SAMPLES SUBMITTED and REQUEST FOR ANALYSIS:

The samples listed in Table I were submitted to New England Testing Laboratory on September 29, 2005. The group of samples appearing in this report was assigned an internal identification number (case number) for laboratory information management purposes. The client's designations for the individual samples, along with our case numbers, are used to identify the samples in this report. The case number for this sample submission is Q0929-07.

Custody records are included in this report.

Site: ECI Needham 875

TABLE I, Samples Submitted

Sample ID	Date Sampled	Matrix	Analysis Requested
System Inf	9/28/05	Water	Table II

TABLE II, Analysis and Methods

ANALYSIS	DETERMINATIVE METHOD
PCBs	608
Total Metals	
Antimony	3113B
Cadmium	3113B
Chromium	200.7
Copper	200.7
Iron	200.7
Lead	3113B
Mercury	245.1
Nickel	200.7
Selenium	3113B
Silver	3113B
Zinc	200.7
Total Suspended Solids	160.2
Residual Chlorine	330.5
Hexavalent Chromium	3500-Cr-D (7196A)

These methods are documented in:

40 CFR 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act*, Office of Federal Register National Archives and Records Administration.

CASE NARRATIVE:

Sample Receipt:

No sample for ms/msd/duplicate analysis was supplied. No field blank was supplied. (This does not qualify the analytical results but does prevent conducting these SW-846 {Chapter 1, Section 3.4} QA Audits.)

The samples were all appropriately cooled and preserved upon receipt.

The samples were received in the appropriate containers.

The chain of custody was adequately completed and corresponded to the samples submitted.

Metals:

All analyses were performed according to NETLAB's documented Standard Operating Procedures, within all required holding times, and with appropriate quality control measures. All QC was within laboratory established acceptance criteria. The samples were received, processed, and reported with no anomalies.

PCBs:

All samples were extracted and analyzed within method specified holding times and according to NETLAB's documented standard operating procedures. The results for the associated calibration, method blank and laboratory control sample (LCS) were within method specified quality control criteria

General Chemistry:

Total Suspended Solids: No anomalies or excursions from QC limits

Residual Chlorine: No anomalies or excursions from QC limits

Hexavalent Chromium: No anomalies or excursions from QC limits

Sample Results

Case No. Q0929-07

System Inf

Parameter	Result, mg/l	Reporting Limit	Date Analyzed
Total Suspended Solids	16	1	10/5/05
Residual Chlorine	N.D.	0.02	9/29/05
Hexavalent Chromium	N.D.	0.01	9/29/05

N.D. = Not Detected

METALS RESULTS

The presence of the NETLAB LOGO in the top right corner of each page in this section indicates:

The Technical Manager of the Metals Analysis Department certifies that the results included in this section have been reviewed and approved. Any exceptions or qualifications of substance have been reported in the case narrative.

New England Testing Laboratory, Inc.

METALS RESULTS

NETLAB

Case Number: Q0929-07
Sample ID: System Inf
Date collected: 09/28/05
Matrix WATER
Sample Type: TOTAL

Analyst CC/RM

Parameter	CAS Number	Preparative Method	Analytical Method	Result	Reporting Limit	Detection Limit	Units	Date of Preparation	Date Analyzed
Antimony	7440-36-0	NA	3113B	ND	0.0005	0.0005	mg/l	9/30/05	10/10/05
Cadmium	7440-43-9	NA	3113B	0.0006	0.0005	0.0005	mg/l	9/30/05	9/30/05
Chromium	7440-47-3	NA	200.7	0.007	0.005	0.005	mg/l	9/30/05	10/5/05
Copper	7440-50-8	NA	200.7	0.04	0.02	0.02	mg/l	9/30/05	10/5/05
Iron	7439-89-6	NA	200.7	11	0.05	0.05	mg/l	9/30/05	10/5/05
Lead	7439-92-1	NA	3113B	0.010	0.002	0.002	mg/l	9/30/05	10/3/05
Mercury	7439-97-6	NA	245.1	ND	0.0002	0.0002	mg/l	10/3/05	10/3/05
Nickel	7440-02-0	NA	200.7	0.007	0.005	0.005	mg/l	9/30/05	10/5/05
Selenium	7782-49-2	NA	3113B	ND	0.005	0.005	mg/l	9/30/05	10/11/05
Silver	7440-22-4	NA	3113B	0.0007	0.0005	0.0005	mg/l	9/30/05	10/4/05
Zinc	7440-66-6	NA	200.7	0.08	0.02	0.02	mg/l	9/30/05	10/5/05

ND indicates not Detected

METALS RESULTS

Sample ID: METHOD BLANK

Matrix WATER

Sample Type: Preparation Blank

Analyst CC/RM

Parameter	CAS Number	Preparative Method	Analytical Method	Result	Reporting Limit	Detection Limit	Units	Date of Preparation	Date Analyzed
Antimony	7440-36-0	NA	3113B	ND	0.0005	0.0005	mg/l	9/30/05	10/10/05
Cadmium	7440-43-9	NA	3113B	ND	0.0005	0.0005	mg/l	9/30/05	9/30/05
Chromium	7440-47-3	NA	200.7	ND	0.005	0.005	mg/l	9/30/05	10/5/05
Copper	7440-50-8	NA	200.7	ND	0.02	0.02	mg/l	9/30/05	10/5/05
Iron	7439-89-6	NA	200.7	ND	0.05	0.05	mg/l	9/30/05	10/5/05
Lead	7439-92-1	NA	3113B	ND	0.002	0.002	mg/l	9/30/05	10/3/05
Mercury	7439-97-6	NA	245.1	ND	0.0002	0.0002	mg/l	10/3/05	10/3/05
Nickel	7440-02-0	NA	200.7	ND	0.005	0.005	mg/l	9/30/05	10/5/05
Selenium	7782-49-2	NA	3113B	ND	0.005	0.005	mg/l	9/30/05	10/11/05
Silver	7440-22-4	NA	3113B	ND	0.0005	0.0005	mg/l	9/30/05	10/4/05
Zinc	7440-66-6	NA	200.7	ND	0.02	0.02	mg/l	9/30/05	10/5/05

ND indicates not Detected

LABORATORY CONTROL SAMPLE RECOVERY

Parameter	True Value	Result	Units	Recovery, %	LCL, %	UCL, %	Date Analyzed
Antimony	0.0200	0.02014	mg/l	101	81	123	10/10/05
Cadmium	0.00500	0.00539	mg/l	108	80	122	9/30/05
Chromium	1.000	0.992	mg/l	99.2	89	110	10/5/05
Copper	1.000	1.07	mg/l	107	87	113	10/5/05
Iron	1.000	0.815	mg/l	81.5	74	122	10/5/05
Lead	0.0200	0.0189	mg/l	94.5	86	119	10/3/05
Mercury	0.00100	0.00099	mg/l	99	89	114	10/3/05
Nickel	1.000	1.01	mg/l	101	89	109	10/5/05
Selenium	0.0200	0.0202	mg/l	101	88	113	10/11/05
Silver	0.00500	0.00515	mg/l	103	71	118	10/4/05
Zinc	1.000	1.02	mg/l	102	91	110	10/5/05

RESULTS: PCBs

The presence of the NETLAB LOGO in the top right corner of each page in this section indicates:

The Technical Manager of the Organics Analysis Department certifies that the samples included in this section have been prepared and analyzed using the procedures cited and that the results have been reviewed and approved. Any exceptions or qualifications of substance have been reported in the case narrative.

Sample: System Inf		Analyst's Initials: DC
Case No. Q0929-07		
Date Collected: 9/28/05		
Sample Matrix: Water		
Subject: PCBs	Date Extracted	Date Analyzed
Analytical Method: EPA 608	10/5/05	10/9/05
Compound	Concentration ug/l (ppb)	Reporting Limit
PCB-1016	N.D.	0.2
PCB-1221	N.D.	0.4
PCB-1232	N.D.	0.2
PCB-1242	N.D.	0.2
PCB-1248	N.D.	0.2
PCB-1254	N.D.	0.2
PCB-1260	N.D.	0.2
Surrogates:		
Compound	% Recovery	Limits
TCMX	98	25-141
DCBP	53	41-156

Sample: Method Blank		Analyst's Initials: DC
Case No. Q0929-07		
Date Collected: NA		
Sample Matrix: Water		
Subject: PCBs	Date Extracted	Date Analyzed
Analytical Method: EPA 608	10/5/05	10/6/05
Compound	Concentration ug/l (ppb)	Reporting Limit
PCB-1016	N.D.	0.2
PCB-1221	N.D.	0.4
PCB-1232	N.D.	0.2
PCB-1242	N.D.	0.2
PCB-1248	N.D.	0.2
PCB-1254	N.D.	0.2
PCB-1260	N.D.	0.2
Surrogates:		
Compound	% Recovery	Limits
TCMX	75	25-141
DCBP	67	41-156

PCB Laboratory Control Spike

Date Collected: NA			Analyst:	DC
Sample Matrix: Water				
Subject: PCB	Date Extracted			Date Analyzed
Prep Method: EPA 3510C	10/5/05			10/6/05
Analytical Method: EPA 8082				
Compound	Amount Spiked ug/l	Result ug/l	Recovery %	Recovery Limits
1254-1	0.50	0.27	53	40-140
Surrogates:	% Recovery	Limits		
TCMX	45	19-139		
DCBP	62	29-155		

Custody Records

NEW ENGLAND TESTING LABORATORY, INC.
1254 Douglas Avenue
North Providence, RI 02904

CHAIN OF CUSTODY RECORD

Q0929-07

PROJ. NO

PROJECT NAME: ~~Motiva~~ Needham 875 (SPK)

CLIENT: ENVIROTRAC LTD

SAMPLE I.D.	DATE	TIME	COMP	GRAB	STATION LOCATION	NO. OF CONTAINERS	TESTS: TSS	TPH (SPK)	PCBs	Total Metals	Total Residual Chlorine & HCl Chrom	REMARKS
	9/28/05	1:00		X	System Inf	54	X	X	X	X	X	
												- Include gas chromatograph w/ lab report
												Attn Sean Kennedy
												- ~~Bill Et Direct~~ (SPK)
												Bill Motiva direct
												Inc. # 98997812
												SAP # 137806
												Provide QA/QC documents

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	9/28/05 4:15	[signature]			
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks	
		S Sweeney	9/29/05 1103	Revised Chain of Custody Temp 4	

REPORT OF ANALYTICAL RESULTS

NETLAB Case Number Q0929-07A

Prepared for:

Attn: Sean Kennedy
Envirotrac Ltd.
1400 Providence Hwy, Suite 2100
Norwood, MA 02062

Report Date: October 11, 2005

Lab # RI010

Total # of Pages: 8

ANALYTICAL METHOD REPORT CERTIFICATION FORM

Laboratory Name: New England Testing Laboratory, Inc.	Project #:
Project Location: ECI Needham 875	RTN[1]:

This form provides certifications for the following data set: Q0929-07

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

SW-846 Methods Used					
	8260B ( )	8151A ( )	8330 ( )	6010B ( )	7470A/1A ( )
	8270C ( )	8081A ( )	VPH ( )	6020 ( )	9014M[2] ( )
	8082 ( )	8021B ( )	EPH ( )	7000 S[3] ( )	Other: (X)

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, and C 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 (X) 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 (X) 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 (X) No[1] ( ) Not Applicable ( )
D	***VPH and EPH Methods only***: Was the VPH and EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)	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?	Yes (X) No[1] ( )
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	Yes (X) No[1] ( )

[1]*All NO answers 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: Jodi Lyons Position: Director, Inorganics

Printed Name: Jodi Lyons Date: 11/10/2005

STATEMENTS/CERTIFICATIONS REQUIRED BY THE NATIONAL ENVIRONMENTAL LABORATORY APPROVAL CONFERENCE (NELAC)

New England Testing Laboratory is certified under the National Environmental Laboratory Approval Program (NELAP). This certification requires the following statements and certifications be included in our report.

This report shall not be reproduced, except in full, without written approval of the laboratory.

New England Testing certifies that the test results contained within this report meet all NELAC requirements except as detailed in the Case Narrative section of this report.

SAMPLES SUBMITTED and REQUEST FOR ANALYSIS:

The samples listed in Table I were submitted to New England Testing Laboratory on September 29, 2005. The group of samples appearing in this report was assigned an internal identification number (case number) for laboratory information management purposes. The client's designations for the individual samples, along with our case numbers, are used to identify the samples in this report. The case number for this sample submission is Q0929-07A.

Custody records are included in this report.

Site: ECI Needham 875

TABLE I, Samples Submitted

Sample ID	Date Sampled	Matrix	Analysis Requested
System Inf	9/28/05	Water	Table II

TABLE II, Analysis and Methods

ANALYSIS	DETERMINATIVE METHOD
Total Petroleum Hydrocarbons	1664A

This method is documented in:

EPA-821-B-94-004

40 CFR 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act*, Office of Federal Register National Archives and Records Administration.

Sample Results

Case No. Q0929-07A

System Inf

Parameter	Result, mg/l	Reporting Limit	Date Analyzed
Total Petroleum Hydrocarbons	N.D.	2	10/4/05

N.D. = Not Detected

Custody Records

NEW ENGLAND TESTING LABORATORY, INC.
1254 Douglas Avenue
North Providence, RI 02904

CHAIN OF CUSTODY RECORD

PROJ. NO.

PROJECT NAME: Needham 875

CLIENT: EnviroTrac Ltd

Q0929.07A

SAMPLE I.D.	DATE	TIME	COMP	GRAB	STATION LOCATION	NO. OF CONTAINERS	TESTS: TPH	REMARKS
	9/29/05	1:00		X	System Inf.	1	X	
								Bill EnviroTrac Ltd.
								Include gas chromatograms
								Attn Sean Kennedy
								Provide QA/QC documents
								*

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	10/5/05				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks	
		S Sweeney	9/29/05 1103	Additional chain of custody	

Temp 4°

New England
ACCUTEST
Laboratories

10/20/05

Technical Report for

Shell Oil

ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

ECI

Accutest Job Number: M51230

Sampling Date: 09/28/05

Report to:

msmith@newfields.com

Total number of pages in report: 57

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 (250204) RI (00071) ME (MA136) FL (E87579) NY (23346) NJ (MA926) NAVY USACE

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Sample Summary

Shell Oil

Job No: M51230

ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA
Project No: ECI

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M51230-1	09/28/05	13:30 JS	09/30/05	AQ	Ground Water	SYSTEM INF
M51230-1A	09/28/05	13:30 JS	09/30/05	AQ	Ground Water	SYSTEM INF
M51230-1B	09/28/05	13:30 JS	09/30/05	AQ	Ground Water	SYSTEM INF

Accutest Laboratories

Report of Analysis

Client Sample ID:	SYSTEM INF		
Lab Sample ID:	M51230-1	Date Sampled:	09/28/05
Matrix:	AQ - Ground Water	Date Received:	09/30/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G53454.D	1	10/07/05	AA	n/a	n/a	MSG2132
Run #2	G53458.D	10	10/07/05	AA	n/a	n/a	MSG2132

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

VOA 8260 List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1490 [a]	10	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%	101%	82-127%
2037-26-5	Toluene-D8	97%	100%	88-112%
460-00-4	4-Bromofluorobenzene	94%	101%	80-118%

(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:	SYSTEM INF		
Lab Sample ID:	M51230-1	Date Sampled:	09/28/05
Matrix:	AQ - Ground Water	Date Received:	09/30/05
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F16241.D	1	10/11/05	PN	10/05/05	OP9768	MSF886
Run #2							

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

ABN PPL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	ug/l	
88-75-5	2-Nitrophenol	ND	10	ug/l	
100-02-7	4-Nitrophenol	ND	20	ug/l	
108-95-2	Phenol	ND	5.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	ug/l	
85-68-7	Butyl benzyl phthalate	ND	10	ug/l	
84-74-2	Di-n-butyl phthalate	ND	10	ug/l	
117-84-0	Di-n-octyl phthalate	ND	10	ug/l	
84-66-2	Diethyl phthalate	ND	10	ug/l	
131-11-3	Dimethyl phthalate	ND	10	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%		10-120%
4165-62-2	Phenol-d5	28%		10-120%
118-79-6	2,4,6-Tribromophenol	77%		31-123%
4165-60-0	Nitrobenzene-d5	62%		32-120%
321-60-8	2-Fluorobiphenyl	65%		32-120%
1718-51-0	Terphenyl-d14	45%		33-123%

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:	SYSTEM INF		
Lab Sample ID:	M51230-1	Date Sampled:	09/28/05
Matrix:	AQ - Ground Water	Date Received:	09/30/05
Method:	EPA 504 EPA 504	Percent Solids:	n/a
Project:	ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ28770.D	1	10/03/05	CZ	10/01/05	OP9741	GYZ1197
Run #2							

	Initial Volume	Final Volume
Run #1	34.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.015	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	56%		26-158%

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

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	SYSTEM INF		
Lab Sample ID:	M51230-1	Date Sampled:	09/28/05
Matrix:	AQ - Ground Water	Date Received:	09/30/05
		Percent Solids:	n/a
Project:	ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	6.2	5.0	ug/l	1	10/03/05	10/05/05	AC	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA6310
(2) Prep QC Batch: MP7699

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SYSTEM INF		
Lab Sample ID:	M51230-1	Date Sampled:	09/28/05
Matrix:	AQ - Ground Water	Date Received:	09/30/05
		Percent Solids:	n/a
Project:	ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	<0.010	0.010	mg/l	1	10/01/05 12:15	MA	EPA 335.3

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SYSTEM INF		
Lab Sample ID:	M51230-1A	Date Sampled:	09/28/05
Matrix:	AQ - Ground Water	Date Received:	09/30/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N4273.D	1	10/05/05	ZW	n/a	n/a	MSN152
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Oxygenates

CAS No.	Compound	Result	RL	Units	Q
994-05-8	tert-Amyl Methyl Ether	12.2	2.0	ug/l	
75-65-0	Tert Butyl Alcohol	750	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		82-127%
2037-26-5	Toluene-D8	105%		88-112%
460-00-4	4-Bromofluorobenzene	106%		80-118%

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:	SYSTEM INF		
Lab Sample ID:	M51230-1B	Date Sampled:	09/28/05
Matrix:	AQ - Ground Water	Date Received:	09/30/05
Method:	SW846 8270C BY SIM SW846 3510C	Percent Solids:	n/a
Project:	ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F16284.D	1	10/12/05	PN	10/05/05	OP9772	MSF887
Run #2							

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

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0	ug/l	
83-32-9	Acenaphthene	ND	0.10	ug/l	
208-96-8	Acenaphthylene	ND	0.10	ug/l	
120-12-7	Anthracene	ND	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	ug/l	
218-01-9	Chrysene	ND	0.10	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	ug/l	
206-44-0	Fluoranthene	ND	0.10	ug/l	
86-73-7	Fluorene	ND	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.20	ug/l	
91-20-3	Naphthalene	ND	0.10	ug/l	
85-01-8	Phenanthrene	ND	0.10	ug/l	
129-00-0	Pyrene	ND	0.10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	37%		10-120%
4165-62-2	Phenol-d5	26%		10-120%
118-79-6	2,4,6-Tribromophenol	64%		23-135%
4165-60-0	Nitrobenzene-d5	49%		30-120%
321-60-8	2-Fluorobiphenyl	53%		25-120%
1718-51-0	Terphenyl-d14	35%		24-132%

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST Laboratories

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7763

ACCUTEST JOB #: M51230
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: ENVIROTRAK LTD
ADDRESS: 1400 BOSTON PROVIDENCE HWY SUITE 210
CITY: NORWOOD STATE: MA ZIP: 02062
SEND REPORT TO: SEAN KENNEDY
PHONE #: 781-769-3001

FACILITY INFORMATION

PROJECT NAME: NEEDHAM 875
LOCATION: 875 HIGHLAND AVE NEEDHAM
PROJECT NO.:
FAX #:

ANALYTICAL INFORMATION

MATRIX CODES

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

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	NA2S2O3	VOC via 8260 EPA 524/624/MTBE	8-1-4 DIOXANE	VOC via 8260 TBA / TAME	EDB via SOIL	PAHs by SIM	PAHs incl. 1-Methylnaphthalene	Tot. Phenols	Tot. Petroleum Hydrocarbons	BIS 2-Ethylhexyl Phthalate	TOTAL AS	TOTAL CYANIDE	LAB USE ONLY
-1	[redacted] SYSTEM INF	9/29/05	1:30	JS	GW	10	X	X	X		X	X	X		X	X	X	X	X			X	X	
	JS																							

DATA TURNAROUND INFORMATION

- ☐ 14 DAYS STANDARD
- ☑ 7 DAYS RUSH — APPROVED BY: SEE ATTACHED
- ☐ 48 HOUR EMERGENCY — SURREGRET
- ☐ OTHER

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. 4B7, 5F, 14F, 12F

COMMENTS/REMARKS

- SEND REPORT TO SEAN KENNEDY
- INCL GAS CHROMO W/ LAB REPORT
- BILL ET PARTY

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.	9/29/05 6:30	1. ET FRIDGE	2.	9/29/05 1:00	2.
RELINQUISHED BY: 3.	DATE TIME 9/29/05 1920	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☒ TEMPERATURE 3.2°C

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M51230: Chain of Custody
Page 1 of 15

ACCUTEST Laboratories

CHAIN OF CUSTODY

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

ACCUTEST JOB #:
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: EnviroTrac Ltd
ADDRESS: 100 Providence Hwy, Ste 2100
CITY: Norwood STATE: MA ZIP: 02062
SEND REPORT TO: Sean P. Kennedy
PHONE #: 781-769-5605

FACILITY INFORMATION

PROJECT NAME: Motiva-Needham 875
LOCATION: 875 Highland Ave Needham, MA
PROJECT NO.:
FAX #: 781-769-9345

ANALYTICAL INFORMATION

MATRIX CODES

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

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION: HCl	PRESERVATION: NaOH/HCl	PRESERVATION: HNO3	PRESERVATION: NONE	PAHs by SIM	Phts include total phenols, petrochemicals, total petroleum	63.2-ethylhexyl phthalate	Total As	Total Cyanide					LAB USE ONLY
	System Inf.	7/28/05	1:30	JS	GW	4		X	X		X	X		X	X					

DATA TURNAROUND INFORMATION

- ☐ 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)

COMMENTS/REMARKS

Bill Motiva Inc. # 98997812, SAP 1378066; Provide chromatograms, QA/QC documents
Revised Chain of Custody

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

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
[signature]	10/5/05	Accutest via fax	2.		2.
3.		3.	4.		4.
5.		5.			

SEAL # | PRESERVE WHERE APPLICABLE ☐ | ON ICE ☐ | TEMPERATURE ____ C

OCT-05-2005(WED) 10:59 ENVIROTRAC (FAX)15083846028 P.002/004

3.1 3

ACCUTEST Laboratories

CHAIN OF CUSTODY

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

ACCUTEST JOB #:
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: EnviroTrac Ltd.
ADDRESS: 1900 Providence Hwy, Ste 2100
CITY, STATE, ZIP: Norwood, MA 02062
SEND REPORT TO: Sam P. Kennedy
PHONE #: 781-769-5005

FACILITY INFORMATION

PROJECT NAME: ECI Needham 875
LOCATION: 875 Highland Ave
PROJECT NO.: Needham, MA
FAX #: 781-769-9345

ANALYTICAL INFORMATION

VOCs via 8260 plus ETBE, DIPE, MTBE + 14-dioxane
NDC by 8260 for TBA & TBAE (unprserved)
EDB by 504.1

MATRIX CODES

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

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	HNO3	NaOH	H2SO4	NONE	VOCs via 8260 plus ETBE, DIPE, MTBE + 14-dioxane	NDC by 8260 for TBA & TBAE (unprserved)	EDB by 504.1							LAB USE ONLY
	System Inf.	9/28/05	1:30	JS	GW	6	X				X	X		X							

DATA TURNAROUND INFORMATION

- ☐ 14 DAYS STANDARD — APPROVED BY:
- ☒ 7 DAYS *RUSH*
- ☐ 48 HOUR EMERGENCY
- ☐ OTHER

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)

COMMENTS/REMARKS

Provide chromatograms, QA/QC documents
*unpreserved sample
Revised Chain of Custody

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

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.		1.	2.		2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE ____ C

OCT-05-2005(WED) 10:59 ENVIROTRAC (FAX)15083846028 P.003/004

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M51230: Chain of Custody
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3.1 3

ACCUTEST Laboratories

CHAIN OF CUSTODY

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

ACCUTEST JOB #:
ACCUTEST QUOTE #:

CLIENT INFORMATION
NAME: Envirotrac LTD
ADDRESS: 144 Bay Providence Hill Site 2nd
CITY: Norwood STATE: MA ZIP: 02062
SEND REPORT TO: Sean Kennedy
PHONE #: 781-769-5001

FACILITY INFORMATION
PROJECT NAME: Nordam 875
LOCATION: 875 Highland Ave Needham
PROJECT NO.:
FAX #:

ANALYTICAL INFORMATION

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	HCl	HNO3	H2SO4	NaOH	NaOH	VOC via 8260 (Ethanol)	£ 1-4 Dioxane	VOC via 8260 TBA / TBAE	EDB via 504.1	PAHs by SIM	PAHs via 8270 Probably Bottom Preserved	Bis-2-Ethylhexyl Phthalate	Total As	Total Cr	Total Cyanide	LAB USE ONLY
	~~[illegible]~~ System Inf	9/28/05	1:30	JS	GW	10	X	X	X		X	X	X	X	X	X	X		X	X		
	JS																					

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
☐ 14 DAYS STANDARD
☐ 7 DAYS RUSH — APPROVED BY: Sgt. Attaway
☐ 48 HOUR EMERGENCY — Supervisor
☐ OTHER
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)

COMMENTS/REMARKS
- Send Report to Sean Kennedy
- Incl Gas Chromat w/ lab report
- Bill E7 Project

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

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	9/28/05 6:30	1. E7 Fridge	2.	9/29/05	2.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE ___ C
5.		5.			

M51230: Chain of Custody
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A

CHAIN OF CUSTODY ATTACHMENT - EPA NPDES RGP REQUIREMENTS
PART 1 of 2

PARAMETER	Minimum Levels and Test Methods METHOD	ML[1]	Discharge Effluent Limit
MISCELLANEOUS COMPOUNDS			
Total Suspended Solids	160.2	5 mg/l	30 mg/l
Total Petroleum Hydrocarbons	1664	5 mg/l	5.0 mg/l
[illegible]			
Total Polychlorinated Biphenyls (PCBs)	608	0.5 ug/l	0.000064 ug/l (compliance limit = ML of test method used)
	1668a[4]	0.00005 ug/l	
METALS			
Total Chromium	Flame AA (218.1)	none specified	Chromium III: MA = FW = 48.6 ug/l, MA = SW = 100 ug/l, NH = FW = 27.7 ug/l, NH = SW = 100 ug/l
	ICP (200.7[11])	10 ug/l	
	ICP (200.5)	10 ug/l	
	ICP (200.15)	10 ug/l	
	ICP (1620)	10 ug/l	
	Furnace AA (200.9)	5 ug/l	
	Other	50 ug/l	
Total Copper (Cu)	Flame AA	20 ug/l	MA = FW = 5.2 ug/l, MA = SW = 3.7 ug/l, NH = FW = 2.9 ug/l, NH = SW = 3.7 ug/l
	ICP	5 ug/l	
	Furnace AA	3 ug/l	
Total Mercury (Hg)	Other	0.2 ug/l	MA & NH = FW = 0.9 ug/l, MA & NH = SW = 1.1 ug/l
Total Iron (Fe)	6010b	see footnote	MA & NH = 1,000 ug/l
	200.7[12]	see footnote	

Prepared by NewFields 9/20/2005 Part 1 of 2 - Page 1 of 2

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M51230: Chain of Custody
Page 5 of 15

CHAIN OF CUSTODY ATTACHMENT - EPA NPDES RGP REQUIREMENTS
PART 1 of 2

PARAMETER	Minimum Levels and Test Methods		
	METHOD	ML[1]	Discharge Effluent Limit

LEGEND:
RGP = Remediation General Permit
Flame AA = Flame Atomic Absorption
ICP = Inductively Coupled Plasma
Furnace AA = Furnace Atomic Absorption
FW = Freshwater
SW = Seltwater
MA = State of Massachusetts
NH = State of New Hampshire

FOOTNOTES:

1. Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.15 (see 40 CFR Part 136, Appendix B) Where a minimum level (ML) is listed but a test method is not specified, permittee may use any of the available methods approved for use under 40 CFR 136, including alternatives approved by this permit, that meets ML. See EPA's "Methods and Guidance for the Analysis of Water" at www.epa.gov/water/owrccatalog.nsf. Where a test method is specified but ML is not listed for that Method, the lowest ML for listed methods must be used before concentration can be considered as "non-detect".
2. For measuring volatile organic compounds, Method 8260C (or the latest version) may be used as a substitute for CWA Methods 524.2, 602, 624, or 1624. Method 8260C must be preceded by Method 5030 as the preparation method. However, any method changes must be accompanied by documented quality assurance quality control (QA/QC) test to prove that the analytical process can achieve the lower detection limits of Method 8260C. For TBA and TAME the EPA advises no acid as a preservative.
3. For measuring semi-volatile organic compounds, Method 8270D may be used as a substitute for Methods 610, 625, or 1625. Method 8270D must be preceded by Method 3520C as the sample preparation method. In either case, the quality control requirements of Method 3500B must be taken into account. The sample preparation method must be specified with data analysis records. Method 8270D may be modified to provide lower detection and quantitation limits using Selected Ion Monitoring (SIM). Any method changes must be accompanied by documented quality assurance quality control (QA/QC) test results to prove that the analytical process can achieve the lower detection limits of Method 8270D.
4. GC - gas chromatography.
5. GCMS -gas chromatography/ mass spectrometry
6. LC-high pressure liquid chromatography.
7. Flame Atomic Absorption.
8. For measuring fuel oxygenates, Method 602 must be modified to include a heated purge.
9. The sum of individual phthalate compounds.
10. In the November 2002 WQC, EPA has revised the definition of total PCBs for aquatic life as "total PCBs is the sum of all homologue, all isomer, all congener, or all Aroclor analyses.
11. Method 1668a (HRGC/HRMS) has been proposed by EPA and is currently being validated. When approval of the method is finalized, it will be approved for use with this general permit
12. Methods 6010b and 200.7 for metals may only be used when sample prepared with SW-846 digestion method, Method 3010.
13. Any value below the ML shall be reported as zero.
14. Analysis of the influent samples shall use the test methods with the MLs at or below limits where practicable.

3.1 3

M51230: Chain of Custody
Page 6 of 15

CHAIN OF CUSTODY ATTACHMENT - EPA NPDES RGP REQUIREMENTS
PART 2 of 2 (ACCUTEST)

PARAMETER	Minimum Levels and Test Methods METHOD	ML[1]	Discharge Effluent Limit
[illegible]			
Cyanide (total)	335.4	10 ug/l	MA & NH = SW = 1.0 ug/l, MA & NH = FW = 5.2 ug/l (compliance limit = ML = 10 ug/l)
VOLATILE ORGANIC COMPOUNDS			
Benzene	602	0.5 ug/l	5.0 ug/l
	624	2 ug/l	
	8260C[2]	see footnote	
Toluene	602	0.5 ug/l	Limited as Total BTEX
	624	2 ug/l	
	8260C[2]	see footnote	
Ethylbenzene	602	0.5 ug/l	Limited as Total BTEX
	624	2 ug/l	
	8260C[2]	see footnote	
Xylenes (total)	602	0.5 ug/l	Limited as Total BTEX
	1624	10 ug/l	
	8260C[2]	see footnote	
Total BTEX	602	0.5 ug/l	100 ug/l
	624	2 ug/l	
	8260C[2]	see footnote	
Ethylene Dibromide (EDB), 1,2-Dibromomethane	618	1.0 ug/l	0.05 ug/l (must use method 504.1 for sites certifying this compound is 'not present')
	504.1	0.01 ug/l	
	624.2	0.1 ug/l	
	8260C[2]	see footnote	
Methyl tert-butyl ether (MTBE)	602[5]	0.5 ug/l	70 ug/l
	624.2	5.0 ug/l	
	8260C[2]	see footnote	
tert-Butyl Alcohol (TBA)	602[5]	0.5 ug/l	Monitor Only
	1668	100 ug/l	
	8260C[2]	see footnote	
tert-Amyl Methyl Ether (TAME)	602[5]	0.5 ug/l	Monitor Only
	8260C[2]	see footnote	
Naphthalene	610-(GC/FID)	10 ug/l	20 ug/l
	625	2 ug/l	
	624.2	5 ug/l	
	610-HPLC	0.2 ug/l	
	8270D[2]	see footnote	
Carbon Tetrachloride	601	0.5 ug/l	4.4 ug/l
	624	2 ug/l	
	1624	2 ug/l	
	8260C[2]	see footnote	
	601	0.5 ug/l	

CHAIN OF CUSTODY ATTACHMENT - EPA NPDES RGP REQUIREMENTS
PART 2 of 2: (ACCUTEST)

PARAMETER	Minimum Levels and Test Methods METHOD	ML[1]	Discharge Effluent Limit
1,4-Dichlorobenzene (p-DCB)	602	0.5-ug/l	5.0 ug/l
	624	2-ug/l	
	625	2-ug/l	
	8260C[2]	see footnote	
1,2-Dichlorobenzene (o-DCB)	601	0.5-ug/l	600 ug/l
	602	0.5-ug/l	
	624	2-ug/l	
	625	2-ug/l	
	8260C[2]	see footnote	
1,3-Dichlorobenzene (m-DCB)	601	0.5-ug/l	320 ug/l
	602	0.5-ug/l	
	624	2-ug/l	
	625	2-ug/l	
	8260C[2]	see footnote	
1,1 Dichloroethane (DCA)	601	0.5-ug/l	70 ug/l
	624	1-ug/l	
	8260C[2]	see footnote	
1,2 Dichloroethane (DCA)	601	0.5-ug/l	5.0 ug/l
	624	2-ug/l	
	8260C[2]	see footnote	
1,1 Dichloroethylene (DCE)	601	0.5-ug/l	3.2 ug/l
	624	2-ug/l	
	8260C[2]	see footnote	
cis-1,2 Dichloro-ethylene (DCE)	601	0.5-ug/l	70 ug/l
	624	2-ug/l	
	8260C[2]	see footnote	
Dichloromethane (Methylene Chloride)	601	0.5-ug/l	4.6 ug/l
	624	2-ug/l	
	8260C[2]	see footnote	
Tetrachloroethylene (PCE)	601	0.5-ug/l	5.0 ug/l
	624	2-ug/l	
	8260C[2]	see footnote	
1,1,1 Trichloro-ethane (TCA)	601	0.5-ug/l	200 ug/l
	624	2-ug/l	
	8260C[2]	see footnote	
1,1,2 Trichloro-ethane (TCA)	601	0.5-ug/l	5.0 ug/l
	624	2-ug/l	
	8260C[2]	see footnote	

CHAIN OF CUSTODY ATTACHMENT - EPA NPDES RGP REQUIREMENTS
PART 2 of 2 (ACCUTEST)

PARAMETER	Minimum Levels and Test Methods: METHOD	Minimum Levels and Test Methods: ML[1]	Discharge Effluent Limit
Trichloroethylene (TCE)	601	0.5 ug/l	5.0 ug/l
	624	2 ug/l	
	8260C[2]	see footnote	
Vinyl Chloride (chloroethane)	601	0.5 ug/l	2.0 ug/l
	624	2 ug/l	
	8260C[2]	see footnote	
Acetone	624.2	1.0 ug/l	Monitor Only
	1624	50 ug/l	
	8260C[2]	see footnote	
1,4 Dioxane	1624	50 ug/l	Monitor Only
	8260C[2]	see footnote	
[illegible]			
Total Phenols	624	1.0 ug/l	300 ug/l
	8260[2]	see footnote	
	625	1.0 ug/l	
	1625	1.0 ug/l	
	8260C[2]	see footnote	
	8270D[2]	see footnote	
[illegible]			
Pentachlorophenol (PCP)	604 (GCFID)	1.0 ug/l	1.0 ug/l
	625	5 ug/l	
	1625	5 ug/l	
	8270D[2] (SIM, ML=1.0)	see footnote	
Total Phthalates[3] (Phthalate esthers)	625	5 ug/l	3.0 ug/l
	8270D[2] (SIM, ML<=3.0)	see footnote	
Bis (2-Ethylhexyl) Phthalate	606	10 ug/l	6.0 ug/l
	625	5 ug/l	
	8270D[2]	see footnote	

CHAIN OF CUSTODY ATTACHMENT - EPA NPDES/RGP REQUIREMENTS
PART 2 of 2 (ACCUTEST)

PARAMETER	Minimum Levels and Test Methods METHOD	ML[1]	Discharge Effluent Limit
Total Group I Polynuclear Aromatic Hydrocarbons (PAH)	8270D[3]	see footnote	10.0 ug/l
Benzo (a) Anthracene	610-GC	10 ug/l	0.0038 ug/l (compliance limit = ML of test method used)
	625	5 ug/l	
	610-HPLC	0.05 ug/l	
	8270D[3]	see footnote	
Benzo(a)pyrene	625	40 ug/l	0.0038 ug/l (compliance limit = ML of test method used).
	610-HPLC	2 ug/l	
	8270D[3]	see footnote	
Benzo(b)fluoranthene	625	10 ug/l	0.0038 ug/l (compliance limit = ML of test method used)
	610-HPLC	0.1 ug/l	
	8270D[3]	see footnote	
Benzo(k)fluoranthene	625	10 ug/l	0.0038 ug/l (compliance limit = ML of test method used)
	610-HPLC	2 ug/l	
	8270D[3]	see footnote	
Chrysene	625	40 ug/l	0.0038 ug/l (compliance limit = ML of test method used)
	610-HPLC	5 ug/l	
	8270D[3]	see footnote	
Dibenzo(a,h)anthracene	625	10 ug/l	0.0038 ug/l (compliance limit = ML of test method used)
	610-HPLC	0.1 ug/l	
	8270D[3]	see footnote	
Indeno(1,2,3-cd)pyrene	625	10 ug/l	0.0038 ug/l (compliance limit = ML of test method used)
	610-HPLC	0.15 ug/l	
	8270D[3]	see footnote	

CHAIN OF CUSTODY ATTACHMENT - EPA NPDES RGP REQUIREMENTS PART 2 of 2 (ACCUTEST)

PARAMETER	Minimum Levels and Test methods METHOD	ML	Discharge Effluent Limit
Total Group II Polynuclear Aromatic Hydrocarbons	8270D[3]	see footnote	100 ug/l
Acenaphthene	610 GC/FID	1 ug/l	Limited as Total Group II PAHs
	625	1 ug/l	
	610 HPLC	0.5 ug/l	
	8270D[3]	see footnote	
Acenaphthylene	625	10 ug/l	Limited as Total Group II PAHs
	610 HPLC	0.2 ug/l	
	8270D[3]	see footnote	
Anthracene	625	10 ug/l	Limited as Total Group II PAHs
	610 HPLC	2 ug/l	
	8270D[3]	see footnote	
Benzo(g,h,i)perylene	625	5 ug/l	Limited as Total Group II PAHs
	610 HPLC	0.1 ug/l	
	8270D[3]	see footnote	
Fluoranthene	610 GC/FID	10 ug/l	Limited as Total Group II PAHs
	625	1 ug/l	
	610 HPLC	0.5 ug/l	
	8270D[3]	see footnote	
Fluorene	625	10 ug/l	Limited as Total Group II PAHs
	610 HPLC	0.1 ug/l	
	8270D[3]	see footnote	
Phenanthrene	625	5 ug/l	Limited as Total Group II PAHs
	610 HPLC	0.05 ug/l	
	8270D[3]	see footnote	
Pyrene	625	10 ug/l	Limited as Total Group II PAHs
	610 HPLC	0.05 ug/l	
	8270D[3]	see footnote	
[redacted]			
Total Arsenic (As)	ICP	5 ug/l	MA & NH = FW = 10 ug/l, MA & NH = SW = 36 ug/l
	Furnace-AA	2 ug/l	

CHAIN OF CUSTODY ATTACHMENT - EPA NPDES RGP REQUIREMENTS
PART 2 of 2 (ACCUTEST)

PARAMETER	Minimum Levels and Test Methods		Discharge Effluent Limit
	METHOD	ML[1]	

LEGEND:
RGP = Remediation General Permit
Flame AA = Flame Atomic Absorption
ICP = Inductively Coupled Plasma
Furnace AA = Furnace Atomic Absorption
FW = Freshwater
SW = Saltwater
MA = State of Massachusetts
NH = State of New Hampshire

FOOTNOTES:

1. Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B) Where a minimum level (ML) is listed but a test method is not specified, permittee may use any of the available methods approved for use under 40 CFR 136, including alternatives approved by this permit, that meets ML. See EPA's "Methods and Guidance for the Analysis of Water" at www.epa.gov/waterlawreadslog.nsf. Where a test method is specified but ML is not listed for that Method, the lowest ML for listed methods must be used before concentration can be considered as "non-detect".
2. For measuring volatile organic compounds, Method 8260C (or the latest version) may be used as a substitute for CWA Methods 624.2, 602, 624, or 1624. Method 8260C must be preceded by Method 5030 as the preparation method. However, any method changes must be accompanied by documented quality assurance quality control (QA/QC) test to prove that the analytical process can achieve the lower detection limits of Method 8260C. For TBA and TAME the EPA advises no acid as a preservative.
3. For measuring semi-volatile organic compounds, Method 8270D may be used as a substitute for Methods 610, 625, or 1625. Method 8270D must be preceded by Method 3520C as the sample preparation method. In other case, the quality control requirements of Method 3500B must be taken into account. The sample preparation method must be specified with data analysis records. Method 8270D may be modified to provide lower detection and quantitation limits using Selected Ion Monitoring (SIM). Any method changes must be accompanied by documented quality assurance quality control (QA/QC) test results to prove that the analytical process can achieve the lower detection limits of Method 8270D.
4. GC - gas chromatography.
5. GCMS -gas chromatography/ mass spectrometry
6. LC-high pressure liquid chromatography.
7. Flame Atomic Absorption.
8. For measuring fuel oxygenates, Method 602 must be modified to include a heated purge.
9. The sum of individual phthalate compounds.
10. In the November 2002 WQC, EPA has revised the definition of total PCBs for aquatic life as "total PCBs is the sum of all homologue, all isomer, all congener, or all Aroclor analyses.
11. Method 1668a (HRGC/HRMS) has been proposed by EPA and is currently being validated. When approval of the method is finalized, it will be approved for use with this general permit
12. Methods 6010b and 200.7 for metals may only be used when sample prepared with SW-846 digestion method, Method 3010.
13. Any value below the ML shall be reported as zero.
14. Analysis of the influent samples shall use the test methods with the MLs at or below limits where practicable.

Reza Tand

From: Sean Kennedy [seank@envirotrac.com]
Sent: Tuesday, October 04, 2005 12:31 PM
To: Reza Tand
Cc: Eric Simpson
Subject: Request for Quicker TATs - RGP NPDES Samples ETMA...
Importance: High

Reza,

Instead of 14 day TAT for the RGP NPDES samples, we will require a minimum of 7 day TATs. Due to reimbursement issues that arose with this new sampling procedure, we will need to adjust our COCs to identify what will be considered reimbursable vs. what parameters will not. The adjusted COCs will be submitted later today.

Here is a list of sites so far which require quicker TATs:

Stoughton 130 – sampled 9/26/05, picked up 9/28/05.
Needham 875 – sampled 9/28/05, picked up 9/29/05.

Thank you,

Sean P. Kennedy, P.G.
Project Manager
EnviroTrac Ltd.
1400 Providence Highway, Suite 2100
Norwood, MA 02062
P: 781.769.5005 F: 781-769-9345
Email: seank@envirotrac.com

EnviroTrac
Environmental Services
1400 Providence Highway, Suite 2100
Norwood, MA 02062
(781) 769-5005 (781) 769-9345 fax

Fax

To: Scott
From: Sean P. Kennedy
Fax: 508-481-7753
Pages: 10 (including cover sheet)
Phone:
Date: 9/29/05
Re: Needham RGP COC backup

☒ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Scott,

The courier left this essential paperwork behind for my Needham 875 Samples. Please attach these documents to COC once received.

Thanks,
Sean

3.1 3

M51230: Chain of Custody
Page 14 of 15

EnviroTrac
Environmental Services
1400 Providence Highway, Suite 2100
Norwood, MA 02062
(781) 769-5005 (781) 769-9345 fax

Fax

To: Reza
From: Sean P. Kennedy
Fax: 508-481-7753
Pages: 4 (including cover sheet)
Phone:
Date: 10/6/05
Re: Needham 875 - RGP NPDES Samples

☒ Urgent ☒ For Review ☐ Please Comment ☒ Please Reply ☐ Please Recycle

Reza,

Please review the revised chains & let me know if there are any questions. Still not sure what QA/QC documentation Newfields wants Accutest to provide - if you find out, please let me know. May be too late if trip blanks, etc. are the QA/QC info they want.

Thanks,
Sean

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: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN152-MB	N4262.D	1	10/05/05	ZW	n/a	n/a	MSN152

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

M51230-1A

CAS No.	Compound	Result	RL	Units	Q
994-05-8	tert-Amyl Methyl Ether	ND	2.0	ug/l	
75-65-0	Tert Butyl Alcohol	ND	100	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	105%	82-127%
2037-26-5	Toluene-D8	103%	88-112%
460-00-4	4-Bromofluorobenzene	106%	80-118%

Method Blank Summary

Job Number: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG2132-MB	G53450.D	1	10/07/05	AA	n/a	n/a	MSG2132

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

M51230-1

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	105%	82-127%
2037-26-5	Toluene-D8	100%	88-112%
460-00-4	4-Bromofluorobenzene	102%	80-118%

Blank Spike/Blank Spike Duplicate Summary

Job Number: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN152-BS	N4259.D	1	10/05/05	ZW	n/a	n/a	MSN152
MSN152-BSD	N4260.D	1	10/05/05	ZW	n/a	n/a	MSN152

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

M51230-1A

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
994-05-8	tert-Amyl Methyl Ether	50	49.9	100	50.1	100	0	61-139/25
75-65-0	Tert Butyl Alcohol	500	485	97	484	97	0	42-161/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	105%	110%	82-127%
2037-26-5	Toluene-D8	102%	101%	88-112%
460-00-4	4-Bromofluorobenzene	99%	94%	80-118%

Blank Spike Summary

Job Number: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG2132-BS	G53448.D	1	10/07/05	AA	n/a	n/a	MSG2132

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

M51230-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	37.7	75	31-150
71-43-2	Benzene	50	50.2	100	73-127
56-23-5	Carbon tetrachloride	50	59.2	118	70-141
95-50-1	1,2-Dichlorobenzene	50	52.7	105	75-125
541-73-1	1,3-Dichlorobenzene	50	52.0	104	76-124
106-46-7	1,4-Dichlorobenzene	50	52.2	104	76-127
75-34-3	1,1-Dichloroethane	50	51.9	104	70-136
75-35-4	1,1-Dichloroethene	50	59.0	118	65-142
156-59-2	cis-1,2-Dichloroethene	50	53.9	108	72-130
123-91-1	1,4-Dioxane	250	198	79	50-140
100-41-4	Ethylbenzene	50	54.9	110	77-126
1634-04-4	Methyl Tert Butyl Ether	50	53.7	107	65-135
75-09-2	Methylene chloride	50	58.7	117	67-136
127-18-4	Tetrachloroethene	50	56.0	112	66-142
108-88-3	Toluene	50	51.4	103	76-124
71-55-6	1,1,1-Trichloroethane	50	54.8	110	71-137
79-00-5	1,1,2-Trichloroethane	50	51.7	103	68-134
79-01-6	Trichloroethene	50	54.8	110	71-130
75-01-4	Vinyl chloride	50	69.1	138	46-151
1330-20-7	Xylene (total)	150	171	114	78-129

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	82-127%
2037-26-5	Toluene-D8	100%	88-112%
460-00-4	4-Bromofluorobenzene	100%	80-118%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M51137-5MS	N4279.D	5	10/05/05	ZW	n/a	n/a	MSN152
M51137-5MSD	N4280.D	5	10/05/05	ZW	n/a	n/a	MSN152
M51137-5	N4272.D	1	10/05/05	ZW	n/a	n/a	MSN152

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

M51230-1A

CAS No.	Compound	M51137-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
994-05-8	tert-Amyl Methyl Ether	ND		250	273	109	266	106	3	54-144/20
75-65-0	Tert Butyl Alcohol	ND		2500	2590	104	2440	98	6	31-170/29

CAS No.	Surrogate Recoveries	MS	MSD	M51137-5	Limits
1868-53-7	Dibromofluoromethane	115%	102%	111%	82-127%
2037-26-5	Toluene-D8	104%	102%	99%	88-112%
460-00-4	4-Bromofluorobenzene	98%	101%	107%	80-118%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M51126-3MS	G53468.D	5	10/07/05	AA	n/a	n/a	MSG2132
M51126-3MSD	G53469.D	5	10/07/05	AA	n/a	n/a	MSG2132
M51126-3	G53459.D	1	10/07/05	AA	n/a	n/a	MSG2132

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

M51230-1

CAS No.	Compound	M51126-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	259	104	227	91	13	30-150/35
71-43-2	Benzene	ND		250	268	107	253	101	6	67-132/20
56-23-5	Carbon tetrachloride	ND		250	337	135	307	123	9	63-144/20
95-50-1	1,2-Dichlorobenzene	ND		250	267	107	264	106	1	75-123/20
541-73-1	1,3-Dichlorobenzene	ND		250	269	108	259	104	4	75-122/20
106-46-7	1,4-Dichlorobenzene	ND		250	272	109	258	103	5	77-125/20
75-34-3	1,1-Dichloroethane	ND		250	284	114	267	107	6	66-141/20
75-35-4	1,1-Dichloroethene	ND		250	311	124	286	114	8	57-150/20
156-59-2	cis-1,2-Dichloroethene	ND		250	284	114	272	109	4	69-133/20
123-91-1	1,4-Dioxane	ND		1250	1050	84	1020	82	3	43-141/32
100-41-4	Ethylbenzene	ND		250	287	115	269	108	6	72-129/20
1634-04-4	Methyl Tert Butyl Ether	ND		250	281	112	270	108	4	61-137/20
75-09-2	Methylene chloride	ND		250	314	126	305	122	3	64-143/20
127-18-4	Tetrachloroethene	ND		250	281	112	266	106	5	57-145/20
108-88-3	Toluene	ND		250	281	112	260	104	8	69-129/20
71-55-6	1,1,1-Trichloroethane	ND		250	315	126	283	113	11	65-144/20
79-00-5	1,1,2-Trichloroethane	ND		250	269	108	263	105	2	63-138/20
79-01-6	Trichloroethene	ND		250	302	121	273	109	10	67-132/20
75-01-4	Vinyl chloride	ND		250	415	166* [a]	380	152* [a]	9	39-150/23
1330-20-7	Xylene (total)	ND		750	880	117	836	111	5	72-133/20

CAS No.	Surrogate Recoveries	MS	MSD	M51126-3	Limits
1868-53-7	Dibromofluoromethane	108%	106%	103%	82-127%
2037-26-5	Toluene-D8	103%	102%	100%	88-112%
460-00-4	4-Bromofluorobenzene	97%	98%	99%	80-118%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

Volatile Surrogate Recovery Summary

Job Number: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, 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
M51230-1	G53458.D	101.0	100.0	101.0
M51230-1	G53454.D	94.0	97.0	94.0
M51230-1A	N4273.D	104.0	105.0	106.0
M51126-3MS	G53468.D	108.0	103.0	97.0
M51126-3MSD	G53469.D	106.0	102.0	98.0
M51137-5MS	N4279.D	115.0	104.0	98.0
M51137-5MSD	N4280.D	102.0	102.0	101.0
MSG2132-BS	G53448.D	102.0	100.0	100.0
MSG2132-MB	G53450.D	105.0	100.0	102.0
MSN152-BS	N4259.D	105.0	102.0	99.0
MSN152-BSD	N4260.D	110.0	101.0	94.0
MSN152-MB	N4262.D	105.0	103.0	106.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	82-127%
S2 = Toluene-D8	88-112%
S3 = 4-Bromofluorobenzene	80-118%

GC/MS Semi-volatiles

5

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: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9768-MB	E24657.D	1	10/11/05	PN	10/05/05	OP9768	MSE1290

The QC reported here applies to the following samples: Method: SW846 8270C

M51230-1

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	ug/l	
88-75-5	2-Nitrophenol	ND*	10	ug/l	
100-02-7	4-Nitrophenol	ND	20	ug/l	
108-95-2	Phenol	ND	5.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	ug/l	
85-68-7	Butyl benzyl phthalate	ND	10	ug/l	
84-74-2	Di-n-butyl phthalate	ND	10	ug/l	
117-84-0	Di-n-octyl phthalate	ND	10	ug/l	
84-66-2	Diethyl phthalate	ND	10	ug/l	
131-11-3	Dimethyl phthalate	ND	10	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	54%	10-120%
4165-62-2	Phenol-d5	34%	10-120%
118-79-6	2,4,6-Tribromophenol	87%	31-123%
4165-60-0	Nitrobenzene-d5	78%	32-120%
321-60-8	2-Fluorobiphenyl	76%	32-120%
1718-51-0	Terphenyl-d14	83%	33-123%

Method Blank Summary

Job Number: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9772-MB	F16281.D	1	10/12/05	PN	10/07/05	OP9772	MSF887

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

M51230-1B

CAS No.	Compound	Result	RL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0	ug/l	
83-32-9	Acenaphthene	ND	0.10	ug/l	
208-96-8	Acenaphthylene	ND	0.10	ug/l	
120-12-7	Anthracene	ND	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	ug/l	
218-01-9	Chrysene	ND	0.10	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	ug/l	
206-44-0	Fluoranthene	ND	0.10	ug/l	
86-73-7	Fluorene	ND	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.20	ug/l	
91-20-3	Naphthalene	ND	0.10	ug/l	
85-01-8	Phenanthrene	ND	0.10	ug/l	
129-00-0	Pyrene	ND	0.10	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	42%	10-120%
4165-62-2	Phenol-d5	28%	10-120%
118-79-6	2,4,6-Tribromophenol	79%	23-135%
4165-60-0	Nitrobenzene-d5	52%	30-120%
321-60-8	2-Fluorobiphenyl	61%	25-120%
1718-51-0	Terphenyl-d14	71%	24-132%

Blank Spike Summary

Job Number: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9768-BS	E24658.D	1	10/11/05	PN	10/05/05	OP9768	MSE1290

The QC reported here applies to the following samples: Method: SW846 8270C

M51230-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	100	75.6	76	50-120
59-50-7	4-Chloro-3-methyl phenol	100	73.0	73	56-120
120-83-2	2,4-Dichlorophenol	100	76.0	76	56-120
105-67-9	2,4-Dimethylphenol	100	62.9	63	37-120
51-28-5	2,4-Dinitrophenol	100	83.9	84	27-120
534-52-1	4,6-Dinitro-o-cresol	100	87.0	87	36-125
88-75-5	2-Nitrophenol	100	85.8	86	54-120
100-02-7	4-Nitrophenol	100	50.3	50	7-120
108-95-2	Phenol	100	42.9	43	17-120
88-06-2	2,4,6-Trichlorophenol	100	81.3	81	53-120
85-68-7	Butyl benzyl phthalate	50	25.0	50	27-120
84-74-2	Di-n-butyl phthalate	50	31.6	63	47-120
117-84-0	Di-n-octyl phthalate	50	37.4	75	60-123
84-66-2	Diethyl phthalate	50	21.2	42	8-120
131-11-3	Dimethyl phthalate	50	8.1	16	1-120
117-81-7	bis(2-Ethylhexyl)phthalate	50	36.7	73	61-120

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	59%	10-120%
4165-62-2	Phenol-d5	39%	10-120%
118-79-6	2,4,6-Tribromophenol	93%	31-123%
4165-60-0	Nitrobenzene-d5	80%	32-120%
321-60-8	2-Fluorobiphenyl	81%	32-120%
1718-51-0	Terphenyl-d14	80%	33-123%

Blank Spike/Blank Spike Duplicate Summary

Job Number: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9772-BS	F16282.D	1	10/12/05	PN	10/07/05	OP9772	MSF887
OP9772-BSD	F16283.D	1	10/12/05	PN	10/07/05	OP9772	MSF887

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

M51230-1B

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
87-86-5	Pentachlorophenol	100	71.5	72	70.7	71	1	53-111/30
83-32-9	Acenaphthene	50	26.6	53	28.1	56	5	47-120/30
208-96-8	Acenaphthylene	50	22.2	44* [a]	23.3	47* [a]	5	49-120/30
120-12-7	Anthracene	50	30.8	62	32.3	65	5	55-120/30
56-55-3	Benzo(a)anthracene	50	32.9	66	34.2	68	4	50-129/30
50-32-8	Benzo(a)pyrene	50	28.4	57	30.1	60	6	57-120/30
205-99-2	Benzo(b)fluoranthene	50	29.4	59* [a]	30.2	60* [a]	3	62-120/30
191-24-2	Benzo(g,h,i)perylene	50	30.9	62	32.4	65	5	57-127/30
207-08-9	Benzo(k)fluoranthene	50	29.6	59	31.4	63	6	51-120/30
218-01-9	Chrysene	50	35.9	72	37.1	74	3	54-120/30
53-70-3	Dibenzo(a,h)anthracene	50	34.5	69	35.9	72	4	45-144/30
206-44-0	Fluoranthene	50	31.4	63	32.9	66	5	51-121/30
86-73-7	Fluorene	50	26.6	53* [a]	27.9	56	5	56-120/30
193-39-5	Indeno(1,2,3-cd)pyrene	50	30.6	61	32.2	64	5	54-121/30
91-57-6	2-Methylnaphthalene	50	24.0	48	25.2	50	5	40-120/30
91-20-3	Naphthalene	50	24.5	49	25.8	52	5	37-120/30
85-01-8	Phenanthrene	50	29.8	60	31.2	62	5	51-120/30
129-00-0	Pyrene	50	30.9	62	32.2	64	4	45-120/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	50%	51%	10-120%
4165-62-2	Phenol-d5	34%	35%	10-120%
118-79-6	2,4,6-Tribromophenol	88%	83%	23-135%
4165-60-0	Nitrobenzene-d5	58%	59%	30-120%
321-60-8	2-Fluorobiphenyl	65%	66%	25-120%
1718-51-0	Terphenyl-d14	70%	69%	24-132%

(a) Outside control limits. Refer to OP9768(full scan 8270) for acceptable spike recoveries.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9768-MS	E24660.D	1	10/11/05	PN	10/05/05	OP9768	MSE1290
OP9768-MSD	E24661.D	1	10/11/05	PN	10/05/05	OP9768	MSE1290
M51226-1	E24676.D	1	10/11/05	PN	10/05/05	OP9768	MSE1290

The QC reported here applies to the following samples: Method: SW846 8270C

M51230-1

CAS No.	Compound	M51226-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND		105	83.3	79	83.6	75	0	43-120/24
59-50-7	4-Chloro-3-methyl phenol	ND		105	89.3	85	90.4	81	1	52-120/20
120-83-2	2,4-Dichlorophenol	ND		105	88.7	84	87.8	79	1	49-120/23
105-67-9	2,4-Dimethylphenol	ND		105	83.5	79	92.1	83	10	1-120/33
51-28-5	2,4-Dinitrophenol	ND		105	66.1	63	94.3	85	35	29-124/50
534-52-1	4,6-Dinitro-o-cresol	ND		105	75.3	72	94.5	85	23	41-126/37
88-75-5	2-Nitrophenol	ND		105	88.2	84	86.9	78	1	48-120/31
100-02-7	4-Nitrophenol	ND		105	54.2	51	55.4	50	2	7-120/22
108-95-2	Phenol	ND		105	44.4	42	46.6	42	5	13-120/25
88-06-2	2,4,6-Trichlorophenol	ND		105	94.1	89	94.7	85	1	44-120/26
85-68-7	Butyl benzyl phthalate	ND		52.6	27.0	51	35.9	65	28	28-120/29
84-74-2	Di-n-butyl phthalate	ND		52.6	31.9	61	41.0	74	25	46-120/25
117-84-0	Di-n-octyl phthalate	ND		52.6	34.6	66	42.9	77	21	57-124/26
84-66-2	Diethyl phthalate	ND		52.6	25.9	49	36.4	66	34	12-120/39
131-11-3	Dimethyl phthalate	ND		52.6	15.1	29	25.5	46	51* [a]	1-120/50
117-81-7	bis(2-Ethylhexyl)phthalate	ND		52.6	33.4	63	41.1	74	21	53-125/25

CAS No.	Surrogate Recoveries	MS	MSD	M51226-1	Limits
367-12-4	2-Fluorophenol	60%	59%	51%	10-120%
4165-62-2	Phenol-d5	45%	43%	38%	10-120%
118-79-6	2,4,6-Tribromophenol	96%	92%	84%	31-123%
4165-60-0	Nitrobenzene-d5	33%	74%	11%* [b]	32-120%
321-60-8	2-Fluorobiphenyl	71%	69%	64%	32-120%
1718-51-0	Terphenyl-d14	60%	60%	48%	33-123%

(a) High RPD due to possible matrix interference and/or sample non-homogeneity.
(b) Outside control limits due to possible matrix interfernce. Confirmed by MS/MSD.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9772-MS	F16286.D	1	10/12/05	PN	10/07/05	OP9772	MSF887
OP9772-MSD	F16287.D	1	10/12/05	PN	10/07/05	OP9772	MSF887
M51226-1	F16288.D	1	10/12/05	PN	10/05/05	OP9772	MSF887

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

M51230-1B

CAS No.	Compound	M51226-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
87-86-5	Pentachlorophenol	ND		105	69.7	66	84.0	80	19	5-137/52
83-32-9	Acenaphthene	ND		52.6	22.2	42* a	32.1	61	36* b	49-120/20
208-96-8	Acenaphthylene	ND		52.6	17.0	32* a	24.8	47* a	37* b	50-120/22
120-12-7	Anthracene	ND		52.6	22.4	43* a	33.1	63	39* b	58-120/20
56-55-3	Benzo(a)anthracene	ND		52.6	24.4	46* a	36.0	68	38* b	50-132/20
50-32-8	Benzo(a)pyrene	ND		52.6	20.5	39* a	30.2	57	38* b	51-120/22
205-99-2	Benzo(b)fluoranthene	ND		52.6	20.3	39* a	29.2	55* a	36* b	67-120/20
191-24-2	Benzo(g,h,i)perylene	ND		52.6	24.9	47* a	36.4	69	38* b	63-121/20
207-08-9	Benzo(k)fluoranthene	ND		52.6	18.7	36* a	28.1	53* a	40* b	54-120/25
218-01-9	Chrysene	ND		52.6	24.9	47* a	37.5	71	40* b	59-120/20
53-70-3	Dibenzo(a,h)anthracene	ND		52.6	29.4	56	42.9	82	37* b	46-146/20
206-44-0	Fluoranthene	ND		52.6	22.1	42* a	31.8	60	36* b	58-120/20
86-73-7	Fluorene	ND		52.6	21.7	41* a	31.1	59* a	36* b	62-120/20
193-39-5	Indeno(1,2,3-cd)pyrene	ND		52.6	25.5	48* a	37.0	70	37* b	52-124/20
91-57-6	2-Methylnaphthalene	ND		52.6	55.1	105	74.6	142* a	30* b	44-120/20
91-20-3	Naphthalene	ND		52.6	57.6	109	72.5	138* a	23* b	41-120/20
85-01-8	Phenanthrene	ND		52.6	23.1	44* a	33.0	63	35* b	51-120/21
129-00-0	Pyrene	ND		52.6	21.7	41* a	31.7	60	37* b	48-121/20

CAS No.	Surrogate Recoveries	MS	MSD	M51226-1	Limits
367-12-4	2-Fluorophenol	47%	56%	45%	10-120%
4165-62-2	Phenol-d5	34%	41%	31%	10-120%
118-79-6	2,4,6-Tribromophenol	73%	88%	76%	23-135%
4165-60-0	Nitrobenzene-d5	22%* d	56%	9%* c	30-120%
321-60-8	2-Fluorobiphenyl	45%	56%	43%	25-120%
1718-51-0	Terphenyl-d14	39%	50%	40%	24-132%

(a) Outside control limits. Refer to OP9768(full scan 8270) for acceptable spike recoveries.
(b) High RPD due to possible matrix interference and/or sample non-homogeneity.
(c) Outside control limits due to matrix interference. Confirmed by reanalysis.
(d) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

Semivolatile Surrogate Recovery Summary

Job Number: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Method: SW846 8270C Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
M51230-1	F16241.D	43.0	28.0	77.0	62.0	65.0	45.0
OP9768-BS	E24658.D	59.0	39.0	93.0	80.0	81.0	80.0
OP9768-MB	E24657.D	54.0	34.0	87.0	78.0	76.0	83.0
OP9768-MS	E24660.D	60.0	45.0	96.0	33.0	71.0	60.0
OP9768-MSD	E24661.D	59.0	43.0	92.0	74.0	69.0	60.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-120%
S2 = Phenol-d5	10-120%
S3 = 2,4,6-Tribromophenol	31-123%
S4 = Nitrobenzene-d5	32-120%
S5 = 2-Fluorobiphenyl	32-120%
S6 = Terphenyl-d14	33-123%

Semivolatile Surrogate Recovery Summary

Job Number: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Method: SW846 8270C BY SIM Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
M51230-1B	F16284.D	37.0	26.0	64.0	49.0	53.0	35.0
OP9772-BS	F16282.D	50.0	34.0	88.0	58.0	65.0	70.0
OP9772-BSD	F16283.D	51.0	35.0	83.0	59.0	66.0	69.0
OP9772-MB	F16281.D	42.0	28.0	79.0	52.0	61.0	71.0
OP9772-MS	F16286.D	47.0	34.0	73.0	22.0* [a]	45.0	39.0
OP9772-MSD	F16287.D	56.0	41.0	88.0	56.0	56.0	50.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-120%
S2 = Phenol-d5	10-120%
S3 = 2,4,6-Tribromophenol	23-135%
S4 = Nitrobenzene-d5	30-120%
S5 = 2-Fluorobiphenyl	25-120%
S6 = Terphenyl-d14	24-132%

(a) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

GC Volatiles

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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: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9741-MB	YZ28782.D	1	10/03/05	CZ	10/01/05	OP9741	GYZ1197

The QC reported here applies to the following samples: Method: EPA 504

M51230-1

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.015	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	60%	26-158%

Blank Spike Summary

Job Number: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9741-BS	YZ28760.D	1	10/02/05	CZ	10/01/05	OP9741	GYZ1197

The QC reported here applies to the following samples: Method: EPA 504

M51230-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.071	0.082	115	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	57%	26-158%

6.2

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Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9741-MS	YZ28761.D	1	10/02/05	CZ	10/01/05	OP9741	GYZ1197
OP9741-MSD	YZ28762.D	1	10/02/05	CZ	10/01/05	OP9741	GYZ1197
M51307-1	YZ28763.D	1	10/03/05	CZ	10/01/05	OP9741	GYZ1197

The QC reported here applies to the following samples: Method: EPA 504

M51230-1

CAS No.	Compound	M51307-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	ND		0.071	0.095	134	0.094	132	1	65-135/30

CAS No.	Surrogate Recoveries	MS	MSD	M51307-1	Limits
460-00-4	Bromofluorobenzene (S)	58%	53%	60%	26-158%

Volatile Surrogate Recovery Summary

Job Number: M51230
Account: SHELLWIC Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Method: EPA 504 Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
M51230-1	YZ28770.D	56.0
OP9741-BS	YZ28760.D	57.0
OP9741-MB	YZ28782.D	60.0
OP9741-MS	YZ28761.D	58.0
OP9741-MSD	YZ28762.D	53.0

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	26-158%

(a) Recovery from GC signal #2

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Metals Analysis

QC Data Summaries

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Includes the following where applicable:

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M51230
Account: SHELLWIC - Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

QC Batch ID: MP7699
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/03/06

Metal	RL	IDL	MB raw	final
Aluminum	200	14		
Antimony	6.0	1.6	anr	
Arsenic	5.0	2.3	-2.2	<5.0
Barium	200	1.7	anr	
Beryllium	4.0	.18		
Boron	100	1.2		
Cadmium	4.0	.31	anr	
Calcium	5000	4.7		
Chromium	10	.53	anr	
Cobalt	50	.47		
Copper	25	2.8	anr	
Iron	100	14	anr	
Lead	5.0	1.9	anr	
Magnesium	5000	5.3		
Manganese	15	.17	anr	
Molybdenum	100	.92		
Nickel	40	.65	anr	
Potassium	5000	31		
Selenium	10	2.7	anr	
Silver	5.0	.53	anr	
Sodium	5000	110		
Strontium	10	.22		
Thallium	10	2.9		
Tin	100	9.4		
Titanium	50	1.3		
Vanadium	50	2.4		
Zinc	20	1.2	anr	

Associated samples MP7699: M51230-1

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

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MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M51230
Account: SHELLWIC - Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

QC Batch ID: MP7699
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/03/05 10/03/05

Metal	M51172-1 Original	MS	Spikelot MPIRWS2	% Rec	QC Limits	M51172-1 Original	DUP	RPD	QC Limits
Aluminum									
Antimony	anr								
Arsenic	30.8	532	500	100.2	75-125	30.8	32.8	6.3	0-20
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	anr								

Associated samples MP7699: M51230-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M51230
Account: SHELLWIC - Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

QC Batch ID: MP7699
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/03/06

Metal	BSP Result	Spikelot MPIRWS2	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	493	500	98.6	80-120
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP7699: M51230-1

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

7.1.3

7

SERIAL DILUTION RESULTS SUMMARY

Login Number: M51230
Account: SHELLWIC - Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

QC Batch ID: MP7699
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/03/05

Metal	M51172-1 Original	SDL 1:5	RPD	QC Limits
Aluminum				
Antimony	anr			
Arsenic	30.8	17.0	44.9 (a)	0-10
Barium	anr			
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP7699: M51230-1

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

7.1.4

7

General Chemistry

QC Data Summaries

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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: M51230
Account: SHELLWIC - Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Cyanide	GP6011/GN17989	0.010	<0.010	mg/l	0.1	0.102	102.0	90-110%
Cyanide	GP6011/GN17989			mg/l	0.2	0.206	103.0	90-110%

Associated Samples:
Batch GP6011: M51230-1

8.1

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DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M51230
Account: SHELLWIC - Shell Oil
Project: ENVTRAC:98997812 (RELMBMA) 875 Highland Ave., Needham, MA

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Cyanide	GP6011/GN17989	M51100-2	mg/l	<0.010	<0.010	0.0	0-20%

Associated Samples:
Batch GP6011: M51230-1

8.2

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MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M51230
Account: SHELLWIC - Shell Oil
Project: ENVTRAC:98997812 (REIMBMA) 875 Highland Ave., Needham, MA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Cyanide	GP6011/GN17989	M51100-2	mg/l	<0.010	0.1	0.10	100.0	75-125%

Associated Samples:
Batch GP6011: M51230-1

8.3

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