KLEINFELDER
Bright People. Right Solutions.

July 5, 2017

Water Enforcement
Attn: Shauna Little
OES4-SMR
U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Boston, MA 021093912

RE: Notice of Intent (NOI) - Authorization to discharge under RGP
Former Mobil Service Station No. 11658 (01-081)
19 Ames Street
Dedham, Massachusetts
NPDES Authorization Number: MAG910588

Dear Ms. Little:

Kleinfelder, operates and maintains the total phase extraction (TPE) remediation system at the above-referenced property on behalf of ExxonMobil Environmental Services Company (EMES). The TPE system is monitored under the National Pollutant Discharge Elimination System (NPDES). This Notice of Intent (NOI) is submitted in accordance with the requirements of the Remediation General Permit (RGP) effective on March 9, 2017, and in compliance with provisions of the Federal Clean Water Act to request permission to discharge groundwater effluent associated with remediation-related activities subject to the Massachusetts Contingency Plan (MCP). This NOI is being submitted to receive an Authorization to Discharge for an existing discharge (NPDES Permit #MAG910000) for the petroleum-remediation related discharge to a Wetland Water Body associated with the Charles River Watershed.

The RGP NOI form is included as Attachment A, and corresponding site-specific dilution factor calculations are included as Attachment B. The site is regulated under the 310 CMR 40.000 (MCP) and is identified by release tracking number 3-2716 which was assigned by the Massachusetts Department of Environmental Protection in 1991 for a release of petroleum.

On May 31, 2017 Kleinfelder personnel collected a groundwater sample from site-related monitoring well MW-4, and a surface water sample from the receiving water body identified as SW-1. Per RGP Appendix VII the groundwater sample was analyzed for parameters applicable to Category I in subcategories A, B, C, D, and F. Laboratory results (Attachment C) for the groundwater sample indicated concentrations of benzene, toluene, ethylbenzene, xylenes, Group I polycyclic aromatic hydrocarbons (PAHs), Group II PAHs, total petroleum hydrocarbons (TPH), arsenic, iron, and lead exceed RGP effluent limitations listed in Table 2 of the RGP. The receiving water body sample (SW-1) was analyzed for Hardness (Total $CaCO_3$), nitrogen (ammonia), and pH. Inorganic parameters specified in subcategory A were not analyzed in sample SW-1 because a dilution factor (1:1) calculated pursuant to Appendix V of the RGP is not applicable. A summary of groundwater analytical data collected pursuant to 310 CMR 40.000 MCP is provided as Attachment D to provide supplemental analytical data, and lines of evidence to support presence and/or absence of specified parameters listed in the RGP Table 2.

4 Technology Drive, Suite 110, Westborough, MA 01581 **p** | 508.370.8256 **f** | 508.628.1401

Please refer to Figures 1 through 3 for the location of the site, the discharge location subject to this request, a depiction of pertinent site features including the boundary associated with RTN 3-2716, and potential sensitive receptors.

The TPE system is currently inactive, and has not discharged groundwater effluent since November 2016. The TPE system was shut-down in November 2016 following the receipt of groundwater effluent analytical data collected on October 28, 2016 which exhibited concentrations of copper above applicable RGP (2010) effluent limitations for copper. Copper concentrations were not exhibited in groundwater influent or mid-fluent samples collected from the TPE system indicating that copper was originating after metal resin treatment and before effluent discharge. The TPE system design including major treatment components, and treatment flow is provided on Figures 4 through 7. Kleinfelder anticipates that the TPE system modifications and resumption of operation will be completed by August 2017. Permission to discharge to the municipal storm-water system was previously obtained in a letter dated October 8, 2013 from the Massachusetts Department of Transportation. A copy of the Massachusetts Department of Transportation letter and Permit to Access State Highway is provided as Attachment E. Please refer to Attachment F for the Town of Dedham Geographic Information Systems (GIS) map which depicts the storm-water drainage system, and outfall location associated with the subject discharge.

As previously documented in the NOI submitted on July 3, 2013, and verified using the United States National Park Service National Register of Historic Places Map the site is not located at or near any location specified in Appendix III of the RGP. As shown in Figure 3 the site and the associated discharge location are not located within a National Heritage Endangered Species Program (NHESP) Estimated or Priority Habitat. In accordance with Appendix I of the RGP a query using The Information Planning and Conservation Online System operated and maintained by the United States Fish & Wildlife Service was performed which indicated that the Northern Long-Eared Bat inhabits the area associated with the subject discharge. Based on existing TPE system data Kleinfelder believes it is unlikely adverse impacts related to the discharge of treated groundwater effluent will result. Kleinfelder is currently awaiting a determination by the United States Fish & Wildlife Service.

Limitations:

Kleinfelder performed the services for this project under the Enabling Agreement with Procurement, a division of ExxonMobil Global Services Company (signed on July 22, 2016). Kleinfelder states that the services performed are consistent with professional standard of care defined as that level of services provided by similar professionals under like circumstances. This report is based on the regulatory standards in effect on the date of the report. It has been produced for the primary benefit of ExxonMobil Global Services Company and its affiliates.

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If you have any questions or require further information, please contact the undersigned at (508)-370-8256.

Sincerely,
KLEINFELDER

Jeremy Blumberg, CHMM
Project Manager

Bruce C. Ross, CPG, LSP
Senior Project Manager

Enclosure

Cc: Ms. Elaine Lamm, EMES (file)
Walter Heller, P.E., District Highway Director, 185 Kneeland Street, Boston, MA 02111

List of Attachments

Figures

1 – Subject Property Location Map
2 – Site Plan
3 – Priority Resource Map
4 – Process & Instrumentation Diagram (Liquid Phase Treatment Plan) Part 1
5 – Process & Instrumentation Diagram (Liquid Phase Treatment Plan) Part 2
6 – Process & Instrumentation Diagram (Vapor Phase Extraction Plan)
7 – Process & Instrumentation Diagram (TPE Tables and Manifold)

Attachments

A – Remediation General Permit Notice of Intent Form
B – Dilution Factor Calculations
C – Laboratory Analytical Results
D – Historical Groundwater Summary
E – MassDOT Letter & Permit to Access State Highway (October 8, 2013)
F – Town of Dedham GIS Map

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FIGURES

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PROJECT NO.	01081
DRAWN:	NOV 2016
DRAWN BY:	ANG
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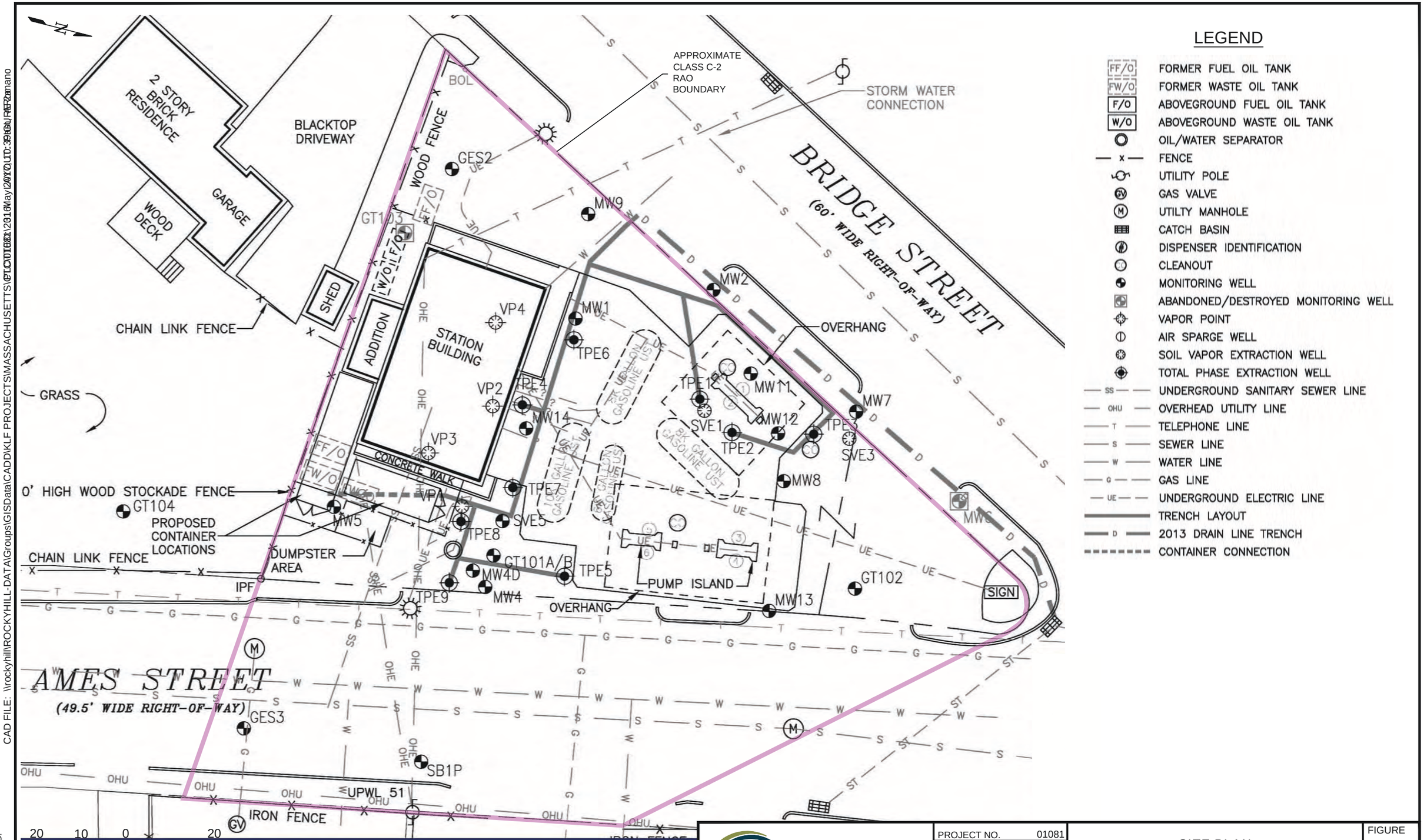
FILE NAME:	01081_DEDHAM_LOC

SUBJECT PROPERTY LOCATION MAP

FORMER MOBIL SERVICE STATION #11658 (01-081)
19 AMES STREET
DEDHAM, MASSACHUSETTS

FIGURE
1



LEGEND

- FORMER FUEL OIL TANK
- FORMER WASTE OIL TANK
- ABOVEGROUND FUEL OIL TANK
- ABOVEGROUND WASTE OIL TANK
- OIL/WATER SEPARATOR
- FENCE
- UTILITY POLE
- GAS VALVE
- UTILTY MANHOLE
- CATCH BASIN
- DISPENSER IDENTIFICATION
- CLEANOUT
- MONITORING WELL
- ABANDONED/DESTROYED MONITORING WELL
- VAPOR POINT
- AIR SPARGE WELL
- SOIL VAPOR EXTRACTION WELL
- TOTAL PHASE EXTRACTION WELL
- UNDERGROUND SANITARY SEWER LINE
- OVERHEAD UTILITY LINE
- TELEPHONE LINE
- SEWER LINE
- WATER LINE
- GAS LINE
- UNDERGROUND ELECTRIC LINE
- TRENCH LAYOUT
- 2013 DRAIN LINE TRENCH
- CONTAINER CONNECTION

SOURCE: GES SITE MAP DATED 11-13-13

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PROJECT NO.	01081
DRAWN:	NOV 2016
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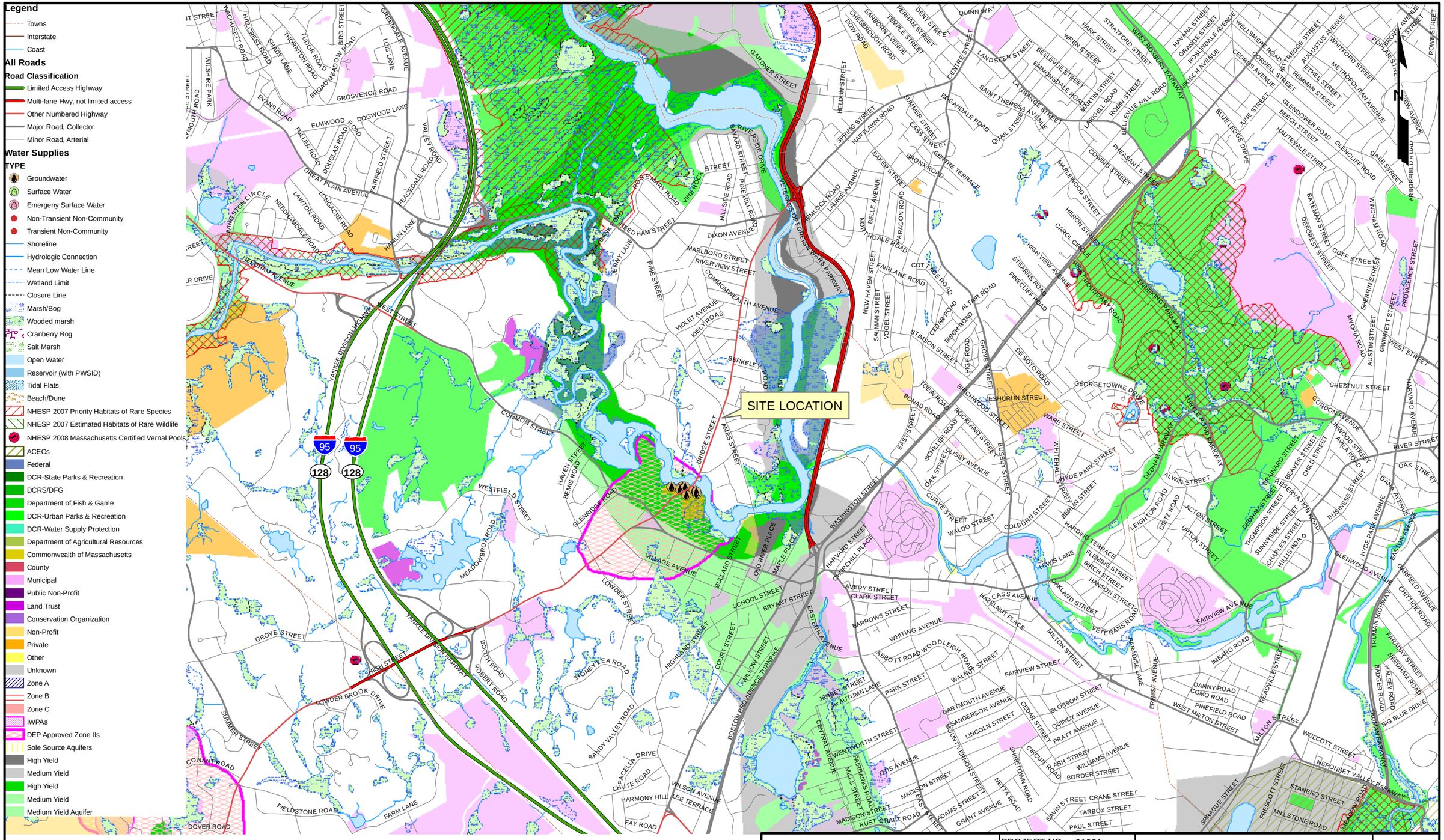
FILE NAME:	01081NOV16SYSLAYOUT.dwg

SITE PLAN

FORMER MOBIL SERVICE STATION #11658 (01-081)
19 AMES STREET
DEDHAM, MASSACHUSETTS

FIGURE 2

ATTACHED IMAGES: Images: CFG4 0.jpg Images: dedham Figure 2.jpg Images: dedham Figure 4.jpg Images: DEDHAM Figure 5.jpg
ATTACHED XREFS:
OFFICE NAME
CAD FILE: \\rockyhill\ROCKYHILL-DATA\Groups\GISData\CADD\KLF PROJECTS\MASSACHUSETTS\[illegible]



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PROJECT NO.	01081
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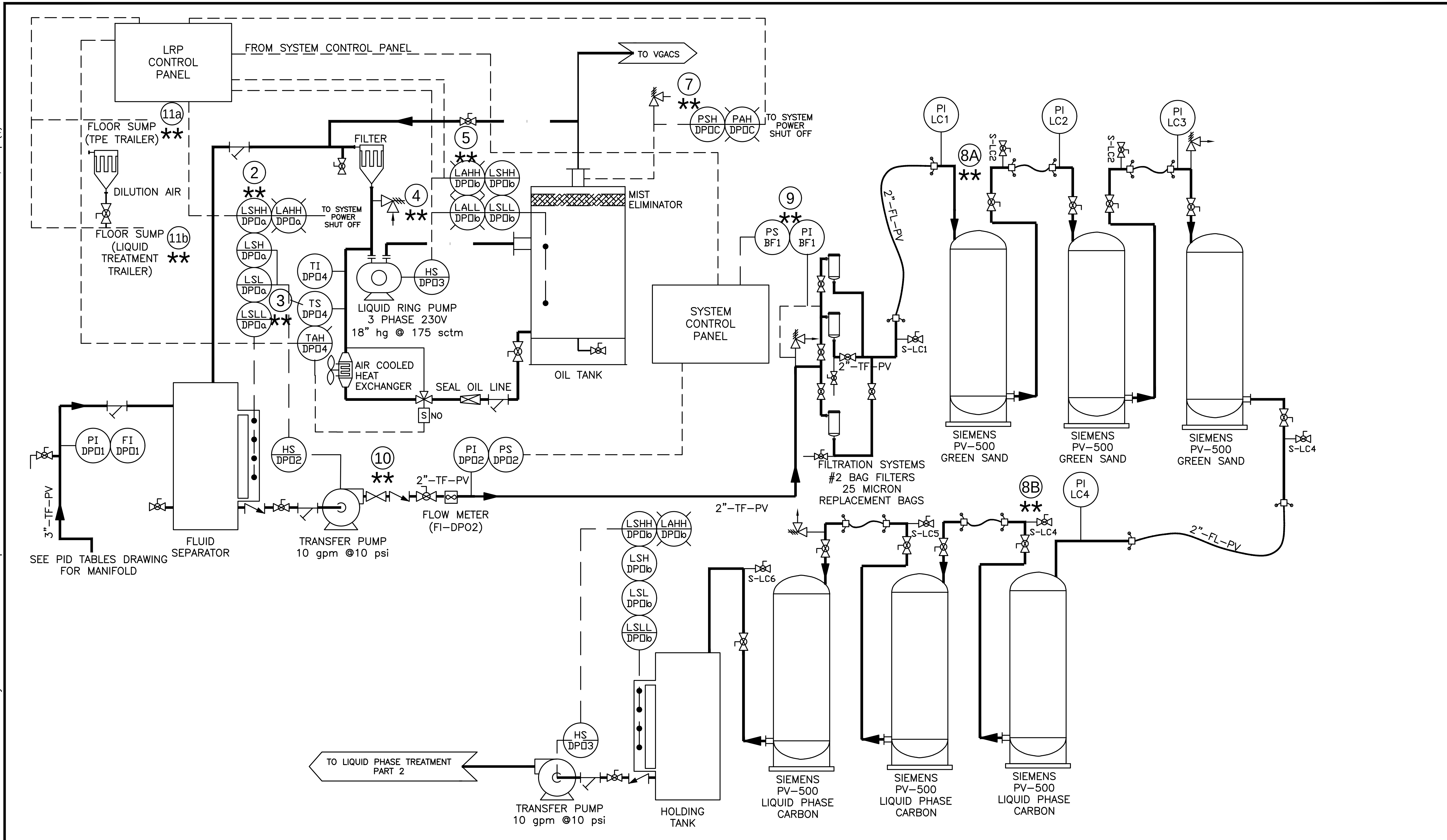
FILE NAME:	01081_DEDHAM_GIS

PRIORITY RESOURCE MAP

FORMER MOBIL SERVICE STATION #11658 (01-081)
19 AMES STREET
DEDHAM, MASSACHUSETTS

FIGURE
3



LEGEND

► GROUNDWATER FLOW DIRECTION

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PROJECT NO.	01801
DRAWN:	JUNE 2017
DRAWN BY:	ANG
CHECKED BY:	
FILE NAME:	01-081 Dedham PID TPE.dwg

PROCESS AND INSTRUMENTATION DIAGRAM (LIQUID PHASE TREATMENT PLAN) PART 1

MOBIL SERVICE STATION #11658 (01-081)
19 AMES STREET
DEDHAM, MASSACHUSETTS

FIGURE 4

ATTACHED IMAGES:
ATTACHED XREFS:
LITTLETON, MA

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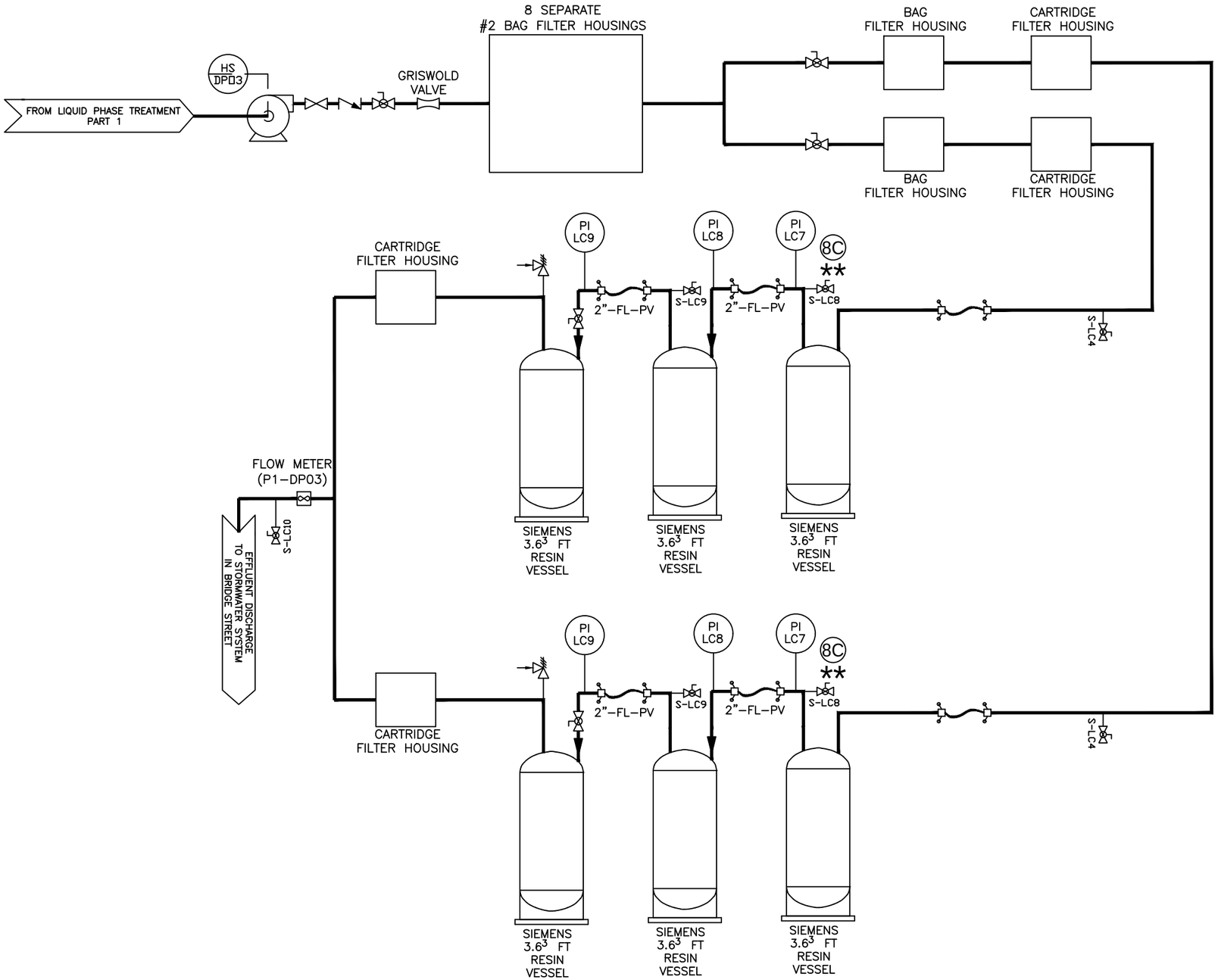

LEGEND

► GROUNDWATER FLOW DIRECTION

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PROJECT NO.	01081
DRAWN:	JUN 2017
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FILE NAME:	01-081 Dedham PID TPE.dwg

PROCESS AND
INSTRUMENTATION DIAGRAM
(LIQUID PHASE TREATMENT PLAN)
PART 2

MOBIL SERVICE STATION #11658 (01-081)
19 AMES STREET
DEDHAM, MASSACHUSETTS

FIGURE
5

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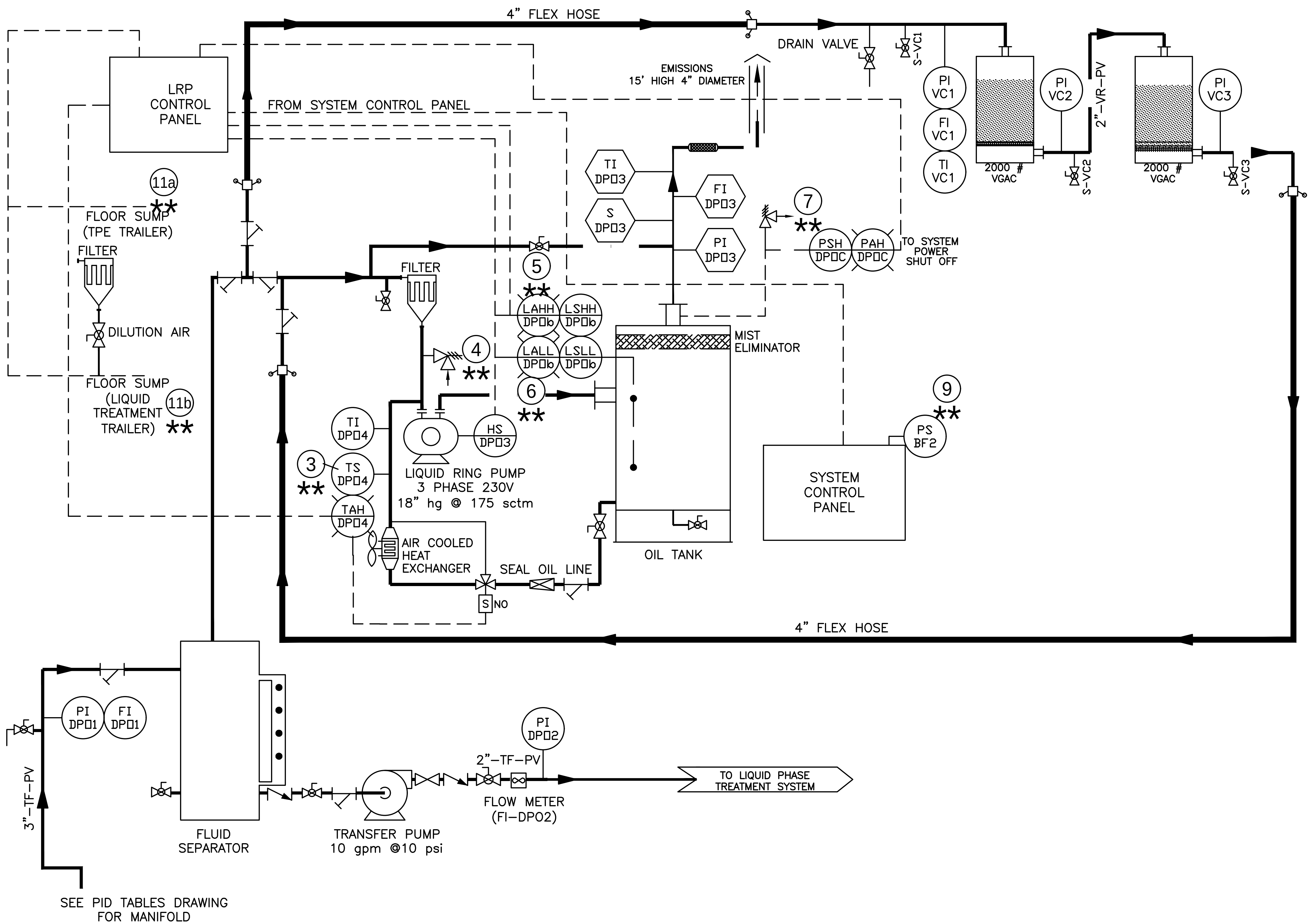
LITTLETON, MA



LEGEND

► GROUNDWATER FLOW DIRECTION

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PROJECT NO.	01801
DRAWN:	JUNE 2017
DRAWN BY:	ANG
CHECKED BY:	
FILE NAME:	01-081 Dedham PID TPE.dwg

PROCESS AND INSTRUMENTATION DIAGRAM (VAPOR PHASE EXTRACTION PLAN)

MOBIL SERVICE STATION #11658 (01-081)
19 AMES STREET
DEDHAM, MASSACHUSETTS

FIGURE 6

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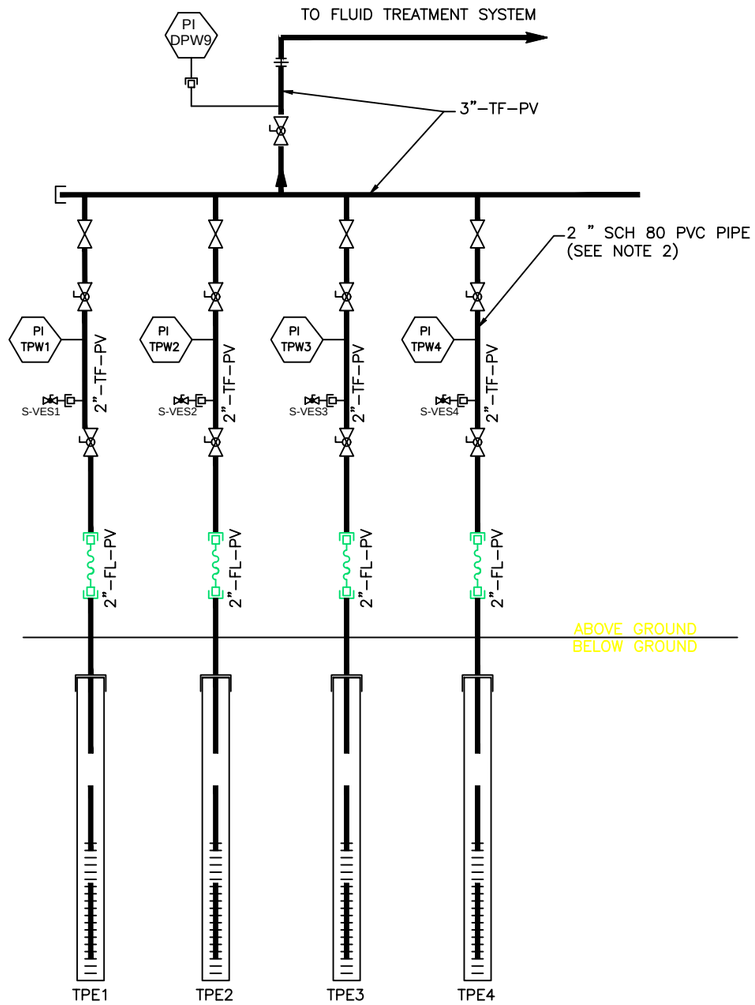
LITTLETON, MA



TYPICAL OF 9 WELLS (TP5, TP6, TP7, TP8 AND TP9)

NOTES:

1. REFER TO SITE PLAN FOR HORIZONTAL PIPE LENGTH, SIZE AND LAYOUT.
2. MINIMUM OF 2 FEET OF REMOVABLE CLEAR PVC SECTIONS.
3. ALL DRAINS AND SAMPLE PORTS SHALL BE PLUGGED.

POSITION		EXPECTED PRESURE	EXPECTED FLOW	EXPECTED TEMP.
	PI-VC1	2 PSI		
	FI-VC1		175 SCFM	
	TI-VC1			85 ^{O} F
	PI-VC2	1 PSI		
	PI-VC3	<1 PSI		
	PI-VC4	<1 PSI		

PARAMETERS:	VAPOR PHASE CARBON POSITION			
	S-VC1	S-VC-2	S-VC3	S-VC4
BENZENE	6.45	<1	<1	<1
TOLUENE	56.5	<1	<1	<1
ETHYLBENZENE	85.4	<1	<1	<1
XYLENES	329	<1	<1	<1
TPH	N/A	N/A	N/A	N/A
MTBE	6.55	<1	<1	<1
LEAD	N/A	N/A	N/A	N/A

Parameters	TOTAL PHASE WELL DATA Values for Total System Flow Water	Meaurement Units	Values for Total System Flow Air	Measurement Units
Benzene	1588	PPB	6.45	PPMV
Toluene	15953	PPB	56.5	PPMV
Ethylbenzene	5085	PPB	85.4	PPMV
Xylenes	24118	PPB	329	PPMV
TPH	17866	PPB	N/A	
MTBE	3555	PPB	6.55	PPMV
Lead	146	PPB	N/A	
PH	6.5	S.U.	N/A	
Temperature	55	DEG F	55	DEG F
Max Vacuum Air	18	IN. Hg		
Max Flow Water	10	GPM		
Max Flow Air	35	SCFM		

Parameters:	DUAL PHASE LIQUID RING PUMP In- Water S-DPO1	In -Air S-DPO1	Out -Water S-LC10	Out - Air S-VC4
Benzene	1588	6.45	<1	<1
Toluene	15953	56.5	<1	<1
Ethylbenzene	5085	85.4	<1	<1
Xylenes	24118	329	<1	<1
TPH	17866	N/A	<1	N/A
MTBE	3555	6.55	<1	<1
Lead	146	N/A	<1	N/A
PH	6.5	N/A	7	N/A
Temperature	55	55	65	85

POSITION			DESIGN PRESSURE	DESIGN FLOW	DESIGN TEMP
IN	Total System	PI-DPO1	-18 IN HG		
	Influent	FI-DPO1		2 GPM	
OUT	Liquid System Influent	PI-DPO2	10 psi		
		FI-DPO2		10 GPM	
	Vapor System Influent	PI-DPO3	2 psi		
		FI-DPO3		175 SCFM	
		TI-DPO3			85°F

CRITICAL DEVICES **

CRITICAL DEVICES	
1a	EMERGENCY SIGNAGE
1b	LOCKS
2	VAPOR LIQUID SEPARATOR - HIGH LEVEL FLOAT
3	LIQUID RING PUMP - HIGH TEMPERATURE SWITCH
4	LIQUID RING PUMP - VACUUM RELIEF VALVE
5	OIL LEVEL (LIQUID RING PUMP) - HIGH LEVEL FLOAT
6	OIL LEVEL (LIQUID RING PUMP) - LOW LEVEL FLOAT
7	LIQUID RING PUMP - HIGH PRESSURE SWITCH
8a	GREENSAND UNIT #1 PRESSURE SWITCH
8b	LIQUID CARBON UNIT #2 PRESSURE SWITCH
8c	RESIN FILTER PRESSURE SWITCH
10	TRANSFER PUMP EFFLUENT PRESSURE SWITCH
11a	FLOOR SUMP - TPE TRAILER
11b	FLOOR SUMP - LIQUID TREATMENT TRAILER
12	HEATER THERMOSTAT - TPE TRAILER
13	EXHAUST FAN THERMOSTAT - LIQUID TREATMENT TRAILER
14	HEATER THERMOSTAT - TPE TRAILER
15	EXHAUST FAN THERMOSTAT - LIQUID TREATMENT TRAILER
16	EXHAUST FAN GUARDS - TPE TRAILER
17	EXHAUST FAN GUARDS - LIQUID TREATMENT TRAILER
18a	LOW TEMPERATURE TPE TRAILER
18B	LOW TEMPERATURE LIQUID TREATMENT TRAILER

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ATTACHED IMAGES:
ATTACHED XREFS:
LITTLETON, MA

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PROJECT NO.	01801
DRAWN:	JUNE 2017
DRAWN BY:	ANG
CHECKED BY:	
FILE NAME:	01-081 PID TPE (tables).dwg

PROCESS & INSTRUMENTATION DIAGRAM (TPE TABLES AND MANIFOLD)

MOBIL SERVICE STATION #1658 (01-081)
19 AMES STREET
DEDHAM, MASSACHUSETTS

FIGURE 7

ATTACHMENT A
Remediation General Permit Notice of Intent Form

II. Suggested Format for the Remediation General Permit Notice of Intent (NOI)

A. General site information:

<table>
<tr><td rowspan="2">1. Name of site:
Former Mobil Station 01-081</td><td colspan="3">Site address: 19 Ames Street
Street:</td></tr>
<tr><td>City: Dedham</td><td>State: MA</td><td>Zip: 02026</td></tr>
<tr><td rowspan="4">2. Site owner
33 McDonald St LLC.

Owner is (check one): ☐ Federal ☐ State/Tribal ■ Private
☐ Other; if so, specify:</td><td colspan="3">Contact Person:</td></tr>
<tr><td colspan="2">Telephone: 781-329-1538</td><td>Email: N/A</td></tr>
<tr><td colspan="3">Mailing address: 19 Ames Street
Street:</td></tr>
<tr><td>City: Dedham</td><td>State: MA</td><td>Zip: 02026</td></tr>
<tr><td rowspan="4">3. Site operator, if different than owner
Kleinfelder, INC.</td><td colspan="3">Contact Person: Bruce C. Ross, LSP.</td></tr>
<tr><td colspan="2">Telephone: (508) 370-8256</td><td>Email: bross@kleinfelder.com</td></tr>
<tr><td colspan="3">Mailing address:
Street: 4 Technology Drive, Suite 110</td></tr>
<tr><td>City: Westborough</td><td>State: MA</td><td>Zip: 01581</td></tr>
<tr><td>4. NPDES permit number assigned by EPA:
MAG910000

NPDES permit is (check all that apply: ■ RGP ☐ DGP ☐ CGP
☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:</td><td colspan="3">5. Other regulatory program(s) that apply to the site (check all that apply):
■ MA Chapter 21e; list RTN(s):
3-2716
☐ NH Groundwater Management Permit or Groundwater Release Detection Permit:
☐ CERCLA
☐ UIC Program
☐ POTW Pretreatment
☐ CWA Section 404</td></tr>
</table>

B. Receiving water information:

1. Name of receiving water(s):	Waterbody identification of receiving water(s):	Classification of receiving water(s):
Wetland of Charles River	Segment 72-07	Class B

Receiving water is (check any that apply): ☐ Outstanding Resource Water ☐ Ocean Sanctuary ☐ territorial sea ☐ Wild and Scenic River

2. Has the operator attached a location map in accordance with the instructions in B, above? (check one): ■ Yes ☐ No

Are sensitive receptors present near the site? (check one): ■ Yes ☐ No

If yes, specify: Please refer to the MassGIS Priority Resource Map (Figure 3) for the location of municipal well field supplying the Town of Dedham, and additional site

3. Indicate if the receiving water(s) is listed in the State's Integrated List of Waters (i.e., CWA Section 303(d)). Include which designated uses are impaired, and any pollutants indicated. Also, indicate if a final TMDL is available for any of the indicated pollutants. For more information, contact the appropriate State as noted in Part 4.6 of the RGP. Listed and identified as Segment ID MA72-07. Listed as Category 5 Water, and impairment cause identified with Escheria Coli (TMDL 32370),

4. Indicate the seven day-ten-year low flow (7Q10) of the receiving water determined in accordance with the instructions in Appendix V for sites located in Massachusetts and Appendix VI for sites located in New Hampshire.	0 million gallons per day (MGD)
5. Indicate the requested dilution factor for the calculation of water quality-based effluent limitations (WQBELs) determined in accordance with the instructions in Appendix V for sites in Massachusetts and Appendix VI for sites in New Hampshire.	1

6. Has the operator received confirmation from the appropriate State for the 7Q10and dilution factor indicated? (check one): ■ Yes ☐ No

If yes, indicate date confirmation received: June 26, 2017

7. Has the operator attached a summary of receiving water sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ■ Yes ☐ No

C. Source water information:

1. Source water(s) is (check any that apply):

■ Contaminated groundwater Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ■ Yes ☐ No	☐ Contaminated surface water Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ☐ Yes ☐ No	☐ The receiving water ☐ A surface water other than the receiving water; if so, indicate waterbody:	☐ Potable water; if so, indicate municipality or origin: ☐ Other; if so, specify:

2. Source water contaminants: Source water contaminants include benzene, toluene, ethylbenzene, xylenes, Group I & II Polycyclic Aromatic Hydrocarbons, T	
a. For source waters that are contaminated groundwater or contaminated surface water, indicate are any contaminants present that are not included in the RGP? (check one): ■ Yes ☐ No If yes, indicate the contaminant(s) and the maximum concentration present in accordance with the instructions in Appendix VIII.	b. For a source water that is a surface water other than the receiving water, potable water or other, indicate any contaminants present at the maximum concentration in accordance with the instructions in Appendix VIII? (check one): ☐ Yes ■ No
3. Has the source water been previously chlorinated or otherwise contains residual chlorine? (check one): ☐ Yes ■ No	

D. Discharge information

1.The discharge(s) is a(n) (check any that apply): ■ Existing discharge ☐ New discharge ☐ New source	
Outfall(s): Outfall is located approximately 1,730 feet north of the site on the eastern side of Bridge Street (MA State Route 109) in Dedham, Massachusetts. Please refer to Figure 1 for visual reference.	Outfall location(s): (Latitude, Longitude) Lat 42° 15' 46.497", and long 71° 10' 38.7804"
Discharges enter the receiving water(s) via (check any that apply): ■ Direct discharge to the receiving water ☐ Indirect discharge, if so, specify: The effluent discharge enters the receiving water body via a stormwater drainage line (owned and maintained by MassDOT) originating from a catch basin ☐ A private storm sewer system ■ A municipal storm sewer system If the discharge enters the receiving water via a private or municipal storm sewer system: Has notification been provided to the owner of this system? (check one): ■ Yes ☐ No Has the operator has received permission from the owner to use such system for discharges? (check one): ■ Yes ☐ No, if so, explain, with an estimated timeframe for obtaining permission: Has the operator attached a summary of any additional requirements the owner of this system has specified? (check one): ☐ Yes ■ No	
Provide the expected start and end dates of discharge(s) (month/year): 08/01/2017 through 08/01/2020 Indicate if the discharge is expected to occur over a duration of: ☐ less than 12 months ■ 12 months or more ☐ is an emergency discharge	
Has the operator attached a site plan in accordance with the instructions in D, above? (check one): ■ Yes ☐ No	

<table>
<tr><td>2. Activity Category: (check all that apply)</td><td colspan="2">3. Contamination Type Category: (check all that apply)</td></tr>
<tr><td rowspan="5">■ I – Petroleum-Related Site Remediation
☐ II – Non-Petroleum-Related Site Remediation
☐ III – Contaminated Site Dewatering
☐ IV – Dewatering of Pipelines and Tanks
☐ V – Aquifer Pump Testing
☐ VI – Well Development/Rehabilitation
☐ VII – Collection Structure Dewatering/Remediation
☐ VIII – Dredge-Related Dewatering</td><td colspan="2">a. If Activity Category I or II: (check all that apply)

■ A. Inorganics
■ B. Non-Halogenated Volatile Organic Compounds
■ C. Halogenated Volatile Organic Compounds
■ D. Non-Halogenated Semi-Volatile Organic Compounds
☐ E. Halogenated Semi-Volatile Organic Compounds
■ F. Fuels Parameters</td></tr>
<tr><td colspan="2">b. If Activity Category III, IV, V, VI, VII or VIII: (check either G or H)</td></tr>
<tr><td>☐ G. Sites with Known Contamination</td><td>☐ H. Sites with Unknown Contamination</td></tr>
<tr><td>c. If Category III-G, IV-G, V-G, VI-G, VII-G or VIII-G: (check all that apply)

☐ A. Inorganics
☐ B. Non-Halogenated Volatile Organic Compounds
☐ C. Halogenated Volatile Organic Compounds
☐ D. Non-Halogenated Semi-Volatile Organic Compounds
☐ E. Halogenated Semi-Volatile Organic Compounds
☐ F. Fuels Parameters</td><td>d. If Category III-H, IV-H, V-H, VI-H, VII-H or VIII-H Contamination Type Categories A through F apply</td></tr>
</table>

4. Influent and Effluent Characteristics

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
A. Inorganics									
Ammonia		✓	1	SM4500N	600	5300	5300	Report mg/L	---
Chloride		✓	1	EPA 300	6000	545000	545000	Report µg/l	---
Total Residual Chlorine	✓							0.2 mg/L	11
Total Suspended Solids	✓		1	SM	4.0	<4.0	<4.0	30 mg/L	---
Antimony	✓		1	EPA 200.8	2.0	<2.0	<2.0	206 µg/L	640
Arsenic		✓	1	EPA 200.8	1.0	10.2	10.2	104 µg/L	10.0
Cadmium	✓		1	EPA 200.8	0.50	<0.50	<0.50	10.2 µg/L	0.8383
Chromium III	✓		1	EPA 6010	0.014	<0.014	<0.014	323 µg/L	300.7
Chromium VI	✓		1	SW846	0.010	<0.010	<0.010	323 µg/L	11.4
Copper		✓	1	EPA 200.8	4.0	26.4	26.4	242 µg/L	34.4
Iron		✓	1	EPA 200.8	50	19400	19400	5,000 µg/L	1000
Lead		✓	1	EPA 200.8	0.50	194	194	160 µg/L	22.20
Mercury	✓		1	EPA 200.8	0.20	<0.20	<0.20	0.739 µg/L	0.91
Nickel		✓	1	EPA 200.8	4.0	4.5	4.5	1,450 µg/L	189.7
Selenium	✓		1	EPA 200.8	1.0	<1.0	<1.0	235.8 µg/L	5.0
Silver	✓		1	EPA 200.8	2.0	<2.0	<2.0	35.1 µg/L	52.2
Zinc		✓	1	EPA 200.8	10	32.9	32.9	420 µg/L	436.6
Cyanide	✓		1	EPA 200.8	0.010	<0.010	<0.010	178 mg/L	5.2
B. Non-Halogenated VOCs									
Total BTEX		✓	1	SW846	---	8,111.3	8,111.3	100 µg/L	---
Benzene		✓	1	SW846	5.0	92.3	92.3	5.0 µg/L	---
1,4 Dioxane	✓		1	SW846	1000	<1000	<1000	200 µg/L	---
Acetone	✓		1	SW846	100	<100	<100	7.97 mg/L	---
Phenol	✓		1	EPA 625	27.0	<27.0	<27.0	1,080 µg/L	300

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
C. Halogenated VOCs									
Carbon Tetrachloride	✓		1	SW846 +	10	<10.0	<10.0	4.4 µg/L	1.6
1,2 Dichlorobenzene	✓		1	SW846 +	10	<10.0	<10.0	600 µg/L	---
1,3 Dichlorobenzene	✓		1	SW846 +	10	<10.0	<10.0	320 µg/L	---
1,4 Dichlorobenzene	✓		1	SW846 +	10	<10.0	<10.0	5.0 µg/L	---
Total dichlorobenzene	✓		1	SW846 +	10	<10.0	<10.0	763 µg/L in NH	---
1,1 Dichloroethane	✓		1	SW846 +	10	<10.0	<10.0	70 µg/L	---
1,2 Dichloroethane	✓		1	SW846 +	10	<10.0	<10.0	5.0 µg/L	---
1,1 Dichloroethylene	✓		1	SW846 +	10	<10.0	<10.0	3.2 µg/L	---
Ethylene Dibromide	✓		1	SW846 +	10	<10.0	<10.0	0.05 µg/L	---
Methylene Chloride	✓		1	SW846 +	20	<20.0	<20.0	4.6 µg/L	---
1,1,1 Trichloroethane	✓		1	SW846 +	10	<10.0	<10.0	200 µg/L	---
1,1,2 Trichloroethane	✓		1	SW846 +	10	<10.0	<10.0	5.0 µg/L	---
Trichloroethylene	✓		1	SW846 +	10	<10.0	<10.0	5.0 µg/L	---
Tetrachloroethylene	✓		1	SW846 +	10	<10.0	<10.0	5.0 µg/L	3.3
cis-1,2 Dichloroethylene	✓		1	SW846 +	10	<10.0	<10.0	70 µg/L	---
Vinyl Chloride	✓		1	SW846 +	10	<10.0	<10.0	2.0 µg/L	---
D. Non-Halogenated SVOCs									
Total Phthalates	✓		1	EPA 625	----	<119	<119	190 µg/L	NA
Diethylhexyl phthalate	✓		1	EPA 625	11.0	<11.0	<11.0	101 µg/L	2.2
Total Group I PAHs		✓	1	EPA 625	---	1.43	1.43	1.0 µg/L	---
Benzo(a)anthracene		✓	1	8270D +	0.54	0.19	0.19	As Total PAHs	0.0038
Benzo(a)pyrene		✓	1	8270D +	0.11	0.20	0.20		0.0038
Benzo(b)fluoranthene		✓	1	8270D +	0.054	0.28	0.28		0.0038
Benzo(k)fluoranthene		✓	1	8270D +	0.11	0.23	0.23		0.0038
Chrysene		✓	1	8270D +	0.11	0.32	0.32		0.0038
Dibenzo(a,h)anthracene	✓		1	8270D +	0.11	<0.11	<0.11		0.0038
Indeno(1,2,3-cd)pyrene		✓	1	8270D +	0.11	0.21	0.21		0.0038

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
Total Group II PAHs		✓	1	EPA 8270	----	385.54	385.54	100 µg/L	---
Naphthalene		✓	1	EPA 8270	2.2	382	382	20 µg/L	---
E. Halogenated SVOCs									
Total PCBs	✓							0.000064 µg/L	---
Pentachlorophenol	✓							1.0 µg/L	---
F. Fuels Parameters									
Total Petroleum Hydrocarbons		✓	1	EPA	5100	5800	5800	5.0 mg/L	---
Ethanol	✓		1	SW846	2000	<2000	<2000	Report mg/L	---
Methyl-tert-Butyl Ether	✓		1	8260C	10.0	<10.0	<10.0	70 µg/L	20
tert-Butyl Alcohol	✓		1	8260C	200	<200	<200	120 µg/L in MA 40 µg/L in NH	---
tert-Amyl Methyl Ether	✓		1	8260C	20	<20	<20	90 µg/L in MA 140 µg/L in NH	---
Other (i.e., pH, temperature, hardness, salinity, LC_{50}, additional pollutants present); if so, specify:									
n-Propylbenzene		✓	1	8260C	50	60.2	60.2		
1,2,4-trimethylbenzene		✓	1	8260C	10	2090	2090		
1,3,5-trimethyllbenzene		✓	1	8260C	10	713	713		
2,4-Dimethylphenol		✓	1	EPA 625	54	57	57		
pH		✓	1	SM21	----	6.6	6.6		

E. Treatment system information

1. Indicate the type(s) of treatment that will be applied to effluent prior to discharge: (check all that apply)

■ Adsorption/Absorption ☐ Advanced Oxidation Processes ☐ Air Stripping ■ Granulated Activated Carbon ("GAC")/Liquid Phase Carbon Adsorption

■ Ion Exchange ☐ Precipitation/Coagulation/Flocculation ■ Separation/Filtration ☐ Other; if so, specify:

N/A

2. Provide a written description of all treatment system(s) or processes that will be applied to the effluent prior to discharge.

A vacuum pump is utilized to extract groundwater and soil vapor from up to nine groundwater monitoring wells. As depicted on the Process and Instrumentation Diagrams (Figures 4-7) when the TPE system is in operation groundwater is pumped into a 120-gallon air water separator, and subsequently pumped at a rate of up to 10 gallons per minute through a series of 5 micron bag filters, 3 green sand units in series, three liquid phase carbon units, and into a 250-gallon holding tank. The groundwater is than pumped to a series of 5 micron bag filters, three ion exchange resin filters, and a totalizer before discharging to a catch basin located immediately north of the site. Refer to Figures 4-8 for detailed TPE system design.

Identify each major treatment component (check any that apply):

☐ Fractionation tanks☐ Equalization tank ■ Oil/water separator ☐ Mechanical filter ■ Media filter

☐ Chemical feed tank ☐ Air stripping unit ■ Bag filter ☐ Other; if so, specify: Refer to Figures 4-7 for major system components, design schematics, and treatment process flow.

Indicate if either of the following will occur (check any that apply):

☐ Chlorination ☐ De-chlorination

3. Provide the **design flow capacity** in gallons per minute (gpm) of the most limiting component. Indicate the most limiting component: The most limiting component to flow is the metals resin treatment. Is use of a flow meter feasible? (check one): ■ Yes ☐ No, if so, provide justification:	10 gpm
Provide the proposed maximum effluent flow in gpm.	10 gpm
Provide the average effluent flow in gpm.	6 gpm
If Activity Category IV applies, indicate the estimated total volume of water that will be discharged:	N/A

4. Has the operator attached a schematic of flow in accordance with the instructions in E, above? (check one): ■ Yes ☐ No

F. Chemical and additive information

1. Indicate the type(s) of chemical or additive that will be applied to effluent prior to discharge or that may otherwise be present in the discharge(s): (check all that apply)

☐ Algaecides/biocides ☐ Antifoams ☐ Coagulants ☐ Corrosion/scale inhibitors ☐ Disinfectants ☐ Flocculants ☐ Neutralizing agents ☐ Oxidants ☐ Oxygen ☐ scavengers ☐ pH conditioners ☐ Bioremedial agents, including microbes ☐ Chlorine or chemicals containing chlorine ☐ Other; if so, specify:
N/A

2. Provide the following information for each chemical/additive, using attachments, if necessary:
N/A
a. Product name, chemical formula, and manufacturer of the chemical/additive;
b. Purpose or use of the chemical/additive or remedial agent;
c. Material Safety Data Sheet (MSDS) and Chemical Abstracts Service (CAS) Registry number for each chemical/additive;
d. The frequency (hourly, daily, etc.), duration (hours, days), quantity (maximum and average), and method of application for the chemical/additive;
e. Any material compatibility risks for storage and/or use including the control measures used to minimize such risks; and
f. If available, the vendor's reported aquatic toxicity (NOAEL and/or LC50 in percent for aquatic organism(s)).

3. Has the operator attached an explanation which demonstrates that the addition of such chemicals/additives may be authorized under this general permit in accordance with the instructions in F, above? (check one): ☐ Yes ☐ No; if no, has the operator attached data that demonstrates each of the 126 priority pollutants in CWA Section 307(a) and 40 CFR Part 423.15(j)(1) are non-detect in discharges with the addition of the proposed chemical/additive?
(check one): ☐ Yes ☐ No

G. Endangered Species Act eligibility determination

1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:

☐ **FWS Criterion A**: No endangered or threatened species or critical habitat are in proximity to the discharges or related activities or come in contact with the "action area".

■ **FWS Criterion B**: Formal or informal consultation with the FWS under section 7 of the ESA resulted in either a no jeopardy opinion (formal consultation) or a written concurrence by FWS on a finding that the discharges and related activities are "not likely to adversely affect" listed species or critical habitat (informal consultation). Has the operator completed consultation with FWS? (check one): ☐ Yes ■ No; if no, is consultation underway? (check one): ■ Yes ☐ No

☐ **FWS Criterion C**: Using the best scientific and commercial data available, the effect of the discharges and related activities on listed species and critical habitat have been evaluated. Based on those evaluations, a determination is made by EPA, or by the operator and affirmed by EPA, that the discharges and related activities will have "no effect" on any federally threatened or endangered listed species or designated critical habitat under the jurisdiction of the FWS. This determination was made by: (check one) ☐ the operator ☐ EPA ☐ Other; if so, specify:

☐ **NMFS Criterion**: A determination made by EPA is affirmed by the operator that the discharges and related activities will have "no effect" or are "not likely to adversely affect" any federally threatened or endangered listed species or critical habitat under the jurisdiction of NMFS and will not result in any take of listed species. Has the operator previously completed consultation with NMFS? (check one): ☐ Yes ☐ No

2. Has the operator attached supporting documentation of ESA eligibility in accordance with the instructions in Appendix I, and G, above? (check one): ☐ Yes ■ No

Does the supporting documentation include any written concurrence or finding provided by the Services? (check one): ☐ Yes ■ No; if yes, attach.

H. National Historic Preservation Act eligibility determination

1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:

■ **Criterion A**: No historic properties are present. The discharges and discharge-related activities (e.g., BMPs) do not have the potential to cause effects on historic properties.

☐ **Criterion B**: Historic properties are present. Discharges and discharge related activities do not have the potential to cause effects on historic properties.

☐ **Criterion C**: Historic properties are present. The discharges and discharge-related activities have the potential to have an effect or will have an adverse effect on historic properties.

2. Has the operator attached supporting documentation of NHPA eligibility in accordance with the instructions in H, above? (check one): ☐ Yes ■ No

Does the supporting documentation include any written agreement with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (TPHO), or other tribal representative that outlines measures the operator will carry out to mitigate or prevent any adverse effects on historic properties? (check one): ☐ Yes ■ No

I. Supplemental information

Describe any supplemental information being provided with the NOI. Include attachments if required or otherwise necessary.

The operator has provided Attachment D a summary of historical groundwater analytical data collected at the site pursuant to 310 CMR 40.0000 the Massachusetts Contingency Plan. Reporting limits for some non-halogenated volatile organic compounds in laboratory analytical data (Attachment C) collected from groundwater sample MW-4 in May 2017 were above the specified method detection limits for volatile organic compounds specified in the 2017 RGP. The ten-fold dilution factor applied to the SW846 8260C analysis of groundwater from MW-4 was a result of concentrations of petroleum-related constituents in groundwater collected from monitoring well MW-4 in May 2017. A summary of historical groundwater analytical data including data collected from MW-4 is provided as Attachment D to support the absence of the non-halogenated volatile organic compound analytes in influent groundwater.

Has the operator attached data, including any laboratory case narrative and chain of custody used to support the application? (check one): ■ Yes ☐ No

Has the operator attached the certification requirement for the Best Management Practices Plan (BMPP)? (check one): ■ Yes ☐ No

J. Certification requirement

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 gathered and evaluated 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, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
BMPP certification statement:
Notification provided to the appropriate State, including a copy of this NOI, if required. Check one: Yes ■ No ☐
Notification provided to the municipality in which the discharge is located, including a copy of this NOI, if requested. Check one: Yes ■ No ☐
Notification provided to the owner of a private or municipal storm sewer system, if such system is used for site discharges, including a copy of this NOI, if requested. Check one: Yes ■ No ☐ NA ☐ Permission obtained from the owner of a private or municipal storm sewer system, if such system is used for site discharges. If yes, attach additional conditions. If no, attach explanation and timeframe for obtaining permission. Check one: Yes ■ No ☐ NA ☐
Notification provided to the owner/operator of the area associated with activities covered by an additional discharge permit(s). Additional discharge permit is (check one): ☐ RGP ☐ DGP ☐ CGP ☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify: Check one: Yes ☐ No ☐ NA ■
Signature:  Date: 7/5/2017
Print Name and Title: Bruce C. Ross, Licensed Site Professional

ATTACHMENT B
Dilution Factor Calculations

Enter number values in green boxes below

Enter values in the units specified

↓

0	Q_R = Enter upstream flow in **MGD**
0.0144	Q_P = Enter discharge flow in **MGD**
0	Downstream 7Q10

Notes:

Freshwater: Q_R equal to the 7Q10; enter alternate Q_R if approved by the State; enter 0 if no dilution factor approved

Saltwater (estuarine and marine): enter Q_R if approved by the State; enter 0 if no entry

Discharge flow is equal to the design flow or 1 MGD, whichever is less

Only if approved by State as the entry for Q_R; leave 0 if no entry

Enter a dilution factor, if other than zero

↓

0

Saltwater (estuarine and marine): only if approved by the State

Leave 0 if no entry

Enter values in the units specified

↓

460	C_d = Enter influent hardness in **mg/L** $CaCO_3$
162	C_s = Enter receiving water hardness in **mg/L** $CaCO_3$

Freshwater only

Enter **receiving water** concentrations in the units specified

↓

6.6	pH in **Standard Units**
16	Temperature in **°C**
0.9	Ammonia in **mg/L**
162	Hardness in **mg/L** $CaCO_3$
0	Salinity in **ppt**
0	Antimony in **µg/L**
0	Arsenic in **µg/L**
0	Cadmium in **µg/L**
0	Chromium III in **µg/L**
0	Chromium VI in **µg/L**
0	Copper in **µg/L**
0	Iron in **µg/L**
0	Lead in **µg/L**
0	Mercury in **µg/L**
0	Nickel in **µg/L**
0	Selenium in **µg/L**
0	Silver in **µg/L**
0	Zinc in **µg/L**

pH, temperature, and ammonia required for all discharges

Hardness required for freshwater

Salinity required for saltwater (estuarine and marine)

Metals required for all discharges if present and if dilution factor is > 1

Enter 0 if non-detect or testing not required

Enter **influent** concentrations in the units specified

↓

0	TRC in **µg/L**
5.3	Ammonia in **mg/L**
0	Antimony in **µg/L**
10.2	Arsenic in **µg/L**
0	Cadmium in **µg/L**
0	Chromium III in **µg/L**
0	Chromium VI in **µg/L**
26.4	Copper in **µg/L**
19400	Iron in **µg/L**
194	Lead in **µg/L**
0	Mercury in **µg/L**
4.5	Nickel in **µg/L**
0	Selenium in **µg/L**
0	Silver in **µg/L**
32.9	Zinc in **µg/L**
0	Cyanide in **µg/L**
0	Phenol in **µg/L**
0	Carbon Tetrachloride in **µg/L**
0	Tetrachloroethylene in **µg/L**
0	Total Phthalates in **µg/L**
0	Diethylhexylphthalate in **µg/L**
0.19	Benzo(a)anthracene in **µg/L**
0.2	Benzo(a)pyrene in **µg/L**
0.28	Benzo(b)fluoranthene in **µg/L**
0.23	Benzo(k)fluoranthene in **µg/L**
0.32	Chrysene in **µg/L**
0	Dibenzo(a,h)anthracene in **µg/L**
0.21	Indeno(1,2,3-cd)pyrene in **µg/L**
0	Methyl-tert butyl ether in **µg/L**

if >1 sample, enter maximum

if >10 samples, may enter 95th percentile

Enter 0 if non-detect or testing not required

I. Dilution Factor Calculation Method

A. 7Q10

Refer to Appendix V for determining critical low flow; must be approved by State before use in calculations.

B. Dilution Factor

Calculated as follows:

$$Df = \frac{Q_R + Q_P}{Q_P}$$

Q_R = 7Q10 in MGD

Q_P = Discharge flow, in MGD

II. Effluent Limitation Calculation Method

A. Calculate Water Quality Criterion:

Step 1. Downstream hardness, calculated as follows:

$$C_r = \frac{Q_d C_d + Q_s C_s}{Q_r}$$

C_r = Downstream hardness in mg/L

Q_d = Discharge flow in MGD

C_d = Discharge hardness in mg/L

Q_s = Upstream flow (7Q10) in MGD

C_s = Upstream (receiving water) hardness in mg/L

Q_r = Downstream receiving water flow in MGD

Step 2. Total recoverable water quality criteria for hardness-dependent metals, calculated as follows:

Total Recoverable Criteria = $\exp\{m_c [\ln(h)] + b_c\}$

m_c = Pollutant-specific coefficient (m_a for silver)

b_c = Pollutant-specific coefficient (b_a for silver)

ln = Natural logarithm

h = Hardness calculated in Step 1

Step 3. Total recoverable water quality criteria for non-hardness-dependent metals, calculated as follows:

$$\text{WQC in } \mu g/L = \frac{\text{dissolved WQC in } \mu g/L}{\text{dissolved to total recoverable factor}}$$

B. Calculate WQBEL:

Step 1. WQBEL calculated as follows for parameter sampled in and detected in the receiving water:

$$C_d = \frac{Q_r C_r - Q_s C_s}{Q_d}$$

C_r = Water quality criterion in µg/L

Q_d = Discharge flow in MGD

C_d = WQBEL in µg/L

Q_s = Upstream flow (7Q10) in MGD

C_s = Ustream (receiving water) concentration in µg/L

Q_r = Downstream receiving water flow in MGD

Step 2. WQBEL calculated as follows for parameter not sampled in or not detected in receiving water:

$$C_d = (Q_r/Q_d) \times C_r$$

C_r = Water quality criterion in µg/L

Q_d = Discharge flow in MGD

Q_r = Downstream receiving water flow in MGD

C. Determine if a WQBEL applies:

Step 1. For parameter sampled in and detected in receiving water, downstream concentrations calculated as follows:

$$C_r = \frac{Q_d C_d + Q_s C_s}{Q_r}$$

C_r = Downstream concentration in µg/L

Q_d = Discharge flow in MGD

C_d = Influent concentration in µg/L

Q_s = Upstream flow (7Q10) in MGD

C_s = Upstream (receiving water) concentration in µg/L

Q_r = Downstream receiving water flow in MGD

The WQBEL applies if:

1) the projected downstream concentration calculated in accordance with Step 1, above, and the discharge concentration of a parameter are greater than the WQC calculated for that parameter in accordance with II.A, above

AND

2) the WQBEL determined for that parameter in accordance with II.B, above, is less than the TBEL in Part 2.1.1 of the RGP for that parameter. Otherwise, the TBEL in Part 2.1.1 of the RGP for that parameter applies.

Step 2. For a parameter not sampled in or not detected in receiving water, the WQBEL applies if:

1) the discharge concentration of a parameter is greater than the WQBEL determined for that parameter in accordance with II.A or II.B, above;

AND

2) the WQBEL determined for that parameter in accordance with II.A or II.B, above is less than the TBEL in Part 2.1.1 of the RGP for that parameter. Otherwise, the TBEL in

Part 2.1.1 of the RGP for that parameter applies.

Dilution Factor	1.0					
A. Inorganics	TBEL applies if bolded		WQBEL applies if bolded		Compliance Level applies if shown	
Ammonia	**Report**	mg/L	---			
Chloride	**Report**	µg/L	---			
Total Residual Chlorine	0.2	mg/L	**11**	µg/L	50	µg/L
Total Suspended Solids	**30**	mg/L	---			
Antimony	**206**	µg/L	640	µg/L		
Arsenic	104	µg/L	**10**	µg/L		
Cadmium	**10.2**	µg/L	0.8383	µg/L		
Chromium III	**323**	µg/L	300.7	µg/L		
Chromium VI	**323**	µg/L	11.4	µg/L		
Copper	**242**	µg/L	34.4	µg/L		
Iron	5000	µg/L	**1000**	µg/L		
Lead	160	µg/L	**22.20**	µg/L		
Mercury	**0.739**	µg/L	0.91	µg/L		
Nickel	**1450**	µg/L	189.7	µg/L		
Selenium	**235.8**	µg/L	5.0	µg/L		
Silver	**35.1**	µg/L	52.2	µg/L		
Zinc	**420**	µg/L	436.6	µg/L		
Cyanide	**178**	mg/L	5.2	µg/L	---	µg/L
B. Non-Halogenated VOCs						
Total BTEX	**100**	µg/L	---			
Benzene	**5.0**	µg/L	---			
1,4 Dioxane	**200**	µg/L	---			
Acetone	**7970**	µg/L	---			
Phenol	**1,080**	µg/L	300	µg/L		
C. Halogenated VOCs						
Carbon Tetrachloride	**4.4**	µg/L	1.6	µg/L		
1,2 Dichlorobenzene	**600**	µg/L	---			
1,3 Dichlorobenzene	**320**	µg/L	---			
1,4 Dichlorobenzene	**5.0**	µg/L	---			
Total dichlorobenzene	**---**	µg/L	---			
1,1 Dichloroethane	**70**	µg/L	---			
1,2 Dichloroethane	**5.0**	µg/L	---			
1,1 Dichloroethylene	**3.2**	µg/L	---			
Ethylene Dibromide	**0.05**	µg/L	---			
Methylene Chloride	**4.6**	µg/L	---			
1,1,1 Trichloroethane	**200**	µg/L	---			
1,1,2 Trichloroethane	**5.0**	µg/L	---			
Trichloroethylene	**5.0**	µg/L	---			
Tetrachloroethylene	**5.0**	µg/L	3.3	µg/L		
cis-1,2 Dichloroethylene	**70**	µg/L	---			
Vinyl Chloride	**2.0**	µg/L	---			
D. Non-Halogenated SVOCs						
Total Phthalates	**190**	µg/L	---	µg/L		
Diethylhexyl phthalate	**101**	µg/L	2.2	µg/L		
Total Group I Polycyclic Aromatic Hydrocarbons	**1.0**	µg/L	---			
Benzo(a)anthracene	1.0	µg/L	**0.0038**	µg/L	0.1	µg/L
Benzo(a)pyrene	1.0	µg/L	**0.0038**	µg/L	0.1	µg/L
Benzo(b)fluoranthene	1.0	µg/L	**0.0038**	µg/L	0.1	µg/L
Benzo(k)fluoranthene	1.0	µg/L	**0.0038**	µg/L	0.1	µg/L
Chrysene	1.0	µg/L	**0.0038**	µg/L	0.1	µg/L
Dibenzo(a,h)anthracene	**1.0**	µg/L	0.0038	µg/L	---	µg/L
Indeno(1,2,3-cd)pyrene	1.0	µg/L	**0.0038**	µg/L	0.1	µg/L
Total Group II Polycyclic Aromatic Hydrocarbons	**100**	µg/L	---			
Naphthalene	**20**	µg/L	---			
E. Halogenated SVOCs						
Total Polychlorinated Biphenyls	**0.000064**	µg/L	---		0.5	µg/L
Pentachlorophenol	**1.0**	µg/L	---			
F. Fuels Parameters						
Total Petroleum Hydrocarbons	**5.0**	mg/L	---			
Ethanol	**Report**	mg/L	---			
Methyl-tert-Butyl Ether	**70**	µg/L	20	µg/L		
tert-Butyl Alcohol	**120**	µg/L	---			
tert-Amyl Methyl Ether	**90**	µg/L	---			

ATTACHMENT C
Laboratory Analytical Results

e-Hardcopy 2.0
Automated Report

Technical Report for

ExxonMobil

GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

(DIR) 20171427.001A PO# 51351-322303

SGS Accutest Job Number: MC48194

Sampling Date: 10/07/16

Report to:

Kleinfelder

ryarnell@kleinfelder.com

ATTN: Robin Yarnell

Total number of pages in report: 42

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

H. (Brad) Madadian
Lab Director

Client Service contact: Robert Soll 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

Sections: 1 2 3 4 5 6 7 8 9 10

Table of Contents

Sample Summary

ExxonMobil

Job No: MC48194

GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Project No: (DIR) 20171427.001A PO# 51351-322303

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
MC48194-1	10/07/16	11:00	ML	10/07/16	AQ	Influent	INF
MC48194-2	10/07/16	11:45	ML	10/07/16	AQ	Water	LGAC MID 1
MC48194-3	10/07/16	12:00	ML	10/07/16	AQ	Water	RESIN MID 1A
MC48194-4	10/07/16	11:30	ML	10/07/16	AQ	Effluent	EFF

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: ExxonMobil **Job No:** MC48194

Site: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA **Report Date** 10/21/2016 12:36:18 P

4 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 10/07/2016 and were received at SGS Accutest New England on 10/07/2016 properly preserved, at 0.9 Deg. C and intact. These Samples received a job number of MC48194. 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 8260C

Matrix: AQ **Batch ID:** MSK3134

- 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 6020A

Matrix: AQ **Batch ID:** MP26901

- 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) MC48194-3SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Copper, Nickel are outside control limits for sample MP26901-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Only selected metals requested.

Wet Chemistry By Method EPA 1664A

Matrix: AQ **Batch ID:** N:GP860

- Analysis performed at SGS Accutest, Dayton, NJ.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** N:GP817

- Analysis performed at SGS Accutest, Dayton, NJ.

Wet Chemistry By Method EPA 335.4

Matrix: AQ **Batch ID:** GP20973

- 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.

Wet Chemistry By Method EPA 420.1

Matrix: AQ **Batch ID:** GP20997

- 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.

Wet Chemistry By Method SM 2540D-11

Matrix: AQ **Batch ID:** GN55029

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- MC48194-4 for Solids, Total Suspended: Reported result obtained from filtration of 890 ml of sample. Sample did not meet method requirement of 2.5 mg of solids on the filter with this volume.

SGS Accutest 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 Laboratory Director for SGS Accutest New England or assignee as verified by the signature on the cover page has authorized the release of this report(MC48194).

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	SGS Accutest New England	**Job No**	MC48194
Site:	MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA	**Report Date**	10/21/2016 9:24:28 A

On 10/11/2016, 2 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 2 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of MC48194 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Wet Chemistry By Method EPA 1664A

Matrix: AQ **Batch ID:** GP860

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP817

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

SGS Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS Accutest is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS Accutest indicated via signature on the report cover

Summary of Hits

Job Number: MC48194
Account: ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Collected: 10/07/16

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC48194-1	**INF**					
Benzene		2.2	0.50		ug/l	SW846 8260C
Ethylbenzene		23.4	1.0		ug/l	SW846 8260C
Naphthalene		11.8	5.0		ug/l	SW846 8260C
Toluene		77.2	1.0		ug/l	SW846 8260C
m,p-Xylene		204	1.0		ug/l	SW846 8260C
o-Xylene		95.4	1.0		ug/l	SW846 8260C
Xylene (total)		300	1.0		ug/l	SW846 8260C
Iron		368	50		ug/l	SW846 6020A
Lead		2.3	1.0		ug/l	SW846 6020A
Chloride [a]		545	6.0		mg/l	EPA 300/SW846 9056A
MC48194-2	**LGAC MID 1**					
No hits reported in this sample.						
MC48194-3	**RESIN MID 1A**					
Iron		62.0	50		ug/l	SW846 6020A
MC48194-4	**EFF**					
Copper		16.4	2.0		ug/l	SW846 6020A
Chloride [a]		550	6.0		mg/l	EPA 300/SW846 9056A

(a) Analysis performed at SGS Accutest, Dayton, NJ.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	MC48194-1	**Date Sampled:**	10/07/16
Matrix:	AQ - Influent	**Date Received:**	10/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K101038.D	1	10/15/16	AD	n/a	n/a	MSK3134
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	2.2	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	23.4	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	11.8	5.0	ug/l	
108-88-3	Toluene	77.2	1.0	ug/l	
	m,p-Xylene	204	1.0	ug/l	
95-47-6	o-Xylene	95.4	1.0	ug/l	
1330-20-7	Xylene (total)	300	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		76-129%
2037-26-5	Toluene-D8	100%		83-114%
460-00-4	4-Bromofluorobenzene	97%		75-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	MC48194-1	**Date Sampled:**	10/07/16
Matrix:	AQ - Influent	**Date Received:**	10/07/16
		Percent Solids:	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Copper	< 2.0	2.0	ug/l	2	10/14/16	10/17/16	EAL	SW846 6020A [1]	SW846 3010A [2]
Iron	368	50	ug/l	2	10/14/16	10/17/16	EAL	SW846 6020A [1]	SW846 3010A [2]
Lead	2.3	1.0	ug/l	2	10/14/16	10/17/16	EAL	SW846 6020A [1]	SW846 3010A [2]
Nickel	< 4.0	4.0	ug/l	2	10/14/16	10/17/16	EAL	SW846 6020A [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA19543
(2) Prep QC Batch: MP26901

RL = Reporting Limit

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	MC48194-1	**Date Sampled:**	10/07/16
Matrix:	AQ - Influent	**Date Received:**	10/07/16
		Percent Solids:	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride [a]	545	6.0	mg/l	3	10/19/16 17:49	ANJ	EPA 300/SW846 9056A
Cyanide	< 0.010	0.010	mg/l	1	10/13/16 18:27	CF	EPA 335.4
HEM Petroleum Hydrocarbo [a]	< 5.2	5.2	mg/l	1	10/19/16 15:00	ANJ	EPA 1664A
Phenols	< 0.050	0.050	mg/l	1	10/20/16 19:09	CF	EPA 420.1
Solids, Total Suspended	< 4.0	4.0	mg/l	1	10/11/16	CF	SM 2540D-11

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	LGAC MID 1		
Lab Sample ID:	MC48194-2	**Date Sampled:**	10/07/16
Matrix:	AQ - Water	**Date Received:**	10/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K101037.D	1	10/15/16	AD	n/a	n/a	MSK3134
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	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	
108-88-3	Toluene	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-129%
2037-26-5	Toluene-D8	99%		83-114%
460-00-4	4-Bromofluorobenzene	99%		75-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RESIN MID 1A		
Lab Sample ID:	MC48194-3	**Date Sampled:**	10/07/16
Matrix:	AQ - Water	**Date Received:**	10/07/16
		Percent Solids:	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Copper	< 2.0	2.0	ug/l	2	10/14/16	10/17/16	EAL	SW846 6020A [1]	SW846 3010A [2]
Iron	62.0	50	ug/l	2	10/14/16	10/17/16	EAL	SW846 6020A [1]	SW846 3010A [2]
Lead	< 1.0	1.0	ug/l	2	10/14/16	10/17/16	EAL	SW846 6020A [1]	SW846 3010A [2]
Nickel	< 4.0	4.0	ug/l	2	10/14/16	10/17/16	EAL	SW846 6020A [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA19543
(2) Prep QC Batch: MP26901

RL = Reporting Limit

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	MC48194-4	**Date Sampled:**	10/07/16
Matrix:	AQ - Effluent	**Date Received:**	10/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K101036.D	1	10/15/16	AD	n/a	n/a	MSK3134
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	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	
108-88-3	Toluene	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		76-129%
2037-26-5	Toluene-D8	99%		83-114%
460-00-4	4-Bromofluorobenzene	97%		75-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	MC48194-4	**Date Sampled:**	10/07/16
Matrix:	AQ - Effluent	**Date Received:**	10/07/16
		Percent Solids:	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Copper	16.4	2.0	ug/l	2	10/14/16	10/17/16	EAL	SW846 6020A [1]	SW846 3010A [2]
Iron	< 50	50	ug/l	2	10/14/16	10/17/16	EAL	SW846 6020A [1]	SW846 3010A [2]
Lead	< 1.0	1.0	ug/l	2	10/14/16	10/17/16	EAL	SW846 6020A [1]	SW846 3010A [2]
Nickel	< 4.0	4.0	ug/l	2	10/14/16	10/17/16	EAL	SW846 6020A [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA19543
(2) Prep QC Batch: MP26901

RL = Reporting Limit

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	MC48194-4	**Date Sampled:**	10/07/16
Matrix:	AQ - Effluent	**Date Received:**	10/07/16
		Percent Solids:	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride [a]	550	6.0	mg/l	3	10/19/16 18:13	ANJ	EPA 300/SW846 9056A
Cyanide	< 0.010	0.010	mg/l	1	10/13/16 18:28	CF	EPA 335.4
HEM Petroleum Hydrocarbo [a]	< 5.3	5.3	mg/l	1	10/19/16 15:00	ANJ	EPA 1664A
Phenols	< 0.050	0.050	mg/l	1	10/20/16 19:09	CF	EPA 420.1
Solids, Total Suspended [b]	< 4.0	4.0	mg/l	1	10/11/16	CF	SM 2540D-11

(a) Analysis performed at SGS Accutest, Dayton, NJ.
(b) Reported result obtained from filtration of 890 ml of sample. Sample did not meet method requirement of 2.5 mg of solids on the filter with this volume.

RL = Reporting Limit

5

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Parameter Certifications (MA)
- Chain of Custody
- MCP Form
- MCP Form (SGS Accutest New Jersey)
- Sample Tracking Chronicle
- QC Evaluation: MA MCP Limits

Parameter Certifications

Job Number: MC48194
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

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

Parameter	CAS#	Method	Mat	Certification Status
Cyanide	57-12-5	**EPA 335.4**	AQ	Accutest is certified for this parameter.
Phenols		**EPA 420.1**	AQ	Accutest is certified for this parameter.
Solids, Total Suspended		**SM 2540D-11**	AQ	Accutest is certified for this parameter.

SGS ACCUTEST

CHAIN OF CUSTODY

SGS Accutest of New England
50 D'Angelo Drive, Building One Marlborough, MA 01752
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

PAGE ___ OF ___

FED-EX Tracking #: | Bottle Order Control #:
SGS Accutest Quote #: | SGS Accutest Job #: MC48194

Client / Reporting Information

Company Name: KLIENFELDER
Street Address: 1 SPEEN ST. Suite 200
City: FRAMINGHAM State: MA Zip: 01701
Project Contact: Jeremy Blumberg E-mail:
Phone #: 800 582 8740 Fax #:
Sampler(s) Name(s): MARK LISS Phone #: 860 6146719

Project Information

Project Name: DEDHAM 01081
Street: 19 AMES ST
City: Dedham State: MA Zip:
Project#: 20171427.001A
Client PO#: 51351-322303
Project Manager: JEREMY Blumberg

Billing Information (If different from Report to)

Company Name: KLIENFELDER
Street Address: 1 SPEEN ST. Suite 200
City: FRAMINGHAM State: MA Zip: 01701
Attention: EASTERN Billing PO#: 51351-322303

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB- Equipment Blank; RB- Rinse Blank; TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	CN by EPA 335.4	ColiMS, FeMS, ABMS, by 9223A	PHC 1664 by EPA 1664A	CHL by EPA 300/SW846 9056A	PN by EPA 420.1	TSS by SM 2540D-11	VOA260 SL by 8260C	LAB USE ONLY
-1	INF		10/7/16	1100	ML	WW	10	5		1	1						1	1	2	1	1	1	3	
-2	LGAC MID 1		10/7/16	1145	ML	WW	3	3															3	
-3	RESIN MID 1A		10/7/16	1200	ML	WW	1			H1								1						
-4	EFF		10/7/16	1130	ML	WW	10	5	1		1						1	1	2	1	1	1	3	
																								4D
																								10B
																								5D
																								2E4

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [x] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

INITIAL ASESSMENT
LABEL VERIFICATION B.C

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

Relinquished By Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Mark Liss	10/7/16 1430	1	2		2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by:	Date Time:	Received By:	Custody Seal #	Intact / Not intact	Preserved where applicable	On Ice / Cooler Temp.
5		5				8 0.1°C

5.2 5

MC48194: Chain of Custody
Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: MC48194 **Client:** KLEINFELDER **Project:** DEDHAM

Date / Time Received: 10/7/2016 2:30:00 PM **Delivery Method:** CLIENT **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (0.9/0.9);

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

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Thermometer ID:	IRGUN1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

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

Comments

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

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

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

Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup	WSC-CAM	Exhibit VII A
	July 1, 2010	Revision No. 1
	Final	

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name:	Accutest Laboratories of New England	Project #:	MC48194
Project Location:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA	MADEP RTN	None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)
MC48194-1,MC48194-2,MC48194-3,MC48194-4

Matrices: Groundwater/Surface Water ( ) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other (X)

CAM Protocol (check all that apply below):

8260 VOC (X) CAM IIA	7470/7471 Hg ( ) CAM III B	MassDEP VPH ( ) CAM IV A	8081 Pesticides ( ) CAM V B	7196 Hex Cr ( ) CAM VI B	Mass DEP APH ( ) CAM IX A
8270 SVOC ( ) CAM II B	7010 Metals ( ) CAM III C	MassDEP EPH ( ) CAM IV B	8151 Herbicides ( ) CAM V C	8330 Explosives ( ) CAM VIII A	TO-15 VOC ( ) CAM IX B
6010 Metals ( ) CAM III A	6020 Metals (X) CAM III D	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 required for "Presumptive Certainty status

A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☑ Yes	☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☑ Yes	☐ No
E	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☑ Yes ☑ Yes	☐ No ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	☑ Yes	☐ No

Responses to questions G, H, and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols	☑ Yes	☐ No [1]
	Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.		
H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☑ Yes	☐ No [1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes	☑ No [1]

[1] ***All Negative responses must be addressed in an attached Environmental Laboratory case narrative.***

I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: _____ **Position:** **Laboratory Director**

Printed Name: **H. (Brad) Madadian** **Date:** **21-Oct-16**

Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup	WSC-CAM	Exhibit VII A
	July 1, 2010	Revision No. 1
	Final	

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name:	Accutest Mid-Atlantic	Project #:	MC48194
Project Location:#01074,	MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA	MADEP RTN	None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)
MC48194-1,MC48194-4

No CAM protocol available for this method. Samples analyzed following the Lab SOP and the method.

Matrices: Groundwater/Surface Water (x) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other ()

CAM Protocol (check all that apply below):

8260 VOC ( ) CAM IIA	7470/7471 Hg ( ) CAM III B	MassDEP VPH ( ) CAM IV A	8081 Pesticides ( ) CAM V B	7196 Hex Cr ( ) CAM VI B	Mass DEP APH ( ) CAM IX A
8270 SVOC ( ) CAM II B	7010 Metals ( ) CAM III C	MassDEP EPH ( ) CAM IV B	8151 Herbicides ( ) CAM V C	8330 Explosives ( ) CAM VIII A	TO-15 VOC ( ) CAM IX B
6010 Metals ( ) 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 Responses to Questions A Through F are required for "Presumptive Certainty status

A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☑ Yes	☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☑ Yes	☐ No
E	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ Yes	☐ No ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	☑ Yes	☐ No

Responses to questions G, H, and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols	☑ Yes	☐ No [1]
	Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.		
H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☑ Yes	☐ No [1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☑ Yes	☐ No [1]

[1] ***All Negative responses must be addressed in an attached Environmental Laboratory case narrative.***

I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Nancy F. Cole **Position:** **Laboratory Director**

Printed Name: **Nancy F. Cole** **Date:** **21-Oct-16**

Internal Sample Tracking Chronicle

ExxonMobil

Job No: MC48194

GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Project No: (DIR) 20171427.001A PO# 51351-322303

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC48194-1	Collected: 07-OCT-16 11:00 By: ML		Received: 07-OCT-16 By: BA			
INF						
MC48194-1	SM 2540D-11	11-OCT-16	CF			TSS
MC48194-1	EPA 335.4	13-OCT-16 18:27	CF	13-OCT-16	CF	CN
MC48194-1	SW846 8260C	15-OCT-16 05:37	AD			V8260SL
MC48194-1	SW846 6020A	17-OCT-16 15:27	EAL	14-OCT-16	EM	CUMS,FEMS,NIMS,PBMS
MC48194-1	EPA 1664A	19-OCT-16 15:00	ANJ	19-OCT-16	ANJ	PHC1664
MC48194-1	EPA 300/SW846 9056A	19-OCT-16 17:49	ANJ	19-OCT-16		CHL
MC48194-1	EPA 420.1	20-OCT-16 19:09	CF	20-OCT-16	CF	PN
MC48194-2	Collected: 07-OCT-16 11:45 By: ML		Received: 07-OCT-16 By: BA			
LGAC MID 1						
MC48194-2	SW846 8260C	15-OCT-16 05:10	AD			V8260SL
MC48194-3	Collected: 07-OCT-16 12:00 By: ML		Received: 07-OCT-16 By: BA			
RESIN MID 1A						
MC48194-3	SW846 6020A	17-OCT-16 15:13	EAL	14-OCT-16	EM	CUMS,FEMS,NIMS,PBMS
MC48194-4	Collected: 07-OCT-16 11:30 By: ML		Received: 07-OCT-16 By: BA			
EFF						
MC48194-4	SM 2540D-11	11-OCT-16	CF			TSS
MC48194-4	EPA 335.4	13-OCT-16 18:28	CF	13-OCT-16	CF	CN
MC48194-4	SW846 8260C	15-OCT-16 04:43	AD			V8260SL
MC48194-4	SW846 6020A	17-OCT-16 15:34	EAL	14-OCT-16	EM	CUMS,FEMS,NIMS,PBMS
MC48194-4	EPA 1664A	19-OCT-16 15:00	ANJ	19-OCT-16	ANJ	PHC1664
MC48194-4	EPA 300/SW846 9056A	19-OCT-16 18:13	ANJ	19-OCT-16		CHL
MC48194-4	EPA 420.1	20-OCT-16 19:09	CF	20-OCT-16	CF	PN

QC Evaluation: MA MCP Limits

Job Number: MC48194
Account: ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Collected: 10/07/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSK3134	SW846 8260C						
MSK3134-BS	71-43-2	Benzene	BSP	REC	99	%	70-130
MSK3134-BS	95-50-1	1,2-Dichlorobenzene	BSP	REC	91	%	70-130
MSK3134-BS	106-46-7	1,4-Dichlorobenzene	BSP	REC	90	%	70-130
MSK3134-BS	100-41-4	Ethylbenzene	BSP	REC	98	%	70-130
MSK3134-BS	1634-04-4	Methyl Tert Butyl Ether	BSP	REC	93	%	70-130
MSK3134-BS	91-20-3	Naphthalene	BSP	REC	98	%	70-130
MSK3134-BS	108-88-3	Toluene	BSP	REC	94	%	70-130
MSK3134-BS		m,p-Xylene	BSP	REC	106	%	70-130
MSK3134-BS	95-47-6	o-Xylene	BSP	REC	101	%	70-130
MSK3134-BS	1330-20-7	Xylene (total)	BSP	REC	105	%	70-130
MSK3134-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	97	%	70-130
MSK3134-BS	2037-26-5	Toluene-D8	BSP	SURR	103	%	70-130
MSK3134-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	102	%	70-130
MSK3134-BSD	71-43-2	Benzene	BSD	REC	99	%	70-130
MSK3134-BSD	71-43-2	Benzene	BSD	RPD	0	%	20
MSK3134-BSD	95-50-1	1,2-Dichlorobenzene	BSD	REC	92	%	70-130
MSK3134-BSD	95-50-1	1,2-Dichlorobenzene	BSD	RPD	0	%	20
MSK3134-BSD	106-46-7	1,4-Dichlorobenzene	BSD	REC	90	%	70-130
MSK3134-BSD	106-46-7	1,4-Dichlorobenzene	BSD	RPD	0	%	20
MSK3134-BSD	100-41-4	Ethylbenzene	BSD	REC	98	%	70-130
MSK3134-BSD	100-41-4	Ethylbenzene	BSD	RPD	0	%	20
MSK3134-BSD	1634-04-4	Methyl Tert Butyl Ether	BSD	REC	93	%	70-130
MSK3134-BSD	1634-04-4	Methyl Tert Butyl Ether	BSD	RPD	0	%	20
MSK3134-BSD	91-20-3	Naphthalene	BSD	REC	101	%	70-130
MSK3134-BSD	91-20-3	Naphthalene	BSD	RPD	2	%	20
MSK3134-BSD	108-88-3	Toluene	BSD	REC	92	%	70-130
MSK3134-BSD	108-88-3	Toluene	BSD	RPD	3	%	20
MSK3134-BSD		m,p-Xylene	BSD	REC	108	%	70-130
MSK3134-BSD		m,p-Xylene	BSD	RPD	2	%	20
MSK3134-BSD	95-47-6	o-Xylene	BSD	REC	102	%	70-130
MSK3134-BSD	95-47-6	o-Xylene	BSD	RPD	1	%	20
MSK3134-BSD	1330-20-7	Xylene (total)	BSD	REC	106	%	70-130
MSK3134-BSD	1330-20-7	Xylene (total)	BSD	RPD	1	%	20
MSK3134-BSD	1868-53-7	Dibromofluoromethane	BSD	SURR	100	%	70-130
MSK3134-BSD	2037-26-5	Toluene-D8	BSD	SURR	99	%	70-130
MSK3134-BSD	460-00-4	4-Bromofluorobenzene	BSD	SURR	101	%	70-130
MSK3134-MB	1868-53-7	Dibromofluoromethane	MB	SURR	100	%	70-130
MSK3134-MB	2037-26-5	Toluene-D8	MB	SURR	99	%	70-130
MSK3134-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	97	%	70-130
MC48194-1	1868-53-7	Dibromofluoromethane	SAMP	SURR	99	%	70-130
MC48194-1	2037-26-5	Toluene-D8	SAMP	SURR	100	%	70-130
MC48194-1	460-00-4	4-Bromofluorobenzene	SAMP	SURR	97	%	70-130

* Sample used for QC is not from job MC48194

QC Evaluation: MA MCP Limits

Job Number: MC48194
Account: ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Collected: 10/07/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC48194-2	1868-53-7	Dibromofluoromethane	SAMP	SURR	101	%	70-130
MC48194-2	2037-26-5	Toluene-D8	SAMP	SURR	99	%	70-130
MC48194-2	460-00-4	4-Bromofluorobenzene	SAMP	SURR	99	%	70-130
MC48194-4	1868-53-7	Dibromofluoromethane	SAMP	SURR	100	%	70-130
MC48194-4	2037-26-5	Toluene-D8	SAMP	SURR	99	%	70-130
MC48194-4	460-00-4	4-Bromofluorobenzene	SAMP	SURR	97	%	70-130

* Sample used for QC is not from job MC48194

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC48194
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSK3134-MB	K101025.D	1	10/14/16	AD	n/a	n/a	MSK3134

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC48194-1, MC48194-2, MC48194-4

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	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	
108-88-3	Toluene	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	76-129%
2037-26-5	Toluene-D8	99%	83-114%
460-00-4	4-Bromofluorobenzene	97%	75-124%

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC48194
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSK3134-BS	K101021.D	1	10/14/16	AD	n/a	n/a	MSK3134
MSK3134-BSD	K101022.D	1	10/14/16	AD	n/a	n/a	MSK3134

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC48194-1, MC48194-2, MC48194-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	50	49.3	99	49.5	99	0	66-123/25
95-50-1	1,2-Dichlorobenzene	50	45.7	91	45.8	92	0	75-124/25
106-46-7	1,4-Dichlorobenzene	50	45.2	90	45.2	90	0	77-117/25
100-41-4	Ethylbenzene	50	49.1	98	49.2	98	0	74-127/25
1634-04-4	Methyl Tert Butyl Ether	50	46.5	93	46.7	93	0	59-135/25
91-20-3	Naphthalene	50	49.2	98	50.3	101	2	37-145/25
108-88-3	Toluene	50	47.2	94	45.9	92	3	73-124/25
	m,p-Xylene	100	106	106	108	108	2	73-129/25
95-47-6	o-Xylene	50	50.5	101	51.1	102	1	73-128/25
1330-20-7	Xylene (total)	150	157	105	159	106	1	74-129/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	97%	100%	76-129%
2037-26-5	Toluene-D8	103%	99%	83-114%
460-00-4	4-Bromofluorobenzene	102%	101%	75-124%

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC48194
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Check Std:	MSK3134-CC3124	**Injection Date:**	10/14/16
Lab File ID:	K101020.D	**Injection Time:**	21:31
Instrument ID:	GCMSK	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	114598	9.30	169336	10.19	74122	13.39	104720	15.96	69055	7.30
Upper Limit [a]	229196	9.80	338672	10.69	148244	13.89	209440	16.46	138110	7.80
Lower Limit [b]	57299	8.80	84668	9.69	37061	12.89	52360	15.46	34528	6.80

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSK3134-BS	125753	9.30	184895	10.19	81882	13.39	112362	15.96	71253	7.30
MSK3134-BSD	126232	9.30	186825	10.19	78367	13.39	109094	15.97	65225	7.30
MSK3134-MB	128661	9.30	178690	10.19	78473	13.39	120364	15.97	76725	7.30
GP20971-LB1	120348	9.30	167376	10.19	73718	13.39	109849	15.96	75340	7.30
ZZZZZZ	124446	9.30	174312	10.19	74752	13.39	113603	15.96	74633	7.30
ZZZZZZ	118988	9.30	162355	10.19	70395	13.39	104576	15.96	70830	7.30
ZZZZZZ	125370	9.30	174496	10.19	76930	13.39	112120	15.96	73848	7.30
ZZZZZZ	119880	9.30	168462	10.19	77337	13.39	115625	15.96	73660	7.30
ZZZZZZ	116965	9.30	165781	10.19	73666	13.39	111532	15.96	74128	7.30
ZZZZZZ	117290	9.30	166072	10.19	72633	13.39	108041	15.96	72223	7.29
ZZZZZZ	131237	9.30	185357	10.19	80154	13.39	119535	15.96	74301	7.30
ZZZZZZ	124066	9.30	170210	10.19	71913	13.39	108943	15.96	82043	7.30
ZZZZZZ	114027	9.30	164247	10.19	74560	13.39	110626	15.97	71087	7.30
MC48194-4	114688	9.30	162234	10.19	72130	13.39	107659	15.96	70221	7.30
MC48194-2	111044	9.30	153615	10.19	72045	13.39	107009	15.96	66264	7.29
MC48194-1	116794	9.30	166430	10.19	73872	13.39	106933	15.96	70021	7.30
ZZZZZZ	123374	9.30	176578	10.19	72632	13.39	109417	15.96	75402	7.30
ZZZZZZ	126383	9.30	177958	10.19	76355	13.39	113835	15.96	73943	7.30
ZZZZZZ	118158	9.30	163042	10.19	70655	13.39	101237	15.96	70050	7.30
ZZZZZZ	120522	9.30	170413	10.19	80482	13.39	110083	15.96	75727	7.30
ZZZZZZ	118561	9.30	167127	10.19	78301	13.39	111933	15.96	83891	7.31
ZZZZZZ	132545	9.30	187799	10.19	80875	13.39	116089	15.96	84425	7.30
GP20971-LS1	120207	9.30	178660	10.19	80799	13.39	108803	15.96	67829	7.30

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: MC48194
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC48194-1	K101038.D	99	100	97
MC48194-2	K101037.D	101	99	99
MC48194-4	K101036.D	100	99	97
MSK3134-BS	K101021.D	97	103	102
MSK3134-BSD	K101022.D	100	99	101
MSK3134-MB	K101025.D	100	99	97

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	76-129%
S2 = Toluene-D8	83-114%
S3 = 4-Bromofluorobenzene	75-124%

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC48194
Account: MOBILSS - ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

QC Batch ID: MP26901
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 10/14/16

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.92	4.2		
Antimony	1.0	.13	.032		
Arsenic	1.0	.2	.62		
Barium	2.0	.017	.15		
Beryllium	1.0	.0076	.04		
Boron	10	.1	.38		
Cadmium	1.0	.01	.04		
Calcium	500	2	72		
Chromium	2.0	.13	.34		
Cobalt	1.0	.0042	.019		
Copper	2.0	.044	.34	0.49	<2.0
Iron	50	1.1	15	-0.14	<50
Lead	1.0	.007	.048	0.0028	<1.0
Magnesium	500	.32	1.7		
Manganese	4.0	.054	.36		
Molybdenum	2.0	.032	.088		
Nickel	4.0	.05	.22	-0.020	<4.0
Potassium	500	10	18		
Selenium	2.0	.28	.22		
Silver	1.0	.0028	.024		
Sodium	500	.96	15		
Strontium	10	.0072	.028		
Thallium	1.0	.19	.06		
Tin	10	.022	1.6		
Titanium	2.0	.22	.13		
Vanadium	8.0	.98	3		
Zinc	8.0	.52	1.5		

Associated samples MP26901: MC48194-1, MC48194-3, MC48194-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC48194
Account: MOBILSS - ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

QC Batch ID: MP26901
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date:			10/14/16					10/14/16	
Metal	BSP Result	Spikelot MPICP7	% Rec	QC Limits	BSD Result	Spikelot MPICP7	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper	505	500	101.0	80-120	507	500	101.4	0.4	
Iron	10600	10000	106.0	80-120	10600	10000	106.0	0.0	
Lead	1030	1000	103.0	80-120	1050	1000	105.0	1.9	
Magnesium									
Manganese									
Molybdenum									
Nickel	511	500	102.2	80-120	512	500	102.4	0.2	
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP26901: MC48194-1, MC48194-3, MC48194-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: MC48194
Account: MOBILSS - ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

QC Batch ID: MP26901
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 10/14/16

Metal	MC48194-3 Original	SDL 2:10	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper	0.676	1.03	51.9 (a)	0-10
Iron	62.0	63.9	2.9	0-10
Lead	0.489	0.506	3.4	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	0.225	0.00	100.0(a)	0-10
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP26901: MC48194-1, MC48194-3, MC48194-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: MC48194
Account: MOBILSS - ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Cyanide	GP20973/GN55055	0.010	0.0	mg/l	0.05	0.0506	101.2	90-110%
Cyanide	GP20973/GN55055			mg/l	0.4	0.363	90.8	90-110%
Phenols	GP20997/GN55116	0.050	0.0	mg/l	0.20	0.20	100.0	80-120%
Solids, Total Suspended	GN55029	4.0	0.0	mg/l				

Associated Samples:
Batch GN55029: MC48194-1, MC48194-4
Batch GP20973: MC48194-1, MC48194-4
Batch GP20997: MC48194-1, MC48194-4
(*) Outside of QC limits

Misc. Forms

Custody Documents and Other Forms

(SGS Accutest New Jersey)

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle

CHAIN OF CUSTODY

SGS ACCUTEST

50 D'Angelo Drive, 495 Technology Center West, Bldg One, Marlborough, MA 01752
TEL 508-481-6200 FAX 508-481-7753
www.sgs.com

Page 1 of 1

FED-EX Tracking # 7068 8600 3910
Bottle Order Control #
SGS Accutest Quote #
SGS Accutest Job MC48194

Client / Reporting Information

Company Name: SGS Accutest
Street Address: 50 D'Angelo Drive, 495 Technolgy Center West, BLDG One
City: Marlbourough, State: MA Zip: 0175
Project Contact: Rob Soll E-mail: Robert.Soll@SGS.com
Phone #: 508-481-6200 Fax #:
Sampler(s) Name(s): ML Phone:

Project Information

Project Name: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	CHL by 300	PHC1664	LAB USE ONLY
1	INF		10/7/16	11:00:00 AM	ML	AQ	2	x				x				X	X	
4	EFF		10/7/16	11:30:00 AM	ML	AQ	2	x				x				X	X	MA

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other Due 10/21/2016

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other MAMCP

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Ship to ALNJ
CHL by 300
INITIAL ASESSMENT JB
LABEL VERIFICATION

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		10/10/16	FedEx	2	10-10-16	2 FedEx
3	FedEx	10/11/16 0941	DH	4		4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal # CLIENT JEH	[ ] Intact [ ] Not intact	Preserved where applicable [ ] On Ice [ ] Cooler Temp. 1.1 C

FP

9.1

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MC48194: Chain of Custody
Page 1 of 2
SGS Accutest New Jersey

SGS Accutest Sample Receipt Summary

Job Number: MC48194 **Client:** _____ **Project:** _____

Date / Time Received: 10/11/2016 9:45:00 AM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (1.1);

Cooler Temps (Corrected) °C: Cooler 1: (2.0);

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

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

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

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

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

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

Comments

MC48194: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

SGS Accutest New England

Job No: MC48194

MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Project No: (DIR) 20171427.001A PO# 51351-322303

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC48194-1	Collected: 07-OCT-16 11:00 By: ML			Received: 07-OCT-16 By: DDH		
INF						
MC48194-1	EPA 1664A	19-OCT-16 15:00	TT	19-OCT-16	TT	PHC1664
MC48194-1	EPA 300/SW846 9056A	19-OCT-16 17:49	TG	19-OCT-16	JN	CHL
MC48194-4	Collected: 07-OCT-16 11:30 By: ML			Received: 07-OCT-16 By: DDH		
EFF						
MC48194-4	EPA 1664A	19-OCT-16 15:00	TT	19-OCT-16	TT	PHC1664
MC48194-4	EPA 300/SW846 9056A	19-OCT-16 18:13	TG	19-OCT-16	JN	CHL

General Chemistry

QC Data Summaries

(SGS Accutest New Jersey)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: MC48194
Account: ALNE - SGS Accutest New England
Project: MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP817/GN53676	2.0	0.0	mg/l	80	79.7	99.6	90-110%
HEM Petroleum Hydrocarbons	GP860/GN53680	5.0	0.0	mg/l	20.05	16.9	84.3	64-132%
HEM Petroleum Hydrocarbons	GP860/GN53680	5.0	1.0	mg/l	20.05	15.3	76.3	64-132%
Sulfate	GP817/GN53676	10	0.0	mg/l	80	79.5	99.4	90-110%

Associated Samples:
Batch GP817: MC48194-1, MC48194-4
Batch GP860: MC48194-1, MC48194-4
(*) Outside of QC limits

e-Hardcopy 2.0
Automated Report

Technical Report for

ExxonMobil

GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

(DIR) 20171427.001A PO#51351-322303

SGS Accutest Job Number: MC48498

Sampling Date: 10/28/16

Report to:

Kleinfelder

ryarnell@kleinfelder.com

ATTN: Robin Yarnell

Total number of pages in report: **17**

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

H. (Brad) Madadian
Lab Director

Client Service contact: Robert Soll 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

Sections: 1 2 3 4 5 6

Table of Contents

Sample Summary

ExxonMobil

Job No: MC48498

GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Project No: (DIR) 20171427.001A PO#51351-322303

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
MC48498-1	10/28/16	10:45	ML	10/28/16	AQ	Effluent	EFF

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: ExxonMobil **Job No:** MC48498

Site: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA **Report Date** 11/2/2016 3:22:02 PM

1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 10/28/2016 and were received at SGS Accutest New England on 10/28/2016 properly preserved, at 4.2 Deg. C and intact. These Samples received a job number of MC48498. 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.

Metals By Method EPA 200.8

Matrix: AQ **Batch ID:** MP26954

- 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) MC48498-1SDL were used as the QC samples for metals.
- Only Copper requested.

SGS Accutest 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 Laboratory Director for SGS Accutest New England or assignee as verified by the signature on the cover page has authorized the release of this report(MC48498).

Summary of Hits

Job Number: MC48498
Account: ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Collected: 10/28/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC48498-1	**EFF**					
Copper		122	4.0		ug/l	EPA 200.8

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	MC48498-1	**Date Sampled:**	10/28/16
Matrix:	AQ - Effluent	**Date Received:**	10/28/16
		Percent Solids:	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Copper	122	4.0	ug/l	1	10/31/16	11/02/16	EAL	EPA 200.8 [1]	EPA 200.8 [2]

(1) Instrument QC Batch: MA19583
(2) Prep QC Batch: MP26954

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- MCP Form
- Sample Tracking Chronicle
- QC Evaluation: MA MCP Limits

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest of New England
D'Angelo Drive/495 Technology Center West, Building One Marlborough, MA 01752
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

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FED-EX Tracking # | Bottle Order Control #

SGS Accutest Quote # | SGS Accutest Job # MC48498

Client / Reporting Information

Company Name: KLEINFELDER
Street Address: 1 SPEEN STREET, SUITE 200
City: FRAMINGHAM State: MA Zip: 01701
Project Contact: JEREMY BLUMBERG E-mail: JBLUMBERG@KLEINFELDER.COM
Phone #: (800) 522-8740 Fax #:
Sampler(s) Name(s): MARK LISS Phone #: 860 6146719

Project Information

Project Name: 01081/DEDHAM
Street: 19 AMES STREET
City: DEDHAM, MA
Project#: 20171427.001A
Client PO#: 51351-322303
Project Manager: JEREMY BLUMBERG

Billing Information (If different from Report to)

Company Name: KLEINFELDER
Street Address: 1 SPEEN STREET, SUITE 200
City: FRAMINGHAM State: MA Zip: 01701
Attention: EASTERN BILLIN PO#: 51351-322303

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB- Equipment Blank
RB- Rinse Blank
TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	Collection: MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	CuMS by SW846 6020A	LAB USE ONLY
1	EFF		10/28/16	1045	MS	WW	1			1							1	

INITIAL ASSESSMENT LV
LABEL VERIFICATION LV
CB

RUSH!

Data Deliverable Information

- Commercial "A" (Level 1)
- Commercial "B" (Level 2)
- FULLT1 (Level 3+4)
- CT RCP
- MA MCP
- NYASP Category A
- NYASP Category B
- State Forms
- EDD Format
- Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

Turnaround Time (Business days)

- Std. 10 Business Days
- Std. 5 Business Days (By Contract only)
- 5 Day RUSH
- [X] 3 Day EMERGENCY
- 2 Day EMERGENCY
- ~~1 Day EMERGENCY~~

Emergency & Rush T/A data available VIA Lablink

Approved By (SGS Accutest PM): / Date: 3 Day by Robert Sell 10/28/16

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Mark Liss	10/28/16 1215	1	2		2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by:	Date Time:	Received By:	Custody Seal #	Intact / Not intact	Preserved where applicable	On Ice / Cooler Temp.
5		5				4.2°C

MC48498: Chain of Custody
Page 1 of 2

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SGS Accutest Sample Receipt Summary

Job Number: MC48498 **Client:** KLEINFELDER **Project:** DEDHAM

Date / Time Received: 10/28/2016 12:15:00 PM **Delivery Method:** DROP OFF **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (4.2/4.2);

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

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Thermometer ID:	IRGUN1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

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

Comments

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

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

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

Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup	WSC-CAM	Exhibit VII A
	July 1, 2010	Revision No. 1
	Final	

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name:	Accutest Laboratories of New England	Project #:	MC48498
Project Location:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA	MADEP RTN	None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)
MC48498-1

Matrices: Groundwater/Surface Water ( ) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other (X)

CAM Protocol (check all that apply below):

8260 VOC ( ) CAM IIA	7470/7471 Hg ( ) CAM III B	MassDEP VPH ( ) CAM IV A	8081 Pesticides ( ) CAM V B	7196 Hex Cr ( ) CAM VI B	Mass DEP APH ( ) CAM IX A
8270 SVOC ( ) CAM II B	7010 Metals ( ) CAM III C	MassDEP EPH ( ) CAM IV B	8151 Herbicides ( ) CAM V C	8330 Explosives ( ) CAM VIII A	TO-15 VOC ( ) CAM IX B
6010 Metals ( ) 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 Responses to Questions A Through F are required for "Presumptive Certainty status

A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☑ Yes	☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☑ Yes	☐ No
E	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	☑ Yes	☐ No
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☑ Yes	☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	☑ Yes	☐ No

Responses to questions G, H, and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols	☑ Yes	☐ No [1]
	Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.		
H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☑ Yes	☐ No [1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes	☑ No [1]

[1] ***All Negative responses must be addressed in an attached Environmental Laboratory case narrative.***

I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: _____ **Position:** **Laboratory Director**

Printed Name: **H. (Brad) Madadian** **Date:** **02-Nov-16**

Internal Sample Tracking Chronicle

ExxonMobil

Job No: MC48498

GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Project No: (DIR) 20171427.001A PO#51351-322303

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC48498-1	Collected: 28-OCT-16 10:45 By: ML			Received: 28-OCT-16 By: SAP		
EFF						
MC48498-1	EPA 200.8	02-NOV-16 12:51	EAL	31-OCT-16	EM	CUMS

QC Evaluation: MA MCP Limits

Job Number: MC48498
Account: ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Collected: 10/28/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits

No Exceptions found.

* Sample used for QC is not from job MC48498

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC48498
Account: MOBILSS - ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

QC Batch ID: MP26954
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 10/31/16

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.26	3.6		
Antimony	0.50	.013	.098		
Arsenic	1.0	.018	.2		
Barium	1.0	.014	.083		
Beryllium	0.50	.006	.026		
Boron	5.0	.059	.12		
Cadmium	0.50	.0062	.033		
Calcium	250	1.4	36		
Chromium	4.0	.016	.24		
Cobalt	0.50	.0015	.031		
Copper	4.0	.011	.22	0.16	<4.0
Iron	50	.2	12		
Lead	0.50	.015	.046		
Magnesium	250	.057	4.1		
Manganese	2.0	.017	.31		
Molybdenum	1.0	.0062	.054		
Nickel	4.0	.0077	.19		
Potassium	250	2.2	7.3		
Selenium	1.0	.066	.1		
Silver	2.0	.0019	.064		
Sodium	250	1.7	10		
Strontium	5.0	.0036	.054		
Thallium	0.50	.0086	.058		
Tin	5.0	.026	.48		
Titanium	1.0	.087	.26		
Vanadium	4.0	.052	1.9		
Zinc	4.0	.067	.51		

Associated samples MP26954: MC48498-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC48498
Account: MOBILSS - ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

QC Batch ID: MP26954 Methods: EPA 200.8
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/31/16

Metal	BSP Result	Spikelot MPICP7	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper	434	500	86.8	85-115
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP26954: MC48498-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: MC48498
Account: MOBILSS - ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

QC Batch ID: MP26954
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 10/31/16

Metal	MC48498-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper	122	130	6.6	0-10
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP26954: MC48498-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

e-Hardcopy 2.0
Automated Report

Technical Report for

ExxonMobil

GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

SGS Accutest Job Number: MC50518

Sampling Date: 05/31/17

Report to:

Kleinfelder

ryarnell@kleinfelder.com

ATTN: Robin Yarnell

Total number of pages in report: **69**

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

H. (Brad) Madadian
Lab Director

Client Service contact: Robert Soll 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NJ (MA926) PA (6801121) LA (AI171119) ND (R-188) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

Sections:

Table of Contents

Sample Summary

ExxonMobil

Job No: MC50518

GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC50518-1	05/31/17	09:15	RPD	05/31/17	AQ	Ground Water	MW-4
MC50518-2	05/31/17	10:15	RPD	05/31/17	AQ	Surface Water	SW-1

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: ExxonMobil **Job No** MC50518

Site: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA **Report Date** 6/14/2017 3:23:09 PM

2 Sample(s) were collected on 05/31/2017 and were received at SGS Accutest New England on 05/31/2017 properly preserved, at 0.9 Deg. C and intact. These Samples received a job number of MC50518. 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 8260C

Matrix: AQ **Batch ID:** MSL4443

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- MSL4443-BS/BSD for Acetone, 2-Butanone (MEK), 2-Hexanone (BS only): Outside MCP control limits (biased high).
- Quadratic regression is employed for initial calibration standard MSL4435-ICC4435 for 1,2,4-trichlorobenzene, naphthalene, 1,2,3-trichlorobenzene.
- The response factor (RF) for Acetone,2-Butanone at low point and average point in the initial calibration MSL4435-ICC4435 are less than the required RF of 0.1 as noted in Table 4 of SW846 8260C. The average and individual response factors (RF) for 1,4-Dioxane are less than 0.05.
- Continuing calibration check standard for acetone, 2-butanone, 2,2-dichloropropane, 2-hexanone exceed 20% Difference (biased high). Associated samples are non-detect for this compound.
- MSL4443-BS/BSD for 2,2-Dichloropropane: Outside control limits. Associated samples are non-detect for this compound.

Extractables by GCMS By Method EPA 625

Matrix: AQ **Batch ID:** OP49756

- All samples were extracted 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.
- MC50518-1: Elevated RL due to dilution required for matrix interference.

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP49758

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Only PAHs requested.
- Sample(s) MC50518-1 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.

Metals By Method EPA 200.8

Matrix: AQ **Batch ID:** N:MP1206

- MC50518-1 for Zinc: Analysis performed at SGS Accutest, Dayton, NJ.
- MC50518-1 for Silver: Analysis performed at SGS Accutest, Dayton, NJ.
- MC50518-1 for Nickel: Analysis performed at SGS Accutest, Dayton, NJ.
- MC50518-1 for Selenium: Analysis performed at SGS Accutest, Dayton, NJ.
- MC50518-1 for Lead: Analysis performed at SGS Accutest, Dayton, NJ.
- MC50518-1 for Antimony: Analysis performed at SGS Accutest, Dayton, NJ.
- MC50518-1 for Arsenic: Analysis performed at SGS Accutest, Dayton, NJ.
- MC50518-1 for Cadmium: Analysis performed at SGS Accutest, Dayton, NJ.
- MC50518-1 for Chromium: Analysis performed at SGS Accutest, Dayton, NJ.
- MC50518-1 for Copper: Analysis performed at SGS Accutest, Dayton, NJ.
- MC50518-1 for Iron: Analysis performed at SGS Accutest, Dayton, NJ.

Metals By Method EPA 245.1

Matrix: AQ **Batch ID:** N:MP1310

- MC50518-1 for Mercury: Analysis performed at SGS Accutest, Dayton, NJ.

Wet Chemistry By Method 6010/7196A M/200.7

Matrix: AQ **Batch ID:** R40034

- MC50518-1 for Chromium, Trivalent: Calculated as: (Chromium) - (Chromium, Hexavalent)

Wet Chemistry By Method EPA 1664A

Matrix: AQ **Batch ID:** N:GP5792

- MC50518-1 for HEM Oil and Grease: Analysis performed at SGS Accutest, Dayton, NJ.

Wet Chemistry By Method EPA 335.4/LACHAT

Matrix: AQ **Batch ID:** N:GP5557

- MC50518-1 for Cyanide: Analysis performed at SGS Accutest, Dayton, NJ.

Wet Chemistry By Method SM21 4500HB/EPA150.1

Matrix: AQ **Batch ID:** GN55896

- MC50518-2 for pH: Analysis performed past the required 15 minutes of collection time/holding time.
- MC50518-1 for pH: Analysis performed past the required 15 minutes of collection time/holding time.

Wet Chemistry By Method SM2340 C-11

Matrix: AQ **Batch ID:** N:GN65187

- MC50518-2 for Hardness, Total as CaCO3: Analysis performed at SGS Accutest, Dayton, NJ.

Wet Chemistry By Method SM4500NH3 H-11LACHAT

Matrix: AQ **Batch ID:** N:GP5925

- MC50518-1 for Nitrogen, Ammonia: Analysis performed at SGS Accutest, Dayton, NJ.
- MC50518-2 for Nitrogen, Ammonia: Analysis performed at SGS Accutest, Dayton, NJ.

Wet Chemistry By Method SW846 7196A

Matrix:	AQ	Batch ID:	GN55895

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

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

SGS Accutest 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 Laboratory Director for SGS Accutest New England or assignee as verified by the signature on the cover page has authorized the release of this report(MC50518).

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: SGS Accutest New England **Job No** MC50518

Site: MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA **Report Date** 6/14/2017 12:56:32 P

On 06/01/2017, 2 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 3.5 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of MC50518 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Please refer to certification exceptions summary for additional certification information.

Metals By Method EPA 200.8

Matrix: AQ **Batch ID:** MP1206

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Metals By Method EPA 245.1

Matrix: AQ **Batch ID:** MP1310

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method EPA 1664A

Matrix: AQ **Batch ID:** GP5792

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method EPA 335.4/LACHAT

Matrix: AQ **Batch ID:** GP5557

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Cyanide are outside control limits.

Wet Chemistry By Method SM2340 C-11

Matrix: AQ **Batch ID:** GN65187

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method SM4500NH3 H-11LACHAT

Matrix: AQ **Batch ID:** GP5925

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method SW846 6010/7196A M

Matrix: AQ **Batch ID:** R163892

- The data for SW846 6010/7196A M meets quality control requirements.

SGS Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS Accutest is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS Accutest indicated via signature on the report cover

Summary of Hits

Job Number: MC50518
Account: ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Collected: 05/31/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC50518-1	**MW-4**					
Benzene		92.3	5.0		ug/l	SW846 8260C
Ethylbenzene		589	10		ug/l	SW846 8260C
Naphthalene		334	50		ug/l	SW846 8260C
n-Propylbenzene		60.2	50		ug/l	SW846 8260C
Toluene		1320	10		ug/l	SW846 8260C
1,2,4-Trimethylbenzene		2090	10		ug/l	SW846 8260C
1,3,5-Trimethylbenzene		713	10		ug/l	SW846 8260C
m,p-Xylene		4120	10		ug/l	SW846 8260C
o-Xylene		2000	10		ug/l	SW846 8260C
Xylene (total)		6110	10		ug/l	SW846 8260C
2,4-Dimethylphenol [a]		57.0	54		ug/l	EPA 625
Naphthalene [a]		282	27		ug/l	EPA 625
Acenaphthene		0.40	0.11		ug/l	SW846 8270D BY SIM
Benzo(a)anthracene		0.19 B	0.054		ug/l	SW846 8270D BY SIM
Benzo(a)pyrene		0.20	0.11		ug/l	SW846 8270D BY SIM
Benzo(b)fluoranthene		0.28	0.054		ug/l	SW846 8270D BY SIM
Benzo(g,h,i)perylene		0.25	0.11		ug/l	SW846 8270D BY SIM
Benzo(k)fluoranthene		0.23	0.11		ug/l	SW846 8270D BY SIM
Chrysene		0.32	0.11		ug/l	SW846 8270D BY SIM
Fluoranthene		0.62	0.11		ug/l	SW846 8270D BY SIM
Fluorene		0.56	0.11		ug/l	SW846 8270D BY SIM
Indeno(1,2,3-cd)pyrene		0.21	0.11		ug/l	SW846 8270D BY SIM
2-Methylnaphthalene		77.1	0.22		ug/l	SW846 8270D BY SIM
Naphthalene		382	2.2		ug/l	SW846 8270D BY SIM
Phenanthrene		1.1	0.054		ug/l	SW846 8270D BY SIM
Pyrene		0.61 B	0.11		ug/l	SW846 8270D BY SIM
Arsenic [b]		10.2	1.0		ug/l	EPA 200.8
Copper [b]		26.4	4.0		ug/l	EPA 200.8
Iron [b]		19400	50		ug/l	EPA 200.8
Lead [b]		194	0.50		ug/l	EPA 200.8
Nickel [b]		4.5	4.0		ug/l	EPA 200.8
Zinc [b]		32.9	10		ug/l	EPA 200.8
HEM Oil and Grease [b]		5.8	5.1		mg/l	EPA 1664A
Nitrogen, Ammonia [b]		5.3	0.60		mg/l	SM4500NH3 H-11LACHAT
pH [c]		6.6			su	SM21 4500HB/EPA150.1
MC50518-2	**SW-1**					
Hardness, Total as CaCO3 [b]		162	4.0		mg/l	SM2340 C-11
Nitrogen, Ammonia [b]		0.90	0.20		mg/l	SM4500NH3 H-11LACHAT
pH [c]		7.0			su	SM21 4500HB/EPA150.1

(a) Elevated RL due to dilution required for matrix interference.

Summary of Hits

Job Number: MC50518
Account: ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Collected: 05/31/17

Lab Sample ID	Client Sample ID	Result/				
Analyte		Qual	RL	MDL	Units	Method

(b) Analysis performed at SGS Accutest, Dayton, NJ.
(c) Analysis performed past the required 15 minutes of collection time/holding time.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	MC50518-1	**Date Sampled:**	05/31/17
Matrix:	AQ - Ground Water	**Date Received:**	05/31/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L103633.D	10	06/08/17 13:29	VY	n/a	n/a	MSL4443
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	100	ug/l	
71-43-2	Benzene	92.3	5.0	ug/l	
108-86-1	Bromobenzene	ND	50	ug/l	
74-97-5	Bromochloromethane	ND	50	ug/l	
75-27-4	Bromodichloromethane	ND	10	ug/l	
75-25-2	Bromoform	ND	20	ug/l	
74-83-9	Bromomethane	ND	20	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	ug/l	
104-51-8	n-Butylbenzene	ND	50	ug/l	
135-98-8	sec-Butylbenzene	ND	50	ug/l	
98-06-6	tert-Butylbenzene	ND	50	ug/l	
75-15-0	Carbon disulfide	ND	50	ug/l	
56-23-5	Carbon tetrachloride	ND	10	ug/l	
108-90-7	Chlorobenzene	ND	10	ug/l	
75-00-3	Chloroethane	ND	20	ug/l	
67-66-3	Chloroform	ND	10	ug/l	
74-87-3	Chloromethane	ND	20	ug/l	
95-49-8	o-Chlorotoluene	ND	50	ug/l	
106-43-4	p-Chlorotoluene	ND	50	ug/l	
108-20-3	Di-Isopropyl ether	ND	20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	ug/l	
124-48-1	Dibromochloromethane	ND	10	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	ug/l	
75-71-8	Dichlorodifluoromethane	ND	20	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	10	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	MC50518-1	**Date Sampled:**	05/31/17
Matrix:	AQ - Ground Water	**Date Received:**	05/31/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	20	ug/l	
142-28-9	1,3-Dichloropropane	ND	50	ug/l	
594-20-7	2,2-Dichloropropane	ND	50	ug/l	
563-58-6	1,1-Dichloropropene	ND	50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	ug/l	
123-91-1	1,4-Dioxane	ND	1000	ug/l	
64-17-5	Ethanol	ND	2000	ug/l	
60-29-7	Ethyl Ether	ND	50	ug/l	
100-41-4	Ethylbenzene	589	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	50	ug/l	
591-78-6	2-Hexanone	ND	100	ug/l	
98-82-8	Isopropylbenzene	ND	50	ug/l	
99-87-6	p-Isopropyltoluene	ND	50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	ug/l	
74-95-3	Methylene bromide	ND	50	ug/l	
75-09-2	Methylene chloride	ND	20	ug/l	
91-20-3	Naphthalene	334	50	ug/l	
103-65-1	n-Propylbenzene	60.2	50	ug/l	
100-42-5	Styrene	ND	50	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	20	ug/l	
75-65-0	Tert Butyl Alcohol	ND	200	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	ug/l	
109-99-9	Tetrahydrofuran	ND	100	ug/l	
108-88-3	Toluene	1320	10	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	ug/l	
79-01-6	Trichloroethene	ND	10	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	2090	10	ug/l	
108-67-8	1,3,5-Trimethylbenzene	713	10	ug/l	
75-01-4	Vinyl chloride	ND	10	ug/l	
	m,p-Xylene	4120	10	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	MC50518-1	**Date Sampled:**	05/31/17
Matrix:	AQ - Ground Water	**Date Received:**	05/31/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
95-47-6	o-Xylene	2000	10	ug/l	
1330-20-7	Xylene (total)	6110	10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		76-129%
2037-26-5	Toluene-D8	99%		83-114%
460-00-4	4-Bromofluorobenzene	96%		75-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	MC50518-1	**Date Sampled:**	05/31/17
Matrix:	AQ - Ground Water	**Date Received:**	05/31/17
Method:	EPA 625 EPA 625	**Percent Solids:**	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	R52197.D	5	06/14/17 11:56	DRY	06/02/17 13:00	OP49756	MSR1974
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	27	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	54	ug/l	
120-83-2	2,4-Dichlorophenol	ND	54	ug/l	
105-67-9	2,4-Dimethylphenol	57.0	54	ug/l	
51-28-5	2,4-Dinitrophenol	ND	54	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	54	ug/l	
88-75-5	2-Nitrophenol	ND	54	ug/l	
100-02-7	4-Nitrophenol	ND	54	ug/l	
87-86-5	Pentachlorophenol	ND	54	ug/l	
108-95-2	Phenol	ND	27	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	54	ug/l	
83-32-9	Acenaphthene	ND	27	ug/l	
208-96-8	Acenaphthylene	ND	27	ug/l	
120-12-7	Anthracene	ND	27	ug/l	
92-87-5	Benzidine	ND	54	ug/l	
56-55-3	Benzo(a)anthracene	ND	27	ug/l	
50-32-8	Benzo(a)pyrene	ND	27	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	27	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	27	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	27	ug/l	
85-68-7	Butyl benzyl phthalate	ND	27	ug/l	
91-58-7	2-Chloronaphthalene	ND	27	ug/l	
106-47-8	4-Chloroaniline	ND	54	ug/l	
218-01-9	Chrysene	ND	27	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	27	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	27	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	27	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	27	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	27	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	27	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	MC50518-1	**Date Sampled:**	05/31/17
Matrix:	AQ - Ground Water	**Date Received:**	05/31/17
Method:	EPA 625 EPA 625	**Percent Solids:**	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

ABN PPL List

CAS No.	Compound	Result	RL	Units	Q
106-46-7	1,4-Dichlorobenzene	ND	27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	54	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	54	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	27	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	27	ug/l	
84-74-2	Di-n-butyl phthalate	ND	27	ug/l	
117-84-0	Di-n-octyl phthalate	ND	27	ug/l	
84-66-2	Diethyl phthalate	ND	27	ug/l	
131-11-3	Dimethyl phthalate	ND	27	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	11	ug/l	
206-44-0	Fluoranthene	ND	27	ug/l	
86-73-7	Fluorene	ND	27	ug/l	
118-74-1	Hexachlorobenzene	ND	27	ug/l	
87-68-3	Hexachlorobutadiene	ND	27	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	54	ug/l	
67-72-1	Hexachloroethane	ND	27	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	27	ug/l	
78-59-1	Isophorone	ND	27	ug/l	
91-20-3	Naphthalene	282	27	ug/l	
98-95-3	Nitrobenzene	ND	27	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	27	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	27	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	54	ug/l	
85-01-8	Phenanthrene	ND	27	ug/l	
129-00-0	Pyrene	ND	27	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	40%		15-110%
4165-62-2	Phenol-d5	35%		15-110%
118-79-6	2,4,6-Tribromophenol	77%		15-110%
4165-60-0	Nitrobenzene-d5	72%		30-130%
321-60-8	2-Fluorobiphenyl	59%		30-130%
1718-51-0	Terphenyl-d14	80%		30-130%

(a) Elevated RL due to dilution required for matrix interference.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	MC50518-1	**Date Sampled:**	05/31/17
Matrix:	AQ - Ground Water	**Date Received:**	05/31/17
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R52131.D	1	06/05/17 18:54	DRY	06/02/17 13:00	OP49758	MSR1970
Run #2	R52155.D	10	06/06/17 22:27	DRY	06/02/17 13:00	OP49758	MSR1971

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2	920 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	0.40	0.11	ug/l	
208-96-8	Acenaphthylene	ND	0.11	ug/l	
120-12-7	Anthracene	ND	0.11	ug/l	
56-55-3	Benzo(a)anthracene	0.19	0.054	ug/l	B
50-32-8	Benzo(a)pyrene	0.20	0.11	ug/l	
205-99-2	Benzo(b)fluoranthene	0.28	0.054	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.25	0.11	ug/l	
207-08-9	Benzo(k)fluoranthene	0.23	0.11	ug/l	
218-01-9	Chrysene	0.32	0.11	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	ug/l	
206-44-0	Fluoranthene	0.62	0.11	ug/l	
86-73-7	Fluorene	0.56	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.21	0.11	ug/l	
91-57-6	2-Methylnaphthalene	77.1	0.22	ug/l	
91-20-3	Naphthalene	382 [a]	2.2	ug/l	
85-01-8	Phenanthrene	1.1	0.054	ug/l	
129-00-0	Pyrene	0.61	0.11	ug/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	87%	89%	26-121%
321-60-8	2-Fluorobiphenyl	31%	74%	28-107%
1718-51-0	Terphenyl-d14	88%	110%	29-129%

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	MC50518-1	**Date Sampled:**	05/31/17
Matrix:	AQ - Ground Water	**Date Received:**	05/31/17
		Percent Solids:	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony [a]	< 2.0	2.0	ug/l	1	06/02/17	06/04/17	ANJ	EPA 200.8 [1]	EPA 200.8 [4]
Arsenic [a]	10.2	1.0	ug/l	1	06/02/17	06/04/17	ANJ	EPA 200.8 [1]	EPA 200.8 [4]
Cadmium [a]	< 0.50	0.50	ug/l	1	06/02/17	06/04/17	ANJ	EPA 200.8 [1]	EPA 200.8 [4]
Chromium [a]	< 4.0	4.0	ug/l	1	06/02/17	06/04/17	ANJ	EPA 200.8 [1]	EPA 200.8 [4]
Copper [a]	26.4	4.0	ug/l	1	06/02/17	06/04/17	ANJ	EPA 200.8 [1]	EPA 200.8 [4]
Iron [a]	19400	50	ug/l	1	06/02/17	06/04/17	ANJ	EPA 200.8 [1]	EPA 200.8 [4]
Lead [a]	194	0.50	ug/l	1	06/02/17	06/06/17	ANJ	EPA 200.8 [2]	EPA 200.8 [4]
Mercury [a]	< 0.20	0.20	ug/l	1	06/07/17	06/07/17	ANJ	EPA 245.1 [3]	EPA 245.1 [5]
Nickel [a]	4.5	4.0	ug/l	1	06/02/17	06/04/17	ANJ	EPA 200.8 [1]	EPA 200.8 [4]
Selenium [a]	< 1.0	1.0	ug/l	1	06/02/17	06/04/17	ANJ	EPA 200.8 [1]	EPA 200.8 [4]
Silver [a]	< 2.0	2.0	ug/l	1	06/02/17	06/04/17	ANJ	EPA 200.8 [1]	EPA 200.8 [4]
Zinc [a]	32.9	10	ug/l	1	06/02/17	06/04/17	ANJ	EPA 200.8 [1]	EPA 200.8 [4]

(1) Instrument QC Batch: N:MA42163
(2) Instrument QC Batch: N:MA42181
(3) Instrument QC Batch: N:MA42182
(4) Prep QC Batch: N:MP1206
(5) Prep QC Batch: N:MP1310

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	MC50518-1	**Date Sampled:**	05/31/17
Matrix:	AQ - Ground Water	**Date Received:**	05/31/17
		Percent Solids:	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent	< 0.010	0.010	mg/l	1	06/01/17 08:20	EAL	SW846 7196A
Chromium, Trivalent [a]	< 0.014	0.014	mg/l	1	06/04/17 19:59	ANJ	6010/7196A M/200.7
Cyanide [b]	< 0.010	0.010	mg/l	1	06/05/17 14:40	ANJ	EPA 335.4/LACHAT
HEM Oil and Grease [b]	5.8	5.1	mg/l	1	06/04/17 13:45	ANJ	EPA 1664A
Nitrogen, Ammonia [b]	5.3	0.60	mg/l	3	06/09/17 14:54	ANJ	SM4500NH3 H-11LACHAT
pH [c]	6.6		su	1	06/01/17 11:43	EAL	SM21 4500HB/EPA150.1

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)
(b) Analysis performed at SGS Accutest, Dayton, NJ.
(c) Analysis performed past the required 15 minutes of collection time/holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SW-1		
Lab Sample ID:	MC50518-2	**Date Sampled:**	05/31/17
Matrix:	AQ - Surface Water	**Date Received:**	05/31/17
		Percent Solids:	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3 [a]	162	4.0	mg/l	1	06/06/17 10:17	ANJ	SM2340 C-11
Nitrogen, Ammonia [a]	0.90	0.20	mg/l	1	06/09/17 14:28	ANJ	SM4500NH3 H-11LACHAT
pH [b]	7.0		su	1	06/01/17 11:41	EAL	SM21 4500HB/EPA150.1

(a) Analysis performed at SGS Accutest, Dayton, NJ.
(b) Analysis performed past the required 15 minutes of collection time/holding time.

RL = Reporting Limit

5

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Parameter Certifications (MA)
- Chain of Custody
- MCP Form
- MCP Form (SGS Accutest New Jersey)
- Sample Tracking Chronicle
- QC Evaluation: MA MCP Limits

Parameter Certifications

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

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

Parameter	CAS#	Method	Mat	Certification Status
pH		**SM21 4500HB/EPA150.1**	AQ	Accutest is certified for this parameter.

CHAIN OF CUSTODY- ExxonMobil Projects

PAGE __1_ OF _1__

ACCUTEST Laboratories

Accutest Laboratories of New England
495 Tech Center West, Bldg. 1, Marlboro, MA 01752
TEL: (508) 481-6200 FAX: (508) 481-7753
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: MC50518

Client / Reporting Information

Company Name: Kleinfelder
Street Address: 4 Technology Drive, Suite 110
City: Westborough State: MA Zip: 1581
Project Contact: Mark Habedank E-mail:
Phone #: (860) 563-7775 Fax #: (860) 563-6744
Sampler(s) Name(s): Ryan Degnim Phone #: 508 370-8256

SITE NAME - Provide MRN for Retail or AFE for Major Projects

Retail Project (MRN): 1081
Major Project (AFE):
Project Name: 19 Ames Street
City: Dedham State: MA
Project Manager: Colby Jensen
ExxonMobil Purchase Order #:

ExxonMobil Environmental Services Co.

If Project is Direct Bill to Consultant
Company Name: Kleinfelder
Street Address: 4 Technology Drive, Suite 110
City: Westborough, MA 01581 State: Zip:
Attention: PO#:
Eastern Billing Center

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB- Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	VOCs via EPA 8260	SVOCs via GC 625	SVOCs via 8270	Total Metlas via ICP/MS 200.8	Total Chromium via 7196A	Total Mercury via 245.1	Cyanide via 335.4	TRH via 1664A Oil + Grease	Ammonia	Hardness	Temperature & pH	LAB USE ONLY
-1	MW-4		5/31/17	0915	RPD	GW	15	X	X	X	X	X				X	X	X	X	X	X	X	X	X			
-2	SW-1		5/31/17	1015	RPD	SW	4				X	X	X						X					X	X	X	

ZN1
H2A

INITIAL ASESSMENT CK
LABEL VERIFICATION CK

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [X] Std. 10 Business Days
- [ ] 8 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] CT RCP
- [X] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

MASSDEP CAM COMPLIANT
Hold SW-1 metals sample for analysis

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

	Relinquished by Sampler:	Date Time:	Received By:
1	Ryan Degnim	5/31/2017 1200	
2	Relinquished By:	Date Time:	Received By:
3	Relinquished by Sampler:	Date Time:	Received By:
4	Relinquished By:	Date Time:	Received By:
5	Relinquished by:	Date Time:	Received By:

Custody Seal # [ ] Intact [ ] Not intact | Preserved where applicable [ ] | On Ice [X] | Cooler Temp. 1.4

5.2 5

MC50518: Chain of Custody
Page 1 of 2

SGS Accutest NE Sample Receipt Summary

Job Number: MC50518 **Client:** KLEINFELDER **Project:** 19 AMES STREET

Date / Time Received: 5/31/2017 12:00:00 PM **Delivery Method:** Client **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (1.4/0.9);

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

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Thermometer ID:	IRGUN1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

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

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

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

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

Comments

MC50518: Chain of Custody
Page 2 of 2

Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup	WSC-CAM	Exhibit VII A
	July 1, 2010	Revision No. 1
	Final	

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name:	SGS Accutest- Marlborough	Project #:	MC50518
Project Location:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA	MADEP RTN	None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)
MC50518-1,MC50518-2

Matrices: Groundwater/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other ( )

CAM Protocol (check all that apply below):

8260 VOC (X) CAM IIA	7470/7471 Hg ( ) CAM III B	MassDEP VPH ( ) CAM IV A	8081 Pesticides ( ) CAM V B	7196 Hex Cr (X) CAM VI B	Mass DEP APH ( ) CAM IX A
8270 SVOC (X) CAM II B	7010 Metals ( ) CAM III C	MassDEP EPH ( ) CAM IV B	8151 Herbicides ( ) CAM V C	8330 Explosives ( ) CAM VIII A	TO-15 VOC ( ) 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 Responses to Questions A Through F are required for "Presumptive Certainty status

A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☐ Yes	☑ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☑ Yes	☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☑ Yes	☐ No
E	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ Yes	☐ No ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	☑ Yes	☐ No

Responses to questions G, H, and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols	☐ Yes	☑ No [1]
	Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.		
H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes	☑ No [1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes	☑ No [1]

[1] ***All Negative responses must be addressed in an attached Environmental Laboratory case narrative.***

I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: _____ **Position:** **Laboratory Director**

Printed Name: **H. (Brad) Madadian** **Date:** **14-Jun-17**

Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup	WSC-CAM	Exhibit VII A
	July 1, 2010	Revision No. 1
	Final	

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name:	Accutest Mid-Atlantic	Project #:	MC50518
Project Location:#01074,	MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA	MADEP RTN	None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)
MC50518-1,MC50518-2

Matrices: Groundwater/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other ( )

CAM Protocol (check all that apply below):

8260 VOC ( ) CAM IIA	7470/7471 Hg ( ) CAM III B	MassDEP VPH ( ) CAM IV A	8081 Pesticides ( ) CAM V B	7196 Hex Cr (X) CAM VI B	Mass DEP APH ( ) CAM IX A
8270 SVOC ( ) CAM II B	7010 Metals ( ) CAM III C	MassDEP EPH ( ) CAM IV B	8151 Herbicides ( ) CAM V C	8330 Explosives ( ) CAM VIII A	TO-15 VOC ( ) 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 Responses to Questions A Through F are required for "Presumptive Certainty status

A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☑ Yes	☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☑ Yes	☐ No
E	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ Yes	☐ No ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	☑ Yes	☐ No

Responses to questions G, H, and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols	☑ Yes	☐ No [1]
	Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.		
H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes	☑ No [1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes	☑ No [1]

[1] ***All Negative responses must be addressed in an attached Environmental Laboratory case narrative.***

I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Nancy F. Cole **Position:** **Laboratory Director**

Printed Name: **Nancy F. Cole** **Date:** **14-Jun-17**

Internal Sample Tracking Chronicle

ExxonMobil

Job No: MC50518

GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50518-1	Collected: 31-MAY-17 09:15 By: RPD		Received: 31-MAY-17 By: TF			
MW-4						
MC50518-1	SW846 7196A	01-JUN-17 08:20	EAL			XCR
MC50518-1	SM21 4500HB/EPA150.1	01-JUN-17 11:43	EAL			PH
MC50518-1	EPA 1664A	04-JUN-17 13:45	ANJ	04-JUN-17	ANJ	OG1664
MC50518-1	EPA 200.8	04-JUN-17 19:59	ANJ	02-JUN-17	ANJ	AGMS,ASMS,CDMS,CRMS,CUMS, FEMS,NIMS,SBMS,SEMS,ZNMS
MC50518-1	6010/7196A M/200.7	04-JUN-17 19:59	ANJ			CR3
MC50518-1	EPA 335.4/LACHAT	05-JUN-17 14:40	ANJ	02-JUN-17	ANJ	CN
MC50518-1	SW846 8270D BY SIM	05-JUN-17 18:54	DRY	02-JUN-17	AJ	B8270SIMPAH
MC50518-1	EPA 200.8	06-JUN-17 19:42	ANJ	02-JUN-17	ANJ	PBMS
MC50518-1	SW846 8270D BY SIM	06-JUN-17 22:27	DRY	02-JUN-17	AJ	B8270SIMPAH
MC50518-1	EPA 245.1	07-JUN-17 10:15	ANJ	07-JUN-17	ANJ	HG
MC50518-1	SW846 8260C	08-JUN-17 13:29	VY			V8260MCP
MC50518-1	SM4500NH3 H-11LACHAT	09-JUN-17 14:54	ANJ	09-JUN-17	ANJ	AMN
MC50518-1	EPA 625	14-JUN-17 11:56	DRY	02-JUN-17	AJ	AB625PPL
MC50518-2	Collected: 31-MAY-17 10:15 By: RPD		Received: 31-MAY-17 By: TF			
SW-1						
MC50518-2	SM21 4500HB/EPA150.1	01-JUN-17 11:41	EAL			PH
MC50518-2	SM2340 C-11	06-JUN-17 10:17	ANJ			HRD
MC50518-2	SM4500NH3 H-11LACHAT	09-JUN-17 14:28	ANJ	09-JUN-17	ANJ	AMN

QC Evaluation: MA MCP Limits

Job Number: MC50518
Account: ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Collected: 05/31/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSL4443	SW846 8260C						
MSL4443-BS	67-64-1	Acetone	BSP	REC	171	%	70-130
MSL4443-BS	71-43-2	Benzene	BSP	REC	103	%	70-130
MSL4443-BS	108-86-1	Bromobenzene	BSP	REC	94	%	70-130
MSL4443-BS	74-97-5	Bromochloromethane	BSP	REC	107	%	70-130
MSL4443-BS	75-27-4	Bromodichloromethane	BSP	REC	108	%	70-130
MSL4443-BS	75-25-2	Bromoform	BSP	REC	112	%	70-130
MSL4443-BS	74-83-9	Bromomethane	BSP	REC	101	%	70-130
MSL4443-BS	78-93-3	2-Butanone (MEK)	BSP	REC	159	%	70-130
MSL4443-BS	104-51-8	n-Butylbenzene	BSP	REC	112	%	70-130
MSL4443-BS	135-98-8	sec-Butylbenzene	BSP	REC	100	%	70-130
MSL4443-BS	98-06-6	tert-Butylbenzene	BSP	REC	96	%	70-130
MSL4443-BS	75-15-0	Carbon disulfide	BSP	REC	101	%	70-130
MSL4443-BS	56-23-5	Carbon tetrachloride	BSP	REC	110	%	70-130
MSL4443-BS	108-90-7	Chlorobenzene	BSP	REC	105	%	70-130
MSL4443-BS	75-00-3	Chloroethane	BSP	REC	99	%	70-130
MSL4443-BS	67-66-3	Chloroform	BSP	REC	106	%	70-130
MSL4443-BS	74-87-3	Chloromethane	BSP	REC	92	%	70-130
MSL4443-BS	95-49-8	o-Chlorotoluene	BSP	REC	95	%	70-130
MSL4443-BS	106-43-4	p-Chlorotoluene	BSP	REC	98	%	70-130
MSL4443-BS	108-20-3	Di-Isopropyl ether	BSP	REC	103	%	70-130
MSL4443-BS	96-12-8	1,2-Dibromo-3-chloropropane	BSP	REC	107	%	70-130
MSL4443-BS	124-48-1	Dibromochloromethane	BSP	REC	106	%	70-130
MSL4443-BS	106-93-4	1,2-Dibromoethane	BSP	REC	104	%	70-130
MSL4443-BS	95-50-1	1,2-Dichlorobenzene	BSP	REC	104	%	70-130
MSL4443-BS	541-73-1	1,3-Dichlorobenzene	BSP	REC	103	%	70-130
MSL4443-BS	106-46-7	1,4-Dichlorobenzene	BSP	REC	102	%	70-130
MSL4443-BS	75-71-8	Dichlorodifluoromethane	BSP	REC	84	%	70-130
MSL4443-BS	75-34-3	1,1-Dichloroethane	BSP	REC	103	%	70-130
MSL4443-BS	107-06-2	1,2-Dichloroethane	BSP	REC	110	%	70-130
MSL4443-BS	75-35-4	1,1-Dichloroethene	BSP	REC	106	%	70-130
MSL4443-BS	156-59-2	cis-1,2-Dichloroethene	BSP	REC	103	%	70-130
MSL4443-BS	156-60-5	trans-1,2-Dichloroethene	BSP	REC	100	%	70-130
MSL4443-BS	78-87-5	1,2-Dichloropropane	BSP	REC	103	%	70-130
MSL4443-BS	142-28-9	1,3-Dichloropropane	BSP	REC	101	%	70-130
MSL4443-BS	594-20-7	2,2-Dichloropropane	BSP	REC	168 [a]	%	70-130
MSL4443-BS	563-58-6	1,1-Dichloropropene	BSP	REC	103	%	70-130
MSL4443-BS	10061-01-5	cis-1,3-Dichloropropene	BSP	REC	110	%	70-130
MSL4443-BS	10061-02-6	trans-1,3-Dichloropropene	BSP	REC	118	%	70-130
MSL4443-BS	123-91-1	1,4-Dioxane	BSP	REC	108	%	70-130
MSL4443-BS	64-17-5	Ethanol	BSP	REC	102	%	70-130
MSL4443-BS	60-29-7	Ethyl Ether	BSP	REC	104	%	70-130
MSL4443-BS	100-41-4	Ethylbenzene	BSP	REC	105	%	70-130

* Sample used for QC is not from job MC50518

QC Evaluation: MA MCP Limits

Job Number: MC50518
Account: ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Collected: 05/31/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSL4443-BS	87-68-3	Hexachlorobutadiene	BSP	REC	115	%	70-130
MSL4443-BS	591-78-6	2-Hexanone	BSP	REC	132	%	70-130
MSL4443-BS	98-82-8	Isopropylbenzene	BSP	REC	94	%	70-130
MSL4443-BS	99-87-6	p-Isopropyltoluene	BSP	REC	105	%	70-130
MSL4443-BS	1634-04-4	Methyl Tert Butyl Ether	BSP	REC	106	%	70-130
MSL4443-BS	108-10-1	4-Methyl-2-pentanone (MIBK)	BSP	REC	108	%	70-130
MSL4443-BS	74-95-3	Methylene bromide	BSP	REC	105	%	70-130
MSL4443-BS	75-09-2	Methylene chloride	BSP	REC	100	%	70-130
MSL4443-BS	91-20-3	Naphthalene	BSP	REC	105	%	70-130
MSL4443-BS	103-65-1	n-Propylbenzene	BSP	REC	96	%	70-130
MSL4443-BS	100-42-5	Styrene	BSP	REC	108	%	70-130
MSL4443-BS	994-05-8	tert-Amyl Methyl Ether	BSP	REC	107	%	70-130
MSL4443-BS	75-65-0	Tert Butyl Alcohol	BSP	REC	104	%	70-130
MSL4443-BS	637-92-3	tert-Butyl Ethyl Ether	BSP	REC	106	%	70-130
MSL4443-BS	630-20-6	1,1,1,2-Tetrachloroethane	BSP	REC	106	%	70-130
MSL4443-BS	79-34-5	1,1,2,2-Tetrachloroethane	BSP	REC	91	%	70-130
MSL4443-BS	127-18-4	Tetrachloroethene	BSP	REC	105	%	70-130
MSL4443-BS	109-99-9	Tetrahydrofuran	BSP	REC	107	%	70-130
MSL4443-BS	108-88-3	Toluene	BSP	REC	105	%	70-130
MSL4443-BS	87-61-6	1,2,3-Trichlorobenzene	BSP	REC	109	%	70-130
MSL4443-BS	120-82-1	1,2,4-Trichlorobenzene	BSP	REC	106	%	70-130
MSL4443-BS	71-55-6	1,1,1-Trichloroethane	BSP	REC	107	%	70-130
MSL4443-BS	79-00-5	1,1,2-Trichloroethane	BSP	REC	103	%	70-130
MSL4443-BS	79-01-6	Trichloroethene	BSP	REC	103	%	70-130
MSL4443-BS	75-69-4	Trichlorofluoromethane	BSP	REC	109	%	70-130
MSL4443-BS	96-18-4	1,2,3-Trichloropropane	BSP	REC	89	%	70-130
MSL4443-BS	95-63-6	1,2,4-Trimethylbenzene	BSP	REC	100	%	70-130
MSL4443-BS	108-67-8	1,3,5-Trimethylbenzene	BSP	REC	98	%	70-130
MSL4443-BS	75-01-4	Vinyl chloride	BSP	REC	93	%	70-130
MSL4443-BS		m,p-Xylene	BSP	REC	108	%	70-130
MSL4443-BS	95-47-6	o-Xylene	BSP	REC	106	%	70-130
MSL4443-BS	1330-20-7	Xylene (total)	BSP	REC	107	%	70-130
MSL4443-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	102	%	70-130
MSL4443-BS	2037-26-5	Toluene-D8	BSP	SURR	100	%	70-130
MSL4443-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	89	%	70-130
MSL4443-BSD	67-64-1	Acetone	BSD	REC	152	%	70-130
MSL4443-BSD	67-64-1	Acetone	BSD	RPD	11	%	20
MSL4443-BSD	71-43-2	Benzene	BSD	REC	101	%	70-130
MSL4443-BSD	71-43-2	Benzene	BSD	RPD	1	%	20
MSL4443-BSD	108-86-1	Bromobenzene	BSD	REC	95	%	70-130
MSL4443-BSD	108-86-1	Bromobenzene	BSD	RPD	1	%	20
MSL4443-BSD	74-97-5	Bromochloromethane	BSD	REC	107	%	70-130
MSL4443-BSD	74-97-5	Bromochloromethane	BSD	RPD	1	%	20
MSL4443-BSD	75-27-4	Bromodichloromethane	BSD	REC	104	%	70-130
MSL4443-BSD	75-27-4	Bromodichloromethane	BSD	RPD	3	%	20

* Sample used for QC is not from job MC50518

QC Evaluation: MA MCP Limits

Job Number: MC50518
Account: ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Collected: 05/31/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSL4443-BSD	75-25-2	Bromoform	BSD	REC	112	%	70-130
MSL4443-BSD	75-25-2	Bromoform	BSD	RPD	1	%	20
MSL4443-BSD	74-83-9	Bromomethane	BSD	REC	101	%	70-130
MSL4443-BSD	74-83-9	Bromomethane	BSD	RPD	0	%	20
MSL4443-BSD	78-93-3	2-Butanone (MEK)	BSD	REC	140	%	70-130
MSL4443-BSD	78-93-3	2-Butanone (MEK)	BSD	RPD	13	%	20
MSL4443-BSD	104-51-8	n-Butylbenzene	BSD	REC	114	%	70-130
MSL4443-BSD	104-51-8	n-Butylbenzene	BSD	RPD	1	%	20
MSL4443-BSD	135-98-8	sec-Butylbenzene	BSD	REC	100	%	70-130
MSL4443-BSD	135-98-8	sec-Butylbenzene	BSD	RPD	1	%	20
MSL4443-BSD	98-06-6	tert-Butylbenzene	BSD	REC	96	%	70-130
MSL4443-BSD	98-06-6	tert-Butylbenzene	BSD	RPD	0	%	20
MSL4443-BSD	75-15-0	Carbon disulfide	BSD	REC	98	%	70-130
MSL4443-BSD	75-15-0	Carbon disulfide	BSD	RPD	3	%	20
MSL4443-BSD	56-23-5	Carbon tetrachloride	BSD	REC	108	%	70-130
MSL4443-BSD	56-23-5	Carbon tetrachloride	BSD	RPD	1	%	20
MSL4443-BSD	108-90-7	Chlorobenzene	BSD	REC	106	%	70-130
MSL4443-BSD	108-90-7	Chlorobenzene	BSD	RPD	1	%	20
MSL4443-BSD	75-00-3	Chloroethane	BSD	REC	99	%	70-130
MSL4443-BSD	75-00-3	Chloroethane	BSD	RPD	0	%	20
MSL4443-BSD	67-66-3	Chloroform	BSD	REC	106	%	70-130
MSL4443-BSD	67-66-3	Chloroform	BSD	RPD	0	%	20
MSL4443-BSD	74-87-3	Chloromethane	BSD	REC	92	%	70-130
MSL4443-BSD	74-87-3	Chloromethane	BSD	RPD	1	%	20
MSL4443-BSD	95-49-8	o-Chlorotoluene	BSD	REC	94	%	70-130
MSL4443-BSD	95-49-8	o-Chlorotoluene	BSD	RPD	1	%	20
MSL4443-BSD	106-43-4	p-Chlorotoluene	BSD	REC	97	%	70-130
MSL4443-BSD	106-43-4	p-Chlorotoluene	BSD	RPD	1	%	20
MSL4443-BSD	108-20-3	Di-Isopropyl ether	BSD	REC	102	%	70-130
MSL4443-BSD	108-20-3	Di-Isopropyl ether	BSD	RPD	1	%	20
MSL4443-BSD	96-12-8	1,2-Dibromo-3-chloropropane	BSD	REC	107	%	70-130
MSL4443-BSD	96-12-8	1,2-Dibromo-3-chloropropane	BSD	RPD	0	%	20
MSL4443-BSD	124-48-1	Dibromochloromethane	BSD	REC	106	%	70-130
MSL4443-BSD	124-48-1	Dibromochloromethane	BSD	RPD	0	%	20
MSL4443-BSD	106-93-4	1,2-Dibromoethane	BSD	REC	105	%	70-130
MSL4443-BSD	106-93-4	1,2-Dibromoethane	BSD	RPD	1	%	20
MSL4443-BSD	95-50-1	1,2-Dichlorobenzene	BSD	REC	105	%	70-130
MSL4443-BSD	95-50-1	1,2-Dichlorobenzene	BSD	RPD	1	%	20
MSL4443-BSD	541-73-1	1,3-Dichlorobenzene	BSD	REC	104	%	70-130
MSL4443-BSD	541-73-1	1,3-Dichlorobenzene	BSD	RPD	1	%	20
MSL4443-BSD	106-46-7	1,4-Dichlorobenzene	BSD	REC	103	%	70-130
MSL4443-BSD	106-46-7	1,4-Dichlorobenzene	BSD	RPD	1	%	20
MSL4443-BSD	75-71-8	Dichlorodifluoromethane	BSD	REC	84	%	70-130
MSL4443-BSD	75-71-8	Dichlorodifluoromethane	BSD	RPD	0	%	20
MSL4443-BSD	75-34-3	1,1-Dichloroethane	BSD	REC	101	%	70-130

* Sample used for QC is not from job MC50518

QC Evaluation: MA MCP Limits

Job Number: MC50518
Account: ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Collected: 05/31/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSL4443-BSD	75-34-3	1,1-Dichloroethane	BSD	RPD	1	%	20
MSL4443-BSD	107-06-2	1,2-Dichloroethane	BSD	REC	108	%	70-130
MSL4443-BSD	107-06-2	1,2-Dichloroethane	BSD	RPD	2	%	20
MSL4443-BSD	75-35-4	1,1-Dichloroethene	BSD	REC	103	%	70-130
MSL4443-BSD	75-35-4	1,1-Dichloroethene	BSD	RPD	2	%	20
MSL4443-BSD	156-59-2	cis-1,2-Dichloroethene	BSD	REC	103	%	70-130
MSL4443-BSD	156-59-2	cis-1,2-Dichloroethene	BSD	RPD	0	%	20
MSL4443-BSD	156-60-5	trans-1,2-Dichloroethene	BSD	REC	99	%	70-130
MSL4443-BSD	156-60-5	trans-1,2-Dichloroethene	BSD	RPD	1	%	20
MSL4443-BSD	78-87-5	1,2-Dichloropropane	BSD	REC	100	%	70-130
MSL4443-BSD	78-87-5	1,2-Dichloropropane	BSD	RPD	2	%	20
MSL4443-BSD	142-28-9	1,3-Dichloropropane	BSD	REC	103	%	70-130
MSL4443-BSD	142-28-9	1,3-Dichloropropane	BSD	RPD	3	%	20
MSL4443-BSD	594-20-7	2,2-Dichloropropane	BSD	REC	167 [a]	%	70-130
MSL4443-BSD	594-20-7	2,2-Dichloropropane	BSD	RPD	0	%	20
MSL4443-BSD	563-58-6	1,1-Dichloropropene	BSD	REC	103	%	70-130
MSL4443-BSD	563-58-6	1,1-Dichloropropene	BSD	RPD	0	%	20
MSL4443-BSD	10061-01-5	cis-1,3-Dichloropropene	BSD	REC	108	%	70-130
MSL4443-BSD	10061-01-5	cis-1,3-Dichloropropene	BSD	RPD	1	%	20
MSL4443-BSD	10061-02-6	trans-1,3-Dichloropropene	BSD	REC	114	%	70-130
MSL4443-BSD	10061-02-6	trans-1,3-Dichloropropene	BSD	RPD	4	%	20
MSL4443-BSD	123-91-1	1,4-Dioxane	BSD	REC	100	%	70-130
MSL4443-BSD	123-91-1	1,4-Dioxane	BSD	RPD	7	%	20
MSL4443-BSD	64-17-5	Ethanol	BSD	REC	105	%	70-130
MSL4443-BSD	60-29-7	Ethyl Ether	BSD	REC	104	%	70-130
MSL4443-BSD	60-29-7	Ethyl Ether	BSD	RPD	0	%	20
MSL4443-BSD	100-41-4	Ethylbenzene	BSD	REC	106	%	70-130
MSL4443-BSD	100-41-4	Ethylbenzene	BSD	RPD	1	%	20
MSL4443-BSD	87-68-3	Hexachlorobutadiene	BSD	REC	118	%	70-130
MSL4443-BSD	87-68-3	Hexachlorobutadiene	BSD	RPD	2	%	20
MSL4443-BSD	591-78-6	2-Hexanone	BSD	REC	124	%	70-130
MSL4443-BSD	591-78-6	2-Hexanone	BSD	RPD	6	%	20
MSL4443-BSD	98-82-8	Isopropylbenzene	BSD	REC	95	%	70-130
MSL4443-BSD	98-82-8	Isopropylbenzene	BSD	RPD	0	%	20
MSL4443-BSD	99-87-6	p-Isopropyltoluene	BSD	REC	105	%	70-130
MSL4443-BSD	99-87-6	p-Isopropyltoluene	BSD	RPD	0	%	20
MSL4443-BSD	1634-04-4	Methyl Tert Butyl Ether	BSD	REC	103	%	70-130
MSL4443-BSD	1634-04-4	Methyl Tert Butyl Ether	BSD	RPD	3	%	20
MSL4443-BSD	108-10-1	4-Methyl-2-pentanone (MIBK)	BSD	REC	103	%	70-130
MSL4443-BSD	108-10-1	4-Methyl-2-pentanone (MIBK)	BSD	RPD	5	%	20
MSL4443-BSD	74-95-3	Methylene bromide	BSD	REC	103	%	70-130
MSL4443-BSD	74-95-3	Methylene bromide	BSD	RPD	2	%	20
MSL4443-BSD	75-09-2	Methylene chloride	BSD	REC	97	%	70-130
MSL4443-BSD	75-09-2	Methylene chloride	BSD	RPD	3	%	20
MSL4443-BSD	91-20-3	Naphthalene	BSD	REC	104	%	70-130

* Sample used for QC is not from job MC50518

QC Evaluation: MA MCP Limits

Job Number: MC50518
Account: ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Collected: 05/31/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSL4443-BSD	91-20-3	Naphthalene	BSD	RPD	2	%	20
MSL4443-BSD	103-65-1	n-Propylbenzene	BSD	REC	97	%	70-130
MSL4443-BSD	103-65-1	n-Propylbenzene	BSD	RPD	1	%	20
MSL4443-BSD	100-42-5	Styrene	BSD	REC	110	%	70-130
MSL4443-BSD	100-42-5	Styrene	BSD	RPD	1	%	20
MSL4443-BSD	994-05-8	tert-Amyl Methyl Ether	BSD	REC	104	%	70-130
MSL4443-BSD	994-05-8	tert-Amyl Methyl Ether	BSD	RPD	3	%	20
MSL4443-BSD	75-65-0	Tert Butyl Alcohol	BSD	REC	107	%	70-130
MSL4443-BSD	75-65-0	Tert Butyl Alcohol	BSD	RPD	3	%	20
MSL4443-BSD	637-92-3	tert-Butyl Ethyl Ether	BSD	REC	104	%	70-130
MSL4443-BSD	637-92-3	tert-Butyl Ethyl Ether	BSD	RPD	2	%	20
MSL4443-BSD	630-20-6	1,1,1,2-Tetrachloroethane	BSD	REC	109	%	70-130
MSL4443-BSD	630-20-6	1,1,1,2-Tetrachloroethane	BSD	RPD	2	%	20
MSL4443-BSD	79-34-5	1,1,2,2-Tetrachloroethane	BSD	REC	89	%	70-130
MSL4443-BSD	79-34-5	1,1,2,2-Tetrachloroethane	BSD	RPD	2	%	20
MSL4443-BSD	127-18-4	Tetrachloroethene	BSD	REC	107	%	70-130
MSL4443-BSD	127-18-4	Tetrachloroethene	BSD	RPD	2	%	20
MSL4443-BSD	109-99-9	Tetrahydrofuran	BSD	REC	104	%	70-130
MSL4443-BSD	109-99-9	Tetrahydrofuran	BSD	RPD	3	%	20
MSL4443-BSD	108-88-3	Toluene	BSD	REC	102	%	70-130
MSL4443-BSD	108-88-3	Toluene	BSD	RPD	2	%	20
MSL4443-BSD	87-61-6	1,2,3-Trichlorobenzene	BSD	REC	106	%	70-130
MSL4443-BSD	87-61-6	1,2,3-Trichlorobenzene	BSD	RPD	2	%	25
MSL4443-BSD	120-82-1	1,2,4-Trichlorobenzene	BSD	REC	106	%	70-130
MSL4443-BSD	120-82-1	1,2,4-Trichlorobenzene	BSD	RPD	0	%	20
MSL4443-BSD	71-55-6	1,1,1-Trichloroethane	BSD	REC	107	%	70-130
MSL4443-BSD	71-55-6	1,1,1-Trichloroethane	BSD	RPD	0	%	20
MSL4443-BSD	79-00-5	1,1,2-Trichloroethane	BSD	REC	99	%	70-130
MSL4443-BSD	79-00-5	1,1,2-Trichloroethane	BSD	RPD	4	%	20
MSL4443-BSD	79-01-6	Trichloroethene	BSD	REC	104	%	70-130
MSL4443-BSD	79-01-6	Trichloroethene	BSD	RPD	0	%	20
MSL4443-BSD	75-69-4	Trichlorofluoromethane	BSD	REC	106	%	70-130
MSL4443-BSD	75-69-4	Trichlorofluoromethane	BSD	RPD	3	%	20
MSL4443-BSD	96-18-4	1,2,3-Trichloropropane	BSD	REC	89	%	70-130
MSL4443-BSD	96-18-4	1,2,3-Trichloropropane	BSD	RPD	0	%	20
MSL4443-BSD	95-63-6	1,2,4-Trimethylbenzene	BSD	REC	102	%	70-130
MSL4443-BSD	95-63-6	1,2,4-Trimethylbenzene	BSD	RPD	1	%	20
MSL4443-BSD	108-67-8	1,3,5-Trimethylbenzene	BSD	REC	98	%	70-130
MSL4443-BSD	108-67-8	1,3,5-Trimethylbenzene	BSD	RPD	0	%	20
MSL4443-BSD	75-01-4	Vinyl chloride	BSD	REC	94	%	70-130
MSL4443-BSD	75-01-4	Vinyl chloride	BSD	RPD	1	%	20
MSL4443-BSD		m,p-Xylene	BSD	REC	109	%	70-130
MSL4443-BSD		m,p-Xylene	BSD	RPD	1	%	20
MSL4443-BSD	95-47-6	o-Xylene	BSD	REC	109	%	70-130
MSL4443-BSD	95-47-6	o-Xylene	BSD	RPD	2	%	20

* Sample used for QC is not from job MC50518

QC Evaluation: MA MCP Limits

Job Number: MC50518
Account: ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Collected: 05/31/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSL4443-BSD	1330-20-7	Xylene (total)	BSD	REC	109	%	70-130
MSL4443-BSD	1330-20-7	Xylene (total)	BSD	RPD	1	%	20
MSL4443-BSD	1868-53-7	Dibromofluoromethane	BSD	SURR	100	%	70-130
MSL4443-BSD	2037-26-5	Toluene-D8	BSD	SURR	98	%	70-130
MSL4443-BSD	460-00-4	4-Bromofluorobenzene	BSD	SURR	89	%	70-130
MSL4443-MB	1868-53-7	Dibromofluoromethane	MB	SURR	100	%	70-130
MSL4443-MB	2037-26-5	Toluene-D8	MB	SURR	100	%	70-130
MSL4443-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	116	%	70-130
MC50518-1	1868-53-7	Dibromofluoromethane	SAMP	SURR	102	%	70-130
MC50518-1	2037-26-5	Toluene-D8	SAMP	SURR	99	%	70-130
MC50518-1	460-00-4	4-Bromofluorobenzene	SAMP	SURR	96	%	70-130

(a) Outside control limits. Associated samples are non-detect for this compound.

* Sample used for QC is not from job MC50518

GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL4443-MB	L103629.D	1	06/08/17	VY	n/a	n/a	MSL4443

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50518-1

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
74-97-5	Bromochloromethane	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	2.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	

Method Blank Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL4443-MB	L103629.D	1	06/08/17	VY	n/a	n/a	MSL4443

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50518-1

CAS No.	Compound	Result	RL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	100	ug/l	
64-17-5	Ethanol	ND	200	ug/l	
60-29-7	Ethyl Ether	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	ug/l	
75-65-0	Tert Butyl Alcohol	ND	20	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	

Method Blank Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL4443-MB	L103629.D	1	06/08/17	VY	n/a	n/a	MSL4443

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50518-1

CAS No.	Compound	Result	RL	Units	Q
95-47-6	o-Xylene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	76-129%
2037-26-5	Toluene-D8	100%	83-114%
460-00-4	4-Bromofluorobenzene	116%	75-124%

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL4443-BS	L103626.D	1	06/08/17	VY	n/a	n/a	MSL4443
MSL4443-BSD	L103627.D	1	06/08/17	VY	n/a	n/a	MSL4443

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50518-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	85.3	171	76.1	152	11	24-200/25
71-43-2	Benzene	50	51.3	103	50.7	101	1	66-123/25
108-86-1	Bromobenzene	50	46.9	94	47.4	95	1	73-124/25
74-97-5	Bromochloromethane	50	53.7	107	53.3	107	1	65-127/25
75-27-4	Bromodichloromethane	50	53.8	108	52.2	104	3	68-130/25
75-25-2	Bromoform	50	56.2	112	55.8	112	1	61-149/25
74-83-9	Bromomethane	50	50.6	101	50.7	101	0	52-151/25
78-93-3	2-Butanone (MEK)	50	79.7	159	70.1	140	13	45-171/25
104-51-8	n-Butylbenzene	50	56.2	112	56.9	114	1	80-134/30
135-98-8	sec-Butylbenzene	50	49.8	100	50.1	100	1	77-132/25
98-06-6	tert-Butylbenzene	50	47.8	96	47.9	96	0	71-130/25
75-15-0	Carbon disulfide	50	50.5	101	49.2	98	3	24-164/25
56-23-5	Carbon tetrachloride	50	54.9	110	54.1	108	1	54-151/25
108-90-7	Chlorobenzene	50	52.5	105	53.0	106	1	75-117/25
75-00-3	Chloroethane	50	49.5	99	49.4	99	0	54-160/25
67-66-3	Chloroform	50	52.9	106	52.8	106	0	65-127/25
74-87-3	Chloromethane	50	45.8	92	46.1	92	1	43-154/25
95-49-8	o-Chlorotoluene	50	47.3	95	47.0	94	1	71-128/25
106-43-4	p-Chlorotoluene	50	48.8	98	48.3	97	1	71-125/25
108-20-3	Di-Isopropyl ether	50	51.4	103	51.0	102	1	58-143/50
96-12-8	1,2-Dibromo-3-chloropropane	50	53.4	107	53.6	107	0	53-145/25
124-48-1	Dibromochloromethane	50	52.8	106	53.0	106	0	67-137/25
106-93-4	1,2-Dibromoethane	50	52.0	104	52.4	105	1	73-126/25
95-50-1	1,2-Dichlorobenzene	50	51.9	104	52.3	105	1	75-124/25
541-73-1	1,3-Dichlorobenzene	50	51.5	103	52.0	104	1	76-120/25
106-46-7	1,4-Dichlorobenzene	50	51.0	102	51.4	103	1	77-117/25
75-71-8	Dichlorodifluoromethane	50	41.9	84	41.9	84	0	20-161/25
75-34-3	1,1-Dichloroethane	50	51.3	103	50.6	101	1	55-128/25
107-06-2	1,2-Dichloroethane	50	55.1	110	53.8	108	2	68-126/25
75-35-4	1,1-Dichloroethene	50	53.0	106	51.7	103	2	44-148/25
156-59-2	cis-1,2-Dichloroethene	50	51.5	103	51.3	103	0	63-132/25
156-60-5	trans-1,2-Dichloroethene	50	50.1	100	49.4	99	1	54-127/25
78-87-5	1,2-Dichloropropane	50	51.3	103	50.2	100	2	68-123/25
142-28-9	1,3-Dichloropropane	50	50.4	101	51.7	103	3	75-130/25
594-20-7	2,2-Dichloropropane	50	83.8	168* [a]	83.5	167* [a]	0	47-156/25
563-58-6	1,1-Dichloropropene	50	51.5	103	51.4	103	0	65-123/25

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL4443-BS	L103626.D	1	06/08/17	VY	n/a	n/a	MSL4443
MSL4443-BSD	L103627.D	1	06/08/17	VY	n/a	n/a	MSL4443

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50518-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	50	54.8	110	54.1	108	1	61-145/25
10061-02-6	trans-1,3-Dichloropropene	50	59.2	118	56.8	114	4	60-134/25
123-91-1	1,4-Dioxane	250	269	108	251	100	7	20-167/25
64-17-5	Ethanol	5000	5100	102	5230	105	3	31-156/30
60-29-7	Ethyl Ether	50	52.1	104	51.9	104	0	45-152/25
100-41-4	Ethylbenzene	50	52.5	105	53.1	106	1	74-127/25
87-68-3	Hexachlorobutadiene	50	57.6	115	59.0	118	2	71-141/25
591-78-6	2-Hexanone	50	66.1	132	62.2	124	6	44-166/25
98-82-8	Isopropylbenzene	50	47.2	94	47.4	95	0	70-131/25
99-87-6	p-Isopropyltoluene	50	52.4	105	52.4	105	0	79-131/25
1634-04-4	Methyl Tert Butyl Ether	50	53.2	106	51.6	103	3	59-135/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	54.1	108	51.6	103	5	63-138/25
74-95-3	Methylene bromide	50	52.3	105	51.5	103	2	70-124/25
75-09-2	Methylene chloride	50	50.1	100	48.6	97	3	54-132/25
91-20-3	Naphthalene	50	52.7	105	51.8	104	2	37-145/25
103-65-1	n-Propylbenzene	50	48.2	96	48.5	97	1	71-128/25
100-42-5	Styrene	50	54.2	108	54.9	110	1	76-130/25
994-05-8	tert-Amyl Methyl Ether	50	53.7	107	51.9	104	3	63-131/25
75-65-0	Tert Butyl Alcohol	500	520	104	534	107	3	64-138/25
637-92-3	tert-Butyl Ethyl Ether	50	52.8	106	51.8	104	2	59-134/300
630-20-6	1,1,1,2-Tetrachloroethane	50	53.1	106	54.3	109	2	71-139/25
79-34-5	1,1,2,2-Tetrachloroethane	50	45.5	91	44.5	89	2	62-130/25
127-18-4	Tetrachloroethene	50	52.4	105	53.3	107	2	68-133/25
109-99-9	Tetrahydrofuran	50	53.6	107	52.1	104	3	52-131/25
108-88-3	Toluene	50	52.3	105	51.1	102	2	73-124/25
87-61-6	1,2,3-Trichlorobenzene	50	54.5	109	53.2	106	2	58-144/25
120-82-1	1,2,4-Trichlorobenzene	50	52.9	106	52.8	106	0	63-137/25
71-55-6	1,1,1-Trichloroethane	50	53.7	107	53.6	107	0	60-135/25
79-00-5	1,1,2-Trichloroethane	50	51.4	103	49.6	99	4	72-125/25
79-01-6	Trichloroethene	50	51.7	103	51.9	104	0	73-120/25
75-69-4	Trichlorofluoromethane	50	54.4	109	52.8	106	3	52-152/25
96-18-4	1,2,3-Trichloropropane	50	44.7	89	44.6	89	0	56-136/25
95-63-6	1,2,4-Trimethylbenzene	50	50.2	100	50.8	102	1	76-125/25
108-67-8	1,3,5-Trimethylbenzene	50	49.0	98	49.0	98	0	76-132/25
75-01-4	Vinyl chloride	50	46.6	93	47.2	94	1	49-154/25
	m,p-Xylene	100	108	108	109	109	1	73-129/25

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL4443-BS	L103626.D	1	06/08/17	VY	n/a	n/a	MSL4443
MSL4443-BSD	L103627.D	1	06/08/17	VY	n/a	n/a	MSL4443

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50518-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-47-6	o-Xylene	50	53.1	106	54.4	109	2	73-128/25
1330-20-7	Xylene (total)	150	161	107	163	109	1	74-129/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	102%	100%	76-129%
2037-26-5	Toluene-D8	100%	98%	83-114%
460-00-4	4-Bromofluorobenzene	89%	89%	75-124%

(a) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Check Std:	MSL4443-CC4435	**Injection Date:**	06/08/17
Lab File ID:	L103625.D	**Injection Time:**	09:46
Instrument ID:	GCMSL	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	127265	9.56	196795	10.46	113047	13.66	121305	16.23	44717	7.52
Upper Limit [a]	254530	10.06	393590	10.96	226094	14.16	242610	16.73	89434	8.02
Lower Limit [b]	63633	9.06	98398	9.96	56524	13.16	60653	15.73	22359	7.02

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSL4443-BS	130472	9.56	202791	10.45	118603	13.66	128185	16.23	48287	7.52
MSL4443-BSD	134174	9.56	210813	10.45	117551	13.66	130327	16.23	45980	7.52
MSL4443-MB	135137	9.56	207941	10.46	118339	13.66	91746	16.23	41165	7.52
ZZZZZZ	132367	9.56	205530	10.46	118045	13.66	95428	16.23	39237	7.52
ZZZZZZ	128127	9.56	200257	10.45	113373	13.66	107363	16.23	39757	7.52
ZZZZZZ	130041	9.56	204087	10.45	114062	13.66	104550	16.23	48282	7.52
MC50518-1	126371	9.56	197388	10.45	113616	13.66	118650	16.23	42213	7.52
MC50518-1MS	132655	9.56	208823	10.45	118620	13.66	131928	16.23	45122	7.52
MC50518-1MSD	147455	9.56	231881	10.45	131783	13.66	144155	16.23	49043	7.52
ZZZZZZ	159478	9.56	245583	10.46	137828	13.66	115593	16.23	53273	7.52
ZZZZZZ	153769	9.56	241532	10.45	132125	13.66	103364	16.23	46501	7.52
ZZZZZZ	152404	9.56	239559	10.46	133085	13.66	107004	16.23	57866	7.52
ZZZZZZ	145978	9.56	229444	10.46	128165	13.66	104334	16.23	59275	7.52
ZZZZZZ	140692	9.56	219218	10.46	128401	13.66	102161	16.23	53887	7.52
ZZZZZZ	139163	9.56	218005	10.46	123642	13.66	100004	16.23	55168	7.52
ZZZZZZ	134363	9.56	209263	10.45	117979	13.66	110692	16.23	52084	7.52
ZZZZZZ	136161	9.56	213113	10.46	118966	13.66	106018	16.23	52931	7.52
ZZZZZZ	135335	9.56	220590	10.45	122115	13.66	116221	16.23	51935	7.52
ZZZZZZ	139580	9.56	222445	10.45	125711	13.66	130026	16.23	53247	7.52
ZZZZZZ	147368	9.56	235561	10.45	134080	13.66	141050	16.23	53246	7.52

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC50518-1	L103633.D	102	99	96
MSL4443-BS	L103626.D	102	100	89
MSL4443-BSD	L103627.D	100	98	89
MSL4443-MB	L103629.D	100	100	116

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	76-129%
S2 = Toluene-D8	83-114%
S3 = 4-Bromofluorobenzene	75-124%

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49756-MB	R52194.D	1	06/14/17	DRY	06/02/17	OP49756	MSR1974

The QC reported here applies to the following samples: **Method:** EPA 625

MC50518-1

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	ug/l	
51-28-5	2,4-Dinitrophenol	ND	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	ug/l	
88-75-5	2-Nitrophenol	ND	10	ug/l	
100-02-7	4-Nitrophenol	ND	10	ug/l	
87-86-5	Pentachlorophenol	ND	10	ug/l	
108-95-2	Phenol	ND	5.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	ug/l	
83-32-9	Acenaphthene	ND	5.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	ug/l	
120-12-7	Anthracene	ND	5.0	ug/l	
92-87-5	Benzidine	ND	10	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	ug/l	
106-47-8	4-Chloroaniline	ND	10	ug/l	
218-01-9	Chrysene	ND	5.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	ug/l	

Method Blank Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49756-MB	R52194.D	1	06/14/17	DRY	06/02/17	OP49756	MSR1974

The QC reported here applies to the following samples: **Method:** EPA 625

MC50518-1

CAS No.	Compound	Result	RL	Units	Q
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	ug/l	
86-73-7	Fluorene	ND	5.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/l	
67-72-1	Hexachloroethane	ND	5.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	ug/l	
78-59-1	Isophorone	ND	5.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
98-95-3	Nitrobenzene	ND	5.0	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	10	ug/l	
85-01-8	Phenanthrene	ND	5.0	ug/l	
129-00-0	Pyrene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	47%	15-110%
4165-62-2	Phenol-d5	36%	15-110%
118-79-6	2,4,6-Tribromophenol	83%	15-110%
4165-60-0	Nitrobenzene-d5	85%	30-130%
321-60-8	2-Fluorobiphenyl	60%	30-130%
1718-51-0	Terphenyl-d14	96%	30-130%

Method Blank Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49758-MB	R52113.D	1	06/05/17	DRY	06/02/17	OP49758	MSR1970

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC50518-1

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.10	ug/l	
208-96-8	Acenaphthylene	ND	0.10	ug/l	
120-12-7	Anthracene	0.014	0.10	ug/l	J
56-55-3	Benzo(a)anthracene	0.032	0.050	ug/l	J
50-32-8	Benzo(a)pyrene	ND	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	ug/l	
218-01-9	Chrysene	0.026	0.10	ug/l	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	ug/l	
206-44-0	Fluoranthene	0.060	0.10	ug/l	J
86-73-7	Fluorene	ND	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.20	ug/l	
91-20-3	Naphthalene	ND	0.20	ug/l	
85-01-8	Phenanthrene	0.037	0.050	ug/l	J
129-00-0	Pyrene	0.071	0.10	ug/l	J

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	89%	26-121%
321-60-8	2-Fluorobiphenyl	59%	28-107%
1718-51-0	Terphenyl-d14	101%	29-129%

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49756-BS	R52195.D	1	06/14/17	DRY	06/02/17	OP49756	MSR1974
OP49756-BSD	R52196.D	1	06/14/17	DRY	06/02/17	OP49756	MSR1974

The QC reported here applies to the following samples: **Method:** EPA 625

MC50518-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	50	41.0	82	39.7	79	3	23-134/30
59-50-7	4-Chloro-3-methyl phenol	50	42.9	86	42.0	84	2	22-147/30
120-83-2	2,4-Dichlorophenol	50	43.6	87	42.7	85	2	39-135/30
105-67-9	2,4-Dimethylphenol	50	23.5	47	26.1	52	10	32-119/30
51-28-5	2,4-Dinitrophenol	50	43.4	87	42.8	86	1	1-191/30
534-52-1	4,6-Dinitro-o-cresol	50	51.1	102	50.9	102	0	1-181/30
88-75-5	2-Nitrophenol	50	49.1	98	47.2	94	4	29-182/30
100-02-7	4-Nitrophenol	50	20.4	41	19.3	39	6	1-132/30
87-86-5	Pentachlorophenol	50	39.9	80	41.1	82	3	14-176/30
108-95-2	Phenol	50	21.5	43	20.4	41	5	5-112/30
88-06-2	2,4,6-Trichlorophenol	50	48.8	98	47.3	95	3	37-144/30
83-32-9	Acenaphthene	50	49.4	99	48.3	97	2	47-145/30
208-96-8	Acenaphthylene	50	48.2	96	47.5	95	1	33-145/30
120-12-7	Anthracene	50	51.3	103	52.1	104	2	27-133/30
92-87-5	Benzidine	50	21.5	43	22.1	44	3	1-120/30
56-55-3	Benzo(a)anthracene	50	56.3	113	56.0	112	1	33-143/30
50-32-8	Benzo(a)pyrene	50	56.2	112	56.2	112	0	17-163/30
205-99-2	Benzo(b)fluoranthene	50	55.9	112	55.8	112	0	24-159/30
191-24-2	Benzo(g,h,i)perylene	50	58.1	116	58.3	117	0	1-219/30
207-08-9	Benzo(k)fluoranthene	50	53.4	107	54.6	109	2	11-162/30
101-55-3	4-Bromophenyl phenyl ether	50	52.1	104	53.2	106	2	53-127/30
85-68-7	Butyl benzyl phthalate	50	62.6	125	61.5	123	2	1-152/30
91-58-7	2-Chloronaphthalene	50	46.9	94	45.9	92	2	60-118/30
106-47-8	4-Chloroaniline	50	41.4	83	39.7	79	4	1-120/30
218-01-9	Chrysene	50	54.0	108	52.7	105	2	17-168/30
111-91-1	bis(2-Chloroethoxy)methane	50	53.4	107	53.6	107	0	33-184/30
111-44-4	bis(2-Chloroethyl)ether	50	54.9	110	56.1	112	2	12-158/30
108-60-1	bis(2-Chloroisopropyl)ether	50	61.5	123	62.0	124	1	36-166/30
7005-72-3	4-Chlorophenyl phenyl ether	50	51.8	104	50.8	102	2	25-158/30
95-50-1	1,2-Dichlorobenzene	50	31.9	64	30.6	61	4	32-129/30
122-66-7	1,2-Diphenylhydrazine	50	55.7	111	54.8	110	2	50-122/30
541-73-1	1,3-Dichlorobenzene	50	29.7	59	28.0	56	6	1-172/30
106-46-7	1,4-Dichlorobenzene	50	30.1	60	28.4	57	6	20-124/30
121-14-2	2,4-Dinitrotoluene	50	59.9	120	59.3	119	1	39-139/30
606-20-2	2,6-Dinitrotoluene	50	57.4	115	57.5	115	0	50-158/30
91-94-1	3,3'-Dichlorobenzidine	50	59.3	119	57.5	115	3	1-262/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49756-BS	R52195.D	1	06/14/17	DRY	06/02/17	OP49756	MSR1974
OP49756-BSD	R52196.D	1	06/14/17	DRY	06/02/17	OP49756	MSR1974

The QC reported here applies to the following samples: **Method:** EPA 625

MC50518-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
53-70-3	Dibenzo(a,h)anthracene	50	58.8	118	58.7	117	0	1-227/30
84-74-2	Di-n-butyl phthalate	50	54.6	109	55.1	110	1	1-118/30
117-84-0	Di-n-octyl phthalate	50	56.2	112	57.1	114	2	4-146/30
84-66-2	Diethyl phthalate	50	54.4	109	53.8	108	1	1-114/30
131-11-3	Dimethyl phthalate	50	55.4	111	54.6	109	1	1-112/30
117-81-7	bis(2-Ethylhexyl)phthalate	50	65.2	130	64.9	130	0	8-158/30
206-44-0	Fluoranthene	50	56.8	114	57.2	114	1	26-137/30
86-73-7	Fluorene	50	53.8	108	53.2	106	1	59-121/30
118-74-1	Hexachlorobenzene	50	51.9	104	52.2	104	1	1-152/30
87-68-3	Hexachlorobutadiene	50	25.9	52	24.4	49	6	24-116/30
77-47-4	Hexachlorocyclopentadiene	50	23.4	47	22.5	45	4	14-120/30
67-72-1	Hexachloroethane	50	27.0	54	24.2	48	11	40-113/30
193-39-5	Indeno(1,2,3-cd)pyrene	50	58.2	116	59.5	119	2	1-171/30
78-59-1	Isophorone	50	54.7	109	54.9	110	0	21-196/30
91-20-3	Naphthalene	50	41.1	82	40.7	81	1	21-133/30
98-95-3	Nitrobenzene	50	51.4	103	52.1	104	1	35-180/30
62-75-9	n-Nitrosodimethylamine	50	32.6	65	32.3	65	1	3-120/30
621-64-7	N-Nitroso-di-n-propylamine	50	61.7	123	60.6	121	2	1-230/30
86-30-6	N-Nitrosodiphenylamine	50	52.5	105	52.2	104	1	54-120/30
85-01-8	Phenanthrene	50	54.0	108	54.2	108	0	54-120/30
129-00-0	Pyrene	50	57.0	114	56.1	112	2	52-115/30
120-82-1	1,2,4-Trichlorobenzene	50	33.6	67	31.4	63	7	44-142/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	54%	53%	15-110%
4165-62-2	Phenol-d5	41%	40%	15-110%
118-79-6	2,4,6-Tribromophenol	91%	92%	15-110%
4165-60-0	Nitrobenzene-d5	91%	92%	30-130%
321-60-8	2-Fluorobiphenyl	81%	80%	30-130%
1718-51-0	Terphenyl-d14	99%	98%	30-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49758-BS	R52114.D	1	06/05/17	DRY	06/02/17	OP49758	MSR1970
OP49758-BSD	R52115.D	1	06/05/17	DRY	06/02/17	OP49758	MSR1970

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC50518-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	50	52.2	104	51.1	102	2	45-116/30
208-96-8	Acenaphthylene	50	51.2	102	50.1	100	2	34-110/30
120-12-7	Anthracene	50	53.6	107	52.6	105	2	50-117/30
56-55-3	Benzo(a)anthracene	50	57.1	114	56.1	112	2	55-139/30
50-32-8	Benzo(a)pyrene	50	56.9	114	55.9	112	2	48-131/30
205-99-2	Benzo(b)fluoranthene	50	59.6	119	57.5	115	4	49-141/30
191-24-2	Benzo(g,h,i)perylene	50	57.9	116	57.1	114	1	60-130/30
207-08-9	Benzo(k)fluoranthene	50	53.2	106	52.4	105	2	49-133/30
218-01-9	Chrysene	50	53.4	107	52.5	105	2	52-128/30
53-70-3	Dibenzo(a,h)anthracene	50	59.0	118	57.9	116	2	60-136/30
206-44-0	Fluoranthene	50	56.2	112	55.6	111	1	46-132/30
86-73-7	Fluorene	50	55.9	112	55.2	110	1	53-120/30
193-39-5	Indeno(1,2,3-cd)pyrene	50	59.2	118	58.1	116	2	57-134/30
91-57-6	2-Methylnaphthalene	50	43.0	86	41.4	83	4	36-111/30
91-20-3	Naphthalene	50	44.4	89	42.7	85	4	32-116/30
85-01-8	Phenanthrene	50	57.4	115	56.4	113	2	50-120/30
129-00-0	Pyrene	50	55.4	111	54.7	109	1	48-127/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
4165-60-0	Nitrobenzene-d5	97%	96%	26-121%
321-60-8	2-Fluorobiphenyl	79%	77%	28-107%
1718-51-0	Terphenyl-d14	99%	97%	29-129%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Check Std: MSR1970-CC1946 **Injection Date:** 06/05/17
Lab File ID: R52112.D **Injection Time:** 10:16
Instrument ID: GCMSR **Method:** SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	26170	4.36	86194	5.42	47299	6.96	88987	8.25	77234	11.43	117404	14.74
Upper Limit [a]	52340	4.86	172388	5.92	94598	7.46	177974	8.75	154468	11.93	234808	15.24
Lower Limit [b]	13085	3.86	43097	4.92	23650	6.46	44494	7.75	38617	10.93	58702	14.24

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP49757-MB	26982	4.36	88718	5.42	48476	6.96	88893	8.25	80151	11.44	124798	14.75
OP49758-MB	26982	4.36	88718	5.42	48476	6.96	88893	8.25	80151	11.44	124798	14.75
OP49757-BS	27724	4.36	88701	5.42	47156	6.96	86419	8.25	78910	11.44	119953	14.75
OP49758-BS	27724	4.36	88701	5.42	47156	6.96	86419	8.25	78910	11.44	119953	14.75
OP49757-BSD	28750	4.36	92798	5.42	49494	6.96	90783	8.25	82968	11.44	126059	14.74
OP49758-BSD	28750	4.36	92798	5.42	49494	6.96	90783	8.25	82968	11.44	126059	14.74
ZZZZZZ	24267	4.36	82620	5.42	47394	6.96	86510	8.25	76023	11.43	115486	14.74
ZZZZZZ	24511	4.36	83354	5.42	46162	6.96	90500	8.25	75589	11.43	117013	14.74
ZZZZZZ	25659	4.36	84908	5.42	45898	6.96	85499	8.25	75553	11.43	119026	14.74
ZZZZZZ	22512	4.36	76942	5.42	41787	6.96	83262	8.25	69355	11.44	108545	14.74
ZZZZZZ	22965	4.36	79982	5.42	44085	6.96	86956	8.25	71178	11.43	108168	14.74
ZZZZZZ	24835	4.36	82419	5.42	44201	6.96	79761	8.25	72450	11.43	111275	14.74
ZZZZZZ	20972	4.36	72918	5.42	40176	6.96	79644	8.25	66992	11.43	104029	14.74
ZZZZZZ	23263	4.36	78633	5.42	43150	6.96	86613	8.25	72265	11.43	111063	14.74
ZZZZZZ	22196	4.36	74184	5.42	41060	6.96	80926	8.25	69427	11.43	108194	14.74
ZZZZZZ	23184	4.36	78622	5.42	43885	6.96	87391	8.25	74052	11.43	114313	14.74
ZZZZZZ	23187	4.36	78339	5.42	44171	6.96	87122	8.25	73658	11.43	112501	14.74
MC50518-1	30556	4.36	101678	5.42	108101[c]	6.96	105296	8.25	96249	11.43	149572	14.75
ZZZZZZ	21616	4.36	74817	5.42	42690	6.96	81791	8.25	70294	11.43	112711	14.74
ZZZZZZ	20414	4.36	73188	5.42	39279	6.96	76029	8.25	66049	11.43	103813	14.74

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits due to possible matrix interference.

Semivolatile Internal Standard Area Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Check Std:	MSR1971-CC1946	**Injection Date:**	06/06/17
Lab File ID:	R52136.D	**Injection Time:**	14:13
Instrument ID:	GCMSR	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	23233	4.36	75588	5.42	41724	6.96	78956	8.25	70359	11.43	104175	14.74
Upper Limit [a]	46466	4.86	151176	5.92	83448	7.46	157912	8.75	140718	11.93	208350	15.24
Lower Limit [b]	11617	3.86	37794	4.92	20862	6.46	39478	7.75	35180	10.93	52088	14.24

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP49761-MB	23299	4.36	76403	5.42	42256	6.96	83506	8.25	70191	11.43	106142	14.74
OP49761-BS	24538	4.36	78629	5.42	42458	6.96	77882	8.25	72784	11.44	107990	14.74
OP49761-MS	24267	4.36	77483	5.42	42182	6.96	78462	8.25	73290	11.43	111035	14.74
OP49761-MSD	24467	4.36	79153	5.42	43537	6.96	81334	8.25	77196	11.44	117436	14.74
ZZZZZZ	23085	4.36	76020	5.42	111663*	6.95	88622	8.25	82042	11.48	123742	14.80
ZZZZZZ	24169	4.36	78335	5.42	44792	6.96	88694	8.25	74680	11.44	119632	14.75
MC50526-3	23681	4.36	78480	5.42	44112	6.96	79465	8.25	74433	11.43	117891	14.74
ZZZZZZ	22493	4.36	74522	5.42	41526	6.96	82675	8.25	70267	11.44	111280	14.74
ZZZZZZ	23669	4.36	76474	5.42	42822	6.96	85561	8.25	73276	11.44	115574	14.74
ZZZZZZ	23142	4.36	76360	5.42	42568	6.96	84588	8.25	71403	11.44	111373	14.75
ZZZZZZ	23330	4.36	76798	5.42	43264	6.96	79023	8.25	72195	11.43	112166	14.74
ZZZZZZ	23925	4.36	79285	5.42	43908	6.96	86666	8.25	72133	11.43	113500	14.74
ZZZZZZ	22717	4.36	75510	5.42	40907	6.96	82504	8.25	70092	11.43	107949	14.74
ZZZZZZ	24346	4.36	78263	5.42	43710	6.96	86316	8.25	72762	11.44	111123	14.74
ZZZZZZ	22528	4.36	72374	5.42	41060	6.96	81258	8.25	68217	11.43	105231	14.74
ZZZZZZ	24708	4.36	81859	5.42	45273	6.96	90923	8.25	77041	11.43	118002	14.74
ZZZZZZ	23648	4.36	75850	5.42	42822	6.96	83893	8.25	69707	11.43	106527	14.74
ZZZZZZ	22087	4.36	76809	5.42	43229	6.96	85078	8.25	70620	11.44	108351	14.74
MC50518-1	24099	4.36	76928	5.42	43163	6.96	83016	8.25	73496	11.43	113494	14.74

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Check Std:	MSR1974-CC1934	**Injection Date:**	06/14/17
Lab File ID:	R52193.D	**Injection Time:**	10:11
Instrument ID:	GCMSR	**Method:**	EPA 625

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	320069	4.29	1255692	5.35	724593	6.88	1375770	8.17	1459722	11.28	1332498	14.57
Upper Limit [a]	640138	4.79	2511384	5.85	1449186	7.38	2751540	8.67	2919444	11.78	2664996	15.07
Lower Limit [b]	160035	3.79	627846	4.85	362297	6.38	687885	7.67	729861	10.78	666249	14.07
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP49756-MB	413865	4.29	1640720	5.35	969497	6.88	1859189	8.17	1911502	11.27	1766830	14.57
OP49756-BS	394557	4.29	1615397	5.35	938588	6.88	1790108	8.17	1823362	11.28	1714972	14.57
OP49756-BSD	440371	4.29	1800062	5.35	1056662	6.88	1997237	8.17	2062941	11.28	1911994	14.57
MC50518-1 [c]	394102	4.29	1560124	5.35	920740	6.88	1802190	8.17	1823164	11.27	1693102	14.56

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Elevated RL due to dilution required for matrix interference.

Semivolatile Surrogate Recovery Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Method: EPA 625 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC50518-1	R52197.D	40	35	77	72	59	80
OP49756-BS	R52195.D	54	41	91	91	81	99
OP49756-BSD	R52196.D	53	40	92	92	80	98
OP49756-MB	R52194.D	47	36	83	85	60	96

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	15-110%
S2 = Phenol-d5	15-110%
S3 = 2,4,6-Tribromophenol	15-110%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

Semivolatile Surrogate Recovery Summary

Job Number: MC50518
Account: MOBILSS ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Method: SW846 8270D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC50518-1	R52131.D	87	31	88
MC50518-1	R52155.D	89	74	110
OP49758-BS	R52114.D	97	79	99
OP49758-BSD	R52115.D	96	77	97
OP49758-MB	R52113.D	89	59	101

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	26-121%
S2 = 2-Fluorobiphenyl	28-107%
S3 = Terphenyl-d14	29-129%

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: MC50518
Account: MOBILSS - ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chromium, Hexavalent	GN55895	0.010	0.0	mg/l	.1	0.10	100.0	85-115%

Associated Samples:
Batch GN55895: MC50518-1
(*) Outside of QC limits

BLANK SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: MC50518
Account: MOBILSS - ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Analyte	Batch ID	Units	Spike Amount	BSD Result	RPD	QC Limit
Chromium, Hexavalent	GN55895	mg/l	.1	0.10	0.0	20%

Associated Samples:
Batch GN55895: MC50518-1
(*) Outside of QC limits

Misc. Forms

Custody Documents and Other Forms

(SGS Accutest New Jersey)

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- QC Evaluation: MA MCP Limits

CHAIN OF CUSTODY

SGS ACCUTEST

50 D'Angelo Drive, 495 Technology Center West, Bldg One, Marlborough, MA 01752
TEL 508-481-6200 FAX 508-481-7753
www.sgs.com

FED-EX Tracking # 7273 7516 3113 | Bottle Order Control #

SGS Accutest Quote # | SGS Accutest Job # MC50518

Client / Reporting Information

Company Name: SGS Accutest

Street Address: 50 D'Angelo Drive, 495 Technolgy Center West, BLDG One

City: Marlbourough, State: MA Zip: 0175?

Project Contact: robert.soll@sgs.com E-mail:

Phone #: 508-481-6200 Fax #:

Sampler(s) Name(s): RPD Phone:

Project Information

Project Name: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Street:

City: State:

Project #:

Client Purchase Order #:

Project Manager:

Billing Information (if different from Report to)

Company Name:

Street Address:

City: State: Zip:

Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH+Ac	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	AGMS ,AMN ,ASMS ,CDMS ,CN ,CR3 ,CRMS ,CUMS ,FEMS ,HG ,NIMS ,OG1664 ,PBMS ,SBMS ,SEMS ,ZNMS ,	AMN ,HRD	HOLD (Metals)	LAB USE ONLY
1	MW-4		5/31/17	9:15:00 AM	RPD	AQ	5		x	x	x					X			
2	SW-1		5/31/17	10:15:00 AM	RPD	AQ	3			x	x						X	X	
																			L33
																			A1
																			G13

Turnaround Time (Business days)

Data Deliverable Information

Comments / Special Instructions

Approved By (SGS Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other Due 6/14/2017

Emergency & Rush T/A data available VIA Lablink

INITIAL ASESSMENT 5/31/17

LABEL VERIFICATION

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other MAMCP

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Ship to ALNJ -- 10 Day TAT Metals by 200.8/ 245.1

MCP Data Pkg Needed

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

Relinquished by Sampler: 1	Date Tir 5-31-17	Received By: 1 FED EX	Relinquished By: 2 FED EX	Date Time: 6-1-17 940	Received By: 2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 564 [ ] Intact [ ] Not intact	Preserved where applicable [ ]	On Ice [ ] Cooler Temp. 2 2 C

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MC50518: Chain of Custody
Page 1 of 2
SGS Accutest New Jersey

SGS Accutest Sample Receipt Summary

Job Number: MC50518 **Client:** _____ **Project:** _____

Date / Time Received: 6/1/2017 9:40:00 AM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (2.2);

Cooler Temps (Corrected) °C: Cooler 1: (3.5);

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

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

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

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

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

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

Comments

SM089-02
Rev. Date 12/1/16

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MC50518: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

SGS Accutest New England

Job No: MC50518

MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Project No: MOBILSS26489

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50518-1	Collected: 31-MAY-17 09:15 By: RPD		Received: 31-MAY-17 By: HY			
MW-4						
MC50518-1	EPA 1664A	04-JUN-17 13:45	CB	04-JUN-17	CB	OG1664
MC50518-1	EPA 200.8	04-JUN-17 19:59	GT	02-JUN-17	CSF	AGMS,ASMS,CDMS,CRMS,CUMS, FEMS,NIMS,SBMS,SEMS,ZNMS
MC50518-1	EPA 335.4/LACHAT	05-JUN-17 14:40	BM	02-JUN-17	MP	CN
MC50518-1	EPA 200.8	06-JUN-17 19:42	GT	02-JUN-17	CSF	PBMS
MC50518-1	EPA 245.1	07-JUN-17 10:15	JA	07-JUN-17	JA	HG
MC50518-1	SM4500NH3 H-11LACHAT	09-JUN-17 14:54	RP	09-JUN-17	BM	AMN
MC50518-1	SW846 6010/7196A M	14-JUN-17	MET			CR3
MC50518-2	Collected: 31-MAY-17 10:15 By: RPD		Received: 31-MAY-17 By: HY			
SW-1						
MC50518-2	SM2340 C-11	06-JUN-17 10:17	MP			HRD
MC50518-2	SM4500NH3 H-11LACHAT	09-JUN-17 14:28	RP	09-JUN-17	BM	AMN

QC Evaluation: MA MCP Limits

Job Number: MC50518
Account: SGS Accutest New England
Project: MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Collected: 05/31/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits

No Exceptions found.

* Sample used for QC is not from job MC50518

Metals Analysis

QC Data Summaries

(SGS Accutest New Jersey)

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC50518
Account: ALNE - SGS Accutest New England
Project: MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

QC Batch ID: MP1206
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 06/02/17

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.23	4		
Antimony	2.0	.22	1.2	0.59	<2.0
Arsenic	1.0	.017	.22	0.41	<1.0
Barium	1.0	.0085	.27		
Beryllium	0.50	.0022	.016		
Boron	50	2.3	18		
Cadmium	0.50	.0032	.063	0.0013	<0.50
Calcium	250	1.4	30		
Chromium	4.0	.012	.34	0.025	<4.0
Cobalt	0.50	.0018	.019		
Copper	4.0	.035	.77	0.18	<4.0
Iron	50	.19	13	1.4	<50
Lead	0.50	.0079	.16	0.055	<0.50
Magnesium	250	.21	3.1		
Manganese	1.0	.0078	.2		
Molybdenum	1.0	.023	.14		
Nickel	4.0	.018	.48	0.013	<4.0
Potassium	250	.77	46		
Selenium	1.0	.012	.24	0.69	<1.0
Silver	2.0	.0058	.051	0.014	<2.0
Sodium	250	.89	77		
Strontium	5.0	.006	.34		
Thallium	0.50	.002	.036		
Tin	5.0	.044	.85		
Titanium	1.0	.031	.49		
Vanadium	4.0	.03	.24		
Zinc	10	.067	1.5	0.43	<10

Associated samples MP1206: MC50518-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC50518
Account: ALNE - SGS Accutest New England
Project: MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

QC Batch ID: MP1206
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date:			06/02/17					06/02/17	
Metal	BSP Result	Spikelot MPX200.8	% Rec	QC Limits	BSD Result	Spikelot MPX200.8	% Rec	BSD RPD	QC Limit
Aluminum	anr								
Antimony	101	100	101.0	85-115	99.8	100	99.8	1.2	20
Arsenic	89.5	100	89.5	85-115	90.3	100	90.3	0.9	20
Barium									
Beryllium									
Boron									
Cadmium	93.7	100	93.7	85-115	93.4	100	93.4	0.3	20
Calcium									
Chromium	91.8	100	91.8	85-115	91.9	100	91.9	0.1	20
Cobalt									
Copper	89.0	100	89.0	85-115	89.1	100	89.1	0.1	20
Iron	1870	2000	93.5	85-115	1860	2000	93.0	0.5	20
Lead	94.4	100	94.4	85-115	94.8	100	94.8	0.4	20
Magnesium									
Manganese									
Molybdenum									
Nickel	90.3	100	90.3	85-115	89.8	100	89.8	0.6	20
Potassium									
Selenium	196	200	98.0	85-115	193	200	96.5	1.5	20
Silver	84.6	76.5	110.6	85-115	83.7	76.5	109.4	1.1	20
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	91.7	100	91.7	85-115	91.1	100	91.1	0.7	20

Associated samples MP1206: MC50518-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC50518
Account: ALNE - SGS Accutest New England
Project: MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

QC Batch ID: MP1310 Methods: EPA 245.1
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 06/07/17

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.012	.082	0.045	<0.20

Associated samples MP1310: MC50518-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC50518
Account: ALNE - SGS Accutest New England
Project: MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

QC Batch ID: MP1310
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 06/07/17 06/07/17

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits	BSD Result	Spikelot HGPW3	% Rec	BSD RPD	QC Limit
Mercury	2.1	2	105.0	85-115	2.0	2	100.0	4.9	

Associated samples MP1310: MC50518-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

General Chemistry

QC Data Summaries

(SGS Accutest New Jersey)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: MC50518
Account: ALNE - SGS Accutest New England
Project: MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Cyanide	GP5557/GN65177	0.010	0.0	mg/l	0.0833	0.0921	110.6*(a)	90-110%
HEM Oil and Grease	GP5792/GN65129	5.0	0.0	mg/l	40.1	35.7	89.0	78-114%
Hardness, Total as CaCO3	GN65187	4.0	0.0	mg/l	160	160	100.0	80-120%
Hardness, Total as CaCO3	GN65187			mg/l	80	80.0	100.0	80-120%
Hardness, Total as CaCO3	GN65187			mg/l	160	160	100.0	80-120%
Nitrogen, Ammonia	GP5925/GN65412	0.20	0.0	mg/l	1	1.14	114.0	80-120%

Associated Samples:
Batch GP5557: MC50518-1
Batch GP5792: MC50518-1
Batch GP5925: MC50518-1, MC50518-2
Batch GN65187: MC50518-2
(*) Outside of QC limits
(a) Spike blank indicates possible high bias, but all associated samples < DL.

e-Hardcopy 2.0
Automated Report

Technical Report for

ExxonMobil

GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

SGS Accutest Job Number: MC50518R

Sampling Date: 05/31/17

Report to:

Kleinfelder

RDegnim@kleinfelder.com

ATTN: Ryan Degnim

Total number of pages in report: **23**

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

H. (Brad) Madadian
Lab Director

Client Service contact: Matt Cordova 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NJ (MA926) PA (6801121) LA (AI171119) ND (R-188) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

Sections: 1 2 3 4 5 6 7

Table of Contents

Sample Summary

ExxonMobil

Job No: MC50518R

GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC50518-1R	05/31/17	09:15	RPD	05/31/17	AQ	Ground Water	MW-4

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	ExxonMobil	**Job No**	MC50518R
Site:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA	**Report Date**	6/27/2017 11:42:06 A

1 Sample was collected on 05/31/2017 and were received at SGS Accutest New England on 05/31/2017 properly preserved, at 0.9 Deg. C and intact. These Samples received a job number of MC50518R. 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.

Wet Chemistry By Method SM2340 C-11

Matrix: AQ **Batch ID:** N:GN66142

- MC50518-1R for Hardness, Total as CaCO3: Analysis performed at SGS Accutest, Dayton, NJ.

SGS Accutest 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 Laboratory Director for SGS Accutest New England or assignee as verified by the signature on the cover page has authorized the release of this report(MC50518R).

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	SGS Accutest New England	**Job No**	MC50518R
Site:	MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA	**Report Date**	6/27/2017 11:23:16 A

On 06/01/2017, 1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 3.5 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of MC50518R was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Wet Chemistry By Method SM2340 C-11

Matrix: AQ **Batch ID:** GN66142

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

SGS Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS Accutest is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS Accutest indicated via signature on the report cover

Summary of Hits

Job Number: MC50518R
Account: ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Collected: 05/31/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC50518-1R	**MW-4**					
Hardness, Total as CaCO3 [a]		460	4.0		mg/l	SM2340 C-11

(a) Analysis performed at SGS Accutest, Dayton, NJ.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	MC50518-1R	**Date Sampled:**	05/31/17
Matrix:	AQ - Ground Water	**Date Received:**	05/31/17
		Percent Solids:	n/a
Project:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3 [a]	460	4.0	mg/l	1	06/27/17 10:27	ANJ	SM2340 C-11

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- MCP Form
- MCP Form (SGS Accutest New Jersey)
- Sample Tracking Chronicle
- QC Evaluation: MA MCP Limits

CHAIN OF CUSTODY- ExxonMobil Projects

PAGE __1_ OF _1__

ACCUTEST Laboratories

Accutest Laboratories of New England
495 Tech Center West, Bldg. I, Marlboro, MA 01752
TEL: (508) 481-6200 FAX: (508) 481-7753
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: MC50518R

Client / Reporting Information

Company Name: Kleinfelder
Street Address: 4 Technology Drive, Suite 110
City: Westborough | State: MA | Zip: 1581
Project Contact: Mark Habedank | E-mail:
Phone #: (860) 563-7775 | Fax #: (860) 563-6744
Sampler(s) Name(s): Ryan Degnim | Phone #: 508 370-8266

SITE NAME - Provide MRN for Retail or AFE for Major Projects

Retail Project (MRN): 1081
Major Project (AFE):
Project Name: 19 Ames Street
City: Dedham | State: MA
Project Manager: Colby Jensen
ExxonMobil Purchase Order #:

ExxonMobil Environmental Services Co.

If Project is Direct Bill to Consultant
Company Name: Kleinfelder
Street Address: 4 Technology Drive, Suite 110
City: Westborough, MA 01581 | State: | Zip:
Attention: | PO#:

Eastern Billing Center

Requested Analysis (see TEST CODE sheet)

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	VOCs via EPA 8260	SVOCs via GC 625	SVOCs via 8270	Total Metlas via ICP/MS 200.8	Total Chromium via 7196A	Total Mercury via 245.1	Cyanide via 335.4	TRL via 1664A Oil + Grease via 1664	Ammonia	Hardness	Temperature & pH	LAB USE ONLY
01	MW-4		5/31/17	0915	RPD	GW	10	X	X	X	X	X				X	X	X	X	X	X	X	X	X			
02	SW-1		5/31/17	1015	RPD	SW	4			X	X	X							X					X	X	X	
																											ZN1
																											16A

INITIAL ASESSMENT: OK

LABEL VERIFICATION: OK

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [X] Std. 10 Business Days
- [ ] 8 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] CT RCP
- [X] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

MASSDEP CAM COMPLIANT
Hold SW-1 metals sample for analysis

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB- Equipment Blank
RB- Rinse Blank
TB-Trip Blank

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

	Relinquished by Sampler:	Date Time:	Received By:
1	Ryan Degnim	5/31/2017 1200	
2	Relinquished By:	Date Time:	Received By:
3	Relinquished by Sampler:	Date Time:	Received By:
4	Relinquished By:	Date Time:	Received By:
5	Relinquished by:	Date Time:	Received By:

Custody Seal # | [ ] Intact [ ] Not intact | Preserved where applicable [ ] | On Ice [✓] | Cooler Temp. 1.4

Job Change Order: MC50518

Requested Date:	6/26/2017	**Received Date:**	5/31/2017
Account Name:	SGS Accutest New England	**Due Date:**	6/14/2017
Project Description:	MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, D	**Deliverable:**	MAMCP
CSR:	mattc	**TAT (Days):**	1

Sample #: MC50518-1 **Change:**

Dept: actiavte for HRD due 6/27

TAT:

MW-4

Above Changes Per: Ryan D. **Date/Time:** 6/26/2017 10:24:14 AM

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

Page 1 of 1

MC50518R: Chain of Custody
Page 2 of 2

Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup	WSC-CAM	Exhibit VII A
	July 1, 2010	Revision No. 1
	Final	

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name:	SGS Accutest- Marlborough	Project #:	MC50518R
Project Location:	GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA	MADEP RTN	None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)
MC50518-1R

Test method: Refer to case narrative.

Matrices: Groundwater/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other ( )

CAM Protocol (check all that apply below):

8260 VOC ( ) CAM IIA	7470/7471 Hg ( ) CAM III B	MassDEP VPH ( ) CAM IV A	8081 Pesticides ( ) CAM V B	7196 Hex Cr ( ) CAM VI B	Mass DEP APH ( ) CAM IX A
8270 SVOC ( ) CAM II B	7010 Metals ( ) CAM III C	MassDEP EPH ( ) CAM IV B	8151 Herbicides ( ) CAM V C	8330 Explosives ( ) CAM VIII A	TO-15 VOC ( ) CAM IX B
6010 Metals ( ) 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 Responses to Questions A Through F are required for "Presumptive Certainty status

A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☑ Yes	☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☑ Yes	☐ No
E	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ Yes	☐ No ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	☑ Yes	☐ No

Responses to questions G, H, and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols	☑ Yes	☐ No [1]
	Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.		
H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☑ Yes	☐ No [1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☑ Yes	☐ No [1]

[1] ***All Negative responses must be addressed in an attached Environmental Laboratory case narrative.***

I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: _____ **Position:** **Laboratory Director**

Printed Name: **H. (Brad) Madadian** **Date:** **27-Jun-17**

Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup	WSC-CAM	Exhibit VII A
	July 1, 2010	Revision No. 1
	Final	

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name:	Accutest Mid-Atlantic	Project #:	MC50518R
Project Location:#01074,	MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA	MADEP RTN	None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)
MC50518-1R

No CAM protocol available for this method. Samples analyzed following the Lab SOP and the method.

Matrices: Groundwater/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other ( )

CAM Protocol (check all that apply below):

8260 VOC ( ) CAM IIA	7470/7471 Hg ( ) CAM III B	MassDEP VPH ( ) CAM IV A	8081 Pesticides ( ) CAM V B	7196 Hex Cr ( ) CAM VI B	Mass DEP APH ( ) CAM IX A
8270 SVOC ( ) CAM II B	7010 Metals ( ) CAM III C	MassDEP EPH ( ) CAM IV B	8151 Herbicides ( ) CAM V C	8330 Explosives ( ) CAM VIII A	TO-15 VOC ( ) CAM IX B
6010 Metals ( ) 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 Responses to Questions A Through F are required for "Presumptive Certainty status

A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☑ Yes	☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☑ Yes	☐ No
E	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ Yes	☐ No ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	☑ Yes	☐ No

Responses to questions G, H, and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols	☑ Yes	☐ No [1]
	Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.		
H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☑ Yes	☐ No [1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☑ Yes	☐ No [1]

[1] ***All Negative responses must be addressed in an attached Environmental Laboratory case narrative.***

I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Nancy F. Cole **Position:** **Laboratory Director**

Printed Name: **Nancy F. Cole** **Date:** **27-Jun-17**

Internal Sample Tracking Chronicle

ExxonMobil

Job No: MC50518R

GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50518-1R MW-4	Collected: 31-MAY-17 09:15	By: RPD	Received: 31-MAY-17		By: TF	
MC50518-1R	SM2340 C-11	27-JUN-17 10:27	ANJ			HRD

QC Evaluation: MA MCP Limits

Job Number: MC50518R
Account: ExxonMobil
Project: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Collected: 05/31/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits

No Exceptions found.

* Sample used for QC is not from job MC50518R

Misc. Forms

Custody Documents and Other Forms

(SGS Accutest New Jersey)

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- QC Evaluation: MA MCP Limits

CHAIN OF CUSTODY

SGS ACCUTEST

50 D'Angelo Drive, 495 Technology Center West, Bldg One, Marlborough, MA 01752
TEL 508-481-6200 FAX 508-481-7753
www.sgs.com

FED-EX Tracking # 7273 7514 3113 | Bottle Order Control # | SGS Accutest Quote # | SGS Accutest Job MC50518

Client / Reporting Information

Company Name: SGS Accutest
Street Address: 50 D'Angelo Drive, 495 Technolgy Center West, BLDG One
City: Marlbourough, State: MA, Zip: 0175
Project Contact: robert.soll@sgs.com, E-mail
Phone #: 508-481-6200, Fax #
Sampler(s) Name(s): RPD, Phone

Project Information

Project Name: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Street
City, State
Project #
Client Purchase Order #
Project Manager

Billing Information (if different from Report to)

Company Name
Street Address
City, State, Zip
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH+As	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	AGMS ,AMN ,ASMS ,CDMS ,CN ,CR3 ,CRMS ,CUMS ,FEMS ,HG ,NIMS ,OG1664 ,PBMS ,SBMS ,SEMS ,ZNMS ,	AMN ,HRD	HOLD (Metals)	LAB USE ONLY
1	MW-4		5/31/17	9:15:00 AM	RPD	AQ	5		x	x	x					X			
2	SW-1		5/31/17	10:15:00 AM	RPD	AQ	3			x	x						X	X	
																			L33
																			A1
																			G13

Turnaround Time (Business days)

Data Deliverable Information

Comments / Special Instructions

Approved By (SGS Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other Due 6/14/2017

Emergency & Rush T/A data available VIA Lablink

INITIAL ASESSMENT 5/31/17

LABEL VERIFICATION

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other MAMCP

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Ship to ALNJ -- 10 Day TAT Metals by 200.8/ 245.1

MCP Data Pkg Needed

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

Relinquished by Sampler: 1	Date Tir 5-31-17	Received By: 1 FED EX	Relinquished By: 2 FED EX	Date Time: 6-1-17 940	Received By: 2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 564 [ ] Intact [ ] Not intact	Preserved where applicable [ ]	On Ice [ ] Cooler Temp. 22 C

FP

6.1

6

MC50518R: Chain of Custody
Page 1 of 3
SGS Accutest New Jersey

SGS Accutest Sample Receipt Summary

Job Number: MC50518 **Client:** _____ **Project:** _____

Date / Time Received: 6/1/2017 9:40:00 AM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (2.2);

Cooler Temps (Corrected) °C: Cooler 1: (3.5);

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

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

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

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

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

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

Comments

SM089-02
Rev. Date 12/1/16

6.1
6

MC50518R: Chain of Custody
Page 2 of 3

Job Change Order: MC50518

Requested Date:	6/26/2017	**Received Date:**	5/31/2017
Account Name:	SGS Accutest New England	**Due Date:**	6/14/2017
Project Description:	MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, D	**Deliverable:**	MAMCP
CSR:	mattc	**TAT (Days):**	1

==========

Sample #: MC50518-1

Dept:

TAT:

MW-4

Change:

actiavte for HRD due 6/27

==========

Above Changes Per: Ryan D.

Date/Time: 6/26/2017 10:24:14 AM

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

Page 1 of 1

6.1

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MC50518R: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

SGS Accutest New England

Job No: MC50518R

MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Project No: MOBILSS26489

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50518-1R MW-4	Collected: 31-MAY-17 09:15 By: RPD			Received: 31-MAY-17	By: HY	
MC50518-1R	SM2340 C-11	27-JUN-17 10:27	ST			HRD

QC Evaluation: MA MCP Limits

Job Number: MC50518R
Account: SGS Accutest New England
Project: MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA
Collected: 05/31/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits

No Exceptions found.

* Sample used for QC is not from job MC50518R

General Chemistry

7

QC Data Summaries

(SGS Accutest New Jersey)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: MC50518R
Account: ALNE - SGS Accutest New England
Project: MOBILSS: GSCMA:S/S 01-081, 19 Ames Street, Dedham, MA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Hardness, Total as CaCO3	GN66142	4.0	0.0	mg/l	80	84.0	105.0	80-120%
Hardness, Total as CaCO3	GN66142			mg/l	160	162	101.3	80-120%

Associated Samples:
Batch GN66142: MC50518-1R
(*) Outside of QC limits

ATTACHMENT D
Historical Groundwater Summary

Table 1. Summary of Groundwater Analytical Data:
VPH and Target Compounds (November 1999 - December 2015)
Former Mobil Service Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153, 3-23994, 3-25770 and 3-26537

Well ID GW classification	Casing Elevation (Ft)	Sampling Date	Depth to Water (Ft)	Depth to Product (Ft)	Product Thickness (Ft)	Groundwater Elevation (Ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TOTAL BTEX (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Groundwater Standards:						**GW-2**	1,000	50,000	20,000	3,000	NA	50,000	700	3,000	5,000	4,000
						GW-3	10,000	40,000	5,000	5,000	NA	50,000	20,000	50,000	50,000	50,000
MW-1	97.95	11/01/99	11.95	ND	NA	86.00	6.2	41	221	316	584	<25	89	1,330	530	3,710
(GW-2/3)		05/04/00	8.68	ND	NA	89.27	<1.0	<5.0	<5.0	<15	ND	<5.0	18.5	<100	<100	110
Screen Interval = 5-15 ft.		10/03/00	12.15	ND	NA	85.80	<1.0	<5.0	<5.0	<15	ND	47.6	<5.0	<100	<100	<100
		08/09/01	10.25	ND	NA	87.70	<0.5	<2.0	<2.0	<7.5	ND	4.0	<2.0	<50	<50	<50
	99.17	09/27/01	12.04	ND	NA	87.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		03/01/02	12.83	ND	NA	86.34	35.2	377	675	1,032	2,119	1,130	118	2,020	3,050	2,180
		09/05/02	13.59	ND	NA	85.58	33.8	53	221	648	956	15,400	75.2	<50	588	1,700
		01/07/03	9.43	ND	NA	89.74	52.5	1,800	1,040	3,490	6,382	19,400	293	<1,300	1,390	6,770
		03/11/03	10.38	ND	NA	88.79	<4.0	<4.0	13.4	6.8	20.2	2,710	20.3	<100	121	365
		07/31/03	10.21	ND	NA	88.96	<2.0	<2.0	<2.0	<4.0	ND	337	<3.0	<50	<50	<50
		10/24/03	11.68	ND	NA	87.49	2.1	<2.0	12	15.6	30	749	6.5	<50	<50	119
		02/09/04	10.09	ND	NA	89.08	<1.0	<3.0	<1.0	<6.0	ND	67	<5.0	<100	<100	<100
		06/04/04	9.57	ND	NA	89.60	<1.0	<3.0	<1.0	<6.0	ND	10	<5.0	<100	<100	<100
	99.15	02/15/05	9.01	ND	NA	90.14	<1.0	<1.0	<1.0	<3.0	ND	3.3	<5.0	NS	NS	NS
		08/11/05	11.09	ND	NA	88.06	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	157	<100	<100
		05/23/06	8.81	ND	NA	90.34	<1.0	<3.0	5.39	<6.0	5	78	<5.0	<100	121	190
		10/25/06	12.09	ND	NA	87.06	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		05/13/07	8.95	ND	NA	90.20	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
	96.02[9]	06/19/08	10.61	ND	NA	85.41	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		12/23/2009[11]	9.05	ND	NA	86.97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		04/18/11	8.29	ND	NA	87.73	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		09/22/11	9.52	ND	NA	86.50	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		02/04/14	10.58	ND	NA	85.44	<1.00	<3.00	2.48	13.4	15.9	<3.00	<5.00	342	168	<100
		12/17/14	8.96	ND	NA	87.06	<1.00	<3.00	<1.00	3.13	3.13	<3.00	<5.00	<100	119	<100
MW-2	98.25	11/01/99	10.98	ND	NA	87.27	<1.0	<5.0	<5.0	<15	ND	124	<5.0	<100	<100	<100
(GW-3)		05/04/00	8.55	ND	NA	89.70	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
Screen Interval = 5-15 ft.		10/03/00	12.32	ND	NA	85.93	<1.0	<5.0	<5.0	<15	ND	369	<5.0	<100	<100	<100
	98.40	09/27/01	13.29	ND	NA	85.11	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		09/05/02	DRY(15.00)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		01/07/03	8.07	ND	NA	90.33	<1.0	<1.0	<1.0	3.2	3	97.3	<1.0	NS	NS	NS
		07/31/03	10.61	ND	NA	87.79	<1.0	<1.0	<1.0	<1.0	ND	157	NS	NS	NS	NS
		10/24/03	11.49	ND	NA	86.91	<2.0	<2.0	<2.0	14.5	15	126	<3.0	<50	<50	207
		02/09/04	10.67	ND	NA	87.73	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		06/04/04	10.00	ND	NA	88.40	<1.0	<3.0	<1.0	<6.0	ND	5.2	<5.0	<100	<100	<100
	98.38	02/15/05	9.06	ND	NA	89.32	<1.0	<1.0	<1.0	<3.0	ND	5.7	<5.0	NS	NS	NS
		08/11/05	12.29	ND	NA	86.09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		01/04/07	9.84	ND	NA	88.54	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		02/25/08	8.58	ND	NA	89.80	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
	95.27[9]	11/18/08	10.25	ND	NA	85.02	<1.00	<3.00	<1.00	<6.00	ND	<3.00	13.8	<100	<100	<100
		03/20/09	8.51	ND	NA	86.76	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		12/23/09[11]	8.70	ND	NA	86.57	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		09/30/10	13.84	ND	NA	81.43	<1.00	<3.00	2.61	24.6	27.2	<3.00	6.92	174	<100	171
		12/06/10	10.57	ND	NA	84.70	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100

Table 1. Summary of Groundwater Analytical Data:
VPH and Target Compounds (November 1999 - December 2015)
Former Mobil Service Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153, 3-23994, 3-25770 and 3-26537

Well ID GW classification	Casing Elevation (Ft)	Sampling Date	Depth to Water (Ft)	Depth to Product (Ft)	Product Thickness (Ft)	Groundwater Elevation (Ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TOTAL BTEX (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Groundwater Standards:						**GW-2**	1,000	50,000	20,000	3,000	NA	50,000	700	3,000	5,000	4,000
						GW-3	10,000	40,000	5,000	5,000	NA	50,000	20,000	50,000	50,000	50,000
MW-4	98.27	11/01/99	11.30	ND	NA	86.97	2,470	19,100	7,260	31,770	60,600	<500	730	25,000	36,000	48,000
(GW-2/3)		05/04/00	8.58	ND	NA	89.69	1,020	8,350	3,770	15,560	28,700	510	490	7,200	25,600	16,200
Screen Interval = 5-15 ft.		10/03/00[3]	12.27	Sheen	NA	86.00	NS[3]	NS	NS	NS	NS	NS	NS	NS	NS	NS
		01/29/01	10.10	ND	NA	88.17	865	7,810	3,630	15,610	27,915	1,220	280	5,500	15,800	13,800
		04/20/01	8.53	ND	NA	89.74	1,750	13,300	3,960	17,660	36,670	4,900	310	5,800	19,000	9,400
		08/09/01	11.50	ND	NA	86.77	4,810	33,500	7,420	32,100	77,830	99,500	580	<2,500	40,600	13,000
	98.41	09/27/01	13.05	ND	NA	85.36	5,230	39,300	8,750	36,300	89,580	53,400	560	13,000	24,000	18,000
		03/01/02	10.78	ND	NA	87.63	828	8,930	3,960	16,140	29,858	1,320	350	7,090	24,400	14,500
		09/05/02	DRY(14.70)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		01/07/03	8.39	ND	NA	90.02	849	4,820	2,490	9,380	17,539	1,910	333	4,080	5,890	11,700
		03/11/03	9.90	ND	NA	88.51	1,590	13,100	4,550	21,200	40,440	16,300	461	6,920	8,930	14,600
		07/31/03	10.48	ND	NA	87.93	2,610	22,300	7,820	33,500	66,230	33,000	1,290	27,200	26,800	33,500
		10/24/03	11.46	ND	NA	86.95	3,580	26,800	12,000	44,300	86,680	46,900	1,660	15,900	20,000	62,000
		02/09/04	10.50	ND	NA	87.91	2,330	23,100	7,450	34,600	67,480	23,100	630	40,000	20,200	19,900
		06/04/04	9.95	ND	NA	88.46	2,850	29,800	8,400	38,500	79,550	35,600	690	24,900	<10,000	17,200
		11/03/04	10.99	ND	NA	87.42	2,260	24,400	9,100	35,500	71,260	13,700	590	28,700	7,800	18,600
	98.42	02/15/05	8.80	ND	NA	89.62	1,450	20,200	5,940	29,370	56,968	7,640	520	17,900 J	15,000	10,600
		05/05/05	9.18	ND	NA	89.24	1,280	20,700	5,730	29,590	57,300	6,850	535	35,300	<10,000	9,240
		08/11/05	12.16	ND	NA	86.26	4,020	35,600	7,200	32,300	79,120	11,000	378	43,800	<20,000	6,390
		02/02/06	8.61	ND	NA	89.81	988	13,900	4,460	23,770	43,118	2,240	534	6,670	<2,500	13,000
		05/23/06	8.40	ND	NA	90.02	989	8,610	4,030	18,390	32,019	3,810	507	10,200	17,900	15,100
		10/25/06	12.33	ND	NA	86.09	3,480	32,500	7,220	32,680	75,880	5,420	480	46,300	21,800	14,600
		01/04/07	9.82	ND	NA	88.60	894	8,800	4,630	21,630	35,954	2,750	429	15,800	15,200	18,000
		05/13/07	9.26	ND	NA	89.16	787	19,400	6,620	32,900	59,707	1,610	613	16,500	25,900	18,400
		08/27/07	13.38	ND	NA	85.04	2,000	28,900	7,970	37,500	76,370	1,940	603	65,400	28,500	21,400
		02/25/08	8.60	ND	NA	89.82	459	3,760	2,330	9,810	16,359	485	291	9,400	3,360	12,100
	95.29[9]	06/19/08	11.49	ND	NA	83.80	1,730	25,000	7,850	32,600	67,180	451	575	31,600	20,400	17,300
		11/18/2008[8]	10.70	ND	NA	84.59	867	18,800	6,520	29,730	55,917	813	490	43,800	19,000	8,040
		03/20/09	8.51	ND	NA	86.78	404	12,000	8,880	42,400	63,684	113	559	90,500	36,000	30,700
		09/21/09	11.06	ND	NA	84.23	1,060	20,200	7,910	33,700	62,870	142	686	28,300	29,200	29,200
		12/23/09[11]	9.16	ND	NA	86.13	3.94	10.8	66.6	177	258	3.49	28.4	<200	<200	789
		12/28/09	8.67	ND	NA	86.62	60.8	1,080	1,180	6,400	8,721	13.9	171	1,530	<1000	9,760
		03/08/10	7.76	ND	NA	87.53	241	3,650	4,250	19,230	27,371	59.0	418	9,650	5,220	26,200
		06/17/10	10.11	ND	NA	85.18	582	19,000	9,400	40,900	69,882	17.1	573	94,400	<10,000	52,700
		09/30/10	13.79	ND	NA	81.50	1,340	17,800	6,530	28,600	54,270	326	436	33,500	<2,500	15,300
		12/06/10	11.55	ND	NA	83.74	217	3,400	2,590	11,900	18,107	128	245	6,760	7,610	12,700
		04/18/11	8.15	ND	NA	87.14	211	4,100	2,160	15,510	21,981	70.5	733	8,320	12,800	15,200
		09/22/11	9.22	ND	NA	86.07	128	2,720	2,780	12,270	17,898	34.8	387	7,220	<2,500	16,300
		01/26/12[15][16]	9.34	ND	NA	85.95	195	4,300	4,030	21,840	30,365	<30.0	606	5,460	12,100	18,200
		07/17/12[17]	11.31	ND	NA	83.98	637	17,300	6,360	28,100	52,397	<1.00	585	NS[17]	NS[17]	NS[17]
		03/25/13[15][17]	7.86	ND	NA	87.43	116	766	1,590	6,970	9,442	8.7	194	955	3,280	7,440
		02/04/14[15]	9.97	ND	NA	85.32	272	2,070	1,590	6,770	10,702	42.5	190	3,690	3,010	5,710
		12/17/14	7.80	ND	NA	87.49	151	923	754	3,070	4,898	<30.0	105	3,190	6,900	3,840
		07/14/15[15]	11.04	ND	NA	84.25	255	7,370	5,150	23,980	36,755	17.6	395	9,830	27,200	15,900
		12/22/15[15]	13.40	ND	NA	81.89	1,130	16,900	6,130	27,340	51,500	<300	<500	15,500	23,400	12,500
MW-4D	99.24	02/15/05	9.60	ND	NA	89.64	840	4,880	1,140	4,690	11,552	8,680	68	5,400 J	2,350	1,600
(GW-3)		05/05/05	9.85	ND	NA	89.39	1,340	5,960	869	4,280	12,449	6,960	62.7	18,800	<5,000	800
Screen Interval = 21-26 ft.		05/23/06	9.01	ND	NA	90.23	258	16.8	182	34.7	492	1,430	12	675	220	299
		10/25/06	12.97	ND	NA	86.27	137	71.7	24.3	117.4	350	1,630	<5.00	551	106	56.3
		01/04/07	10.47	ND	NA	88.77	128	37.5	16.4	94.2	276	1,290	<5.00	<500	117	58.7
		05/13/07	10.02	ND	NA	89.22	186	377	102	192.2	857	79.3	<5.00	628	141	111.0
		08/27/07	14.09	ND	NA	85.15	28	5.6	1.2	14.4	49	561	<5.00	616	<100	<100
		02/25/08	9.25	ND	NA	89.99	1.76	<3.00	<1.00	<6.00	2	20	<5.00	228	<100	<100
	95.90[9]	06/19/08	12.19	ND	NA	83.71	497	16,500	6,580	25,510	49,087	195	577	18,800	14,700	19,700
		11/18/08	11.35	ND	NA	84.55	1.11	<3.00	<1.00	<6.00	1.11	<3.00	<5.00	<100	<100	<100
		03/20/09	9.24	ND	NA	86.66	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		09/21/09	11.75	ND	NA	84.15	14.1	34.2	7.76	49.2	105	<3.00	<5.00	<100	<100	<100
		12/28/09	9.28	ND	NA	86.62	4.80	<3.00	2.81	21.5	29.0	<3.00	<5.00	<100	116	<50.0
		03/08/10	9.28	ND	NA	86.62	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		06/17/10	10.90	ND	NA	85.00	39.3	192	38.8	245	515	<3.00	9.67	829	115	120
		09/30/10	14.45	ND	NA	81.45	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		02/04/14	10.64	ND	NA	85.26	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100

Table 1. Summary of Groundwater Analytical Data:
VPH and Target Compounds (November 1999 - December 2015)
Former Mobil Service Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153, 3-23994, 3-25770 and 3-26537

Well ID GW classification	Casing Elevation (Ft)	Sampling Date	Depth to Water (Ft)	Depth to Product (Ft)	Product Thickness (Ft)	Groundwater Elevation (Ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TOTAL BTEX (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Groundwater Standards:						**GW-2**	1,000	50,000	20,000	3,000	NA	50,000	700	3,000	5,000	4,000
						GW-3	10,000	40,000	5,000	5,000	NA	50,000	20,000	50,000	50,000	50,000
MW-5	98.15	11/01/99	11.92	ND	NA	86.23	60	<5.0	<5.0	<15	60	27.7	<5.0	310	<100	<100
(GW-2/3)		05/04/00	8.66	ND	NA	89.49	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
Screen Interval = 6-16 ft.		08/09/01	12.29	ND	NA	85.86	<0.5	<2.0	<2.0	<7.5	ND	<2.0	<2.0	<50	<50	<50
	99.31	09/27/01	14.22	ND	NA	85.09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		03/01/02	11.69	ND	NA	87.62	8.2	<5.0	<5.0	<15	8	175	<5.0	<100	<100	<100
		09/05/02	DRY(15.10)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		01/07/03	9.01	ND	NA	90.30	36.1	4.4	15	10.3	66	210	3.9	156	60.7	127
		07/31/03	11.51	ND	NA	87.80	<2.0	<2.0	<2.0	3.6	4	2.4	<3.0	<50	<50	<50
		10/24/03	12.04	ND	NA	87.27	<2.0	<2.0	<2.0	<4.0	ND	140	<3.0	<50	<50	<50
		02/09/04	10.87	ND	NA	88.44	<1.0	7.7	3.5	19.7	31	5.5	<5.0	<100	<100	<100
		06/04/04	10.60	ND	NA	88.71	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		11/03/04	11.92	ND	NA	87.39	<1.0	5.4	2.6	12.1	20	284	<5.0	NS	NS	NS
		02/15/05	9.11	ND	NA	90.20	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		05/05/05	9.11	ND	NA	90.20	<1.0	<1.0	<1.0	<3.0	ND	9.9	<5.0	NS	NS	NS
		08/11/05	13.26	ND	NA	86.05	2.24	35.3	13.6	61	121	21.7	<5.0	<100	<100	<100
		02/02/06	8.53	ND	NA	90.78	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		05/23/06	8.65	ND	NA	90.66	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		10/25/06	13.27	ND	NA	86.04	<1.00	3.41	1.8	8.68	14	50.2	<5.00	<100	<100	<100
		05/13/07	10.43	ND	NA	88.88	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		08/27/07	14.42	ND	NA	84.89	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
	96.19[9]	06/19/08	12.73	ND	NA	83.46	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		11/18/08	11.67	ND	NA	84.52	<1.00	<3.00	<1.00	<6.00	ND	9.15	<5.00	<100	<100	<100
		09/21/09	12.08	ND	NA	84.11	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		12/28/09	9.03	ND	NA	87.16	<1.00	<3.00	<1.00	4.42	4.42	<3.00	<5.00	<100	<100	<100
		03/08/10	7.95	ND	NA	88.24	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		09/30/10[14]	14.79	ND	NA	81.40	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		04/18/11	8.29	ND	NA	87.90	<1.00	<3.00	2.02	10.62	12.6	<3.00	<5.00	<100	<100	<100
		09/22/11	9.91	ND	NA	86.28	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		01/26/12	9.59	ND	NA	86.60	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
MW-6	98.12	11/01/99	10.70	ND	NA	87.42	<1.0	<5.0	<5.0	<15	ND	9.6	<5.0	<100	<100	<100
(GW-3)		05/04/00	8.57	ND	NA	89.55	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
Screen Interval = 6-16.5 ft.		08/09/01	11.06	ND	NA	87.06	<0.5	<2.0	<2.0	<7.5	ND	<2.0	<2.0	<50	<50	<50
	98.36	09/27/01	12.95	ND	NA	85.41	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		09/05/02	14.58	ND	NA	83.78	<2.0	<2.0	<2.0	<4.0	ND	7.2	<3.0	<50	<50	<50
		07/31/03	10.42	ND	NA	87.94	<1.0	<1.0	<1.0	<1.0	ND	<1.0	NS	NS	NS	NS
		02/09/04	10.44	ND	NA	87.92	<1.0	<1.0	<1.0	<3.0	ND	<1.0	NS	NS	NS	NS
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MW-7	98.29	11/01/99	10.82	ND	NA	87.47	<1.0	<5.0	<5.0	<15	ND	7.5	<5.0	<100	<100	<100
(GW-3)	98.33	09/27/01	12.98	ND	NA	85.35	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Screen Interval = 5-15 ft.		09/05/02	DRY(14.20)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		01/07/03	8.00	ND	NA	90.33	<1.0	<1.0	<1.0	1.1	1	36.7	<1.0	NS	NS	NS
		07/31/03	10.45	ND	NA	87.88	<1.0	<1.0	<1.0	<1.0	ND	<1.0	NS	NS	NS	NS
		10/24/03	11.28	ND	NA	87.05	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	98.33	02/15/05	8.46	ND	NA	89.87	<1.0	<1.0	<1.0	<3.0	ND	<1.0	<5.0	NS	NS	NS
		08/11/05	12.08	ND	NA	86.25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		01/04/07	9.72	ND	NA	88.61	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		08/27/07	12.24	ND	NA	86.09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		02/25/08	8.52	ND	NA	89.81	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
	95.20[9]	11/18/08	10.61	ND	NA	84.59	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		03/20/09	8.01	ND	NA	87.19	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		09/21/09	10.98	ND	NA	84.22	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	71.7
		12/28/09	8.51	ND	NA	86.69	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		03/08/10	7.51	ND	NA	87.69	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		02/04/14	9.81	ND	NA	85.39	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100

Table 1. Summary of Groundwater Analytical Data:
VPH and Target Compounds (November 1999 - December 2015)
Former Mobil Service Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153, 3-23994, 3-25770 and 3-26537

Well ID GW classification	Casing Elevation (Ft)	Sampling Date	Depth to Water (Ft)	Depth to Product (Ft)	Product Thickness (Ft)	Groundwater Elevation (Ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TOTAL BTEX (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Groundwater Standards:						**GW-2**	1,000	50,000	20,000	3,000	NA	50,000	700	3,000	5,000	4,000
						GW-3	10,000	40,000	5,000	5,000	NA	50,000	20,000	50,000	50,000	50,000
MW-8	98.43	11/01/99	11.68	ND	NA	86.75	<1.0	<5.0	<5.0	<18.1	ND	20.1	5.7	<100	<100	200
(GW-3)		05/04/00	8.84	ND	NA	89.59	<1.0	<5.0	33.9	90.1	124	8.3	16.9	<100	790	920
Screen Interval = 4-14 ft.		10/03/00	12.41	ND	NA	86.02	232	47.3	38	152.4	470	3,940	9.4	1,960	330	340
		01/29/01	10.34	ND	NA	88.09	2.9	<5.0	<5.0	<15	3	374	<5.0	<100	140	330
		04/20/01	8.86	ND	NA	89.57	239	279	23 J	139	680	10,800	<10	<250	290 J	330 J
		08/09/01	11.33	ND	NA	87.10	404	157	117	425	1,103	12,200	10	<500	650	<500
	98.61	09/27/01	13.14	ND	NA	85.47	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		03/01/02	11.04	ND	NA	87.57	7.6	<5.0	<5.0	<15	8	3,650	<5.0	<100	220	240
		09/05/02	DRY(13.60)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		01/07/03	8.43	ND	NA	90.18	3.9	2.2	61.4	117.8	185	141	26.6	1,100	636	2,360
		07/31/03	10.73	ND	NA	87.88	<2.0	<2.0	<2.0	<4.0	ND	1,110	<3.0	<50	<50	<50
		10/24/03	11.63	ND	NA	86.98	2.1	<2.0	<2.0	<4.0	2	1,880	<3.0	<50	<50	<50
		02/09/04	10.84	ND	NA	87.77	<10.0	<10	<10	<10	ND	1,510	NS	NS	NS	NS
		06/04/04	10.21	ND	NA	88.40	<5.0	<5.0	<5.0	<15	ND	663	<25	NS	NS	NS
	98.62	02/11/05	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		05/05/05	9.51	ND	NA	89.11	1.9	<3.0	<1.0	<6.0	2	3,810	<5.0	1,070 J	<100	<100
		02/02/06	8.95	ND	NA	89.67	<1.0	<3.0	3.07	<6.0	3	104	<5.0	<100	<100	136
		05/23/06	8.63	ND	NA	89.99	<1.0	<3.0	10.1	13.48	24	<3.00	<5.00	166	104	<50
		10/25/06	12.50	ND	NA	86.12	<1.00	<3.00	<1.00	<6.00	ND	28.3	<5.00	<100	<100	<100
		01/04/07	10.05	ND	NA	88.57	<1.00	<3.00	1.72	14.72	16	3.17	<5.00	<100	101	<50.0
		08/27/07	DRY(13.28))	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		02/25/08	8.90	ND	NA	89.72	<1.00	<3.00	2.26	<6.00	2	<3.00	<5.00	<100	<100	110
	95.53[9]	11/18/08	10.90	ND	NA	84.63	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		12/23/09[11]	8.88	ND	NA	86.65	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
MW-9	98.46	11/01/99	11.08	ND	NA	87.38	<1.0	<5.0	<5.0	<15	ND	16.9	<5.0	<100	<100	<100
(GW-2/3)		04/20/01	8.01	ND	NA	90.45	<1.0	<5.0	<5.0	<15	ND	381	<5.0	<100	<100	<100
Screen Interval = 5-15 ft.		08/09/01	11.40	ND	NA	87.06	<0.5	<2.0	<2.0	<7.5	ND	583	<2.0	<50	<50	<50
	98.49	09/27/01	DRY(10.29)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		03/01/02	10.88	ND	NA	87.61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		09/05/02	DRY(10.65)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		01/07/03	8.36	ND	NA	90.13	<1.0	<1.0	<1.0	2.2	2	127	<1.0	NS	NS	NS
		07/31/03	10.60	ND	NA	87.89	<1.0	<1.0	<1.0	<1.0	ND	37.9	NS	NS	NS	NS
		02/09/04	10.71	ND	NA	87.78	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		06/04/04	9.88	ND	NA	88.61	<1.0	<1.0	<1.0	<3.0	ND	20.7	<5.0	NS	NS	NS
		11/03/04	11.06	ND	NA	87.43	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
	95.38[9]	09/30/10	DRY (10.28)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11	98.67	02/15/05	9.19	ND	NA	89.48	2.1	4.7	2.3	21.4	31	7.3	<5.0	90.9 J	52.3 J	49 J
(GW-3)		05/05/05	9.27	ND	NA	89.40	3.9	13.2	5.7	43.5	66	37.1	<5.0	92.8 J	<100	<100
Screen Interval = 8-18 ft.		08/11/05	11.85	ND	NA	86.82	11.6	27.9	20.2	80.8	141	493	7.88	<100	<100	106
		02/02/06	8.83	ND	NA	89.84	<1.0	<3.0	6.75	10.52	17	169	<5.0	<100	<100	240
		05/23/06	8.41	ND	NA	90.26	<1.0	<3.0	7.14	12.71	20	16.6	<5.0	197	188	411
		10/25/06	12.58	ND	NA	86.09	53.2	77.8	212	324	667	311	56.2	434	944	1,760
		01/04/07	9.93	ND	NA	88.74	1.70	<3.00	4.13	<6.00	6	15.4	<5.00	109	<100	72.2
		05/13/07	9.22	ND	NA	89.45	<1.00	<3.00	1.98	2.12	4	4.32	<5.00	<100	<100	58.9
		08/27/07	13.52	ND	NA	85.15	56.1	66.5	284	457	864	21.8	66.7	<1000	1,520	2,030
		02/25/08	8.73	ND	NA	89.94	2.27	13.0	13.0	12.3	41	<3.00	<5.00	395	<100	318.0
	95.55[9]	06/19/08	11.63	ND	NA	83.92	3.69	22.4	14.1	42.9	83	<3.00	<5.00	<100	108	95.6
		09/21/09	10.55	ND	NA	85.00	<1.00	<3.00	2.26	<6.00	2.26	<3.00	<5.00	<100	119	<50.0
		12/23/09[11]	8.72	ND	NA	86.83	2.59	<3.00	<1.00	12.6	15.2	<3.00	<5.00	<100	<100	61.8
		12/28/09	8.71	ND	NA	86.84	1.15	<3.00	2.10	<6.00	3.25	<3.00	5.31	<100	<100	101
		09/30/10	13.98	ND	NA	81.57	19.3	10.7	175	89.0	294	3.98	31.5	846	726	2,320
		12/06/10	13.59	ND	NA	81.96	<1.00	<3.00	3.32	<6.00	3.32	<3.00	<5.00	<100	<100	56.6
		09/22/11	9.08	ND	NA	86.47	<1.00	<3.00	4.24	<6.00	4.24	<3.00	<5.00	<100	<100	159
		01/26/12	9.11	ND	NA	86.44	<1.00	<3.00	3.02	19.8	22.79	<3.00	<5.00	<100	<100	139
		02/04/14	9.74	ND	NA	85.81	2.19	13.0	6.16	12.9	34.26	<3.00	<5.00	<100	164	<100

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Well ID GW classification	Casing Elevation (Ft)	Sampling Date	Depth to Water (Ft)	Depth to Product (Ft)	Product Thickness (Ft)	Groundwater Elevation (Ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TOTAL BTEX (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Groundwater Standards:						**GW-2**	1,000	50,000	20,000	3,000	NA	50,000	700	3,000	5,000	4,000
						GW-3	10,000	40,000	5,000	5,000	NA	50,000	20,000	50,000	50,000	50,000
MW-12	98.51	02/15/05	9.18	ND	NA	89.33	<1.0	<3.0	19.9	95.4	115	<3.0	13.1	567	521	704
(GW-3)		05/05/05	9.41	ND	NA	89.10	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
Screen Interval = 8-18 ft.		08/11/05	12.31	ND	NA	86.20	<1.0	4.46	68.0	231.1	304	15.6	49.4	682	<1000	2,440
		02/02/06	8.85	ND	NA	89.66	<1.0	<3.0	1.39	<6.0	1	<3.0	<5.0	<100	<100	126
		05/23/06	8.50	ND	NA	90.01	<1.0	11.7	7.43	36.6	56	3.71	<5.0	111	172	353
		10/25/06	12.42	ND	NA	86.09	1.69	3.65	52.5	136.4	194	<3.00	34.2	851	1,090	2,090
		01/04/07	9.95	ND	NA	88.56	<1.00	<3.00	20.3	50.6	71	<3.00	13.7	687	919	1,490
		05/13/07	9.50	ND	NA	89.01	<1.00	<3.00	6.73	21.6	28	<3.00	<5.00	<100	<100	172
		08/27/07	14.59	ND	NA	83.92	<1.00	<3.00	38.30	75.3	114	<3.00	23.8	766	1,220	1,540
		02/25/08	8.75	ND	NA	89.76	<1.00	<3.00	17.10	57.9	75	<3.00	6.2	267	<200	599
	95.41[9]	06/19/08	11.74	ND	NA	83.67	1.20	<3.00	37.3	83.4	122	<3.00	21.8	642	1,230	2,300
		09/21/09	11.21	ND	NA	84.20	<1.00	<3.00	16.5	24.0	40.5	<3.00	14.5	553	540	1,150
		12/28/09	8.74	ND	NA	86.67	<1.00	<3.00	1.32	<6.00	1.32	<3.00	<5.00	<100	<100	83.5
		03/08/10	7.77	ND	NA	87.64	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		09/30/10	13.81	ND	NA	81.60	<1.00	<3.00	7.87	8.13	16.0	<3.00	8.35	803	<200	740
		12/06/10	10.62	ND	NA	84.79	<1.00	5.66	9.71	18.92	34.3	<3.00	12.7	790	280	584
		01/26/12	9.39	ND	NA	86.02	<1.00	<3.00	2.61	<6.00	2.61	<3.00	<5.00	<100	<100	206
		02/04/14	10.06	ND	NA	85.35	<1.00	<3.00	2.79	<6.00	2.79	<3.00	<5.00	258	114	245
MW-13	98.44	02/15/05	9.09	ND	NA	89.35	<1.0	6.5	2.1	15.1	23.7	4.4	<5.0	<100	<100	<100
(GW-3)		05/05/05	9.42	ND	NA	89.02	<1.00	<3.0	<1.0	<6.0	ND	14	<5.0	<100	<100	<100
Screen Interval = 7-17 ft.		08/11/05	12.09	ND	NA	86.35	<1.0	<3.0	<1.0	<6.0	ND	709	<5.0	<200	<100	<100
		02/02/06	8.43	ND	NA	90.01	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		05/23/06	8.57	ND	NA	89.87	7.98	9.59	23.4	39.2	80	508	<5.0	<100	154	262
		10/25/06	12.28	ND	NA	86.16	1.66	<3.00	1.44	<6.00	3	421	<5.00	<100	105	<50.0
		01/04/07	9.75	ND	NA	88.69	<1.00	<3.00	<1.00	<6.00	ND	17.0	<5.00	<100	<100	<100
		05/13/07	9.39	ND	NA	89.05	2.19	<3.00	4.22	<6.00	6	16.1	<5.00	<100	132	<100
		08/27/07	13.12	ND	NA	85.32	<1.0	3.07	<1.0	<6.0	3	<3.0	<5.0	<100	<100	<100
	95.32[9]	06/19/08	11.55	ND	NA	83.77	<1.00	<3.00	<1.00	<6.00	ND	15.4	5.02	<100	<100	78.1
		11/18/08	10.67	ND	NA	84.65	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		12/23/09[11]	8.68	ND	NA	86.64	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		09/30/10[13]	13.49	ND	NA	81.83	24.5	868	387	6,570	7,850	3.63	337	18,500	5,540	24,200
		12/06/10	10.49	ND	NA	84.83	15.0	14.5	128	1,024	1,182	<3.00	238	2,030	2,770	7,980
		04/18/11	8.67	ND	NA	86.65	<1.00	<3.00	3.44	8.50	11.9	<3.00	16.8	368	484	794
		09/22/11	9.17	ND	NA	86.15	<1.00	<3.00	<1.00	<6.00	ND	<3.00	7.36	287	62.0	190
		01/26/12	9.23	ND	NA	86.09	<1.00	<3.00	<1.00	2.14	2.14	<3.00	7.82	266	<100	359
		02/04/14	9.86	ND	NA	85.46	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
MW-14	NSVD	10/25/06	13.12	ND	NA	NSVD	1,180	10,400	2,970	16,530	31,080	2,720	533	25,500	15,100	16,700
(GW-2/3)		01/04/07	10.61	ND	NA	NSVD	97.8	861	577	3,631	5,167	174	136	11,000	6,790	8,200
Screen Interval = 23'-33'		05/13/07	10.12	ND	NA	NSVD	675.0	1,170	312	1,138	3,295	2,000	48	4,940	1,030	1,480
		08/27/07	14.18	ND	NA	NSVD	29.7	4.82	96.9	173.7	305	113	23	1,800	759	1,130
		02/25/08	9.36	ND	NA	NSVD	4.49	<3.00	37.6	35.85	77.9	53.3	7.50	737	<100	332
	96.03[9]	06/19/08	12.52	ND	NA	83.51	24.9	3.41	8.28	7.75	44.3	28.2	<5.00	345	107	147
		11/18/08	11.47	ND	NA	84.56	9.70	164	22.6	159.9	356	4.64	<5.00	350	222	121
		03/20/09	9.32	ND	NA	86.71	26.7	14.0	5.04	2.84	48.6	21.5	<5.00	832	<100	129
		12/28/09	9.34	ND	NA	86.69	1.18	7.12	3.37	20.1	31.8	<3.00	5.95	123	<100	136
		03/08/10	8.52	ND	NA	87.51	6.10	<3.00	2.37	2.40	10.9	3.85	7.78	191	<100	102
		12/06/10	11.82	ND	NA	84.21	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
GT-101A [1]	98.86	11/01/99 [5]	NG	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
(GW-3)	98.71 [2]	05/25/00 [5]	NG	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Screen Interval = 75-85 ft.	98.90	09/27/01 [5]	NG	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		09/05/02 [6]	15.18	ND	NA	83.72	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
		01/07/03	8.68	ND	NA	90.22	<2.0	<2.0	<2.0	<4.0	ND	2.0	<3.0	<50	<50	<50
		02/09/04	9.28	ND	NA	89.62	<1.0	<1.0	<1.0	<3.0	ND	<1.0	NS	NS	NS	NS
		11/03/04	11.43	ND	NA	87.47	<1.0	<1.0	<1.0	<3.0	ND	<1.0	<5.0	NS	NS	NS
	98.81	02/11/05	NA	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		05/05/05	9.58	ND	NA	89.23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		08/11/05	12.24	ND	NA	86.57	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
	95.67[9]	01/26/12	10.35	ND	NA	85.32	<1.00	<3.00	<1.00	<6.00	ND	<1.00	<5.00	<100	<100	<100

Table 1. Summary of Groundwater Analytical Data:
VPH and Target Compounds (November 1999 - December 2015)
Former Mobil Service Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153, 3-23994, 3-25770 and 3-26537

Well ID GW classification	Casing Elevation (Ft)	Sampling Date	Depth to Water (Ft)	Depth to Product (Ft)	Product Thickness (Ft)	Groundwater Elevation (Ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TOTAL BTEX (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Groundwater Standards:						**GW-2**	1,000	50,000	20,000	3,000	NA	50,000	700	3,000	5,000	4,000
						GW-3	10,000	40,000	5,000	5,000	NA	50,000	20,000	50,000	50,000	50,000
GT-101B [1]	98.84	05/04/00	9.02	ND	NA	89.82	<1.0	<5.0	<5.0	<15	ND	15.2	<5.0	<100	<100	<100
(GW-3)	98.62[2]	05/25/00	NG	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Screen Interval = 46 -56 ft.		04/20/01	8.56	NA	NA	90.06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		08/09/01	10.71	ND	NA	87.91	<0.5	<2.0	<2.0	<7.5	ND	6.3	4.5	<50	<50	<50
	98.81	09/27/01	13.04	ND	NA	85.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		09/05/02	14.95	ND	NA	83.86	<2.0	<2.0	<2.0	<4.0	ND	4.6	<3.0	<50	<50	<50
		01/07/03	8.44	ND	NA	90.37	<2.0	<2.0	<2.0	<4.0	ND	8.4	<3.0	<50	<50	<50
		07/31/03	11.75	ND	NA	87.06	<1.0	1.3	<1.0	2.6	4	<1.0	NS	NS	NS	NS
		10/24/03	10.73	ND	NA	88.08	<2.0	<2.0	<2.0	2.6	3	2.7	<3.0	<50	<50	<50
		06/04/04	9.69	ND	NA	89.12	<1.0	11.2	5.4	31.6	48	5.6	<5.0	<100	<100	<100
		11/03/04	11.02	ND	NA	87.79	<1.0	<1.0	<1.0	<3.0	ND	2.5	<5.0	NS	NS	NS
	98.81	02/11/05	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		05/05/05	9.37	ND	NA	89.44	<1.0	<3.0	<1.0	<6.0	ND	3	<5.0	<100	<100	<100
		08/11/05	11.29	ND	NA	87.52	<1.0	<3.0	1.11	<6.0	1.11	<3.0	<5.0	<100	<100	<100
	95.60	1/26/2012	9.32	ND	NA	86.28	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
GT-102	98.22	11/01/99	10.78	ND	NA	87.44	<1.0	<5.0	<5.0	<15	ND	21.3	<5.0	<100	<100	<100
(GW-3)	98.39	09/27/01	13.04	ND	NA	85.35	<1.0	<5.0	<5.0	<15	ND	237	<5.0	<100	<100	<100
Screen Interval = 7-17 ft.		09/05/02	14.63	ND	NA	83.76	<2.0	<2.0	<2.0	<4.0	ND	1,250	<3.0	<50	<50	<50
		01/07/03	8.27	ND	NA	90.12	2.1	<1.0	1.2	4.4	8	309	3.1	NS	NS	NS
		02/09/04	10.52	ND	NA	87.87	<1.0	<1.0	<1.0	<3.0	ND	23.4	NS	NS	NS	NS
		06/04/04	9.93	ND	NA	88.46	<1.0	<1.0	<1.0	<3.0	ND	2.5	<5.0	NS	NS	NS
		11/03/04	10.83	ND	NA	87.56	<1.0	<1.0	<1.0	<3.0	ND	1.4	<5.0	NS	NS	NS
		08/11/05	12.02	ND	NA	86.37	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		10/25/06	12.20	ND	NA	86.19	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		02/25/08	8.85	ND	NA	89.54	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
	95.30[9]	11/18/08	10.51	ND	NA	84.79	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		03/20/09	8.29	ND	NA	87.01	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		09/21/09	10.99	ND	NA	84.31	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		12/28/09	8.28	ND	NA	87.02	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		03/08/10	7.66	ND	NA	87.64	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
GT-103	98.82	11/01/99	11.53	ND	NA	87.29	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
(GW-2/3)		05/04/00	8.06	ND	NA	90.76	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
Screen Interval = 7-19.5 ft.		01/29/01	10.11	ND	NA	88.71	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
		04/20/01	7.67	ND	NA	91.15	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
		08/09/01	10.47	ND	NA	88.35	<0.5	<2.0	<2.0	<7.5	ND	<2.0	<2.0	<50	<50	<50
	98.99	09/27/01	12.37	ND	NA	86.62	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		03/01/02	11.49	ND	NA	87.50	30.7	<5.0	7.4	<15	38	26.9	<5.0	<100	<100	<100
		09/05/02	13.33	ND	NA	85.66	<2.0	<2.0	5.9	9.3	15	<2.0	10.5	<50	<50	132
		01/07/03	8.48	ND	NA	90.51	7.4	<1.0	7.1	13.5	28	9.9	1.6	NS	NS	NS
		07/31/03	10.36	ND	NA	88.63	<1.0	<1.0	1.3	1.9	3.2	<1.0	NS	NS	NS	NS
		02/09/04	9.71	ND	NA	89.28	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		06/04/04	9.27	ND	NA	89.72	<1.0	<1.0	<1.0	<3.0	ND	<1.0	<5.0	NS	NS	NS
		02/15/05	8.03	ND	NA	90.96	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		08/11/05	11.25	ND	NA	87.74	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		01/04/07	9.35	ND	NA	89.64	<1.00	<3.00	<1.00	<6.00	ND	<3.00	6.79	<100	137	152
		08/27/07	12.31	ND	NA	86.68	<1.00	<3.00	1.24	<6.00	1.24	<3.00	6.86	<100	130	154
	95.85[9]	06/19/08	10.56	ND	NA	85.29	<1.00	<3.00	1.13	<6.00	1.13	<3.00	<5.00	<100	109	<50.0
		03/20/09	8.19	ND	NA	87.66	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		09/21/09	10.72	ND	NA	85.13	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	57.8
		12/28/09	8.21	ND	NA	87.64	<1.00	<3.00	<1.00	<6.00	ND	<3.00	6.61	<100	<100	91.0
		03/08/10	7.43	ND	NA	88.42	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		06/17/10	9.46	ND	NA	86.39	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	82.3
		09/30/10	12.62	ND	NA	83.23	<1.00	<3.00	<1.00	<6.00	ND	<3.00	6.76	<100	<100	109
		01/26/12	9.08	ND	NA	86.77	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100

GT-103 abandoned in September 2012 due to station construction.

Table 1. Summary of Groundwater Analytical Data:
VPH and Target Compounds (November 1999 - December 2015)
Former Mobil Service Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153, 3-23994, 3-25770 and 3-26537

Well ID GW classification	Casing Elevation (Ft)	Sampling Date	Depth to Water (Ft)	Depth to Product (Ft)	Product Thickness (Ft)	Groundwater Elevation (Ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TOTAL BTEX (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Groundwater Standards:						**GW-2**	1,000	50,000	20,000	3,000	NA	50,000	700	3,000	5,000	4,000
						GW-3	10,000	40,000	5,000	5,000	NA	50,000	20,000	50,000	50,000	50,000
GT-104	NSVD	01/29/01	9.57	ND	NA	NA	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
(GW-2/3)		04/20/01	7.11	ND	NA	NA	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
Screen Interval = 5-20 ft.		08/09/01	DRY(10.30)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	98.12	09/27/01	DRY(9.84)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		03/01/02	DRY(10.40)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		09/05/02	DRY(10.35)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		01/07/03	7.52	ND	NA	90.60	<2.0	<2.0	<2.0	<4.0	ND	43.7	<3.0	<50	<50	<50
		03/11/03	10.91	ND	NA	87.21	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
		07/31/03	9.74	ND	NA	88.38	<1.0	<1.0	<1.0	<1.0	ND	<1.0	NS	NS	NS	NS
		02/09/04	9.36	ND	NA	88.76	<1.0	<1.0	<1.0	<3.0	ND	<1.0	NS	NS	NS	NS
		11/03/04	DRY(10.38)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		02/15/05	7.49	ND	NA	90.63	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		08/11/05	9.60	ND	NA	88.52	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		02/02/06	7.00	ND	NA	91.12	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		05/23/06	7.25	ND	NA	90.87	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		01/04/07	8.72	ND	NA	89.40	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		05/13/07	7.84	ND	NA	90.28	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		08/27/07	DRY(10.30)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	95.00[9]	06/19/08	9.73	ND	NA	85.27	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		03/20/09	7.21	ND	NA	87.79	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		09/21/09	DRY (10.17)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/28/09	7.60	ND	NA	87.40	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		06/17/10	9.64	ND	NA	85.36	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		09/30/10	DRY (11.55)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GT-105	98.25	11/01/99	10.78	ND	NA	87.47	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
(GW-2/3)		05/04/00	8.68	ND	NA	89.57	<1.0	<5.0	<5.0	<15	ND	122	<5.0	<100	<100	<100
Screen Interval = 5-19 ft.		10/03/00	12.12	ND	NA	86.13	<1.0	<5.0	12.1	70.4	83	<5.0	<5.0	<100	120	140
		04/20/01	5.73	ND	NA	92.52	<1.0	<5.0	<5.0	<15.0	ND	<5.0	<5.0	<100	<100	<100
		08/09/01	DRY(10.90)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	98.39	09/27/01	DRY(11.80)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		03/01/02	10.81	ND	NA	87.58	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
		09/05/02	DRY(13.75)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		01/07/03	7.96	ND	NA	90.43	<1.0	<1.0	<1.0	2.6	3	1.9	1.3	NS	NS	NS
		03/11/03	9.85	ND	NA	88.54	<2.0	<2.0	<2.0	<4.0	ND	8.2	<3.0	<50	<50	<50
		07/31/03	10.44	ND	NA	87.95	<1.0	<1.0	<1.0	<1.0	ND	<1.0	NS	NS	NS	NS
		02/09/04	10.51	ND	NA	87.88	<1.0	<1.0	<1.0	<3.0	ND	<1.0	NS	NS	NS	NS
		11/03/04	10.81	ND	NA	87.58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		02/15/05	9.04	ND	NA	89.35	<1.0	<1.0	<1.0	<3.0	ND	<1.0	<5.0	NS	NS	NS
		08/11/05	12.04	ND	NA	86.35	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		10/25/06	12.21	ND	NA	86.18	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		05/13/07	9.40	ND	NA	88.99	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
	NSVD[10]															
SB-1P[4]	NSVD	11/01/99	NA	ND	NA	NA	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
(GW-2/3)		10/03/00	NA	ND	NA	NA	1.0	63.9	30.3	121.8	217	<5.0	<5.0	<100	110	<100
Screen Interval = 5-15 ft.		08/09/01	11.10	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	98.33	09/27/01	DRY(12.83)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		01/07/03	DRY(13.10)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		08/11/05	12.77	ND	NA	85.56	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		05/23/06	9.05	ND	NA	89.28	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		01/04/07	10.35	ND	NA	87.98	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		05/13/07	9.94	ND	NA	88.39	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
	95.70[9]															

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19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153, 3-23994, 3-25770 and 3-26537

Well ID GW classification	Casing Elevation (Ft)	Sampling Date	Depth to Water (Ft)	Depth to Product (Ft)	Product Thickness (Ft)	Groundwater Elevation (Ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TOTAL BTEX (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Groundwater Standards:						**GW-2**	1,000	50,000	20,000	3,000	NA	50,000	700	3,000	5,000	4,000
						GW-3	10,000	40,000	5,000	5,000	NA	50,000	20,000	50,000	50,000	50,000
SB-3P[4]	NSVD	11/01/99	NA	ND	NA	NA	<1.0	<5.0	<5.0	<15	ND	29.2	<5.0	<100	<100	<100
(GW-2/3)		05/04/00	NA	ND	NA	NA	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
Screen Interval = 3-13 ft.		04/20/01	NA	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	98.40	09/27/01	11.30	ND	NA	87.10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		01/07/03[7]	NG	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	95.29[9]	03/20/09	8.68	NA	NA	86.61	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		09/21/09	10.22	NA	NA	85.07	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		12/28/09	8.86	NA	NA	86.43	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		03/08/10	8.20	NA	NA	87.09	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		06/17/10	9.61	NA	NA	85.68	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		09/30/10	DRY (11.74)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SB-4P[4]	NSVD	11/01/99	NA	ND	NA	NA	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
(GW-2/3)	98.60	09/27/01	11.91	ND	NA	86.69	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
Screen Interval Not Available	95.51[9]															
GES-2	NSVD	08/09/01	11.43	ND	NA	NA	<0.5	<2.0	<2.0	<7.5	ND	4.6	<2.0	<50	<50	<50
(GW-2/3)	98.46	09/27/01	13.40	ND	NA	85.06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Screen Interval = 5-15 ft.		03/01/02	11.63	ND	NA	86.83	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
		09/05/02	DRY(14.85)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		03/11/03	9.98	ND	NA	88.48	<2.0	<2.0	<2.0	<4.0	ND	8.5	<3.0	<50	<50	<50
		07/31/03	Well could not be sampled due to stored equipment obstructing access.													
		02/09/04	Well could not be sampled due to stored equipment obstructing access.													
		06/04/04	Well could not be sampled due to stored equipment obstructing access.													
		11/03/04	11.06	ND	NA	87.40	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		05/05/05	9.30	ND	NA	89.16	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		08/11/05	12.39	ND	NA	86.07	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		10/25/06	12.42	ND	NA	86.04	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		08/27/07	13.48	ND	NA	84.98	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
	NSVD[10]	11/18/08	10.81	ND	NA	NA	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		03/20/09	8.29	ND	NA	NA	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	103	<50.0
	95.31	09/21/09	11.22	ND	NA	84.09	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
GES-3	99.08	09/05/02	DRY(17.74)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
(GW-2/3)		01/07/03	7.78	ND	NA	91.30	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
Screen Interval = 8-18 ft.		07/31/03	14.35	ND	NA	84.73	<1.0	<1.0	<1.0	<1.0	ND	<1.0	NS	NS	NS	NS
		10/24/03	12.15	ND	NA	86.93	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
		02/09/04	11.45	ND	NA	87.63	<1.0	<3.0	<1.0	<6.0	ND	3.3	<5.0	<100	<100	<100
		06/04/04	10.69	ND	NA	88.39	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		11/03/04	11.68	ND	NA	87.40	<1.0	<1.0	<1.0	<3.0	ND	<1.0	<5.0	NS	NS	NS
		02/15/05	9.71	ND	NA	89.37	<1.0	<1.0	<1.0	<3.0	ND	<1.0	<5.0	NS	NS	NS
		08/11/05	13.00	ND	NA	86.08	8.63	135	42.3	200.2	386	<3.0	<5.0	139	<100	<100
		02/02/06	9.38	ND	NA	89.70	<1.0	<3.0	<1.0	<6.0	ND	<3.0	<5.0	<100	<100	<100
		05/23/06	9.05	ND	NA	90.03	<1.0	<3.0	<1.0	<6.0	ND	6.69	<5.0	<100	<100	<100
		10/25/06	14.05	ND	NA	85.03	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		01/04/07	10.51	ND	NA	88.57	<1.00	<3.00	1.44	6.34	8	<3.00	<5.00	<100	263	96.2
		05/13/07	10.05	ND	NA	89.03	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		08/27/07	DRY (12.42)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		02/25/08	9.35	ND	NA	89.73	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
	95.95[9]	03/20/09	9.38	ND	NA	86.57	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		09/21/09	DRY (10.80)	ND	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		03/08/10	8.67	ND	NA	87.28	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		06/17/10	10.99	ND	NA	84.96	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		09/30/10	14.55	ND	NA	81.40	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
		1/26/12[15]	10.05	ND	NA	85.90	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100

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MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153, 3-23994, 3-25770 and 3-26537

Well ID GW classification	Casing Elevation (Ft)	Sampling Date	Depth to Water (Ft)	Depth to Product (Ft)	Product Thickness (Ft)	Groundwater Elevation (Ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TOTAL BTEX (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Groundwater Standards:						**GW-2**	1,000	50,000	20,000	3,000	NA	50,000	700	3,000	5,000	4,000
						GW-3	10,000	40,000	5,000	5,000	NA	50,000	20,000	50,000	50,000	50,000
SVE-1	98.45	02/15/05	8.68	ND	NA	89.77	5,940	51,700	5,180	42,900	105,720	89,400	790	36,000	16,200 J	12,500
(GW-2/3)		05/05/05	8.65	ND	NA	89.80	3,300	37,700	3,800	34,800	79,600	66,600	700	79,400	<20,000	13,300
Screen Interval = 5-15 ft.		08/11/05	10.93	ND	NA	87.52	9,000	61,200	5,130	36,700	112,030	57,100	624	35,700	<25,000	9,120
		02/02/06	8.36	ND	NA	90.09	4,250	40,600	4,590	36,900	86,340	99,200	1,190	<25,000	<5,000	19,800
		05/23/06	8.31	ND	NA	90.14	6,170	53,600	5,420	36,600	101,790	43,100	656	91,100	35,600	18,800
		10/25/06	11.73	ND	NA	86.72	8,750	56,500	5,160	31,900	102,310	24,800	638	72,000	21,000	14,300
		01/04/07	9.48	ND	NA	88.97	4,280	48,600	5,280	40,200	98,360	4,370	540	43,800	29,400	19,000
		05/13/07	8.65	ND	NA	89.80	1,790	23,300	2,440	24,420	51,950	697	534	29,200	15,500	12,300
		08/27/07	11.78	ND	NA	86.67	7,280	44,200	3,560	23,960	79,000	1,940	553	96,600	23,400	13,800
		02/25/08	8.35	ND	NA	90.10	5,710	50,200	6,060	40,600	102,570	5,450	590	85,600	11,300	23,500
	95.32[9]	06/19/08	10.38	ND	NA	84.94	3,740	51,800	6,640	44,600	106,780	486	1,650	58,000	33,400	35,400
		11/18/08	10.31	ND	NA	85.01	2,360	43,100	6,300	43,100	94,860	<150	1,020	90,500	16,300	14,800
		03/20/09	7.99	ND	NA	87.33	1,270	22,000	2,980	24,960	51,210	81.9	550	66,400	9,360	21,300
		09/21/09	10.06	ND	NA	85.26	1,580	35,200	5,190	32,300	74,270	63.8	838	42,500	28,700	26,000
		12/28/09	8.20	ND	NA	87.12	1,130	27,300	4,580	31,100	64,110	55.5	795	17,500	4,320	16,800
		03/08/10[12]	7.70	ND	NA	87.62	979	19,200	3,340	24,910	48,429	32.3	726	26,900	2,850	15,100
		06/17/10	9.15	ND	NA	86.17	488	8,380	1,800	14,890	25,558	7.95	602	26,000	12,200	10,700
		09/30/10[13]	12.07	ND	NA	83.25	3,900	40,700	4,520	28,340	77,460	152	829	58,200	<2,500	20,400
		12/06/10	12.31	ND	NA	83.01	2,010	37,500	5,640	35,000	80,150	60.5	939	44,500	19,900	20,300
		04/18/11	7.78	ND	NA	87.54	547	6,650	1,460	17,500	26,157	45.8	477	13,000	13,300	13,700
		09/22/11	9.05	ND	NA	86.27	761	21,400	3,470	28,300	53,931	<3.00	858	29,400	<2,500	18,900
		01/26/12[15][16]	8.63	ND	NA	86.69	495	12,800	2,620	18,360	34,275	<150	671	14,500	7,420	13,300
		07/17/12[17]	10.10	ND	NA	85.19	546	18,300	2,950	23,000	44,796	<1.00	533	NS[17]	NS[17]	NS[17]
		03/25/13[15][17]	7.78	ND	NA	87.51	710	8,830	1,840	16,100	27,480	12.0	621	5,250	5,050	9,040
		02/04/14[15]	9.78	ND	NA	85.51	2,070	22,500	2,300	22,740	49,610	<300	552	30,600	12,700	10,500
		12/17/14	8.08	ND	NA	87.21	352	6,880	1,240	14,070	22,542	<150	431	14,500	23,400	9,340
		07/14/15[15]	10.40	ND	NA	84.89	74.7	6,320	1,550	20,690	28,635	<300	697	10,400	25,300	13,400
		12/22/15	13.06	ND	NA	82.23	1,380	18,300	2,690	26,960	49,330	34.3	688	16,700	22,400	14,100
SVE-4	NSVD	08/27/07	13.07	ND	NA	NSVD	439	3,590	1,170	4,260	9,459	918	152	9,450	4,570	7,000
(GW-2/3)	95.72[9]	03/20/09	9.00	ND	NA	86.72	31.0	1,160	1,520	8,340	11,051	6.53	537	3,930	3,040	16,800
Screen Interval = 6-16'		09/21/09	11.57	ND	NA	84.15	201	5,450	3,300	13,820	22,771	46.0	375	7,100	7,480	13,300
		12/28/09	9.18	ND	NA	86.54	36.9	505	480	2,255	3,276	9.73	94.0	518	<500	3,680
		03/08/10	8.23	ND	NA	87.49	86.1	1,620	1,310	5,270	11,563	15.8	203	2,690	1,280	6,540
		06/17/10	10.71	ND	NA	85.01	217	5,380	4,010	17,550	27,157	15.4	546	19,000	12,200	23,800
		09/30/10	14.23	ND	NA	81.49	47.3	215	397	2,174	2,833	40.1	97.8	1,820	<500	5,200
		12/06/10	11.81	ND	NA	83.91	7.72	94.0	149	461	712	3.21	29.7	451	<500	620
		04/18/11	8.63	ND	NA	87.09	49.9	2,520	1,760	7,750	12,080	11.0	165	5,320	6,170	5,620
		09/22/11	9.73	ND	NA	85.99	25.1	366	550	2,227	3,168	8.66	69.0	740	<250	2,210
		01/26/12[15][16]	9.85	ND	NA	85.87	11.1	391	1000	4,330	5,732	<30.0	342	<500	3070	11,700
SVE-4 overdrilled and replaced with TPE-9 in October 2012																
TPE-9	NSVD	03/25/13[15]	8.35	ND	NA	NSVD	6.28	257	553	1,994	2,810	<15.0	81.2	1,080	538	2,610
(GW-2/3)		02/04/14[15]	10.41	ND	NA	NSVD	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
Screen Interval = 5-25'		12/17/14	8.13	ND	NA	NSVD	2.34	<3.00	5.96	11.4	19.7	<3.00	<5.00	<100	123	<100

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Well ID GW classification	Casing Elevation (Ft)	Sampling Date	Depth to Water (Ft)	Depth to Product (Ft)	Product Thickness (Ft)	Groundwater Elevation (Ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TOTAL BTEX (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Groundwater Standards:						**GW-2**	1,000	50,000	20,000	3,000	NA	50,000	700	3,000	5,000	4,000
						GW-3	10,000	40,000	5,000	5,000	NA	50,000	20,000	50,000	50,000	50,000
SVE-5	NSVD	09/30/10	14.26	14.25	0.01	NSVD	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
(GW-2/3)		12/06/10	11.06	ND	NA	NSVD	362	3,590	3,880	16,660	24,492	74.6	416	17,300	10,100	21,200
Screen Interval = 6-16'		04/18/11	8.61	ND	NA	NSVD	415	6,840	2,890	19,520	29,665	28.2	463	14,200	14,300	13,500
		09/22/11	9.72	ND	NA	NSVD	206	4,900	4,150	23,730	32,986	20.9	840	6,770	<2,500	21,200
		01/26/2012[15]	9.82	ND	NA	NSVD	668	9,820	3,590	21,300	35,378	<30.0	649	12,100	9,610	17,800
		03/25/13[15]	8.35	ND	NA	NSVD	177	3,310	1,740	11,070	16,297	17.3	300	5,060	9,720	10,100
		02/04/14	10.47	ND	NA	NSVD	41.6	373	963	5,050	6,428	<30.0	180	1,720	9,170	7,780
		12/17/14	8.22	ND	NA	NSVD	<10.0	<30.0	108	500	608	<30.0	<50.0	1,280	2,740	2,270
SVE-6	NSVD	08/27/07	11.51	ND	NA	NSVD	380	10,100	3,380	24,110	37,970	97.4	477	20,800	15,500	11,600
(GW-2/3)	95.53[9]	03/20/09	8.12	ND	NA	87.41	270	2,410	2,730	21,320	26,730	15.3	778	4,930	6,550	21,000
Screen Interval = 6-16'		09/21/09	10.36	ND	NA	85.17	327	1,810	3,090	20,970	26,197	41.1	886	7,560	11,500	22,300
		12/28/09	8.58	ND	NA	86.95	278	2,180	3,400	19,830	25,688	32.2	823	5,410	<5,000	16,700
		03/08/10	7.63	ND	NA	87.90	288	2,330	3,200	22,230	28,048	29.2	760	5,560	2,770	17,300
		06/17/10	9.36	ND	NA	86.17	254	873	2,850	18,350	22,327	8.32	788	9,960	<5,000	28,000
		09/30/10[13]	12.29	ND	NA	83.24	237	5,930	3,440	24,110	33,717	43.3	792	21,500	<2500	14,500
		12/06/10	9.23	ND	NA	86.30	367	2,930	3,820	26,030	33,147	50.8	1,050	7,150	13,400	22,400
		04/18/11	8.07	ND	NA	87.46	162	1,290	2,880	18,240	22,572	24.4	685	4,720	14,500	15,000
		09/22/11	9.12	ND	NA	86.41	143	2,180	2,960	25,720	31,003	21.9	935	4,200	<2,500	21,200
		01/26/12[15][16]	9.02	ND	NA	86.51	116	1,250	1,710	16,700	19,776	<150	734	<2500	6,390	16,600
SVE-6 overdrilled and replaced with TPE-7 in October 2012																
TPE-7	NSVD	03/25/13[15]	8.40	ND	NA	NSVD	53.1	574	1,040	6,050	7,717	8.5	222	2,280	2,250	5,550
(GW-2/3)		02/04/14[15]	10.68	ND	NA	NSVD	44.4	361	1,110	6,160	7,675	<30.0	303	1,280	8,700	6,170
Screen Interval = 5-23'		12/17/14	8.72	ND	NA	NSVD	11.2	196	290	1,809	2,306	<30.0	130	1,140	4,800	3,630
		07/14/15	11.92	11.90	0.02	NSVD	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/22/15	14.14	14.13	0.01	NSVD	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
TPE-1		03/25/13	8.07	ND	NA	NSVD	506	3,930	438	4,280	9,154	<30.0	116	23,600	1,680	3,190
(GW-2/3)		02/04/14[15]	10.29	ND	NA	NSVD	1,600	8,240	1,630	9,590	21,060	46.7	308	12,300	7,510	6,240
Screen Interval = 7-24'		12/17/14	8.02	ND	NA	NSVD	3.14	31.1	12.9	99.6	147	<3.00	6.11	153	254	139
		07/14/15[15]	11.56	ND	NA	NSVD	5,150	32,200	3,080	20,110	60,540	136	434	44,300	22,700	10,900
		12/22/15[15]	13.78	ND	NA	NSVD	3,090	13,900	1,900	11,160	30,050	96.3	261	14,700	16,400	<10,000
TPE-2[18]		03/25/13	7.77	ND	NA	NSVD	23.4	109	347	1,653	2,132	<15.0	116	1,410	978	5,720
(GW-2/3)		02/04/14	9.95	ND	NA	NSVD	256	2,810	1,740	11,930	16,736	<30.0	552	5,480	12,200	10,800
Screen Interval = 7-19'		12/17/14	8.01	ND	NA	NSVD	<10.0	149	135	631	915	<30.0	53.6	1,100	2,750	2,020
		07/14/15[15]	11.11	ND	NA	NSVD	94.4	2,080	434	4,590	7,198	3.34	187	3,590	19,800	<10,000
		12/22/15	13.49	ND	NA	NSVD	336	712	1,440	5,340	7,828	<30.0	325	1,800	17,300	<10,000
TPE-3		02/04/14	10.10	ND	NA	NSVD	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	243	112	<100
(GW-3)		07/14/15[15]	11.25	ND	NA	NSVD	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	107	<100
Screen Interval = 7-18'		12/22/15	13.45	ND	NA	NSVD	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	<100	<100	<100
TPE-4		03/25/13	8.40	ND	NA	NSVD	3.90	22.4	15.6	252.3	294	7.71	12.2	506	<500	900
(GW-2/3)		02/04/14	10.91	ND	NA	NSVD	44.6	86.6	77.4	710	919	14.0	58.8	1,520	1,230	2,270
Screen Interval = 7-30'		12/17/14	8.99	ND	NA	NSVD	27.9	39.8	32.2	122	222	6.68	11.2	573	379	279
		07/14/15[15]	11.23	ND	NA	NSVD	<1.00	<3.00	<1.00	4.46	4.46	<3.00	<5.00	<100	880	1,350
		12/22/15	14.19	ND	NA	NSVD	37.9	13,500	2,510	14,800	30,848	75.5	366	14,500	26,800	<10,000
TPE-5		03/25/13	8.10	ND	NA	NSVD	124	1,520	623	4,610	6,877	17.5	92.3	2,840	1,010	4,250
(GW-2/3)		02/04/14[15]	10.23	ND	NA	NSVD	451	1,170	306	2,054	3,981	40.3	52.5	3,320	1,350	1,530
Screen Interval = 5-25'		07/14/15[15]	11.41	ND	NA	NSVD	2,740	25,900	3,180	14,640	46,460	172	223	35,200	26,600	<10,000
		12/22/15[15]	13.65	ND	NA	NSVD	2,050	14,600	1,890	7,990	26,530	91.8	130	16,000	15,600	<10,000

Table 1. Summary of Groundwater Analytical Data:
VPH and Target Compounds (November 1999 - December 2015)
Former Mobil Service Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153, 3-23994, 3-25770 and 3-26537

Well ID GW classification	Casing Elevation (Ft)	Sampling Date	Depth to Water (Ft)	Depth to Product (Ft)	Product Thickness (Ft)	Groundwater Elevation (Ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TOTAL BTEX (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)
MCP Method 1 Groundwater Standards:						**GW-2**	1,000	50,000	20,000	3,000	NA	50,000	700	3,000	5,000	4,000
						GW-3	10,000	40,000	5,000	5,000	NA	50,000	20,000	50,000	50,000	50,000
TPE-6[19]		03/25/13	8.25	ND	NA	NSVD	<1.00	<3.00	<1.00	<6.00	ND	<3.00	<5.00	153	136	<100
(GW-2/3)		02/04/14	10.85	ND	NA	NSVD	229	2,030	885	3,680	6,824	84.9	236	8,500	2,300	4,800
Screen Interval = 5-23'		12/17/14	9.07	ND	NA	NSVD	195	978	713	2,016	3,902	59.4	216	6,180	5,350	3,440
TPE-8[20]		03/25/13	8.43	ND	NA	NSVD	195	7,680	3,840	21,390	33,105	11.6	260	25,400	13,600	8,530
(GW-2/3)		02/04/14[15]	10.47	ND	NA	NSVD	3.80	179	117	1,243	1,543	<3.00	31.9	365	1,210	1,040
Screen Interval = 5-25'		12/17/14	8.25	ND	NA	NSVD	7.44	127	183	1,081	1,398	<15.0	37.4	603	2,170	1,170
		12/22/15[15]	13.95	ND	NA	NSVD	<1.00	8.66	5.47	33.99	48.12	<3.00	<5.00	<100	101	<100

Notes:
MTBE = Methyl tertiary-butyl ether.
ND = Not detected above method detection limit.
NG = Not gauged.
NS = Not sampled.
NA = Not applicable.
ND = Not Detected.
NSVD = No survey data available.
J = Estimated Value below Report Limit.
Concentrations given in micrograms per liter (µg/L), which is equivalent to parts per billion (ppb).
Concentrations in **BOLD** exceed the applicable MCP Method 1 GW-1 groundwater standards.
Concentrations underlined exceed MCP Method 1 GW-2 groundwater standards (if applicable).
Shaded concentrations exceed the applicable MCP Method 1 GW-3 groundwater standard.
Italics = The laboratory reporting limit is greater than or equal to the applicable MCP Method 1 Groundwater Standard.
< Less than - the number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.
Wells were resurveyed on September 27, 2001 by GES personnel.
Table was modified from previous versions to reflect revisions to the MCP Method 1 Standards effective February 14, 2008.
Table was modified from previous versions to reflect revisions to the MCP Method 1 Standards effective June 20, 2014.
(1) GT-101A and GT-101B are bedrock wells with screened intervals of 75' to 85' and 46' to 56' below grade, respectively.
(2) New casing elevation due to road box repair completed on 5/25/00.
(3) Groundwater samples were not collected from MW-4 on 10/3/00 due to the observation of a sheen.
(4) SB-1P, SB-3P, and SB-4P are permanent 0.75 inch micro wells. Due to the small diameter and slow recharge of these wells, gauging could not always be performed, however, groundwater samples have been collected.
(5) Well could not be gauged or sampled due to an obstruction in PVC casing.
(6) Monitoring well has obstruction at approximately 40 feet below grade, therefore groundwater sample was collected above from above 40 feet below grade.
(7) Monitoring well could not be accessed due to thick ice covering well.
(8) VPH C9-C12 aliphatic range results were above the calibration range and should be considered estimated values. Insufficient sample volume available for additional dilutions.
(9) Professional survey completed by CT Male Associates on 5/22/2008.
(10) Well could not be located during professional survey performed on 5/22/2008.
(11) Well was sampled as part of an Emergency Response and was not properly purged prior to collecting a sample. Therefore, the data should not be considered representative of actual conditions.
(12) Due to sample matrix effects, the surrogate recovery of 2,5-Dibromotoluene was outside the acceptance limits.
(13) The VPH PID Surrogate recoveries were outside QC limits due to sample matrix.
(14) After purging, insufficient water to sample.
(15) Wells were sampled using low-flow methodology.
(16) The reporting limit for MTBE and/or C5-C8 Aliphatics was raised due to sample matrix effects.
(17) Samples from July 2012 and March 2013 anlayzed for VOCs (target compounds) by EPA Method 8260C and MassDEP VPH analysis (fractions).
(18) TPE-2 was installed in the borehole for former point AS-1 (overdrilled in October 2012).
(19) TPE-6 was installed in the borehole for former point AS-2 (overdrilled in October 2012).
(20) TPE-8 was installed in the borehole for former point AS-3 (overdrilled in October 2012).

Table 2. Summary of Groundwater Analytical Data:
PAHs, EPH, Metals, EDB and VOCs by 8260 (April 2001 - December 2015)
Former Mobil Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153, 3-23994, 3-25770 and 3-26537

Sample ID GW Classification Collection Date: Depth to Water (feet)	MW-1 GW-2/3 03/11/03 10.38	MW-1 GW-2/3 07/31/03 10.21	MW-1 GW-2/3 02/09/04 10.09	MW-1 GW-2/3 08/11/05 11.09	MW-1 GW-2/3 05/13/07 8.95	MW-4 GW-2/3 04/20/01 8.53	MW-4 GW-2/3 08/09/01 11.50	MW-4 GW-2/3 03/02/02 10.78	MW-4 GW-2/3 01/07/03 8.39	MW-4 GW-2/3 03/11/03 9.90	MW-4 GW-2/3 07/31/03 10.48	MW-4 GW-2/3 10/24/03 11.46	MW-4 GW-2/3 02/09/04 10.5	MW-4 GW-2/3 03/02/04 11.34	MW-4 GW-2/3 11/03/04 10.99	MW-4 GW-2/3 02/15/05 8.80	MW-4 GW-2/3 05/05/05 9.18	MW-4[4][6] GW-2/3 08/11/05 12.16	MW-4[4] GW-2/3 02/02/06 8.61	MW-4 GW-2/3 05/23/06 8.40	MW-4[5] GW-2/3 10/25/06 12.33	MW-4 GW-2/3 01/04/07 9.82	MW-4 GW-2/3 05/13/07 9.26	MW-4 GW-2/3 08/27/07 13.38	MW-4 GW-2/3 02/25/08 8.60	MW-4 GW-2/3 06/19/08 11.49	MW-4 GW-2/3 11/18/08 10.70	MW-4[10] GW-2/3 03/20/09 8.51	MW-4 GW-2/3 09/21/09 11.06	MW-4 GW-2/3 12/28/09 8.67	MW-4 GW-2/3 03/08/10 7.76	MW-4 GW-2/3 06/17/10 10.11	MW-4 GW-2/3 09/30/10 13.79	MW-4 GW-2/3 12/06/10 11.55	MW-4 GW-2/3 04/18/11 8.15	MW-4[4] GW-2/3 01/26/12 9.34	MW-4[4] GW-2/3 07/17/12 11.31	MW-4[4][15] GW-2/3 03/25/13 7.86	MW-4[4] GW-2/3 02/04/14 9.97	MW-4 GW-2/3 12/17/14 7.80	MW-4[4] GW-2/3 07/14/15 11.04	MW-4[4] GW-2/3 12/22/15 13.40	MCP Method 1 GW-2 Standards[7] (µg/L)	MCP Method 1 GW-3 Standards[7] (µg/L)
Polycyclic Aromatic Hydrocarbons (µg/L):																																										
2-Methylnaphthalene	NS	NS	NS	NS	NS	460[1]	1,300[1]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	615	53.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	40.8	NS	NS	NS	NS	2,000	20,000
Naphthalene	NS	NS	NS	NS	NS	700[1]	2,000[1]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	197	329	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	194	NS	NS	NS	NS	700	20,000
Acenaphthylene	NS	NS	NS	NS	NS	220[1]	300[1]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10000	40
Acenaphthene	NS	NS	NS	NS	NS	<4.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.0	<10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	10,000
Fluorene	NS	NS	NS	NS	NS	<0.87	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	40
Phenanthrene	NS	NS	NS	NS	NS	<0.36	25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10.7	<10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	10,000
Anthracene	NS	NS	NS	NS	NS	0.81J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	30
Fluoranthene	NS	NS	NS	NS	NS	1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	200
Pyrene	NS	NS	NS	NS	NS	1.9J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	20
Benzo(a)anthracene	NS	NS	NS	NS	NS	0.26J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	1,000
Chrysene	NS	NS	NS	NS	NS	<0.31	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	70
Benzo(b)fluoranthene	NS	NS	NS	NS	NS	0.32	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	400
Benzo(k)fluoranthene	NS	NS	NS	NS	NS	0.16J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	100
Benzo(a)pyrene	NS	NS	NS	NS	NS	0.27J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	500
Dibenz(a,h)anthracene	NS	NS	NS	NS	NS	<0.15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	40
Benzo(g,h,i)perylene	NS	NS	NS	NS	NS	<0.51	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	20
Indeno(1,2,3-cd)pyrene	NS	NS	NS	NS	NS	0.42J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	100
Semivolatile Organic Compounds (ug/L):																																										
Acetophenone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50.7	78.1	NS	NS	NS	NS	NA	NA
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	22.5	15.7	NS	NS	NS	NS	40,000	50,000
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<10.0	<10	NS	NS	NS	NS	NA	NA
3 & 4 Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	24.3	15.6	NS	NS	NS	NS	NA	NA
Extractable Petroleum Hydrocarbons (µg/L):																																										
C9-C18 Aliphatics	NS	NS	NS	NS	NS	4,000[1]	38,000[1]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	361	<100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,000	50,000
C19-C36 Aliphatics	NS	NS	NS	NS	NS	310	<10,000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<100	<100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	50,000
C11-22 Aromatics	NS	NS	NS	NS	NS	<400[1]	2,000[1]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<100	<100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50,000	5,000
RCRA 8, CAM or ICP Metals (µg/L) (Dissolved):																																										
Mercury	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.200	<0.20	NS	NS	NS	NS	NA	20
Barium	NS	NS	NS	NS	NS	NS	229	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	303	355	NS	NS	NS	NS	NA	50,000
Cadmium	NS	NS	NS	NS	NS	NS	1.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	<4.0	NS	NS	NS	NS	NA	4
Chromium	NS	NS	NS	NS	NS	NS	<1.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5.00	<10	NS	NS	NS	NS	NA	300
Antimony	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<10.0	<6.0	NS	NS	NS	NS	NA	8,000
Beryllium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<4.00	<4.0	NS	NS	NS	NS	NA	200
Nickel	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<10.0	<40	NS	NS	NS	NS	NA	200
Thallium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<10.0	<5.0	NS	NS	NS	NS	NA	3,000
Vanadium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<20.0	<10	NS	NS	NS	NS	NA	4,000
Zinc	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<50.0	<20	NS	NS	NS	NS	NA	900
Lead	<5.0	<5.0	<5.0	<5.0	<5.0	NS	183	47.3	33.6	59.8	138	189	150[2]	144	227	188	89	134	47.3	35.3	146.0	60.30	85.1	227.0	28.0	101	97.7	<50	107	24.5	59.3	20.0	355	17.7	382	117	258	29.6	36.6	186	78.8	518	NA	10
Silver	NS	NS	NS	NS	NS	NS	<1.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5.00	<5.0	NS	NS	NS	NS	NA	7
Arsenic	NS	NS	NS	NS	NS	NS	33.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	16.5	17.1	NS	NS	NS	NS	NA	900
Selenium	NS	NS	NS	NS	NS	NS	<4.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<10.0	<10	NS	NS	NS	NS	NA	100
RCRA 8, CAM or ICP Metals (µg/L) (Total):																																										
Lead	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	131	87.6	494	NA	10
Organic Lead by GFAA (µg/L)																																										
Tetraethyl Lead	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
EDB (µg/L)																																										
1,2-Dibromoethane	<0.015	<0.014	<0.02	NS	<.0203	NS	NS	NS	NS	3.8	6.3	15.5	4.86	NS	2.81	1.42	0.68	NS	1.47	0.969	18.3	1.41	2.51	10.2	0.966	6.43	2.46	<1.00	4.06	0.1695	0.3977	NS	NS	NS	NS	NS	NS	<2.0	NS	NS	NS	NS	2	50,000
Volatile Organics - MCP CAM Method 8260																																										
Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<500	110	<50	<50.0	<50.0	<50.0	<10,000	<500	<50.0	<50.0	<50.0	<1000	<50.0[13]	NS	NS	NS	NS	NS	<50.0	<5.0	NS	NS	NS	NS	50,000	50,000
Tert-Amyl Methyl Ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,220	630	572	1,330	654	828	2100	176	NS	1,010	157	185	<20.0	79.4	NS	NS	NS	NS	NS	44.5	<2.0	NS	NS	NS	NS	50,000	50,000(7)
Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,420	1,070	890	4,020	1,490	664	2560	470	1,980	892	412	1,050	42.2	220	NS	NS	NS	NS	NS	637	116	NS	NS	NS	NS	1,000	10,000
Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5.0	<1.0	<1.0	<1.00	<1.00	<1.00	<200	<10.0	<1.00	<1.00	<1.00	<1.00	<20.0	<1.00	NS	NS	NS	NS	NS	<1.00	<1.0	NS	NS	NS	NS	700	50,000
tert-Butylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5.0	9	<1.0	<1.00	<1.00	<1.00	<200	<10.0	<1.00	<1.00	NS	<1.00	<20.0	1.26	NS	NS	NS	NS	NS	<1.00	<5.0	NS	NS	NS	NS	NA	NA
n-Butylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	48	98.5	<1.0	<1.00	<1.00	102	428	146	82.2	132	146	86.3	185	130	NS	NS	NS	NS	NS	54.5	<5.0	NS	NS	NS	NS	NA	NA
sec-Butylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	16.8	129	30.2	<1.00	33.9	26.9	492	35.6	26.3	35.0	49.5	26.6	38.8	34.5	NS	NS	NS	NS	NS	<1.00	18.8	NS	NS	NS	NS	NA	NA
Tertiary Butyl Alcohol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<4,000	<200	189	111	90.4	84.8[11]	<400	127[14]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	<1.0	1.58	<50.0	<1.00	<1.00	<200	<10.0	<1.00	<1.00	<1.00	<1.00	<20.0	<1.00	NS	NS	NS	NS	NS	<1.00	<2.0	NS	NS	NS	NS	NA	NA
Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8,670	4,570	4,400	8,280	4,450	6,710	11,100	2,900	11,300	7,570	6,470	9,100	1,350	3,470	NS	NS	NS	NS	NS	6,360	1,590	NS	NS	NS	NS	20,000	5,000
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	217	158	201	304	169	189	702	177	1,560	266	204	340	116	199	NS	NS	NS	NS	NS	170	88.5	NS	NS	NS	NS	NA	NA
p-Isopropyltoluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25.1	24.2	18.5	<1.00	71.2	19.1	388	21.5	16.8	23.1	31.0	17.1	30.4	25.2	NS	NS	NS	NS	NS	10.6	19.1	NS	NS	NS	NS	NA	NA
Methyl tert-Butyl Ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10,600	2,200	3,550	6,260	2,880	1,420	2,650	468	619	848	127	137	<20.0	60.3[14]	NS	NS	NS	NS	NS	<1.00	8.7	NS	NS	NS	NS	50,000	50,000
Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	384	449	383	496	913	733	2,180	310	3,160	558	505	778	262	474	NS	NS	NS	NS	NS	585	327	NS	NS	NS	NS	700	20,000
n-Propylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	449	386	586	716	1,280	711	1,260	529	2,300	754	604	1,070	377	758	NS	NS	NS	NS	NS	468	263	NS	NS	NS	NS	NA	NA
Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10.6	<1.00	<1.0	<1.00	<1.00	<1.00	<200	<10.0	<1.00	<1.00	<1.00	<1.00	<20.0	<1.00	NS	NS	NS	NS	NS	<1.00	<1.0	NS	NS	NS	NS	50	30,000
Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	40,900	15,500	8,720	34,100	8,900	17,400	36,000	4,440	24,400	20,300	11,500	24,200	1,070	3,250	NS	NS	NS	NS	NS	17,300	766	NS	NS	NS	NS	50,000	40,000
1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.0	<1.0	<1.0	1.76	<1.00	<1.00	<200	<10.0	1.70	<1.0	<1.00	<1.00	<20.0	<1.00	NS	NS	NS	NS	NS	<1.00	<1.0	NS	NS	NS	NS	4,000	20,000
1,3,5-Trimethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	904	964	1,100	1,310	2,650	1,500	2,550	1,090	4,030	1,500	1,340	2,040	1,130	1,570	NS	NS	NS	NS	NS	899	511	NS	NS	NS	NS	NA	NA
1,2,4-Trimethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,790	3,050	4,060	4,160	4,370	5,100	7,330	3,260	11,700	5,040	7,340	6,720	3,270	4,480	NS	NS	NS	NS	NS	3,040	1,620	NS	NS	NS	NS	NA	NA
Total Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	40,400	19,400	18,500	35,200	19,700	30,100	50,500	13,100	45,700	33,000	29,700	42,100	7,520	16,600	NS	NS	NS	NS	NS	28,100	6,970	NS	NS	NS	NS	3,000	5,000
Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	7.38	<1.0	<1.00	<1.00	5.85	<200	<10.0	3.47	2.43	<1.00	2.50	<20.0	1.66	NS	NS	NS	NS	NS	<1.00	<1.0	NS	NS	NS	NS	200	1,000
1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	15.6	17.5	9.1	8.64	24.0	<200	<10.0	8.82	9.86	18.0	11.3	<20.0	12.6	NS	NS	NS	NS	NS	9.21	9.2[16]	NS	NS	NS	NS	8,000	2,000
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	1.15	1.27	<1.00	<1.00	2.04	<200	<10.0	<1.00	1.01	1.63	1.05	<20.0	1.32	NS	NS	NS	NS	NS	<1.00	<1.0	NS	NS	NS	NS	6,000	50,000
1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5.0	<1.0	<1.0	<1.00	<1.00	<1.00	<200	<10.0	<1.00	<1.00	<1.00	<1.00	<20.0	<1.00	NS	NS	NS	NS	NS	17.0	<1.0	NS	NS	NS	NS	5	20,000
1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	2.27	<1.0	<1.00	1.65	3.79	<200	<10.0	1.66	1.75	3.05	1.78	<20.0	2.46	NS	NS	NS	NS	NS	1.44	2.1	NS	NS	NS	NS	60	8,000

Table 2. Summary of Groundwater Sample Analytical Results:
PAHs, EPH, Metals, EDB and VOCs by 8260 (April 2001 - December 2014)
Mobil Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153, 3-23994, 3-25770 and 3-26537

Sample ID GW Classification Collection Date: Depth to Water (feet)	MW-4D GW-3 02/15/05 9.60	MW-4D GW-3 05/05/05 9.85	MW-4D GW-3 05/23/06 9.01	MW-4D GW-3 10/25/06 12.97	MW-4D GW-3 01/04/07 10.47	MW-4D GW-3 05/13/07 10.02	MW-4D GW-3 08/27/07 14.09	MW-4D GW-3 02/25/08 9.25	MW-4D GW-3 11/18/08 11.35	MW-4D GW-3 03/20/09 9.24	MW-4D GW-3 09/21/09 11.75	MW-4D GW-3 12/28/09 9.28	MW-4D GW-3 03/08/10 9.28	MW-4D GW-3 06/17/10 10.90	MW-5 GW-2/3 08/09/01 12.29	MW-5 GW-2/3 07/31/03 11.51	MW-5 GW-2/3 02/09/04 10.87	MW-5 GW-2/3 03/02/04 12.34	MW-5 GW-2/3 06/04/04 10.60	MW-5 GW-2/3 11/03/04 11.92	MW-5[4)(6)] GW-2/3 08/11/05 13.26	MW-5 GW-2/3 05/13/07 10.43	MW-5 GW-2/3 03/08/10 7.95	MW-8 GW-3 06/04/04 10.21	MW-9 GW-2/3 06/04/04 9.88	MW-11 GW-2/3 02/15/05 9.19	MW-11 GW-2/3 05/13/07 9.22	MW-12 GW-3 02/15/05 9.18	MW-12 GW-3 05/13/07 9.5	MW-12 GW-3 03/08/10 7.77	MW-13 GW-3 02/15/05 9.09	MW-13 GW-3 05/13/07 9.39	MW-14 GW-2/3 05/13/07 10.12	MW-14 GW-2/3 08/27/07 14.18	MCP Method 1 GW-2 Standards[7] (µg/L)	MCP Method 1 GW-3 Standards[7] (µg/L)
Polycyclic Aromatic Hydrocarbons (µg/L):																																			
2-Methylnaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.9	NS	NS	NS	NS	NS	1.28	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,000	20,000
Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<2	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	700	20,000
Acenaphthylene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<2	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10000	40
Acenaphthene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	10,000
Fluorene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	40
Phenanthrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.1	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	10,000
Anthracene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	30
Fluoranthene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	200
Pyrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	20
Benzo(a)anthracene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	1,000
Chrysene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	70
Benzo(b)fluoranthene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	400
Benzo(k)fluoranthene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	100
Benzo(a)pyrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	500
Dibenzo(a,h)anthracene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	40
Benzo(g,h,I)perylene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	20
Indeno(1,2,3-cd)pyrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	100
Acetophenone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	40,000	50,000
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
3 & 4 Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
Extractable Petroleum Hydrocarbons (µg/L):																																			
C9-C18 Aliphatics	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<150	NS	NS	NS	NS	NS	<100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,000	50,000
C19-C36 Aliphatics	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	520	NS	NS	NS	NS	NS	<100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	50,000
C11-22 Aromatics	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<200	NS	NS	NS	NS	NS	<100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50,000	5,000
RCRA 8, CAM or ICP Metals (µg/L) (Dissolved):																																			
Mercury	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	20
Barium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	32.2	NS	NS	NS	NS	NS	139	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	50,000
Cadmium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.64	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	4
Chromium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.7	NS	NS	NS	NS	NS	<5.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	300
Antimony	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<6.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	8,000
Beryllium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<4.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	200
Nickel	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<10.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	200
Thallium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<4.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	3,000
Vanadium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	4,000
Zinc	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	57.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	900
Lead	8.0	8.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.4	<5.0	6[2)]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	10
Silver	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.3	NS	NS	NS	NS	NS	<5.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	7
Arsenic	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<3.7	NS	NS	NS	NS	NS	<10.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	900
Selenium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<4.3	NS	NS	NS	NS	NS	<10.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	100
RCRA 8, CAM or ICP Metals (µg/L) (Total):																																			
Lead	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	10
Organic Lead by GFAA (µg/L)																																			
Tetraethyl Lead	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
EDB (µg/L)																																			
1,2-Dibromoethane	0.66	1.47	0.0305	0.0571	<0.0200	<0.0197	<0.0198	<0.0196	<0.0198	<0.0200	0.0576	<0.01972	<0.01955	NS	NS	<0.014	<0.02	NS	NS	<0.02	NS	<.0203	NS	NS	NS	<0.02	<.0199	<0.02	<.0199	NS	<0.02	<.0199	1.25	NS	2	50,000
Volatile Organics - MCP CAM Method 8260																																			
Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<50.0	NS	NS	NS	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50,000	50,000
Tert-Amyl Methyl Ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.59	NS	NS	NS	NS	NS	NS	NS	NS	4.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	9.81	50,000	50,000(7)
Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.19	NS	NS	NS	NS	NS	NS	NS	NS	2.44	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25.4	1,000	10,000
Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	NS	NS	NS	NS	NS	2.31	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	700	50,000
tert-Butylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
n-Butylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
sec-Butylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
Tertiary Butyl Alcohol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<20.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	214	NA	NA
Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.99	NS	NS	NS	NS	NS	NS	NS	NS	15.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	96.8	20,000	5,000
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	NS	NS	NS	NS	NS	0.69	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
p-Isopropyltoluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
Methyl tert-Butyl Ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.83	NS	NS	NS	NS	NS	NS	NS	NS	21.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	145	50,000	50,000
Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5.00	NS	NS	NS	NS	NS	NS	NS	NS	<5.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	32.8	700	20,000
n-Propylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	NS	NS	NS	NS	NS	1.08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50	30,000
Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.43	NS	NS	NS	NS	NS	NS	NS	NS	39.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.86	50,000	40,000
1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,000	20,000
1,3,5-Trimethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.46	NS	NS	NS	NS	NS	NS	NS	NS	2.41	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
1,2,4-Trimethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8.04	NS	NS	NS	NS	NS	NS	NS	NS	8.52	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
Total Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20.7	NS	NS	NS	NS	NS	NS	NS	NS	74.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	175	3,000	5,000
Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	200	1,000
1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8,000	2,000
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,000	50,000
1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5	20,000
1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	60	8,000

Table 2. Summary of Groundwater Sample Analytical Results:
PAHs, EPH, Metals, EDB and VOCs by 8260 (April 2001 - December 2014)
Mobil Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153, 3-23994, 3-25770 and 3-26537

Sample ID GW Classification Collection Date: Depth to Water (feet)	GT-101B GW-3 08/09/01 10.71	GT-101B GW-3 07/31/03 11.75	GT-101B GW-3 05/05/05 9.37	GT-102 GW-3 06/04/04 9.93	GT-102 GW-3 03/08/10 7.66	GT-103 GW-2/3 04/20/01 7.67	GT-103 GW-2/3 08/09/01 10.47	GT-103 GW-2/3 07/31/03 10.36	GT-103 GW-2/3 06/04/04 9.27	GT-103[4] GW-2/3 08/11/05 11.25	GT-103 GW-2/3 08/27/07 12.31	GT-103 GW-2/3 06/17/10 9.46	GES-2 GW-2/3 03/11/03 9.98	GES-2[4] GW-2/3 08/11/05 12.39	GES-2 GW-2/3 08/27/07 13.48	GES-3 GW-2/3 07/31/03 14.35	GES-3 GW-2/3 02/09/04 11.45	GES-3 GW-2/3 06/04/04 10.69	GES-3[4][6] GW-2/3 08/11/05 13.00	GES-3[4] GW-2/3 01/26/12 10.05	SVE-1 GW-2/3 08/11/05 10.93	SVE-1 GW-2/3 02/02/06 8.36	SVE-1 GW-2/3 05/23/06 8.31	SVE-1[5] GW-2/3 10/25/06 11.73	SVE-1 GW-2/3 05/13/07 8.65	SVE-1[15] GW-2/3 08/27/07 11.78	SVE-1[4] GW-2/3 01/26/12 8.63	SVE-1[4] GW-2/3 07/17/12 10.10	SVE-1[4][15] GW-2/3 03/25/13 7.78	SVE-1[4] GW-2/3 02/04/14 9.78	SVE-1 GW-2/3 12/17/14 8.08	SVE-4 GW-2/3 03/08/10 8.23	SVE-4 GW-2/3 06/17/10 10.71	SVE-4[4] GW-2/3 01/26/12 9.85	TPE-9[4] GW-2/3 03/25/13 8.35	TPE-9[4] GW-2/3 02/04/14 10.41	TPE-9 GW-2/3 12/17/14 8.13	MCP Method 1 GW-2 Standards[7] (µg/L)	MCP Method 1 GW-3 Standards[7] (µg/L)
Polycyclic Aromatic Hydrocarbons (µg/L):						*GT-103 abandoned in September 2012 due to station construction.*																									*SVE-4 overdrilled and converted to TPE-9 in October 2012*							
2-Methylnaphthalene	0.89	NS	NS	NS	NS	<9.9	<0.50	NS	NS	<1.0	NS	NS	NS	**10.9**	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	66.1	NS	NS	NS	NS	NS	NS	NS	NS	2,000	20,000
Naphthalene	3.5	NS	NS	NS	NS	<7.9	1	NS	NS	<1.0	NS	NS	NS	<1.0	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	286	NS	NS	NS	NS	NS	NS	NS	NS	700	20,000
Acenaphthylene	1.9	NS	NS	NS	NS	<7.9	2.6	NS	NS	<1.0	NS	NS	NS	<1.0	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10000	40
Acenaphthene	NS	NS	NS	NS	NS	<7.9	NS	NS	NS	<1.0	NS	NS	NS	<1.0	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	10,000
Fluorene	NS	NS	NS	NS	NS	<0.79	NS	NS	NS	<0.5	NS	NS	NS	0.764	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	40
Phenanthrene	0.24	NS	NS	NS	NS	<0.30	0.2	NS	NS	<0.5	NS	NS	NS	3.83	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	10,000
Anthracene	NS	NS	NS	NS	NS	<0.20	NS	NS	NS	<1.0	NS	NS	NS	1.06	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	30
Fluoranthene	NS	NS	NS	NS	NS	0.39	NS	NS	NS	<0.2	NS	NS	NS	<0.2	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	200
Pyrene	NS	NS	NS	NS	NS	<0.79	NS	NS	NS	<0.2	NS	NS	NS	<0.2	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	20
Benzo(a)anthracene	NS	NS	NS	NS	NS	0.11	NS	NS	NS	<0.2	NS	NS	NS	<0.2	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	1,000
Chrysene	NS	NS	NS	NS	NS	<0.30	NS	NS	NS	<0.10	NS	NS	NS	<0.1	NS	NS	NS	NS	<0.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	70
Benzo(b)fluoranthene	NS	NS	NS	NS	NS	0.15	NS	NS	NS	<0.10	NS	NS	NS	<0.1	NS	NS	NS	NS	<0.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	400
Benzo(k)fluoranthene	NS	NS	NS	NS	NS	0.077	NS	NS	NS	<0.14	NS	NS	NS	<0.14	NS	NS	NS	NS	<0.14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	100
Benzo(a)pyrene	NS	NS	NS	NS	NS	0.14	NS	NS	NS	<0.10	NS	NS	NS	<0.1	NS	NS	NS	NS	<0.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	500
Dibenzo(a,h)anthracene	NS	NS	NS	NS	NS	<0.20	NS	NS	NS	<0.2	NS	NS	NS	<0.2	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	40
Benzo(g,h,I)perylene	NS	NS	NS	NS	NS	<0.49	NS	NS	NS	<0.2	NS	NS	NS	<0.2	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	20
Indeno(1,2,3-cd)pyrene	NS	NS	NS	NS	NS	<0.30	NS	NS	NS	<0.2	NS	NS	NS	<0.2	NS	NS	NS	NS	<0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	100
Acetophenone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	35.3	66.8	NS	NS	NS	NS	NS	NS	NS	NA	NA
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	158	477	NS	NS	NS	NS	NS	NS	NS	40,000	50,000
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	60.3	27.0	NS	NS	NS	NS	NS	NS	NS	NA	NA
3 & 4 Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	40.3	72.1	NS	NS	NS	NS	NS	NS	NS	NA	NA
Extractable Petroleum Hydrocarbons (µg/L):																																						
C9-C18 Aliphatics	<150	NS	NS	NS	NS	<60	<300	NS	NS	<100	NS	NS	NS	<100	NS	NS	NS	NS	<100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,000	50,000
C19-C36 Aliphatics	<300	NS	NS	NS	NS	<100	<500	NS	NS	<100	NS	NS	NS	<100	NS	NS	NS	NS	<100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	50,000
C11-22 Aromatics	<200	NS	NS	NS	NS	<80	<400	NS	NS	<100	NS	NS	NS	<100	NS	NS	NS	NS	<100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50,000	5,000
RCRA 8, CAM or ICP Metals (µg/L) (Dissolved):																																						
Mercury	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.200	<0.20	NS	NS	NS	NS	NS	NS	NA	20
Barium	59.3	NS	NS	NS	NS	NS	31.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	212	338	NS	NS	NS	NS	NS	NS	NS	NA	50,000
Cadmium	<0.64	NS	NS	NS	NS	NS	<0.64	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	<4.0	NS	NS	NS	NS	NS	NS	NS	NA	4
Chromium	2.6	NS	NS	NS	NS	NS	<1.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5.00	<10	NS	NS	NS	NS	NS	NS	NS	NA	300
Antimony	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<10.0	<6.0	NS	NS	NS	NS	NS	NS	NS	NA	8,000
Beryllium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<4.00	<4.0	NS	NS	NS	NS	NS	NS	NS	NA	200
Nickel	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<10.0	<40	NS	NS	NS	NS	NS	NS	NS	NA	200
Thallium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<10.0	<5.0	NS	NS	NS	NS	NS	NS	NS	NA	3,000
Vanadium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<20.0	<10	NS	NS	NS	NS	NS	NS	NS	NA	4,000
Zinc	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	65.1	<20	NS	NS	NS	NS	NS	NS	NS	NA	900
Lead	<1.8	<5.0	<5.0	NS	<5.0	NS	3.2	NS	NS	NS	<5.0	5.1	NS	NS	<5.0	<5.0	<5.0	9.82	<5.0	<5.0	6.9	10.4	6.0	11.8	NS	<5.00	9.80	<5.0	<5.00	5.40	17.7	53.7	7.6	9.10	<5.00	5.30	NA	10
Silver	<1.3	NS	NS	NS	NS	NS	<1.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5.00	<5.0	NS	NS	NS	NS	NS	NS	NS	NA	7
Arsenic	13.9	NS	NS	NS	NS	NS	<3.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	11.5	10.7	NS	NS	NS	NS	NS	NS	NS	NA	900
Selenium	<4.3	NS	NS	NS	NS	NS	<4.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<10.0	<10	NS	NS	NS	NS	NS	NS	NS	NA	100
RCRA 8, CAM or ICP Metals (µg/L) (Total):																																						
Lead	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	28.2	NS	NS	NS	NS	NS	20.3	NA	10
Organic Lead by GFAA (µg/L)																																						
Tetraethyl Lead	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	22	NS	NS	NS	NS	NA	NA
EDB (µg/L)																																						
1,2-Dibromoethane	NS	<0.014	<0.02	NS	NS	NS	NS	<0.014	NS	NS	NS	NS	NS	NS	NS	<0.014	<0.002	NS	NS	NS	14.731	17.1	19.3	63.3	4.07	NS	NS	NS	<2.0	NS	NS	NS	NS	NS	NS	NS	2	50,000
Volatile Organics - MCP CAM Method 8260																																						
Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	<50.0	<5.0	NS	NS	NS	NS	NS	NS	NS	50,000	50,000
Tert-Amyl Methyl Ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	<1.00	NS	NS	NS	3.55	NS	NS	NS	NS	NS	NS	694	NS	<1.00	<2.0	NS	NS	NS	NS	NS	NS	NS	50,000	50,000(7)
Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	<1.00	NS	NS	NS	8.62	NS	NS	NS	NS	NS	NS	7,700	NS	546	710	NS	NS	NS	NS	NS	NS	NS	1,000	10,000
Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	<1.0	NS	NS	NS	NS	NS	NS	NS	700	50,000
tert-Butylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.81	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	<5.0	NS	NS	NS	NS	NS	NS	NS	NA	NA
n-Butylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	55.0	115	NS	NS	NS	NS	NS	NS	NS	NA	NA
sec-Butylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	<5.0	NS	NS	NS	NS	NS	NS	NS	NA	NA
Tertiary Butyl Alcohol	NS	NS	NS	NS	NS	NS	NS	NS	NS	<20	NS	NS	NS	<20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1,000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	<2.0	NS	NS	NS	NS	NS	NS	NS	NA	NA
Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.99	NS	NS	NS	<1.00	NS	NS	NS	43.4	NS	NS	NS	NS	NS	NS	5,230	NS	2,950	1,840	NS	NS	NS	NS	NS	NS	NS	20,000	5,000
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.13	NS	NS	NS	NS	NS	NS	NS	NS	99.3	75.7	NS	NS	NS	NS	NS	NS	NS	NA	NA
p-Isopropyltoluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	9.53	12.2	NS	NS	NS	NS	NS	NS	NS	NA	NA
Methyl tert-Butyl Ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	<1.00	NS	NS	NS	2.31	NS	NS	NS	NS	NS	NS	2260	NS	<1.00	12.0	NS	NS	NS	NS	NS	NS	NS	50,000	50,000
Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	8.95	NS	NS	NS	5.93	NS	NS	NS	<5.0	NS	NS	NS	NS	NS	NS	883	NS	533	621	NS	NS	NS	NS	NS	NS	NS	700	20,000
n-Propylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.98	NS	NS	NS	NS	NS	NS	NS	NS	198	156	NS	NS	NS	NS	NS	NS	NS	NA	NA
Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	<1.0	NS	NS	NS	NS	NS	NS	NS	50	30,000
Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	NS	NS	NS	<1.00	NS	NS	NS	138	NS	NS	NS	NS	NS	NS	55,600	NS	18,300	8,830	NS	NS	NS	NS	NS	NS	NS	50,000	40,000
1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<3.00	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	<1.0	NS	NS	NS	NS	NS	NS	NS	4,000	20,000
1,3,5-Trimethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.34	NS	NS	NS	NS	NS	NS	NS	NS	939	912	NS	NS	NS	NS	NS	NS	NS	NA	NA
1,2,4-Trimethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	21.3	NS	NS	NS	NS	NS	NS	NS	NS	3,270	2,930	NS	NS	NS	NS	NS	NS	NS	NA	NA
Total Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	<3.00	NS	NS	NS	NS	NS	NS	NS	192	NS	NS	NS	NS	NS	NS	26,700	NS	23,000	16,100	NS	NS	NS	NS	NS	NS	NS	3,000	5,000
Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	<1.0	NS	NS	NS	NS	NS	NS	NS	200	1,000
1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	<1.0	NS	NS	NS	NS	NS	NS	NS	8,000	2,000
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	<1.0	NS	NS	NS	NS	NS	NS	NS	6,000	50,000
1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	<1.0	NS	NS	NS	NS	NS	NS	NS	5	20,000
1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	<1.00	<1.0	NS	NS	NS	NS	NS	NS	NS	60	8,000

Table 2. Summary of Groundwater Sample Analytical Results:
PAHs, EPH, Metals, EDB and VOCs by 8260 (April 2001 - December 2015)
Mobil Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153, 3-23994, 3-25770 and 3-26537

Sample ID GW Classification Collection Date: Depth to Water (feet)	SVE-5[4] GW-2/3 01/26/12 9.82	SVE-5[4] GW-2/3 03/25/13 8.35	SVE-5[4] GW-2/3 02/04/14 10.47	SVE-5 GW-2/3 12/17/14 8.22	SVE-6 GW-2/3 03/08/10 7.63	SVE-6 GW-2/3 06/17/10 9.36	SVE-6[4] GW-2/3 01/26/12 9.02	TPE-7[4] GW-2/3 03/25/13 8.40	TPE-7[4] GW-2/3 02/04/14 10.68	TPE-7 GW-2/3 12/17/14 8.72	TPE-1 GW-2/3 03/25/13 8.07	TPE-1[4] GW-2/3 02/04/14 10.29	TPE-1 GW-2/3 12/17/14 8.02	TPE-1[4] GW-2/3 07/14/15 11.56	TPE-1[4] GW-2/3 12/22/15 13.78	TPE-2 GW-2/3 03/25/13 7.77	TPE-4 GW-2/3 03/25/13 8.40	TPE-5 GW-2/3 03/25/13 8.10	TPE-5[4] GW-2/3 02/04/14 10.23	TPE-5[4] GW-2/3 07/14/15 11.41	TPE-5[4] GW-2/3 12/22/15 13.65	TPE-6 GW-2/3 03/25/13 8.25	TPE-8 GW-2/3 03/25/13 8.43	TPE-8[4] GW-2/3 02/04/14 10.47	TPE-8 GW-2/3 12/17/14 8.25	TPE-8[4] GW-2/3 12/22/15 13.95	MCP Method 1 GW-2 Standards[7] (µg/L)	MCP Method 1 GW-3 Standards[7] (µg/L)
Polycyclic Aromatic Hydrocarbons (µg/L):					*SVE-6 overdrilled and converted to TPE-7 in October 2012*																							
2-Methylnaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,000	20,000
Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	700	20,000
Acenaphthylene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10000	40
Acenaphthene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	10,000
Fluorene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	40
Phenanthrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	10,000
Anthracene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	30
Fluoranthene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	200
Pyrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	20
Benzo(a)anthracene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	1,000
Chrysene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	70
Benzo(b)fluoranthene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	400
Benzo(k)fluoranthene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	100
Benzo(a)pyrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	500
Dibenzo(a,h)anthracene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	40
Benzo(g,h,I)perylene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	20
Indeno(1,2,3-cd)pyrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	100
Acetophenone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	40,000	50,000
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
3 & 4 Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
Extractable Petroleum Hydrocarbons (µg/L):																												
C9-C18 Aliphatics	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,000	50,000
C19-C36 Aliphatics	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	50,000
C11-22 Aromatics	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50,000	5,000
RCRA 8, CAM or ICP Metals (µg/L) (Dissolved):																												
Mercury	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	20
Barium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	50,000
Cadmium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	4
Chromium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	300
Antimony	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	8,000
Beryllium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	200
Nickel	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	200
Thallium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	3,000
Vanadium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	4,000
Zinc	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	900
Lead	263	158	21.7	7.90	22.6	<5.00	20.9	<5.00	<5.00	<5.00	20.5	5.10	<5.00	27.5	21.4	<5.00	<5.00	39.9	<5.00	238	182	<5.00	89.7	31.6	5.10	<5.00	NA	10
Silver	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	7
Arsenic	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	900
Selenium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	100
RCRA 8, CAM or ICP Metals (µg/L) (Total):																												
Lead	NS	NS	NS	49.6	NS	NS	NS	NS	NS	87.6	NS	NS	9.40	36.1	20	NS	NS	NS	NS	255	183	NS	NS	NS	12.2	<5.00	NA	10
Organic Lead by GFAA (µg/L)																												
Tetraethyl Lead	NS	NS	NS	NS	NS	14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
EDB (µg/L)																												
1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2	50,000
Volatile Organics - MCP CAM Method 8260																												
Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50,000	50,000
Tert-Amyl Methyl Ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50,000	50,000(7)
Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,000	10,000
Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	700	50,000
tert-Butylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
n-Butylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
sec-Butylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
Tertiary Butyl Alcohol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20,000	5,000
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
p-Isopropyltoluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
Methyl tert-Butyl Ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50,000	50,000
Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	700	20,000
n-Propylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50	30,000
Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50,000	40,000
1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,000	20,000
1,3,5-Trimethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
1,2,4-Trimethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
Total Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,000	5,000
Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	200	1,000
1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8,000	2,000
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,000	50,000
1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5	20,000
1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	60	8,000

Table 3. Summary of NAPL Gauge and Bail Data
(March 2006 - December 2015)
Former Mobil Service Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153, 3-23994, 3-25770 and 3-26537

Well ID: (GW Class) *[Screen Interval]*	Casing Elevation (Ft)		Gauging Date	Depth to Water (Ft)	Depth to Product (Ft)	Product Thickness (Ft)	Product Thickness (in)	Amount Bailed (gallons)	Groundwater Elevation (Ft)
AS-1	NSVD		03/28/06	10.94	10.70	0.24	2.88	2.0	NA
(GW-3)		R	03/28/06	10.77	ND	ND	ND	NA	NA
Screen Interval = 12-17 ft.			04/06/06	11.05	ND	ND	ND	NA	NA
			04/12/06	11.08	Sheen	Sheen	Sheen	NA	NA
			04/17/06	11.21	ND	ND	ND	NA	NA
			04/28/06	11.36	ND	ND	ND	NA	NA
			05/10/06	10.73	10.71	0.02*	0.24*	1.0	NA
		R	05/10/06	10.72	ND	ND	ND	NA	NA
			05/23/06	8.61	ND	ND	ND	NA	NA
			06/06/06	8.71	ND	ND	ND	NA	NA
			07/07/06	9.61	ND	ND	ND	NA	NA
			10/25/06	12.75	ND	ND	ND	NA	NA
			01/04/07	10.25	ND	ND	ND	NA	NA
			05/13/07	9.79	9.75	0.04	0.48	NA	NA
			06/06/07	9.88	9.86	0.02	0.24	2.5	NA
		R	06/06/07	9.90	ND	ND	ND	NA	NA
			07/23/07	11.79	11.78	0.01	0.12	2.5	NA
			09/28/07	15.11	15.10	0.01	0.12	1.0	NA
			02/25/08	9.10	9.00	0.10	1.2	3.0	NA
	95.69	(2)	06/19/08	11.98	ND	ND	ND	NA	83.71
			11/18/08	11.08	ND	ND	ND	NA	84.61
			03/20/09	8.55	ND	ND	ND	NA	87.14
			09/21/09	11.22	11.08	0.14	1.68	2.0	84.47
			12/23/09	8.92	ND	ND	ND	NA	86.77
			12/28/09	9.07	ND	ND	ND	NA	86.62
			03/08/10	7.93	7.91	0.02	0.24	0.25	87.76
			06/17/10	10.35	ND	ND	ND	NA	85.34
			08/18/10	14.27	14.18	0.09	1.08	NA	81.42
			12/06/10	10.95	ND	ND	ND	NA	84.74
			09/22/11	9.32	ND	ND	ND	NA	86.37
			01/26/12	9.27	9.26	0.01	0.12	0.75	86.42
			06/29/12	10.12	10.11	0.01	0.12	0.75	85.57
AS-1 overdrilled and replaced with TPE-2 in October 2012									
AS-2	NSVD		03/28/06	11.41	ND	ND	ND	NA	NA
(GW-2/3)			04/06/06	11.84	ND	ND	ND	NA	NA
Screen Interval = 20-25 ft.			04/12/06	11.83	ND	ND	ND	NA	NA
			04/17/06	11.97	ND	ND	ND	NA	NA
			04/28/06	12.11	ND	ND	ND	NA	NA
			05/10/06	11.67	ND	ND	ND	NA	NA
			06/06/06	9.47	ND	ND	ND	NA	NA
			07/07/06	10.33	ND	ND	ND	NA	NA
			01/04/07	10.90	ND	ND	ND	NA	NA
			05/13/07	10.32	ND	ND	ND	NA	NA
	96.29	(2)	06/19/08	12.64	ND	ND	ND	NA	83.65
			11/18/08	11.75	ND	ND	ND	NA	84.54
AS-2 overdrilled and replaced with TPE-6 in October 2012									
AS-3	NSVD		08/18/10	14.61	ND	ND	ND	NA	NA
(GW-2/3)									
Screen Interval = 22-24 ft.									
AS-3 overdrilled and replaced with TPE-8 in October 2012									
SVE-1	98.45		03/28/06	9.82	ND	ND	ND	NA	88.63
(GW-2/3)			04/06/06	10.00	ND	ND	ND	NA	88.45
Screen Interval = 5-15 ft.			04/12/06	10.12	ND	ND	ND	NA	88.33
			04/17/06	11.24	ND	ND	ND	NA	87.21
			04/28/06	10.41	ND	ND	ND	NA	88.04
			05/10/06	10.07	ND	ND	ND	NA	88.38
			05/23/06	8.31	ND	ND	ND	NA	90.14
			06/06/06	8.17	ND	ND	ND	NA	90.28
			07/07/06	8.50	ND	ND	ND	NA	89.95
			10/25/06	11.73	ND	ND	ND	NA	86.72
			01/04/07	9.48	ND	ND	ND	NA	88.97
			05/13/07	8.65	ND	ND	ND	NA	89.80
			06/06/07	8.56	ND	ND	ND	NA	89.89
			07/23/07	10.27	ND	ND	ND	NA	88.18
			09/28/07	13.49	ND	ND	ND	NA	84.96
			02/25/08	8.35	ND	ND	ND	NA	90.10
	95.32	(2)	06/19/08	10.38	ND	ND	ND	NA	84.94
			11/18/08	10.31	ND	ND	ND	NA	85.01
			03/20/09	7.99	ND	ND	ND	NA	87.33
			09/21/09	10.06	ND	ND	ND	NA	85.26
			12/28/09	8.20	ND	ND	ND	NA	87.12
			03/08/10	7.70	ND	ND	ND	NA	87.62
			06/17/10	9.15	ND	ND	ND	NA	86.17
			07/27/10	8.86	ND	ND	ND	NA[3]	86.46
			12/06/10	12.31	ND	ND	ND	NA	83.01
			04/18/11	7.78	ND	ND	ND	NA	87.54
			09/22/11	9.05	ND	ND	ND	NA	86.27
			01/26/12	8.63	ND	ND	ND	NA	86.69
			06/29/12	5.40	ND	ND	ND	NA	89.92
SVE-1 overdrilled and replaced with TPE-1 in October 2012									

Table 3. Summary of NAPL Gauge and Bail Data
(March 2006 - December 2015)
Former Mobil Service Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153, 3-23994, 3-25770 and 3-26537

Well ID: (GW Class) *[Screen Interval]*	Casing Elevation (Ft)	Gauging Date	Depth to Water (Ft)	Depth to Product (Ft)	Product Thickness (Ft)	Product Thickness (in)	Amount Bailed (gallons)	Groundwater Elevation (Ft)
SVE-2	NSVD	05/13/07	9.37	ND	ND	ND	NA	NA
(GW-2/3)		06/06/07	9.44	ND	ND	ND	NA	NA
Screen Interval = 7-17 ft.		07/23/07	11.41	ND	ND	ND	NA	NA
		09/28/07	14.60	ND	ND	ND	NA	NA
		07/27/10	12.81	ND	ND	ND	NA(3)	NA
SVE-2 overdrilled and replaced with TPE-3 in October 2012								
SVE-4	95.72	06/28/10	11.11	ND	ND	ND	NA(3)	84.61
(GW-2/3)		08/17/10	14.36	ND	ND	ND	NA(3)	81.36
		09/27/10	15.76	ND	ND	ND	NA(3)	79.96
		10/27/10	12.19	ND	ND	ND	NA(3)	83.53
		11/29/10	11.04	ND	ND	ND	NA(3)	84.68
		12/29/10	11.25	ND	ND	ND	NA(3)	84.47
		01/24/11	10.26	ND	ND	ND	NA(3)	85.46
		02/14/11	9.83	ND	ND	ND	NA(3)	85.89
		03/21/11	8.32	ND	ND	ND	NA(3)	87.40
		12/06/10	11.81	ND	ND	ND	NA	83.91
		04/18/11	8.63	ND	ND	ND	NA	87.09
		09/22/11	9.73	ND	ND	ND	NA	85.99
		01/26/12	9.85	ND	ND	ND	NA	85.87
SVE-4 overdrilled and replaced with TPE-9 in October 2012								
SVE-5	NSVD	06/28/10	10.55	ND	ND	ND	NA	NA
(GW-2/3)		08/17/10	14.32	14.05	0.27	3.24	NA(3)	NA
Screen Interval = 6-16'		08/18/10	14.40	14.35	0.05	0.60	NA	NA
		09/27/10	14.12	14.02	0.10	1.2	NA(3)	NA
		09/30/10	14.26	14.25	0.01	0.12	NA	NA
		10/27/10	12.22	ND	ND	ND	NA(3)	NA
		11/29/10	11.09	ND	ND	ND	NA(3)	NA
		12/06/10	11.06	ND	ND	ND	NA	NA
		12/29/10	10.63	ND	ND	ND	NA(3)	NA
		01/24/11	10.31	ND	ND	ND	NA(3)	NA
		02/14/11	9.57	ND	ND	ND	NA(3)	NA
		03/21/11	8.31	ND	ND	ND	NA(3)	NA
		04/18/11	8.61	ND	ND	ND	NA	NA
		09/22/11	9.72	ND	ND	ND	NA	NA
		01/26/12	9.82	ND	ND	ND	NA	NA
		06/29/12	10.51	ND	ND	ND	NA	NA
SVE-6	95.53	06/28/10	9.67	ND	ND	ND	NA(3)	85.86
(GW-2/3)		08/17/10	11.82	ND	ND	ND	NA(3)	83.71
Screen Interval = 6-16'		08/18/10	16.82	ND	ND	ND	NA	78.71
		09/27/10	12.08	ND	ND	ND	NA(3)	83.45
		10/27/10	11.61	ND	ND	ND	NA(3)	83.92
		11/29/10	10.89	ND	ND	ND	NA(3)	84.64
		12/06/10	9.23	ND	ND	ND	NA	86.30
		12/29/10	10.02	ND	ND	ND	NA(3)	85.51
		01/24/11	9.83	ND	ND	ND	NA(3)	85.70
		02/14/11	9.46	ND	ND	ND	NA(3)	86.07
		03/21/11	7.91	ND	ND	ND	NA(3)	87.62
		04/18/11	8.07	ND	ND	ND	NA	87.46
		09/22/11	9.12	ND	ND	ND	NA	86.41
		01/26/12	9.02	ND	ND	ND	NA	86.51
SVE-6 overdrilled and replaced with TPE-7 in October 2012								
GT-101A	95.67	08/18/10	14.54	ND	ND	ND	NA	81.13
(GW-3)		01/26/12	10.35	ND	ND	ND	NA	85.32
Screen Interval = 75-85 ft.								
GT-101B	95.60	08/18/10	14.76	ND	ND	ND	NA	80.84
(GW-3)		01/26/12	9.32	ND	ND	ND	NA	86.28
Screen Interval = 46 -56 ft.								

Table 3. Summary of NAPL Gauge and Bail Data
(March 2006 - December 2015)
Former Mobil Service Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153, 3-23994, 3-25770 and 3-26537

Well ID: (GW Class) *[Screen Interval]*	Casing Elevation (Ft)	Gauging Date	Depth to Water (Ft)	Depth to Product (Ft)	Product Thickness (Ft)	Product Thickness (in)	Amount Bailed (gallons)	Groundwater Elevation (Ft)
MW-4	98.42	03/28/06	11.34	ND	ND	ND	NA	87.08
(GW-2/3)		04/06/06	10.66	ND	ND	ND	NA	87.76
Screen Interval = 5-15 ft.		04/12/06	10.71	ND	ND	ND	NA	87.71
		04/17/06	10.89	ND	ND	ND	NA	87.53
		04/28/06	11.04	ND	ND	ND	NA	87.38
		05/10/06	10.43	ND	ND	ND	NA	87.99
		05/23/06	8.40	ND	ND	ND	NA	90.02
		06/06/06	8.41	ND	ND	ND	NA	90.01
		07/07/06	8.43	ND	ND	ND	NA	89.99
		10/25/06	12.33	ND	ND	ND	NA	86.09
		01/04/07	9.82	ND	ND	ND	NA	88.60
		05/13/07	9.26	ND	ND	ND	NA	89.16
		06/06/07	9.36	ND	ND	ND	NA	89.06
		07/23/07	11.44	ND	ND	ND	NA	86.98
		09/28/07	DRY	ND	ND	ND	NA	NA
		02/25/08	8.6	ND	ND	ND	NA	89.82
	95.29 (2)	06/19/08	11.49	ND	ND	ND	NA	83.80
		11/18/08	10.7	ND	ND	ND	NA	84.59
		03/20/09	11.06	ND	ND	ND	NA	84.23
		09/21/09	9.16	ND	ND	ND	NA	86.13
		12/28/09	8.67	ND	ND	ND	NA	86.62
		03/08/10	7.76	ND	ND	ND	NA	87.53
		06/17/10	10.11	ND	ND	ND	NA	85.18
		06/28/10	10.56	ND	ND	ND	NA[3]	84.73
		08/17/10	14.49	ND	ND	ND	NA[3]	80.80
		08/18/10	13.95	ND	ND	ND	NA	81.34
		09/27/10	13.65	ND	ND	ND	NA[3]	81.64
		10/27/10	11.77	ND	ND	ND	NA[3]	83.52
		11/29/10	10.62	ND	ND	ND	NA[3]	84.67
		12/06/10	11.55	ND	ND	ND	NA	83.74
		12/29/10	9.02	ND	ND	ND	NA[3]	86.27
		01/24/11	9.83	ND	ND	ND	NA[3]	85.46
		02/14/11	9.40	ND	ND	ND	NA[3]	85.89
		03/21/11	7.78	ND	ND	ND	NA[3]	87.51
		04/18/11	8.15	ND	ND	ND	NA	87.14
		09/22/11	9.21	ND	ND	ND	NA	86.08
		01/26/12	9.34	ND	ND	ND	NA	85.95
MW-5	96.19	08/18/10	14.99	ND	ND	ND	NA	88.24
(GW-2/3)		03/21/11	7.95	ND	ND	ND	NA	87.90
Screen Interval = 6-16 ft.		04/18/11	8.29	ND	ND	ND	NA	96.19
		09/22/11	9.91	ND	ND	ND	NA	85.52
		01/26/12	9.59	ND	ND	ND	NA	86.60
MW-8[1]	98.62	03/28/06	10.67	ND	ND	ND	NA	87.95
(GW-3)		04/06/06	10.97	ND	ND	ND	NA	87.65
Screen Interval = 4-14 ft.		04/12/06	10.97	ND	ND	ND	NA	87.65
		04/17/06	11.09	ND	ND	ND	NA	87.53
		04/28/06	11.26	ND	ND	ND	NA	87.36
		05/10/06	10.62	ND	ND	ND	NA	88.00
		05/23/06	8.63	ND	ND	ND	NA	89.99
		06/06/06	10.97	ND	ND	ND	NA	87.65
		07/07/06	9.50	ND	ND	ND	NA	89.12
		10/25/06	12.50	ND	ND	ND	NA	86.12
		01/04/07	10.05	ND	ND	ND	NA	88.57
		05/13/07	9.21	ND	ND	ND	NA	89.41
		06/06/07	9.71	ND	ND	ND	NA	88.91
		07/23/07	11.68	ND	ND	ND	NA	86.94
		09/28/07	13.13	ND	ND	ND	NA	85.49
		02/25/08	8.90	ND	ND	ND	NA	89.72
	95.53 (2)	06/19/08	11.86	ND	ND	ND	NA	83.67
		11/18/08	10.90	ND	ND	ND	NA	84.63
		12/23/09	8.88	ND	ND	ND	NA	86.65

Table 3. Summary of NAPL Gauge and Bail Data
(March 2006 - December 2015)
Former Mobil Service Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153, 3-23994, 3-25770 and 3-26537

Well ID: (GW Class) *[Screen Interval]*	Casing Elevation (Ft)	Gauging Date	Depth to Water (Ft)	Depth to Product (Ft)	Product Thickness (Ft)	Product Thickness (in)	Amount Bailed (gallons)	Groundwater Elevation (Ft)
MW-11	98.67	03/28/06	10.52	ND	ND	ND	NA	88.15
(GW-3)		04/06/06	11.73	ND	ND	ND	NA	86.94
Screen Interval = 8-18 ft.		04/12/06	10.79	ND	ND	ND	NA	87.88
		04/17/06	10.87	ND	ND	ND	NA	87.80
		04/28/06	11.04	ND	ND	ND	NA	87.63
		05/10/06	10.45	ND	ND	ND	NA	88.22
		05/23/06	8.41	ND	ND	ND	NA	90.26
		06/06/06	11.73	ND	ND	ND	NA	86.94
		07/07/06	9.04	ND	ND	ND	NA	89.63
		10/25/06	12.58	ND	ND	ND	NA	86.09
		01/04/07	9.93	ND	ND	ND	NA	88.74
		05/13/07	9.22	ND	ND	ND	NA	89.45
		06/06/07	9.83	ND	ND	ND	NA	88.84
		07/23/07	11.01	ND	ND	ND	NA	87.66
		09/28/07	14.94	ND	ND	ND	NA	83.73
		02/25/08	8.73	ND	ND	ND	NA	89.94
	95.55 (2)	06/19/08	11.63	ND	ND	ND	NA	83.92
		11/18/08	10.77	ND	ND	ND	NA	84.78
		03/20/09	8.29	ND	ND	ND	NA	87.26
		09/21/09	10.55	ND	ND	ND	NA	85.00
		12/23/09	8.72	ND	ND	ND	NA	86.83
		12/28/09	8.71	ND	ND	ND	NA	86.84
		09/30/10	13.98	ND	ND	ND	NA	81.57
		12/06/10	13.59	ND	ND	ND	NA	81.96
		09/22/11	9.08	ND	ND	ND	NA	86.47
		01/26/12	9.11	ND	ND	ND	NA	86.44
MW-12	98.51	03/28/06	10.60	ND	ND	ND	NA	87.91
(GW-3)		04/06/06	10.87	ND	ND	ND	NA	87.64
Screen Interval = 8-18 ft.		04/12/06	10.88	ND	ND	ND	NA	87.63
		04/17/06	11.00	ND	ND	ND	NA	87.51
		04/28/06	11.19	ND	ND	ND	NA	87.32
		05/10/06	10.54	ND	ND	ND	NA	87.97
		05/23/06	8.50	ND	ND	ND	NA	90.01
		06/06/06	10.87	ND	ND	ND	NA	87.64
		07/07/06	9.46	ND	ND	ND	NA	89.05
		10/25/06	12.42	ND	ND	ND	NA	86.09
		01/04/07	9.95	ND	ND	ND	NA	88.56
		05/13/07	9.50	ND	ND	ND	NA	89.01
		06/06/07	9.80	ND	ND	ND	NA	88.71
		07/23/07	11.57	ND	ND	ND	NA	86.94
		09/28/07	14.78	ND	ND	ND	NA	83.73
		02/25/08	8.75	ND	ND	ND	NA	89.76
	95.41 (2)	06/19/08	11.74	ND	ND	ND	NA	83.67
		11/18/08	10.91	ND	ND	ND	NA	84.50
		03/20/09	8.49	ND	ND	ND	NA	86.92
		09/21/09	11.21	ND	ND	ND	NA	84.20
		12/28/09	8.74	ND	ND	ND	NA	86.67
		03/08/10	7.77	ND	ND	ND	NA	87.64
		09/30/10	13.81	ND	ND	ND	NA	81.60
		12/06/10	10.62	ND	ND	ND	NA	84.79
		01/26/12	9.39	ND	ND	ND	NA	86.02
MW-14	96.03	03/08/10	8.52	ND	ND	ND	NA	87.51
(GW-2/3)		08/18/10	14.74	ND	ND	ND	NA	81.29
Screen Interval = 23'-33'		12/06/10	11.82	ND	ND	ND	NA	84.21
TPE-7	NSVD	07/14/15	11.92	11.9	0.02	0.24	NA	NA
(GW-2/3)		12/22/15	14.14	14.13	0.01	0.12	NA	NA
Screen Interval = 5-23'								

Notes:
NA = Not Applicable
NM = Not Measured
ND = Not Detected
NSVD = Not Surveyed
ft bgs = feet below ground surface
Sheen = No measurable product, but sheen on surface of water
* = Confirmed thickness with bailer, only sheen and globules on water surface, no measuable thickness
R = Subsequent gauging event conducted within 1/2 hour following initial bailing and recharge of monitoring well.
(1) LNAPL observed in MW-8 in 1991
(2) Professional survey completed by CT Male Associates on 5/22/2008
(3) HIT event conducted at this location on this date

Table 4. Summary of Soil Vapor Screening Results
(May 2008 - February 2016)
Former Mobil Service Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153,
3-23994, 3-25770 and 3-26537

Sample Point:		**VP-1**			**VP-2**			**VP-3**			**VP-4**		
Screen Interval (ft bgs):		3.0-4.0'			2.6 - 3.6'			2.0 -3.0'			2.6 - 3.6'		
Surface around sample point:		Asphalt			Concrete			Concrete			Concrete		
General Location:		Along perimiter of structure			Within structure's footprint			Within structure's footprint			Within structure's footprint		
Date	**Time (min.)**	Flow Rate (ml/min)	Field PID Reading (ppm) [a]	Adjusted PID Reading (ppm) [b]	Flow Rate (ml/min)	Field PID Reading (ppm) [a]	Adjusted PID Reading (ppm) [b]	Flow Rate (ml/min)	Field PID Reading (ppm) [a]	Adjusted PID Reading (ppm) [b]	Flow Rate (ml/min)	Field PID Reading (ppm) [a]	Adjusted PID Reading (ppm) [b]
5/19/2008 [1] [2]	0 - Initial	NR	<1	<2	NR	<1	<2	NR	<1	<2	NR	<1	<2
	1		<1	<2		<1	<2		<1	<2		<1	<2
	2		<1	<2		<1	<2		<1	<2		<1	<2
	3		<1	<2		<1	<2		<1	<2		<1	<2
	4		<1	<2		<1	<2		<1	<2		<1	<2
	5		<1	<2		<1	<2		<1	<2		<1	<2
	10		<1	<2		<1	<2		<1	<2		<1	<2
	15		<1	<2		<1	<2		<1	<2		<1	<2
	20		<1	<2		<1	<2		<1	<2		<1	<2
	25		<1	<2		<1	<2		<1	<2		<1	<2
	30		<1	<2		<1	<2		<1	<2		<1	<2
		4-hour sample collected via summa canister											
11/18/2008 [2]	0 - Initial	NR	<1	<2	NR	1.1	<2	NR	1.1	2.1	NR	1.7	3.2
	1		<1	<2		<1	<2		1.0	1.9		1.8	3.4
	2		<1	<2		<1	<2		1.0	1.9		2.0	3.8
	3		<1	<2		<1	<2		<1	<2		2.5	4.7
	4		<1	<2		<1	<2		<1	<2		2.3	4.3
	5		<1	<2		<1	<2		<1	<2		2.3	4.3
	10		<1	<2		<1	<2		<1	<2		2.3	4.3
	15		<1	<2		<1	<2		<1	<2		2.5	4.7
	20		<1	<2		<1	<2		<1	<2		1.6	3.0
	25		<1	<2		<1	<2		<1	<2		1.5	2.8
	30		<1	<2		<1	<2		<1	<2		1.3	2.5
3/20/2009 [3]	0 - Initial	1,000	<1	<2	1,000	2.9	5.5	1,000	3.4	6.4	1,000	1.1	2.1
	1	1,000	<1	<2	1,000	2.5	4.7	1,000	2.3	4.3	1,000	1.4	2.6
	2	1,000	<1	<2	1,000	2.3	4.3	1,000	2.4	4.5	1,000	1.4	2.6
	3	1,000	<1	<2	1,000	1.1	2.1	1,000	2.3	4.3	1,000	1.3	2.5
	4	1,000	<1	<2	1,000	1.2	2.3	1,000	2.4	4.5	1,000	1.3	2.5
	5	1,000	<1	<2	1,000	1.6	3.0	1,000	2.6	4.9	1,000	1.4	2.6
	10	1,000	<1	<2	1,000	2.0	3.8	1,000	2.3	4.3	1,000	1.4	2.6
	15	1,000	<1	<2	1,000	1.9	3.6	1,000	2.4	4.5	1,000	1.3	2.5
	20	1,000	<1	<2	1,000	2.0	3.8	1,000	1.3	2.5	1,000	1.3	2.5
	25	1,000	<1	<2	1,000	1.9	3.6	1,000	2.1	4.0	NS	NS	NS
	30	1,000	<1	<2	1,000	1.9	3.6	1,000	1.4	2.6	NS	NS	NS
9/21/2009 [3]	0 - Initial	900	<1	<2	900	<1	<2	900	<1	<2	900	<1	<2
	1	900	<1	<2	900	<1	<2	900	<1	<2	900	<1	<2
	2	900	<1	<2	900	<1	<2	900	<1	<2	900	<1	<2
	3	900	<1	<2	900	<1	<2	900	<1	<2	900	<1	<2
	4	900	<1	<2	900	<1	<2	900	<1	<2	900	<1	<2
	5	900	<1	<2	900	<1	<2	900	<1	<2	900	<1	<2
	10	900	<1	<2	900	<1	<2	900	<1	<2	900	<1	<2
	15	900	<1	<2	900	<1	<2	900	<1	<2	900	<1	<2
	20	900	<1	<2	900	<1	<2	900	<1	<2	900	<1	<2
	25	900	<1	<2	900	<1	<2	900	<1	<2	900	<1	<2
	30	900	<1	<2	900	<1	<2	900	<1	<2	900	<1	<2
3/8/2010 [3]	1	Screening not conducted--vapor point full of water			900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	2				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	3				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	4				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	5				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	10				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	15				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	20				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	25				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	30				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
9/30/2010 [3]	1	1,000	<0.5	<0.9	1000	<0.5	<0.9	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	2	1,000	<0.5	<0.9	1000	<0.5	<0.9	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	3	1,000	<0.5	<0.9	1000	<0.5	<0.9	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	4	1,000	<0.5	<0.9	1000	<0.5	<0.9	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	5	1,000	<0.5	<0.9	1000	<0.5	<0.9	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	10	1,000	<0.5	<0.9	1000	<0.5	<0.9	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	15	1,000	<0.5	<0.9	1000	<0.5	<0.9	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	20	1,000	<0.5	<0.9	1000	<0.5	<0.9	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	25	1,000	<0.5	<0.9	1000	<0.5	<0.9	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	30	1,000	<0.5	<0.9	1000	<0.5	<0.9	1,000	<0.5	<0.9	1,000	<0.5	<0.9

Table 4. Summary of Soil Vapor Screening Results
(May 2008 - February 2016)
Former Mobil Service Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153,
3-23994, 3-25770 and 3-26537

Sample Point:		**VP-1**			**VP-2**			**VP-3**			**VP-4**		
Screen Interval (ft bgs):		3.0-4.0'			2.6 - 3.6'			2.0 -3.0'			2.6 - 3.6'		
Surface around sample point:		Asphalt			Concrete			Concrete			Concrete		
General Location:		Along perimiter of structure			Within structure's footprint			Within structure's footprint			Within structure's footprint		
Date	**Time (min.)**	Flow Rate (ml/min)	Field PID Reading (ppm) [a]	Adjusted PID Reading (ppm) [b]	Flow Rate (ml/min)	Field PID Reading (ppm) [a]	Adjusted PID Reading (ppm) [b]	Flow Rate (ml/min)	Field PID Reading (ppm) [a]	Adjusted PID Reading (ppm) [b]	Flow Rate (ml/min)	Field PID Reading (ppm) [a]	Adjusted PID Reading (ppm) [b]
4/18/2011 [3]	0-Initial	1,000	<0.5	<0.9	NS	NS	NS	1,000	0.7	1.3	1,000	2.9	5.5
	1	1,000	<0.5	<0.9	NS	NS	NS	1,000	1.0	1.9	1,000	3.6	6.8
	2	1,000	<0.5	<0.9	NS	NS	NS	1,000	0.9	1.7	1,000	4.0	7.5
	3	1,000	3.6	6.8	NS	NS	NS	1,000	0.8	1.5	1,000	4.1	7.7
	4	1,000	5.5	10.4	NS	NS	NS	1,000	0.6	1.1	1,000	4.5	8.5
	5	1,000	6.3	11.9	NS	NS	NS	1,000	0.5	0.9	1,000	4.9	9.2
	10	1,000	2.0	3.8	NS	NS	NS	1,000	<0.5	<0.9	1,000	3.8	7.2
	15	1,000	1.5	2.8	NS	NS	NS	1,000	<0.5	<0.9	1,000	3.7	7.0
	20	1,000	1.3	2.5	NS	NS	NS	1,000	<0.5	<0.9	1,000	4.7	8.9
	25	1,000	1.1	2.1	NS	NS	NS	1,000	<0.5	<0.9	1,000	5.1	9.6
	30	1,000	1.1	2.1	NS	NS	NS	1,000	<0.5	<0.9	1,000	8.5	16.0
	35	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,000	8.6	16.2
	40	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,000	7.8	14.7
4/21/2011 [3]	0-Initial	1,000	<0.5	<0.9	NS	NS	NS	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	1	1,000	<0.5	<0.9	NS	NS	NS	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	2	1,000	<0.5	<0.9	NS	NS	NS	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	3	1,000	<0.5	<0.9	NS	NS	NS	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	4	1,000	<0.5	<0.9	NS	NS	NS	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	5	1,000	<0.5	<0.9	NS	NS	NS	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	10	1,000	<0.5	<0.9	NS	NS	NS	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	15	1,000	<0.5	<0.9	NS	NS	NS	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	20	1,000	<0.5	<0.9	NS	NS	NS	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	25	1,000	<0.5	<0.9	NS	NS	NS	1,000	<0.5	<0.9	1,000	<0.5	<0.9
	30	1,000	<0.5	<0.9	NS	NS	NS	1,000	<0.5	<0.9	1,000	<0.5	<0.9
9/22/2011 [3]	0-Initial	Screening not conducted--vapor point full of water			900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	1				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	2				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	3				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	4				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	5				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	10				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	15				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	20				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	25				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	30				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
1/26/2012 [3]	0-Initial	Screening not conducted--vapor point full of water			900	<0.5	<0.9	900.0	<0.5	<0.9	900	<0.5	<0.9
	1				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	2				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	3				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	4				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	5				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	10				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	15				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	20				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	25				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	30				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
3/25/2013 [3]	0-Initial	NR	NR	NR	900	3.2	6.0	900	3.2	6.0	900	4.1	7.7
	1				900	3.0	5.7	900	3.4	6.4	900	4.3	8.1
	2				900	2.8	5.3	900	3.0	5.7	900	4.2	7.9
	3				900	2.7	5.1	900	2.8	5.3	900	4.1	7.7
	4				900	2.6	4.9	900	2.5	4.7	900	4.2	7.9
	5				900	2.7	5.1	900	2.7	5.1	900	4.0	7.5
	6				900	2.7	5.1	900	2.6	4.9	900	3.9	7.4
	7				900	2.6	4.9	900	2.6	4.9	900	4.0	7.5
	8				900	2.5	4.7	900	2.5	4.7	900	3.9	7.4
	9				900	2.5	4.7	900	2.4	4.5	900	3.8	7.2
	10				900	2.4	4.5	900	2.5	4.7	900	3.9	7.4
2/4/2014 [3]	0-Initial	NR	NR	NR	900	1.0	1.9	900	2.0	3.8	900	5.5	10.4
	1				900	0.8	1.5	900	3.4	6.4	900	5.8	10.9
	2				900	0.8	1.5	900	3.8	7.2	900	6.6	12.5
	3				900	0.9	1.7	900	6.0	11.3	900	7.6	14.3
	4				900	0.9	1.7	900	6.9	13.0	900	9.3	17.5
	5				900	0.9	1.7	900	6.2	11.7	900	11.0	20.8
	6				900	1.0	1.9	900	7.8	14.7	900	12.3	23.2
	7				900	1.1	2.1	900	9.4	17.7	900	13.4	25.3
	8				900	1.2	2.3	900	8.2	15.5	900	14.6	27.5
	9				900	1.2	2.3	900	8.9	16.8	900	15.3	28.9
	10				900	1.3	2.5	900	9.8	18.5	900	16.6	31.3

Table 4. Summary of Soil Vapor Screening Results
(May 2008 - February 2016)
Former Mobil Service Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153,
3-23994, 3-25770 and 3-26537

Sample Point:		**VP-1**			**VP-2**			**VP-3**			**VP-4**		
Screen Interval (ft bgs):		3.0-4.0'			2.6 - 3.6'			2.0 -3.0'			2.6 - 3.6'		
Surface around sample point:		Asphalt			Concrete			Concrete			Concrete		
General Location:		Along perimiter of structure			Within structure's footprint			Within structure's footprint			Within structure's footprint		
Date	**Time (min.)**	Flow Rate (ml/min)	Field PID Reading (ppm) [a]	Adjusted PID Reading (ppm) [b]	Flow Rate (ml/min)	Field PID Reading (ppm) [a]	Adjusted PID Reading (ppm) [b]	Flow Rate (ml/min)	Field PID Reading (ppm) [a]	Adjusted PID Reading (ppm) [b]	Flow Rate (ml/min)	Field PID Reading (ppm) [a]	Adjusted PID Reading (ppm) [b]
2/27/2015[3]	0-Initial	NR	NR	NR	900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	1				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	2				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	3				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	4				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	5				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	6				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	7				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	8				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	9				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
	10				900	<0.5	<0.9	900	<0.5	<0.9	900	<0.5	<0.9
1/26/2016[3]	0-Initial	NR	NR	NR	900	15.3	28.9	900	16.8	31.7	900	19.7	37.2
	1				900	14.9	28.1	900	14.7	27.7	900	14.3	27.0
	2				900	13.7	25.8	900	14.0	26.4	900	13.9	26.2
	3				900	13.1	24.7	900	13.3	25.1	900	13.1	24.7
	4				900	12.6	23.8	900	12.8	24.2	900	12.8	24.2
	5				900	11.4	21.5	900	11.4	21.5	900	11.5	21.7
	6				900	10.9	20.6	900	4.1	7.7	900	10.2	19.2
	7				900	10.0	18.9	900	8.9	16.8	900	9.7	18.3
	8				900	9.5	17.9	900	7.4	14.0	900	9.4	17.7
	9				900	9.1	17.2	900	6.8	12.8	900	8.9	16.8
	10				900	8.7	16.4	900	6.5	12.3	900	8.3	15.7

Notes:
Photoionization Detector (PID) readings were collected using a Mini-rae 2000 PID equipped with a 10.6 eV lamp calibrated as equivalent benzene.
ppmv = parts per million per unit volume.
ml/min = milliliters per minute
Shaded readings identify exceedance of the MassDEP published Level 1 - Soil Gas Screening Levels (applicable at that time) for Evaluating Indoor Air Impacts.
NA = Not Applicable
NS = Not Screened
NR = Not Recorded
ft. bgs. = Feet below ground surface.
<= PID readings not detected above 1 ppmv.
(1) Sample collected for APH analysis.
(2) Sampled with a GAST ROC-4 pump.
(3) Sampled with a SKC Universal sample pump.
(a) = Field Readings were obtained by calibrating the PID using a 100 ppmv isobutylene standard and a 0.53 Response Factor to respond as benzene.
(b) = Adjusted Readings for detected concentrations were back-calculated to correspond to action levels in the Method 2 Approach, which are based on an isobutylene standard calibrated with a 1.0 Response Factor to respond as isobutylene.

Table 5. Summary of Soil Vapor Analytical Results
(May 2008 - February 2016)
Mobil Station No. 11658 (Formerly 01-081)
19 Ames Street
Dedham, Massachusetts
MassDEP Site No. 3-2716 and Linked RTNs 3-21116, 3-23153,
3-23994, 3-25770 and 3-26537

		Sub-Slab Soil Vapor Screening Levels		Soil Vapor Concentration (µg/m³)				
		Residential (2) (µg/m³)	Commercial/ Industrial (3) (µg/m³)	Summa (1) 5/19/2008	Summa (1) 3/25/2013	Summa (5) 2/4/2014	Summa (5) 2/27/2015	Summa (5) 1/26/2016
APH and Target VOC's by MassDEP Method:								
VP-1	C5-C8 Aliphatic Hydrocarbons	4,100	23,000	1,330	--	--	--	--
	C9-C12 Aliphatic Hydrocarbons	700	3,100	<18	--	--	--	--
soil gas	C9-C10 Aromatic Hydrocarbons	4,800	15,000	22	--	--	--	--
	Benzene	160	770	3.5	--	--	--	--
	Toluene	3,800	100,000	17	--	--	--	--
	Ethylbenzene	520	20,000	2.8	--	--	--	--
	Xylenes (total)	1,400	2,000	16.2	--	--	--	--
	Methyl Tert Butyl Ether (MTBE)	2,700	62,000	<1.8	--	--	--	--
	Naphthalene	43	190	<2.6	--	--	--	--
	2-Methylnaphthalene (4)	560	1,000	<2.9	--	--	--	--
VP-2	C5-C8 Aliphatic Hydrocarbons	4,100	23,000	2,120	**9,980**	**6,680**	**6,150**	**110,000**
	C9-C12 Aliphatic Hydrocarbons	4,800	15,000	18	1,060	1,310	389	678
sub slab	C9-C10 Aromatic Hydrocarbons	700	3,100	26	16	94.0	31	28
	Benzene	160	770	8.3	22	50.2	36.7	19
	Toluene	3,800	310,000	36	198	260	94.6	111
	Ethylbenzene	520	62,000	5.2	8.3	84.7	14	62.5
	Xylenes (total)	1,400	6,200	28.4	31.8	195.5	111.3	232
	Methyl Tert Butyl Ether (MTBE)	2,700	190,000	<1.8	<1.4	<7.2	<1.4	<5.8
	Naphthalene	42	190	<2.6	<2.1	<10	<2.1	3.2
	1,3-Butadiene	NE	NE	<1.1	<0.88	<4.4	<0.88	<3.5
	2-Methylnaphthalene (4)	560	2,400	<2.9	--	--	--	--
VP-3	C5-C8 Aliphatic Hydrocarbons	4,100	23,000	3,720	**7,820**	**6,110**	3,830	**80,100**
	C9-C12 Aliphatic Hydrocarbons	4,800	15,000	<18	533	**979**	173	429
sub slab	C9-C10 Aromatic Hydrocarbons	700	3,100	27	14	<50	24	<40
	Benzene	160	770	6.4	17	29	17	17
	Toluene	3,800	310,000	29	135	229	59.9	101
	Ethylbenzene	520	62,000	4.8	10	99.0	9.1	49.5
	Xylenes (total)	1,400	6,200	<4.4	43	880	73.5	195
	Methyl Tert Butyl Ether (MTBE)	2,700	190,000	<1.8	<1.4	<7.2	<1.4	<5.8
	Naphthalene	42	190	<2.6	<2.1	<10	<2.1	2.7
	1,3-Butadiene	NE	NE	<1.1	<0.88	<4.4	<0.88	<3.5
	2-Methylnaphthalene (4)	560	2,400	<2.9	--	--	--	--
VP-4	C5-C8 Aliphatic Hydrocarbons	4,100	23,000	820	**12,400**	**7,440**	3,270	**89,600**
	C9-C12 Aliphatic Hydrocarbons	4,800	15,000	<18	452	1,660	265	773
sub slab	C9-C10 Aromatic Hydrocarbons	700	3,100	<13	16	112	44	40
	Benzene	160	770	6.7	15	44.7	18	22
	Toluene	3,800	310,000	9.4	193	305	63.7	108
	Ethylbenzene	520	62,000	<2.2	9.1	104	11	77.7
	Xylenes (total)	1,400	6,200	<4.4	39.1	998	87.3	258
	Methyl Tert Butyl Ether (MTBE)	2,700	190,000	<1.8	<1.4	<7.2	<1.4	<5.8
	Naphthalene	42	190	<2.6	<2.1	<10	<2.1	3.1
	1,3-Butadiene	NE	NE	<1.1	<0.88	<4.4	<0.88	<3.5
	2-Methylnaphthalene (4)	560	2,400	<2.9	--	--	--	--

Notes:
µg/m³ = Micrograms per cubic meter
NA = Not Applicable
R = Rejected following data quality review because result was attributed to a single (non-petroleum) analyte peak
NE = Not Established by MassDEP
APH = Air-Phase Petroleum Hydrocarbons
VOCs = Volatile Organic Compounds
MassDEP = Massachusetts Department of Environmental Protection
Bold values indicate that the analyte was detected above the Residential Sub-Slab Soil Vapor Screening Value.
<# = Not detected at indicated reporting limit.
-- = Not Sampled.
(1) Soil vapor samples were collected using a 6L evacuated, polished, stainless steel summa canister with a calibrated 4 hour time-integrated flow controller.
(2) Values provided in Table II.1 of the Interim Final Vapor Intrusion Guidance (WSC#11-435) issued in December 2011.
(3) Values provided in Table II.2 of the Interim Final Vapor Intrusion Guidance (WSC#11-435) issued in December 2011.
(4) 2-methylnaphthalene was on the constituent list for the MassDEP draft APH method, but is no longer in the final method.
As such, samples collected after 2011 were not analyzed for this specific compound.
(5) Soil vapor samples were collected using a 6L evacuated, polished, stainless steel summa canister with a calibrated 8 hour time-integrated flow controller.

ATTACHMENT E
MassDOT Letter & Permit to Access State Highway (October 8, 2013)

Deval L. Patrick, Governor
Timothy P. Murray, Lt. Governor
Richard A. Davey, Secretary & CEO
Frank DePaola, Administrator

MassDOT
Massachusetts Department of Transportation
Highway Division

PERMIT – DEDHAM

Environmental Site Cleanup

Permit # 6-2013-0138

This Permit is issued as of the **8th** day of **October, 2013** by the Massachusetts Department of Transportation (MassDOT), a body politic and corporate duly established and existing pursuant to G. L. Chapter 6C, having an address of 10 Park Plaza, Suite 4160, Boston, Massachusetts 02116, to **Cyn Environmental Services** (the "Grantee"), having a usual place of business at **100 Tosca Drive, Stoughton, MA 02072** subject to the terms and conditions set forth in this Permit and any attachments to this Permit, to allow the Grantee to enter upon the Property (as that term is defined in Section 1 – "Scope of Work" of this Permit) for the sole purpose of performing the Work as that term is defined in Section 1 – "Scope of Work" of this Permit.

TERMS AND CONDITIONS

1. Scope of Work. The MassDOT hereby permits the Grantee, its agents and contractors, to enter upon the properties owned by or under the control of MassDOT located **on Bridge Street/Route 109 at 19 Ames Street in Dedham** (the "Property") as described in the Application for Permit to Access State Highway and as shown on the plan titled **"EXHIBIT PLAN OF LAND IN DEDHAM, MASSACHUSETTS PREPARED FOR: GES, INC"** prepared by **the Cyn Environmental Services and Hancock Associates** respectively for the limited purpose of permitting the Grantee access to **excavate and install a two inch schedule 40 PVC pipe to discharge treated ground water to a MassDOT owned catch basin on Bridge Street/Route 109, backfill, repave the roadway and make repairs to sidewalks as necessary to restore the roadway and sidewalks to their original conditions in accordance with the aforementioned application and plans, if applicable** (the "Work"), and in strict accordance with the terms and conditions of this Permit.

i. **The Grantee shall contact the Area Contact Person, Mr. Bob Hutcheon or designee, from 7:30 AM to 3:00 PM Monday through Friday ONLY at (857) 368-6308 (office) or via email at Robert.hutcheon@state.ma.us two (2) working days prior to the start of work.**

ii. **The applicant is required to complete the Roadway Work Notification Form (attached) and submit it to Mr. Robert Hutcheon via email at Robert.hutcheon@state.ma.us on the Wednesday of the week preceding the work. MassDOT notifications (approvals and denials) will be delivered via email by noon on Friday.**

iii. **Roadway Lane Closure Work Hours: Monday thru Friday, 9:30 AM to 3:30 PM.**

iv. **No work will be performed on the day prior to or the day after a holiday or a long weekend which involves a holiday on any highway, roadway or property under the control of the MassDOT or in areas where the work would adversely impact the normal flow of traffic on the State Highway System without permission of the DHD or an authorized representative.**

v. **No detours shall be permitted to complete this work.**

vi. **Two way traffic shall be maintained at all times during construction.**

vii. **The District will assign an inspector for the project whose primary responsibility shall be quality assurance inspections for work on MassDOT infrastructure. There shall be a Reimbursable Number for State Engineering Personnel while inspecting this job. The inspector shall be notified at least 48 hours in advance of work to be performed. Rework required for work performed without an inspector present shall be at no expense to MassDOT.**

P310 # 391510 Completed 12/6

185 Kneeland Street, Boston, MA 02111
Tel: 857 -368-6300, FAX: 857-368-0106/0105
www.mass.gov/massdot

viii. It shall be the responsibility of the Grantee to provide access to the property of residents and business owners in the vicinity of the work during progress of the proposed work.

ix. Provisions shall be made for the safety and protection of Pedestrian and Vehicular Traffic during the work. Sufficient uniformed police necessary to control motor vehicle and pedestrian traffic and to man the detour shall be present. The Grantee shall minimize delays to motorists and ensure the safety of pedestrians at no expense to MassDOT.

x. All work shall be in compliance with the 1988 Edition of the "Massachusetts Highway Department Standard Specifications for Highways and Bridges", and Supplemental Specifications Dated November 8, 2000.

xi. Care shall be exercised so as not to disturb any existing State Highway Traffic Duct Systems or any underground structures that exist. Any disturbance shall be restored immediately to its original condition. All expenses for restoring conditions shall be borne by the Grantee.

xii. It shall be the responsibility of the Grantee to install or replace all pavement markings which have been disturbed by this permit. The pavement markings shall be restored within ten (10) Days after this work is performed or as deemed necessary by the District Highway Director or an authorized Representative.

xiii. The Grantee shall take care during his operations not to damage existing signs. The Grantee is responsible to replace damaged signs at his/her expense in accordance with MassDOT sign installation protocols.

xiv. No trees shall be removed under this permit.

xv. All trenches shall be squared-off and saw-cut. Concrete sidewalk patches shall include the entire panel and shall extend to the nearest control or expansion joint as required. Pavement restoration shall be in accordance with MassDOT typical Trench Detail (attached).

xvi. Concrete sidewalk patches shall include full width and depth construction of the sidewalk and the full length of the trench construction. The sidewalk reconstruction shall be in accordance with the MassDOT Standard Sidewalk Detail (attached).

xvii. All excavated material shall be properly and legally disposed of off site at the Grantee's expense. Excavated material may not be reused unless expressly permitted by an authorized MassDOT representative.

xviii. The Grantee will be responsible for and shall repair any damage caused by his operation to curbing, structures, roadways, infrastructure, etcetera. Damage to signal conduits or loop detectors shall be repaired by the end of the work day.

xix. At the completion of this permit, all disturbed areas shall be a) restored to a condition equal to that which existed prior to the work or b) restored as agreed upon by the MassDOT as required at the Grantee's expense.

xx. The Grantee shall complete and return the "Notice of Completion of Work" form. The Grantee's liability for the site shall continue until the form is received and the completed work has been inspected.

xxi. The Grantee shall use the MassDOT Trench Detail included (dated April 2003) where applicable. Controlled Density Fill (CDF) for specified trench cuts (less than 4') within the paved surface of a state highway is mandatory.

xxii. The Grantee shall assume full responsibility for the structural integrity of any trench located within the MassDOT layout. This responsibility shall remain in place for a period of three (3) years after the completion of the physical work, this time frame starts when the Grantor receives the Completion of Work Form from the Grantee.

xxiii. The grantee shall respond to trench maintenance requests by the DHD or his representative within two (2) working days. Non-response within the specified time frame will result in the required maintenance work being performed by the Grantor, with all expenses charged to the Grantee.

xxiv. Failure to respond to trench maintenance requests shall result in denial of future Permit requests.

xxv. The highway surface shall be kept clean of debris at all times and shall be thoroughly cleaned at the completion of the scope of work under this permit.

xxvi. All utility companies whose services are located within or adjacent to the proposed installation areas shall be notified in writing of the proposed installation at least 48 hours prior to the start of any excavation in said areas. Note: this is independent of the required Dig-safe notification.

xxvii. Under no circumstances shall the operations create a hazardous environment for the general public.

xxviii. The Contractor is responsible to ensure that all contractor personnel, including all subcontractors, working on the project are issued and are wearing all necessary personal protective safety equipment while working within the project limits. This equipment shall include, as a minimum, a hardhat, safety vest and glasses, regardless of the type of work being performed. Other safety equipment shall be added as required to perform the work in which they are engaged and in accordance with all local, state and federal requirements in effect.

xxix. The furnishing and erecting of all required signs and traffic safety devices shall be the responsibility of the Grantee. All signs and devices shall conform to the 2009 edition of the Manual on Uniform Traffic Control Devices (MUTCD) with the Commonwealth of Massachusetts Amendments.

xxx. Cones and non-reflecting warning devices shall not be left in the operating position on the highway when the daytime operations have ceased. All costs to remove any construction warning devices or their appurtenances from the project if it becomes necessary for the Department will be charged to the Grantee.

xxxi. Care shall be used so as not to disturb any highway markers or property bounds. If it becomes necessary to remove and reset any bounds then the Grantee shall hire a Registered Professional Land Surveyor to perform this work. It shall be the responsibility of the land surveyor to submit to this office a statement in writing and a plan containing his stamp and signature showing that said work has been performed.

xxxii. The work shall be performed as per the aforementioned plans and documents on file at the MassDOT District 6 Permit Office.

xxxiii. All regulatory submittals shall be copied to the MassDOT District 6 Director of Environmental Engineering via email or USPS at, Director of Environmental Engineering, MassDOT, District 6, 9th Floor, 185 Kneeland Street, Boston, MA 02111.

xxxiv. The Grantee shall provide as-builts of all construction work completed on MassDOT owned properties. And when all environmental agencies agree and grant approval to remove all groundwater treatment facilities and underground discharge pipes, the Grantee shall contact the MassDOT District 6 Director of Environmental Engineering prior to removal for final inspection. No installed discharge pipes shall remain in the ground upon completion of this work.

xxxv. This permit is issued with the stipulation that it may be modified or revoked at any time. at the discretion of the District 6 Highway Director or an authorized representative without rendering said Department or the Commonwealth of Massachusetts liable in any way.

xxxvi. **A copy of this permit must be on the job site at all times for inspection. Failure to have this permit available will result in suspension of the rights granted by this permit until such permit is made available.**

xxxvii. **This permit does not relieve the Grantee of their obligation to procure all necessary local, State or federal permits or licenses as required. Copies of other permits or approvals shall be forwarded to the District Permit office prior to commencing field work.**

2. Term of Permit. The term of this Permit shall commence on the date first above written and shall end on **November 15, 2014** (the "Expiration Date"), unless otherwise revoked or extended by the MassDOT in accordance with this Permit. The MassDOT reserves the right to revoke this Permit at any time prior to the Expiration Date for any reason or for no reason by written notice to the Grantee in accordance with the provisions of Section 6 below or, in the event of an emergency, as provided in Subsection 3(f) below, by verbal notice to the Grantee by the District Highway Director or his designee.

3. Conditions to Entry. The Grantee shall provide MassDOT representative(s) specified in Subsection 3(a) below with reasonable prior notice before the Grantee, its agents or contractors, enters onto the Property to perform the Work, and such entry shall be subject to reasonable conditions imposed by MassDOT representatives. The following shall apply to entry on the Property by the Grantee, its agents or contractors:

(a) the Grantee shall notify the following MassDOT representatives (where doubled checked) of the name of each agent or contractor that will be entering onto the Property, the proposed date and time of such entry and the nature of the Work:

Check off as appropriate (MassDOT use only)	*Name of MassDOT Representative*	*Title of MassDOT Representative*	*Telephone # of MassDOT Representative*
XX	Dave Belanger or designee	Highway Operations Engineer	(857) 368-6301

The Grantee is prohibited from performing any work under this Permit until the Grantee (i) has received permission from the appropriate MassDOT representative(s), specified above, to commence the Work and (ii) has followed any further instructions of MassDOT;

(b) the Grantee or its principal shall comply with all provisions of the Permit which are prerequisites for commencing the Work including, but not limited to, the furnishing of payment and performance bonds to MassDOT and the securing of all requisite environmental permits from each municipality in which the Grantee will be conducting the Work under this Permit;

(c) all of the activities performed on the Property by the Grantee, its agents and contractors, shall be undertaken in a good, workmanlike and safe manner in compliance with all Applicable Laws. The term "Applicable Laws" shall mean all applicable local, state and federal laws, regulations, rules, orders, decrees, codes or ordinances.

(d) the Grantee shall notify the appropriate public service corporations and/or municipal departments prior to performing any work in the vicinity of their installations in accordance with the provisions of M.G.L. Chapter 82, Section 40. In particular, the Grantee shall notify the public service corporations and/or municipal departments 72 hours prior to performing any excavation on the Property in the vicinity of these installations, except as otherwise provided by the statute or this Permit. The telephone number for the Dig Safe Center is 1-888-DIG-SAFE;

(e) the Grantee, its agents and contractors, shall not unreasonably interfere with MassDOT or any tenants of the Property or their respective business operations or use and enjoyment of the Property. The Grantee shall not cause or permit any unlawful conduct, unreasonable annoyance or nuisance to exist or arise in the course of, or as a result of, the Work, nor

permit any such activity. In particular, the Grantee shall not interfere with MassDOT's operation of the toll highway or harbor tunnels or any of its facilities in the performance of the Work, except as specifically provided herein, nor permit any such activity;

(f) in the event a public health or safety emergency should arise, as determined in the sole discretion of, MassDOT or its agents shall have the right to order the Grantee to interrupt the performance of the Work and to require the Grantee to vacate the Property. In addition, MassDOT or its agents may further undertake whatever action may be necessary, in MassDOT's sole discretion, to alleviate the emergency including, but not limited to, suspending or revoking this Permit;

(g) promptly upon completion (or discontinuance) of the Work, the Grantee, at its sole expense, shall remove or cause to be removed from the Property all materials, equipment, machinery and other items brought onto the Property by the Grantee, its agents or contractors, and shall promptly repair and restore the Property to the condition it was in immediately prior to the commencement of the Work;

(h) the Grantee shall indemnify MassDOT in accordance with Section 5 below and carry the insurance as provided in Section 4 below;

(i) the Grantee shall not, nor shall it permit third parties to, use, generate, store, release on, under or about the Property, or transport to the Property, any Hazardous Materials. The term "Hazardous Materials" shall mean any substance, material, waste, gas or particulate matter that is regulated by any local governmental MassDOT, the Commonwealth of Massachusetts or the United States Government including, but not limited to, any material or substance that is (i) defined as a "hazardous waste", "hazardous material", "hazardous substance", "toxic waste", "toxic material", or "toxic substance" under any provision of any federal, state or local law, (ii) petroleum, (iii) asbestos, (iv) polychlorinated biphenyl, or (v) radioactive material;

(j) all costs of any traffic control details, construction phase services and all third parties actual out-of-pocket costs reasonably incurred by or on behalf of MassDOT relating to any or all of the foregoing activities including, but not limited to, the costs of related traffic protection set-ups, and/or inspectors shall be paid in full by the Grantee. The Grantee shall also pay all fees, licenses, permits, taxes or other charges due to any person in the performance of the Work under this Permit including, but not limited to, taxes, fees, or other charges assessed to MassDOT or which any governmental jurisdiction demands that MassDOT pay in relation to the Work under this Permit.

The provisions of this Section 3 shall survive the expiration or revocation of this Permit.

4. Insurance Requirements: The Grantee shall purchase and maintain throughout the term of the Permit adequate insurance coverage, to include but not be limited to the following types and amounts of coverage:

a) The following minimum insurance coverage is required.

i) Workers' Compensation Insurance in compliance with applicable federal and state laws, including U.S. Longshoreman's and Jones Act coverage, and Employers Liability Insurance with limits of at least One Million Dollars ($1,000,000) per occurrence. The policy must be endorsed to provide that the insurer waives all rights of subrogation against MassDOT.

ii) Automobile Liability Insurance covering owned, non-owned and hired vehicles.

iii) Commercial General Liability Insurance including contractual liability specifically covering this Permit and personal injury coverage, written on an occurrence form.

iv) Umbrella Liability Insurance (an excess liability policy is not acceptable). The combination of the policy limits of the underlying automobile liability and general

liability policies and the umbrella liability policy shall provide overall limits of not less than $6,000,000 (six million dollars) per occurrence.

b) The policies listed in subsections ii, iii and iv above must be endorsed to name "MassDOT" as additional insured.

c) All insurance maintained by the Grantee pursuant to this Permit shall be written by insurance companies licensed to do business in the Commonwealth. If the Grantee determines that any such insurance needs to be placed with surplus lines carriers not licensed by the Commonwealth, written permission from MassDOT is required. All insurance companies to be used by the Grantee must have a Best's Rating of not less than A- and be reasonably acceptable to MassDOT.

d) If requested by MassDOT in writing, the Grantee will furnish certified copies of the aforementioned policies to MassDOT's designated representative.

e) All insurance maintained by the Grantee shall provide that insurance for the benefit of MassDOT shall be primary and MassDOT's own insurance shall be non-contributing.

f) The Grantee shall provide MassDOT with certificates of insurance evidencing the above referenced insurance policies prior the execution of this Permit. The certificates shall contain an unequivocal provision that MassDOT shall be given thirty (30) days prior written notice of cancellation, material change or non-renewal of the coverage.

5. Indemnity. The Grantee at its sole cost and expense shall defend and shall indemnify and hold harmless MassDOT, its members, officers, employees, agents, successors and assigns (the "Indemnified Parties") from and against all claims, causes of action, suits, losses, damages and expenses (including reasonable attorneys' fees and costs of investigation and litigation) of whatever nature to any person or property based upon or arising out of this Permit, unless caused solely by the gross negligence or willful misconduct of any one or more of the Indemnified Parties, or its agents or contractors. The foregoing express obligation of indemnification shall not be construed to negate or abridge any other obligation of indemnification running to MassDOT which would exist at common law or under other provisions of this Permit, and the extent of the obligation of indemnification shall not be limited by any provision of insurance undertaken in accordance with this Permit. Further, the Grantee shall indemnify and hold harmless MassDOT from and against all costs, reasonable counsel and expert fees, expenses, and disbursements incurred in connection with or in defending any such claim or any action or proceeding brought thereon; and in case any action or proceeding is brought against MassDOT by reason of any such claim, the Grantee, upon notice from MassDOT, shall resist or defend such action or proceeding with counsel reasonably acceptable to MassDOT. Without in any way limiting the scope of the foregoing, the Grantee shall defend, indemnify and hold harmless MassDOT, its members, officers, employees, agents, successors and assigns from and against any and all claims, liabilities, losses, damages, costs and expenses (including reasonable attorneys' fees and costs of investigation and litigation) relating to environmental contamination arising out or in any way related to the Work. MassDOT shall give the Grantee prompt written notice of any claims threatened or made or suits instituted against it which could result in a claim of indemnification hereunder. Each of the Indemnified Parties indemnified under any indemnity in this Permit shall cooperate in all reasonable respects (at the Grantee's cost and expense) in defense of the third-party claim pursuant to which the Grantee is alleged to have liability. The provisions of this Section 5 shall survive the revocation or expiration of this Permit.

6. Notice. All notices, demands, submissions, requests, consents, approvals and other instruments required or permitted to be given pursuant to the terms hereof shall be in writing and shall be deemed to have been properly given if delivered by hand during regular business hours, by any courier service providing receipts, or sent by registered or certified United States mail, postage prepaid, return receipt requested, to the parties at the address first above written, or to such other addresses as may from time to time specified in writing by any party hereto given in accordance with this Section 6. A copy of each notice to MassDOT shall be sent to c/o District Highway Director, Massachusetts Department of Transportation, 185 Kneeland Street, Boston, MA 02111, with a copy to the MassDOT's General Counsel, at the address of MassDOT first above written. Any notice so addressed and so delivered and mailed shall be deemed given when delivery is tendered, whether or not tender of delivery is accepted. A copy of each notice to the Grantee shall be sent c/o **Mr. Richard Bell [Telephone: (781) 603-7713 --- Email: rich_bell@cynenv.com]** at the address of the Grantee first above written.

7. Successors and Assigns. The provisions of this Permit shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns. Notwithstanding the foregoing, the Grantee may not assign its interest in this Permit without MassDOT's prior consent, which consent may be withheld or denied in MassDOT's sole and absolute discretion.

8. Governing Law. The parties agree that the laws of the Commonwealth of Massachusetts shall govern the interpretation and enforcement of this Permit. Any legal proceedings arising out of or under this Permit shall be brought in the Superior Court of Suffolk County in Boston, MA.

9. Counterparts. This Permit may be executed in one or more separate counterparts, each of which when so executed shall be deemed to be an original and together all of such counterparts shall constitute one and the same instrument.

10. Trench/Excavator Work. By signing the application, the applicant/excavator understands and agrees to comply with the following:

i. No trench may be excavated unless the requirements of sections 40 through 40D of chapter 82, and any accompanying regulations, have been met and this permit is invalid unless and until said requirements have been complied with by the excavator applying for the permit including, but not limited to, the establishment of a valid excavation number with the underground plant damage prevention system as said system is defined in section 76D of chapter 164 (DIG SAFE);

ii. Trenches may pose a significant health and safety hazard. Pursuant to Section 1 of Chapter 82 of the General Laws, an excavator shall not leave any open trench unattended without first making every reasonable effort to eliminate any recognized safety hazard that may exist as a result of leaving said open trench unattended. Excavators should consult regulations promulgated by the Department of Public Safety in order to familiarize themselves with the recognized safety hazards associated with excavations and open trenches and the procedures required or recommended by said department in order to make every reasonable effort to eliminate said safety hazards which may include covering, barricading or otherwise protecting open trenches from accidental entry.

iii. Persons engaging in any in any trenching operation shall familiarize themselves with the federal safety standards promulgated by the Occupational Safety and Health Administration on excavations: 29 CFR 1926.650 et.seq., entitled Subpart P "Excavations".

iv. Excavators engaging in any trenching operation who utilize hoisting or other mechanical equipment subject to chapter 146 shall only employ individuals licensed to operate said equipment by the Department of Public Safety pursuant to said chapter and this permit must be presented to said licensed operator before any excavation is commenced;

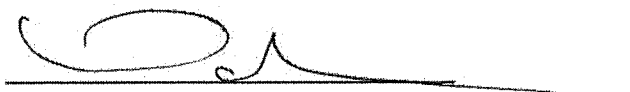
v. By applying for, accepting and signing this permit, the applicant hereby attests to the following: (1) that they have read and understands the regulations promulgated by the Department of Public Safety with regard to construction related excavations and trench safety; (2) that he has read and understands the federal safety standards promulgated by the Occupational Safety and Health Administration on excavations: 29 CMR 1926.650 et.seq., entitled Subpart P "Excavations" as well as any other excavation requirements established by this municipality; and (3) that he is aware of and has, with regard to the proposed trench excavation on private property or proposed excavation of a city or town public way that forms the basis of the permit application, complied with the requirements of sections 40-40D of chapter 82A.

vi. The permit shall be posted in plain view on the site of the work.

Dated at Boston as of the date first written above.

By,

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION



Walter P. Heller, P.E.
Acting District Highway Director

ATTACHMENT A

PLAN OR SKETCH OF AUTHORIZED WORK AREA

MISCELLANEOUS ATTACHMENTS

Construction Details
MassDOT Trench Detail
MassDOT Standard Sidewalk Details

MASSACHUSETTS HIGHWAY DEPARTMENT

Application for Permit to Access State Highway

This Access Permit Application, including the attached Access Permit Submittal Checklist, must be completed in full by the Applicant. Instructions for this page are located on page 2. Descriptions of the two types of access permits and related categories are located on page 6. MassHighway will make the final determination regarding Access Permit Application type and category.

1. **Town/City:** Dedham, MA
2. **State Highway route number and/or name:** Route 109, Bridge Street
3. **Locus/Property Address:** 19 Ames Street, Dedham, MA
4. **Description of property and/or facility for which access is sought** (attach additional sheets if necessary):
   Install 2-inch sch 40 PVC discharge pipe from treatment system to catch basin, Trench along sidewalk - Town of Dedham. Install line, backfill, compact, re-pave. Police Detail.
5. **Description of work to be performed within State Highway Layout** (attach additional sheets if necessary):
   Install discharge line to catch basin crossing sidewalk. Saw cut pavement, excavate to proper depth, install trench box if necessary. Core & install 2" PVC Pipe. Repair basin, backfill, compact, & Re-pave. Police Detail.
6. **Dig Safe number:** 20133702879
7. **Applicant Information** [1] (See footnote below.)

   Name: Cyn Environmental Services
   Attn: Richard Bell
   Mailing Address: 166 Tosca Drive
   Stoughton, MA 02072
   Telephone: 781-603-7713
   Fax: 781-686-1289
   Email: rich_bell@cynenv.com
   Signature: Richard Bell
   Print Name: Richard Bell
   Date: 09-09-13

8. **Property Owner**

   Name: 33 McDonald Street LLC
   Mailing Address: 19 Ames Street
   Dedham, MA 02027
   Telephone: 781-329-1538
   Fax:
   Email:
   Signature:
   Print Name: Jack Mudy
   Date: 09-09-13

Return completed application, including Submittal Checklist, to the District Highway Director for your town/city. Refer to reverse side for appropriate address.

For office use only. Do not write below this line.

1. Application number:
2. Date received:
3. Fee amount (non-refundable):
4. Completeness Pre-Review date:
5. MEPA required (yes or no)
   ENF-EOEEA Cert. #
   EIR-EOEEA Cert. #
   Other-EOEEA Cert. #
6. Section 61 Finding date:
7. Mass. Historic Action (yes or no)
8. Plans returned to DHD:
9. Permit Type/Category:
10. Application complete date:
11. Permit written date:
12. Permit issued date:
13. Permit denied:
14. Permit Recording date at Registry of Deeds

[1] If an agent is representing an Applicant, the application must include a notarized letter from the Applicant outlining the specified duties and responsibilities of the agent. Where work is proposed on a utility, the utility department must sign the application as the Applicant(s).

Instructions for completing
Application for Permit to Access State Highway

GENERAL INSTRUCTIONS

MassHighway is granted authority to issue **State Highway Access Permits** by M.G.L. Chapter 81, Section 21. MassHighway adopted 720 CMR 13.00 under the authority of M.G.L. c.81, §21 and M.G.L. c.85 §2. 720 CMR 13.00 supersedes the Standard Operating Procedures for Review of State Highway Access Permits dated November 30, 1971 and board vote of September 17, 1991.

ACCESS is generally defined but not limited to:
Any physical work performed within the State Highway Layout.

This application governs issuance of the two types of access permit Applications, Non-Vehicular and Vehicular, which are issued under three categories:

Category I	Minor Vehicle Access Permits
Category II	Major Vehicular Access Permits
Category III	Complex Vehicular Access Permits

Please refer to the **MassHighway Access Permit Submittal Checklist** for details regarding permit types and submittals required.

FEES:
A check payable to the Commonwealth of Massachusetts for the appropriate permit application fee must accompany the permit application. Fees are non-refundable.

Fee schedule for Access and Utility Payments:

Residential Access Permits

5 units or less	$25.00
From 6 to 49 units	$100.00
Greater than 49 units	$2000.00

Non-Residential Access Permits

Less than 25,000 square feet	$500.00
From 25,000 to 300,000 square feet	$1000.00
From 300,000 to 750,000 square feet	$2000.00
Greater than 750,000 square feet.	$3000.00

Non-Municipal Utility Permits not in conjunction with Access Permits:

Annual blanket utility permit	$500.00
Capital improvements to a utility	$500.00

SPECIFIC INSTRUCTIONS (print or type)

Line 1:
List Name of municipality in which access is sought.

Line 2:
List name or number of State Highway Route(s) to which access is sought.

Line 3:
List Locus/Property address.

Line 4:
Describe property and/or facility. If access is sought under Category II above, briefly describe facility for which access is sought.

Example 1: Private single family residence at 100 State Road. Approximate size of proposed building 2500 s.f. Approximate lot size 0.75 acres.

Example 2: 500,000 s.f. enclosed shopping mall adjacent to State Route I-290 and Route 20. Approx lot size 67 acres.

Line 5:
Briefly describe the proposed work to be performed within the State Highway Layout.

Example 1: Remove 50 feet of existing granite curb on south side of highway in order to construct driveway access and modify the roadway geometry to accommodate left-hand turn.

Example 2: Excavate 10 foot x 10 foot section of roadway at Station 100+00 in westbound lane in order to install water service to residence at 100 State Street.

Line 6:
A Dig Safe number must be provided if the work will commence within 30 days of the filing of the permit. **NOTE:** A Dig Safe number must be obtained by calling **1-888-DIG-SAFE** (1-888-344-7233). If construction within the State Highway Layout does not commence within the period allowed by Dig Safe, a new number must be obtained prior to beginning construction. (www.digsafe.com)

Line 7:
Individual or business making application must complete the required information, including application date and signature.

Line 8:
Complete this section only if the individual or business making application is other than the property owner of the land for which the permit applies.

Return completed application, submittal checklist and fee to appropriate District Office listed below. Please contact the Permit Engineer at this address if additional information is required.

District One
270 Pittsfield Road
Lenox, MA 01201
Tel. (413) 637-5700
Fax (413) 637-0309

District Two
811 North King Street
Northampton, MA 01060
Tel. (413) 582-0599
Fax (413) 582-0596

District Three
403 Belmont Street
Worcester, MA 01604
Tel. (508) 929-3800
Fax (508) 799-9763

District Four
519 Appleton Street
Arlington, MA 02174
Tel. (781) 641-8300
Fax (781) 646-5115

District Five
1000 County Street
Taunton, MA 02780
Tel. (508) 824-6633
Fax (508) 880-6102

MassHighway Website:
www.mhd.state.ma.us

MASSACHUSETTS HIGHWAY DEPARTMENT

Access Permit Submittal Checklist

GREY: MHD USE ONLY

This checklist provides the Applicant with a list of required submittals to obtain an Access Permit. However, additional submittals may be required to issue an Access Permit. All Applicants must fill out Part A and one additional part that correlates to the selected application type. To help identify the application type, please see the descriptions on page 6. Check each box that pertains to your application. MassHighway will make the final determination regarding Access Permit Application type and category.

PART A: ALL APPLICANTS MUST FILL OUT

1. APPLICATION TYPE - CHECK ONE

☐ **NON-VEHICULAR:**
- ☑ Non-Vehicular - Fill out Part B

☐ **VEHICULAR:**
- ☐ **Category I** – Minor Vehicle Access Permits: Fill out Part C-I
- ☐ **Category II** – Major Vehicle Access Permits: Fill out Part C-I and Part C-II
- ☐ **Category III** – Complex Vehicle Access Permits: Fill out Part C-I and Part C-III

2. APPLICATION TYPE (Check all applicable boxes.)

- ☐ Application complete
- ☐ Permit corresponds to appropriate MassHighway District
- ☐ Non-refundable check or money order in correct amount payable to: *Commonwealth of Massachusetts*
- ☐ Evidence certifying property owner(s) consent
- ☐ Notarized Applicant Letter outlining agent's duties and responsibilities (if applicable)
- ☐ Municipal utility department application sign-off as the Applicant(s) (if applicable)

PART B: NON-VEHICULAR PERMITS

☐ **IF NO PHYSICAL MODIFICATION** *to state highway layout – i.e. parade, road race, traffic counts, etc.*

Required Submittals:

- ☑ Map of route Police Detail during work.
- ☑ Traffic Management Plan (designed in accordance with the Road Flagger & Police Regulations: 701 CMR 7.00)
- ☐ Detour Plan(s) with municipal approval (if applicable)

☐ **IF DRAINAGE:**
- ☑ If requesting connection or discharge to any MassHighway drainage system, contact District Personnel for additional information regarding required submittals. Mike MacQueen

☐ **IF CONSTRUCTION, RELOCATION OR REPAIR OF UTILITIES:**

Required Submittals:

- ☐ **EXISTING PROJECT:** reference(s) to the documents and plans already filed with MassHighway for the affected project
- ☐ **NEW PROJECT/UTILITY WORK:**

Required Submittals:

- ☐ Engineered Plan(s) including method of crossing Highway
- ☐ Traffic Management Plan (if applicable)
  (Designed in accordance with the Road Flagger & Police Regulations: 701 CMR 7.00)
- ☐ Detour Plan(s) with municipal approval (if applicable)
- ☐ Tree Cutting or Landscaping Plan (if applicable)
- ☐ Vegetative Plan including plant species and maturity size (if applicable)
- ☐ Blasting Plan (contact District Personnel for additional information)

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PART C-I : VEHICULAR PERMITS

CATEGORY I – Minor Vehicular Access Permits

Required Submittals:

- ☐ Engineering Plans
- ☐ ENF - (Environmental Notification Form) Certificate (if applicable)

IF RESIDENTIAL DRIVEWAY:

- ☐ Detailed plan/sketch showing the drive location in relation to the property lines, MassHighway baselines, distance from nearest mile marker, and an easily identifiable fixed object (distance from telephone poles, mail boxes, other drives, etc.).
- ☐ If severe topographic conditions exist, an engineered plan showing the driveway layout, profile and storm water management may be necessary to show that the edge of the proposed drive is protected during and after construction to prevent sediment and debris from entering upon the State Highway Layout (SHLO).

IF COMMERCIAL DRIVEWAY: (where no MEPA review is required)

Required Submittals:

- ☐ **Two (2) 40 scale plans that include:**
  - ☐ A. Route Number, Road Name, Property Address
  - ☐ B. Property Corners and Bounds
  - ☐ C. Lot Line Dimensions, Bearings and Distances
  - ☐ D. State Highway Layout Lines (both sides) and Nearest Massachusetts Highway Bounds (if found).
  - ☐ E. State Highway Baseline and both edges of roadway including any sidewalks and type of edging, if any, and shoulder information (grass, gravel etc.).
  - ☐ F. Any existing drive to be altered or closed shall be indicated. Existing and proposed dimensions should be included for altered drives.
  - ☐ G. Information on all proposed drives including radii, widths, handicap ramps, etc. must be shown.
  - ☐ H. All existing and proposed buildings, utilities, trees, stonewalls, fences etc., should be labeled and shown in their correct location.
  - ☐ I. It is required that all stands, buildings, gasoline pumps and structures of any kind be placed at least 12 feet back from the State Highway Layout Line, since conducting of business within a State Highway Layout is forbidden.
  - ☐ J. Complete detail on drainage; all drives should be constructed on a downgrade from the edge of the highway surface or shoulder to the State Highway Layout Line.
  - ☐ K. Engineered plans will be required to show that storm flows are not directed into the SHLO, using contour lines, where applicant/owner property elevations are raised from the edge of the highway.
  - ☐ L. The plans should identify measures to protect the edge of the proposed drive during and after construction to prevent sediment and debris from entering upon the SHLO.

IF NEW STREET/SUBDIVISION ROAD:

Minor Intersection and Roadway Reconstruction (where no MEPA review is required)

Required Submittals:

- ☐ All Commercial Driveway requirements (above) apply in addition to the following: Evidence of acceptance, including its line, grade and proposed drainage, by a local planning board, or other City or Town official with such authority.
- ☐ A street/road profile from its nearest high point and plan of drainage.

Please be advised:

- It will be required that all such future street approaches be constructed on a downgrade, where possible, from the edge of highway surface or shoulder to the State Highway Layout Line.
- Common driveway criteria may apply and must be shown on plans as mentioned above.

GREY: MHD USE ONLY

PART C-II : VEHICULAR PERMITS

CATEGORY II – Major Vehicular Access Permits

Required Submittals:

- ☐ ☐ Engineering Plans based on the standards in the Manual On Uniform Traffic Control Devices (MUTCD), MassHighway's Project Development & Design Guide or its successor, MassHighway's Standard Specifications for Highway and Bridges, and any current technical policies or engineering directives issued by MassHighway. All PS&E design submissions must be both in hard copy (one set) and electronic format. Electronic format includes PDF files transmitted to DHD or designee via USB Flash Drive, DVD or posted to a FTP site.
- ☐ ☐ In cases where a proposed access is to be shared by multiple development sites, the Applicant(s) will provide evidence of the rights of access between the parties involved prior to the issuance of the Access Permit.
- ☐ ☐ MEPA Certificate
- ☐ ☐ Section 61 Finding

PART C-III : VEHICULAR PERMITS

CATEGORY III – Complex Vehicular Permits

Required Submittals:

- ☐ ☐ Engineering Plans based on the standards in the Manual On Uniform Traffic Control Devices (MUTCD), MassHighway's Project Development & Design Guide or its successor, MassHighway's Standard Specifications for Highway and Bridges, and any current technical policies or engineering directives issued by MassHighway. All PS&E design submissions must be both in hard copy (one set) and electronic format. Electronic format includes PDF files transmitted to DHD or designee via USB Flash Drive, DVD or posted to a FTP site.
- ☐ ☐ In cases where a proposed access is to be shared by multiple development sites, the Applicant(s) will provide evidence of the rights of access between the parties involved prior to the issuance of the Access Permit.
- ☐ ☐ MEPA Certificate
- ☐ ☐ Section 61 Finding

Recording of Access Permits

Applicants must record any Vehicular Access Permit and plans or any Non-vehicular Access Permit and plans involving drainage at the appropriate registry of deeds. Any Permit issued by MassHighway that requires recording will not be effective until recorded at the appropriate Registry of Deeds and a notice of recording is submitted to the District Highway Director (DHD). Changes may require the re-recording of permits and related documents. In those cases, permits will not be effective until re-recorded at the Registry of Deeds and a notice of recording is submitted to the DHD.

THERE ARE TWO TYPES OF ACCESS PERMIT APPLICATIONS: VEHICULAR, ISSUES UNDER THREE CATEGORIES and NON-VEHICULAR:

1. VEHICULAR ACCESS PERMITS:

Category I - Minor Vehicular Access Permits:
Access Permits for Projects that require entry to the state highway layout (SHLO), require little to no non-signalized modifications, and do not significantly alter the operating characteristics of traffic. These Projects ordinarily do not exceed the Massachusetts Environmental Policy Act (MEPA) transportation thresholds beyond the filing of an Environmental Notification Form (ENF).

Category II - Major Vehicular Access Permits:
Access Permits for Projects that require significant non-signalized modification that may alter the operating characteristics of traffic at a residential or commercial driveway intersecting with the SHLO; that require significant non-signalized modifications that may alter the operating characteristics of traffic at or upon any other intersection or roadway under the jurisdiction of MassHighway; that require installation of a new traffic signal at a residential or commercial driveway intersecting with the SHLO or at any other intersection or roadway under the jurisdiction of MassHighway; or that require modification of structures, equipment, or hardware at an existing traffic signal at a residential or commercial driveway and its intersection with the SHLO or at any other intersection or roadway under the jurisdiction of MassHighway.

Category III - Complex Vehicular Permits
Access Permits for Complex Projects requiring actions similar to major Projects, but which require a new or altered SHLO; that require significant non-signalized and/or signalized modifications within the SHLO over an extended distance or at a number of intersections that significantly alters the operating characteristics of traffic along a corridor; or that require the construction of a new, or modifications to an existing, bridge. These Projects generally require MEPA review and may require Federal review.

2. NON-VEHICULAR ACCESS PERMITS:

Access Permit for Projects that require access to the SHLO that do not involve physical modifications such as a parade or road race; construction, relocation or repair of utilities within the SHLO; tree cutting or landscaping within the SHLO; the use of explosives to remove material from within 250 feet of the SHLO; or connection to or discharge to any MassHighway drainage system (in cases where it can be shown that no practical alternative exists).

CONDITIONS REQUIRING AN ACCESS PERMIT

Vehicular Access Permits are required for:

- New residential or commercial driveways or streets intersecting the SHLO; or,
- Physical modifications to existing residential or commercial driveways or streets at their intersection with the SHLO; or,
- Change in use of an existing residential or commercial driveway onto SHLO that results in a **Substantial Increase in or Impact on Traffic** (as defined below) over the current use. or,
- Construction of new, or change in use of existing, residential or commercial driveway from properties that abut the SHLO to serve a building or facility, or expansion of a building or facility, that generates a Substantial Increase in or Impact on Traffic.

Substantial Increase in, or Impact on, Traffic as referenced above is defined as:
A Project that meets or exceeds any of the following thresholds:

(i) Generation of 2,000 or more new ADT on roadways providing access to a single location; or

(ii) Generation of 1,000 or more new ADT on roadways providing access to a single location and construction of 150 or more new parking spaces at a single location; or

(iii) Construction of 300 or more new parking spaces at a single location; or

(iv) Creation of a change in the type, pattern, or timing of traffic that is determined by MassHighway to generate a significant impact on traffic flow and safety.

Non-vehicular Access Permits are required for:

- Access to the SHLO for Projects that do not involve physical modifications; or
- Connection to or discharge to any MassHighway drainage system (in cases where it can be shown that no practical alternative exists); or
- Construction, relocation or repair of utilities within the SHLO; or
- Tree cutting or landscaping within the SHLO; or
- The use of explosives to remove material from within 250 feet of the SHLO.

In cases where a particular Project or activity may seek both vehicular and non-vehicular access, separate and distinct Permit Applications must be filed.

Moving Massachusetts Forward **massDOT** Highway

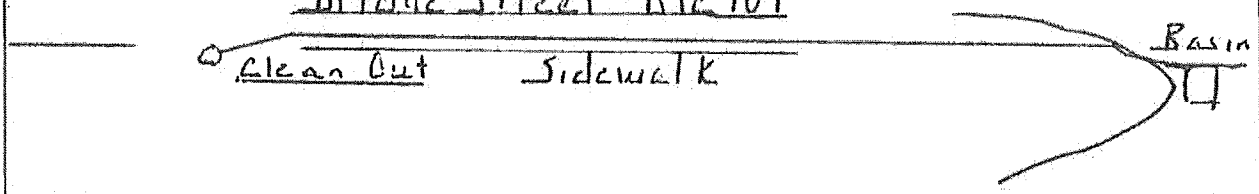
TRENCH PERMIT RIDER

Pursuant to G.L. cs. 81, §21 and 82A §1, 720 CMR 13.00 and 520 CMR 7.00 et seq

THIS PERMIT MUST BE FULLY COMPLETED PRIOR TO CONSIDERATION

Name of Applicant Cyn Environmental Services **Street Address** 100 Tosca Drive			**Phone** 781-341-0269 **Cell** 781-603-7713 Rich Bell	
City/Town Stoughton	**MA**	**ZIP** 02072		
Name of Excavator (if different from applicant) MARK MUCCIACCIO **Street Address** 116 CENTRAL ST			**Phone** 781-341-1777 EXT 107 **Cell** 781-844 6920	
City/Town SO EASTON	**MA**	**ZIP** 02375		
Name of Owner(s) of Property 33 McDonald Street LLC **Street Address** 19 Ames Street			**Phone** 781-329-1538 **Cell**	
City/Town Dedham	**MA**	**ZIP** 02027		
Other Contact			**Permit Fee Received** No ( ) Yes ( )	

Description, location and purpose of proposed trench:
Please describe the exact location of the proposed trench and its purpose (include a description of what is (or is intended) to be laid in proposed trench (eg; pipes/cable lines etc..) Please use reverse side if additional space is needed.



Insurance Certificate #: CYNEN-1 ; XL Specialty Insurance

Name and Contact Information of Insurer:
Capstone Insurance LLC
Suite 551, 366 Washington St, Newton, MA 02458

Policy Expiration Date: 05-30-14

Dig Safe #: 20133702879

Name of Competent Person (as defined by 520 CMR 7.02):
Richard Bell

Massachusetts Hoisting License # HE-140763	
License Grade: 1C 2A	Expiration Date: 07-08-15

BY SIGNING THIS FORM, THE APPLICANTAND EXCAVATOR ACKNOWLEDGE AND CERTIFY THAT THEY ARE FAMILIAR WITH, OR, BEFORE COMMENCEMENT OF THE WORK, WILL BECOME FAMILIAR WITH, ALL LAWS AND REGULATIONS APPLICABLE TO WORK PROPOSED, INCLUDING OSHA REGULATIONS, G.L. c. 82A, 520 CMR 7.00 et seq., AND ANY APPLICABLE MUNICIPAL ORDINANCES, BY-LAWS AND REGULATIONS AND THEY COVENANT AND AGREE THAT ALL WORK DONE UNDER THE PERMIT ISSUED FOR SUCH WORK WILL COMPLY THEREWITH IN ALL RESPECTS AND WITH THE CONDITIONS SET FORTH BELOW.

THE UNDERSIGNED APPLICANT AND EXCAVATOR AGREE JOINTLY AND SEVERALLY TO REIMBURSE THE COMMONWEALTH FOR ANY AND ALL COSTS AND EXPENSES INCURRED BY THE COMMONWEALTH IN CONNECTION WITH THIS PERMIT AND THE WORK CONDUCTED THEREUNDER, INCLUDING BUT NOT LIMITED TO ENFORCING THE REQUIREMENTS OF STATE LAW AND CONDITIONS OF THIS PERMIT, INSPECTIONS MADE TO ASSURE COMPLIANCE THEREWITH, AND MEASURES TAKEN BY THE COMMONWEALTH TO PROTECT THE PUBLIC WHERE THE APPLICANT OR EXCAVATOR HAS FAILED TO COMPLY THEREWITH INCLUDING POLICE DETAILS AND OTHER REMEDIAL MEASURES DEEMED NECESSARY BY THE COMMONWEALTH.

THE UNDERSIGNED APPLICANT AND EXCAVATOR AGREE JOINTLY AND SEVERALLY TO DEFEND, INDEMNIFY, AND HOLD HARMLESS THE COMMONWEALTH AND ALL OF ITS AGENTS AND EMPLOYEES FROM ANY AND ALL LIABILITY, CAUSES OR ACTION, COSTS, AND EXPENSES RESULTING FROM OR ARISING OUT OF ANY INJURY, DEATH, LOSS, OR DAMAGE TO ANY PERSON OR PROPERTY DURING THE WORK CONDUCTED UNDER THIS PERMIT.

APPLICANT SIGNATURE

Richard Bell **DATE** 09-09-13

EXCAVATOR SIGNATURE (IF DIFFERENT)

M/E Muccíaccio **DATE** 09-09-13

For Department use – Do not write in this section	
PERMIT APPROVED BY	**$_____ Application Fee**
PERMITTING AUTHORITY **Date**	
CONDITIONS OF APPROVAL	

CONDITIONS AND REQUIREMENTS PURSUANT TO G.L.C.82A AND 520 CMR 7.00 et seq. (as amended)

Deval L. Patrick, Governor
Timothy P. Murray, Lt. Governor
Richard A. Davey, Secretary & CEO
Frank DePaola, Administrator

MassDOT
Massachusetts Department of Transportation
Highway Division

October 8, 2013

Mr. Richard Bell
Cyn Environmental Services
100 Tosca Drive
Stoughton, MA 02072

SUBJECT: **PERMIT # 6-2013-0138**
ENVIRONMENTAL SITE CLEANUP, BRIDGE STREET/ROUTE 109, DEDHAM, MA

Dear Mr. Bell:

Enclosed is the original, fully executed permit for your records. As stated in the Terms and Conditions, you must contact Mr. Robert Hutcheon to coordinate your access to the state highway. He may be reached at telephone number (857) 368-6308 or via email at **robert.hutcheon@state.ma.us**.

Once access has been granted, please contact the Highway Operations Center at telephone number (617) 946-3150 prior to and after roadway access.

Should you have additional questions/concerns please feel free to contact me at telephone number (857) 368-6309.

Thank you for your cooperation.

Sincerely,

Michael F. MacQueen
Acting Permit Engineer

cc: D. Belanger, MassDOT

185 Kneeland Street, Boston, MA 02111
Tel: 857-368-6300, FAX: 857-368-0106/0105
www.mass.gov/massdot

GRASS

2 STORY BRICK RESIDENCE

BLACKTOP DRIVEWAY

WOOD FENCE

BOL

GES2

MW9

GT103

WOOD DECK

GARAGE

SHED

IAIN LINK FENCE

STATION BUILDING

ADDITION

OHE

VP4

VP2

VP3

MW1

AS2

MW14

SVE1

MW11

MW12

AS1

8K GALLON GASOLINE UST

10K GALLON GASOLINE UST

6K GALLON GASOLINE UST

MW2

PUMP ISLAND

OVERHANG

MW7

SVE2

SVE3

MW8

MW6

SIGN

GT102

MW13

PUMP ISLAND

OVERHANG

BRIDGE STREET

(60' WIDE RIGHT-OF-WAY)

F/O

W/O

OCKADE FENCE

GT104

MW5

VP1

AS3

SVE6

SVE5

GT101A/B

MW4D

MW4

SVE4

IPF

ICE

CONCRETE WALK

STREET

RIGHT-OF-WAY)

GES3

UE

T

W

G

S

SS

ATTACHMENT F
Town of Dedham GIS Map

Dedham Maps

June 13, 2017

Parcels
Storm Manholes
Storm Gravity Mains
Storm Culverts
Storm Open Drains

Storm Detention Areas

Detention Pond
Sediment Forebay

1:7,899

0 0.05 0.1 0.2 mi

0 335 670 1,340 Feet

Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
Use Limitations: For planning purposes only.
General Constraints: The Town of Dedham makes no warranty as to the accuracy of the data used to produce this map.
Generated By: Town of Dedham, MA GIS