ATTACHMENT D

SUMMARY OF GROUND WATER MONITORING DATA

(2004)

GLOBAL PETROLEUM CORPORATION

NPDES PERMIT NO. MA0003425

Global Petroleum Corporation
140 Lee Burbank Highway, Revere, Massachusetts
NPDES Exclusion 98-086
Groundwater Treatment System
Influent/Effluent Testing Results

Date		Apr-04		May-04		Jun-04	
Parameter	NPDES Limit	Influent	Effluent	Influent	Effluent	Influent	Effluent
TPH	5 ppm	20.5 mg/l	ND mg/l	2.8 mg/l	ND mg/l	0.66 mg/l	ND mg/l
Methyl Butyl Tert Ether	70 ppb	862,000 ug/l	1.3 ug/l	3,540 ug/l	ND ug/l	47,000 ug/l	ND ug/l
Benzene	5 ppb	4,640 ug/l	ND ug/l	362 ug/l	ND ug/l	1,920 ug/l	ND ug/l
Toluene	*	14,500 ug/l	ND ug/l	2,920 ug/l	ND ug/l	2,190 ug/l	ND ug/l
Ethylbenzene	*	899 ug/l	ND ug/l	269 ug/l	ND ug/l	326 ug/l	ND ug/l
Xylenes	*	9,170 ug/l	ND ug/l	5,860 ug/l	ND ug/l	4,940 ug/l	ND ug/l
Total BTEX	100 ppb	29,209 ug/l	ND ug/l	9,411 ug/l	ND ug/l	9,376 ug/l	ND ug/l

New England
ACCUTEST
Laboratories

04/29/04

Technical Report for

Camp Dresser & McKee

Global Petroleum, Revere MA

Accutest Job Number: M38820

Sampling Date: 04/09/04

Report to:

Camp Dresser & McKee
50 Hampshire St.
Cambridge, MA 02139

ATTN: James H. Winkler

Total number of pages in report: 32

ACCREDITED IN ACCORDANCE WITH nelac

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

Reza Pand
Lab Director

Certifications: MA (M-MA136) CT (PH-0109) NH (250203) RI (00071) ME (MA136) FL (E87579) NY (11791) NJ (MA926) IL (000589) NAVY USACE

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ACCUTEST Laboratories

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Camp Dresser & McKee	**Job No:**	M38820
Site:	Global Petroleum, Revere MA	**Report Date**	4/28/04 3:01:32 PM

5 Sample(s) were collected on 04/09/2004 and were received at Accutest on 04/14/2004 properly preserved, at 3 Deg. C and intact. These Samples received an Accutest job number of M38820.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:** GAB712

- All samples were analyzed within the recommended method holding time.
- Sample(s) M38831-8MS, M38831-8MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** GAB713

- All samples were analyzed within the recommended method holding time.
- Sample(s) M38831-5MS, M38831-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** GMN1036

- All samples were analyzed within the recommended method holding time.
- Sample(s) M38820-4MS, M38820-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method EPA 418.1

Matrix: AQ **Batch ID:** GP4327

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M38821-1DUP, M38821-4MS were used as the QC samples for Petroleum Hydrocarbons, Petroleum Hydrocarbons.
- All method blanks for this batch meet method specific criteria.

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(M38820).

Title: MADEP MCP Response Action Analytical Report Certification Form

MADEP MCP Analytical Method Report Certification Form

Laboratory Name:	Accutest Laboratories of New England	Project #:	M38820
Project Location:	Global Petroleum, Revere MA	MADEP RTN [1]	None

This form provides certifications for the following data set:
M38820-1,M38820-2,M38820-3,M38820-4,M38820-5

Test methods: EPA 602, 418.1

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

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

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

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

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

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

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

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

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

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

Printed Name: **Reza Tand** **Date:**

Sample Summary

Camp Dresser & McKee

Global Petroleum, Revere MA

Job No: M38820

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M38820-1	04/09/04	12:45 TAN	04/14/04	AQ	Influent	INF-4904
M38820-2	04/09/04	12:55 TAN	04/14/04	AQ	Ground Water	CIN-4904
M38820-3	04/09/04	13:05 TAN	04/14/04	AQ	Ground Water	MID-1-4904
M38820-4	04/09/04	13:10 TAN	04/14/04	AQ	Ground Water	MID-2-4904
M38820-5	04/09/04	13:15 TAN	04/14/04	AQ	Effluent	EFF-4904

Accutest Laboratories

Report of Analysis

Client Sample ID:	INF-4904		
Lab Sample ID:	M38820-1	**Date Sampled:**	04/09/04
Matrix:	AQ - Influent	**Date Received:**	04/14/04
Method:	EPA 602	**Percent Solids:**	n/a
Project:	Global Petroleum, Revere MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB14402.D	100	04/20/04	DL	n/a	n/a	GAB712
Run #2	AB14430.D	2000	04/21/04	DL	n/a	n/a	GAB713

	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	4640	100	ug/l	
108-88-3	Toluene	14500	100	ug/l	
100-41-4	Ethylbenzene	899	100	ug/l	
1330-20-7	Xylenes (total)	9170	100	ug/l	
1634-04-4	Methyl Tert Butyl Ether	862000 [a]	2000	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	103%	90%	61-124%

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	INF-4904		
Lab Sample ID:	M38820-1	**Date Sampled:**	04/09/04
Matrix:	AQ - Influent	**Date Received:**	04/14/04
		Percent Solids:	n/a
Project:	Global Petroleum, Revere MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	20.5	3.1	mg/l	5	04/16/04	BF	EPA 418.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	CIN-4904		
Lab Sample ID:	M38820-2	**Date Sampled:**	04/09/04
Matrix:	AQ - Ground Water	**Date Received:**	04/14/04
Method:	EPA 602	**Percent Solids:**	n/a
Project:	Global Petroleum, Revere MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB14403.D	1	04/20/04	DL	n/a	n/a	GAB712
Run #2	AB14404.D	20	04/20/04	DL	n/a	n/a	GAB712

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

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	5.6	1.0	ug/l	
100-41-4	Ethylbenzene	1.0	1.0	ug/l	
1330-20-7	Xylenes (total)	8.3	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	4360 [a]	20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	106%	90%	61-124%

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	CIN-4904		
Lab Sample ID:	M38820-2	**Date Sampled:**	04/09/04
Matrix:	AQ - Ground Water	**Date Received:**	04/14/04
		Percent Solids:	n/a
Project:	Global Petroleum, Revere MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	<0.61	0.61	mg/l	1	04/16/04	BF	EPA 418.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MID-1-4904		
Lab Sample ID:	M38820-3	**Date Sampled:**	04/09/04
Matrix:	AQ - Ground Water	**Date Received:**	04/14/04
Method:	EPA 602	**Percent Solids:**	n/a
Project:	Global Petroleum, Revere MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB14405.D	1	04/20/04	DL	n/a	n/a	GAB712
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	3.3	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	87%		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

Accutest Laboratories

Report of Analysis

Client Sample ID:	MID-1-4904		
Lab Sample ID:	M38820-3	**Date Sampled:**	04/09/04
Matrix:	AQ - Ground Water	**Date Received:**	04/14/04
		Percent Solids:	n/a
Project:	Global Petroleum, Revere MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	<0.61	0.61	mg/l	1	04/16/04	BF	EPA 418.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MID-2-4904		
Lab Sample ID:	M38820-4	**Date Sampled:**	04/09/04
Matrix:	AQ - Ground Water	**Date Received:**	04/14/04
Method:	EPA 602	**Percent Solids:**	n/a
Project:	Global Petroleum, Revere MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	MN26599.D	1	04/20/04	AP	n/a	n/a	GMN1036
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.1	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	96%		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

Accutest Laboratories

Report of Analysis

Client Sample ID:	MID-2-4904		
Lab Sample ID:	M38820-4	**Date Sampled:**	04/09/04
Matrix:	AQ - Ground Water	**Date Received:**	04/14/04
		Percent Solids:	n/a
Project:	Global Petroleum, Revere MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	<0.61	0.61	mg/l	1	04/16/04	BF	EPA 418.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	EFF-4904		
Lab Sample ID:	M38820-5	**Date Sampled:**	04/09/04
Matrix:	AQ - Effluent	**Date Received:**	04/14/04
Method:	EPA 602	**Percent Solids:**	n/a
Project:	Global Petroleum, Revere MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	MN26600.D	1	04/20/04	AP	n/a	n/a	GMN1036
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.3	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	95%		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

Accutest Laboratories

Report of Analysis

Client Sample ID:	EFF-4904		
Lab Sample ID:	M38820-5	**Date Sampled:**	04/09/04
Matrix:	AQ - Effluent	**Date Received:**	04/14/04
		Percent Solids:	n/a
Project:	Global Petroleum, Revere MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	<0.61	0.61	mg/l	1	04/16/04	BF	EPA 418.1

RL = Reporting Limit

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: M38820
Account: CDM Camp Dresser & McKee
Project: Global Petroleum, Revere MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GMN1036-MB	MN26590.D	1	04/19/04	AP	n/a	n/a	GMN1036

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

M38820-4, M38820-5

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

CAS No.	Surrogate Recoveries		Limits
	2,3,4-Trifluorotoluene	98%	61-124%

Method Blank Summary

Job Number: M38820
Account: CDM Camp Dresser & McKee
Project: Global Petroleum, Revere MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAB712-MB	AB14398A.D1		04/20/04	DL	n/a	n/a	GAB712

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

M38820-1, M38820-2, M38820-3

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

CAS No.	Surrogate Recoveries		Limits
	2,3,4-Trifluorotoluene	80%	61-124%

Method Blank Summary

Job Number: M38820
Account: CDM Camp Dresser & McKee
Project: Global Petroleum, Revere MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAB713-MB	AB14422.D	1	04/21/04	DL	n/a	n/a	GAB713

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

M38820-1

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

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

Blank Spike Summary

Job Number: M38820
Account: CDM Camp Dresser & McKee
Project: Global Petroleum, Revere MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GMN1036-BSP	MN26591.D	1	04/19/04	AP	n/a	n/a	GMN1036

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

M38820-4, M38820-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	17.2	86	39-150
100-41-4	Ethylbenzene	20	16.7	84	32-160
1634-04-4	Methyl Tert Butyl Ether	20	17.9	90	65-122
108-88-3	Toluene	20	17.1	86	46-148
1330-20-7	Xylenes (total)	60	51.6	86	69-111

CAS No.	Surrogate Recoveries	BSP	Limits
	2,3,4-Trifluorotoluene	101%	61-124%

Blank Spike Summary

Job Number: M38820
Account: CDM Camp Dresser & McKee
Project: Global Petroleum, Revere MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAB712-BSP	AB14398B.D	1	04/20/04	DL	n/a	n/a	GAB712

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

M38820-1, M38820-2, M38820-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	22.6	113	39-150
100-41-4	Ethylbenzene	20	21.3	107	32-160
1634-04-4	Methyl Tert Butyl Ether	20	20.7	104	65-122
108-88-3	Toluene	20	21.7	109	46-148
1330-20-7	Xylenes (total)	60	65.0	108	69-111

CAS No.	Surrogate Recoveries	BSP	Limits
	2,3,4-Trifluorotoluene	100%	61-124%

Blank Spike Summary

Job Number: M38820
Account: CDM Camp Dresser & McKee
Project: Global Petroleum, Revere MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAB713-BSP	AB14423.D	1	04/21/04	DL	n/a	n/a	GAB713

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

M38820-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
1634-04-4	Methyl Tert Butyl Ether	20	21.5	108	65-122

CAS No.	Surrogate Recoveries	BSP	Limits
	2,3,4-Trifluorotoluene	96%	61-124%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M38820
Account: CDM Camp Dresser & McKee
Project: Global Petroleum, Revere MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M38820-4MS	MN26593.D	1	04/19/04	AP	n/a	n/a	GMN1036
M38820-4MSD	MN26594.D	1	04/19/04	AP	n/a	n/a	GMN1036
M38820-4	MN26599.D	1	04/20/04	AP	n/a	n/a	GMN1036

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

M38820-4, M38820-5

CAS No.	Compound	M38820-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.046		20	17.4	87	17.4	87	0	39-150/30
100-41-4	Ethylbenzene	0.045		20	16.6	83	16.3	81	2	32-160/30
1634-04-4	Methyl Tert Butyl Ether	2.1		20	18.2	81	18.7	83	3	57-126/30
108-88-3	Toluene	0.16		20	17.0	84	17.0	84	0	46-148/30
1330-20-7	Xylenes (total)	0.67		60	52.0	86	51.0	84	2	61-113/30

CAS No.	Surrogate Recoveries	MS	MSD	M38820-4	Limits
	2,3,4-Trifluorotoluene	99%	101%	96%	61-124%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M38820
Account: CDM Camp Dresser & McKee
Project: Global Petroleum, Revere MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M38831-8MS	AB14409.D	1	04/21/04	DL	n/a	n/a	GAB712
M38831-8MSD	AB14410.D	1	04/21/04	DL	n/a	n/a	GAB712
M38831-8	AB14408.D	1	04/20/04	DL	n/a	n/a	GAB712

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

M38820-1, M38820-2, M38820-3

CAS No.	Compound	M38831-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	21.8	109	21.2	106	3	39-150/30
100-41-4	Ethylbenzene	ND		20	20.0	100	19.4	97	3	32-160/30
1634-04-4	Methyl Tert Butyl Ether	ND		20	22.0	110	21.7	109	1	57-126/30
108-88-3	Toluene	ND		20	20.5	103	19.8	99	3	46-148/30
1330-20-7	Xylenes (total)	ND		60	61.3	102	59.1	99	4	61-113/30

CAS No.	Surrogate Recoveries	MS	MSD	M38831-8	Limits
	2,3,4-Trifluorotoluene	97%	93%	86%	61-124%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M38820
Account: CDM Camp Dresser & McKee
Project: Global Petroleum, Revere MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M38831-5MS	AB14425.D	1	04/21/04	DL	n/a	n/a	GAB713
M38831-5MSD	AB14426.D	1	04/21/04	DL	n/a	n/a	GAB713
M38831-5	AB14424.D	1	04/21/04	DL	n/a	n/a	GAB713

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

M38820-1

CAS No.	Compound	M38831-5 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	ND		20	21.4	107	21.5	108	0	57-126/30

CAS No.	Surrogate Recoveries	MS	MSD	M38831-5	Limits
	2,3,4-Trifluorotoluene	95%	97%	85%	61-124%

Volatile Surrogate Recovery Summary

Job Number: M38820
Account: CDM Camp Dresser & McKee
Project: Global Petroleum, Revere MA

Method: EPA 602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
M38820-1	AB14402.D	103.0
M38820-1	AB14430.D	90.0
M38820-2	AB14403.D	106.0
M38820-2	AB14404.D	90.0
M38820-3	AB14405.D	87.0
M38820-4	MN26599.D	96.0
M38820-5	MN26600.D	95.0
GAB712-BSP	AB14398B.D	100.0
GAB712-MB	AB14398A.D	80.0
GAB713-BSP	AB14423.D	96.0
GAB713-MB	AB14422.D	86.0
GMN1036-BSP	MN26591.D	101.0
GMN1036-MB	MN26590.D	98.0
M38820-4MS	MN26593.D	99.0
M38820-4MSD	MN26594.D	101.0
M38831-5MS	AB14425.D	95.0
M38831-5MSD	AB14426.D	97.0
M38831-8MS	AB14409.D	97.0
M38831-8MSD	AB14410.D	93.0

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

(a) Recovery from GC signal #2

General Chemistry

QC Data Summaries

Includes the following where applicable:

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

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M38820
Account: CDM - Camp Dresser & McKee
Project: Global Petroleum, Revere MA

Analyte	Batch ID	RL	MB Result	Units	BSP %Recov	QC Limits
Petroleum Hydrocarbons	GP4327/GN13670	0.60	<0.60	mg/l	94.0	80-120%

Associated Samples:
Batch GP4327: M38820-1, M38820-2, M38820-3, M38820-4, M38820-5

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M38820
Account: CDM - Camp Dresser & McKee
Project: Global Petroleum, Revere MA

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Petroleum Hydrocarbons	GP4327/GN13670	M38821-1	mg/l	9.5	9.5	0.0	0-20%

Associated Samples:
Batch GP4327: M38820-1, M38820-2, M38820-3, M38820-4, M38820-5

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M38820
Account: CDM - Camp Dresser & McKee
Project: Global Petroleum, Revere MA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Petroleum Hydrocarbons	GP4327/GN13670	M38821-4	mg/l	<0.61	5.1	4.4	86.3	75-125%

Associated Samples:
Batch GP4327: M38820-1, M38820-2, M38820-3, M38820-4, M38820-5

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Sample Tracking Chronicle

Internal Sample Tracking Chronicle

Camp Dresser & McKee

Global Petroleum, Revere MA

Job No: M38820

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M38820-1 INF-4904	Collected: 09-APR-04 12:45 By: TAN		Received: 14-APR-04 By: RS			
M38820-1	EPA 418.1	16-APR-04	BF	16-APR-04	BF	PHC
M38820-1	EPA 602	20-APR-04 19:44	DL			V602BTXM
M38820-1	EPA 602	21-APR-04 15:18	DL			V602BTXM
M38820-2 CIN-4904	Collected: 09-APR-04 12:55 By: TAN		Received: 14-APR-04 By: RS			
M38820-2	EPA 418.1	16-APR-04	BF	16-APR-04	BF	PHC
M38820-2	EPA 602	20-APR-04 20:24	DL			V602BTXM
M38820-2	EPA 602	20-APR-04 21:04	DL			V602BTXM
M38820-3 MID-1-4904	Collected: 09-APR-04 13:05 By: TAN		Received: 14-APR-04 By: RS			
M38820-3	EPA 418.1	16-APR-04	BF	16-APR-04	BF	PHC
M38820-3	EPA 602	20-APR-04 21:45	DL			V602BTXM
M38820-4 MID-2-4904	Collected: 09-APR-04 13:10 By: TAN		Received: 14-APR-04 By: RS			
M38820-4	EPA 418.1	16-APR-04	BF	16-APR-04	BF	PHC
M38820-4	EPA 602	20-APR-04 03:28	AP			V602BTXM
M38820-5 EFF-4904	Collected: 09-APR-04 13:15 By: TAN		Received: 14-APR-04 By: RS			
M38820-5	EPA 418.1	16-APR-04	BF	16-APR-04	BF	PHC
M38820-5	EPA 602	20-APR-04 04:11	AP			V602BTXM

CHAIN OF CUSTODY

ACCUTEST®

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #: M38820

ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: CDM
ADDRESS: 50 HAMPSHIRE ST
CITY, STATE ZIP: CAMBRIDGE, MA
SEND REPORT TO: JIM WINKLER
PHONE #: (617) 452-6263

FACILITY INFORMATION

PROJECT NAME: GLOBAL
LOCATION: 140 LEE BURBANK HGWY
PROJECT NO.: REVERE, MA
FAX #: 20394-35913-OM.INP

ANALYTICAL INFORMATION

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	BTEX/MTBE 602	TPH 418.1	LAB USE ONLY
-1	INF-4904	4.9.04	12:45	TAN	GW	4	X					X	X	
-2	CIN-4904		12:55			4	X					X	X	
-3	MID-1-4904		13:05			4	X					X	X	
-4	MID-2-4904		13:10			4	X					X	X	
-5	EFF-4904	4.9.04	13:15	TAN	GW	4	X					X	X	

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

DATA TURNAROUND INFORMATION

- [x] 14 DAYS STANDARD
- [ ] 7 DAYS *RUSH*
- [ ] 48 HOUR EMERGENCY
- [ ] OTHER _____

APPROVED BY:

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [ ] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY) Loc. 4D, IC2

COMMENTS/REMARKS

MCP-PRESUMPTIVE CERTAINTY REQUIRED

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. T.C. Rawn	4.12.04 2AM	1. Jack Wilson	2. Jack Wilson	4/14/04 14:15	2. [signature]
3. [signature]	4/14/04 16:45	3. [signature]	4.		4.
5.		5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☑ TEMPERATURE 3.0 C

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