CDM
One Cambridge Place, 50 Hampshire Street
Cambridge, Massachusetts 02139
tel: 617 452-6000
fax: 617 452-8000

DC
MAR 9/0139

October 21, 2005

United States Environmental Protection Agency
RCP-NOC Processing
Municipal Assistance Unit (CMU)
One Congress Street, Suite 1100
Boston, Massachusetts 02114-2023

OCT 24 2005

Subject: Notice of Intent
Remediation General Permit
Former Mobil Service Station No. 01-FQP
Massachusetts Turnpike Service Area 5E
[redacted] Massachusetts
Release Tracking Number 2-761
NPDES Exclusion Reference #02-063

To Whom It May Concern:

On behalf of Exxon Mobil Corporation (ExxonMobil), Camp Dresser & McKee, Inc. is submitting this Notice of Intent for the Remediation General Permit for the Former Mobil Service Station No. 01-FQP located at Massachusetts Turnpike Service Area 5E in Charlton, Massachusetts. ExxonMobil is currently operating a total phase vacuum enhanced remedial system located on the above property. This discharge is currently operating in accordance with 310 CMR 40.0000 and National Pollution Discharge Elimination System Exclusion Reference #02-063.

If you have any further questions regarding this matter please contact the undersigned at (617) 452-6000.

Very truly yours,

James H. Zigmont, LSP
Project Manager
Camp Dresser & McKee Inc.

William R. Swanson, P.E., LSP
Vice President
Camp Dresser & McKee Inc.

cc: Daniel Hannon, MADEP CERO
Eric Errico, ExxonMobil
David Lawrence, Charlton Board of Health
File

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Notice of Intent (NOI) for the Remediation General Permit No. MAG910000

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

a) Name of **facility/site**: Former Mobil Service Station No. 01-FQP			**Facility/site** address: Massachusetts Turnpike Service Area 5E	
Location of **facility/site**: longitude:-72°01'27" latitude: 42°08'25"	Facility SIC code(s): 5541		Street: Massachusetts Turnpike Service Area 5E	
b) Name of **facility/site owner:** Massachusetts Turnpike Authority contact: Rick McCullough			Town: Charlton	
Email address of owner: rick.mccullough@mta.state.ma.us			State: MA	Zip: 01507	County: Worcester
Telephone no.of facility/site **owner**: (781) 431-5020					
Fax no. of facility/site **owner**: (781) 237-3348			**Owner** is (check one): 1. Federal____ 2. State/Tribal_____ 3. Private__X__ 4. other, if so, describe:	
Address of **owner** (if different from site):				
Street: 668 South Avenue				
Town: Weston	State: MA	Zip: 02493	County: Middlesex	
c) Legal name of **operator**: Exxon Mobil Corporation	**Operator** telephone no: 617-381-2952			
	Operator fax no.: 617-381-2911		**Operator** email: eric.w.errico@exxonmobil.com	
Operator contact name and title: Eric Errico, Project Manager				
Address of **operator** (if different from owner):	Street: 52 Beacham Street			
Town: Everett	State: MA	Zip: 02149-5226	County: Middlesex	
d) Check "yes" or "no" for the following: 1. Has a prior NPDES permit exclusion been granted for the discharge? Yes_X__ No___, if "yes," number: 02-063 2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes___ No_X_, if "yes," date and tracking #: 3. Is the discharge a "new discharge"as defined by 40 CFR 122.2? Yes___ No X 4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes_X__ No__				
e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes_X_ No___ If "yes," please list: MCP compliance			f) Is the site/facility covered by any other EPA permit, including: 1. multi-sector storm water general permit? Y___ N_X_ if Y, number: 2. phase I or II construction storm water general permit? Y___ N X	

1. site identification # assigned by the state of NH or MA: RTN 2-761 2. permit or license # assigned: Tier IB Permit No. 84850 3. state agency contact information: name, location, and telephone number: MADEP, 627 Main Street, Worcester, MA 01608, 508-792-7650	if Y, number: 3. individual NPDES permit? Y___ N_X_, if Y, number: 4. any other water quality related permit? Y___ N_X_, if Y, number:

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

a) Describe the discharge activities for which the owner/applicant is seeking coverage: Coverage is sought for discharge related to operation of a total phase vacuum enhanced (TPVE) remediation system, performed in compliance with the MCP. The TPVE system extracts groundwater which is routed through an oil/water separator, bag filters, an air stripper tower, and liquid granular activated carbon before its discharge to a storm drain.

b) Provide the following information about each discharge:	1) Number of discharge points: 1	2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft3/s)? Max. flow 0.045 ft^3/sec Average flow 0.0058 ft^3/sec Is maximum flow a **design value**? Y_X_ N____ For average flow, include the units and appropriate notation if this value is a design value or estimate if not available.

3) Latitude and longitude of each discharge within 100 feet: pt.1:long . -72°01′18″ lat. 42°08′30″ ; pt.2: long. _____lat.; _____ pt.3: long._____ lat_____; pt.4: long. _____ lat._____; pt.5: long. _____ lat._____; pt.6:long._____ lat._____; pt.7: long._____ lat._____; pt.8:long._____ lat._____; etc.

4) If hydrostatic testing, total volume of the discharge (gals):	5) Is the discharge intermittent _N_ or seasonal _N_ ? Is discharge ongoing Yes _X_ No_____?

c) Expected dates of discharge (mm/dd/yy): start 04/08/02 end 10/01/15 Expected date for end of discharge is estimated and is dependent on achievement of groundwater cleanup standards under the Massachusetts Contingency Plan.

d) Please attach a line drawing or flow schematic showing water flow through the facility including:
1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s).
See Attached Process & Instrumentation Diagram

3. Contaminant information. In order to complete this section, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for all of the parameters listed in Appendix III. Historical data, (i.e., data taken no more than 2 years prior to the effective date of the permit) may be used if obtained pursuant to: i. Massachusetts' regulations 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E"); ii. New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act; or iii. an EPA permit exclusion letter issued pursuant to 40 CFR 122.3, provided the data was analyzed with test methods that meet the requirements of this permit. Otherwise, a new sample shall be taken and analyzed.

a) Based on the analysis of the sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within.

Gasoline Only X	VOC Only	Primarily Metals	Urban Fill Sites	Contaminated Sumps	Mixed Contaminants	Aquifer Testing
Fuel Oils (and Other Oils) only	VOC with Other Contaminants	Petroleum with Other Contaminants	Listed Contaminated Sites	Contaminated Dredge Condensates	Hydrostatic Testing of Pipelines/Tanks	Well Development or Rehabilitation

b) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

PARAMETER	**Believe Absent**	**Believe Present**	**# of Samples (1 min-imum)**	**Type of Sample (e.g., grab)**	**Analytical Method Used (method #)**	**Minimum Level (ML) of Test Method (ug/l)**	**Maximum daily value**		**Avg. daily value**	
							concentration (ug/l)	**mass (kg)**	**concentration (ug/l)**	**mass (kg)**
1. Total Suspended Solids		X	6	Grab	160.2	4000	142,000	15.48	55,170	0.782
2. Total Residual Chlorine	(1)									
3. Total Petroleum Hydrocarbons		X	7	Grab	418.1	600	2,000	0.218	546.4	0.008
4. Cyanide	(1)									
5. Benzene		X	7	Grab	602 / SW846 / 624	1.0 / 0.5 / 0.5	25	0.003	12.93	0.0002
6. Toluene		X	7	Grab	602 / SW846 / 624	1.0 / 1.0 / 1.0	75.8	0.008	36.51	0.001
7. Ethylbenzene		X	7	Grab	602 / SW846 / 624	1.0 / 1.0 / 1.0	50	0.005	19.41	0.0003

8. (m,p,o) Xylenes		X	7	Grab	602 / SW846 / 624	1.0 / 1.0 / 1.0	586	0.064	227.87	0.003
9. Total BTEX[1]		X	7 sets	Grabs	602 / SW846 / 624	4.0 / 3.5 / 3.5	711	0.078	296.73	0.004

[1] BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method (ug/l)	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
10. Ethylene Dibromide [2] (1,2- Dibromo-methane)	X (2)		1	Grab	504	0.012	0.006	0.00000065	0.006	0.00000009
11. Methyl-tert-Butyl Ether (MtBE)		X	7	Grab	602 / SW846 / 624	50 / 100 / 20	23,300	2.54	13,439	0.19
12. tert-Butyl Alcohol (TBA)		X	1	Grab	SW846 8260B	1,000	19,600	2.14	19,600	0.278
13. tert-Amyl Methyl Ether (TAME)		X	1	Grab	SW846 8260B	2.0	377	0.0411	377	0.0053
14. Naphthalene		X	1	Grab	625	5.0	16	0.0017	16	0.00023
15. Carbon Tetra-chloride	(1)									
16. 1,4 Dichlorobenzene	(1)									
17. 1,2 Dichlorobenzene	(1)									
18. 1,3 Dichlorobenzene	(1)									
19. 1,1 Dichloroethane	(1)									
20. 1,2 Dichloroethane	(1)									
21. 1,1 Dichloroethylene	(1)									
22. cis-1,2 Dichloro-ethylene	(1)									
23. Dichloromethane (Methylene Chloride)	(1)									
24. Tetrachloroethylene	(1)									

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

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method (ug/l)	Maximum daily value		Avg. daily Value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
25. 1,1,1 Trichloroethane	(1)									
26. 1,1,2 Trichloroethane	(1)									
27. Trichloroethylene	(1)									
28. Vinyl Chloride	(1)									
29. Acetone	(1)									
30. 1,4 Dioxane	(1)									
31. Total Phenols	(1)									
32. Pentachlorophenol	(1)									
33. Total Phthalates [3] (Phthalate esthers)	(1)									
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	(1)									
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	(1)									
a. Benzo(a) Anthracene	(1)									
b. Benzo(a) Pyrene	(1)									
c. Benzo(b)Fluoranthene	(1)									
d. Benzo(k) Fluoranthene	(1)									
e. Chrysene	(1)									

[3] The sum of individual phthalate compounds.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method (ug/l)	Maximum daily value		Average daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
f. Dibenzo(a,h) anthracene	(1)									
g. Indeno(1,2,3-cd) Pyrene	(1)									
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	(1)									
h. Acenaphthene	(1)									
i. Acenaphthylene	(1)									
j. Anthracene	(1)									
k. Benzo(ghi) Perylene	(1)									
l. Fluoranthene	(1)									
m. Fluorene	(1)									
n. Naphthalene-	(1)									
o. Phenanthrene	(1)									
p. Pyrene	(1)									
37. Total Polychlorinated Biphenyls (PCBs)	(1)									
38. Antimony	(1)									
39. Arsenic	(1)									
40. Cadmium	(1)									
41. Chromium III	(1)									
42. Chromium VI	(1)									

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method (ug/l)	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
43. Copper	(1)									
44. Lead	X (2)		1	Grab	239.2	1.0	0.5	0.000055	0.5	0.000007
45. Mercury	(1)									
46. Nickel	(1)									
47. Selenium	(1)									
48. Silver	(1)									
49. Zinc	(1)									
50. Iron		X	1	Grab	SW846 6010B	100	12,000	1.31	12,000	0.17
Other (describe):										

Footnotes: (1) Analysis for this parameter is not required for gasoline remediation sites in accordance with Part I.C. Table V of the RGP.
(2) Parameter not detected above the minimum level of test method. Half the minimum level is used in computing average daily values and compiling maximum daily values.

Notes: Data used (when more than one sample included) consists of data collected between 9/2004 and 9/2005. For undetected results among these data, half the minimum level is used in computing average daily values and compiling maximum daily values.
MLs listed represent the minimum detection limit of included results for a given analysis.

c) For discharges where **metals** are believed present, please fill out the following:

Step 1: Do any of the metals in the influent have a **reasonable potential** to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y_X_ N____	If yes, which metals? Iron
Step 2: For any metals which have **reasonable potential** to exceed the **Appendix III** limits, calculate the **dilution factor (DF)** using the formula in Part I.A.3.c) (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metals: Iron DF: 1.0	Look up the limit calculated at the corresponding dilution factor in **Appendix IV.** Do any of the metals in the **influent** have the potential to exceed the corresponding **effluent** limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y_X_N____ If "Yes," list which metals: Iron

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

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:						
b) Identify each applicable treatment unit (check all that apply):	Frac. tank	Air stripper X	Oil/water separator X	Equalization tanks	Bag filter X	GAC filter X
	Chlorination	Dechlorination	Other (please describe):			
c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate**(s) (gallons per minute) of the treatment system: Average flow rate of discharge 2.6 gpm Maximum flow rate of treatment system 20 gpm Design flow rate of treatment system 20 gpm						
d) A description of chemical additives being used or planned to be used (attach MSDS sheets):						

5. Receiving surface water(s). Please provide information about the receiving water(s), using separate sheets as necessary:

a) Identify the discharge pathway:	Direct____	Within facility__	Storm drain_X__	River/brook _X	Wetlands__X__	Other (describe): X: Pond
b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters: Discharge is to a storm drain which discharges to a drainage swale that flows to a wetland. The wetland flows into Sibley Pond via an unnamed tributary.						
c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water: 1. For multiple discharges, number the discharges sequentially. 2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas. See attached Location Map						
d) Provide the state water quality classification of the receiving water_Class B, Warm Water						
e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water_0__cfs Please attach any calculation sheets used to support stream flow and dilution calculations.						
f) Is the receiving water a listed 303(d) water quality impaired or limited water? Yes____ No_X_If yes, for which pollutant(s)? See 7. Supplemental Information Is there a TMDL? Yes____ No_X_ If yes, for which pollutant(s)?						

6. Results of Consultation with Federal Services: Please provide the following information according to requirements of Part I.B.4 and Appendices II and VII.

a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes____No_X
Has any consultation with the federal services been completed ? Yes___ No_X_ or is consultation underway? Yes ____ No_X_ See 7. Supplemental Information
What were the results of the consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (check one):
a "no jeopardy" opinion? _____or written concurrence____ on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat?

b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge?
Yes_____ No_X_Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes_____ No_X_ See 7. Supplemental Information

7. Supplemental information. :

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

5. f) Cady Brook, downstream of the Sibley Ponds, is impaired by nutrients, organic enrichment/low DO, flow alteration, and taste, odor and color. There are no TMDLs. Source: *Proposed Massachusetts Year 2004 Integrated List of Waters*.

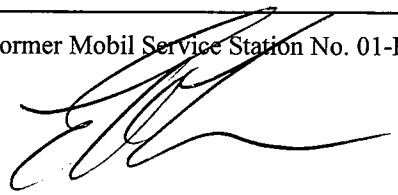
6. a) According to the website of the Massachusetts Natural Heritage and Endangered Species Program, no species protected by the federal Endangered Species Act occur in Charlton. No critical habitats are designated in the county.

6. b) No sites on the National Register of Historic Places are located within one mile of the facility or discharge location.

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

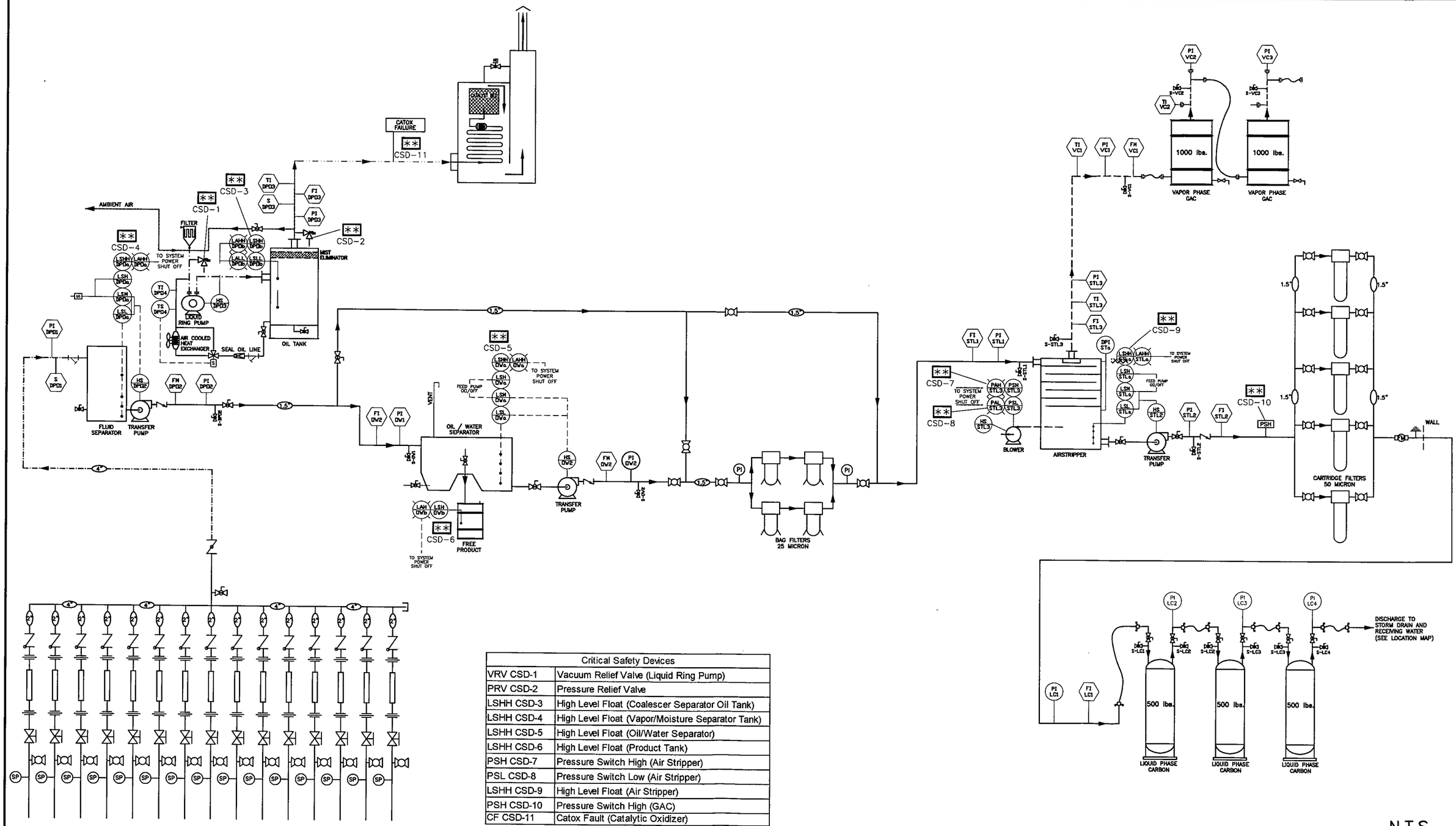
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage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

Facility/Site Name: Former Mobil Service Station No. 01-FQP, Charlton, Massachusetts (NPDES Permit Exclusion Reference #02-063)

Operator signature: 

Title: Project Manager

Date: 10-18-05



Critical Safety Devices	
VRV CSD-1	Vacuum Relief Valve (Liquid Ring Pump)
PRV CSD-2	Pressure Relief Valve
LSHH CSD-3	High Level Float (Coalescer Separator Oil Tank)
LSHH CSD-4	High Level Float (Vapor/Moisture Separator Tank)
LSHH CSD-5	High Level Float (Oil/Water Separator)
LSHH CSD-6	High Level Float (Product Tank)
PSH CSD-7	Pressure Switch High (Air Stripper)
PSL CSD-8	Pressure Switch Low (Air Stripper)
LSHH CSD-9	High Level Float (Air Stripper)
PSH CSD-10	Pressure Switch High (GAC)
CF CSD-11	Catox Fault (Catalytic Oxidizer)

N.T.S.

P:\20474\32302\01-FQP\PID00006.DWG

CDM

FORMER MOBIL SERVICE STATION (FORMERLY# 01-FQP)
MASSACHUSETTS TURNPIKE SERVICE AREA 5E
CHARLTON, MASSACHUSETTS

NOTICE OF INTENT FOR REMEDIATION GENERAL PERMIT

PROCESS & INSTRUMENTATION DIAGRAM
TOTAL PHASE VACUUM ENHANCED REMEDIATION SYSTEM

New England ACCUTEST. Laboratories

10/07/04

Technical Report for

ExxonMobil

CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

PO#4504499474 WBS#08

Accutest Job Number: M42188

Sampling Dates: 09/01/04 - 09/28/04

Report to:

Camp Dresser & McKee
50 Hampshire St.
Cambridge, MA 02067

ATTN: Jim Zigmont

Total number of pages in report: 30

ACCREDITED IN ACCORDANCE WITH nelac

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

Reza Tand
Lab Director

Certifications: MA (M-MA136) CT (PH-0109) NH (250204) RI (00071) ME (MA136) FL (E87579) NY (23346) NJ (MA926) NAVY USACE

ACCUTEST Laboratories

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: ExxonMobil **Job No:** M42188

Site: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA **Report Date** 10/7/2004 5:52:53 PM

5 Samples and 1 Trip Blank were collected on between 09/01/2004 and 09/28/2004 and were received at Accutest on 09/30/2004 properly preserved, at 4 Deg. C and intact. These Samples received an Accutest job number of M42188. 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 GC By Method EPA 602

Matrix: AQ **Batch ID:** GMN1256

- Sample(s) M42139-2MS, M42139-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** GMN1258

- Sample(s) M42188-5MS, M42188-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

For EPA 602, only BTX and METB requested.

Wet Chemistry By Method EPA 418.1

Matrix: AQ **Batch ID:** GP4877

- All samples were distilled within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M42188-1DUP, M42188-2MS were used as the QC samples for Petroleum Hydrocarbons.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M42188).

MADEP MCP Analytical Method Report Certification Form

Laboratory Name:	Accutest Laboratories of New England	Project #:	M42188
Project Location:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA	MADEP RTN [1]	None

This form provides certifications for the following data set:
M42188-1 through M42188-6

Test Method: EPA 602, 418.1, and below

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

MCP SW-846 Methods Used					
	8260B ( )	8151A ( )	8330 ( )	6010B ( )	7470A/1A ( )
	8270C ( )	8081A ( )	VPH ( )	6020 ( )	9014M [2] ( )
As specified in MADEP Compendium of Analytical Methods (Check all that apply)	8082 ( )	8021B ( )	EPH ( )	7000 S [3] ( )	7196A ( )

1 List Release Tracking Number (RTN), if known
2 M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method
3 S - SW-846 Methods 7000 Series: List individual method and analyte

An affirmative response to questions A, B, C, and D is required for "Presumptive Certainty status

A	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	☑	Yes	☐ No [1]
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	☑	Yes	☐ No [1]
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☑	Yes	☐ No [1]
D	**VPH and EPH methods only:** Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	☑	Yes	☐ No [1]

A response to questions E and F below is required for "Presumptive Certainty" status

E	Were all QC performance standards and recommendations for the specified methods achieved?	☑ Refer to Narrative	Yes	☐ No [1]
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	☐ Refer to Narrative	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: Reza Tand **Date:** 10/07/2004

Sample Summary

ExxonMobil

CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA
Project No: PO#4504499474 WBS#08

Job No: M42188

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
M42188-1	09/28/04	12:20	RMB	09/30/04	AQ	Effluent	EFF
M42188-2	09/28/04	12:30	RMB	09/30/04	AQ	Effluent2	GAC 2EFF
M42188-3	09/28/04	12:40	RMB	09/30/04	AQ	Effluent1	GAC 1EFF
M42188-4	09/28/04	12:50	RMB	09/30/04	AQ	Effluent	AS EFF
M42188-5	09/28/04	13:00	RMB	09/30/04	AQ	Influent	INF
M42188-6	09/01/04	00:00	RMB	09/30/04	AQ	Trip Blank Water	TRIP BLANK

Accutest Laboratories

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	M42188-5	**Date Sampled:**	09/28/04
Matrix:	AQ - Influent	**Date Received:**	09/30/04
Method:	EPA 602	**Percent Solids:**	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	MN29808.D	1	10/02/04	AP	n/a	n/a	GMN1256
Run #2	MN29831.D	50	10/04/04	AP	n/a	n/a	GMN1258

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

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	13.4	1.0	ug/l	
108-88-3	Toluene	25.6	1.0	ug/l	
100-41-4	Ethylbenzene	16.2	1.0	ug/l	
1330-20-7	Xylenes (total)	254	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	5690 [a]	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	89%	86%	61-124%

(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

Accutest Laboratories

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	M42188-5	**Date Sampled:**	09/28/04
Matrix:	AQ - Influent	**Date Received:**	09/30/04
		Percent Solids:	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	<0.61	0.61	mg/l	1	10/04/04	BF	EPA 418.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	M42188-6	**Date Sampled:**	09/01/04
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/30/04
Method:	EPA 602	**Percent Solids:**	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	MN29803.D	1	10/01/04	AP	n/a	n/a	GMN1256
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	81%		61-124%

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

GC Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: M42188
Account: MOBILSS ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GMN1256-MB	MN29795.D	1	10/01/04	AP	n/a	n/a	GMN1256

The QC reported here applies to the following samples: **Method:** EPA 602

M42188-1, M42188-2, M42188-3, M42188-4, M42188-5, M42188-6

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	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	
108-88-3	Toluene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
	2,3,4-Trifluorotoluene	85%	61-124%

Method Blank Summary

Job Number: M42188
Account: MOBILSS ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GMN1258-MB	MN29828.D	1	10/04/04	AP	n/a	n/a	GMN1258

The QC reported here applies to the following samples: **Method:** EPA 602

M42188-5

CAS No.	Compound	Result	RL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
	2,3,4-Trifluorotoluene	86%	61-124%

Blank Spike/Blank Spike Duplicate Summary

Job Number: M42188
Account: MOBILSS ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GMN1256-BSP	MN29796.D	1	10/01/04	AP	n/a	n/a	GMN1256
GMN1256-BSD	MN29797.D	1	10/01/04	AP	n/a	n/a	GMN1256

The QC reported here applies to the following samples: **Method:** EPA 602

M42188-1, M42188-2, M42188-3, M42188-4, M42188-5, M42188-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	15.5	78	15.6	78	1	39-150/30
100-41-4	Ethylbenzene	20	16.9	85	17.1	86	1	32-160/30
1634-04-4	Methyl Tert Butyl Ether	20	17.6	88	17.8	89	1	65-122/30
108-88-3	Toluene	20	17.0	85	17.1	86	1	46-148/30
1330-20-7	Xylenes (total)	60	55.8	93	55.5	93	1	69-111/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
	2,3,4-Trifluorotoluene	88%	86%	61-124%

Blank Spike/Blank Spike Duplicate Summary

Job Number: M42188
Account: MOBILSS ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GMN1258-BSP	MN29829.D	1	10/04/04	AP	n/a	n/a	GMN1258
GMN1258-BSD	MN29830.D	1	10/04/04	AP	n/a	n/a	GMN1258

The QC reported here applies to the following samples: **Method:** EPA 602

M42188-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
1634-04-4	Methyl Tert Butyl Ether	20	17.9	90	18.2	91	2	65-122/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
	2,3,4-Trifluorotoluene	91%	90%	61-124%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M42188
Account: MOBILSS ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M42139-2MS	MN29798.D	1	10/01/04	AP	n/a	n/a	GMN1256
M42139-2MSD	MN29799.D	1	10/01/04	AP	n/a	n/a	GMN1256
M42139-2	MN29800.D	1	10/01/04	AP	n/a	n/a	GMN1256

The QC reported here applies to the following samples: **Method:** EPA 602

M42188-1, M42188-2, M42188-3, M42188-4, M42188-5, M42188-6

CAS No.	Compound	M42139-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	15.6	78	15.5	78	1	39-150/30
100-41-4	Ethylbenzene	ND		20	17.0	85	16.9	85	1	32-160/30
1634-04-4	Methyl Tert Butyl Ether	ND		20	17.7	89	17.6	88	1	57-126/30
108-88-3	Toluene	ND		20	17.1	86	17.0	85	1	46-148/30
1330-20-7	Xylenes (total)	ND		60	55.1	92	55.0	92	0	61-113/30

CAS No.	Surrogate Recoveries	MS	MSD	M42139-2	Limits
	2,3,4-Trifluorotoluene	87%	87%	83%	61-124%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M42188
Account: MOBILSS ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M42188-5MS	MN29832.D	50	10/04/04	AP	n/a	n/a	GMN1258
M42188-5MSD	MN29833.D	50	10/04/04	AP	n/a	n/a	GMN1258
M42188-5	MN29831.D	50	10/04/04	AP	n/a	n/a	GMN1258

The QC reported here applies to the following samples: **Method:** EPA 602

M42188-5

CAS No.	Compound	M42188-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
1634-04-4	Methyl Tert Butyl Ether	5690		1000	6610	92	6690	100	1	57-126/30

CAS No.	Surrogate Recoveries	MS	MSD	M42188-5	Limits
	2,3,4-Trifluorotoluene	89%	88%	86%	61-124%

Volatile Surrogate Recovery Summary

Job Number: M42188
Account: MOBILSS ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Method: EPA 602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
M42188-1	MN29804.D	83.0
M42188-2	MN29805.D	82.0
M42188-3	MN29806.D	82.0
M42188-4	MN29807.D	78.0
M42188-5	MN29831.D	86.0
M42188-5	MN29808.D	89.0
M42188-6	MN29803.D	81.0
GMN1256-BSD	MN29797.D	86.0
GMN1256-BSP	MN29796.D	88.0
GMN1256-MB	MN29795.D	85.0
GMN1258-BSD	MN29830.D	90.0
GMN1258-BSP	MN29829.D	91.0
GMN1258-MB	MN29828.D	86.0
M42139-2MS	MN29798.D	87.0
M42139-2MSD	MN29799.D	87.0
M42188-5MS	MN29832.D	89.0
M42188-5MSD	MN29833.D	88.0

Surrogate Compounds	Recovery Limits
S1 = 2,3,4-Trifluorotoluene	61-124%

(a) Recovery from GC signal #2

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: M42188
Account: MOBILSS - ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Petroleum Hydrocarbons	GP4877/GN14946	0.60	<0.60	mg/l	5	4.5	90.0	80-120%

Associated Samples:
Batch GP4877: M42188-1, M42188-2, M42188-3, M42188-4, M42188-5

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M42188
Account: MOBILSS - ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Petroleum Hydrocarbons	GP4877/GN14946	M42188-1	mg/l	<0.61	<0.61	0.0	0-20%

Associated Samples:
Batch GP4877: M42188-1, M42188-2, M42188-3, M42188-4, M42188-5

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M42188
Account: MOBILSS - ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Petroleum Hydrocarbons	GP4877/GN14946	M42188-2	mg/l	<0.61	5.1	4.4	86.3	75-125%

Associated Samples:
Batch GP4877: M42188-1, M42188-2, M42188-3, M42188-4, M42188-5

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Sample Tracking Chronicle

Accutest Laboratories

Internal Sample Tracking Chronicle

ExxonMobil

Job No: M42188

CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA
Project No: PO#4504499474 WBS#08

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M42188-1 Collected: 28-SEP-04 12:20 By: RMB Received: 30-SEP-04 By: RS EFF						
M42188-1	EPA 602	01-OCT-04 23:27	AP			V602BTXM
M42188-1	EPA 418.1	04-OCT-04	BF	04-OCT-04	BF	PHC
M42188-2 Collected: 28-SEP-04 12:30 By: RMB Received: 30-SEP-04 By: RS GAC 2EFF						
M42188-2	EPA 602	02-OCT-04 00:08	AP			V602BTXM
M42188-2	EPA 418.1	04-OCT-04	BF	04-OCT-04	BF	PHC
M42188-3 Collected: 28-SEP-04 12:40 By: RMB Received: 30-SEP-04 By: RS GAC 1EFF						
M42188-3	EPA 602	02-OCT-04 00:50	AP			V602BTXM
M42188-3	EPA 418.1	04-OCT-04	BF	04-OCT-04	BF	PHC
M42188-4 Collected: 28-SEP-04 12:50 By: RMB Received: 30-SEP-04 By: RS AS EFF						
M42188-4	EPA 602	02-OCT-04 01:31	AP			V602BTXM
M42188-4	EPA 418.1	04-OCT-04	BF	04-OCT-04	BF	PHC
M42188-5 Collected: 28-SEP-04 13:00 By: RMB Received: 30-SEP-04 By: RS INF						
M42188-5	EPA 602	02-OCT-04 02:12	AP			V602BTXM
M42188-5	EPA 418.1	04-OCT-04	BF	04-OCT-04	BF	PHC
M42188-5	EPA 602	04-OCT-04 11:52	AP			V602BTXM
M42188-6 Collected: 01-SEP-04 00:00 By: RMB Received: 30-SEP-04 By: RS TRIP BLANK						
M42188-6	EPA 602	01-OCT-04 22:45	AP			V602BTXM

ACCUTEST Laboratories

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

Accutest Job #: M42188

Client Information | Facility Information | Analytical Information

EXXONMOBIL CORPORATION - Regional Laboratory Program Northeast

Consultants Company Name: CDM	Project Name: XOM Charlton
Address: 50 Hampshire St.	Street: Charlton, MA
City: Cambridge State: MA Zip: 02140	City: Eric Errico State:
Project Contact: Jim Zigmont	ExxonMobil Contact: 617-381-2952
Sampler's Name: Ryan Bouldin	ExxonMobil Contact Phone #: 01-FQP
Phone #: 617-452-6000 Ext. Fax #:	Location ID#: WBS#:
AFE #:	PO#: Line#:

Accutest Sample #	Field ID / Point of Collection	Collection: Date	Time	Sampled by	Matrix	# of bottles	Preservation: HCL	NaOH	HNO3	H2SO4	MEOH	Encore	Other	None
2188-1	Eff	9-28-04	1220	TCMB	GW	2	✓							
	Eff	"	1220											
-2	GAC 2 Eff		1230											
	GAC 2 Eff		↓											
-3	GAC 1 Eff		1240											
	GAC 1 Eff		↓											
-4	AS Eff		1250											
	AS Eff		↓											
-5	Inf		1300											
	Inf	↓	↓	↓	↓	↓								
-6	Trip Blank	9-1-04												

Analytical Information:

Accutest Sample #	BTEX 8260 ☐ 624 ☐ 8021 ☐ 524 ☐ MTBE ☐ TBA ☐ Naphthalene ☐ Oxygenates ☐	VOC AQUEOUS 8260 ☐ 624 ☐ 524 ☐ STD ☐ TCL ☐ PPL ☐ MTBE ☐ TBA ☐ Oxygenates ☐	VOC SOIL 8260 ☐ STD ☐ TCL ☐ PPL ☐ MTBE ☐ TBA ☐ Oxygenates ☐ 5035/LOW ☐ 5035MED ☐	VPH RANGES ☐ TARGETS ☐	EPH RANGES ☐ TARGET (PAH) ☐ DIESEL (PAH) ☐	TPH-CTDEP ☐ TPH418.1 ☒	TPH-MAINE GRO ☐ DRO ☐	TPH-8015 GRO ☐ TPH-8015 DRO ☐	METALS TOTAL ☐ DISSOLVED ☐ HM8 ☐ HM5 ☐	METALS TCLP ☐ SPLP ☐ HM8 ☐ HM5 ☐	BTEX, MTBE via 602
2188-1						✓						✓
-2						✓						✓
-3						✓						✓
-4						✓						✓
-5						✓						✓
-6												✓

Turnaround Time (Business days)

- ☐ Std. 10 Business Days
- ☐ 8 Day RUSH
- ☒ 5 Day RUSH
- ☐ 3 Day EMERGENCY
- ☐ 2 Day EMERGENCY
- ☐ 1 Day EMERGENCY

Approved By:/Date: _____

Emergency T/A is for FAX or Lablink Data

Data Deliverable Information

- ☐ Commercial "A"
- ☐ Commercial "B"
- ☐ Full Deliverables
- ☐ Other
- ☐ FULL CLP
- ☐ State Forms
- ☐ Disk Deliverable Format _____

Site Specific: QC Yes ☐ No ☐ If yes, indicate QC sample in Comments and submit triplicate volume.

Comments / Remarks

MCP Presumptive Certainty Required
GW-1 Stds Apply

Loc, 3B2, 4A

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

Relinquished by Sampler: Ryan M Bouldin	Date Time: 9-28-04 1500	Received by: 1 Ryan M Sweeney	9/30/04 1455	Relinquished by: 2 Ryan M Sweeney	Date Time: 9/30/04 1640
Received by: 2 Ryan M Sweeney					
Relinquished by:	Date Time:	Received by: 3		Relinquished by: 4	Date Time:
Received by: 4					
Relinquished by:	Date Time:	Received by: 5		Seal #	Preserved where applicable ☐

On Ice ☒ Temp. 4.0°c

New England ACCUTEST. Laboratories

11/12/04

Technical Report for

ExxonMobil

CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

PO#4504499474 WBS#08

Accutest Job Number: M42710

Sampling Date: 10/26/04

Report to:

Camp Dresser & McKee
50 Hampshire St.
Cambridge, MA 02067

ATTN: Jim Zigmont

Total number of pages in report: 32

ACCREDITED IN ACCORDANCE WITH nelac

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

Reza Tand
Lab Director

Certifications: MA (M-MA136) CT (PH-0109) NH (250204) RI (00071) ME (MA136) FL (E87579) NY (23346) NJ (MA926) NAVY USACE

ACCUTEST Laboratories

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: ExxonMobil **Job No:** M42710

Site: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA **Report Date** 11/11/2004 3:53:37 P

5 Samples were collected on 10/26/2004 and were received at Accutest on 10/26/2004 properly preserved, at 3.3 Deg. C and intact. These Samples received an Accutest job number of M42710. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

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

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** MSA1633

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M42710-5MS, M42710-5MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** MSA1634

- All samples were analyzed within the recommended method holding time.
- Sample(s) M42756-1MS, M42756-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method EPA 110.2

Matrix: AQ **Batch ID:** GN15127

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M42710-1DUP were used as the QC samples for Color, Apparent.
- M42710-5 for Color, Apparent: pH at the time of analysis 8.38 pH unit
- M42710-1 for Color, Apparent: pH at the time of analysis 7.23 pH unit

Wet Chemistry By Method EPA 160.2

Matrix: AQ **Batch ID:** GN15144

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M42747-1DUP were used as the QC samples for Solids, Total Suspended.

Wet Chemistry By Method EPA 180.1

Matrix: AQ **Batch ID:** GN15128

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M42710-1DUP were used as the QC samples for Turbidity.

Wet Chemistry By Method EPA 418.1

Matrix: AQ	Batch ID: GP4957

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M42587-1DUP, M42587-2MS were used as the QC samples for Petroleum Hydrocarbons.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M42710).

Title: MADEP MCP Response Action Analytical Report Certification Form

MADEP MCP Analytical Method Report Certification Form

Laboratory Name:	Accutest Laboratories of New England	Project #:	M42710
Project Location:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA	MADEP RTN [1]	None

This form provides certifications for the following data set:
M42710-1 through M42710-5

Test Method: EPA 110.2, 180.1, 160.2, 418.1and below

Sample Matrices:	Groundwater	Soil/Sediment ( )	Drinking Water ( )	Other: (x)	( )
MCP SW-846 Methods Used As specified in MADEP Compendium of Analytical Methods (Check all that apply)	8260B (x)	8151A ( )	8330 ( )	6010B ( )	7470A/1A ( )
	8270C ( )	8081A ( )	VPH ( )	6020 ( )	9014M [2] ( )
	8082 ( )	8021B ( )	EPH ( )	7000 S [3] ( )	7196A ( )

1 List Release Tracking Number (RTN), if known
2 M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method
3 S - SW-846 Method's 7000 Series; List individual method and analyte

An affirmative response to questions A, B, C, and D is required for "Presumptive Certainty status

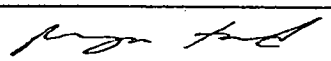
A	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	☑	Yes	☐ No [1]
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	☑	Yes	☐ No [1]
C	Does the data included in this report meet all the analytical requirements for "Presumptive Certainty", as described in Section 2.0 (a), (b), (c) and (d) of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☑	Yes	☐ No [1]
D	**VPH and EPH methods only:** Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	☑	Yes	☐ No [1]

A response to questions E and F below is required for "Presumptive Certainty" status

E	Were all QC performance standards and recommendations for the specified methods achieved?	☑ Refer to Narrative	Yes	☐ No [1]
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	☑ Refer to Narrative	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: Reza Tand **Date:** 11/11/2004

Accutest Laboratories

Sample Summary

ExxonMobil

Job No: M42710

CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA
Project No: PO#4504499474 WBS#08

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
M42710-1	10/26/04	13:00	RMB	10/26/04	AQ	Influent	INF
M42710-2	10/26/04	13:15	RMB	10/26/04	AQ	Effluent1	AS EFF
M42710-3	10/26/04	13:30	RMB	10/26/04	AQ	Effluent2	GAC 1 EFF
M42710-4	10/26/04	13:45	RMB	10/26/04	AQ	Effluent3	GAC 2 EFF
M42710-5	10/26/04	14:00	RMB	10/26/04	AQ	Effluent	EFF

Accutest Laboratories

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	M42710-1	**Date Sampled:**	10/26/04
Matrix:	AQ - Influent	**Date Received:**	10/26/04
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A49043.D	1	11/03/04	AMY	n/a	n/a	MSA1633
Run #2	A49095.D	100	11/05/04	AMY	n/a	n/a	MSA1634

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

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	18.4	0.50	ug/l	
108-88-3	Toluene	75.8	1.0	ug/l	
100-41-4	Ethylbenzene	12.8	1.0	ug/l	
1330-20-7	Xylene (total)	314	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	22300 [a]	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%	91%	83-122%
2037-26-5	Toluene-D8	102%	95%	87-111%
460-00-4	4-Bromofluorobenzene	99%	95%	81-116%

(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

Accutest Laboratories

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	M42710-1	**Date Sampled:**	10/26/04
Matrix:	AQ - Influent	**Date Received:**	10/26/04
		Percent Solids:	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Color, Apparent [a]	200	50	CU	10	10/26/04 18:03	MA	EPA 110.2
Petroleum Hydrocarbons	<0.60	0.60	mg/l	1	10/27/04	BF	EPA 418.1
Solids, Total Suspended	18.0	4.0	mg/l	1	10/28/04	BF	EPA 160.2
Turbidity	57.4	1.0	NTU	2	10/26/04 17:50	MA	EPA 180.1

(a) pH at the time of analysis 7.23 pH unit

RL = Reporting Limit

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: M42710
Account: MOBILSS ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSA1633-MB	A49042.D	1	11/03/04	AMY	n/a	n/a	MSA1633

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

M42710-1, M42710-2, M42710-3, M42710-4, M42710-5

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	90%	83-122%
2037-26-5	Toluene-D8	95%	87-111%
460-00-4	4-Bromofluorobenzene	96%	81-116%

Method Blank Summary

Job Number: M42710
Account: MOBILSS ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSA1634-MB1	A49093.D	1	11/05/04	AMY	n/a	n/a	MSA1634

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

M42710-1

CAS No.	Compound	Result	RL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	94%	83-122%
2037-26-5	Toluene-D8	102%	87-111%
460-00-4	4-Bromofluorobenzene	94%	81-116%

Method Blank Summary

Job Number: M42710
Account: MOBILSS ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSA1634-MB	A49076.D	1	11/04/04	AMY	n/a	n/a	MSA1634

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

MSA1634-BSD, MSA1634-BS1, M42756-1MS, M42756-1MSD

CAS No.	Compound	Result	RL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	83-122%
2037-26-5	Toluene-D8	95%	87-111%
460-00-4	4-Bromofluorobenzene	94%	81-116%

Blank Spike/Blank Spike Duplicate Summary

Job Number: M42710
Account: MOBILSS ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSA1633-BS	A49040.D	1	11/03/04	AMY	n/a	n/a	MSA1633
MSA1633-BSD	A49041.D	1	11/03/04	AMY	n/a	n/a	MSA1633

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

M42710-1, M42710-2, M42710-3, M42710-4, M42710-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	50	46.9	94	49.8	100	6	83-122/25
100-41-4	Ethylbenzene	50	52.2	104	51.4	103	2	83-126/25
1634-04-4	Methyl Tert Butyl Ether	50	43.2	86	41.8	84	3	63-131/25
108-88-3	Toluene	50	44.5	89	46.6	93	5	84-123/25
1330-20-7	Xylene (total)	150	141	94	154	103	9	84-129/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	95%	94%	83-122%
2037-26-5	Toluene-D8	95%	96%	87-111%
460-00-4	4-Bromofluorobenzene	94%	99%	81-116%

Blank Spike/Blank Spike Duplicate Summary

Job Number: M42710
Account: MOBILSS ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSA1634-BS	A49073.D	1	11/04/04	AMY	n/a	n/a	MSA1634
MSA1634-BSD	A49074.D	1	11/04/04	AMY	n/a	n/a	MSA1634

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

M42710-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
1634-04-4	Methyl Tert Butyl Ether	50	41.4	83	41.0	82	1	63-131/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	97%	98%	83-122%
2037-26-5	Toluene-D8	100%	96%	87-111%
460-00-4	4-Bromofluorobenzene	98%	95%	81-116%

Blank Spike Summary

Job Number: M42710
Account: MOBILSS ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSA1634-BS1	A49091.D	1	11/05/04	AMY	n/a	n/a	MSA1634

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

M42710-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
1634-04-4	Methyl Tert Butyl Ether	50	40.0	80	63-131

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	96%	83-122%
2037-26-5	Toluene-D8	97%	87-111%
460-00-4	4-Bromofluorobenzene	107%	81-116%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M42710
Account: MOBILSS ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M42710-5MS	A49055.D	5	11/04/04	AMY	n/a	n/a	MSA1633
M42710-5MSD	A49056.D	5	11/04/04	AMY	n/a	n/a	MSA1633
M42710-5	A49047.D	1	11/03/04	AMY	n/a	n/a	MSA1633

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

M42710-1, M42710-2, M42710-3, M42710-4, M42710-5

CAS No.	Compound	M42710-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		250	233	93	235	94	1	74-129/20
100-41-4	Ethylbenzene	ND		250	247	99	242	97	2	79-126/20
1634-04-4	Methyl Tert Butyl Ether	ND		250	195	78	186	74	5	58-136/20
108-88-3	Toluene	ND		250	215	86	223	89	4	77-127/20
1330-20-7	Xylene (total)	ND		750	767	102	696	93	10	80-129/20

CAS No.	Surrogate Recoveries	MS	MSD	M42710-5	Limits
1868-53-7	Dibromofluoromethane	98%	94%	94%	83-122%
2037-26-5	Toluene-D8	93%	95%	93%	87-111%
460-00-4	4-Bromofluorobenzene	94%	105%	95%	81-116%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M42710
Account: MOBILSS ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M42756-1MS	A49087.D	5	11/04/04	AMY	n/a	n/a	MSA1634
M42756-1MSD	A49088.D	5	11/04/04	AMY	n/a	n/a	MSA1634
M42756-1	A49077.D	1	11/04/04	AMY	n/a	n/a	MSA1634

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

M42710-1

CAS No.	Compound	M42756-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
1634-04-4	Methyl Tert Butyl Ether	ND		250	203	81	211	84	4	58-136/20

CAS No.	Surrogate Recoveries	MS	MSD	M42756-1	Limits
1868-53-7	Dibromofluoromethane	96%	99%	90%	83-122%
2037-26-5	Toluene-D8	96%	105%	96%	87-111%
460-00-4	4-Bromofluorobenzene	108%	95%	96%	81-116%

Volatile Surrogate Recovery Summary

Job Number: M42710
Account: MOBILSS ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
M42710-1	A49095.D	91.0	95.0	95.0
M42710-1	A49043.D	93.0	102.0	99.0
M42710-2	A49044.D	92.0	97.0	96.0
M42710-3	A49045.D	94.0	97.0	93.0
M42710-4	A49046.D	100.0	95.0	94.0
M42710-5	A49047.D	94.0	93.0	95.0
M42710-5MS	A49055.D	98.0	93.0	94.0
M42710-5MSD	A49056.D	94.0	95.0	105.0
M42756-1MS	A49087.D	96.0	96.0	108.0
M42756-1MSD	A49088.D	99.0	105.0	95.0
MSA1633-BS	A49040.D	95.0	95.0	94.0
MSA1633-BSD	A49041.D	94.0	96.0	99.0
MSA1633-MB	A49042.D	90.0	95.0	96.0
MSA1634-BS1	A49091.D	96.0	97.0	107.0
MSA1634-BSD	A49074.D	98.0	96.0	95.0
MSA1634-MB1	A49093.D	94.0	102.0	94.0
MSA1634-MB	A49076.D	98.0	95.0	94.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	83-122%
S2 = Toluene-D8	87-111%
S3 = 4-Bromofluorobenzene	81-116%

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: M42710
Account: MOBILSS - ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Color, Apparent	GN15127	5	<5	CU				
Petroleum Hydrocarbons	GP4957/GN15135	0.60	<0.60	mg/l	5	4.8	96.0	80-120%
Solids, Total Suspended	GN15144	4.0	<4.0	mg/l				
Turbidity	GN15128	0.50	<0.50	NTU				

Associated Samples:
Batch GN15127: M42710-1, M42710-5
Batch GN15128: M42710-1, M42710-5
Batch GN15144: M42710-1, M42710-5
Batch GP4957: M42710-1, M42710-2, M42710-3, M42710-4, M42710-5

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M42710
Account: MOBILSS - ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Color, Apparent	GN15127	M42710-1	CU	200	200	0.0	0-20%
Petroleum Hydrocarbons	GP4957/GN15135	M42587-1	mg/l	<0.60	<0.60	0.0	0-20%
Solids, Total Suspended	GN15144	M42747-1	mg/l	<4.0	<4.0	0.0	0-20%
Turbidity	GN15128	M42710-1	NTU	57.4	58.2	1.4	0-20%

Associated Samples:
Batch GN15127: M42710-1, M42710-5
Batch GN15128: M42710-1, M42710-5
Batch GN15144: M42710-1, M42710-5
Batch GP4957: M42710-1, M42710-2, M42710-3, M42710-4, M42710-5

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M42710
Account: MOBILSS - ExxonMobil
Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Petroleum Hydrocarbons	GP4957/GN15135	M42587-2	mg/l	<0.60	5	4.8	96.0	75-125%

Associated Samples:
Batch GP4957: M42710-1, M42710-2, M42710-3, M42710-4, M42710-5

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Sample Tracking Chronicle

Internal Sample Tracking Chronicle

ExxonMobil

Job No: M42710

CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA
Project No: PO#4504499474 WBS#08

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M42710-1 Collected: 26-OCT-04 13:00 By: RMB Received: 26-OCT-04 By: RS INF						
M42710-1	EPA 180.1	26-OCT-04 17:50	MA			TURB
M42710-1	EPA 110.2	26-OCT-04 18:03	MA			COL
M42710-1	EPA 418.1	27-OCT-04	BF	27-OCT-04	BF	PHC
M42710-1	EPA 160.2	28-OCT-04	BF			TSS
M42710-1	SW846 8260B	03-NOV-04 18:18	AMY			V8260BTXM
M42710-1	SW846 8260B	05-NOV-04 04:17	AMY			V8260BTXM
M42710-2 Collected: 26-OCT-04 13:15 By: RMB Received: 26-OCT-04 By: RS AS EFF						
M42710-2	EPA 418.1	27-OCT-04	BF	27-OCT-04	BF	PHC
M42710-2	SW846 8260B	03-NOV-04 18:56	AMY			V8260BTXM
M42710-3 Collected: 26-OCT-04 13:30 By: RMB Received: 26-OCT-04 By: RS GAC 1 EFF						
M42710-3	EPA 418.1	27-OCT-04	BF	27-OCT-04	BF	PHC
M42710-3	SW846 8260B	03-NOV-04 19:34	AMY			V8260BTXM
M42710-4 Collected: 26-OCT-04 13:45 By: RMB Received: 26-OCT-04 By: RS GAC 2 EFF						
M42710-4	EPA 418.1	27-OCT-04	BF	27-OCT-04	BF	PHC
M42710-4	SW846 8260B	03-NOV-04 20:12	AMY			V8260BTXM
M42710-5 Collected: 26-OCT-04 14:00 By: RMB Received: 26-OCT-04 By: RS EFF						
M42710-5	EPA 180.1	26-OCT-04 17:50	MA			TURB
M42710-5	EPA 110.2	26-OCT-04 18:03	MA			COL
M42710-5	EPA 418.1	27-OCT-04	BF	27-OCT-04	BF	PHC
M42710-5	EPA 160.2	28-OCT-04	BF			TSS
M42710-5	SW846 8260B	03-NOV-04 20:49	AMY			V8260BTXM

CHAIN OF CUSTODY

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

Accutest Job #: M42710

Client Information | **Facility Information** | **Analytical Information**

EXXONMOBIL CORPORATION - Regional Laboratory Program Northeast

Consultants Company Name: CDM	Project Name: 01-FQP,
Address: 50 Hampshire St Cambridge, MA	Street: Mass Turnpike Station - Charlton East
City / State / Zip	City: Charlton State
Project Contact: Jim Zigmont	ExxonMobil Contact: Ryan Boulch
Sampler's Name: Eric Errico	ExxonMobil Contact Phone #: 617-452-6000
Phone #: / Ext. / Fax #:	Location ID#: 01-FQP WBS#
LFE #:	PO# Line#

Accutest Sample #	Field ID / Point of Collection	Collection: Date	Time	Sampled by	Matrix	# of bottles	Preservation: HCL	NaOH	HNO3	H2SO4	MEOH	Encore	Other	None	BTEX 8260 ☒ 624 ☐ 8021 ☐ 524 ☐ MTBE ☒	TBA ☐ Naphthalene ☐ Oxygenates ☐	VOC AQUEOUS 8260 ☐ 624 ☐ 524 ☐ STD ☐ TCL ☐	PPL ☐ MTBE ☐ TBA ☐ Oxygenates ☐	VOC SOIL 8260 ☐ STD ☐ TCL ☐ PPL ☐ MTBE ☐	TBA ☐ Oxygenates ☐ 5035/LOW ☐ 5035MED ☐	VPH RANGES ☐ TARGETS ☐	EPH RANGES ☐ TARGET (PAH) ☐ DIESEL (PAH) ☐	TPH-CTDEP ☐ TPH418.1 ☒	TPH-MAINE GRO ☐ DRO ☐	TPH-8015 GRO ☐ TPH-8015 DRO ☐	METALS TOTAL ☐ DISSOLVED ☐ HM8 ☐ HM5 ☐	METALS TCLP ☐ SPLP ☐ HM8 ☐ HM5 ☐	TSS via	Color via	Turbidity via
2710-1	Inf*	10.26.04	1300	RMB	GW	6	✓							✓	✓							✓						✓	✓	✓
-2	AS Eff	↓	1315	↓	↓	4									✓							✓								
-3	GAC1 Eff		1330			4									✓							✓								
-4	GAC2 Eff		1345			4									✓							✓								
-5	Eff*	↓	1400	↓	↓	6	↓							✓	✓							✓						✓	✓	✓

Turnaround Time (Business days)

- ☒ Std. 10 Business Days — Approved By:/Date
- ☐ 8 Day RUSH
- ☐ 5 Day RUSH
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day EMERGENCY

Emergency T/A is for FAX or Lablink Data

Data Deliverable Information

- ☐ Commercial "A"
- ☐ Commercial "B"
- ☐ Full Deliverables
- ☐ Other
- ☐ FULL CLP
- ☐ State Forms
- ☐ Disk Deliverable Format _____

Site Specific: QC Yes ☐ No ☐ If yes, indicate QC sample in Comments and submit triplicate volume.

Comments / Remarks

MCP Presumptive Certainty Required
* 7 day TAT.

Loc. 9F, 4B, 2C3

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:
Ryan M Boulch	10-26-04 1510	1	2		2
Relinquished by:	Date Time:	Received by:	Relinquished by:	Date Time:	Received by:
		3	4		4
Relinquished by:	Date Time:	Received by:	Seal #	Preserved where applicable	On Ice ☒ Temp. 3.2°
		5		☐	

New England ACCUTEST. Laboratories

05/23/05

Technical Report for

ExxonMobil

CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

PO#4506003634 WBS#08

Accutest Job Number: M47268

Sampling Date: 05/13/05

Report to:

Camp Dresser & McKee
50 Hampshire St.
Cambridge, MA 02067

ATTN: Jim Zigmont

Total number of pages in report: 10

ACCREDITED IN ACCORDANCE WITH nelac

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

Reza Tand
Lab Director

Certifications: MA (M-MA136) CT (PH-0109) NH (250204) RI (00071) ME (MA136) FL (E87579) NY (23346) NJ (MA926) NAVY USACE

Sample Summary

ExxonMobil

CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA
Project No: PO#4506003634 WBS#08

Job No: M47268

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
M47268-1	05/13/05	09:30	JMC	05/13/05	AQ	Influent	INF
M47268-2	05/13/05	09:30	JMC	05/13/05	AQ	Effluent	EFF
M47268-3	05/13/05	09:30	JMC	05/13/05	AQ	Effluent	AS EFF
M47268-4	05/13/05	09:30	JMC	05/13/05	AQ	Effluent1	GAC1 EFF
M47268-5	05/13/05	09:30	JMC	05/13/05	AQ	Effluent2	GAC2 EFF

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	M47268-1	**Date Sampled:**	05/13/05
Matrix:	AQ - Influent	**Date Received:**	05/13/05
Method:	EPA 624	**Percent Solids:**	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D43429.D	50	05/20/05	AT	n/a	n/a	MSD2504
Run #2	D43436.D	100	05/20/05	AT	n/a	n/a	MSD2504

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

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	25	ug/l	
108-88-3	Toluene	59.3	50	ug/l	
100-41-4	Ethylbenzene	ND	50	ug/l	
1330-20-7	Xylenes (total)	110	50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	22100 [a]	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	124%	110%	76-138%
2037-26-5	Toluene-D8 (SUR)	93%	84% [b]	86-114%
460-00-4	4-Bromofluorobenzene (SUR)	91%	107%	76-114%

(a) Result is from Run# 2
(b) Outside control limits due to possible 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:	INF		
Lab Sample ID:	M47268-1	**Date Sampled:**	05/13/05
Matrix:	AQ - Influent	**Date Received:**	05/13/05
		Percent Solids:	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Color, Apparent [a]	500	50	CU	10	05/13/05 17:45	MA	EPA 110.2
Petroleum Hydrocarbons	2.0	0.61	mg/l	1	05/18/05	BF	EPA 418.1
Solids, Total Suspended	79.0	4.0	mg/l	1	05/16/05	BF	EPA 160.2
Turbidity	241	5.0	NTU	10	05/13/05 17:25	MA	EPA 180.1

(a) pH at the time of analysis 7.17.

RL = Reporting Limit

Laboratories

:lbor 01752
508-481-6200 FAX: 508-481-6200

Accutest Job #: M47268

Client Information | **Facility Information**

EXXONMOBIL CORPORATION - Regional Laboratory Program Northeast

Consultants Company Name: CDM
Address:
City: Cambridge State: MA Zip:
Project Contact: CHRIS B HAYWARD
Sampler's Name: John CHUDZIK
Phone #: Ext. Fax #:
AFE #:

Project Name: CHARLTON 01-FQP
Street:
City: CHARLTON State:
ExxonMobil Contact:
ExxonMobil Contact Phone #:
Location ID#: 01-FQP WBS#:
PO# Line#:

Analytical Information

Accutest Sample #	Field ID / Point of Collection	Collection: Date	Time	Sampled by	Matrix	# of bottles	Preservation: HCL	NaOH	HNO3	H2SO4	MEOH	Encore	Other	None	BTEX 8260 ☐ 624 ☒ 8021 ☐ 524 ☐ MTBE ☒ TBA ☐ Naphthalene ☐ Oxygenates ☐	VOC AQUEOUS 8260 ☐ 624 ☐ 524 ☐ STD ☐ TCL ☐ PPL ☐ MTBE ☐ TBA ☐ Oxygenates ☐	VOC SOIL 8260 ☐ STD ☐ TCL ☐ PPL ☐ MTBE ☐ TBA ☐ Oxygenates ☐ 5035/LOW ☐ 5035MED ☐	VPH RANGES ☐ TARGETS ☐	EPH RANGES ☐ TARGET (PAH) ☐ DIESEL (PAH) ☐	TPH-CTDEP ☐ TPH418.1 ☒	TPH-MAINE GRO ☐ DRO ☐	TPH-8015 GRO ☐ TPH-8015 DRO ☐	METALS TOTAL ☐ DISSOLVED ☐ HM8 ☐ HM5 ☐	METALS TCLP ☐ SPLP ☐ HM8 ☐ HM5 ☐	TSS	Color	Turbidity
-1	INF	5/13	930AM	JMC		5	X								X					X					X	X	X
-2	Eff					5	X								X										X	X	X
-3	AS EFF					2	X								X					X					X	X	X
-4	GAC1EFF					2	X								X												
-5	GAC 2 EFF					2	X								X												

Turnaround Time (Business days)

- ☒ Std. 10 Business Days
- ☐ 8 Day RUSH
- ☐ 5 Day RUSH
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day EMERGENCY

Approved By:/Date

Emergency T/A is for FAX or Lablink Data

Data Deliverable Information

- ☐ Commercial "A"
- ☐ Commercial "B"
- ☐ Full Deliverables
- ☐ Other
- ☐ FULL CLP
- ☐ State Forms
- ☐ Disk Deliverable Format

Site Specific: QC Yes ☐ No ☐ If yes, indicate QC sample in Comments and submit triplicate volume.

Comments / Remarks

Loc. 4B, 4D4, 10D

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

Relinquished by Sampler: 1	JMC	Date Time: 12:00pm	Received by: 1	Chris Hayward	Relinquished by: 2	Chris Hayward	Date Time: 5/13/05 14:40	Received by: 2
Relinquished by: 3		Date Time:	Received by: 3		Relinquished by: 4		Date Time:	Received by: 4
Relinquished by: 5		Date Time:	Received by: 5		Seal #		Preserved where applicable ☐	On Ice ☒ Temp. 1.9 °C

New England ACCUTEST Laboratories

07/12/05

Technical Report for

ExxonMobil

CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

PO#4505935526 WBS#08

Accutest Job Number: M48610

Sampling Date: 06/27/05

Report to:

Camp Dresser & McKee
50 Hampshire St.
Cambridge, MA 02067

ATTN: Jim Zigmont

Total number of pages in report: 14

ACCREDITED IN ACCORDANCE WITH nelac

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

Reza Tand
Lab Director

Certifications: MA (M-MA136) CT (PH-0109) NH (250204) RI (00071) ME (MA136) FL (E87579) NY (23346) NJ (MA926) NAVY USACE

Sample Summary

ExxonMobil

CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA
Project No: PO#4505935526 WBS#08

Job No: M48610

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
M48610-1	06/27/05	12:00	JN	06/27/05	AQ	Influent	INF
M48610-2	06/27/05	12:30	JN	06/27/05	AQ	Effluent	EFF
M48610-3	06/27/05	12:45	JN	06/27/05	AQ	Ground Water	AS EFF
M48610-4	06/27/05	13:00	JN	06/27/05	AQ	Ground Water	GAC1 EFF
M48610-5	06/27/05	13:15	JN	06/27/05	AQ	Ground Water	GAC2 EFF

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	M48610-1	**Date Sampled:**	06/27/05
Matrix:	AQ - Influent	**Date Received:**	06/27/05
Method:	EPA 624	**Percent Solids:**	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D44361.D	1	07/08/05	AT	n/a	n/a	MSD2534
Run #2	D44367.D	500	07/08/05	AT	n/a	n/a	MSD2534

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

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	5.7	0.50	ug/l	
108-88-3	Toluene	13.9	1.0	ug/l	
100-41-4	Ethylbenzene	5.7	1.0	ug/l	
1330-20-7	Xylenes (total)	93.7	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	12900 [a]	500	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	100%	108%	76-138%
2037-26-5	Toluene-D8 (SUR)	99%	100%	86-114%
460-00-4	4-Bromofluorobenzene (SUR)	97%	95%	76-114%

(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:	INF		
Lab Sample ID:	M48610-1	**Date Sampled:**	06/27/05
Matrix:	AQ - Influent	**Date Received:**	06/27/05
		Percent Solids:	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Color, Apparent	225	25	CU	5	06/27/05 16:58	MA	EPA 110.2
Petroleum Hydrocarbons	<0.61	0.61	mg/l	1	06/30/05	BF	EPA 418.1
Solids, Total Suspended	36.0	4.0	mg/l	1	06/28/05	BF	EPA 160.2
Turbidity	131	2.5	NTU	5	06/27/05 17:15	MA	EPA 180.1

RL = Reporting Limit

CHAIN OF CUSTODY

ACCUTEST Laboratories

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

Accutest Job #: M48610

Client Information | **Facility Information**

EXXONMOBIL CORPORATION - Regional Laboratory Program Northeast

Consultants Company Name: CDM
Address:
City: Cambridge State: MA Zip:
Project Contact: CHRIS & HAYWARD
Sampler's Name: John N Chmielic
Phone #: Ext. Fax #:
AFE #:

Project Name: XOM Charlton
Street: MASS Pike EAST
City: Charlton State:
ExxonMobil Contact:
ExxonMobil Contact Phone #:
Location ID#: WBS#:
PO#: Line#:

Analytical Information

Accutest Sample #	Field ID / Point of Collection	Collection: Date	Time	Sampled by	Matrix	# of bottles	Preservation: HCL	NaOH	HNO3	H2SO4	MEOH	Encore	Other	None	BTEX 8260 ☐ 624 ☒ 8021 ☐ 524 ☐ MTBE ☐ TBA ☐ Naphthalene ☐ Oxygenates ☐	VOC AQUEOUS 8260 ☐ 624 ☐ 524 ☐ STD ☐ TCL ☐ PPL ☐ MTBE ☐ TBA ☐ Oxygenates ☐	VOC SOIL 8260 ☐ STD ☐ TCL ☐ PPL ☐ MTBE ☐ TBA ☐ Oxygenates ☐ 5035/LOW ☐ 5035MED ☐	VPH RANGES ☐ TARGETS ☐	EPH RANGES ☐ TARGET (PAH) ☐ DIESEL (PAH) ☐	TPH-CTDEP ☐ TPH418.1 ☒	TPH-MAINE GRO ☐ DRO ☐	TPH-8015 GRO ☐ TPH-8015 DRO ☐	METALS TOTAL ☐ DISSOLVED ☐ HM8 ☐ HM5 ☐	METALS TCLP ☐ SPLP ☐ HM8 ☐ HM5 ☐	Calc, Turbidity, TSS
	INF	6/27/05	12:00pm	JN	GW	1								X											
-1	INF		12:00			2	X								X										X
	INF		12:00			2							X							X					
	Eff		12:30			1								X											
-2	Eff		12:35			2	X								X										X
	Eff		12:30			2							X							X					
	AS Eff		12:45			2	X								X										
-3	AS Eff		12:45			2							X							X					
	GAC I Eff		1:00			2	X								X										
-4	GAC I Eff		1:00			2							X							X					

Turnaround Time (Business days)

- ☐ Std. 10 Business Days
- ☐ 8 Day RUSH
- ☐ 5 Day RUSH
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day EMERGENCY

Approved By:/Date:

Emergency T/A is for FAX or Lablink Data

Data Deliverable Information

- ☐ Commercial "A"
- ☐ Commercial "B"
- ☐ Full Deliverables
- ☐ Other
- ☐ FULL CLP
- ☐ State Forms
- ☐ Disk Deliverable Format

Site Specific: QC Yes ☐ No ☐ If yes, indicate QC sample in Comments and submit triplicate volume.

Comments / Remarks

Loc. ID9, 4D, 11F

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

Relinquished by Sampler: 1 John Chmielic	Date Time: 6-27-05 19:50	Received by: 1	Relinquished by: 2	Date Time: 6-27-05 13:25	Received by: 2
Relinquished by: 3	Date Time:	Received by: 3	Relinquished by: 4	Date Time:	Received by: 4
Relinquished by: 5	Date Time:	Received by:	Seal #		

CHAIN OF CUSTODY

ACCUTEST Laboratories

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

Accutest Job #: M48610

Client Information | **Facility Information**

EXXONMOBIL CORPORATION - Regional Laboratory Program Northeast

Client Information	Facility Information
Consultants Company Name: CDM	Project Name: XOM Charlton
Address:	Street: MASS. Pike EAST
City: Cambridge State: MA Zip:	City: Charlton State:
Project Contact: Chris G Hayward	ExxonMobil Contact:
Sampler's Name: John Churchill	ExxonMobil Contact Phone #:
Phone #: Ext. Fax #:	Location ID# WBS#
AFE #:	PO# Line#

Accutest Sample #	Field ID / Point of Collection	Collection: Date	Time	Sampled by	Matrix	# of bottles	Preservation: HCL	NaOH	HNO3	H2SO4	MEOH	Encore	Other	None	BTEX 8260 ☐ 624 ☒ 8021 ☐ 524 ☐ MTBE ☐ TBA ☐ Naphthalene ☐ Oxygenates ☐	VOC AQUEOUS 8260 ☐ 624 ☐ 524 ☐ STD ☐ TCL ☐ PPL ☐ MTBE ☐ TBA ☐ Oxygenates ☐	VOC SOIL 8260 ☐ STD ☐ TCL ☐ PPL ☐ MTBE ☐ TBA ☐ Oxygenates ☐ 5035/LOW ☐ 5035MED ☐	VPH RANGES ☐ TARGETS ☐	EPH RANGES ☐ TARGET (PAH) ☐ DIESEL (PAH) ☐ TPH-CTDEP ☐ TPH418.1 ☒	TPH-MAINE GRO ☐ DRO ☐	TPH-8015 GRO ☐ TPH-8015 DRO ☐	METALS TOTAL ☐ DISSOLVED ☐ HM8 ☐ HM5 ☐	METALS TCLP ☐ SPLP ☐ HM8 ☐ HM5 ☐
	GAC 2 EFF	6/27	1:15	MK	GW	2	X								X				X				
-5	GAC 2 EFF	6/27	1:15	/	GW	2							X										

Turnaround Time (Business days)

- ☐ Std. 10 Business Days
- ☐ 8 Day RUSH
- ☐ 5 Day RUSH
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day EMERGENCY

Approved By:/Date

Emergency T/A is for FAX or Lablink Data

Data Deliverable Information

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- ☐ Commercial "B"
- ☐ Full Deliverables
- ☐ Other
- ☐ FULL CLP
- ☐ State Forms
- ☐ Disk Deliverable Format

Site Specific: QC Yes ☐ No ☐ If yes, indicate QC sample in Comments and submit triplicate volume.

Comments / Remarks

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	6-27-05 14:30	1	2	6-27-05 15:25	2
Relinquished by:	Date Time:	Received by:	Relinquished by:	Date Time:	Received by:
3		3	4		
Relinquished by:	Date Time:	Received by:			
5					

New England ACCUTEST Laboratories

08/02/05

Technical Report for

ExxonMobil

CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

PO#4506003634 WBS#08

Accutest Job Number: M49067

Sampling Date: 07/13/05

Report to:

Camp, Dresser & McKee

ZigmontJH@cdm.com

ATTN: Jim Zigmont

Total number of pages in report: 18

ACCREDITED IN ACCORDANCE WITH nelac

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

Reza Tand
Lab Director

Certifications: MA (M-MA136) CT (PH-0109) NH (250204) RI (00071) ME (MA136) FL (E87579) NY (23346) NJ (MA926) NAVY USACE

Table of Contents

Sections: 1 2 3 4

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Sample Summary

ExxonMobil

CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA
Project No: PO#4506003634 WBS#08

Job No: M49067

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
M49067-1	07/13/05	14:00	RMB	07/13/05	AQ	Influent	AS-INF
M49067-2	07/13/05	14:10	RMB	07/13/05	AQ	Effluent	AS-EFF
M49067-3	07/13/05	14:20	RMB	07/13/05	AQ	Effluent1	GAC1-EFF
M49067-4	07/13/05	14:30	RMB	07/13/05	AQ	Effluent2	GAC2-EFF
M49067-5	07/13/05	14:40	RMB	07/13/05	AQ	Effluent3	GAC3-EFF

ACCUTEST. Laboratories

2

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: ExxonMobil

Job No M49067

Site: CDM:01-FQP Mass Tumpike Area 5E Charlton ,MA

Report Date 7/22/2005 4:14:24 PM

5 Samples were collected on 07/13/2005 and were received at Accutest on 07/13/2005 properly preserved, at 18.5 Deg. C and intact. These Samples received an Accutest job number of M49067. 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 EPA 624

Matrix AQ Batch ID: MSD2539

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M49021-4MS, M49021-4MSD were used as the QC samples indicated.
- Only BTX and MTBE requested.

Wet Chemistry By Method EPA 110.2

Matrix AQ Batch ID: GN17276

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M49067-1DUP were used as the QC samples for Color, Apparent.

Wet Chemistry By Method EPA 160.2

Matrix AQ Batch ID: GN17321

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M49149-1DUP were used as the QC samples for Solids, Total Suspended.

Wet Chemistry By Method EPA 180.1

Matrix AQ Batch ID: GN17275

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M49067-5DUP were used as the QC samples for Turbidity.

Wet Chemistry By Method EPA 418.1

Matrix AQ Batch ID: GP5751

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M49113-1DUP, M49113-3MS were used as the QC samples for Petroleum Hydrocarbons.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M49067).

Report of Analysis

Client Sample ID:	AS-INF		
Lab Sample ID:	M49067-1	Date Sampled:	07/13/05
Matrix:	AQ - Influent	Date Received:	07/13/05
Method:	EPA 624	Percent Solids:	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D44527.D	1	07/18/05	AT	n/a	n/a	MSD2539
Run #2	D44528.D	20	07/18/05	AT	n/a	n/a	MSD2539

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

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	8.6	0.50	ug/l	
108-88-3	Toluene	13.2	1.0	ug/l	
100-41-4	Ethylbenzene	14.7	1.0	ug/l	
1330-20-7	Xylenes (total)	65.4	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	3910 [a]	20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	97%	88%	76-138%
2037-26-5	Toluene-D8 (SUR)	98%	102%	86-114%
460-00-4	4-Bromofluorobenzene (SUR)	98%	106%	76-114%

(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:	AS-INF		
Lab Sample ID:	M49067-1	Date Sampled:	07/13/05
Matrix:	AQ - Influent	Date Received:	07/13/05
		Percent Solids:	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Color, Apparent	700	100	CU	20	07/13/05 17:45	MA	EPA 110.2
Petroleum Hydrocarbons	<0.61	0.61	mg/l	1	07/18/05	BF	EPA 418.1
Solids, Total Suspended	142	4.0	mg/l	1	07/19/05	BF	EPA 160.2
Turbidity	522	10	NTU	20	07/13/05 18:05	MA	EPA 180.1

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- MCP Form

ACCUTEST Laboratories

CHAIN OF CUSTODY

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

Accutest Job #: M49067

Client Information | **Facility Information** | **Analytical Information**

EXXONMOBIL CORPORATION - Regional Laboratory Program Northeast

Consultants Company Name: CDM	Project Name: CHARLTON - XOM
Address: 50 HAMPSHIRE ST.	Street: MA Turnpike - East Bound
City: CAMBRIDGE State: MA Zip:	City: Charlton State: MA
Project Contact: JIM ZIGMOT	ExxonMobil Contact: ERIC GRRICO
Sampler's Name: RMB	ExxonMobil Contact Phone #:
Phone #: 617-452-6000 Ext. Fax #:	Location ID#: 01-FQP WBS#
AFE #:	PO# Line#

Accutest Sample #	Field ID / Point of Collection	Collection: Date	Time	Sampled by	Matrix	# of bottles	Preservation: HCL	NaOH	HNO3	H2SO4	MEOH	Encore	Other	None	BTEX 8260 ☐ 624 ☐ 8021 ☐ 624 ☐ MTBE ☐	TBA ☐ Naphthalene ☐ Oxygenates ☐	VOC ARGUOUS 8260 ☐ 624 ☐ STD ☐ TCL ☐	PPL ☐ MTBE ☐ TBA ☐ Oxygenates ☐ STD ☐	VOC SOIL 8260 ☐ TCL ☐ PPL ☐ MTBE ☐	TBA ☐ Oxygenates ☐ 5035/LOW ☐ 5035/MED ☐	VPH RANGES ☐ TARGETS ☐	EPH RANGES ☐ TARGET (PAH) ☐ DIESEL (PAH) ☐	TPH-CTEQP ☐ TPH418.1 ☐	TPH-MAINE GRO ☐ DRO ☐	TPH-8015 GRO ☐ TPH-8015 DRO ☐	METALS TOTAL ☐ DISSOLVED ☐ HM5 ☐	METALS TCLP ☐ SPLP ☐ HM5 ☐	TSS	COLOR	TURBIDITY
M49067																														
-1	AS-INF	7/13/05	14:00	RMB	GW	5	X							X	X								X					X	X	X
-2	AS-EFF		14:10			4	X								X								X							
-3	GAC1-EFF		14:20			4	X								X								X							
-4	GAC2-EFF		14:30			4	X								X								X							
-5	GAC3-EFF		14:40			5	X							X	X								X					X	X	X

Turnaround Time (Business days)

- ☐ Std. 10 Business Days — Approved By/Date: _____
- ☐ 8 Day RUSH
- ☒ 5 Day RUSH
- ☐ ~~3 Day EMERGENCY~~
- ☐ 2 Day EMERGENCY
- ☐ 1 Day EMERGENCY

Emergency T/A is for FAX or Labiink Data

Data Deliverable Information

- ☐ Commercial "A"
- ☐ Commercial "B"
- ☐ Full Deliverables
- ☐ Other
- ☐ FULL CLP
- ☐ State Forms
- ☐ Disk Deliverable Format _____

Site Specific: QC Yes ☐ No ☐ If yes, indicate QC sample in Comments and submit triplicate volume.

Comments / Remarks

MCP PRESUMPTIVE CERTAINTY REQUIRED

for 2C, 4D, 3F4

SAMPLES RECEIVED DIRECTLY FROM FIELD SAMPLING

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

Relinquished by Sampler: 1	Date Time:	Received by: 1	Relinquished by: 2	Date Time:	Received by: 2
Relinquished by: 3	Date Time:	Received by: 3	Relinquished by: 4	Date Time:	Received by: 4
Relinquished by: 5	Date Time:	Received by: 5	Seal #	Preserved where applicable ☐	On Ice ☐ Temp. 18.5C

4.1 4

M49067: Chain of Custody
Page 1 of 1

MADEP MCP Analytical Method Report Certification Form

Laboratory Name:	Accutest Laboratories of New England	Project #:	M49067
Project Location:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA	MADEP RTN [1]	None

This form provides certifications for the following data set:
M49067-1,M49067-2,M49067-3,M49067-4,M49067-5

Test Method:EPA 624, 110.2, 160.2, 180.1, 418.1

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

MCP SW-846 Methods Used As specified in MADEP Compendium of Analytical Methods (Check all that apply)					
	8260B ( )	8151A ( )	8330 ( )	6010B ( )	7470A/1A ( )
	8270C ( )	8081A ( )	VPH ( )	6020 ( )	9014M [2] ( )
	8082 ( )	8021B ( )	EPH ( )	7000 S [3] ( )	7196A ( )

1 List Release Tracking Number (RTN), if known
2 M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method
3 S - SW-846 Methods 7000 Series, List individual method and analyte

An affirmative response to questions A, B, C, and D is required for "Presumptive Certainty status

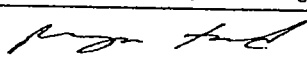
A	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	☑	Yes	☐ No [1]
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	☑	Yes	☐ No [1]
C	Does the data included in this report meet all the analytical requirements for "Presumptive Certainty", as described in Section 2.0 (a), (b), (c) and (d) of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☑	Yes	☐ No [1]
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	☑	Yes	☐ No [1]

A response to questions E and F below is required for "Presumptive Certainty" status

E	Were all QC performance standards and recommendations for the specified methods achieved?	☑ Refer to Narrative	Yes	☐ No [1]
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	☐ Refer to Narrative	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: Reza Tand Date: 07/22/2005

New England ACCUTEST Laboratories

09/12/05

Technical Report for

ExxonMobil

CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

PO#4506003634 WBS#08

Accutest Job Number: M50238

Sampling Date: 08/23/05

Report to:

Camp, Dresser & McKee

KohmKE@cdm.com

ATTN: Katharine Kohm

Total number of pages in report: 16

ACCREDITED IN ACCORDANCE WITH nelac

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

Reza Tand
Lab Director

Certifications: MA (M-MA136) CT (PH-0109) NH (250204) RI (00071) ME (MA136) FL (E87579) NY (23346) NJ (MA926) NAVY USACE

Table of Contents

Sections: 1 2

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Sample Summary

ExxonMobil

Job No: M50238

CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA
Project No: PO#4506003634 WBS#08

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
M50238-1	08/23/05	10:25	CGH	08/24/05	AQ	Influent	INF
M50238-2	08/23/05	10:30	CGH	08/24/05	AQ	Effluent	EFF
M50238-3	08/23/05	10:35	CGH	08/24/05	AQ	Ground Water	AS EFF
M50238-4	08/23/05	10:40	CGH	08/24/05	AQ	Ground Water	GAC1 EFF
M50238-5	08/23/05	10:45	CGH	08/24/05	AQ	Ground Water	GAC2 EFF
M50238-6	08/23/05	00:00	CGH	08/24/05	AQ	Trip Blank Water	TB

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	M50238-1	Date Sampled:	08/23/05
Matrix:	AQ - Influent	Date Received:	08/24/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P859.D	100	08/30/05	AMY	n/a	n/a	MSP29
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	50	ug/l	
108-88-3	Toluene	ND	100	ug/l	
100-41-4	Ethylbenzene	ND	100	ug/l	
1330-20-7	Xylene (total)	586	100	ug/l	
1634-04-4	Methyl Tert Butyl Ether	23300	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		84-121%
2037-26-5	Toluene-D8	94%		88-110%
460-00-4	4-Bromofluorobenzene	92%		83-114%

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:	M50238-1	Date Sampled:	08/23/05
Matrix:	AQ - Influent	Date Received:	08/24/05
		Percent Solids:	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Color, Apparent	125	25	CU	5	08/25/05	MA	EPA 110.2
Petroleum Hydrocarbons	< 0.61	0.61	mg/l	1	08/29/05	BF	EPA 418.1
Solids, Total Suspended	35.0	4.0	mg/l	1	08/30/05	BF	EPA 160.2
Turbidity	42.6	1.0	NTU	2	08/25/05 08:05	MA	EPA 180.1

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TB		
Lab Sample ID:	M50238-6	Date Sampled:	08/23/05
Matrix:	AQ - Trip Blank Water	Date Received:	08/24/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P1000.D	1	09/04/05	AMY	n/a	n/a	MSP31
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	0.50	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		84-121%
2037-26-5	Toluene-D8	98%		88-110%
460-00-4	4-Bromofluorobenzene	88%		83-114%

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST. Laboratories

CHAIN OF CUSTODY

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

Accutest Job #: M50238

Client Information | **Facility Information** | **Analytical Information**

EXXONMOBIL CORPORATION - Regional Laboratory Program Northeast

Consultants Company Name: CDM	Project Name: Charlton 01-FQP
Address: 50 Hampshire St.	Street: Mass Turnpike Service Area SE
City: Cambridge State: MA Zip: 02139	City: Charlton State: MA
Project Contact: Tim Zigmont	ExxonMobil Contact: Eric Evora
Sampler's Name: Chris Hayward	ExxonMobil Contact Phone #: 617.391.2952
Phone #: 617.452.6572 Ext. Fax #:	Location ID#: 01-FQP WBS#
APE #:	PO#: 4500135526 Line# WBS08

Accutest Sample #	Field ID / Point of Collection	Collection: Date	Time	Sampled by	Matrix	# of bottles	Preservation: HCL	NaOH	HNO3	H2SO4	MEOH	Encore	Other	None
-1	INF	10/23/15	1025	CGH	GW	5	✓							✓
-2	EFF		1030			4	✓							✓
-3	AS EFF		1035			4	✓							✓
-4	GAC1 EFF		1040			4	✓							✓
-5	GAC2 EFF		1045			4								✓
-6	TB					2								

BTEX 8260 ☐ 624 ☐ 8021 ☐ 524 ☐ MTBE ☑
TBA ☐ Naphthalene ☐ Oxygenates ☐
VOC AQUEOUS 8260 ☐ 624 ☐ STD ☐ TCL ☐
PPL ☐ MTBE ☐ TBA ☐ Oxygenates ☐
VOC SOIL 8260 ☐ STD ☐ TCL ☐ PPL ☐ MTBE ☐
TBA ☐ Oxygenates ☐ 5035LOW ☐ 5035MED ☐
VPH RANGES ☐ TARGETS ☐
EPH RANGES ☐ TARGET (PAH) ☐ DIESEL (PAH) ☐
TPH-CTDEP ☐ TPH418.1 ☐
TPH-MAINE GRO ☐ DRO ☐
TPH-8015 GRO ☐ TPH-8015 DRO ☐
METALS TOTAL ☐ DISSOLVED ☐ HMS ☐ HMS ☐
METALS TCLP ☐ SPLP ☐ HMS ☐ HMS ☐
TSS 160.2
Color 110.2
Turbidity 2130

Turnaround Time (Business days)

- ☐ Std. 10 Business Days — Approved By/Date: _____
- ☑ 7 Day RUSH
- ☐ 5 Day RUSH
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day EMERGENCY

Emergency T/A is for FAX or Lablink Data

Data Deliverable Information

- ☐ Commercial "A"
- ☐ Commercial "B"
- ☐ Full Deliverables
- ☐ Other
- ☐ FULL CLP
- ☐ State Forms
- ☐ Disk Deliverable Format _____

Site Specific: QC Yes ☐ No ☐ If yes, indicate QC sample in Comments and submit triplicate volume.

Comments / Remarks

Please place samples INF and EFF on Friday TAT. Other samples are normal TAT.

Loc. 4D, 2C, 4E2

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

Relinquished by Sampler: 1	Date Time: 10/24/15 1100	Received by: 1		Relinquished by:	Date Time:	Received by: 2	
Relinquished by: 3	Date Time:	Received by: 3		Relinquished by: 4	Date Time:	Received by: 4	
Relinquished by: 5	Date Time:	Received by: 5		Seal #	Preserved where applicable ☐	On Ice ☑	3.8°C Temp.

M50238: Chain of Custody
Page 1 of 1

New England
ACCUTEST.
Laboratories

10/20/05

Technical Report for

ExxonMobil

CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

PO#4506003634 WBS#08

Accutest Job Number: M50719

Sampling Date: 09/13/05

Report to:

Camp, Dresser & McKee

HimmelDB@cdm.com

ATTN: Dana Himmel

Total number of pages in report: **16**

ACCREDITED IN ACCORDANCE WITH nelac

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

Reza Tand
Lab Director

Certifications: MA (M-MA136) CT (PH-0109) NH (250204) RI (00071) ME (MA136) FL (E87579) NY (23346) NJ (MA926) NAVY USACE

Sections: 1 2 3

Table of Contents

-1-

Sample Summary

ExxonMobil

Job No: M50719

CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA
Project No: PO#4506003634 WBS#08

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
M50719-1	09/13/05	10:05	CH	09/13/05	AQ	Influent	ASINF
M50719-2	09/13/05	10:10	CH	09/13/05	AQ	Effluent	ASEFF
M50719-3	09/13/05	10:15	CH	09/13/05	AQ	Effluent1	LGAC1EFF
M50719-4	09/13/05	10:20	CH	09/13/05	AQ	Effluent2	LGAC2EFF
M50719-5	09/13/05	10:25	CH	09/13/05	AQ	Effluent	EFF
M50719-6	09/13/05	00:00	CH	09/13/05	AQ	Trip Blank Water	TRIP BLANK

Report of Analysis

Client Sample ID:	ASINF		
Lab Sample ID:	M50719-1	Date Sampled:	09/13/05
Matrix:	AQ - Influent	Date Received:	09/13/05
Method:	EPA 624	Percent Solids:	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D45198.D	1	09/16/05	AT	n/a	n/a	MSD2558
Run #2	D45214.D	50	09/17/05	AT	n/a	n/a	MSD2558

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

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	6.9	0.50	ug/l	
108-88-3	Toluene	17.8	1.0	ug/l	
100-41-4	Ethylbenzene	11.5	1.0	ug/l	
1330-20-7	Xylenes (total)	172	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	3870 [a]	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	96%	113%	76-138%
2037-26-5	Toluene-D8 (SUR)	96%	93%	86-114%
460-00-4	4-Bromofluorobenzene (SUR)	110%	109%	76-114%

(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:	ASINF		
Lab Sample ID:	M50719-1	Date Sampled:	09/13/05
Matrix:	AQ - Influent	Date Received:	09/13/05
		Percent Solids:	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Color, Apparent [a]	200	50	CU	10	09/13/05 18:20	MA	EPA 110.2
Petroleum Hydrocarbons	<0.61	0.61	mg/l	1	09/19/05	BF	EPA 418.1
Solids, Total Suspended	21.0	4.0	mg/l	1	09/14/05	BF	EPA 160.2
Turbidity	67.2	2.5	NTU	5	09/13/05 17:55	MA	EPA 180.1

(a) pH at the time of analysis, 7.33.

RL = Reporting Limit

Accutest LabLink@56924 14:53 20-Oct-2005

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	M50719-6	Date Sampled:	09/13/05
Matrix:	AQ - Trip Blank Water	Date Received:	09/13/05
Method:	EPA 624	Percent Solids:	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D45238.D	1	09/19/05	AT	n/a	n/a	MSD2559
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	0.50	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	111%		76-138%
2037-26-5	Toluene-D8 (SUR)	101%		86-114%
460-00-4	4-Bromofluorobenzene (SUR)	104%		76-114%

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST Laboratories

CHAIN OF CUSTODY

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

Accutest Job #: M50719

Client Information | **Facility Information** | **Analytical Information**

EXXONMOBIL CORPORATION - Regional Laborstory Program Northeast

Consultants Company Name: CDM	Project Name: Charlton 01-FQP
Address: 50 Hampshire St	Street: Mass TPKE Service Area 5E
City: Cambridge State: MA Zip: 02139	City: Charlton State: MA
Project Contact: James Zigmont	ExxonMobil Contact: Eric Errico
Sampler's Name: Chris Harley	ExxonMobil Contact Phone #: (617) 381-2952
Phone #: (617) 452-6000 Ext. Fax #:	Location ID#: 01-FQP WBS#
AFE #:	PO#: 4505935526 Lines: WBS#08

Accutest Sample #	Field ID / Point of Collection	Collection: Date	Time	Sampled by	Matrix	# of bottles	Preservation: HCL	HNO3	H2SO4	MEOH	Encore	Other	None	BTEX 8260 ☐ 624 ☐ 8021 ☐ 624 ☐ MTBE ☐ TBA ☐ Naphthalene ☐ Oxygenates ☐	VOC AQUEOUS 8260 ☐ 624 ☐ STD ☐ TCL ☐ PPL ☐ MTBE ☐ TBA ☐ Oxygenates ☐	VOC SOIL 8260 ☐ STD ☐ TCL ☐ PPL ☐ MTBE ☐ TBA ☐ Oxygenates ☐ 5035/LOW ☐ 5035/MED ☐	VPH RANGES ☐ TARGETS ☐	EPH RANGES ☐ TARGET (PAH) ☐ DIESEL (PAH) ☐	TPH-CTEP ☐ TPH418.1 ☐	TPH-MAINE GRO ☐ DRO ☐	TPH-8015 GRO ☐ TPH-8015 DRO ☐	METALS TOTAL ☐ DISSOLVED ☐ HMS ☐ HMS ☐	METALS TCLP ☐ SPLP ☐ HMS ☐ HMS ☐	Color	Turbidity	TSS	
-1	AS INF	9/13/05	1005	CH	GW	6	X						X	X					X						X	X	X	
-2	AS EFF		1010			5	X							X					X									
-3	LGAC 1 EFF		1015			5	X							X					X									
-4	LGAC 2 EFF		1020			5	X							X					X									
-5	EFF		1025			6	X						X	X					X						X	X	X	
-6	Trip Blank	9/13/05				2																						

Turnaround Time (Business days)

- ☑ Std. 10 Business Days
- ☐ ~~7 Day~~ 3 Day RUSH
- ☐ 5 Day RUSH
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day EMERGENCY

Approved By:/Date: _____

Emergency T/A is for FAX or Lablink Data

Data Deliverable Information

- ☐ Commercial "A"
- ☐ Commercial "B"
- ☐ Full Deliverables
- ☐ Other
- ☐ FULL CLP
- ☐ State Forms
- ☐ Disk Deliverable Format _____

Site Specific: QC Yes ☐ No ☐ If yes, indicate QC sample in Comments and submit triplicate volume.

Comments / Remarks

Please place samples AS INF and EFF on 7-Day TAT. Normal TAT for all other samples.

Loc. 10E, 2F8, 4F

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

Relinquished by: 1	Date Time: 9/13/05 16:05	Received by: 1	Relinquished by: 2	Date Time:	Received by: 2
Relinquished by: 3	Date Time:	Received by: 3	Relinquished by: 4	Date Time:	Received by: 4
Relinquished by: 5	Date Time:	Received by: 5	Seal #	Preserved where applicable ☐	On Ice ☒ Temp. 1.4°C

M50719: Chain of Custody
Page 1 of 1

New England ACCUTEST. Laboratories

10/19/05

Technical Report for

ExxonMobil

CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

PO#4506003634 WBS#08

Accutest Job Number: M51387

Sampling Date: 10/04/05

Report to:

Camp, Dresser & McKee

HimmelDB@cdm.com

ATTN: Dana Himmel

Total number of pages in report: 12

ACCREDITED IN ACCORDANCE WITH nelac

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

Reza Tand
Lab Director

Certifications: MA (M-MA136) CT (PH-0109) NH (250204) RI (00071) ME (MA136) FL (E87579) NY (23346) NJ (MA926) NAVY USACE

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Sample Summary

ExxonMobil

Job No: M51387

CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA
Project No: PO#4506003634 WBS#08

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
M51387-1	10/04/05	16:15	CH	10/04/05	AQ	Ground Water	INF CHARLTON
M51387-2	10/04/05	00:00	CH	10/04/05	AQ	Trip Blank Water	TRIP BLANK

Report of Analysis

Client Sample ID:	INF CHARLTON		
Lab Sample ID:	M51387-1	Date Sampled:	10/04/05
Matrix:	AQ - Ground Water	Date Received:	10/04/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	P2141.D	1	10/10/05	AMY	n/a	n/a	MSP73
Run #2 [a]	P2152.D	10	10/10/05	AMY	n/a	n/a	MSP73

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

Oxygenates

CAS No.	Compound	Result	RL	Units	Q
994-05-8	tert-Amyl Methyl Ether	377	2.0	ug/l	
75-65-0	Tert Butyl Alcohol	19600 [b]	1000	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	98%	82-127%
2037-26-5	Toluene-D8	100%	93%	88-112%
460-00-4	4-Bromofluorobenzene	106%	100%	80-118%

(a) The pH of the sample aliquot for VOA analysis was >2 at time of analysis.
(b) 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:	INF CHARLTON		
Lab Sample ID:	M51387-1	Date Sampled:	10/04/05
Matrix:	AQ - Ground Water	Date Received:	10/04/05
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E24638.D	1	10/07/05	PB	10/06/05	OP9781	MSE1288
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
91-20-3	Naphthalene	16.0	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%		22-126%
321-60-8	2-Fluorobiphenyl	61%		21-124%
1718-51-0	Terphenyl-d14	50%		24-133%

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 CHARLTON		
Lab Sample ID:	M51387-1	Date Sampled:	10/04/05
Matrix:	AQ - Ground Water	Date Received:	10/04/05
Method:	EPA 504 EPA 504	Percent Solids:	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ28986.D	1	10/11/05	CZ	10/10/05	OP9803	GYZ1204
Run #2							

	Initial Volume	Final Volume
Run #1	42.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	61%		26-158%

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 CHARLTON		
Lab Sample ID:	M51387-1	Date Sampled:	10/04/05
Matrix:	AQ - Ground Water	Date Received:	10/04/05
		Percent Solids:	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method	Prep Method
Iron	12000	100	ug/l	1	10/07/05	10/10/05	AC	SW846 6010B [2]	SW846 3010A [3]
Lead	<1.0	1.0	ug/l	1	10/10/05	10/10/05	LMN	EPA 239.2 [1]	SW846 3020A [4]

(1) Instrument QC Batch: MA6325
(2) Instrument QC Batch: MA6332
(3) Prep QC Batch: MP7728
(4) Prep QC Batch: MP7730

RL = Reporting Limit

Accutest LabLink@56777 08:28 19-Oct-2005

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	M51387-2	Date Sampled:	10/04/05
Matrix:	AQ - Trip Blank Water	Date Received:	10/04/05
Method:	EPA 504 EPA 504	Percent Solids:	n/a
Project:	CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ28987.D	1	10/11/05	CZ	10/10/05	OP9803	GYZ1204
Run #2							

	Initial Volume	Final Volume
Run #1	42.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	91%		26-158%

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

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

Accutest Job #: ~~M51386~~ ~~RS~~ M51387

Client Information | **Facility Information** | **Analytical Information**

EXXONMOBIL CORPORATION - Regional Laboratory Program Northeast

Consultants Company Name: CDM	Project Name: Xom Charlton 01-FQP
Address: 50 Hampshire St	Street: MTA Service Area 5E
City: Cambridge State: MA Zip: 02139	City: Charlton State: MA
Project Contact: Jim Zigmont	ExxonMobil Contact: Eric Errico
Sampler's Name: Chris Harley	ExxonMobil Contact Phone #: 617 381 2952
Phone #: (617) 452-6000 Ext. Fax #: (617) 452-8000	Location ID#: 01-FQP WBS#
AFE #:	PO#: 4505935526 Line#: WBS 05

Analytical columns: BTEX 8260 ☒ 624 ☐ 8021 ☐ 624 ☐ MTBE ☐ TBA ☐ Naphthalene ☐ Oxygenates ☐; VOC AQUEOUS 8260 ☐ 624 ☐ 624 ☐ STD ☐ TCL ☐ PPL ☐ MTBE ☐ TBA ☐ Oxygenates ☐; VOC SOIL 8260 ☐ STD ☐ TCL ☐ PPL ☐ MTBE ☐ TBA ☐ Oxygenates ☐ 5035/LOW ☐ 5035/MED ☐; VPH RANGES ☐ TARGETS ☐; EPH RANGES ☐ TARGET (PAH) ☐ DIESEL (PAH) ☐; TPH-CTDEP ☐ TPH418.1 ☐; TPH-MAINE GRO ☐ DRO ☐; TPH-8015 GRO ☐ TPH-8015 DRO ☐; METALS TOTAL ☐ DISSOLVED ☐ HM8 ☐ HM8 ☐; METALS TCLP ☐ SPLP ☐ HM8 ☐ HM8 ☐; AB 827; AB 8270 SIM; 504 EDB; OTG 1664; PCB 608; Metals w/ Hg; Cyanide (total); HexCr, TSS, TRC

Accutest Sample #	Field ID / Point of Collection	Date	Time	Sampled by	Matrix	# of bottles	Preservation	Analysis
	INF Char	10/4/05	1615	CH	GW	2	HCL X	BTEX X
	INF Char	↓	1520	↓	↓	2	None X	AB 827 X
	INF Char		1525			2	None X	AB 8270 SIM X
	INF Char		1615			2	Other X	504 EDB X
-1	INF Char		1550			3	HCL X	OTG 1664 X
	INF Char		1550			2	None X	PCB 608 X
	INF Char		1550			1	HNO3 X	Metals w/ Hg X
	INF Char		1550			1	Other X	Cyanide (total) X
	INF Char	↓	1550	↓	↓	1	[illegible] None X	HexCr, TSS, TRC X
-2	Trip Blank	10/4/05	—	—	—	2		

Preservation columns: HCL, NaOH, HNO3, H2SO4, MEOH, Encore, Other, None

Turnaround Time (Business days) — Approved By/Date

- ☐ Std. 10 Business Days
- ☐ 8 Day RUSH
- ☐ 5 Day RUSH
- ☐ 3 Day EMERGENCY
- ☐ 2 Day EMERGENCY
- ☐ 1 Day EMERGENCY

Emergency T/A is for FAX or Lablink Data

Data Deliverable Information

- ☐ Commercial "A"
- ☐ Commercial "B"
- ☐ Full Deliverables
- ☐ Other
- ☐ FULL CLP
- ☐ State Forms
- ☐ Disk Deliverable Format ______

Site Specific: QC Yes ☐ No ☐ If yes, indicate QC sample in Comments and submit triplicate volume.

Comments / Remarks

Please refer to email from Dana Himmel (CDM) about analytical info & TA

Loc. (3D, 4D, 1D, 6B, 4I7

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

Relinquished by Sampler: 1 [signature]	Date Time: 10/4/05 1710	Received by: 1 [signature]	Relinquished by: 2	Date Time:	Received by: 2
Relinquished by: 3	Date Time:	Received by: 3	Relinquished by: 4	Date Time:	Received by: 4
Relinquished by: 5	Date Time:	Received by: 5	Seal #	Preserved where applicable ☐	On Ice ☑ Temp. 3.1°C

M51387: Chain of Custody
Page 1 of 3

Reza Tand

From: Himmel, Dana [HimmelDB@cdm.com]
Sent: Wednesday, October 05, 2005 8:21 AM
To: Reza Tand
Cc: Zigmont, James
Subject: RE: Samples (Charlton, Lee, and Boxborough)

Reza,

We would only like the analyses listed in this email. Please ignore the COCs, as we had received spotty information prior. Turns out the EPA only requires these additional parameters to be analyzed for a gasoline site. If you have any further questions, you can reach me at 617-452-6380.

From: Reza Tand [mailto:rezat@accutest.com]
Sent: Tuesday, October 04, 2005 7:33 PM
To: Himmel, Dana
Cc: Zigmont, James; Welch, Jonathan; Molloy, Kevin
Subject: RE: Samples (Charlton, Lee, and Boxborough)

Hi Dana,
After looking at the COC's that we recived,it appears there are more analysis requested than this email,I will call you in the morning to discuss what exactly you need & the T/A that we can offer you.
Thanks,Reza

From: Himmel, Dana [mailto:HimmelDB@cdm.com]
Sent: Tuesday, October 04, 2005 3:05 PM
To: Reza Tand
Cc: Zigmont, James; Welch, Jonathan; Molloy, Kevin
Subject: Samples (Charlton, Lee, and Boxborough)

Reza,

We had put the samples collected for the RGP process on hold, however, at this time, we wish to go ahead and analyze for the following for the influent samples collected today (10/3/05) from Charlton, Lee, and Boxborough:

Parameter	Necessary Detection Limit	Approved Methods
Naphthalene	20 ug/L	610 GC/FID, 625, 610 HPLC, 524.2, 8270D
Ethylene dibromide	0.05 ug/L	618, 504.1, 524.2, 8260C
tert-Butyl Alcohol	none	602, 1666, 8260C
tert-Amyl Methyl Ether	none	602, 8260C
Lead (total recoverable)	1.3 ug/L	Flame Atomic Absorption, ICP, Furnace Atomic Absorption
Iron (total recoverable)	1000 ug/L	Flame Atomic Absorption, ICP, Furnace Atomic Absorption

Please let me know if you have any questions. Thanks.

Dana Himmel

Betty Baer

From: Himmel, Dana [HimmelDB@cdm.com]
Sent: Wednesday, October 05, 2005 10:33 AM
To: Betty Baer
Subject: RE: Charlton, Lee, and Boxborough)

We need EDB analyzed for all three sites.

From: Betty Baer [mailto:bettyb@accutest.com]
Sent: Wednesday, October 05, 2005 9:51 AM
To: Himmel, Dana
Subject: Charlton, Lee, and Boxborough)

Dana, what do you need for the Trip Blank analysis for these sites? Boxborough is the only one with EDB on the Chain.

Betty

Betty Baer

Accutest Laboratories

495 Technology Center West, Building #1

Marlboro, MA 01752

Phone (508) 481- 6200

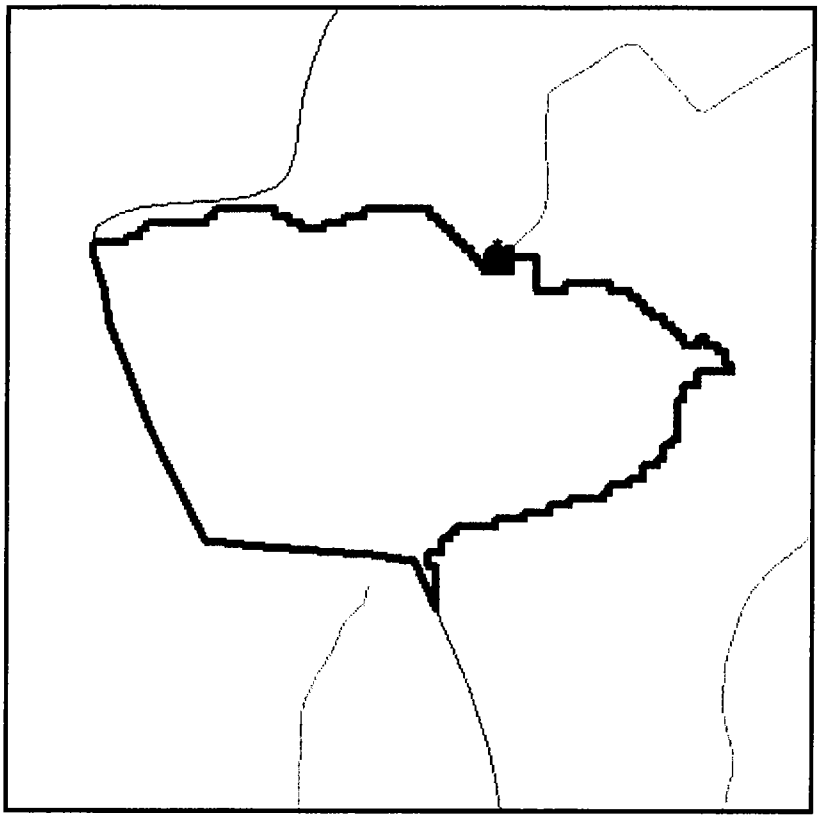
Fax (508) 481-7753

Dilution Factor
NPDES RGP
Charlton, Massachusetts

Qd	Qd	Qs (7Q10)	DF
gpm	cfs	cfs	
20	0.045	0	1.0

Charlton
(Quinebaug River watershed)

Streamflow Statistics Report



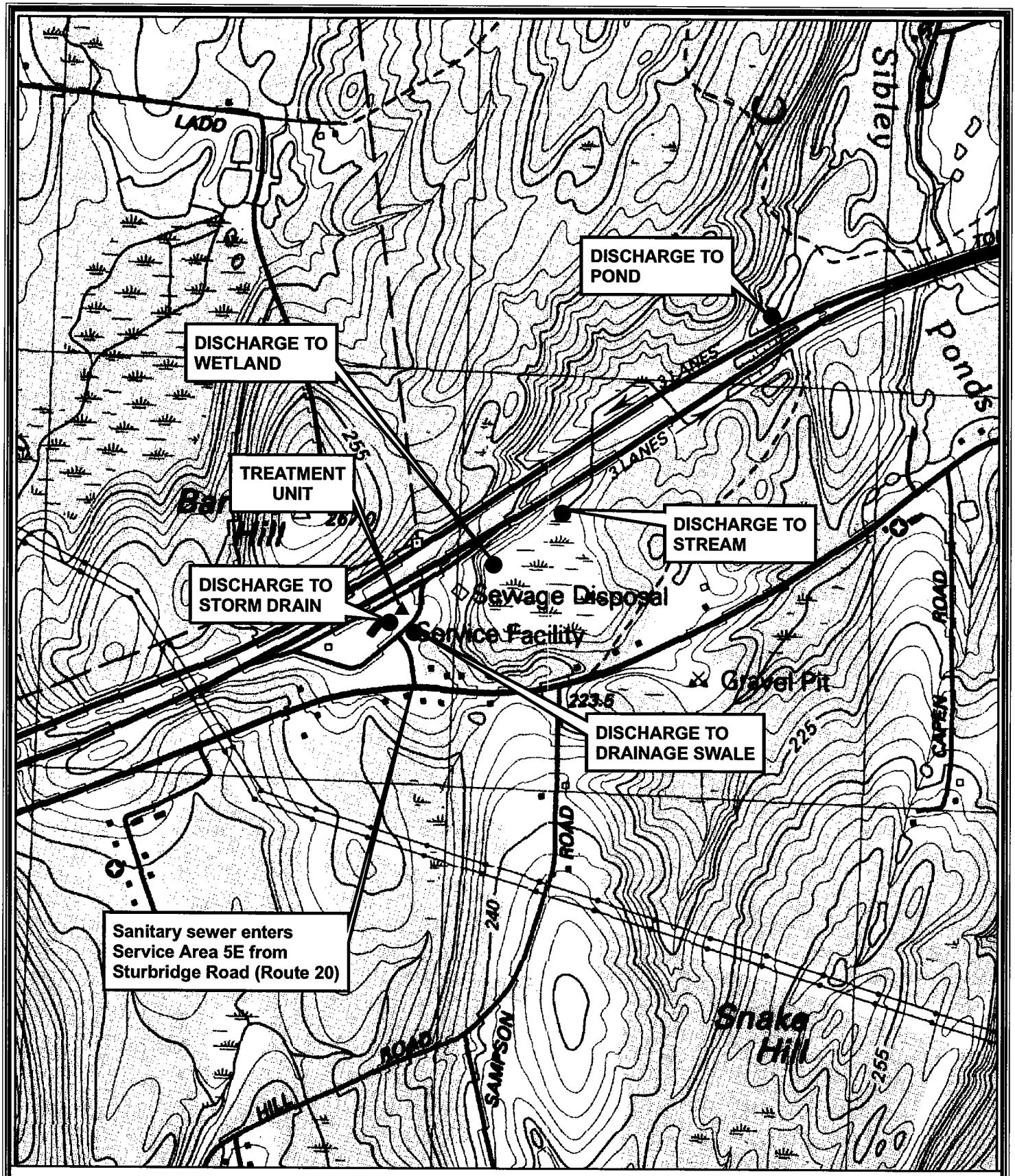
Date: Thu Oct 13 08:40:39 2005
Warning! Drainage Area outside allowable range. Prediction intervals not calculated.
Latitude: 42.1424
Longitude: -72.0198
Measured Basin Characteristics:
Drainage Area (square miles): 0.13
Stratified Drift Area (square miles): 0.00
Stream Length (miles): 0.00
Slope (percent): 4.63
Region: 0

Statistic	Estimated streamflow, ft^3/s	90% Prediction interval	
		Minimum	Maximum
99-percent duration flow	0.00		
98-percent duration flow	0.00		
95-percent duration flow	0.00		

90-percent duration flow	0.01		
85-percent duration flow	0.01		
80-percent duration flow	0.02		
75-percent duration flow	0.02		
70-percent duration flow	0.03		
60-percent duration flow	0.07		
50-percent duration flow	0.12		
7-day, 2-year low flow	0.00		
7-day, 10-year low flow	0.00		
August median flow	0.01		

U.S. Department of the Interior, U.S. Geological Survey
10 Bearfoot Road
Northborough, MA 01532
(508) 490-5000

Maintainer: webmaster@mass1.er.usgs.gov



FORMER MOBIL SERVICE STATION NO.01-FQP
MASSACHUSETTS TURNPIKE SERVICE AREA 5E
CHARLTON, MASSACHUSETTS

Legend
- Public Water Supply (Wells)

N

0 500 1,000 2,000 Feet

NOTICE OF INTENT FOR REMEDIATION GENERAL PERMIT LOCATION MAP

CDM

\\BWSC7\Projects\charltonquads\NOI_Permit_revised.mxd LEK 10/2005