifica | itioi | n Form | | | | |
|----------|---|---|---|--|------------|---------------------------------------|-------|-----------------------------------|-----------------------|-------|--------------------------|----|
| Labora | tory Name: | Accutest | Accutest Laboratories of New England Project #: | | | | | | M928 | 25 | | |
| Project | Project Location: CEA:Sunoco Routes 19 and 20 Brimfield MA | | | | | | | | | | | |
| | | ertifications for th 2825-2,M92825-3 | 0 | data set: list Labo | orato | ory Sample ID N | uml | bers(s) | | | | |
| Matrices | s: Grou | ndwater/Surface W | /ater (X) | Soil/Sediment (| () [| Drinking Water | () | Air () | | | Other | () |
| CAM Pr | rotocol (check | all that apply below | v): | | | | | | | | | |
| | 260 VOC () CAM IIA | K) 7470/747 CAM III E | • • • • | MassDEP VPH CAM IV A | • • | 3081 Pesticides CAM V B | () | 7196 Hex Cr CAM VI B | (X) | | Mass DEP APH CAM IX A | () |
| 8 | 270 SVOC () 2AM II B | | | | ()8 | | () | 8330 Explosives CAM VIII A | () | | TO-15 VOC CAM IX B | () |
| 6 | 010 Metals (> CAM III A | | ils () | | () 9 () | 2014 Total Cyanide/PAC CAM VI A | () | 6860 Perchlorate CAM VIII B | () | | | |
| | | - | | | • | - | | e Certainty status | | | | |
| A p m | roperly prese nethod holdin | rved (including te g times? | mperature | onsistent with thos) in the field or labo | orato | ory, and prepared | d/ar | nalyzed within | ~ | Yes | s 🗌 No | |
| Вр | rotocol(s) foll | owed? | | ciated QC require | | • | | | ~ | Yes | s 🗌 No | |
| | | | | nalytical response a erformance standa | | | | | 1 | Yes | s 🗌 No | |
| D "(| Quality Assur | | • | the reporting requin idelines for the Ac | | • | CA | AM VII A, | ~ | Yes | s 🗌 No | |
| E a | . VPH, EPH, | | s only: Wa | as each method co ethod(s) for a list c | | • | | | √ | Yes | s 🗌 No | |
| | | | | e complete analyte | | | | | | Yes | | |
| | | • | | performance stand cluding all "No" res | | | | | ✓ | Yes | s ∐No | |
| F | Responses to | questions G, H | , and I belo | ow is required for | r "Pr | resumptive Cert | tain | nty" status | | | | |
| | Vere the repo elected CAM | | elow all CA | AM reporting limits | spe | cified in the | | | | Yes | s 🗹 No | 1 |
| | | | | sumptive Certaint escribed in 310 C | | | | cessarily meet the WSC-07-350. | data ı | iseab | ility | |
| ΗV | Vere all QC p | erformance stand | dards speci | fied in the CAM pre | otoc | ol(s) achieved? | | | | Yes | s 🗹 No | 1 |
| 4 | | | | alyte list specified i | | | | | | Yes | s 🗹 No | 1 |
| A | \// Negative r | esponses must | be addres | sed in an attache | ed Er | nvironmental La | abc | oratory case narra | tive. | | | |
| inquiry | of those rea | sponsible for ob | taining the | penalties of perju information, the lge and belief, ac | ma | terial contained | l in | ••• | | | | |
| Signat | | | fred to | | | | | boratory Director | | | | |
| Printeo | d Name: | Reza Tar | nd | | <u>[</u> | Date: | | 07/16/2010 | | | | |







07/21/10

Technical Report for

Drake Petroleum Co., Inc.

CEA:Sunoco Routes 19 and 20 Brimfield MA

PC# 007280

Accutest Job Number: M92857

Sampling Date: 07/12/10

Report to:

ndescoteaux@cea-inc.com

ATTN: Distribution5

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.

tand

Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (002) ND (R-188) CO MN (11546AA) NC (653) IL (002337) DoD/ISO/IEC 17025:2005 (L2235) This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.







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|---|----|
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| 3.2: M92857-2: MIDPOINT | 10 |
| 3.3: M92857-3: INFLUENT | 11 |
| Section 4: Misc. Forms | 14 |
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Sample Summary

Drake Petroleum Co., Inc.

Job No: M92857

CEA:Sunoco Routes 19 and 20 Brimfield MA Project No: PC# 007280

| Sample Number | Collected Date | Time By | Received | Matr Code | | Client Sample ID |
|------------------|-------------------|----------|----------|--------------|--------------|---------------------|
| M92857-1 | 07/12/10 | 10:15 MH | 07/12/10 | AQ | Effluent | EFFLUENT |
| M92857-2 | 07/12/10 | 10:20 MH | 07/12/10 | AQ | Ground Water | MIDPOINT |
| M92857-3 | 07/12/10 | 10:24 MH | 07/12/10 | AQ | Influent | INFLUENT |





SAMPLE DELIVERY GROUP CASE NARRATIVE

| Client: | Drake Petroleum Co., Inc. | Job No | M92857 |
|---------|--|-------------|-----------------------|
| Site: | CEA:Sunoco Routes 19 and 20 Brimfield MA | Report Date | 7/21/2010 10:42:12 AM |

3 Sample(s) were collected on 07/12/2010 and were received at Accutest on 07/12/2010 properly preserved, at 1.7 Deg. C and intact. These Samples received an Accutest job number of M92857. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

| | Matrix AQ | Batch ID: | MSG4014 |
|--|-----------|-----------|---------|
|--|-----------|-----------|---------|

All samples were analyzed within the recommended method holding time.

- All method blanks for this batch meet method specific criteria.
- Sample(s) M92702-3MS, M92702-3MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Methyl Tert Butyl Ether, Toluene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Only selected compounds requested.

Metals By Method SW846 6010B

| Matrix | AQ | Batch ID: MP15597 |
|--------|----|-------------------|
| | | |

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

- All method blanks for this batch meet method specific criteria.
- Sample(s) M92844-2DUP, M92844-2MS, M92844-2SDL were used as the QC samples for metals.
- Only selected metals requested.

Wet Chemistry By Method 6010/7196A M/200.7

| | Matrix AQ | Batch ID: | R27101 | | | | |
|---|--|-----------|--------|--|--|--|--|
| | M92857-1 for Chromium, Trivalent: Calculated as: (Chromium) - (Chromium, Hexavalent) | | | | | | |
| Γ | Matrix AQ | Batch ID: | R27102 | | | | |

M92857-3 for Chromium, Trivalent: Calculated as: (Chromium) - (Chromium, Hexavalent)

Wet Chemistry By Method EPA 1664

| Matrix AQ Batch ID: GP11804 |
|-----------------------------|
|-----------------------------|

All samples were distilled within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) M92817-3DUP, M92817-3MS were used as the QC samples for HEM Petroleum Hydrocarbons.



Wet Chemistry By Method SM21 2540D

| | Matrix AQ | Batch ID: GN32393 | | | | |
|---|---|-------------------|--|--|--|--|
| - | All samples were analyzed within the recommended method holding time. | | | | | |

- All method blanks for this batch meet method specific criteria.
- Sample(s) M92857-1DUP were used as the QC samples for Solids, Total Suspended.

Wet Chemistry By Method SW846 7196A

| Matrix AQBatch ID:GN32359 |
|---------------------------|
|---------------------------|

All samples were analyzed within the recommended method holding time.

- All method blanks for this batch meet method specific criteria.
- Sample(s) M92857-1DUP, M92857-1MS were used as the QC samples for Chromium, Hexavalent.

Accutest may not have met all requested limits due to methodology limitations, sample matrix, dilutions, or percents solids.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M92857).

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Section 3

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Sample Results

Report of Analysis



| | Page 1 of 1 | | | | | | | |
|--|-------------------|----------------------|---------------------|----------------------|-----------|--|-------------------|-----------------------------|
| Client Sa Lab Sam Matrix: Method: Project: | - | M928 AQ - SW84 | Effluent 6 8260B | utes 19 and 20 I | Brimfield | Date Sampled: Date Received: Percent Solids: I MA | | |
| Run #1 Run #2 | File ID G99320 | | DF 1 | Analyzed 07/13/10 | By EL | Prep Date n/a | Prep Batch n/a | Analytical Batch MSG4014 |
| Run #1 Run #2 | Purge 5.0 ml | Volume | 9 | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|--|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | ND ND ND ND ND ND ND ND | 0.50 1.0 1.0 1.0 5.0 2.0 2.0 20 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 2037-26-5 460-00-4 | Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | Run# 1 93% 96% 87% | Run# 2 | Limits 70-130% 70-130% 70-130% |

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



<u>ω</u> ω Accutest LabLink@11:05 21-Jul-2010

| Client Sample ID: | EFFLUENT | Date Sampled: | 07/12/10 |
|-------------------|--|-----------------|----------|
| Lab Sample ID: | M92857-1 | Date Received: | |
| Matrix: | AQ - Effluent | Percent Solids: | |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|------------------------------------|--------------------------------|------------------------|------------------------------|------------------|----------------------|----------------------------|--|--|
| Chromium Iron Lead Nickel | < 10 < 100 < 5.0 < 40 | 10 100 5.0 40 | ug/l ug/l ug/l ug/l | 1 1 1 1 | 07/13/10 07/13/10 | 07/13/10 DA 07/13/10 DA | SW846 6010B ¹ SW846 6010B ¹ SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² SW846 3010A ² SW846 3010A ² |

(1) Instrument QC Batch: MA12008

(2) Prep QC Batch: MP15597

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Accutest LabLink@11:05 21-Jul-2010

Solids, Total Suspended

| Client Sample ID: Lab Sample ID: Matrix: | NT I uent | Date] | Date Sampled: 07/12/10 Date Received: 07/12/10 Percent Solids: n/a | | | | | |
|--|---|-------------------------------|--|----------------------|-------------|--|----|---|
| Project: | Project: CEA:Sunoco Routes 19 and 20 Brimfield MA | | | | | | | |
| General Chemistry | | | | | | | | |
| Analyte | | Result | RL | Units | DF | Analyzed | By | Method |
| Chromium, Hexaval Chromium, Trivalen HEM Petroleum Hyd | t ^a | < 0.010 < 0.020 5 < 4.1 | 0.010 0.020 4.1 | mg/l mg/l mg/l | 1 1 1 | 07/12/10 17:35 07/13/10 20:22 07/14/10 | | SW846 7196A 6010/7196A M/200.7 EPA 1664 |

mg/l

1

07/19/10

BF

SM21 2540D

Report of Analysis

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

< 4.0

4.0

Page 1 of 1

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| | Page 1 of 1 | | | | | | | |
|--|-------------------|--------|-------------------------|---------------------------|-----------------|--|-------------------|-----------------------------|
| Client San Lab Samp Matrix: Method: Project: | - | SW846 | 7-2 round W 8260B | ater outes 19 and 20 I | Brimfield | Date Sampled: Date Received: Percent Solids: d MA | 07/12/10 | |
| Run #1 Run #2 | File ID G99321 | .D | DF 1 | Analyzed 07/13/10 | By EL | Prep Date n/a | Prep Batch n/a | Analytical Batch MSG4014 |
| Run #1 Run #2 | Purge V 5.0 ml | Volume | | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|---|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | ND ND ND 4.3 ND ND ND ND | 0.50 1.0 1.0 1.0 5.0 2.0 2.0 20 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 2037-26-5 460-00-4 | Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | Run# 1 95% 95% 86% | Run# 2 | Limits 70-130% 70-130% 70-130% |

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



Page 1 of 1

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| | Page 1 of 1 | | | | | | | |
|---|-------------------|--------|-------------------------|----------------------|-----------|--|-------------------|-----------------------------|
| Client Sample ID: Lab Sample ID: Matrix: Method: Project: | | | 7-3 nfluent 8260B | utes 19 and 20 I | Brimfield | Date Sampled: Date Received: Percent Solids: I MA | 07/12/10 | |
| Run #1 Run #2 | File ID G99322 | .D | DF 1 | Analyzed 07/13/10 | By EL | Prep Date n/a | Prep Batch n/a | Analytical Batch MSG4014 |
| Run #1 Run #2 | Purge V 5.0 ml | /olume | | | | | | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|--|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 91-20-3 106-93-4 994-05-8 75-65-0 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether Tert Butyl Alcohol | 1.3 ND 1.1 3.8 3.3 ND ND ND 21.8 | 0.50 1.0 1.0 1.0 5.0 2.0 2.0 20 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 2037-26-5 460-00-4 | Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | Run# 1 95% 96% 86% | Run# 2 | Limits 70-130% 70-130% 70-130% |

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



Page 1 of 1

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Accutest LabLink@11:05 21-Jul-2010

| Client Sample ID: | INFLUENT | Date Sampled: | 07/12/10 |
|-------------------|--|-----------------|----------|
| Lab Sample ID: | M92857-3 | Date Received: | |
| Matrix: | AQ - Influent | Percent Solids: | |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|----------|--------|-----|-------|----|----------|-------------|--------------------------|--------------------------|
| Chromium | < 10 | 10 | ug/l | 1 | | | SW846 6010B 1 | SW846 3010A ² |
| Iron | 4520 | 100 | ug/l | I | | 07/13/10 DA | SW846 6010B ¹ | SW846 3010A ² |
| Lead | < 5.0 | 5.0 | ug/l | 1 | 07/13/10 | 07/13/10 DA | SW846 6010B ¹ | SW846 3010A ² |
| Nickel | < 40 | 40 | ug/l | 1 | 07/13/10 | 07/13/10 DA | SW846 6010B ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA12008

(2) Prep QC Batch: MP15597

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Accutest LabLink@11:05 21-Jul-2010

| Client Sample ID: Lab Sample ID: Matrix: | INFLUEN M92857-3 AQ - Influ | 3 Jent | | | Date I Percer | Date Sampled: 07/12/10 Date Received: 07/12/10 Percent Solids: n/a | | | |
|--|-----------------------------------|--------------|-------------|------------|------------------|--|----|--------------------|--|
| Project: | CEA:Sun | oco Routes 1 | 9 and 20 Bi | rimfield M | A | | | | |
| General Chemistry | | | | | | | | | |
| Analyte | | Result | RL | Units | DF | Analyzed | By | Method | |
| | | | | | | - | • | | |
| Chromium, Hexava | lent | < 0.010 | 0.010 | mg/l | 1 | 07/12/10 17:35 | CF | SW846 7196A | |
| Chromium, Trivalent ^a | | < 0.020 | 0.020 | mg/l | 1 | 07/13/10 20:26 | DA | 6010/7196A M/200.7 | |
| HEM Petroleum Hydrocarbons | | s < 4.1 | 4.1 | mg/l | 1 | 07/14/10 | BF | EPA 1664 | |

mg/l

1

07/19/10

BF

SM21 2540D

Report of Analysis

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

< 4.0

4.0

Solids, Total Suspended

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Section 4

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody
- MCP Form



Parameter Certifications

| Job Number: | M92857 |
|-------------|--|
| Account: | DRAKEPET Drake Petroleum Co., Inc. |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA |

The following parameters included in this report are certified by the state of MA.

| | | | | | 1 - |
|-------------------------|------|------------|-----|---|-----|
| Parameter | CAS# | Method | Mat | Certification Status | |
| Solids, Total Suspended | | SM21 2540D | AQ | Accutest is certified for this parameter. | _ |



Page 1 of 1



| ACCUTEST. | . • | C | | IN CHNOL M | .0GY | | TER | WES | T * I | BUIL | | | 1 | | | | | | | • | ,* | | |
|--|-------------------|--------------------|----------|------------------|--------|--------|--------------|------------|------------------------|----------|----------|---|-----------|-----------|----------|-------------------|----------|---------------|-------------------------|--------------|------------|----------|---|
| | | | | TEL: 5 | 08-48 | 81-620 | 00 * F | FAX: | 508- | 481-7 | 7753 | | | | | | st Job # | | | r | 192 | 285 | 7 |
| Laboratories | | | | | | | | | | | | | | | | Accute | st Quote | | | • | | | |
| Client / Reporting Information | | | ect Info | mation | | | | | | | | | T | | | | Requ | ested / | Analys | is i | | 1 | Matrix Codes DW- Drinking Water |
| Company Name Drake Petroleum Company, Inc. | Project P.C. I | Name: No007280/ | Brimfie | ld Sund | oco | | | | | | | | | | | | | 1 | | | | | GW- Ground Water |
| Address | Street | | | | | | | | | | | | | | | 5 | | | | | | | WW- Water |
| P.O. Box 866 221 Quinebaug Road City State Zip | | es 19 and 20 |) | | | State | | | | | _ | | | | | N a | | | | | | | SW- Surface Water SO- Soll |
| | | | | | | | | | | | | | | | | TBA, TAME, Naph | | | | | | | SL-Sludge |
| North Grosvenordale CT 6255 Project Contact; E-mail | Brimfi Project | | | | | MA | | | | , | | 9 | | | | 5 | | | | | | | OI-Oil LIQ- Other Liquid |
| Mrs. Bronds Growind Lee Smith | 5745- | | | | | | | | | | | | | | | 18/ | | | 1. | lent | | | |
| Phone # | Fax # | | | | | | | | ÷ | | | | | | | EDB, | | | rivalen | Hexavale | | | AIR- Air |
| Samplers's Name MARCHE HOGIE | | urchase Order | # | | | ÷ | | | | | | | | | | MTBE, | | 3 | mr III tu | mr VI | | | SOL-Other Solid |
| Accutest | Collec | | | # of | | HOR O | | | 2 | HOU | s auo | | | | | BTEX, N (8260) | TSS | TPH 1664 | Chromiumr III trivalent | Chromiumr VI | Pb, Ni, Fe | | LAB USE ONLY |
| Field ID / Point of SUMMA# | Date Time | | | botties | 불 | ž i | 일 | ž | z | ž | ž | | | | | <u>™ ®</u> | × | × | 1° | 1° | × | | |
| | 12/2/01015 | | 60 | 6 | 3 | | 4- | + | $\left \cdot \right $ | \vdash | + | | | | | | 5 | \uparrow | ╞┻ | | <u> </u> | 1 | |
| | 1020 | | | 3 | | | + - | | $\left - \right $ | \vdash | + | | | | | × | | - | 4 | | 1. | | · · · · |
| -S INFLUENT | 1024 | 1 4 | N. | 6 | 4 | - | ¥_ | 1 | | | - | | | | | X | X | X | X | ĻΧ. | ∣X | | |
| | V | | | | | | | | | | | | | | | 1. | - 21 | | | <u> </u> | <u> </u> | <u> </u> | |
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| | | | | | | _ | | | H | 1 | + | | | | | | | | - | | + | | |
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| Turnaround Time (Business days) Std. 14 Business Days Approved By:// | Date | Standa | | liverable | intorm | nation | . I . | | | | | | | - | | | | or (III) IB() | a i rulit | 141 N.3 | | Ļ | |
| 10 Day RUSH | Delty , | | | | | | | | | | | | P.C. No | 00728 | 0/ Bri | imfield | l Sunc | oco, R | outes | 19 an | d 20, | Brimf | ield, MA |
| 5 Day RUSH 7 Day Per L | JSEPA | Disk De | | | | | | ÷ *, | | | ÷., | Ĭ | | | • | | 5 | | 1.1 | | | | |
| 3 Day EMERGENCY | • | State Fo | sms | | | | | | | | | ļ | | | | | | | | | | | nc com and |
| 2 Day EMERGENCY | | Other_ | | - | | | | | | | | | Priv | 0 31 | PR-G | onœ | DCE | ~- J | NC | cow | n | 14. | 64,333 |
| Other | | | | | | | | | | | | | | 1 | | | | | | | ۰. | JIV | - /- |
| Emergency T/A data available VIA Lablink | | | | | | | | | | | | | Must m | eet M | ADE | P GW | -1 Sta | Indaro | İs | | | | |
| Sample Custody must be o | documented bel | ow each time | sample | s chang | je po | ssess | ion, I | incluc | ling | couri | ier de | | | ite Time: | | -, / (| | Receive | | | | | |
| Relinquitedby Sampler | 12/10 12 :00 | Received By: | 20 | - | | | | nquish | ea By | | | | ľ | | | | | 2 | - 07. | | | | |
| | Time: | Received By: | 10 | \sim | | | Rell | nquish | ed By | r. | | | | te Time: | | | | Receive | d By: | | | | |
| 3 | | 3 | <u> </u> | | | | 4 | | | | | | | | | | | 4 | | | | | |
| | Time: | Received By: | 1 | | | | Cus | tody S | eal# | | | , | Preserved | where ap | plicable | • | | | | On k D | - | Cooler | Temp. |
| 5 | | 15 | | | | | 1 | | | | | | | | | | | | | ~ | | | |

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M92857: Chain of Custody Page 1 of 2



4.2

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Accutest Laboratories Sample Receipt Summary

| Accutest Job Number: M9285 | 7 C | Client: DRAKE | | Immediate Client Ser | vices Actio | n Required: | No |
|--|--|----------------------------------|----------------------|---|--|--------------|----------|
| Date / Time Received: 7/12/20 | 010 1:50:00 PI | M No. Co | olers: | 1 Client Service Act | ion Require | ed at Login: | No |
| Project: BRIMFIELD SUNOCO | | | | Airbill #'s: N/A | | | |
| Cooler Security Y c 1. Custody Seals Present: Image: Cooler Temperature | | COC Present: pl Dates/Time OK | Y or N ✓ □ ✓ □ | Sample Integrity - Documentation 1. Sample labels present on bottles: 2. Container labeling complete: 3. Sample container label / COC agree: | Y 2 2 | or N | |
| Temp criteria achieved: Cooler temp verification: Cooler media: Duality Control Preservation | ✓ □ Infared gun Ice (bag) <u>Y or N</u> | NA | | Sample Integrity - Condition 1. Sample recvd within HT: 2. All containers accounted for: 3. Condition of sample: | ⊻ ⊻ | or N | |
| Trip Blank present / cooler: Trip Blank listed on COC: Samples preserved properly: VOCs headspace free: | | | | Sample Integrity - Instructions 1. Analysis requested is clear: 2. Bottles received for unspecified tests 3. Sufficient volume rec'd for analysis: 4. Compositing instructions clear: | Y 2 2 2 2 2 2 2 2 2 2 2 2 2 | or N | N/A ⊻ |
| Comments | | | | 5. Filtering instructions clear: | | | ✓ |

Accutest Laboratories V:508.481.6200 495 Technology Center West, Bldg One F: 508.481.7753 Marlborough, MA www/accutest.com 4.2

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M92857: Chain of Custody Page 2 of 2





| WSC-CAM | Exhibit VII A |
|--------------|----------------|
| July 1, 2010 | Revision No. 1 |
| Final | Page 13 of 38 |

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

| 4.3 |
|-----|
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| | | | Ma | ssDEP Analytical F | Protocol Certif | icatio | n Form | | | | |
|--|--|--|--------------|--|---------------------------------------|-----------------|----------------------------------|--------------|------------|--------------------------|----------|
| Laboratory Nam | e: | Accutest Laborate | orie | es of New England | | | Project #: | M928 | 857 | | |
| Project Location | | | | 19 and 20 Brimfield | | | MADEP RTN | None | 1 | | |
| | ,M92857-2 | 2,M92857-3 | ing | data set: list Labora | tory Sample ID | Num | Ders(s) | | | | |
| Matrices: 0 | Groundwate | er/Surface Water | (X) | Soil/Sediment () | Drinking Water | () | Air () |) | | Other | () |
| CAM Protocol (ch | heck all tha | t apply below): | | | | | | | | | |
| 8260 VOC CAM IIA | C (X) | 7470/7471 Hg CAM III B | () | MassDEP VPH () CAM IV A | 8081 Pesticid CAM V B | es () | 7196 Hex Cr CAM VI B | (X) | | Mass DEP APH CAM IX A | (|
| 8270 SVOC CAM II B | C () | 7010 Metals CAM III C | () | | 8151 Herbicid CAM V C | es (| | () | | TO-15 VOC CAM IX B | (|
| 6010 Metals CAM III A | s (X) | 6020 Metals CAM III D | () | 8082 PCB () CAM V A | 9014 Total Cyanide/PAC CAM VI A | () | 6860 Perchlorate CAM VIII B | () | | | |
| Were all s A properly pr method ho | amples re reserved (olding time | ceived in a condition (including temperatues? | n co ire) | Through F are requi | lescribed on th ory, and prepa | e Cha red/ar | in-of Custody, nalyzed within | • | Yes | 🗌 No | |
| B protocol(s) |) followed | ? | | ciated QC requireme | - | | | 1 | Yes | 🗌 No | |
| C protocol(s) |) impleme | nted for all identified | d pe | erformance standard | non-conformar | ices? | | \checkmark | Yes | 🗌 No | |
| D "Quality As Reporting | ssurance a of Analytic | and Quality Control cal Data"? | | he reporting requiren idelines for the Acqui | | in CA | M VII A, | | Yes | ⊡ No | |
| E a. VPH, El | PH, and A | • | | s each method cond ethod(s) for a list of s | | • | | 1 | Yes | No | |
| | | | | complete analyte lis | | | | ✓ ✓ | Yes | □ No | |
| F and evalua | ated in a la | aboratory narrative (| (inc | performance standar luding all "No" respor | nses to Questic | ons A | through E)? | Ū. | Yes | No | |
| - | - | | | ow is required for "F | - | ertaiı | nty" status | | | | 4 |
| selected C | CAM proto | cols | | M reporting limits spe | | | | | Yes | ∐ No | <u> </u> |
| | | | | sumptive Certainty" escribed in 310 CMF | | | | บลเล เ | Iseabi | | |
| | | | | fied in the CAM proto lyte list specified in the | 、 / | | atocol(s)? | | Yes Yes | ⊻ No ⊻ No | 1 |
| 1 | | • | | sed in an attached E | | | | tive. | 165 | | |
| inquiry of those | e respons | sible for obtaining | the | penalties of perjury information, the m lge and belief, accu | aterial contain | ed in | • • | | | | |
| Signature: | K | In fre | | | Position: | | boratory Director | | | | |
| Printed Name: | | Reza Tand | | | Date: | | 07/21/2010 | | | | |







08/17/10

Technical Report for

Drake Petroleum Co., Inc.

CEA:Sunoco Routes 19 and 20 Brimfield MA

PC# 007280

Accutest Job Number: M93486

Sampling Date: 08/09/10

Report to:

ndescoteaux@cea-inc.com

ATTN: Distribution5

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.

tand

Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (002) ND (R-188) CO MN (11546AA) NC (653) IL (002337) DoD/ISO/IEC 17025:2005 (L2235) This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.





New England • 495 Tech Center West • Building 1 • Marlborough, MA 01752 • tel: 508-481-6200 • fax: 508-481-7753 • http://www.accutest.com



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| 3.2: M93486-2: MIDPOINT | 10 |
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Sample Summary

Drake Petroleum Co., Inc.

Job No: M93486

CEA:Sunoco Routes 19 and 20 Brimfield MA Project No: PC# 007280

| Sample Number | Collected Date | Time By | Received | Matr Code | | Client Sample ID |
|------------------|-------------------|----------|----------|--------------|--------------|---------------------|
| M93486-1 | 08/09/10 | 09:30 MH | 08/09/10 | AQ | Effluent | EFFLUENT |
| M93486-2 | 08/09/10 | 09:35 MH | 08/09/10 | AQ | Ground Water | MIDPOINT |
| M93486-3 | 08/09/10 | 09:40 MH | 08/09/10 | AQ | Influent | INFLUENT |







SAMPLE DELIVERY GROUP CASE NARRATIVE

| Client: | Drake Petroleum Co., Inc. | Job No | M93486 |
|---------|--|-------------|-----------------------|
| Site: | CEA:Sunoco Routes 19 and 20 Brimfield MA | Report Date | 8/17/2010 11:02:48 AM |

3 Sample(s) were collected on 08/09/2010 and were received at Accutest on 08/09/2010 properly preserved, at 4.1 Deg. C and intact. These Samples received an Accutest job number of M93486. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

| | <u> </u> | J | |
|---|-------------------------|---------------------------------------|---------------|
| | Matrix AQ | Batch ID: | MSL1434 |
| - | All samples were analyz | zed within the recommended method | holding time. |
| | All method blanks for t | this batch meet method specific crite | ria. |

Only selected compounds requested.

| Matrix AQ Batch ID: MSL1435 | Matrix AO Batch ID: MSL1435 | |
|-----------------------------|-----------------------------|--|
|-----------------------------|-----------------------------|--|

- All samples were analyzed within the recommended method holding time.
- Sample(s) M93483-3MS, M93483-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Tert Butyl Alcohol are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Matrix Spike Recovery(s) for Ethylbenzene, Methyl Tert Butyl Ether, Naphthalene, Xylene (total) are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- Only selected compounds requested.
- Matrix Spike Duplicate Recovery(s) for Ethylbenzene, Methyl Tert Butyl Ether, Naphthalene are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Metals By Method SW846 6010B

| | Matrix AQ | Batch ID: MP15741 | |
|------|-----------|-------------------|--|
| 4.11 | | | |

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M93486-1DUP, M93486-1MS, M93486-1SDL, M93486-1DUP were used as the QC samples for metals.
- RPD(s) for Duplicate for Iron are outside control limits for sample MP15741-D1. RPD acceptable due to low duplicate and sample concentrations.
- RPD(s) for Serial Dilution for Iron are outside control limits for sample MP15741-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).</p>
- Only selected metals requested.

Wet Chemistry By Method 6010/7196A M/200.7

| | Matrix AQ | Batch ID: | R27197 | | | | |
|---|--|-----------|--------|--|--|--|--|
| - | M93486-1 for Chromium, Trivalent: Calculated as: (Chromium) - (Chromium, Hexavalent) | | | | | | |
| | Matrix AQ | Batch ID: | R27198 | | | | |

M93486-3 for Chromium, Trivalent: Calculated as: (Chromium) - (Chromium, Hexavalent)



Wet Chemistry By Method EPA 1664

| Matrix AQ | Batch ID: GP11900 |
|-----------|-------------------|
| | |

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M93408-3DUP, M93408-3MS were used as the QC samples for HEM Petroleum Hydrocarbons.

Wet Chemistry By Method SM21 2540D

| Matrix AQ | Batch ID: GN32569 | |
|-----------|-------------------|--|
| | | |

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M93403-3DUP were used as the QC samples for Solids, Total Suspended.

Wet Chemistry By Method SW846 7196A

| Matrix AQ Batch ID: GN32301 | Matrix AQ | Batch ID: GN32561 |
|-----------------------------|-----------|-------------------|
|-----------------------------|-----------|-------------------|

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) M93486-1DUP, M93486-1MS were used as the QC samples for Chromium, Hexavalent.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M93486).

Page 2 of 2





Section 3

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Sample Results

Report of Analysis



| | Report of Analysis | | | | | | | |
|---|--------------------|--|------------|----------------------|-------------|--|-------------------|-----------------------------|
| Client San Lab Sam Matrix: Method: Project: | ple ID: | EFFLUEN M93486-1 AQ - Efflu SW846 829 CEA:Suno | ent 60B | outes 19 and 20 I | Brimfield N | Date Sampled: Date Received: Percent Solids: MA | | |
| Run #1 Run #2 | File ID L43781. | D 1 | F | Analyzed 08/12/10 | By AMY | Prep Date n/a | Prep Batch n/a | Analytical Batch MSL1435 |
| Run #1 Run #2 | Purge V 5.0 ml | olume | | | | | | |

Purgeable Aromatics, MTBE, TBA, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|--|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 75-65-0 91-20-3 106-93-4 994-05-8 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Tert Butyl Alcohol Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether | ND ND ND ND ND ND ND ND | 0.50 1.0 1.0 1.0 20 5.0 2.0 2.0 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 2037-26-5 460-00-4 | Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | Run# 1 114% 109% 107% | Run# 2 | Limits 70-130% 70-130% 70-130% |

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



<u>ω</u> ω Accutest LabLink@11:59 17-Aug-2010

| Client Sample ID: | EFFLUENT | Date Sampled: | 08/09/10 |
|-------------------|--|-----------------|----------|
| Lab Sample ID: | M93486-1 | Date Received: | |
| Matrix: | AQ - Effluent | Percent Solids: | |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|------------------------------------|--------------------------------|------------------------|------------------------------|------------------|----------------------|--|--|--|
| Chromium Iron Lead Nickel | < 10 < 100 < 5.0 < 40 | 10 100 5.0 40 | ug/l ug/l ug/l ug/l | 1 1 1 1 | 08/10/10 08/10/10 | 08/10/10 DA 08/11/10 DA 08/10/10 DA 08/10/10 DA | SW846 6010B ¹ SW846 6010B ² SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ³ SW846 3010A ³ SW846 3010A ³ SW846 3010A ³ |

(1) Instrument QC Batch: MA12100

(2) Instrument QC Batch: MA12102(3) Prep QC Batch: MP15741



3.4 3

Accutest LabLink@11:59 17-Aug-2010

| Lab Sample ID: M9 Matrix: AQ | FLUENT 3486-1 - Effluent A:Sunoco Routes 1 | 9 and 20 Br | rimfield M | Date l Percer | Sampled: 08/09/1 Received: 08/09/1 nt Solids: n/a | | | |
|----------------------------------|---|-------------|------------|------------------|---|----|--------------------|--|
| General Chemistry | | | | | | | | |
| Analyte | Result | RL | Units | DF | Analyzed | By | Method | |
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 08/09/10 17:50 | CF | SW846 7196A | |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 08/10/10 20:07 | DA | 6010/7196A M/200.7 | |
| HEM Petroleum Hydroc | arbons < 4.1 | 4.1 | mg/l | 1 | 08/12/10 | BF | EPA 1664 | |
| Solids, Total Suspended | < 4.0 | 4.0 | mg/l | 1 | 08/10/10 | BF | SM21 2540D | |

Report of Analysis

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

Page 1 of 1

3.1 3

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| | Report of Analysis | | | | | | | |
|---|--------------------|--------|------------------------------|--------------------------|-------------|--|-------------------|-----------------------------|
| Client San Lab Sam Matrix: Method: Project: | - | SW84 | 86-2 Ground Wa 6 8260B | iter utes 19 and 20 F | Brimfield N | Date Sampled: Date Received: Percent Solids: MA | | |
| Run #1 Run #2 | File ID L43766 | | DF 1 | Analyzed 08/12/10 | By AMY | Prep Date n/a | Prep Batch n/a | Analytical Batch MSL1434 |
| Run #1 Run #2 | Purge 5.0 ml | Volume | ; | | | | | |

Purgeable Aromatics, MTBE, TBA, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|---|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 75-65-0 91-20-3 106-93-4 994-05-8 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Tert Butyl Alcohol Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether | ND ND ND 2.8 ND ND ND ND | 0.50 1.0 1.0 1.0 20 5.0 2.0 2.0 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 2037-26-5 460-00-4 | Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | Run# 1 105% 110% 107% | Run# 2 | Limits 70-130% 70-130% 70-130% |

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Page 1 of 1

3.2

| | | | Repo | ort of A | nalysis | | Page 1 of 1 | | |
|---|---------------------|--|----------------------|-------------|-----------------------------------|--|-----------------------------|--|--|
| Client San Lab Sam Matrix: Method: Project: | ple ID: M | NFLUENT A93486-3 AQ - Influent SW846 8260B CEA:Sunoco Ro | utes 19 and 20 I | Brimfield N | Date Received: Percent Solids: | Date Sampled: 08/09/10 Date Received: 08/09/10 Percent Solids: n/a | | | |
| Run #1 Run #2 | File ID L43765.I | DF D 1 | Analyzed 08/12/10 | By AMY | Prep Date n/a | Prep Batch n/a | Analytical Batch MSL1434 | | |
| Run #1 Run #2 | Purge Vo 5.0 ml | blume | | | | | | | |

Purgeable Aromatics, MTBE, TBA, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|---|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 75-65-0 91-20-3 106-93-4 994-05-8 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Tert Butyl Alcohol Naphthalene 1,2-Dibromoethane tert-Amyl Methyl Ether | ND ND ND 1.1 ND ND ND | 0.50 1.0 1.0 1.0 20 5.0 2.0 2.0 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| CAS No. 1868-53-7 2037-26-5 460-00-4 | Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | Run# 1 104% 107% 107% | Run# 2 | Limits 70-130% 70-130% 70-130% |

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



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Accutest LabLink@11:59 17-Aug-2010

| Client Sample ID: Lab Sample ID: Matrix: | M93486-3 AQ - Influent | Date Sampled: Date Received: Percent Solids: | 08/09/10 |
|--|--|--|----------|
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|------------------------------------|-------------------------------|------------------------|------------------------------|------------------|----------------------|--------------------|--|--|
| Chromium Iron Lead Nickel | < 10 4700 < 5.0 < 40 | 10 100 5.0 40 | ug/l ug/l ug/l ug/l | 1 1 1 1 | 08/10/10 08/10/10 | 08/10/10 DA | SW846 6010B ¹ SW846 6010B ² SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ³ SW846 3010A ³ SW846 3010A ³ SW846 3010A ³ |

(1) Instrument QC Batch: MA12100

(2) Instrument QC Batch: MA12102(3) Prep QC Batch: MP15741

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Accutest LabLink@11:59 17-Aug-2010

Solids, Total Suspended

| Client Sample ID: Lab Sample ID: Matrix: | INFLUE M93486-3 AQ - Infl | 3 | | | Date 1 | Sampled: 08/09/1 Received: 08/09/1 nt Solids: n/a | | |
|---|---------------------------------|-------------------------------|-----------------------|----------------------|-------------|---|----|---|
| Project: | CEA:Sun | oco Routes 19 | 9 and 20 Bi | rimfield M | | | | |
| General Chemistry | | | | | | | | |
| Analyte | | Result | RL | Units | DF | Analyzed | By | Method |
| Chromium, Hexaval Chromium, Trivalen HEM Petroleum Hy | it ^a | < 0.010 < 0.020 s < 4.1 | 0.010 0.020 4.1 | mg/l mg/l mg/l | 1 1 1 | 08/09/10 17:50 08/10/10 21:56 08/12/10 | | SW846 7196A 6010/7196A M/200.7 EPA 1664 |

mg/l

1

08/10/10

BF

SM21 2540D

Report of Analysis

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

< 4.0

4.0

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Section 4

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody
- MCP Form



Parameter Certifications

Job Number:M93486Account:DRAKEPET Drake Petroleum Co., Inc.Project:CEA:Sunoco Routes 19 and 20 Brimfield MA

The following parameters included in this report are certified by the state of MA.

| Parameter | CAS# | Method | Mat | Certification Status |
|-------------------------|------|------------|-----|---|
| Solids, Total Suspended | | SM21 2540D | AQ | Accutest is certified for this parameter. |





| MARLBORCUGH, MO. 0173 The Loo F ALC OF FAX: 508-481-7753 Control For FAX: 508-581-7754 Control For FAX: 508-581-7754 Control For FAX: 508-581-7754 For FAX: 508-581-7754 Control For FAX: 508-581-7754 For FAX: 5 | WANT. | | • | | , t | C | HA 495 TEC | CHNOL | OGY | CEN | ITER V | VEST | * BL | JILD | | Y ONE | | | | | | | | | , 7 | | |
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| Turnaround Time (Business days) Data Deliverable information Comments / Remarks Std. 14 Business Days Approved By: Date: Standard 10 Day RUSH Commercial "B" P.C. No007280/ Brimfield Sunoco, Routes 19 and 20, Brimfield, MA 5 Day RUSH Commercial "B" P.C. No007280/ Brimfield Sunoco, Routes 19 and 20, Brimfield, MA 5 Day RUSH To Day Per USEPA Disk beinerable 3 Day Business Days Disk Deliverable Email lab reports to: Ismith@warreneg.com, kduprey@cca-inc.com and 1 Day BMERGENCY Other Other Must meet MADEP GW-1 Standards Comparison Data Deliverable Bainguished By: Data Time: Received By: 2 Day BMERGENCY 2 1 Must meet MADEP GW-1 Standards Bainguished by Sample: 2 1 Must meet MADEP GW-1 Standards Control Sample Custody must be documented below each time samples change possession, including courier delivery. Data Time: Received By: Ratinguished By: 1 Must meet MADEP GW-1 Standards 2 3 2 4 On tice Conter Jama. 3 6 1 Conter Jama. 0 4 0 0 | 1 | | | | | <u> </u> | | <u> </u> | | \vdash | - | + | -+ | | + | | | | + | | 1 | 1 | + | + | 1- | | 125 |
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| Soli, La business bays Approximation of an analysis P.C. No007280/ Brimfield Sunoco, Routes 19 and 20, Brimfield, MA 1 to Day RUSH 7 Day Per USEPA Disk Deliverable Email lab reports to: Ismith@warreneg.com, kduprey@cea-inc.com and 3 Day EMERGENCY | | Tumaround Time (Business days) | | | | - | | eliverable | Infor | mation | | : | | ··· . | | | | <u>.</u> | | - | | | | | | | |
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| Other Must meet MADEP GW-1 Standards Emergency T/A data available VIA Lablink Sample Custody must be documented below each time samples change possession, including courier delivery. Data Time: Reserved By: Ralinguished by: 3 99/00 147:00 1 1//////////////////////////////////// | | | | · | | | | | ι | | | | | | | | | | | | | | | | | | |
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| Emergency 1/A data available VIA Labilitik Reinergency 1/A data available VIA Labilitik Rainergency 1/A data available VIA Labilitik Rainergency 1/A data available VIA Labilitik | | | | | | | | | | | | | | | | | Muct | meet | MAD | EP G | w-1 S | tanda | rds | | | | |
| Relinguished by Sampler 2 1 A grad of 14 : 00 Relinguished by: Relinguished by: Color famp. Color famp. Color famp. Relinguished by: Color famp. Color famp. Color famp. Color famp. | Emer | gency T/A data available VIA Lablin | nk | | | l | | les cha | | 0950 | ssion | inclu | dine | cou | rier d | eliver | | | | | | 1 | | | | | |
| Ratinguished by: Date Time: Received By: Received By: Attraction of the second by: 3 4 4 Realinguished by: 0 to the second by: 0 to the second by: | Relinguis | | ody must | | | | | | | _ | Re | lingula | ned By | r. | | | | Date Ti | ne: | | | Recei | ved By: | | | | |
| 3 Relinquished by: Date Time: Received By: Custody Seal # Preserved winter approximation | 1)- | ull blg | 1 | V9/0 | 14:00 | 1 No | Tr. | 11 | 6 | ~ | 2 <u>2</u> | linquis | ned By | r: | | | | Date Th | ne: | | ~~~~ | Recei | ved By: | | | | <u></u> |
| Relinquished by: 79 Date Time: Received by: | 3 | <u>Q</u> | | | | | | | | | 4 | storly 4 | as 2 | | | | Preserv | ed where | applies | able | | 4 | | | | _ Coo | er Temp. D |
| | Relinquis | hed by: | | Date Time: | | | 5у: | | | | | | | | | | | | | | | ÷ | | | ~ | <u>-</u> | 41- |

M93486: Chain of Custody Page 1 of 2



4.2 4



Accutest Laboratories Sample Receipt Summary

| Accutest Job Number: M93486 | 6 Client | : DRAKE | | | Immediate Client Serv | ices Action | Required: | No |
|--|-------------------------------|-----------|--------|---|-------------------------|--------------|--------------|--------------|
| Date / Time Received: 8/9/201 | 0 2:00:00 PM | No. Coole | ers: | 1 | Client Service Action | on Require | d at Login: | No |
| Project: BRIMFIELD SUNOCO | | | | Airbill #'s | N/A | | | |
| Cooler Security Y or | <u>r N</u> | <u> </u> | Y or N | Sample Integrity | - Documentation | Y | or N | |
| 1. Custody Seals Present: Image: Custody Seals Intact: 2. Custody Seals Intact: Image: Custody Seals Intact: | 3. COC 4. Smpl Date | | | 1. Sample labels p 2. Container labelir | | v V | | |
| <u>Cooler Temperature</u> | Y or N | | | 3. Sample containe | er label / COC agree: | \checkmark | | |
| Temp criteria achieved: Cooler temp verification: Cooler media: | Infared gun | | | Sample Integrity 1. Sample recvd w 2. All containers ac | ithin HT: | <u> </u> | or N | |
| Quality Control Preservation | Y or N | N/A | | 3. Condition of san | | | LI Intact | |
| 1. Trip Blank present / cooler: | | | | Sample Integrity | <u>y - Instructions</u> | Y | or N | N/A |
| 2. Trip Blank listed on COC: | | | | 1. Analysis reques | sted is clear: | 1 | | |
| 3. Samples preserved properly: | ✓ | | | 2. Bottles receive | d for unspecified tests | | ✓ | |
| 4. VOCs headspace free: | | | | 3. Sufficient volum | ne rec'd for analysis: | ✓ | | |
| | | | | 4. Compositing in | structions clear: | | | \checkmark |
| | | | | 5. Filtering instruct | tions clear: | | | ✓ |

Comments

Accutest Laboratories V:508.481.6200 495 Technology Center West, Bldg One F: 508.481.7753 Marlborough, MA www/accutest.com

M93486: Chain of Custody Page 2 of 2





| WSC-CAM | Exhibit VII A |
|--------------|----------------|
| July 1, 2010 | Revision No. 1 |
| Final | Page 13 of 38 |

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

| | | Ма | ssDEP Analytical F | Protocol Certifica | tior | n Form | | | | |
|--------|---|--|----------------------------|---------------------------------------|------|--------------------------------|-----------------------|-------|-----------------------|----|
| Labor | atory Name: | Accutest Laboratorie | es of New England | | | Project #: | M934 | 86 | | |
| Proje | ct Location: | CEA:Sunoco Route | s 19 and 20 Brimfield | MA | | MADEP RTN | None | | | |
| | orm provides cer M93486-1,M934 | rtifications for the following 186-2,M93486-3 |) data set: list Labora | atory Sample ID Nu | uml | oers(s) | | | | |
| Matric | | . , | Soil/Sediment () | Drinking Water | () | Air () | | | Other | () |
| CAM | Protocol (check al | Il that apply below): | 1 | 1 | | | | | T | |
| | 8260 VOC (X) | S () | () | 8081 Pesticides | () | | (X) | | Mass DEP APH | () |
| - | | CAM III B | | CAM V B | () | CAM VI B | () | | CAM IX A TO-15 VOC | () |
| | 8270 SVOC () CAM II B | 7010 Metals () CAM III C | MassDEP EPH () CAM IV B | 8151 Herbicides CAM V C | . , | CAM VIII A | () | | CAM IX B | () |
| | 6010 Metals (X) CAM III A | 6020 Metals () CAM III D | 8082 PCB () CAM V A | 9014 Total Cyanide/PAC CAM VI A | () | 6860 Perchlorate CAM VIII B | () | | | |
| | Affirmative Res | sponses to Questions A | Through F are regu | ired for "Presum | otiv | e Certainty status | ; | | | |
| Α | Were all samples received in a condition consistent with those described on the Chain-of Custody, Yes No A properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times? | | | | | | | | | |
| | Were the analyti protocol(s) follow | ical method(s) and all asso wed? | ociated QC requireme | ents specified in th | le s | elected CAM | \checkmark | Yes | 🗌 No | |
| | | d corrective actions and a | nalytical response ac | tions specified in t | he | selected CAM | _ | | | |
| | | emented for all identified p tory report comply with all | | | | | ✓ | Yes | ∐ No | |
| D | "Quality Assurar Reporting of Ana | nce and Quality Control Gualytical Data"? | | | 07 | WI VII A, | 1 | Yes | No | |
| | a. VPH, EPH, ar | I, and TO-15 only: nd APH Methods only: Wa (Refer to the individual m | | • | | | 1 | Yes | No | |
| | • • • | 15 Methods only: Was the | () | • | | , | \checkmark | Yes | No | |
| | | ble CAM protocol QC and a laboratory narrative (inc | | | | | 1 | Yes | No | |
| | Responses to a | questions G, H, and I bel | ow is required for "I | Presumptive Cert | tain | nty" status | | | | |
| G | Were the reporti selected CAM p | ing limits at or below all CA | AM reporting limits sp | ecified in the | | | 1 | Yes | □ No | 1 |
| | Data User Note | : Data that achieve "Pre | | | | | data u | iseab | ility | |
| | | tiveness requirements d | | | nd ' | WSC-07-350. | | Yes | ✓ No | 1 |
| | | ported for the complete and | | | pro | tocol(s)? | | Yes | | |
| 1 | All Negative re | sponses must be addres | sed in an attached | Environmental La | abo | oratory case narra | tive. | | | |
| inqui | ry of those resp | ttest under the pains and consible for obtaining the co the best of my knowled | e information, the m | aterial contained | ' in | • • | | | | |
| Signa | | mon pro | | | | boratory Director | | | | |
| Printe | ed Name: | Reza Tand | | Date: | | 08/17/2010 | | | | |







09/17/10

Technical Report for

Drake Petroleum Co., Inc.

CEA:Sunoco Routes 19 and 20 Brimfield MA

PC# 007280

Accutest Job Number: M94171

Sampling Date: 09/10/10

Report to:

ndescoteaux@cea-inc.com

ATTN: Distribution5

Total number of pages in report: 15



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.

tand

Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (002) ND (R-188) CO MN (11546AA) NC (653) IL (002337) DoD/ISO/IEC 17025:2005 (L2235) This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.





New England • 495 Tech Center West • Building 1 • Marlborough, MA 01752 • tel: 508-481-6200 • fax: 508-481-7753 • http://www.accutest.com



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| 2.2: M94171-2: MIDPOINT | 8 |
| 2.3: M94171-3: INFLUENT | 9 |
| Section 3: Misc. Forms | 12 |
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Sample Summary

Drake Petroleum Co., Inc.

Job No: M94171

CEA:Sunoco Routes 19 and 20 Brimfield MA Project No: PC# 007280

| Sample Number | Collected Date | Time By | Received | Matr Code | | Client Sample ID |
|------------------|-------------------|----------|----------|--------------|--------------|---------------------|
| M94171-1 | 09/10/10 | 14:20 JB | 09/10/10 | AQ | Effluent | EFFLUENT |
| M94171-2 | 09/10/10 | 14:25 JB | 09/10/10 | AQ | Ground Water | MIDPOINT |
| M94171-3 | 09/10/10 | 14:30 JB | 09/10/10 | AQ | Influent | INFLUENT |





Sample Results

Report of Analysis



| Client Sa | mple ID: EFFL | UENT | | | | | | | | | | | | |
|-----------|---------------|-----------|-------------------------|---------------------|---------------------|------------|-------------------------|--|--|--|--|--|---|--|
| Lab Sam | • | 71-1 | | Date Sample | e Sampled: 09/10/10 | | | | | | | | | |
| - | | Effluent | t Date Received: 09/10/ | | | | Date Received: 09/10/10 | | | | | | 1 | |
| Method: | SW84 | 6 8260B | | Percent Solids: n/a | | | | | | | | | | |
| Project: | CEA: | Sunoco Ro | outes 19 and 20 I | Brimfield | MA | | | | | | | | | |
| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch | | | | | | | |
| Run #1 | G100091.D | 1 | 09/13/10 | EL | n/a | n/a | MSG4037 | | | | | | | |
| Run #2 | | | | | | | | | | | | | | |
| | Purge Volum | e | | | | | | | | | | | | |
| Run #1 | 5.0 ml | | | | | | | | | | | | | |
| Run #2 | | | | | | | | | | | | | | |

Purgeable Aromatics, MTBE, TBA, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|--|---|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 75-65-0 91-20-3 106-93-4 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Tert Butyl Alcohol Naphthalene 1,2-Dibromoethane | ND ND ND ND ND ND ND | 0.50 1.0 1.0 1.0 20 5.0 2.0 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| 994-05-8 | tert-Amyl Methyl Ether | ND | 2.0 | ug/l |
| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
| 1868-53-7 2037-26-5 460-00-4 | Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | 105% 108% 101% | | 70-130% 70-130% 70-130% |

N = Indicates presumptive evidence of a compound



Page 1 of 1

Accutest LabLink@15:59 17-Sep-2010

| Client Sample ID: | EFFLUENT | | |
|-------------------|--|-----------------|----------|
| Lab Sample ID: | M94171-1 | Date Sampled: | 09/10/10 |
| Matrix: | AQ - Effluent | Date Received: | 09/10/10 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
| | | | |

Report of Analysis

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|------------------|-------------|-----------|--------------|--------|----------|----------------------------|--|--|
| Chromium Iron | < 10 321 | 10 100 | ug/l ug/l | 1 1 | | 09/13/10 DA 09/13/10 DA | SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² |
| Lead | < 5.0 | 5.0 | ug/l | 1 | 09/13/10 | 09/13/10 DA | SW846 6010B ¹ | SW846 3010A ² |
| Nickel | < 40 | 40 | ug/l | 1 | 09/13/10 | 09/13/10 DA | SW846 6010B ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA12216

(2) Prep QC Batch: MP15918

Page 1 of 1

2.1

N



Accutest LabLink@15:59 17-Sep-2010

Solids, Total Suspended

| Lab Sample ID: M94 | LUENT 171-1 Effluent | | | Date 1 | Sampled: 09/10/1 Received: 09/10/1 nt Solids: n/a | | | |
|---|----------------------------|-------|-------|--------|---|----|--------------------|--|
| Project: CEA:Sunoco Routes 19 and 20 Brimfield MA | | | | | | | | |
| General Chemistry | | | | | | | | |
| Analyte | Result | RL | Units | DF | Analyzed | Ву | Method | |
| Chromium, Hexavalent | < 0.010 | 0.010 | mg/l | 1 | 09/10/10 16:50 | CF | SW846 7196A | |
| Chromium, Trivalent ^a | < 0.020 | 0.020 | mg/l | 1 | 09/13/10 23:01 | DA | 6010/7196A M/200.7 | |
| HEM Petroleum Hydroca | rbons < 4.1 | 4.1 | mg/l | 1 | 09/16/10 | BF | EPA 1664 | |
| Solids Total Suspended | < 4.0 | 4 0 | mơ/l | 1 | 09/17/10 | BF | SM21 2540D | |

mg/l

1

4.0

09/16/10 BF 09/17/10 BF

Report of Analysis

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

< 4.0

Page 1 of 1

SM21 2540D

2.1

N



| Client San Lab Samj Matrix: Method: Project: | ple ID: M941 AQ - 0 SW84 | 71-2 Ground W 6 8260B | ater outes 19 and 20 F | Brimfield | Percent Solid | ed: 09/10/10 | |
|--|--------------------------------|-----------------------------|---------------------------|-----------|------------------|-------------------|-----------------------------|
| Run #1 Run #2 | File ID G100092.D | DF 1 | Analyzed 09/13/10 | By EL | Prep Date n/a | Prep Batch n/a | Analytical Batch MSG4037 |
| Run #1 Run #2 | Purge Volume 5.0 ml |) | | | | | |

Purgeable Aromatics, MTBE, TBA, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|---|---|---|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 75-65-0 91-20-3 106-93-4 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Tert Butyl Alcohol Naphthalene 1,2-Dibromoethane | ND ND ND 2.7 ND ND ND | 0.50 1.0 1.0 1.0 20 5.0 2.0 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| 994-05-8 CAS No. 1868-53-7 2037-26-5 460-00-4 | tert-Amyl Methyl Ether Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | ND Run# 1 103% 107% 101% | 2.0 Run# 2 | ug/l Limits 70-130% 70-130% 70-130% |

N = Indicates presumptive evidence of a compound



Page 1 of 1

| Client Sa | mple ID: INFL | UENT | | | | | | | |
|-----------------------|---------------|---------------------------------|-------------------------|---------------------|-----------|------------|------------------|--|--|
| Lab Sam | • | M94171-3 Date Sampled: 09/10/10 | | | | | | | |
| Matrix: AQ - Influent | | Influent | Date Received: 09/10/10 | | | | | | |
| Method: | SW84 | 6 8260B | | Percent Solids: n/a | | | | | |
| Project: | CEA: | Sunoco Ro | utes 19 and 20 I | Brimfield | MA | | | | |
| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch | | |
| Run #1 | G100093.D | 1 | 09/13/10 | EL | n/a | n/a | MSG4037 | | |
| Run #2 | | | | | | | | | |
| | Purge Volume | • | | | | | | | |
| Run #1 | 5.0 ml | | | | | | | | |
| Run #2 | | | | | | | | | |

Purgeable Aromatics, MTBE, TBA, Naphthalene

| CAS No. | Compound | Result | RL | Units Q |
|---|--|---|--|--|
| 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 75-65-0 91-20-3 106-93-4 994-05-8 | Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Tert Butyl Alcohol Naphthalene 1,2-Dibromoethane tert A myd Methyl Ether | ND ND ND 2.1 ND ND ND | 0.50 1.0 1.0 1.0 20 5.0 2.0 2.0 | ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l |
| 994-05-8 CAS No. 1868-53-7 2037-26-5 460-00-4 | tert-Amyl Methyl Ether Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene | ND Run# 1 104% 107% 101% | 2.0 Run# 2 | ug/l Limits 70-130% 70-130% 70-130% |

N = Indicates presumptive evidence of a compound



Page 1 of 1

9 of 15

| Client Sample ID: | INFLUENT | | |
|-------------------|--|-----------------|----------|
| - | M94171-3 | Date Sampled: | 09/10/10 |
| Matrix: | AQ - Influent | Date Received: | 09/10/10 |
| | | Percent Solids: | n/a |
| Project: | CEA:Sunoco Routes 19 and 20 Brimfield MA | | |
| L | | | |

Total Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|------------------------------------|-------------------------------|------------------------|------------------------------|------------------|----------------------|--|--|--|
| Chromium Iron Lead Nickel | < 10 57300 23.8 < 40 | 10 100 5.0 40 | ug/l ug/l ug/l ug/l | 1 1 1 1 | 09/13/10 09/13/10 | 09/13/10 DA 09/13/10 DA 09/13/10 DA 09/13/10 DA | SW846 6010B ¹ SW846 6010B ¹ SW846 6010B ¹ SW846 6010B ¹ | SW846 3010A ² SW846 3010A ² SW846 3010A ² SW846 3010A ² |

(1) Instrument QC Batch: MA12216

(2) Prep QC Batch: MP15918

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M94171

Accutest LabLink@15:59 17-Sep-2010

| Client Sample ID: Lab Sample ID: Matrix: Project: | ab Sample ID: M94171-3 Fatrix: AQ - Influent | | | | | Sampled: 09/10/1 Received: 09/10/1 nt Solids: n/a | | |
|--|---|---------|-------|-------|----|---|----|--------------------|
| General Chemistry | General Chemistry | | | | | | | |
| Analyte | | Result | RL | Units | DF | Analyzed | By | Method |
| Chromium, Hexaval | lent | < 0.010 | 0.010 | mg/l | 1 | 09/10/10 16:50 | CF | SW846 7196A |
| Chromium, Trivalent ^a | | < 0.020 | 0.020 | mg/l | 1 | 09/13/10 23:05 | DA | 6010/7196A M/200.7 |
| HEM Petroleum Hydrocarbons | | s < 4.1 | 4.1 | mg/l | 1 | 09/16/10 | BF | EPA 1664 |
| Solids, Total Suspen | ided | 113 | 4.0 | mg/l | 1 | 09/17/10 | BF | SM21 2540D |

Report of Analysis

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

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Section 3

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Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)Chain of Custody



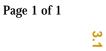
Parameter Certifications

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Job Number:M94171Account:DRAKEPET Drake Petroleum Co., Inc.Project:CEA:Sunoco Routes 19 and 20 Brimfield MA

The following parameters included in this report are certified by the state of MA.

| Parameter | CAS# | Method | Mat | Certification Status |
|-------------------------|------|------------|-----|---|
| Solids, Total Suspended | | SM21 2540D | AQ | Accutest is certified for this parameter. |





| Accutest T/ Time Sample % | 177/ Matrix Codes DW- Drinking Water GW- Smuch Weller WW- Water SW- Surface Water SU-Surga | | |
|--|--|--|--|
| Requested Analysis Project Information Project Information Requested Analysis Client / Reporting Information Project Name: Project Name: Project Information Project Information Project Name: Project Information Requested Analysis Project Name: Project Information Project Name: Project Name: Project Name: Project Name: Project Name: Project N | DW- Drinking Water CV- Circular Water W- Crinking Water SW- Surface Water SO-Soll SL-Surface Water SO-Soll SL-Surface COL COL Direct Uquid AIR- Air SOL-Other Solid WP-Wite LAB USE ONLY | | |
| Client / Reporting Information Project Numation Project Numation Gradie View Order Partyleum Company, Inc. P. C. No007280/ Brimfield Sunoco | DW- Drinking Water CV- Circular Water W- Crinking Water SW- Surface Water SO-Soll SL-Surface Water SO-Soll SL-Surface COL COL Direct Uquid AIR- Air SOL-Other Solid WP-Wite LAB USE ONLY | | |
| Samplary Name Project Name: Project Name: Project Name: Project Name: Oracle Petroleum Company, Inc. Street Street Street P.O. Box 866 221 Quinebaug Road Routes 19 and 20 State Nonth Grosvenordale CT 6255 Binn Rield MA MA Project Contact: E-mail Project Routes 19 and 20 State Singer Contact: E-mail Project Routes 0 role # MA State State Sampler's Name: Cilient Purchase Order # Scale # 20 State State Accutest Time Sampler & Time Sampler & Time Sampler & State P-/ EFFLUENT P-/ V P/ Z/Z P/ | GW- Ground Water WW- Water SW- Surface Water SU-Surface Water SU-Surface Water SU-Surface CHOIL LIO- Other Liquid AIR- Air SOL-Other Solid WP-Wipe Z | | |
| Drake Petroleum Company, Inc. P. C. No007280/ Brimfield Sunoco odoress Street Street Routes 19 and 20 North Grosvenordale CT CT 6255 Brimfield MA Project Contact: E-mail Project # Street Samplers Name//L E-mail Samplers Name//L Collection MIDPOINT P-/V P Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z | WW-Water SW-5-Surface Water S-Solid SL-Sudge CH-OIL LO-Other Liquid AIR-Air SOL-Other Solid W-Wde Z LAB USE ONLY | | |
| address Street 20. Box 866 221 Quinebaug Road Routes 19 and 20 Routes 19 and 20 State Routes 19 and 20 MA Routes 10 and 100 MA Routes 10 and 100 Ma State State | SW- Surface Water So- Sol Su-Surge Ocoll LIO- Other Uquid AIR- Air SOL-Other Solid WP-Wige LAB USE ONLY | | |
| Client Purchase Order # Name Client Purchase Order # Number of preserved Bottles Accutest Number of preserved Bottles Field ID / Point of SUMMA # Date Time Sampled by Matrix Number of preserved Bottles ## | SQ. Soil SU.Suidy SU.Suidy Cu-Suidy Cu-Olt Cu-Olt LID- Other Liquid AIR- Air SCL-Other Solid WP-Wige E WP-Wige E LAB USE ONLY | | |
| Client Purchase Order # Name Client Purchase Order # Number of preserved Bottles Accutest Number of preserved Bottles Field ID / Point of SUMMA # Date Time Sampled by Matrix Number of preserved Bottles ## | CI-OİL LIO-OBerUquid AIR-Air SOL-OberSelid VP-Wige LAB USE ONLY | | |
| Client Purchase Order # Name Client Purchase Order # Number of preserved Bottles Accutest Number of preserved Bottles Field ID / Point of SUMMA # Date Time Sampled by Matrix Number of preserved Bottles ## | LIO- Other Liquid AIR: Air SOL-Other Solid WP-Wide Z LAB USE ONLY | | |
| Client Purchase Order # Number 3 Name Office Purchase Order # Number of preserved Bottles Ample # Date Time Sampled by Number of preserved Bottles ## # | AIR-Air SOL-Other Solid WP-Wpe Z LAB USE ONLY | | |
| Client Purchase Order # Number 3 Name Office Purchase Order # Number of preserved Bottles Ample # Date Time Sampled by Number of preserved Bottles ## # | SOL-Other Solid WP-Wipe Z LAB USE ONLY | | |
| Client Purchase Order # Number 3 Name Office Purchase Order # Number of preserved Bottles Ample # Date Time Sampled by Number of preserved Bottles ## # | LE WP-Wpe | | |
| Client Purchase Order # Collection Number of preserved Bottles Add/n / 1/ Date Tree Sampled by Matrix Bottles Number of preserved Bottles -// EFFLUENT Date Tree Sampled by Matrix Bottles Y X | LE WP-Wpe | | |
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| Field ID / Point of SUMMA # Date Time Sampled by Matrix bottles ₹ <td></td> | | | |
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| | | | |
| Std. 14 Business Days Approved By/Date: Standard P C No007280/ Brimfield Sunoco. Routes 19 and | P.C. No007280/ Brimfield Sunoco, Routes 19 and 20, Brimfield, MA | | |
| 10 Day RUSH | | | |
| 5 Day RUSH 7 Day Per USEPA Disk Deliverable Email lab reports to: Ismith@warreneg.com, kdupr | ey@cea-inc.com and | | |
| 3 Day EMERGENCY | | | |
| 2 Day EMERGENC | - 12.5 B.41 | | |
| | à i A | | |
| Other Must meet MADEP GW-1 Standards | 2 (8,58,41 9#1) 3I2 | | |
| Emergency/T/A data available VIA Lablink | <u> </u> | | |
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3.2



Accutest Laboratories Sample Receipt Summary

| Accutest Job Number: M94171 | Client: CEA | Client: CEA | | Immediate Client Services Action Required: | |
|---|--|-------------|---|--|-----------|
| Date / Time Received: 9/10/2010 3:15 | 5:00 PM No. Coo | olers: | 1 Client Service Action | Client Service Action Required at Login: | |
| Project: BRIMFIELD | | | Airbill #'s: | | |
| Cooler Security Y or N | | Y or N | Sample Integrity - Documentation | Y or | <u>N_</u> |
| 1. Custody Seals Present: | COC Present: Smpl Dates/Time OK | | 1. Sample labels present on bottles: | V | |
| 2. Custody Seals Intact: | 4. Onprodies/ Time OK | | 2. Container labeling complete: | \checkmark | |
| Cooler Temperature Y or | N | | 3. Sample container label / COC agree: | \checkmark | |
| 1. Temp criteria achieved: | | | Sample Integrity - Condition | <u> Ү ог</u> | <u>N_</u> |
| 2. Cooler temp verification: Infare | d gun | | 1. Sample recvd within HT: | \checkmark | |
| 3. Cooler media: Ice (| bag) | | 2. All containers accounted for: | × | |
| Quality Control Preservation Y or N N/A | | | 3. Condition of sample: | Intact | |
| 1. Trip Blank present / cooler: | | | Sample Integrity - Instructions | Y or N | N N/A |
| 2. Trip Blank listed on COC: | | | 1. Analysis requested is clear: | v |] |
| 3. Samples preserved properly: | | | 2. Bottles received for unspecified tests | | |
| 4. VOCs headspace free: | | | 3. Sufficient volume rec'd for analysis: | v | |
| | | | 4. Compositing instructions clear: | | ✓ |
| | | | 5. Filtering instructions clear: | | |

Comments

Accutest Laboratories V:508.481.6200 495 Technology Center West, Bldg One F: 508.481.7753 Marlborough, MA www/accutest.com

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