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October 21, 2005

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

Subject:

Notice of Intent

Remediation General Permit

Former Mobil Service Station No. 01-FQP Massachusetts Turnpike Service Area 5E

Massachusetts

Release Tracking Number 2-761

NPDES Exclusion Reference #02-063

OCT 24 2005

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. Zighnont, 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

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 S	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 Turcontact: Rick McCullough	•	Town: Charlton					
Email address of owner: rick.mccullough@mta.sta	te.ma.us	State: MA	Zip: 01507	County: Worcester			
Telephone no.of facility/site owner: (781) 431-50	20						
Fax no. of facility/site owner: (781) 237-3348		Owner is (check one): 1		ribal			
Address of owner (if different from site):		3. Private X 4. other	; if so, describe:				
Street: 668 South Avenue							
Town: Weston	State: MA	Zip: 02493	County: Middlesex				
c) Legal name of operator: Exxon Mobil Corporation	Operator telephone no: 617-33	81-2952					
Exxon Mobil Corporation	Operator fax no.: 617-381-291	1	Operator email: e	ric.w.errico@exxonmobil.com			
Operator contact name and title: Eric Errico, Pro	oject 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 grante 2. Has a prior NPDES application (Form 1 & 2C) e 3. Is the discharge a "new discharge" as defined by 4. For sites in Massachusetts, is the discharge cover	ver been filed for the discharge? Y 40 CFR 122.2? Yes No X	Yes No_X, if "yes," date and tracking #:					
e) Is site/facility subject to any State permitting or or generation of discharge? Yes_X_No If "yes," please list: MCP compliance	other action which is causing the	f) Is the site/facility covered by any other EPA permit, including: 1. multi-sector storm water general permit? Y NX if Y, number: 2. phase I or II construction storm water general permit? Y NX					

1 site identificat	tion # assigned by	the state of NH or MA: RTN 2-761	if Y, number:						
		er IB Permit No. 84850	3. individual NPDES permit? Y N_X_, if Y, number:						
3. state agency c	ontact information	: name, location, and telephone number:	4. any other water quality related permit? Y N_X, if Y, number:						
		ster, MA 01608, 508-792-7650	" any onto vacor quanty rotated permit: 1 1\(\frac{1}{X}\), if 1, indinber.						
		•							
<u> </u>									
2. Discharge i	nformation. Plea	se provide information about the discharge, (attack	ning additional sheets as needed) including:						
a) Describe the of (TPVE) remedia	lischarge activities tion system, perfo	for which the owner/applicant is seeking coverage	e: Coverage is sought for discharge related to operation of a total phase vacuum enhanced stem extracts groundwater which is routed through an oil/water separator, has filters, an air						
b) Provide the following information about each discharge:	1) Number of discharge points: 1	Average flow $0.0058 \text{ ft}^3/\text{sec}$ Is maximum flow:	e of discharge (in cubic feet per second, ft3/s)? Max. flow 0.045 ft³/sec a design value? Y_X_N attenuation if this value is a design value or estimate if not available.						
3) Latitude and long lat.	ongitude of each d	ischarge within 100 feet: pt.1:long . <u>-72°01'18"</u> la long lat; pt.6:long l	t. <u>42°08′30″</u> ; pt.2: longlat.;pt.3: longlat; pt.4: at; pt.7: longlat; pt.8:longlat; etc.						
4) If hydrostatic to volume of the dis	Ç,	5) Is the discharge intermittent N or season Is discharge ongoing Yes X No							
c) Expected dates groundwater clea	s of discharge (mm nup standards und	h/dd/yy): start 04/08/02 end 10/01/15 Exper the Massachusetts Contingency Plan.	ected date for end of discharge is estimated and is dependent on achievement of						
d) Please attach a 1. sources of intal	line drawing or fl ke water, 2. contri	ow schematic showing water flow through the fact buting flow from the operation, 3. treatment units,	lity including: and 4. discharge points and receiving waters(s)						
	cess & Instrument		6- F mra 10001, mg						

3. Contaminant intormation. In order to complete this section, the applicant will need to take a minimum of one sample of the univerted water and have it analyzed for an 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	VOC with Other	Petroleum with Other	Listed Contaminated	Contaminated	Hydrostatic Testing of Pipelines/Tanks	Well Development or
Other Oils) only	Contaminants	Contaminants	Sites	Dredge Condensates		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	Believe	# of	Type of	Analytical	Minimum	Maximum daily	value	Avg. daily value	e
	Absent	Present	Samples (1 min- imum)	Sample (e.g., grab)	Method Used (method #)	Level (ML) of Test Method (ug/l)	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

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

PARAMETER	Believe Absent	Believe Present	# of Samples	Type of Sample (e.g.,	Analytical Method Used	Minimum	Maximum daily	value	Avg. daily value	•
	Absent	rresent	(1 min- imum)	grab) (method #) Test Method		Level (ML) of Test Method (ug/l)	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)			-	i i					-
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)	-					<u>, </u>			

 $^{^2}_{\hbox{\footnotesize{EDB}}}$ is a groundwater contaminant at fuel spill and pesticide application sites in New England.

PARAMETER	Believe Absent	Believe Present	# of Samples	Type of Sample (e.g.,	Analytical Method Used	Minimum Level (ML) of	Maximum daily	value	Avg. daily Valu	ıe
	Assent	Fiesent	(1 min- imum)	grab)	(method #)	Test Method (ug/l)	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)		-	7						
31. Total Phenols	(1)					<u>.</u>				
32. Pentachlorophenol	(1)							<u> </u>	 	
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)					<u> </u>			<u></u>	
c. Benzo(b)Fluoranthene	(1)	-								<u> </u>
d. Benzo(k) Fluoranthene	(1)						·			
e. Chrysene	(1)			-	-					

³The sum of individual phthalate compounds.

PARAMETER	Believe	Believe	# of	Type of	Analytical	Minimum	Maximum daily	value	Average daily value	
	Absent	Present	Samples (1 min- imum)	Sample (e.g., grab)	Method Used (method #)	Level (ML) of Test Method (ug/l)	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)	-			,	<u>.</u>		-		
m. Fluorene	(1)									
n. Naphthalene-	(1)			''					· ·	1.
o. Phenanthrene	(1)									-
p. Pyrene	(1)				-					
37. Total Polychlorinated Biphenyls (PCBs)	(1)									
38. Antimony	(1)				"					
39. Arsenic	(1)				7	- "				
40. Cadmium	(1)							_		
41. Chromium III	(1)									
42. Chromium VI	(1)			***		-				 -

Believe	Believe	# of	Type of			value	Avg. daily value			
Absent	rresent	(1 min- imum)	grab)	(method #)	Test Method (ug/l)	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)	
(1)								_		
X (2)		1	Grab	239.2	1.0	0.5	0.000055	0.5	0.000007	
(1)					·	-	-			
(1)										
(1)	<u>-</u>				1811		-			
(1)		-								
(1)									-	
	X	1	Grab	SW846 6010B	100	12,000	1.31	12,000	0.17	
					 ·					
	(1) X (2) (1) (1) (1) (1)	Absent Present	Absent Present Samples (1 min-imum)	Absent Present Samples (1 min-imum) grab Grab	Absent Present (1 min-imum) Samples (2 min-imum) Sample (e.g., grab) Method Used (method #) (1) X (2) 1 Grab 239.2 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (2) (1) (1) (1) (2) (1) (1) (1) (2) (1) (1) (1) (2) (1) (1) (1) (2) (1) (1) (1) (2) (1) (1) (1) (2) (1) (1) (1) (2) (1) (1)	Absent	Absent Present Samples (1 min-imum) Sample (e.g., grab) Method Used (method #) Level (ML) of Test Method (ug/l)	Absent	Absent	

Footnotes: (1) Analysis for this parameter is not required for gasoline remediation sites in accordance with Part I.C. Table V of the RGP.

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)? YXN If "Yes," list which metals: Iron

⁽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.

4. Treatment system informa	tion. Please des	scribe the treatme	nt syst	em using separ	ate sheets as necessar	y, including:					
a) A description of the treatment system, including a schematic of the proposed or existing treatment system:											
b) Identify each applicable	Frac. tank	Air stripper	X	Oil/water sep	parator X	Equalization tanks	Bag filter	X	GAC filter X		
treatment unit (check all that apply):	Chlorination	Dechlorinatio	n	Other (please	e 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 pathy	way: I	Direct	With	in facility	Storm drain_X	River/brook X	Wetlands X		ther (describe): <u>X</u> : ond		
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 qual	d) Provide the state water quality classification of the receiving water <u>Class B, Warm Water</u>										
e) Provide the reported or calc Please attach any calculation s	ulated seven day heets used to sup	t-ten year low floopport stream flow	w (7Q) and di	10) of the recei	ving water 0 cfs ions.			_			
f) Is the receiving water a liste Is there a TMDL? Yes N	d 303(d) water q No X If yes, for	uality impaired o which pollutant(r limite (s)?	ed water? Yes	No X If yes, fo	or which pollutant(s)?	See 7. Supplen	nental I	nformation		

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:

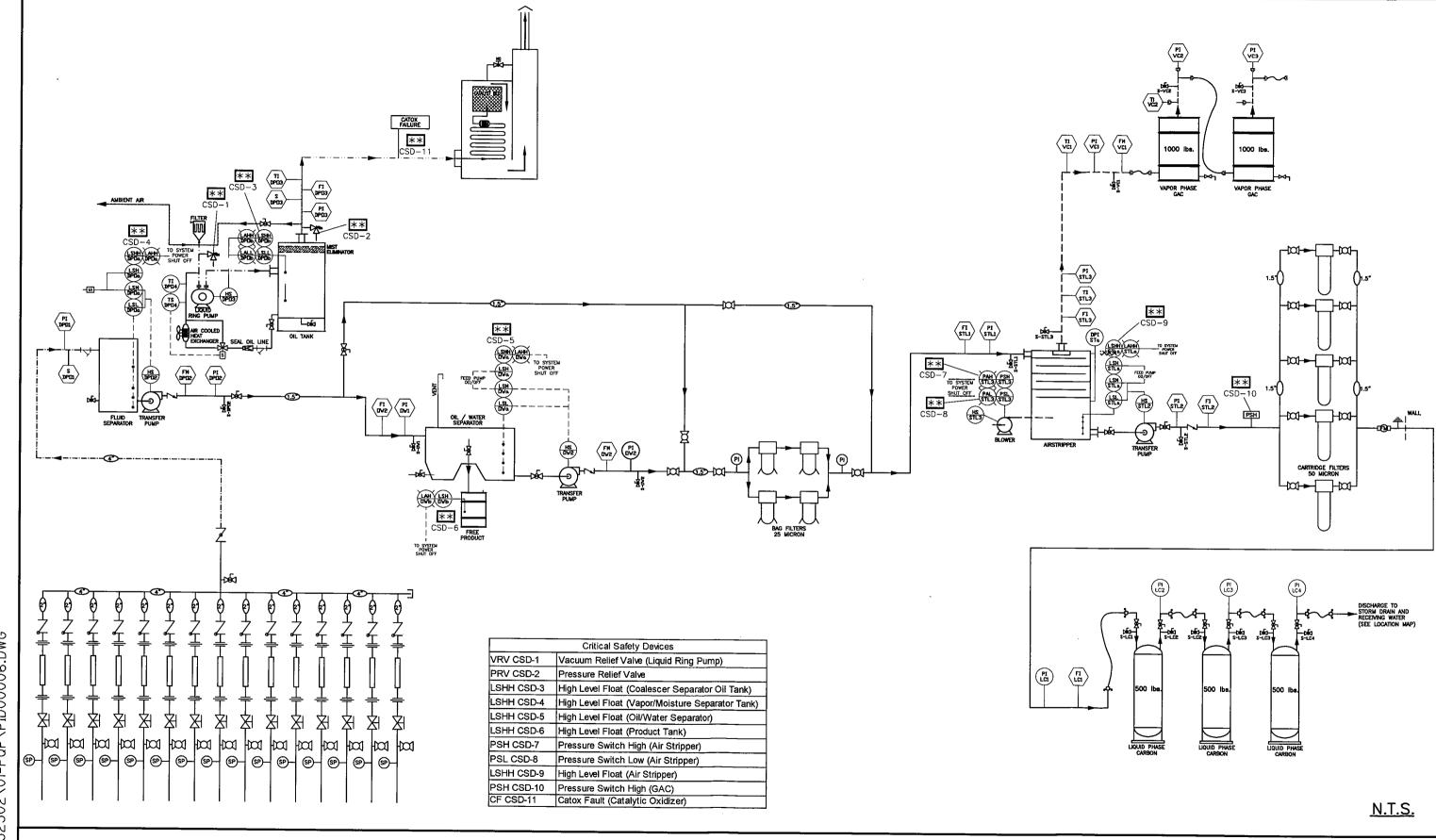
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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



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

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



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



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 Pand 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 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: AO

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).



Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup

BWSC-CAM	Exhibit VII A-1
21 May 2004	Revision No. 3.2
Final	Page 10 of 32

Title: MADEP MCP Response Action Analytical Report Certification Form

	MADE	PMCP Analytica	al:Method F	Report Certific	ation Form		
Laboratory Name:	Accutest Laborator	ries of New Engla	and		Project #:	M42188	
Project Location: This form provides certification	CDM:01-FQP Mas	s Turnpike Area (5E Charlton		MADEP RTN	None	
M42188-1 through N	M42188-6	ig data set:					
Sample Matrices:	Groundwater	Soil/Sediment	() Drinkin	Water	Other:	(x)	
MCPSW-846	8260B ()	8151A		8330 ()	6010B	(1)	(
Methods Used	8270C ()			VPH ()	6020	0	7470A/1A (
S specified in MADER Compendium of	8082 ()	8021B	()	EPH()	7000 S ³	()	7196A (
oringe idion of tralylical Methods Check all that apply)	List Release Trackin 2 M = SW-846 Method 3 S = SW-846 Methods	9014 of MADER PI	nvsiologicaliv	Available Gyanic			TOUA
An affirmative respo	nse to questions A	, B, C, and D is i	required fo	r "Presumptiv	e Certainty stat	us	
A Were all samples rece that described on the	eived by the laborato Chain-of-Custody do	ry in a condition of	consistent v	ith	☑ [Yes	□ No ¹
Were all QA/QC proce included in this report discuss in a narrative standards or guideline	followed, including the QC data that did not es?	ne requirement to meet appropriate	note and performan	ce		Yes	□ No ¹
Does the analytical da for "Presumptive Certa document CAM VII A, for the Acquisition and	ainty", as described in "Quality Assurance a	n Section 2.0 of the and Quality Control	he MADED		Ø	Yes	□ No ¹
VPH and EPH method significant modification	ds only: Was the VP	H or EPH metho	d run witho	ut	Ø	Yes	□ No ¹
A response to questi	ons E and F below	is required for "I	Presumpti	e Certainty" :	status		
 Were all QC performant specified methods achieved 	nce standards and re eved?	commendations	for the		Ø	Yes	□ No ¹
Were results for all ana method(s) reported?	lyte-list compounds/	elements for the	specified	Re	fer to Narrative	Yes	✓ No¹
All Negative response	es must be address	ed in an attack	d Environ	Ref	fer to Narrative		
he undersigned, attest un	der the pains and p	enalties of peri	ury that he	sed upon mu	I DAYSAWAI	tive.	
quiry or inose responsible	e for obtaining the l	information, the	material c	antainad in th	is		
quiry of those responsible allytical report is, to the beginning gnature:	e for obtaining the l	information, the	material c	ontained in th complete.	is atory Director		

Sample Summary

ExxonMobil

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

Job No:	M42188
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Sample Number	Collected Date	l Time By	Received	Matr Code		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	TRIPBLANK

Report of Analysis

Page 1 of 1

Client Sample ID: INF

Lab Sample ID:

M42188-5

AQ - Influent

Date Sampled: 09/28/04 Date Received: 09/30/04

Matrix: Method:

EPA 602

Percent Solids: n/a

Project:

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

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

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

Purgeable Aromatics, MTBE

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

Report of Analysis

Page 1 of 1

Client Sample ID: INF

Lab Sample ID: Matrix:

M42188-5 AQ - Influent

Date Sampled: 09/28/04

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	Ву	Method
Petroleum Hydrocarbons	<0.61	0.61	mg/l	1	10/04/04	BF	EPA 418.1

Report of Analysis

Page 1 of 1

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

Analyzed

10/01/04

File ID MN29803.D DF 1

Вy AP **Prep Date** n/a

Prep Batch n/a

Analytical Batch GMN1256

Run #1 Run #2

Purge Volume

Run #1 Run #2 5.0 ml

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units Q	
71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4	Benzene Toluene Ethylbenzene Xylenes (total) Methyl Tert Butyl Ether	ND ND ND ND ND	1.0 1.0 1.0 1.0 1.0	ug/l ug/l ug/l ug/l 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 10/01/04	By	Prep Date	Prep Batch	Analytical Batch
GMN1256-MB	MN29795.D	1		AP	n/a	n/a	GMN1256

The QC reported here applies to the following samples:

Method: EPA 602

Page 1 of 1

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

CAS No.	Compound	Result	RL	Units Q
71-43-2 100-41-4 1634-04-4 108-88-3 1330-20-7	Benzene Ethylbenzene Methyl Tert Butyl Ether Toluene Xylenes (total)	ND ND ND ND ND	1.0 1.0 1.0 1.0 1.0	ug/l ug/l ug/l ug/l ug/l
CAS No.	Surrogate Recoveries .		Limit	:s
	2,3,4-Trifluorotoluene	85%	8 61-12	4%

Method Blank Summary

Page 1 of 1

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

Page 1 of 1

Job Number: M42188

Account:

MOBILSS ExxonMobil

Project:

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

Sample	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
GMN1256-BSP	MN29796.D	1	10/01/04	AP	n/a	n/a	GMN1256
GMN 1256-BSD	MN29797.D	1	10/01/04	AP	n/a	n/a	GMN1256
NN 1230-83D	MN29/9/.D	1	10/01/04	AP	n/a	n/a	GMN 1256

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	BS	D	Limits			
	2,3,4-Trifluorotoluene	88%	86	%	61-1249	%		

Blank Spike/Blank Spike Duplicate Summary Job Number: M42188

Page 1 of 1

Account:

MOBILSS ExxonMobil

Project:

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

Sample GMN1258-BSP GMN1258-BSD		_	Analyzed 10/04/04 10/04/04	By AP AP	Prep Date n/a n/a	Prep Batch n/a n/a	Analytical Batch GMN1258 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	BS	D	Limits			
	2,3,4-Trifluorotoluene	91%	909	76	61-1249	6		

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M42188

Account:

MOBILSS ExxonMobil

Project:

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

Sample	File ID	1	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M42139-2MS	MN29798.D		10/01/04	AP	n/a	n/a	GMN1256
M42139-2MSE	MN29799.D		10/01/04	AP	n/a	n/a	GMN1256
M42139-2	MN29800.D		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
71-43-2 100-41-4 1634-04-4 108-88-3 1330-20-7	Benzene Ethylbenzene Methyl Tert Butyl Ether Toluene Xylenes (total)	ND ND ND ND ND	20 20 20 20 20 60	15.6 17.0 17.7 17.1 55.1	78 85 89 86 92	15.5 16.9 17.6 17.0 55.0	78 85 88 85 92	1 1 1 1 0	39-150/30 32-160/30 57-126/30 46-148/30 61-113/30
CAS No.	Surrogate Recoveries	MS	MSD	M42	2139-2	Limits			
	2,3,4-Trifluorotoluene	87%	87%	83%	Ó	61-124%	,)		

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M42188

Account:

MOBILSS ExxonMobil

Project:

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

Sample File ID DF M42188-5MS MN29832.D 50 M42188-5MSD MN29833.D 50 M42188-5 MN29831.D 50	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
	10/04/04	AP	n/a	n/a	GMN1258
	10/04/04	AP	n/a	n/a	GMN1258
	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	M4.	2188-5	Limits			
	2,3,4-Trifluorotoluene	89%	88%	86%	6	61-1249	6		

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	Lab	
Sample ID	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

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Page 1 of 1

General Chemistry

QC Data Summaries

Includes the following where applicable:

21

- 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 Q	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

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	Ву	Prepped By	Test Codes
M42188-1 EFF	Collected: 28-SEP-04	12:20 By: RMB	Recei	ved: 30-SEP-04-By	; RS
	EPA 602 EPA 418.1	01-OCT-04 23:27 04-OCT-04		04-OCT-04 BF	V602BTXM PHC
M42188-2 GAC 2EFI	Collected: 28 SEP-04	12:30 By: RMB	Recei	ved: 30-SEP-04 By	: RS
	EPA 602 EPA 418.1	02-OCT-04 00:08 04-OCT-04		04-OCT-04 BF	V602BTXM PHC
M42188-3 GAC 1EFI	Collected: 28-SEP-04	12:40 By: RMB	Recei	ved: 30-SEP-04 By	RS
	EPA 602 EPA 418.1			04-OCT-04 BF	V602BTXM PHC
M42188-4 AS EFF	Collected: 28-SEP-04	12:50 By: RMB	Recei	ved: 30-SEP-04 By	: RS
	EPA 602 EPA 418.1	02-OCT-04 01:31 04-OCT-04		04-OCT-04 BF	V602BTXM PHC
M42188-5 INF	Collected: 28-SEP-04	3:00 By: RMB	Recen	ved: 30-SEP-04 By	: RS
M42188-5 M42188-5 M42188-5	EPA 418.1	02-OCT-04 02:12 04-OCT-04 04-OCT-04 11:52	BF	04-OCT-04 BF	V602BTXM PHC V602BTXM
M42188-6 TRIP BLA!	Collected: 01-SEP-040 VK	00:00 By: RMB	Receiv	/ed: 30-SEP-04 By	: RS
M42188-6	EPA 602	01-OCT-04 22:45	AP		V602BTXM



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

Accutest Job #:

Client Information													Analytical Information												
EXXONMOBIL CORPORATION - Regional Laboratory Program Northeast																				7					
Consultants Company Name:	ect Name:									1	1 .		l.,				ŀ		602			- 1			
CDM	COM						ject Name: XOM Charlton														9				
Address 50 Hampshire St. Thy State Cambridge MA Project Contact: Jim Zig mont Sampler's Name: Ryan Bouldin Phone 8: 617-452-6000 AFE 8:	Hampshire St. Charlton, MA										MTBE 0	1 TOL 12	PPLCI MTBE		L (PAH)				HMS	<u></u>	Via				
Cambridge MA 02140 Eric Errico roject Contact: Jim Zig mont Exampler's Name: Ryan Bouldin Ext. Earlier Location IDE Location IDE State State State State State Example City Example Contact Contac											- 1		PPLO		DIESEL			0	HW8	D HMS C	W				
Tim Zigmont ExconMobil Contact: 617-381-2952 FevroMobil Contact: FevroMobil Contact Phone 8:												hygenates	CO TOLED I		(PAH)		п	TPH-8015 DRO	DISSOLVED []	HW8 []	MTB				
Ryan Bouldin			OI-F	QP					•		- 8	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	STD CI	TARGETS	ينا	TPH418.1,28	D ONG	<u>\$</u>	1000	SPLP	X				
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NFE #:	PO# Line#									- 8	Naphthaler UEOUS 8260 MTRF [1]	VOC SOIL 8260 CI ST	. 🗖	. II SI		TPH-MAINE GRO	GR0 🗆	TOTAL D	<u>-</u>	EX					
Collection Preservation										8		15	RANGES	RANGES	190	ANE		Z Z	510	1					
Accutest Sample # Field ID / Point of Collection	Date	Time	Sampled by	Matrix	# of bottles	귳	HOS HO3	H2SO4	MEOH Encore	Other	None BTEX	TBA CI Napht VOC AQUEOUS	VOC SK TBA 🗆	VPH R.	EPH R	трк-стоер	TPH-M	TPH-8015	METALS	METALS TCLP	8				
∫ Eff	9.28.0	1 1220	TEMB	6W	2	1		1 1								1									
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-6 Trip Blank 9.1.04				-1500-245-045C	<u>.</u>	14	Д.,				12/50/40/10										V				
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Std. 10 Business Days Approved By:/Date Commercial "A"								ULL C					MCP Presumptive Certainty Required GW-1 Stds Apply												
8 Day RUSH Commercial "B" State Forms 5 Day RUSH State Forms Full Deliverables Disk Deliverable Form												GW-1'Stds Annly													
5 Day RUSH											rmat _														
☐ 2 Day EMERGENCY Site Specific: QC Yes ☐ No ☐ If yes, indicate QC sites											samı	ple in											·		
1 Day EMERGENCY Comments and submit triplicate volume.																									
Emergericy T/A is for FAX or Lablink	Data	Sample C:	letody mir-	t he dd-) ·	ad ht	od:	- At			()		Loc, 3B2, 4A												
Sample Custody must be decumented below each time samples the simpulshed by Sampler: Date Time: 9.28.04 1500 Redship Well 1455 2 Am Well 3 Am Well 3											nange	e possess													
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5									Preserved where applicable On Ice 4.0 °C Temp.												4.0) ° c	Temp.		



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



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 Pand 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 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: AO

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).



Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup

BWSC-CAM	Exhibit VII A-1
21 May 2004	Revision No. 3.2
Final	Page 10 of 32

Title: MADEP MCP Response Action Analytical Report Certification Form

		МАЙН	M@⊇/Analytica	Metirod Rep	on Ceriii	(CallOn/Forms		
Lab	oratory Name:	Accutest Laborator	ries of New Englar	nd .		Project #:	M42710	
L	ect Location:	CDM:01-FQP Mas	s Turnpike Area 5	E Charlton ,M/	4	MADEP RTN	None	
	form provides certifice 710-1 through M427	ations for the following	ng data set:				-	····
	Method: EPA 110.2,		nd below	•				
Samp	ole Matrices:	Groundwater	Soil/Sediment	() Drinking Wa	ater ()	Other:	(x)	. () -
	MGP SW-846	8260B (x)	8151A	()	8330 ()	6010B	()	7470A/1A ()
	Methods Used	8270C ()	8081A	()	VPH()	6020	()	9014M ² ()
	eelise (n WADEE's 🧷	8082 ()	8021B	()	EPH ()	7000 S ³	()	7196A ()
Artaly	pendium or rical Methods Realbhateagan)	ULISI Release Frackir 2 M. SVV 846 Method 3 S. SV 846 Method	9014 or MADER PE	ysiologically Av	allable Oya	nide (FAC) Method		
1919	An affirmative resp					A CONTRACTOR OF THE PROPERTY AND ADDRESS A	ntus	
A	Were all samples red that described on the	ceived by the laborate Chain-of-Custody d	ory in a condition o	consistent with)	Ø	Yes	□ No¹ ¬
В	Were all QA/QC prod included in this report discuss in a narrative standards or guidelin	t followed, including of QC data that did no	the requirement to	note and			Yes	□ No ¹
С	Does the data includ for "Presumptive Cer (d) of the MADEP do Control Guidelines fo	tainty", as described cument CAM VII A, "	in Section 2.0 (a), Quality Assurance	(b), (c) and and Quality		IJ	Yes	□ No¹
D	VPH and EPH meth significant modification	o ds only: Was the Vons, as specified in S	PH or EPH metho ection 11.3?	d run without		V	Yes	□ No¹
	A response to ques	tions E and F below	is required for "	Presumptive	Certainty	" status		7
E	Were all QC performa	ance standards and r hieved?	ecommendations	for the		Refer to Narrative	Yes	□ No¹
F	Were results for all ar method(s) reported?		elements for the	specified		7	Yes	□ No¹
- 1	All Negative respon	ses must be addres	sed in an attach	ed Environme		Refer to Narrative Oratory case nari	rative.	
the u	undersigned, attest ry of those responsi tical report is, to the	under the pains and ble for obtaining the	penalties of per	jury that, bas material cor	ed upon i ntained in	my personal this		
Signa	ture:	m fort		Position:	Labe	oratory Director	·	
Printe	d Name:	Reza Tand		Date:	11/1	1/2004		-
								- <u>į.</u>

Sample Summary

ExxonMobil

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

Job No: M42710

Sample Number	Collected Date	l Time By	Received	Matr. Code		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 1	Effluent	EFF

Report of Analysis

Page 1 of 1

Client Sample ID: INF

Lab Sample ID:

M42710-1

AQ - Influent

Date Sampled:

10/26/04

Matrix: Method:

SW846 8260B

Date Received: 10/26/04 Percent Solids: n/a

Project:

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

j	File ID	\mathbf{DF}	Analyzed	Ву	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	Lim	its
1868-53-7	Dibromofluoromethane	93%	91%	83-1	22%
2037-26-5	Toluene-D8	102%	95%	87-1	-
460-00-4	4-Bromofluorobenzene	99%	95%	81-1	

(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

his

N = Indicates presumptive evidence of a compound

Client Sample ID: INF

Lab Sample ID:

M42710-1

AQ - Influent

Date Sampled: 10/26/04 Date Received: 10/26/04

Percent Solids: n/a

Project:

Matrix:

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

General Chemistry

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

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

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

Page 1 of 1

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

CAS No.	Compound	Result	RL	Units	Q
71-43-2 100-41-4 1634-04-4 108-88-3 1330-20-7	Benzene Ethylbenzene Methyl Tert Butyl Ether Toluene Xylene (total)	ND ND ND ND ND	0.50 1.0 1.0 1.0 1.0	ug/l ug/l ug/l ug/l ug/l	
CAS No.	Surrogate Recoveries		. Limit	s	*
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	90% 95% 96%	83-122 87-111 81-116	l %	

Method Blank Summary Job Number: M42710

Page 1 of 1

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 U	nits Q
1634-04-4 Methyl Tert Butyl Ether	ND	1.0 սչ	g/l
CAS No. Surrogate Recoveries		Limits	
1868-53-7 Dibromofluoromethane 2037-26-5 Toluene-D8 460-00-4 4-Bromofluorobenzene	94% 102% 94%	83-122% 87-111% 81-116%	

Method Blank Summary Job Number: M42710

Page 1 of 1

Account:

MOBILSS ExxonMobil

Project:

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

Sample	File ID	DF	Analyzed 11/04/04	By	Prep Date	Prep Batch	Analytical Batch
MSA1634-MB	A49076.D	1		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 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	98% 95% 94%	83-1229 87-1119 81-1169	%	

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

Page 1 of 1

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
71-43-2 100-41-4 1634-04-4 108-88-3 1330-20-7	Benzene Ethylbenzene Methyl Tert Butyl Ether Toluene Xylene (total)	50 50 50 50 150	46.9 52.2 43.2 44.5 141	94 104 86 89 94	49.8 51.4 41.8 46.6 154	100 103 84 93 103	6 2 3 5 9	83-122/25 83-126/25 63-131/25 84-123/25 84-129/25
	. A.							

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
	Dibromofluoromethane Toluene-D8		94% 96%	83-122 % 87-111 %
460-00-4	4-Bromofluorobenzene	902000000000000000000000000000000000000	MA 1049999 MARKANINI (1996)	81-116%

Blank Spike/Blank Spike Duplicate Summary Job Number: M42710

Page 1 of 1

Account:

MOBILSS ExxonMobil

Project:

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

Sample	File ID	DF	Analyzed 11/04/04 11/04/04	By	Prep Date	Prep Batch	Analytical Batch
MSA1634-BS	A49073.D	1		AMY	n/a	n/a	MSA1634
MSA1634-BSD	A49074.D	1		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/I	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	BSI		Limits			
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	97% 100% 98%	98 % 96 % . 95 %	;	83-122 % 87-111 % 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 Вy **Prep Date** Analytical Batch Prep 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

Page 1 of 1

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	Liı	nits	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	96% 97% 107 <i>%</i>	87-	122% 111% 116%	

Matrix Spike/Matrix Spike Duplicate Summary Job Number: M42710

Account:

MOBILSS ExxonMobil

Project:

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

M42710-5MSD A49	055.D 5	Analyzed 11/04/04 11/04/04 11/03/04	By AMY AMY AMY	Prep Date n/a n/a n/a	Prep Batch n/a n/a n/a	Analytical Batch MSA1633 MSA1633 MSA1633
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The QC reported here applies to the following samples:

Method: SW846 8260B

Page 1 of 1

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

CAS No.	Compound	M42710- ug/l	5 Spike Q 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	M	42710-5	Limits	٠.		
1868-53-7	Dibromofluoromethane	98%	94%	94	[%	83-122	07. ·		· · .
2037-26-5	Toluene-D8	93 %	95%	93		87-111	-	•	
460-00-4	4-Bromofluorobenzene	94%	105%	95		Q1 116			

Matrix Spike/Matrix Spike Duplicate Summary Job Number: M42710

Page 1 of 1

Account:

MOBILSS ExxonMobil

Project:

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

Sample	File ID	DF 5 5 1	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M42756-1MS	A49087.D		11/04/04	AMY	n/a	n/a	MSA1634
M42756-1MSD	A49088.D		11/04/04	AMY	n/a	n/a	MSA1634
M42756-1	A49077.D		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	M 4	12756-1	Limits			
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	96% 96% 108%	99% 105% 95%	905 965 966	%	83-122 % 87-111 % 81-116 %	ó .		

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%

25

Page 1 of 1

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike SummariesDuplicate 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	ŘĹ	MB Result	Units	Spike Amount	BSP Result	BSP *Recov	QC Limits
Color, Apparent Petroleum Hydrocarbons Solids, Total Suspended Turbidity	GN15127 GP4957/GN15135 GN15144 GN15128	5 0.60 4.0 0.50	<5 < 0.60 < 4.0 < 0.50	mg/l mg/l	5	4.8	96.0	80-120%

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.Q	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	Ву	Prepped	Ву	Test Codes
	M42710-1	Collected: 26-OCT-0	4 13:00 By. RMB	Recei	ved: 26-0CT=	04 B	r. RS
	INF						
	M42710-1 M42710-1 M42710-1 M42710-1	EPA 160.2	26-OCT-04 17:50 26-OCT-04 18:03 27-OCT-04 28-OCT-04 03-NOV-04 18:18 05-NOV-04 04:17	MA BF BF			TURB COL PHC TSS V8260BTXM V8260BTXM
	M42710-2	Collected: 26-OCT-0	4 13:15 By: RMB	Receiv	red: 26-0CT-6	u Ru	DC .
٠.	AS EFF					•	. 450
		EPA 418.1 SW846 8260B	27-OCT-04 03-NOV-04 18:56	BF AMY	27-OCT-04]	BF	PHC V8260BTXM
	M42710-3	Collected: 26-OCT-04	13:30 By RMB	Receiv	ed: 26-OCT-0	4 Bv	RS
	GAC 1 EF	F				•	
	M42710-3 M42710-3	EPA 418.1 SW846 8260B	27-OCT-04 03-NOV-04 19:34	BF AMY	27-OCT-04 I	3F	PHC V8260BTXM
	M42710-4	Callected: 26-OCT-04	13:45 By: RMB	Receiv	ed: 26-OCT-0	4 By:	RS
	GAC 2 EFI	7				Š	
		EPA 418.1 SW846 8260B	27-OCT-04 03-NOV-04 20:12		27-OCT-04 E		PHC V8260BTXM
0.00	M42710-5 3FF	Collected: 26-OCT-04	14:00 By: RMB	Receiv	ed: 26-OCT-O	4 By:	RS
N N	M42710-5 M42710-5 M42710-5	EPA 180.1 EPA 110.2 EPA 418.1 EPA 160.2 SW846 8260B	26-OCT-04 17:50 26-OCT-04 18:03 27-OCT-04 28-OCT-04 03-NOV-04 20:49	MA BF BF	27-OCT-04 B	F	TURB COL PHC TSS V8260BTXM



CHIMITOL CODIODI

495 Tech Center West, Bldg. 1 Marlboro, MA 01752

508-481-6200 FAX: 508-481-6200

Accutest Job #: M42710

Client Information		Faci									nalytic	al Info	mation				
EXXONMOBIL CORPORATION	- Regional La	boratory Prog	ram Northea	st													T
Consultants Company Name:		Project Name:	~>	,]		•	ļ	1		1	1 1	-		
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Address 50 Hampshire St Car Sity Tim Zigmont Project Contact: Kyan Bould M Semplor's Name: 617-452-6000 Ext.	Zip U /	Street Mass Tul City Char ExxonMobil Conte Cric ExxonMobil Conte Location ID#	Lton		State		E Cars	및 및 B	DIESEL		-	HM8 [E E				
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KyanBouldle	,	Eric	<u> </u>					TCLD	₹		TPH-BOIS DRO	DISSOLVED [₹ (E		
Sampler's Name:		ExxonMobil Cont	ct Phone #:				2 0 2 0		TARGET (PAH)	DIRO	ğ	102		- N	7		
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Accutest			1 4				TEAD OF TEAD	: 1 ^ = 1 =	15	} ₹	TPH-8015		뒱 1	. 9	13	.	
Sample # Field ID / Point of Collection	Date T	ime Sampled by	Matrix bottles	HO3	H2SO4 MEOH Encore	None end	E S S	8 ¥ ¥	<u> </u>	<u> </u>	F	Z	¥		1/		
2710-1 Inf*	10.26.04 13	00 RMB	6.00 6	\checkmark					,				7				
W2 AS Eff	4	15	1						,	//							
3 GACI Eff		30	И		 			 	1 1,					 		\dashv	-
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Std. 10 Business Days	Approved By:/Dat					139735		MCP	0	ump	£ 40	Carrient			D	1	
B Day RUSH _	. wpn orau bya bac	- 00	nmercial "A" nmercial "B"		ULL CLP				- } \	<u>somb</u>	1776		erta:	W, X	seg	vired	<u>-</u>
5 Day RUSH		1	merciai "B" Deliverables		itate Forms Pisk Deliverat	ıla Faar		* 7	7 day	1/	IT.			•	•		
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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



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 Fand 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

Job No:

GAC2 EFF

M47268

ExxonMobil

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

M47268-5 05/13/05 09:30 JMC 05/13/05 AQ Effluent2

Sample Number	Collected Date	Time By	Received	Mat Cod		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

Client Sample ID: INF

Lab Sample ID: M47268-1

Matrix: AQ - Influent

Method: EPA 624

Date Sampled: 05/13/05

Date Received: 05/13/05

Percent Solids: n/a

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

Run #1 Run #2	File ID D43429.D D43436.D	DF 50 100	Analyzed 05/20/05 05/20/05	By AT	Prep Date	Prep Batch	Analytical Batch MSD2504
	D 15150.D	100	03/20/03	Al	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 Toluene Ethylbenzene Xylenes (total) Methyl Tert Butyl Ether	ND	25	ug/l
108-88-3		59.3	50	ug/l
100-41-4		ND	50	ug/l
1330-20-7		110	50	ug/l
1634-04-4		22100 4	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

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

⁽b) Outside control limits due to possible matrix interference.

Client Sample ID: INF

Lab Sample ID: M47268-1

Matrix:

AQ - Influent

Date Sampled: 05/13/05

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	Ву	Method
Color, Apparent ^a Petroleum Hydrocarbons Solids, Total Suspended Turbidity	500 2.0 79.0 241	50 0.61 4.0 5.0	CU mg/l mg/l NTU	10 1 1 10	05/13/05 17:45 05/18/05 05/16/05 05/13/05 17:25	BF BF	EPA 110.2 EPA 418.1 EPA 160.2 EPA 180.1

⁽a) pH at the time of analysis 7.17.

Laboratories 508-481-6200 FAX: 508-481-6200 Accutest Job #: Client Information Facility Information **EXXONMOBIL CORPORATION - Regional Laboratory Program Northeast Analytical Information** Consultants Company Name: Project Name:
CHANITON 01-FQP CDM Address SТО ПО. П HM5 CAMBRIDGE CHARITUM Project Contact: ExonMobil Contact: Sampler's Name: DISSOLVED [] ExxonMobil Contact Phone #: JOHN CHUPZIK 8021 Phone #: Fax #: Location ID# WES AFE #: 0 VPH RANGES EPH RANGES [] METALS TOLP Collection Accutest Preservation Field ID / Point of Collection Sample # Sampled by bottles 930Ax Me X X 2 2 Turnaround Time (Business days) Data Deliverable Information Std. 10 Business Days Approved By:/Date Comments / Remarks ☐ Commercial "A" 8 Day RUSH ☐ FULL CLP ☐ Commercial "B" 5 Day RUSH ☐ State Forms ☐ Full Deliverables LOC. 4B, 4D4, 10D \Box 3 Day EMERGENCY ☐ Disk Deliverable Format _ ☐ Other 2 Day EMERGENCY Site Specific: QC Yes $\ \square$ No $\ \square$ If yes, indicate QC sample in 1 Day EMERGENCY Comments and submit triplicate volume. Emergency T/A is for FAX or Lablink Data Sample Custody must be documented below each time samples change possession, including courier delivery. Relinquished by Sampler: 1200pm Relinquished by: Date Time: Received by: Relinquished by: Date Time: Received by: Preserved where applicable



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



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 Fand 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

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	Mat Cod		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
1 48610-5	06/27/05 1	l3:15 JN	06/27/05	A Q	Ground Water	GAC2 EFF

Report of Analysis

Page 1 of 1

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	ال غيسال مسام	n	D D		
D #1		Dr	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D44361.D	1.	07/08/05	ΑT	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	\mathbf{RL}	Units Q	2
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	٠
17060-07-0	1,2-Dichloroethane-D4 (SUR)	100%	108%	76-138%	6
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

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

Page 1 of 1

Client Sample ID: INF

Lab Sample ID: M48610-1

Matrix:

AQ - Influent

Date Sampled: 06/27/05

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



Consultants Company Name:

Cambridge

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Refinguished by:

Project Contact:

Address

City

AFE #:

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Received by:

Date Time:

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CHAIN OF CUSTODY

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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



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.

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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Section 4: Misc. Forms	14
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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	Mat Code	rix e Type	Client Sample ID
M49067-1	07/13/05	14:00 RMB	07/13/05	AQ	Influent	AS-INF
M49067-2	<i>∯</i> 07/13/05	14:10 RMB	07/13/05	ΑQ	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	7 07/13/05	14:40 RMB	07/13/05	AQ	Effluent3	CAC3-EFF





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:

- 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.

M49067

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).

M49067-1

AQ - Influent

Page 1 of 1

Report of Analysis

Date Sampled: 07/13/05 Date Received: 07/13/05

EPA 624 Percent Solids: n/a Project: CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

Run #1 Run #2	File ID D44527.D D44528.D	DF 1 20	Analyzed 07/18/05 07/18/05	By AT AT	Prep Date n/a n/a	Prep Batch n/a n/a	Analytical Batch MSD2539 MSD2539
						u	M3D2339

	Purge Volume	
Run #1	5.0 ml	
Run #2	5.0 ml	
<u> </u>		

Purgeable Aromatics, MTBE

Client Sample ID: AS-INF

Lab Sample ID:

Matrix:

Method:

CAS No.	Compound	Result	RL	Units Q
71-43-2	Benzene		0.50	ug/l
108-88-3	Toluene		1.0	ug/l
100-41-4	Ethylbenzene		1.0	ug/l
1330-20-7	Xylenes (total)		1.0	ug/l
1634-04-4	Methyl Tert Butyl Ether		20	ug/l
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	98%	88%	76-138%
2037-26-5	Toluene-D8 (SUR)		102%	86-114%
460-00-4	4-Bromofluorobenzene (SUR)		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



Page 1 of 1

Client Sample ID: AS-INF Lab Sample ID: M49067 M49067-1

Matrix:

AQ - Influent

Date Sampled: 07/13/05

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	Ву	Method
Color, Apparent Petroleum Hydrocarbons Solids, Total Suspended Turbidity	< 0.61	100 0.61 4.0 10	CU mg/l mg/l NTU	20 1 1 20	07/13/05 17:45 07/18/05 07/19/05 07/13/05 18:05	BF BF	EPA 110.2 EPA 418.1 EPA 160.2 EPA 180.1

Report of Analysis

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 Mariboro, MA 01752 508-481-6200 FAX: 508-481-6200 M48067 Cient Information Facility Information EXCONMOBIL CORPORATION - Regional Laboratory Program Northeast Analytical Information Mơớ CHARLTON - XOM DESEL PAHIO MA Turnpike - East Bound 1 Ž MA 524 0 WOCANNOUS ESSO 621 D. EST PP. C. MTDE CI TEA C. Organism I VOC SOIL ESSO STOOT TO, D. PP. TEA.C. Organism C. SCISCOW C. SO 0 H TARGET (PAH) () DISSOUVED ZIG MOT ERIC GARICO Onypen Desc RMB 617-452-6000 Mighthalens [] 01-FQP TPH-MAINE GRO [] METALS TOLP D EPH RANGES () ColoR STEX S. TBAO Field ID / Point of Collection ample (AS-INF 7/15/01/14:00 RMB GW 5 X AS-PPR 4 14:10 Х -3 GACI-EFF 14:20 4 × X GACZ-EFF 14:30 X Х GAU3-BFF <u>) 4</u>:40 X XX MCP PRESUMPTIVE CONTAINTY REQUIRED D FULL CLP 8 Day RUSH ☐ Commercial "B" ☐ State Forms 6 Day RUSH lor 2C, 4D, 3F4 ☐ Full Deliverables Disk Deliverable Form P. EMERGEROY П ☐ Other 2 Day EMERGENCY Site Specific: QC Yes | No | If yes, Indicate QC sample in SAMPLES RECEIVED DIRECTLY 1 Day EMERGENCY FROM FIELD SAMPLING Emergency T/A is for FAX or Lablink Data dor Wallet in MBouler 9713765 K140 1

M49067: Chain of Custody

Page 1 of 1

18.5



Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup

BWSC-CAM	Exhibit VII A-1
21 May 2004	Revision No. 3.2
Final	Page 10 of 32

Title: MADEP MCP Response Action Analytical Report Certification Form

MADEP MCP Analytical Method Report Certification Form Laboratory Name: Accutest Laboratories of New England Project #: M49067 Project Location: MADEP RTN None CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA 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: () () MCP SW-846 + 8260B () 8151A () 8330 () 6010B () 7470A/1A Methods Used 8270C () 8081A () VPH () 6020 9014M specified in MADER 8082 () 8021B () EPH () $7000 \, \mathrm{s}^{-3}$ 7196A Compendium of Analytical Methods 1.List Release Tracking Number (RTN); if known ALIST Release tracking Numbert (* 110) it Nilowit 2:M : SW-846 Method 9014 of MADEP: Physiologically Available Cyanide (PAC) Method SW-846 Methods: 7000 Series Eist Individual method and analyte An affirmative response to questions A, B, C, and D is required for "Presumptive Certainty status Were all samples received by the laboratory in a condition consistent with Yes that described on the Chain-of-Custody documentation for the data set? ☐ No ¹ Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and [7] Yes □ No ¹ discuss in a narrative QC data that did not meet appropriate performance standards or guidelines? 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 Ø Yes (d) of the MADEP document CAM VII A, "Quality Assurance and Quality ∏No ¹ Control Guidelines for the Acquisition and Reporting of Analytical Data"? VPH and EPH methods only: Was the VPH or EPH method run without Ø 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 Were all QC performance standards and recommendations for the IJ Yes specified methods achieved? ☐ No ¹ Refer to Narrative Were results for all analyte-list compounds/elements for the specified Yes U No 1 method(s) reported? Refer to Narrative 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



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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



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 Pand 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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2.3. M30236-3: GACZ EFF	
2.0. MJ0236-0, 1B	
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Sample Summary

ExxonMobil

M50238-5

M50238-6

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

08/23/05 10:45 CGH 08/24/05 AQ Ground Water

08/23/05 00:00 CGH 08/24/05 AQ Trip Blank Water

Job No:

GAC2 EFF

M50238

Sample Number		Time By		Matr Code		Client Sample ID
M50238-1	08/23/05	10:25 CGH	08/24/05	AQ	Influent	INF CONTROL OF CONTROL
M50238-2	08/23/05	10:30 CGH	08/24/05	AQ	Effluent	EFF * 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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	GÀC1 EFF

Page 1 of 1

Client Sample ID: INF

Lab Sample ID: M50238-1

Matrix: Method: AQ - Influent

SW846 8260B

Date Sampled:

08/23/05

Date Received: Percent Solids: n/a

08/24/05

Project:

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

File ID Run #1 P859.D

DF 100 Analyzed 08/30/05

Ву **AMY** Prep Date n/a

Prep Batch

n/a

Analytical Batch

MSP29

Run #2

Purge Volume

Run #1

5.0 ml

Run #2

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2 108-88-3	Benzene Toluene	ND	50	ug/l	-,
100-66-3	Ethylbenzene	ND ND	100	ug/l	
1330-20-7	Xylene (total)	586	100 100	ug/l ug/l	
1634-04-4	Methyl Tert Butyl Ether	23300	100	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its
1868-53-7	Dibromofluoromethane	94%		84-1	21%
2037-26-5	Toluene-D8	94%		88-1	
460-00-4	4-Bromofluorobenzene	92%		83-1	

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



Page 1 of 1

Client Sample ID: INF Lab Sample ID:

M50238-1

Date Sampled: 08/23/05

Matrix:

AQ - Influent

Date Received: 08/24/05

Project:

Percent Solids: n/a CDM:01-FQP Mass Turnpike Area 5E Charlton ,MA

General Chemistry

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

Page 1 of 1

Client Sample ID: TB

Lab Sample ID:

M50238-6

AQ - Trip Blank Water

1

Date Sampled: 08/23/05

Matrix: Method:

SW846 8260B

Date Received: 08/24/05 Percent Solids: n/a

Project:

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

Run #1

File ID P1000.D DF Analyzed 09/04/05

By **AMY**

Prep Date

Prep Batch n/a

Analytical Batch MSP31

Run #2

Purge Volume

Run #1

Run #2

Purgeable Aromatics, MTBE

5.0 ml

CAS No.	Compound	Result	RL	Units Q
71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4	Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether	ND ND ND ND ND	0.50 1.0 1.0 1.0	ug/l ug/l ug/l ug/l ug/l
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	102% 98% 88%		84-121% 88-110% 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





Misc.	Forms		,		

Custody Documents and Other Forms

Includes the following where applicable:

• Chain of Custody



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EACCUT	EST.

CHAIN OF CUSTODY

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M50238: Chain of Custody Page 1 of 1





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



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 Pand 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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2.6: M50719-6: TRIP BLANK	
Section 3: Misc. Forms	
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Sample Summary

ExxonMobil

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

Job No:	M50719

Sample Number	Collected Date	l Time By	Mat Received Cod		Client Sample ID
M50719-1	09/13/05	10:05 CH	09/13/05 AQ	Influent	ASINF
M50719-2	₃ 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	LGACIEFF
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 CONTRACTOR STORY
M50719-6	. 09/13/05	00:00 CH	09/13/05 AQ	Trip Blank Water	TRIP BLANK

Client Sample ID: ASINF

Lab Sample ID: Matrix:

M50719-1

Date Sampled: Date Received:

09/13/05 09/13/05

Method:

AQ - Influent **EPA 624**

Percent Solids: n/a

Project:

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

L						
	File ID	DF	Analyzed	By	Prep Date	Pre
D #4	D 45400 D	-	00/40/05	4	, -	

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

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

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units Q
71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4	Benzene Toluene Ethylbenzene Xylenes (total) Methyl Tert Butyl Ether	11.5 172	0.50 1.0 1.0 1.0 50	ug/l ug/l ug/l ug/l ug/l
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0 2037-26-5 460-00-4	1,2-Dichloroethane-D4 (SUR) Toluene-D8 (SUR) 4-Bromofluorobenzene (SUR)	96% 96% 110%	113% 93% 109%	76-138% 86-114% 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



Page 1 of 1

Client Sample ID: ASINF

Lab Sample ID: Matrix:

M50719-1

Date Sampled: 09/13/05 Date Received: 09/13/05

AQ - Influent

Percent Solids: n/a

Project:

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

General Chemistry

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

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

Page 1 of 1

Client Sample ID: TRIP BLANK

Lab Sample ID:

M50719-6

Date Sampled: Date Received:

09/13/05

Matrix:

AQ - Trip Blank Water

09/13/05

Method:

EPA 624

Percent Solids: n/a

Project:

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

Run #1

File ID D45238.D DF 1

Analyzed By 09/19/05 ΑŤ Prep Date · n/a

Prep Batch n/a

Analytical Batch MSD2559

Run #2

Purge Volume

Run #1 Run #2 5.0 ml

Purgeable Aromatics, MTBE

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



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

• Chain of Custody

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M50719: Chain of Custody
Page 1 of 1





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



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 Fand 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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2.1: M51387-1: INF CHARLTON	
2.2: M51387-2: TRIP BLANK	
Section 3: Misc. Forms	
3.1: Chain of Custody	









Sample Summary

ExxonMobil

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

Job No:	M51387
J	11101001

Sample Number		Time By		Matı Code		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

Page 1 of 1

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 Prep Date By Prep Batch **Analytical Batch** Run #1 a P2141.D 1 10/10/05 **AMY** n/a n/a MSP73 Run #2 a 10 P2152.D 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 75-65-0	tert-Amyl Methyl Ether Tert Butyl Alcohol	377 19600 ^b		ug/l ug/l
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7 2037-26-5	Dibromofluoromethane Toluene-D8	96% 100%	98% 93%	82-127% 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



Page 1 of 1

Client Sample ID: INF CHARLTON

Initial Volume

1000 ml

Lab Sample ID:

M51387-1

Date Sampled: Date Received: 10/04/05

10/04/05

Matrix: Method: AQ - Ground Water

Percent Solids: n/a

EPA 625 EPA 625

Project:

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

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

Run #1

Run #2

BN PAH List

CAS No. Compound Result RLUnits Q

16:0 5.0 91-20-3 Naphthalene ug/l

Final Volume

1.0 ml

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



By

CZ

Page 1 of 1

Client Sample ID: INF CHARLTON

File ID

42.6 ml

YZ28986.D

Lab Sample ID: Matrix:

M51387-1

Date Sampled: 10/04/05

Method:

AQ - Ground Water

Date Received: 10/04/05

EPA 504 EPA 504

Percent Solids: n/a

Project:

DF

1

Prep Date

10/10/05

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

Analyzed

10/11/05

Prep Batch Analytical Batch OP9803 GYZ1204

Run #1 Run #2

> **Initial Volume** Final Volume

Run #1

2.0 ml

Run #2

CAS No. Compound Result

Run# 1

RL

Units Q

106-93-4

1,2-Dibromoethane

ND

0.012 ug/l

Surrogate Recoveries

Run# 2

Limits

460-00-4

CAS No.

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



Page 1 of 1

Client Sample ID: INF CHARLTON

Lab Sample ID:

M51387-1

Date Sampled:

10/04/05

AQ - Ground Water

Percent Solids: n/a

Date Received: 10/04/05

Project:

Matrix:

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

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron Lead	12000 < 1.0		ug/l ug/l	1 1		10/10/05 AC 10/10/05 LMN		SW846 3010A ³ SW846 3020A ⁴

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

Page 1 of 1

Client Sample ID: TRIP BLANK

Lab Sample ID: Matrix:

M51387-2

AQ - Trip Blank Water

DF

1

Date Sampled: Date Received: 10/04/05

10/04/05

Method:

EPA 504 EPA 504

Percent Solids: n/a

Project:

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

Analytical Batch

Run #1 Run #2

YZ28987.D

File ID

42.6 ml

Initial Volume

Compound

Analyzed 10/11/05

By CZ **Prep Date** 10/10/05

Prep Batch OP9803

GYZ1204

Run #1

Final Volume

2.0 ml

Run #2

CAS No.

Result

RL

Units Q

106-93-4

1,2-Dibromoethane

ND 0.012

ug/l

CAS No.

Surrogate Recoveries

Run# 1

Limits Run# 2

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



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

• Chain of Custody

ACCUTEST.	495 Teci Maribon 508-481	AIN OF CUST the Center West, Bidg. 1 ro, MA 01752 1-6200 FAX: 508-481-6	-6200		60s MS1387
EXCONMOBIL CORPORATION - Regional L		information	RANKE SEAMON SERVICE SERVICE	Analytica	al Information
Consultants Company Harms:	Telephone Addressed	om Charlton	OI-FOP		
Address	Street				
50 Hampshire ST	C964	rvice Arca 51			2 日 日 日 日 日 日 日 日 日 日 日 日 日 日 日 日 日 日 日
Cambridge MA 02139	Charlto		MA		
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Std. 10 Business Days Approved By:/Do	Comme		ULL CLP		to email from Dana Himmel
5 Day RUSH	Comme		itate Forme Hek Deliverable Format	(CDM) about a	inalytical info 1 TA
3 Day EMERGENCY 2 Day EMERGENCY	Other	OC Van [] No []	If yes, indicate QC sample in		
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Emergency T/A is for FAX or Lablink Data	ample Custody must be	documented below es	ch time samples change pozsi	esion, including courier delivery.	417
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M51387: Chain of Custody
Page 1 of 3



M51387: Chain of Custody Page 2 of 3

Samples (Charlton, Lee, and Boxborough)

Page 1 of 1

Reza Tand

Himmel, Dana [HimmelDB@cdm.com] From:

Sent: Wednesday, October 05, 2005 8:21 AM

To: Reza Tand

Zigmont, James

Subject: RE: Samples (Charlton, Lee, and Boxborough)

Reza,

Cc:

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 Chariton, 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

10/5/2005

Betty Baer

From: Sent: Himmel, Dana [HimmelDB@cdm.com] Wednesday, October 05, 2005 10:33 AM

To: Subject: Betty Baer 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

Mariboro, MA 01752

Phone (508) 481-6200

Fax (508) 481-7753

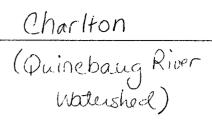
M51387: Chain of Custody
Page 3 of 3

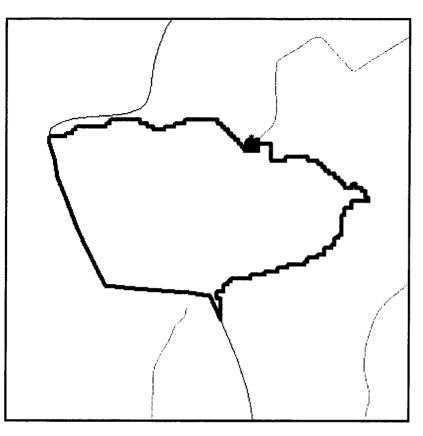
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Dilution Factor NPDES RGP Charlton, Massachusetts

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

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,	90% Prediction interval		
	ft ³ /s	Minimum	Maximum	
99-percent duration flow	0.00	A		
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

