

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
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Monday, March 26, 2012

Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

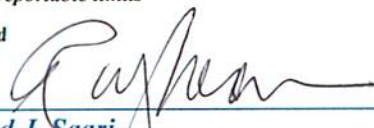
ProjectName: GW Eel River **Comments:**
Project Number: DW-1
Collection Date: 03/12/12 **Collection Time:** 11:30
Sampled By: KT
Lab Order Number: WW-120509
Date Received: 03/12/12

Sample Type	Sample Time	Sample Date	Comments			
DW-1 A	11:30	03/12/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	68	6.0	03/16/12	KB	2540 C
Total Organic Carbon*	mg/L	<0.5*	0.5	03/14/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	03/19/12	RIA*	*
Total Iron	mg/L	0.12	0.01	03/16/12	MC	200.7
Mercury*	mg/L	<0.0005*	0.0005	03/16/12	RIA*	245.1
Boron	mg/L	0.019	0.010	03/16/12	MC	200.7
Copper	mg/L	BRL	0.003	03/16/12	MC	200.7
Nitrate-N	mg/L	1.16	0.01	03/13/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/13/12	LL	300.0
Ammonia-N *	mg/L	0.04*	0.02	03/21/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	03/20/12	MC	SM4500 NH3 C
Chloride	mg/L	10.1	3.0	03/13/12	LL	300.0
Total Phosphorous (P)	mg/L	0.014	0.005	03/14/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	03/20/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	03/14/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	1.20	NA	03/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	BRL	NA	03/26/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.007	0.005	03/13/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	03/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	03/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<1.36	NA	03/26/12	MC	Calculation

$$TN = DON(0.1) + PON(0.1) + NH_4(0.04) + NO_3(1.16) + NO_2(0.002) = 1.402$$

BRL=below reportable limits

*see attached

By: 

Ronald J. Saari
 Laboratory Director

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.
Attn: Mr. Ron Saari
8 Jan Sebastian Drive
Sandwich, MA 02563

Date Received: 3/13/12
Date Reported: 3/22/12
P.O. #:
Work Order #: 1203-05106

DESCRIPTION: PLYMOUTH ENV.

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.
The Certificate of Analysis shall not be reproduced except in full, without written approval of R.I. Analytical.
Results relate only to samples submitted to the laboratory for analysis.
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:



Sharon Baker
MIS / Data Reporting Manager

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/13/12

Work Order #: 1203-05106

PLYMOUTH ENV.

Sample # 001

SAMPLE DESCRIPTION: WW-120509 DW-1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2012 @ 11:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.04	0.02	mg/l	SM 4500-NH3 C	3/21/12	EVH
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	3/14/12	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	3/14/12	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/13/12

Work Order #: 1203-05106

PLYMOUTH ENV.

Sample # 001

SAMPLE DESCRIPTION: WW-120509 DW-1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2012 @ 11:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Styrene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Toluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
Acetone	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	3/19/12	KAC
Surrogates			RANGE	SW-846 8260B	3/19/12	KAC
Dibromofluoromethane	102		86-118%	SW-846 8260B	3/19/12	KAC

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/13/12

Work Order #: 1203-05106

PLYMOUTH ENV.

Sample # 001

SAMPLE DESCRIPTION: WW-120509 DW-1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2012 @ 11:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Toluene-d8	103		88-110%	SW-846 8260B	3/19/12	KAC
4-Bromofluorobenzene	95		86-115%	SW-846 8260B	3/19/12	KAC
1,2 Dichloroethane-d4	103		80-120%	SW-846 8260B	3/19/12	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	3/16/12	SUB

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

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Sandwich, MA 02563
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FAX (508)888-6446

Monday, March 26, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: GW Eel River

Comments:

Project Number: A19

Collection Date: 03/12/12 Collection Time: 12:00

Sampled By: KT

Lab Order Number: WW-120510

Date Received: 03/12/12

Sample Type	Sample Time	Sample Date	Comments			
A19 A	12:00	03/12/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	62	6.0	03/16/12	KB	2540 C
Total Organic Carbon*	mg/L	<0.5*	0.5	03/14/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	03/19/12	RIA*	*
Total Iron	mg/L	0.06	0.01	03/16/12	MC	200.7
Mercury*	mg/L	<0.0005*	0.0005	03/16/12	RIA*	245.1
Boron	mg/L	0.017	0.010	03/16/12	MC	200.7
Copper	mg/L	BRL	0.003	03/16/12	MC	200.7
Nitrate-N	mg/L	1.14	0.01	03/13/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/13/12	LL	300.0
Ammonia-N *	mg/L	0.03*	0.02	03/21/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.54	0.2	03/20/12	MC	SM4500 NH3 C
Chloride	mg/L	10.0	3.0	03/13/12	LL	300.0
Total Phosphorous (P)	mg/L	0.012	0.005	03/14/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.25	0.2	03/20/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	03/14/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	1.17	NA	03/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.22	NA	03/26/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.007	0.005	03/13/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	03/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.29	NA	03/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	1.39	NA	03/26/12	MC	Calculation

$$TN = DON(0.22) + PON(0.29) + NH_4(0.03) + NO_3(1.14) + NO_2(0.002) = 1.682$$

BRL=below reportable limits

*see attached

By: 

Ronald J. Saari

Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/13/12

Work Order #: 1203-05106

PLYMOUTH ENV.

Sample # 002

SAMPLE DESCRIPTION: WW-120510 A-19

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2012 @ 12:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.03	0.02	mg/l	SM 4500-NH3 C	3/21/12	EVH
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	3/14/12	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	3/14/12	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/13/12

Work Order #: 1203-05106

PLYMOUTH ENV.

Sample # 002

SAMPLE DESCRIPTION: WW-120510 A-19

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2012 @ 12:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Styrene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Toluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
Acetone	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	3/19/12	KAC
Surrogates			RANGE	SW-846 8260B	3/19/12	KAC
Dibromofluoromethane	102		86-118%	SW-846 8260B	3/19/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/13/12

Work Order #: 1203-05106

PLYMOUTH ENV.

Sample # 002

SAMPLE DESCRIPTION: WW-120510 A-19

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2012 @ 12:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Toluene-d8	104		88-110%	SW-846 8260B	3/19/12	KAC
4-Bromofluorobenzene	94		86-115%	SW-846 8260B	3/19/12	KAC
1,2 Dichloroethane-d4	105		80-120%	SW-846 8260B	3/19/12	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	3/16/12	SUB

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Monday, March 26, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: GW Eel River

Comments:

Project Number: 2SR

Collection Date: 03/12/12 Collection Time: 13:05

Sampled By: KT

Lab Order Number: WW-120511

Date Received: 03/12/12

Sample Type	Sample Time	Sample Date	Comments			
2SR A	13:05	03/12/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	92	6.0	03/16/12	KB	2540 C
Total Organic Carbon*	mg/L	<0.5*	0.5	03/14/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	03/19/12	RIA*	*
Total Iron	mg/L	0.03	0.01	03/16/12	MC	200.7
Mercury*	mg/L	<0.0005*	0.0005	03/16/12	RIA*	245.1
Boron	mg/L	BRL	0.010	03/16/12	MC	200.7
Copper	mg/L	BRL	0.003	03/16/12	MC	200.7
Nitrate-N	mg/L	0.51	0.01	03/13/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/13/12	LL	300.0
Ammonia-N *	mg/L	<0.02*	0.02	03/21/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.40	0.2	03/20/12	MC	SM4500 NH3 C
Chloride	mg/L	38.4	3.0	03/13/12	LL	300.0
Total Phosphorous (P)	mg/L	BRL	0.005	03/14/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	03/20/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	03/14/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.51	NA	03/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	BRL	NA	03/26/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	03/13/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	03/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.20	NA	03/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.71	NA	03/26/12	MC	Calculation

$$TN = \text{DON}(0.1) + \text{PON}(0.1) + \text{NH}_4(0.01) + \text{NO}_3(0.51) + \text{NO}_2(0.002) = 0.722$$

BRL=below reportable limits

*see attached

By:

Ronald J. Saari
Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/13/12

Work Order #: 1203-05106

PLYMOUTH ENV.

Sample # 003

SAMPLE DESCRIPTION: WW-120511 2SR

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2012 @ 13:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM 4500-NH3 C	3/21/12	EVH
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	3/14/12	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	3/14/12	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/13/12

Work Order #: 1203-05106

PLYMOUTH ENV.

Sample # 003

SAMPLE DESCRIPTION: WW-120511 2SR

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2012 @ 13:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Styrene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Toluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
Acetone	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	3/19/12	KAC
Surrogates			RANGE	SW-846 8260B	3/19/12	KAC
Dibromofluoromethane	103		86-118%	SW-846 8260B	3/19/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/13/12

Work Order #: 1203-05106

PLYMOUTH ENV.

Sample # 003

SAMPLE DESCRIPTION: WW-120511 2SR

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2012 @ 13:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Toluene-d8	104		88-110%	SW-846 8260B	3/19/12	KAC
4-Bromofluorobenzene	95		86-115%	SW-846 8260B	3/19/12	KAC
1,2 Dichloroethane-d4	104		80-120%	SW-846 8260B	3/19/12	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	3/16/12	SUB

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Monday, April 02, 2012

Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: GW Eel River

Comments:

Project Number: 2DR

Collection Date: 03/12/12 **Collection Time:** 13:40

Sampled By: KT

Lab Order Number: WW-120512

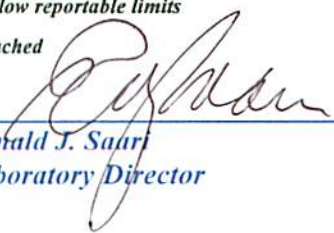
Date Received: 03/12/12

Sample Type	Sample Time	Sample Date	Comments			
2DR A	13:40	03/12/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	156	6.0	03/16/12	KB	2540 C
Total Organic Carbon*	mg/L	<0.5*	0.5	03/14/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	03/19/12	RIA*	*
Total Iron	mg/L	18.2	0.01	03/16/12	MC	200.7
Mercury*	mg/L	<0.0005*	0.0005	03/16/12	RIA*	245.1
Boron	mg/L	0.060	0.010	03/16/12	MC	200.7
Copper	mg/L	BRL	0.003	03/16/12	MC	200.7
Nitrate-N	mg/L	0.10	0.01	03/13/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/13/12	LL	300.0
Ammonia-N *	mg/L	0.04*	0.02	03/21/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.35	0.2	03/29/12	MC	SM4500 NH3 C
Chloride	mg/L	51.9	3.0	03/13/12	LL	300.0
Total Phosphorous (P)	mg/L	0.11	0.005	03/14/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.2	03/29/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	0.63*	0.5	03/14/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.14	NA	03/29/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.17	NA	03/29/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	03/13/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	03/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.14	NA	03/29/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.31	NA	03/29/12	MC	Calculation

$$TN = DON(0.17) + PON(0.14) + NH_4(0.04) + NO_3(0.1) + NO_2(0.002) = 0.452$$

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/13/12

Work Order #: 1203-05106

PLYMOUTH ENV.

Sample # 004

SAMPLE DESCRIPTION: WW-120512 2DR

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2012 @ 13:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.04	0.02	mg/l	SM 4500-NH3 C	3/21/12	EVH
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	3/14/12	JRG
Dissolved TOC	0.63	0.5	mg/l	EPA 415.1	3/14/12	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/13/12

Work Order #: 1203-05106

PLYMOUTH ENV.

Sample # 004

SAMPLE DESCRIPTION: WW-120512 2DR

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2012 @ 13:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Styrene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Toluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
Acetone	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	3/19/12	KAC
Surrogates			RANGE	SW-846 8260B	3/19/12	KAC
Dibromofluoromethane	98		86-118%	SW-846 8260B	3/19/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/13/12

Work Order #: 1203-05106

PLYMOUTH ENV.

Sample # 004

SAMPLE DESCRIPTION: WW-120512 2DR

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2012 @ 13:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Toluene-d8	103		88-110%	SW-846 8260B	3/19/12	KAC
4-Bromofluorobenzene	95		86-115%	SW-846 8260B	3/19/12	KAC
1,2 Dichloroethane-d4	106		80-120%	SW-846 8260B	3/19/12	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	3/16/12	SUB

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Monday, March 26, 2012

Plymouth Environmental Management
 K.Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: GW Eel River **Comments:**
Project Number: GW-1
Collection Date: 03/12/12 **Collection Time:** 08:30
Sampled By: KT
Lab Order Number: WW-120513
Date Received: 03/12/12

Sample Type	Sample Time	Sample Date	Comments			
GW-1 A	08:30	03/12/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	BRL	6.0	03/16/12	KB	2540 C
Total Organic Carbon*	mg/L	<0.5*	0.5	03/14/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	03/19/12	RIA*	*
Total Iron	mg/L	0.06	0.01	03/16/12	MC	200.7
Mercury*	mg/L	<0.0005*	0.0005	03/16/12	RIA*	245.1
Boron	mg/L	BRL	0.010	03/16/12	MC	200.7
Copper	mg/L	BRL	0.003	03/16/12	MC	200.7
Nitrate-N	mg/L	0.10	0.01	03/13/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/13/12	LL	300.0
Ammonia-N *	mg/L	0.03*	0.02	03/21/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	03/20/12	MC	SM4500 NH3 C
Chloride	mg/L	<3.0	3.0	03/13/12	LL	300.0
Total Phosphorous (P)	mg/L	BRL	0.005	03/14/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	03/20/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	03/14/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	BRL	NA	03/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	BRL	NA	03/26/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	03/13/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	03/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	03/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.30	NA	03/26/12	MC	Calculation

$$TN = DON(0.1) + PON(0.1) + NH_4(0.03) + NO_3(0.1) + NO_2(0.002) = 0.332$$

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saafi
 Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/13/12

Work Order #: 1203-05106

PLYMOUTH ENV.

Sample # 005

SAMPLE DESCRIPTION: WW-120513 GW-1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2012 @ 08:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.03	0.02	mg/l	SM 4500-NH3 C	3/21/12	EVH
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	3/14/12	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	3/14/12	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/13/12

Work Order #: 1203-05106

PLYMOUTH ENV.

Sample # 005

SAMPLE DESCRIPTION: WW-120513 GW-1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2012 @ 08:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Styrene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Toluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
Acetone	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	3/19/12	KAC
Surrogates			RANGE	SW-846 8260B	3/19/12	KAC
Dibromofluoromethane	103		86-118%	SW-846 8260B	3/19/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/13/12

Work Order #: 1203-05106

PLYMOUTH ENV.

Sample # 005

SAMPLE DESCRIPTION: WW-120513 GW-1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2012 @ 08:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Toluene-d8	104		88-110%	SW-846 8260B	3/19/12	KAC
4-Bromofluorobenzene	93		86-115%	SW-846 8260B	3/19/12	KAC
1,2 Dichloroethane-d4	103		80-120%	SW-846 8260B	3/19/12	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	3/16/12	SUB

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Monday, March 26, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: GW Eel River

Comments:

Project Number: A17

Collection Date: 03/12/12 **Collection Time:** 10:50

Sampled By: KT

Lab Order Number: WW-120514

Date Received: 03/12/12

Sample Type	Sample Time	Sample Date	Comments			
A17 A	10:50	03/12/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	104	6.0	03/16/12	KB	2540 C
Total Organic Carbon*	mg/L	<0.5*	0.5	03/14/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	03/19/12	RIA*	*
Total Iron	mg/L	0.03	0.01	03/16/12	MC	200.7
Mercury*	mg/L	<0.0005*	0.0005	03/16/12	RIA*	245.1
Boron	mg/L	0.012	0.010	03/16/12	MC	200.7
Copper	mg/L	BRL	0.003	03/16/12	MC	200.7
Nitrate-N	mg/L	0.76	0.01	03/13/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/13/12	LL	300.0
Ammonia-N *	mg/L	<0.02*	0.02	03/21/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	03/21/12	MC	SM4500 NH3 C
Chloride	mg/L	42.3	3.0	03/13/12	LL	300.0
Total Phosphorous (P)	mg/L	0.011	0.005	03/14/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	03/21/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	03/14/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.76	NA	03/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	BRL	NA	03/26/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.007	0.005	03/13/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	03/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	03/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.96	NA	03/26/12	MC	Calculation

$$TN = DON(0.1) + PON(0.1) + NH_4(0.01) + NO_3(0.76) + NO_2(0.002) = 0.972$$

BRL=below reportable limits

*see attached

By: 

Ronald J. Saari

Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/13/12

Work Order #: 1203-05106

PLYMOUTH ENV.

Sample # 006

SAMPLE DESCRIPTION: WW-120514 A17

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2012 @ 10:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM 4500-NH3 C	3/21/12	EVH
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	3/14/12	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	3/14/12	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/13/12

Work Order #: 1203-05106

PLYMOUTH ENV.

Sample # 006

SAMPLE DESCRIPTION: WW-120514 A17

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2012 @ 10:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3-Dichloropropene (total)	<1		ug/l	SW-846 8260B	3/19/12	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Styrene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Toluene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	3/19/12	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	3/19/12	KAC
Acetone	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	3/19/12	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	3/19/12	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	3/19/12	KAC
Surrogates			RANGE	SW-846 8260B	3/19/12	KAC
Dibromofluoromethane	103		86-118%	SW-846 8260B	3/19/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/13/12

Work Order #: 1203-05106

PLYMOUTH ENV.

Sample # 006

SAMPLE DESCRIPTION: WW-120514 A17

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2012 @ 10:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Toluene-d8	105		88-110%	SW-846 8260B	3/19/12	KAC
4-Bromofluorobenzene	95		86-115%	SW-846 8260B	3/19/12	KAC
1,2 Dichloroethane-d4	104		80-120%	SW-846 8260B	3/19/12	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	3/16/12	SUB

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of CustodyClient:

Town of Plymouth - DPW Environmental Management Attn: Kim Michaelis
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: GW Eel River -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
NW-120509 3/12/12	1130	DN-1	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4
NW-120510 3/14/12	1200	A19	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4

NOTE: Analysis needed for reporting in lowest detection possible; Total Dissolved Solids, O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen, Boron, Chloride, Copper, Iron, Mercury, VOC

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

J. Lavalley 3/12/12 1600

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of CustodyClient:

Town of Plymouth - DPW Environmental Management Attn: Kim Michaelis
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: GW Eel River -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
JW-120511 3/12/12	1305	25R	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4
JW-120512 3/12/12	1340	2D2	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4

NOTE: Analysis needed for reporting in lowest detection possible; Total Dissolved Solids, O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen, Boron, Chloride, Copper, Iron, Mercury, VOC

Relinquished By: Date/Time

Kim Tan

Received By: Date/Time:

L. Sawalley 3/12/12 1600

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of CustodyClient:

Town of Plymouth - DPW Environmental Management Attn: Kim Michaelis
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: GW Eel River -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
3/12/12	0830	GW-1	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4
3/12/12	1050	A17	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4

NOTE: Analysis needed for reporting in lowest detection possible; Total Dissolved Solids, O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen, Boron, Chloride, Copper, Iron, Mercury, VOC

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

J. Saville 3/12/12 1600

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Wednesday, March 28, 2012

Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: GW Eel River
Project Number: 7SR
Collection Date: 3/13/12
Sampled By: K. Tower
Lab Order Number: WW-120528
Date Received: 03/13/12

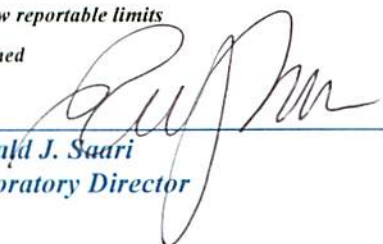
Comments:

Sample Type	Sample Time	Sample Date	Comments			
7 SR A	11:10	3/13/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	295	6.0	03/16/12	KB	2540 C
Total Organic Carbon*	mg/L	<0.5*	0.5	03/19/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	03/21/12	RIA*	*
Total Iron	mg/L	0.03	0.01	03/16/12	MC	200.7
Mercury*	mg/L	<0.0005*	0.0005	03/21/12	RIA*	245.1
Boron	mg/L	BRL	0.010	03/16/12	MC	200.7
Copper	mg/L	BRL	0.003	03/16/12	MC	200.7
Nitrate-N	mg/L	0.18	0.01	03/14/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/14/12	LL	300.0
Ammonia-N *	mg/L	0.03*	0.02	03/21/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.36	0.2	03/21/12	MC	SM4500 NH3 C
Chloride	mg/L	170	3.0	03/14/12	LL	300.0
Total Phosphorous (P)	mg/L	BRL	0.005	03/14/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	03/21/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	03/19/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.21	NA	03/28/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	BRL	NA	03/28/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	03/14/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	03/28/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	03/28/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.38	NA	03/28/12	MC	Calculation

$$TN = DON(0.1) + PON(0.1) + NH_4(0.03) + NO_3(0.18) + NO_2(0.002) = 0.412$$

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.
Attn: Mr. Ron Saari
8 Jan Sebastian Drive
Sandwich, MA 02563

Date Received: 3/15/12
Date Reported: 3/22/12
P.O. #:
Work Order #: 1203-05317

DESCRIPTION: PLYMOUTH ENV.

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.
The Certificate of Analysis shall not be reproduced except in full, without written approval of R.I. Analytical.
Results relate only to samples submitted to the laboratory for analysis.
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:



Sharon Baker
MIS / Data Reporting Manager

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.
Date Received: 3/15/12
Work Order #: 1203-05317
PLYMOUTH ENV.

Sample # 001
SAMPLE DESCRIPTION: WW-120528 7SR
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/13/2012 @ 11:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.03	0.02	mg/l	SM 4500-NH3 C	3/21/12	EVH
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	3/19/12	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	3/19/12	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	3/21/12	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	3/21/12	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	3/21/12	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	3/21/12	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	3/21/12	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	3/21/12	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	3/21/12	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/15/12

Work Order #: 1203-05317

PLYMOUTH ENV.

Sample # 001

SAMPLE DESCRIPTION: WW-120528 7SR

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/13/2012 @ 11:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	3/21/12	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Styrene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Toluene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	3/21/12	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	3/21/12	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	3/21/12	KAC
Acetone	<10	10	ug/l	SW-846 8260B	3/21/12	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	3/21/12	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	3/21/12	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	3/21/12	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	3/21/12	KAC
Surrogates			RANGE	SW-846 8260B	3/22/12	MMM
Dibromofluoromethane	107		86-118%	SW-846 8260B	3/21/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/15/12

Work Order #: 1203-05317

PLYMOUTH ENV.

Sample # 001

SAMPLE DESCRIPTION: WW-120528 7SR

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/13/2012 @ 11:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Toluene-d8	107		88-110%	SW-846 8260B	3/21/12	KAC
4-Bromofluorobenzene	93		86-115%	SW-846 8260B	3/21/12	KAC
1,2 Dichloroethane-d4	107		80-120%	SW-846 8260B	3/21/12	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	3/21/12	PJC

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Wednesday, March 28, 2012

Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

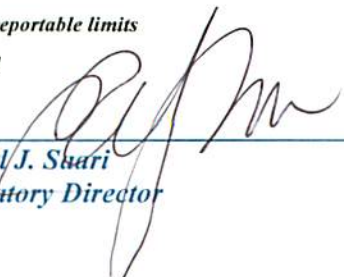
ProjectName: GW Eel River **Comments:**
Project Number: A 15
Collection Date: 3/13/12 **Collection Time:** 13:45
Sampled By: K. Tower
Lab Order Number: WW-120529
Date Received: 03/13/12

Sample Type	Sample Time	Sample Date	Comments			
A 15 A		3/13/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	178	6.0	03/16/12	KB	2540 C
Total Organic Carbon*	mg/L	<0.5*	0.5	03/19/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	03/21/12	RIA*	*
Total Iron	mg/L	0.03	0.01	03/16/12	MC	200.7
Mercury*	mg/L	<0.0005*	0.0005	03/21/12	RIA*	245.1
Boron	mg/L	0.012	0.010	03/16/12	MC	200.7
Copper	mg/L	BRL	0.003	03/16/12	MC	200.7
Nitrate-N	mg/L	1.28	0.01	03/14/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/14/12	LL	300.0
Ammonia-N *	mg/L	<0.02*	0.02	03/21/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	03/21/12	MC	SM4500 NH3 C
Chloride	mg/L	67.0	3.0	03/14/12	LL	300.0
Total Phosphorous (P)	mg/L	0.035	0.005	03/14/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	03/21/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	03/19/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	1.28	NA	03/28/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	BRL	NA	03/28/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.033	0.005	03/14/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	03/28/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	03/28/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<1.48	NA	03/28/12	MC	Calculation

$$TN = DON(0.1) + PON(0.1) + NH_4(0.01) + NO_3(1.28) + NO_2(0.002) = 1.492$$

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/15/12

Work Order #: 1203-05317

PLYMOUTH ENV.

Sample # 002

SAMPLE DESCRIPTION: WW-120529 A15

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/13/2012 @ 13:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM 4500-NH3 C	3/21/12	EVH
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	3/19/12	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	3/19/12	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	3/21/12	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	3/21/12	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	3/21/12	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	3/21/12	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	3/21/12	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	3/21/12	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	3/21/12	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/15/12

Work Order #: 1203-05317

PLYMOUTH ENV.

Sample # 002

SAMPLE DESCRIPTION: WW-120529 A15

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/13/2012 @ 13:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	3/21/12	RGM
Ethylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	3/21/12	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Styrene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Toluene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	3/21/12	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	3/21/12	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	3/21/12	KAC
Acetone	<10	10	ug/l	SW-846 8260B	3/21/12	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	3/21/12	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	3/21/12	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	3/21/12	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	3/21/12	KAC
Surrogates			RANGE	SW-846 8260B	3/22/12	MMM
Dibromofluoromethane	107		86-118%	SW-846 8260B	3/21/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/15/12

Work Order #: 1203-05317

PLYMOUTH ENV.

Sample # 002

SAMPLE DESCRIPTION: WW-120529 A15

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/13/2012 @ 13:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Toluene-d8	106		88-110%	SW-846 8260B	3/21/12	KAC
4-Bromofluorobenzene	95		86-115%	SW-846 8260B	3/21/12	KAC
1,2 Dichloroethane-d4	106		80-120%	SW-846 8260B	3/21/12	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	3/21/12	PJC

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Wednesday, March 28, 2012

Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: GW Eel River
Project Number: A 21-A
Collection Date: 3/13/12
Sampled By: K. Tower
Lab Order Number: WW-120530
Date Received: 03/13/12

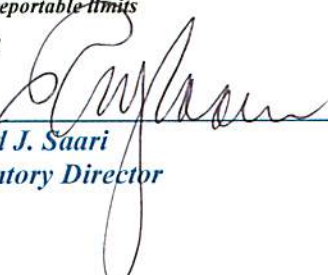
Comments:

Sample Type	Sample Time	Sample Date	Comments			
A 21-A A	14:40	3/13/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	72	6.0	03/16/12	KB	2540 C
Total Organic Carbon*	mg/L	<0.5*	0.5	03/19/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	03/21/12	RIA*	*
Total Iron	mg/L	1.70	0.01	03/16/12	MC	200.7
Mercury*	mg/L	<0.0005*	0.0005	03/21/12	RIA*	245.1
Boron	mg/L	0.012	0.010	03/16/12	MC	200.7
Copper	mg/L	BRL	0.003	03/16/12	MC	200.7
Nitrate-N	mg/L	0.14	0.01	03/14/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/14/12	LL	300.0
Ammonia-N *	mg/L	0.11*	0.02	03/21/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.30	0.2	03/21/12	MC	SM4500 NH3 C
Chloride	mg/L	27.0	3.0	03/14/12	LL	300.0
Total Phosphorous (P)	mg/L	0.020	0.005	03/14/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.26	0.2	03/21/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	03/19/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.25	NA	03/28/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.15	NA	03/28/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.014	0.005	03/14/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	03/28/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.15	NA	03/28/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.40	NA	03/28/12	MC	Calculation

$$TN = DON(0.15) + PON(0.15) + NH_4(0.11) + NO_3(0.14) + NO_2(0.002) = 0.552$$

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/15/12

Work Order #: 1203-05317

PLYMOUTH ENV.

Sample # 003

SAMPLE DESCRIPTION: WW-120530 A21-A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/13/2012 @ 14:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.11	0.02	mg/l	SM 4500-NH3 C	3/21/12	EVH
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	3/19/12	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	3/19/12	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	3/21/12	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	3/21/12	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	3/21/12	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	3/21/12	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	3/21/12	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	3/21/12	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	3/21/12	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/15/12

Work Order #: 1203-05317

PLYMOUTH ENV.

Sample # 003

SAMPLE DESCRIPTION: WW-120530 A21-A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/13/2012 @ 14:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	3/21/12	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Styrene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Toluene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	3/21/12	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	3/21/12	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	3/21/12	KAC
Acetone	<10	10	ug/l	SW-846 8260B	3/21/12	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	3/21/12	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	3/21/12	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	3/21/12	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	3/21/12	KAC
Surrogates			RANGE	SW-846 8260B	3/22/12	MMM
Dibromofluoromethane	103		86-118%	SW-846 8260B	3/21/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/15/12

Work Order #: 1203-05317

PLYMOUTH ENV.

Sample # 003

SAMPLE DESCRIPTION: WW-120530 A21-A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/13/2012 @ 14:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Toluene-d8	102		88-110%	SW-846 8260B	3/21/12	KAC
4-Bromofluorobenzene	97		86-115%	SW-846 8260B	3/21/12	KAC
1,2 Dichloroethane-d4	103		80-120%	SW-846 8260B	3/21/12	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	3/21/12	PJC

CL

Chain of Custody

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Michaelis
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: GW Eel River -Plymouth MA
Sampler: Kim Tower (KT)

W-120528

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
3/13/12	1110	75R	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4
3/13/12	1345	A15	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4

W-120529

NOTE: Analysis needed for reporting in lowest detection possible; Total Dissolved Solids, O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen, Boron, Chloride, Copper, Iron, Mercury, VOC

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

Adawally 03/13/12 1535

15

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of Custody

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Michaelis
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: GW Eel River -Plymouth MA
Sampler: Kim Tower (KT)

W-120530

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
3/13/12	1440	A21-A	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4
			2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4

NOTE: Analysis needed for reporting in lowest detection possible; Total Dissolved Solids, O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen, Boron, Chloride, Copper, Iron, Mercury, VOC

Relinquished By: Date/Time

Kim Tan

Received By: Date/Time:

Blavally 03/13/12 1535

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Wednesday, March 28, 2012

Plymouth Environmental Management
 K.Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: GW Eel River **Comments:**
Project Number: Bradford
Collection Date: 03/14/12 **Collection Time:** 08:15
Sampled By: KM
Lab Order Number: WW-120537
Date Received: 03/14/12

Sample Type	Sample Time	Sample Date	Comments			
Bradford A	08:15	03/14/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	45	6.0	03/16/12	KB	2540 C
Total Organic Carbon*	mg/L	<0.5*	0.5	03/19/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	03/22/12	RIA*	*
Total Iron	mg/L	1.94	0.01	03/16/12	MC	200.7
Mercury*	mg/L	<0.0005*	0.0005	03/20/12	RIA*	245.1
Boron	mg/L	0.013	0.010	03/16/12	MC	200.7
Copper	mg/L	BRL	0.003	03/16/12	MC	200.7
Nitrate-N	mg/L	0.12	0.01	03/14/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/14/12	LL	300.0
Ammonia-N *	mg/L	0.02*	0.02	03/21/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.23	0.2	03/21/12	MC	SM4500 NH3 C
Chloride	mg/L	11.3	3.0	03/14/12	LL	300.0
Total Phosphorous (P)	mg/L	0.008	0.005	03/14/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.20	0.2	03/21/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	03/19/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.14	NA	03/28/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.18	NA	03/28/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.008	0.005	03/14/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	03/28/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.03	NA	03/28/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.32	NA	03/28/12	MC	Calculation

$$TN = DON(0.18) + PON(0.03) + NH_4(0.02) + NO_3(0.12) + NO_2(0.002) = 0.352$$

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.
Attn: Mr. Ron Saari
8 Jan Sebastian Drive
Sandwich, MA 02563

Date Received: 3/15/12
Date Reported: 3/22/12
P.O. #:
Work Order #: 1203-05318

DESCRIPTION: PLYMOUTH ENV.

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.
The Certificate of Analysis shall not be reproduced except in full, without written approval of R.I. Analytical.
Results relate only to samples submitted to the laboratory for analysis.
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:



Sharon Baker
MIS / Data Reporting Manager

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/15/12

Work Order #: 1203-05318

PLYMOUTH ENV.

Sample # 001

SAMPLE DESCRIPTION: WW-120537 BRADFORD WELL

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/14/2012 @ 08:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.02	0.02	mg/l	SM 4500-NH ₃ C	3/21/12	EVH
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	3/19/12	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	3/19/12	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	3/22/12	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	3/22/12	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	3/22/12	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	3/22/12	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	3/22/12	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	3/22/12	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	3/22/12	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/15/12

Work Order #: 1203-05318

PLYMOUTH ENV.

Sample # 001

SAMPLE DESCRIPTION: WW-120537 BRADFORD WELL

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/14/2012 @ 08:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	3/22/12	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Styrene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Toluene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	3/22/12	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	3/22/12	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	3/22/12	KAC
Acetone	<10	10	ug/l	SW-846 8260B	3/22/12	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	3/22/12	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	3/22/12	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	3/22/12	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	3/22/12	KAC
Surrogates			RANGE	SW-846 8260B	3/21/12	KAC
Dibromofluoromethane	107		86-118%	SW-846 8260B	3/22/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/15/12

Work Order #: 1203-05318

PLYMOUTH ENV.

Sample # 001

SAMPLE DESCRIPTION: WW-120537 BRADFORD WELL

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/14/2012 @ 08:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Toluene-d8	104		88-110%	SW-846 8260B	3/22/12	KAC
4-Bromofluorobenzene	94		86-115%	SW-846 8260B	3/22/12	KAC
1,2 Dichloroethane-d4	105		80-120%	SW-846 8260B	3/22/12	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	3/20/12	PJC

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Thursday, March 29, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: GW Eel River

Comments:

Project Number: 5S

Collection Date: 3/14/12 **Collection Time:** 9:30

Sampled By: K. Tower

Lab Order Number: WW-120538

Date Received: 03/14/12

Sample Type	Sample Time	Sample Date	Comments			
5S A	9:30	3/14/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrite-N	mg/L	BRL	0.020	03/14/12	LL	300.0
Total Dissolved Solids	mg/L	1232	6.0	03/16/12	KB	2540 C
Total Organic Carbon*	mg/L	<0.5*	0.5	03/19/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	03/22/12	RIA*	*
Total Iron	mg/L	0.04	0.01	03/16/12	MC	200.7
Mercury*	mg/L	<0.0005*	0.0005	03/20/12	RIA*	245.1
Boron	mg/L	0.011	0.010	03/16/12	MC	200.7
Copper	mg/L	BRL	0.003	03/16/12	MC	200.7
Nitrate-N	mg/L	0.40	0.01	03/14/12	LL	300.0
Ammonia-N *	mg/L	0.02*	0.02	03/21/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	03/22/12	MC	SM4500 NH3 C
Chloride	mg/L	729	3.0	03/15/12	LL	300.0
Total Phosphorous (P)	mg/L	0.011	0.005	03/14/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	03/22/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	03/19/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.42	NA	03/28/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	BRL	NA	03/28/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.007	0.005	03/14/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	03/28/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	03/28/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.60	NA	03/28/12	MC	Calculation

$$TN = DON (0.1) + PON (0.1) + NH_4 (0.02) + NO_3 (0.4) + NO_2 (0.002) = 0.622$$

BRL=below reportable limits

*see attached

By: 

Ronald J. Saari
Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/15/12

Work Order #: 1203-05318

PLYMOUTH ENV.

Sample # 002

SAMPLE DESCRIPTION: WW-120538 5S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/14/2012 @ 09:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.02	0.02	mg/l	SM 4500-NH3 C	3/21/12	EVH
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	3/19/12	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	3/19/12	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	3/22/12	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	3/22/12	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	3/22/12	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	3/22/12	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	3/22/12	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	3/22/12	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	3/22/12	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/15/12

Work Order #: 1203-05318

PLYMOUTH ENV.

Sample # 002

SAMPLE DESCRIPTION: WW-120538 5S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/14/2012 @ 09:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	3/22/12	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Styrene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Toluene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	3/22/12	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	3/22/12	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	3/22/12	KAC
Acetone	<10	10	ug/l	SW-846 8260B	3/22/12	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	3/22/12	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	3/22/12	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	3/22/12	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	3/22/12	KAC
Surrogates			RANGE	SW-846 8260B	3/21/12	KAC
Dibromofluoromethane	107		86-118%	SW-846 8260B	3/22/12	KAC

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/15/12

Work Order #: 1203-05318

PLYMOUTH ENV.

Sample # 002

SAMPLE DESCRIPTION: WW-120538 5S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/14/2012 @ 09:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Toluene-d8	105		88-110%	SW-846 8260B	3/22/12	KAC
4-Bromofluorobenzene	94.6		86-115%	SW-846 8260B	3/22/12	KAC
1,2 Dichloroethane-d4	105		80-120%	SW-846 8260B	3/22/12	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	3/20/12	PJC

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Wednesday, March 28, 2012

Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

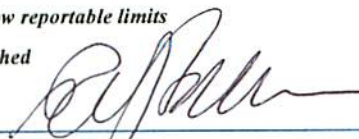
ProjectName: GW Eel River **Comments:**
Project Number: A 13
Collection Date: 3/14/12 **Collection Time:** 11:20
Sampled By: K. Tower
Lab Order Number: WW-120539
Date Received: 03/14/12

Sample Type	Sample Time	Sample Date	Comments			
A 13 A	11:20	3/14/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrite-N	mg/L	BRL	0.020	03/15/12	LL	300.0
Total Dissolved Solids	mg/L	444	6.0	03/16/12	KB	2540 C
Total Organic Carbon*	mg/L	1.4*	0.5	03/19/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	03/22/12	RIA*	*
Total Iron	mg/L	6.34	0.01	03/16/12	MC	200.7
Mercury*	mg/L	<0.0005*	0.0005	03/20/12	RIA*	245.1
Boron	mg/L	0.025	0.010	03/16/12	MC	200.7
Copper	mg/L	BRL	0.003	03/16/12	MC	200.7
Nitrate-N	mg/L	0.17	0.01	03/14/12	LL	300.0
Ammonia-N *	mg/L	0.23*	0.02	03/21/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.54	0.2	03/22/12	MC	SM4500 NH3 C
Chloride	mg/L	282	3.0	03/15/12	LL	300.0
Total Phosphorous (P)	mg/L	0.013	0.005	03/14/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.41	0.2	03/22/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	1.4*	0.5	03/19/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.40	NA	03/28/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.18	NA	03/28/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.010	0.005	03/14/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	03/28/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.13	NA	03/28/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.58	NA	03/28/12	MC	Calculation

$$TN = DON(0.18) + PON(0.13) + NH_4(0.23) + NO_3(0.17) + NO_2(0.002) = 0.712$$

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saafi
 Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/15/12

Work Order #: 1203-05318

PLYMOUTH ENV.

Sample # 003

SAMPLE DESCRIPTION: WW-120539 A13

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/14/2012 @ 11:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.23	0.02	mg/l	SM 4500-NH3 C	3/21/12	EVH
TOC Low Level	1.4	0.5	mg/l	SM-5310B	3/19/12	JRG
Dissolved TOC	1.4	0.5	mg/l	EPA 415.1	3/19/12	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	3/22/12	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	3/22/12	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	3/22/12	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	3/22/12	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	3/22/12	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	3/22/12	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	3/22/12	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/15/12

Work Order #: 1203-05318

PLYMOUTH ENV.

Sample # 003

SAMPLE DESCRIPTION: WW-120539 A13

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/14/2012 @ 11:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	3/21/12	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	3/22/12	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Styrene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Toluene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	3/22/12	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	3/22/12	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	3/22/12	KAC
Acetone	<10	10	ug/l	SW-846 8260B	3/22/12	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	3/22/12	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	3/22/12	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	3/22/12	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	3/22/12	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	3/22/12	KAC
Surrogates			RANGE	SW-846 8260B	3/21/12	KAC
Dibromofluoromethane	106		86-118%	SW-846 8260B	3/22/12	KAC

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/15/12

Work Order #: 1203-05318

PLYMOUTH ENV.

Sample # 003

SAMPLE DESCRIPTION: WW-120539 A13

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/14/2012 @ 11:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Toluene-d8	105		88-110%	SW-846 8260B	3/22/12	KAC
4-Bromofluorobenzene	96		86-115%	SW-846 8260B	3/22/12	KAC
1,2 Dichloroethane-d4	106		80-120%	SW-846 8260B	3/22/12	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	3/20/12	PJC

[illegible]

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

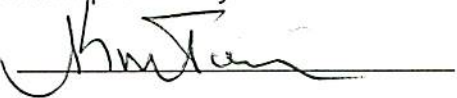
Chain of CustodyClient:

Town of Plymouth - DPW Environmental Management Attn: Kim Michaelis
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: GW Eel River -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
3/14/12	0845	Bradford	2	Glass Vial	VOC	HCL
	0815		1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4
3/14/12	0930	SS	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4

NOTE: Analysis needed for reporting in lowest detection possible; Total Dissolved Solids, O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen, Boron, Chloride, Copper, Iron, Mercury, VOC

Relinquished By: Date/Time



Received By: Date/Time:

 3/14/12 1205

②

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of Custody

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Michaelis
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: GW Eel River -Plymouth MA
Sampler: Kim Tower (KT)

JW-120539

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
3/14/12	1120	A13	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4
			2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4

NOTE: Analysis needed for reporting in lowest detection possible; Total Dissolved Solids, O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen, Boron, Chloride, Copper, Iron, Mercury, VOC

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

L. Savall 3/14/12 1205

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Tuesday, December 11, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: GW Eel River

Comments:

Project Number: GW-1

Collection Date: 10/1/12 **Collection Time:** 7:30

Sampled By: Kim Tower

Lab Order Number: WW-122276

Date Received: 10/01/12

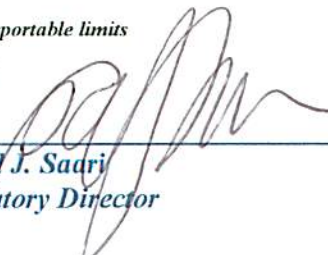
Sample Type	Sample Time	Sample Date	Comments			
GW-1 A	7:30	10/1/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	11	6.0	10/03/12	KB	2540 C
Total Organic Carbon*	mg/L	ND*	0.5	10/10/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	10/11/12	RIA*	*
Total Iron	mg/L	BRL	0.01	10/02/12	MC	200.7
Mercury*	mg/L	ND*	0.0005	10/10/12	RIA*	245.1
Boron	mg/L	BRL	0.010	10/02/12	MC	200.7
Copper	mg/L	BRL	0.003	10/02/12	MC	200.7
Nitrate-N	mg/L	0.09	0.01	10/01/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/01/12	LL	300.0
Ammonia-N *	mg/L	ND*	0.02	10/15/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Chloride	mg/L	BRL	3.0	10/01/12	LL	300.0
Total Phosphorous (P)	mg/L	BRL	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	ND*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.11	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	11/26/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	10/02/12	MC	4500-P
Particulate Organic Carbon	mg/L	ND	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.29	NA	11/26/12	MC	Calculation

$$TN = DON(0.09) + PUN(0.1) + NO_3(0.09) + NO_2(0.002) + NH_4(0.01) = 0.292$$

BRL=below reportable limits

*see attached

By:


Ronald J. Sadri
Laboratory Director

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.
Attn: Mr. Ron Saari
8 Jan Sebastian Drive
Sandwich, MA 02563

Date Received: 10/4/2012
Date Reported: 10/16/2012
P.O. #:
Work Order #: 1210-20863

DESCRIPTION: PLYMOUTH ENV.

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

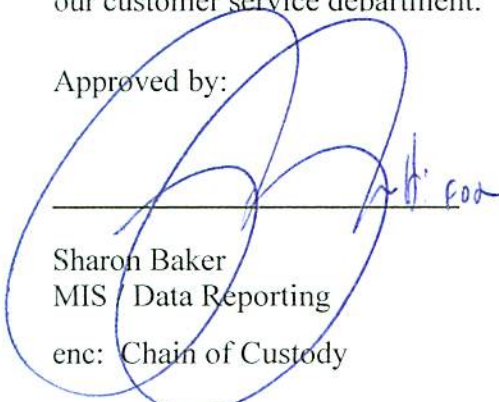
Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.
The Certificate of Analysis shall not be reproduced except in full, without written approval of R.I. Analytical.
Results relate only to samples submitted to the laboratory for analysis.
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:



Sharon Baker
MIS / Data Reporting
enc: Chain of Custody

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20863

Sample # 001

SAMPLE DESCRIPTION: WW-122276 GW-1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/01/2012 @ 07:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM 4500-NH3 C	10/15/2012 6:15	SJC
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20863

Sample # 001

SAMPLE DESCRIPTION: WW-122276 GW-1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/01/2012 @ 07:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Styrene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Toluene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Acetone	<10	10	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	10/11/2012 11:44	KAC
Surrogates			RANGE	SW-846 8260B	10/11/2012 11:44	KAC
Dibromofluoromethane	104		86-118%	SW-846 8260B	10/11/2012 11:44	KAC
Toluene-d8	99		88-110%	SW-846 8260B	10/11/2012 11:44	KAC
4-Bromofluorobenzene	99		86-115%	SW-846 8260B	10/11/2012 11:44	KAC
1,2 Dichloroethane-d4	101		80-120%	SW-846 8260B	10/11/2012 11:44	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	10/10/2012 14:59	JRW

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Tuesday, December 11, 2012

Plymouth Environmental Management
K. Towers/ 11 Lincoln St.
Plymouth, MA

ProjectName: GW Eel River **Comments:**
Project Number: 2SR
Collection Date: 10/1/12 **Collection Time:** 9:15
Sampled By: Kim Tower
Lab Order Number: WW-122277
Date Received: 10/01/12

Sample Type	Sample Time	Sample Date	Comments			
2SR A	9:15	10/1/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	35	6.0	10/07/12	KB	2540 C
Total Organic Carbon*	mg/L	ND*	0.5	10/10/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	10/11/12	RIA*	*
Total Iron	mg/L	BRL	0.01	10/02/12	MC	200.7
Mercury*	mg/L	ND*	0.0005	10/10/12	RIA*	245.1
Boron	mg/L	BRL	0.010	10/02/12	MC	200.7
Copper	mg/L	BRL	0.003	10/02/12	MC	200.7
Nitrate-N	mg/L	1.24	0.01	10/01/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/01/12	LL	300.0
Ammonia-N *	mg/L	0.03*	0.02	10/15/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Chloride	mg/L	8.1	3.0	10/01/12	LL	300.0
Total Phosphorous (P)	mg/L	BRL	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	ND*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	1.27	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.17	NA	11/26/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	10/02/12	MC	4500-P
Particulate Organic Carbon	mg/L	ND	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<1.44	NA	11/26/12	MC	Calculation

$$TN = DON(0.085) + PON(0.1) + NO_3(1.24) + NO_2(0.002) + NH_4(0.03) = 1.457$$

BRL=below reportable limits

*see attached

By:

Ronald J. Saari
Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20863

Sample # 002

SAMPLE DESCRIPTION: WW-122277 2SR

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/01/2012 @ 09:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.03	0.02	mg/l	SM 4500-NH3 C	10/15/2012 6:15	SJC
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20863

Sample # 002

SAMPLE DESCRIPTION: WW-122277 2SR

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/01/2012 @ 09:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Styrene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Toluene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Acetone	<10	10	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	10/11/2012 12:11	KAC
Surrogates			RANGE	SW-846 8260B	10/11/2012 12:11	KAC
Dibromofluoromethane	106		86-118%	SW-846 8260B	10/11/2012 12:11	KAC
Toluene-d8	100		88-110%	SW-846 8260B	10/11/2012 12:11	KAC
4-Bromofluorobenzene	98		86-115%	SW-846 8260B	10/11/2012 12:11	KAC
1,2 Dichloroethane-d4	103		80-120%	SW-846 8260B	10/11/2012 12:11	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	10/10/2012 14:59	JRW

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Tuesday, December 11, 2012

Plymouth Environmental Management
K. Towers/ 11 Lincoln St.
Plymouth, MA

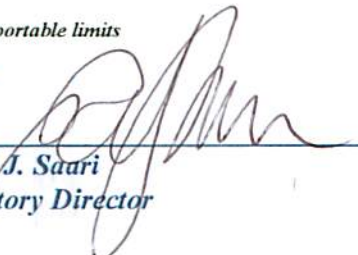
ProjectName: GW Eel River **Comments:**
Project Number: 2DR
Collection Date: 10/1/12 **Collection Time:** 9:55
Sampled By: Kim Tower
Lab Order Number: WW-122278
Date Received: 10/01/12

Sample Type	Sample Time	Sample Date	Comments			
2DR A	9:55	10/1/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	183	6.0	10/03/12	KB	2540 C
Chloride grab	mg/L	87.4	3.0	10/01/12	LL	300.0
Total Organic Carbon*	mg/L	0.65*	0.5	10/10/12	MC	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	10/11/12	RIA*	*
Total Iron	mg/L	12.7	0.01	10/03/12	MC	200.7
Mercury*	mg/L	ND*	0.0005	10/10/12	RIA*	245.1
Boron	mg/L	0.039	0.010	10/02/12	MC	200.7
Copper	mg/L	BRL	0.003	10/02/12	MC	200.7
Nitrate-N	mg/L	0.10	0.01	10/01/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/01/12	LL	300.0
Ammonia-N *	mg/L	0.04*	0.02	10/15/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.34	0.2	11/26/12	MC	SM4500 NH3 C
Total Phosphorous (P)	mg/L	0.10	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.22	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	0.64*	0.5	10/10/12	MC	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.14	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.18	NA	11/26/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.008	0.005	10/02/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.01	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.12	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.32	NA	11/26/12	MC	Calculation

$$TN = DON(0.18) + PON(0.12) + NO_3(0.10) + NO_2(0.002) + NH_4(0.04) = 0.442$$

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20863

Sample # 003

SAMPLE DESCRIPTION: WW-122278 2DR

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/01/2012 @ 09:55

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.04	0.02	mg/l	SM 4500-NH3 C	10/15/2012 6:15	SJC
TOC Low Level	0.65	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	0.64	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20863

Sample # 003

SAMPLE DESCRIPTION: WW-122278 2DR

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/01/2012 @ 09:55

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Styrene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Toluene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Acetone	<10	10	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	10/11/2012 12:38	KAC
Surrogates			RANGE	SW-846 8260B	10/11/2012 12:38	KAC
Dibromofluoromethane	105		86-118%	SW-846 8260B	10/11/2012 12:38	KAC
Toluene-d8	94		88-110%	SW-846 8260B	10/11/2012 12:38	KAC
4-Bromofluorobenzene	98		86-115%	SW-846 8260B	10/11/2012 12:38	KAC
1,2 Dichloroethane-d4	102		80-120%	SW-846 8260B	10/11/2012 12:38	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	10/10/2012 14:59	JRW

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Tuesday, December 11, 2012

Plymouth Environmental Management
 K.Towers/ 11 Lincoln St.
 Plymouth, MA

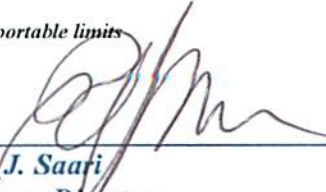
ProjectName: GW Eel River **Comments:**
Project Number: DW-1
Collection Date: 10/1/12 **Collection Time:** 10:45
Sampled By: Kim Tower
Lab Order Number: WW-122279
Date Received: 10/01/12

Sample Type	Sample Time	Sample Date	Comments			
DW-1 A	10:45	10/1/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	76	6.0	10/03/12	KB	2540 C
Chloride grab	mg/L	29.0	3.0	10/01/12	LL	300.0
Total Organic Carbon*	mg/L	0.76*	0.5	10/10/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	10/11/12	RIA*	*
Total Iron	mg/L	1.90	0.01	10/03/12	MC	200.7
Mercury*	mg/L	ND*	0.0005	10/10/12	RIA*	245.1
Boron	mg/L	0.015	0.010	10/02/12	MC	200.7
Copper	mg/L	BRL	0.003	10/02/12	MC	200.7
Nitrate-N	mg/L	0.09	0.01	10/01/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/01/12	LL	300.0
Ammonia-N *	mg/L	0.18*	0.02	10/15/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.35	0.2	11/26/12	MC	SM4500 NH3 C
Total Phosphorous (P)	mg/L	0.047	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.24	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	0.83*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.27	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.06	NA	11/26/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.025	0.005	10/02/12	MC	4500-P
Particulate Organic Carbon	mg/L	ND	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.11	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.33	NA	11/26/12	MC	Calculation

$$TN = DON(0.06) + PON(0.11) + NO_3(0.09) + NO_2(0.002) + NH_4(0.18) = 0.442$$

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20863

Sample # 004

SAMPLE DESCRIPTION: WW-122279 DW-1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/01/2012 @ 09:55

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.18	0.02	mg/l	SM 4500-NH3 C	10/15/2012 6:15	SJC
TOC Low Level	0.76	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	0.83	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20863

Sample # 004

SAMPLE DESCRIPTION: WW-122279 DW-1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/01/2012 @ 09:55

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Styrene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Toluene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Acetone	<10	10	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	10/11/2012 13:05	KAC
Surrogates			RANGE	SW-846 8260B	10/11/2012 13:05	KAC
Dibromofluoromethane	107		86-118%	SW-846 8260B	10/11/2012 13:05	KAC
Toluene-d8	96		88-110%	SW-846 8260B	10/11/2012 13:05	KAC
4-Bromofluorobenzene	98		86-115%	SW-846 8260B	10/11/2012 13:05	KAC
1,2 Dichloroethane-d4	105		80-120%	SW-846 8260B	10/11/2012 13:05	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	10/10/2012 14:59	JRW

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Tuesday, December 11, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: GW Eel River

Comments:

Project Number: A-21A

Collection Date: 10/1/12 **Collection Time:** 11:40

Sampled By: Kim Tower

Lab Order Number: WW-122280

Date Received: 10/01/12

Sample Type	Sample Time	Sample Date	Comments			
A-21A A	11:40	10/01/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	66	6.0	10/07/12	KB	2540 C
Chloride grab	mg/L	29.1	3.0	10/01/12	LL	300.0
Total Organic Carbon*	mg/L	0.81*	0.5	10/10/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	10/11/12	RIA*	*
Total Iron	mg/L	1.74	0.01	10/03/12	MC	200.7
Mercury*	mg/L	ND*	0.0005	10/10/12	RIA*	245.1
Boron	mg/L	0.014	0.010	10/02/12	MC	200.7
Copper	mg/L	BRL	0.003	10/02/12	MC	200.7
Nitrate-N	mg/L	0.09	0.01	10/01/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/01/12	LL	300.0
Ammonia-N *	mg/L	0.18*	0.02	10/15/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.33	0.2	11/26/12	MC	SM4500 NH3 C
Total Phosphorous (P)	mg/L	0.043	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.25	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	0.82*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.27	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.07	NA	11/26/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.026	0.005	10/02/12	MC	4500-P
Particulate Organic Carbon	mg/L	ND	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.08	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.34	NA	11/26/12	MC	Calculation

$$TN = DON(0.07) + PON(0.08) + NO_3(0.09) + NO_2(0.002) + NH_4(0.18) = 0.422$$

BRL=below reportable limits

*see attached

By: 

Ronald J. Saari
Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20863

Sample # 005

SAMPLE DESCRIPTION: WW-122280 A-21A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/01/2012 @ 11:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.18	0.02	mg/l	SM 4500-NH3 C	10/15/2012 6:15	SJC
TOC Low Level	0.81	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	0.82	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20863

Sample # 005

SAMPLE DESCRIPTION: WW-122280 A-21A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/01/2012 @ 11:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Styrene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Toluene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Acetone	<10	10	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	10/11/2012 13:32	KAC
Surrogates			RANGE	SW-846 8260B	10/11/2012 13:32	KAC
Dibromofluoromethane	106		86-118%	SW-846 8260B	10/11/2012 13:32	KAC
Toluene-d8	97		88-110%	SW-846 8260B	10/11/2012 13:32	KAC
4-Bromofluorobenzene	98		86-115%	SW-846 8260B	10/11/2012 13:32	KAC
1,2 Dichloroethane-d4	104		80-120%	SW-846 8260B	10/11/2012 13:32	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	10/10/2012 14:59	JRW

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Tuesday, December 11, 2012

Plymouth Environmental Management
K.Towers/ 11 Lincoln St.
Plymouth, MA

ProjectName: GW Eel River
Project Number: A15
Collection Date: 10/1/12
Sampled By: Kim Tower
Lab Order Number: WW-122281
Date Received: 10/01/12

Comments:

Sample Type	Sample Time	Sample Date	Comments			
A15 A	14:15	10/01/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	218	6.0	10/07/12	KB	2540 C
Chloride grab	mg/L	77.5	3.0	10/01/12	LL	300.0
Total Organic Carbon*	mg/L	ND*	0.5	10/10/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	10/11/12	RIA*	*
Total Iron	mg/L	BRL	0.01	10/02/12	MC	200.7
Mercury*	mg/L	ND*	0.0005	10/10/12	RIA*	245.1
Boron	mg/L	0.021	0.010	10/02/12	MC	200.7
Copper	mg/L	BRL	0.003	10/02/12	MC	200.7
Nitrate-N	mg/L	1.16	0.01	10/01/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/01/12	LL	300.0
Ammonia-N *	mg/L	0.03*	0.02	10/15/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Total Phosphorous (P)	mg/L	0.040	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	ND*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	1.19	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.17	NA	11/26/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.033	0.005	10/02/12	MC	4500-P
Particulate Organic Carbon	mg/L	ND	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<1.36	NA	11/26/12	MC	Calculation

$$TN = DON(0.085) + PON(0.1) + NO_3(1.16) + NO_2(0.002) + NH_4(0.03) = 1.377$$

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.
Date Received: 10/4/2012
Work Order #: 1210-20863

Sample # 006

SAMPLE DESCRIPTION: WW-122281 A15

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/01/2012 @ 14:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.03	0.02	mg/l	SM 4500-NH3 C	10/15/2012 6:15	SJC
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20863

Sample # 006

SAMPLE DESCRIPTION: WW-122281 A15

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/01/2012 @ 14:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Styrene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Toluene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Acetone	<10	10	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	10/11/2012 14:00	KAC
Surrogates			RANGE	SW-846 8260B	10/11/2012 14:00	KAC
Dibromofluoromethane	108		86-118%	SW-846 8260B	10/11/2012 14:00	KAC
Toluene-d8	100		88-110%	SW-846 8260B	10/11/2012 14:00	KAC
4-Bromofluorobenzene	98		86-115%	SW-846 8260B	10/11/2012 14:00	KAC
1,2 Dichloroethane-d4	104		80-120%	SW-846 8260B	10/11/2012 14:00	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	10/10/2012 14:59	JRW

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of Custody

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: GW Eel River -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
10/1/12	0730	GW-1	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4
10/1/12	0915	25R	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4

NOTE: Analysis needed for reporting in lowest detection possible; Total Dissolved Solids, O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen, Boron, Chloride, Copper, Iron, Mercury, VOC

Relinquished By: Date/Time

Kim Tower 10/1/12

Received By: Date/Time:

J. Savely 10/1/12 1525

65

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of Custody

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: GW Eel River -Plymouth MA
Sampler: Kim Tower (KT)

WW-122278

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
10/1/12	0955	2D12	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4
10/1/12	1045	DW-1	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4

NW-122279

NOTE: Analysis needed for reporting in lowest detection possible; Total Dissolved Solids, O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen, Boron, Chloride, Copper, Iron, Mercury, VOC

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

L. Savary 10/1/12 1525

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of CustodyClient:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: GW Eel River -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
JW-122280 10/1/12	1140	A-21A	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4
JW-122281 10/1/12	1415	A15	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4

NOTE: Analysis needed for reporting in lowest detection possible; Total Dissolved Solids, O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen, Boron, Chloride, Copper, Iron, Mercury, VOC

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

J. Swally 10/1/12 1525

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Wednesday, December 12, 2012

Plymouth Environmental Management
 K.Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: GW Eel River **Comments:**
Project Number: Bradford
Collection Date: 10/2/12 **Collection Time:** 8:00
Sampled By: Kim Tower
Lab Order Number: WW-122293
Date Received: 10/02/12

Sample Type	Sample Time	Sample Date	Comments			
Bradford A	8:00	10/2/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	38	6.0	10/07/12	KB	2540 C
Total Organic Carbon*	mg/L	ND*	0.5	10/10/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	10/05/12	RIA*	*
Total Iron	mg/L	0.12	0.01	10/03/12	MC	200.7
Mercury*	mg/L	ND*	0.0005	10/10/12	RIA*	245.1
Boron	mg/L	BRL	0.010	10/10/12	MC	200.7
Copper	mg/L	0.011	0.003	10/10/12	MC	200.7
Nitrate-N	mg/L	0.12	0.01	10/02/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/02/12	LL	300.0
Ammonia-N *	mg/L	0.05*	0.02	10/15/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Chloride	mg/L	11.4	3.0	10/02/12	LL	300.0
Total Phosphorous (P)	mg/L	0.009	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	ND*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.17	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.15	NA	11/26/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	10/02/12	MC	4500-P
Particulate Organic Carbon	mg/L	ND	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.32	NA	11/26/12	MC	Calculation

$$TN = DON(0.075) + PON(0.1) + NO_3(0.12) + NO_2(0.002) + NH_4(0.05) =$$

0.347

BRL=below reportable limits

*see attached

By: 
 Ronald J. Sadri
 Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20862

Sample # 001

SAMPLE DESCRIPTION: WW-122293 BRADFORD

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/02/2012 @ 08:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.05	0.02	mg/l	SM 4500-NH3 C	10/15/2012 6:15	SJC
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20862

Sample # 001

SAMPLE DESCRIPTION: WW-122293 BRADFORD

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/02/2012 @ 08:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Styrene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Toluene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Acetone	<10	10	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	10/5/2012 15:46	KAC
Surrogates			RANGE	SW-846 8260B	10/5/2012 15:46	KAC
Dibromofluoromethane	116		86-118%	SW-846 8260B	10/5/2012 15:46	KAC
Toluene-d8	101		88-110%	SW-846 8260B	10/5/2012 15:46	KAC
4-Bromofluorobenzene	100		86-115%	SW-846 8260B	10/5/2012 15:46	KAC
1,2 Dichloroethane-d4	106		80-120%	SW-846 8260B	10/5/2012 15:46	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	10/10/2012 14:59	JRW

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Tuesday, December 11, 2012

Plymouth Environmental Management
 K.Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: GW Eel River **Comments:**
Project Number: A13
Collection Date: 10/2/12 **Collection Time:** 9:45
Sampled By: KimTower
Lab Order Number: WW-122294
Date Received: 10/02/12

Sample Type	Sample Time	Sample Date	Comments			
A13 A	9:45	10/2/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	457	6.0	10/07/12	KB	2540 C
Total Organic Carbon*	mg/L	2.3*	0.5	10/10/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	10/05/12	RIA*	*
Total Iron	mg/L	2.82	0.01	10/03/12	MC	200.7
Mercury*	mg/L	ND*	0.0005	10/10/12	RIA*	245.1
Boron	mg/L	BRL	0.010	10/11/12	MC	200.7
Copper	mg/L	BRL	0.003	10/11/12	MC	200.7
Nitrate-N	mg/L	0.13	0.01	10/02/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/02/12	LL	300.0
Ammonia-N *	mg/L	0.21*	0.02	10/15/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.55	0.2	11/26/12	MC	SM4500 NH3 C
Chloride	mg/L	281	3.0	10/03/12	LL	300.0
Total Phosphorous (P)	mg/L	0.020	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.45	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	2.3*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.34	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.24	NA	11/26/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.005	0.005	10/02/12	MC	4500-P
Particulate Organic Carbon	mg/L	ND	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.10	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.58	NA	11/26/12	MC	Calculation

$$TN = DON(0.24) + PON(0.10) + NO_3(0.13) + NO_2(0.002) + NH_4(0.21) = 0.682$$

BRL=below reportable limits

*see attached

By:


 Ronald J. Saari
 Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20862

Sample # 002

SAMPLE DESCRIPTION: WW-122294 A13

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/02/2012 @ 09:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.21	0.02	mg/l	SM 4500-NH3 C	10/15/2012 6:15	SJC
TOC Low Level	2.3	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	2.3	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20862

Sample # 002

SAMPLE DESCRIPTION: WW-122294 A13

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/02/2012 @ 09:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Styrene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Toluene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Acetone	<10	10	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	10/5/2012 16:15	KAC
Surrogates			RANGE	SW-846 8260B	10/5/2012 16:15	KAC
Dibromofluoromethane	117		86-118%	SW-846 8260B	10/5/2012 16:15	KAC
Toluene-d8	102		88-110%	SW-846 8260B	10/5/2012 16:15	KAC
4-Bromofluorobenzene	102		86-115%	SW-846 8260B	10/5/2012 16:15	KAC
1,2 Dichloroethane-d4	110		80-120%	SW-846 8260B	10/5/2012 16:15	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	10/10/2012 14:59	JRW

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Tuesday, December 11, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: GW Eel River

Comments:

Project Number: A17

Collection Date: 10/2/12 **Collection Time:** 12:25

Sampled By: Kim Tower

Lab Order Number: WW-122295

Date Received: 10/02/12

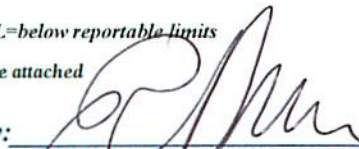
Sample Type	Sample Time	Sample Date	Comments			
A17 A	12:25	10/2/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	131	6.0	10/07/12	KB	2540 C
Total Organic Carbon*	mg/L	ND*	0.5	10/10/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	10/05/12	RIA*	*
Total Iron	mg/L	0.03	0.01	10/03/12	MC	200.7
Mercury*	mg/L	ND*	0.0005	10/10/12	RIA*	245.1
Boron	mg/L	BRL	0.010	10/11/12	MC	200.7
Copper	mg/L	BRL	0.003	10/11/12	MC	200.7
Nitrate-N	mg/L	1.80	0.01	10/02/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/02/12	LL	300.0
Ammonia-N *	mg/L	0.02*	0.02	10/15/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Chloride	mg/L	51.2	3.0	10/02/12	LL	300.0
Total Phosphorous (P)	mg/L	0.015	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	ND*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	1.82	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	11/26/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.008	0.005	10/02/12	MC	4500-P
Particulate Organic Carbon	mg/L	ND	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<2.00	NA	11/26/12	MC	Calculation

$$TN = DON (0.09) + PON (0.1) + NO_3 (1.80) + NO_2 (0.002) + NH_4 (0.02) = 2.012$$

BRL=below reportable limits

*see attached

By:


Ronald J. Saari
Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20862

Sample # 003

SAMPLE DESCRIPTION: WW-122295 A17

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/02/2012 @ 12:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.02	0.02	mg/l	SM 4500-NH3 C	10/15/2012 6:15	SJC
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20862

Sample # 003

SAMPLE DESCRIPTION: WW-122295 A17

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/02/2012 @ 12:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Styrene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Toluene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Acetone	<10	10	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	10/5/2012 16:42	KAC
Surrogates			RANGE	SW-846 8260B	10/5/2012 16:42	KAC
Dibromofluoromethane	117		86-118%	SW-846 8260B	10/5/2012 16:42	KAC
Toluene-d8	106		88-110%	SW-846 8260B	10/5/2012 16:42	KAC
4-Bromofluorobenzene	101		86-115%	SW-846 8260B	10/5/2012 16:42	KAC
1,2 Dichloroethane-d4	108		80-120%	SW-846 8260B	10/5/2012 16:42	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	10/10/2012 14:59	JRW

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Tuesday, December 11, 2012

Plymouth Environmental Management
K. Towers/ 11 Lincoln St.
Plymouth, MA

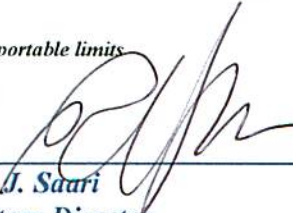
ProjectName: GW Eel River **Comments:**
Project Number: 7SR
Collection Date: 10/2/12 **Collection Time:** 14:20
Sampled By: Kim Tower
Lab Order Number: WW-122296
Date Received: 10/02/12

Sample Type	Sample Time	Sample Date	Comments			
7SR A	14:@0	10/2/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	223	6.0	10/07/12	KB	2540 C
Total Organic Carbon*	mg/L	ND*	0.5	10/10/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	10/05/12	RIA*	*
Total Iron	mg/L	BRL	0.01	10/03/12	MC	200.7
Mercury*	mg/L	ND*	0.0005	10/10/12	RIA*	245.1
Boron	mg/L	BRL	0.010	10/11/12	MC	200.7
Copper	mg/L	BRL	0.003	10/11/12	MC	200.7
Nitrate-N	mg/L	0.16	0.01	10/03/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/03/12	LL	300.0
Ammonia-N *	mg/L	0.03*	0.02	10/15/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Chloride	mg/L	128	3.0	10/03/12	LL	300.0
Total Phosphorous (P)	mg/L	BRL	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	ND*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.19	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.17	NA	11/26/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	10/02/12	MC	4500-P
Particulate Organic Carbon	mg/L	ND	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.36	NA	11/26/12	MC	Calculation

$$TN = DON (0.085) + PON (0.1) + NO_3 (0.16) + NO_2 (0.002) + NH_4 (0.03) = 0.377$$

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20862

Sample # 004

SAMPLE DESCRIPTION: WW-122296 7SR

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/02/2012 @ 14:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.03	0.02	mg/l	SM 4500-NH3 C	10/15/2012 6:15	SJC
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Chloroform	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.
 Date Received: 10/4/2012
 Work Order #: 1210-20862

Sample # 004

SAMPLE DESCRIPTION: WW-122296 7SR

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/02/2012 @ 14:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Styrene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Toluene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Acetone	<10	10	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	10/5/2012 17:10	KAC
Surrogates			RANGE	SW-846 8260B	10/5/2012 17:10	KAC
Dibromofluoromethane	117		86-118%	SW-846 8260B	10/5/2012 17:10	KAC
Toluene-d8	105		88-110%	SW-846 8260B	10/5/2012 17:10	KAC
4-Bromofluorobenzene	101		86-115%	SW-846 8260B	10/5/2012 17:10	KAC
1,2 Dichloroethane-d4	110		80-120%	SW-846 8260B	10/5/2012 17:10	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	10/10/2012 14:59	JRW

6

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of Custody

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: GW Eel River -Plymouth MA
Sampler: Kim Tower (KT)

WW-122293

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
10/2/12	0800	Bradford	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4
10/2/12	0945	A13	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4

WW-122294

NOTE: Analysis needed for reporting in lowest detection possible; Total Dissolved Solids, O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen, Boron, Chloride, Copper, Iron, Mercury, VOC

Relinquished By: Date/Time

Kim Tower

Received By:

Date/Time:

[Signature]

10/2/12

150

6

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of Custody

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: **GW Eel River -Plymouth MA**
Sampler: Kim Tower (KT)

NW-122295

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
10/4/12	1225	A17	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4
10/2/12	1420	75R	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , I-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4

NW-122294

NOTE: Analysis needed for reporting in lowest detection possible; Total Dissolved Solids, O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen, Boron, Chloride, Copper, Iron, Mercury, VOC

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

[Signature] 10/2/12 750

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Friday, January 04, 2013

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Eel River GW Sampling **Comments:**

Project Number: A19

Collection Date: 10/3/12 **Collection Time:** 08:50

Sampled By: Kim Tower

Lab Order Number: WW-122314

Date Received: 10/03/12

Sample Type	Sample Time	Sample Date	Comments			
A19 A	08:50	10/03/12	**Chloroform			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	50	6.0	10/10/12	KB	2540 C
Total Organic Carbon*	mg/L	ND*	0.5	10/10/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	1**	*	10/10/12	RIA*	*
Total Iron	mg/L	0.08	0.01	10/11/12	MC	200.7
Mercury*	mg/L	ND*	0.0005	10/10/12	RIA*	245.1
Boron	mg/L	BRL	0.010	10/11/12	MC	200.7
Copper	mg/L	BRL	0.003	10/11/12	MC	200.7
Nitrate-N	mg/L	0.72	0.01	10/04/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/04/12	LL	300.0
Ammonia-N *	mg/L	ND*	0.02	10/15/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Chloride	mg/L	14.1	3.0	10/04/12	LL	300.0
Total Phosphorous (P)	mg/L	0.011	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	ND*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.74	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.74	NA	11/26/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.005	0.005	10/04/12	MC	4500-P
Particulate Organic Carbon	mg/L	ND	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.92	NA	11/26/12	MC	Calculation

$$TN = DON(0.1) + PON(0.1) + NO_3(0.72) + NO_2(0.005) + NH_4(0.01) = 0.935$$

BRL=below reportable limits

*see attached

By: Ronald J. Saari
Ronald J. Saari
Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20864

Sample # 001

SAMPLE DESCRIPTION: WW-122314 A-19

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/03/2012 @ 08:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM 4500-NH3 C	10/15/2012 6:15	SJC
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Chloroform	1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20864

Sample # 001

SAMPLE DESCRIPTION: WW-122314 A-19

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/03/2012 @ 08:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Styrene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Toluene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Acetone	<10	10	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	10/10/2012 15:10	KAC
Surrogates			RANGE	SW-846 8260B	10/10/2012 15:10	KAC
Dibromofluoromethane	101		86-118%	SW-846 8260B	10/10/2012 15:10	KAC
Toluene-d8	97		88-110%	SW-846 8260B	10/10/2012 15:10	KAC
4-Bromofluorobenzene	97		86-115%	SW-846 8260B	10/10/2012 15:10	KAC
1,2 Dichloroethane-d4	104		80-120%	SW-846 8260B	10/10/2012 15:10	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	10/10/2012 14:59	JRW

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

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Friday, January 04, 2013

Plymouth Environmental Management
K. Towers/ 11 Lincoln St.
Plymouth, MA

ProjectName: Eel River GW Sampling
Project Number: 5S
Collection Date: 10/3/12 **Collection Time:** 10:25
Sampled By: Kim Tower
Lab Order Number: WW-122315
Date Received: 10/03/12

Comments: ***Increased detection limit due to sample matrix.

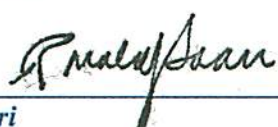
Sample Type	Sample Time	Sample Date	Comments			
SS A	10:25	10/03/12	**Chloroform			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrite-N	mg/L	BRL***	0.020	10/04/12	LL	300.0
Total Dissolved Solids	mg/L	954	6.0	10/10/12	KB	2540 C
Total Organic Carbon*	mg/L	ND*	0.5	10/15/12	RIA*	SM 5310 C
Volatile Organic Compounds*	ug/L	1**	*	10/10/12	RIA*	*
Total Iron	mg/L	0.16	0.01	10/11/12	MC	200.7
Mercury*	mg/L	ND*	0.0005	10/10/12	RIA*	245.1
Boron	mg/L	BRL	0.010	10/11/12	MC	200.7
Copper	mg/L	BRL	0.003	10/11/12	MC	200.7
Nitrate-N	mg/L	0.46	0.01	10/04/12	LL	300.0
Ammonia-N *	mg/L	0.06*	0.02	10/10/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Chloride	mg/L	540	3.0	10/04/12	LL	300.0
Total Phosphorous (P)	mg/L	0.042	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	ND*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.52	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.14	NA	11/26/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	10/04/12	MC	4500-P
Particulate Organic Carbon	mg/L	ND	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.66	NA	11/26/12	MC	Calculation

$$TN = DON (0.07) + PON (0.1) + NO_3 (0.46) + NO_2 (0.01) + NH_4 (0.06) = 0.70$$

msk

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20864

Sample # 002

SAMPLE DESCRIPTION: WW-122315 5S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/03/2012 @ 10:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.06	0.02	mg/l	SM 4500-NH3 C	10/15/2012 6:15	SJC
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Bromobenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Bromochloromethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Bromodichloromethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Bromoform	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Bromomethane	<5	5	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
n-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Sec-butylbenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
tert-Butylbenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Chlorobenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Chloroethane	<5	5	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Chloroform	1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Chloromethane	<5	5	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
2-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
4-Chlorotoluene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Dibromochloromethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Dibromomethane	<2	2	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
trans-1,2-Dichloroethylene	<2	2	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Ethylbenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Isopropylbenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 10/4/2012

Work Order #: 1210-20864

Sample # 002

SAMPLE DESCRIPTION: WW-122315 5S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/03/2012 @ 10:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Methylene Chloride	<5	5	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Naphthalene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
n-Propylbenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Styrene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Tetrachloroethene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Toluene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Trichloroethene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Vinyl Chloride	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
o-Xylene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
m,p-Xylene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Methyl Tertiary Butyl Ether (MTBE)	<2	2	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Carbon Disulfide	<5	5	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Acetone	<10	10	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
2-Hexanone	<10	10	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
cis-1,3-Dichloropropene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
trans-1,3-Dichloropropylene	<1	1	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Vinyl Acetate	<50	50	ug/l	SW-846 8260B	10/10/2012 15:37	KAC
Surrogates			RANGE	SW-846 8260B	10/10/2012 15:37	KAC
Dibromofluoromethane	100		86-118%	SW-846 8260B	10/10/2012 15:37	KAC
Toluene-d8	97		88-110%	SW-846 8260B	10/10/2012 15:37	KAC
4-Bromofluorobenzene	96		86-115%	SW-846 8260B	10/10/2012 15:37	KAC
1,2 Dichloroethane-d4	102		80-120%	SW-846 8260B	10/10/2012 15:37	KAC
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	10/10/2012 14:59	JRW

①

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of Custody

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: GW Eel River -Plymouth MA
Sampler: Kim Tower (KT)

JW-122314

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
10-3-12	0850	A19	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4
JW-122315	10-3-12	1025	55	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	NH ₃ , T-Phosphorus, TKN	H2SO4
			1	Plastic	Boron, NO ₂ , NO ₃ , Chloride, Cu, Iron, Mercury, O-Phos	NONE
			1	Plastic	TOC	H2SO4

NOTE: Analysis needed for reporting in lowest detection possible; Total Dissolved Solids, O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen, Boron, Chloride, Copper, Iron, Mercury, VOC

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

L. Lavalley 10/3/12 1350

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Monday, April 30, 2012

Plymouth Environmental Management
K. Towers/ 11 Lincoln St.
Plymouth, MA

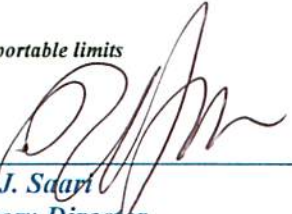
ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-6A
Collection Date: 3/27/12 **Collection Time:** 10:10
Sampled By: K. Tower
Lab Order Number: WW-120630
Date Received: 03/27/12

Sample Type	Sample Time	Sample Date	Comments			
S-6A A	10:10	3/27/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	50	6.0	03/28/12	KB	2540 C
Total Organic Carbon*	mg/L	<0.5*	0.5	03/30/12	RIA*	SM 5310 C
Baron Dissolved	mg/L	0.012	0.010	03/29/12	MC	200.7
ate-N	mg/L	0.32	0.01	03/27/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/27/12	LL	300.0
Ammonia-N *	mg/L	0.02*	0.02	03/30/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.20	0.2	03/29/12	MC	SM4500 NH3 C
Chloride	mg/L	18.9	3.0	03/27/12	LL	300.0
Total Phosphorous (P)	mg/L	0.020	0.005	03/29/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	03/29/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	0.56*	0.5	03/30/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.34	NA	03/30/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	BRL	NA	03/30/12	MC	Calculation
Chlorophyll-a	*	0.7*	*	04/06/12	ABS*	*
Ortho Phosphorous (P)	mg/L	0.009	0.005	03/27/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	03/30/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	03/30/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.52	NA	03/30/12	MC	Calculation

$$TN = DON(0.1) + PON(0.1) + NH_4(0.02) + NO_3(0.32) + NO_2(0.002) = 0.542$$

BRL=below reportable limits

*see attached


Ronald J. Saari
Laboratory Director

✓

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Monday, April 30, 2012

Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

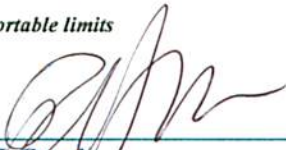
ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-12
Collection Date: 3/27/12 **Collection Time:** 10:25
Sampled By: K. Tower
Lab Order Number: WW-120631
Date Received: 03/27/12

Sample Type	Sample Time	Sample Date	Comments			
S-12 A	10:25	3/27/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	51	6.0	03/28/12	KB	2540 C
Total Organic Carbon*	mg/L	0.66*	0.5	03/30/12	RIA*	SM 5310 C
Boron Dissolved	mg/L	0.013	0.010	03/29/12	MC	200.7
Nitrate-N	mg/L	0.33	0.01	03/27/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/27/12	LL	300.0
Ammonia-N *	mg/L	0.02*	0.02	03/30/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.30	0.2	03/29/12	MC	SM4500 NH3 C
Chloride	mg/L	17.3	3.0	03/27/12	LL	300.0
Total Phosphorous (P)	mg/L	0.016	0.005	03/29/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	03/29/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	0.64*	0.5	03/30/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.35	NA	03/30/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	BRL	NA	03/30/12	MC	Calculation
Chlorophyll-a	*	1.2*	*	04/06/12	ABS*	*
Ortho Phosphorous (P)	mg/L	0.006	0.005	03/27/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.02	NA	03/30/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.10	NA	03/30/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.53	NA	03/30/12	MC	Calculation

$$TN = DON(0.1) + PON(0.05) + NH_4(0.02) + NO_3(0.33) + NO_2(0.002) = 0.502$$

BRL=below reportable limits

*see attached


 Ronald J. Saari
 Laboratory Director

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
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Monday, April 30, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number: S-3A

Collection Date: 03/27/12 **Collection Time:** 09:25

Sampled By: KT

Lab Order Number: WW-120632

Date Received: 03/27/12

Sample Type	Sample Time	Sample Date	Comments			
S-3A A	09:25	03/27/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	68	6.0	03/28/12	KB	2540 C
Total Organic Carbon*	mg/L	0.96*	0.5	03/30/12	RIA*	SM 5310 C
Boron Dissolved	mg/L	0.011	0.010	03/29/12	MC	200.7
Nitrate-N	mg/L	0.17	0.01	03/27/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/27/12	LL	300.0
Ammonia-N *	mg/L	0.02*	0.02	03/30/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.42	0.2	03/29/12	MC	SM4500 NH3 C
Chloride	mg/L	30.1	3.0	03/27/12	LL	300.0
Total Phosphorous (P)	mg/L	0.024	0.005	03/29/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.32	0.2	03/29/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	0.55*	0.5	03/30/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.19	NA	03/30/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.30	NA	03/30/12	MC	Calculation
Chlorophyll-a	*	15.2*	*	04/06/12	ABS*	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	03/27/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.41	NA	03/30/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.10	NA	03/30/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.49	NA	03/30/12	MC	Calculation

$$TN = DON (0.3) + PON (0.1) + NH_4 (0.02) + NO_3 (0.17) + NO_2 (0.002) = 0.592$$

BRL=below reportable limits

*see attached

Ronald J. Sabri

Laboratory Director

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
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Thursday, May 31, 2012

Plymouth Environmental Management

K. Towers / 11 Lincoln St.

Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number: S-2

Collection Date: 03/27/12 **Collection Time:** 09:50

Sampled By: KT

Lab Order Number: WW-120633

Date Received: 03/27/12

Sample Type	Sample Time	Sample Date	Comments			
S-2 A	09:50	03/27/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	63	6.0	03/28/12	KB	2540 C
Total Organic Carbon*	mg/L	1.1*	0.5	03/30/12	RIA*	SM 5310 C
Carbon Dissolved	mg/L	0.012	0.010	03/29/12	MC	200.7
Nitrate-N	mg/L	0.10	0.01	03/27/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/27/12	LL	300.0
Ammonia-N *	mg/L	0.04*	0.02	03/30/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.74	0.2	03/29/12	MC	SM4500 NH3 C
Chloride	mg/L	26.9	3.0	03/27/12	LL	300.0
Total Phosphorous (P)	mg/L	0.040	0.005	03/29/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.30	0.2	03/29/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	03/30/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.14	NA	03/30/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.26	NA	03/30/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.009	0.005	03/27/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.5-1.1	NA	03/30/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.44	NA	03/30/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.40	NA	03/30/12	MC	Calculation
Chlorophyll A	mg/m^3	23.0*	0.2	04/06/12	ABS*	SM 10200H

revised

BRL=below reportable limits

*see attached

y:

Ronald J. Saari

Laboratory Director

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

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 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
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Monday, May 07, 2012

Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-2L
Collection Date: 03/27/12 **Collection Time:** 09:50
Sampled By: KT
Lab Order Number: WW-120633
Date Received: 03/27/12

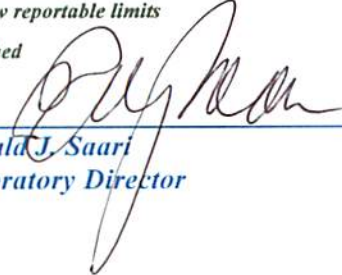
Sample Type	Sample Time	Sample Date	Comments			
S-2C A	09:50	03/27/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	63	6.0	03/28/12	KB	2540 C
Total Organic Carbon*	mg/L	1.1*	0.5	03/30/12	RIA*	SM 5310 C
Dissolved	mg/L	0.012	0.010	03/29/12	MC	200.7
Ammonia-N	mg/L	0.10	0.01	03/27/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/27/12	LL	300.0
Ammonia-N *	mg/L	0.04*	0.02	03/30/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.74	0.2	03/29/12	MC	SM4500 NH3 C
Chloride	mg/L	26.9	3.0	03/27/12	LL	300.0
Total Phosphorous (P)	mg/L	0.040	0.005	03/29/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.30	0.2	03/29/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	03/30/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.14	NA	03/30/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.26	NA	03/30/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.009	0.005	03/27/12	MC	4500-P
Particulate Organic Carbon	mg/L	0-1.1	NA	03/30/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.44	NA	03/30/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.40	NA	03/30/12	MC	Calculation
Chlorophyll A	mg/m^3	23.0*	0.2	04/06/12	ABS*	SM 10200H

$$TN = DON(0.26) + PON(0.44) + NH_4(0.04) + NO_3(0.1) + NO_2(0.002) = 0.842$$

see revision

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Monday, April 30, 2012

Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-8A
Collection Date: 03/27/12 **Collection Time:** 08:45
Sampled By: KT
Lab Order Number: WW-120634
Date Received: 03/27/12

Sample Type	Sample Time	Sample Date	Comments			
S-8A A	08:45	03/27/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	85	6.0	03/28/12	KB	2540 C
Total Organic Carbon*	mg/L	1.4*	0.5	03/30/12	RIA*	SM 5310 C
Carbon Dissolved	mg/L	0.012	0.010	03/29/12	MC	200.7
Nitrate-N	mg/L	0.13	0.01	03/27/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/27/12	LL	300.0
Ammonia-N *	mg/L	0.04*	0.02	03/30/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.48	0.2	03/29/12	MC	SM4500 NH3 C
Chloride	mg/L	38.7	3.0	03/27/12	LL	300.0
Total Phosphorous (P)	mg/L	0.011	0.005	03/29/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.39	0.2	03/30/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	0.87*	0.5	03/30/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.17	NA	03/30/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.35	NA	03/30/12	MC	Calculation
Chlorophyll-a	*	17.9*	*	04/06/12	ABS*	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	03/27/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.53	NA	03/30/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.09	NA	03/30/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.52	NA	03/30/12	MC	Calculation

$$TN = DON (0.35) + PON (0.09) + NH_4 (0.04) + NO_3 (0.13) + NO_2 (0.002) = 0.612$$

BRL=below reportable limits

*see attached

By:

Ronald J. Saari
 Laboratory Director

✓

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Monday, April 30, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number: S-4A

Collection Date: 03/27/12 **Collection Time:** 09:10

Sampled By: KT

Lab Order Number: WW-120635

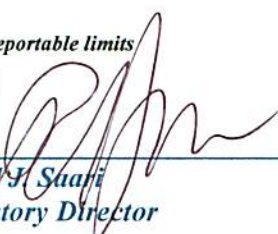
Date Received: 03/27/12

Sample Type	Sample Time	Sample Date	Comments			
S-4A A	09:10	03/27/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	65	6.0	03/28/12	KB	2540 C
Total Organic Carbon*	mg/L	1.5*	0.5	03/30/12	RIA*	SM 5310 C
Carbon Dissolved	mg/L	0.011	0.010	03/29/12	MC	200.7
Nitrate-N	mg/L	0.13	0.01	03/27/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/27/12	LL	300.0
Ammonia-N *	mg/L	0.04*	0.02	03/30/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.28	0.2	03/30/12	MC	SM4500 NH3 C
Chloride	mg/L	28.9	3.0	03/27/12	LL	300.0
Total Phosphorous (P)	mg/L	0.047	0.005	03/29/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.25	0.2	03/30/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	1.2*	0.5	03/30/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.17	NA	03/30/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.21	NA	03/30/12	MC	Calculation
Chlorophyll-a	*	0.04*	*	04/06/12	ABS*	*
Ortho Phosphorous (P)	mg/L	0.007	0.005	03/27/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.30	NA	03/30/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.03	NA	03/30/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.38	NA	03/30/12	MC	Calculation

$$TN = DON(0.21) + PON(0.03) + NH_4(0.04) + NO_3(0.13) + NO_2(0.002) = 0.412$$

BRL=below reportable limits

*see attached

By: 

Ronald J. Saari
Laboratory Director

✓

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Monday, April 30, 2012

Plymouth Environmental Management
K. Towers/ 11 Lincoln St.
Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number: S-8B

Collection Date: 3/27/12 **Collection Time:** 8:30¹⁵

Sampled By: K. Tower

Lab Order Number: WW-120636

Date Received: 03/27/12

Sample Type	Sample Time	Sample Date	Comments			
S-8B A	8:15	3/27/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	BRL	6.0	03/28/12	KB	2540 C
Total Organic Carbon*	mg/L	<0.5*	0.5	03/30/12	RIA*	SM 5310 C
Carbon Dissolved	mg/L	BRL	0.010	03/29/12	MC	200.7
Nitrate-N	mg/L	BRL	0.01	03/27/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/27/12	LL	300.0
Ammonia-N *	mg/L	0.02*	0.02	03/30/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	03/30/12	MC	SM4500 NH3 C
Chloride	mg/L	BRL	3.0	03/27/12	LL	300.0
Total Phosphorous (P)	mg/L	BRL	0.005	03/29/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	03/30/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	03/30/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.03	NA	03/30/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	BRL	NA	03/30/12	MC	Calculation
Chlorophyll-a	*	0.02*	*	04/06/12	ABS*	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	03/27/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	03/30/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	03/30/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.21	NA	03/30/12	MC	Calculation

$$TN = DON(0.1) + PON(0.1) + NH_4(0.02) + NO_3(0.005) + NO_2(0.002) = 0.227$$

BRL=below reportable limits

*see attached

By:

Ronald J. Saari
Laboratory Director

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

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(508)888-6460 1-800-339-6460
FAX (508)888-6446

Monday, May 07, 2012

Plymouth Environmental Management
K. Towers/ 11 Lincoln St.
Plymouth, MA

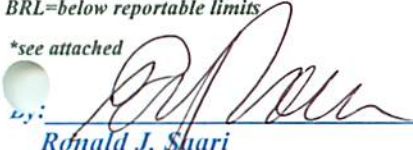
ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-5B
Collection Date: 3/27/12 **Collection Time:** 8:30
Sampled By: K. Tower
Lab Order Number: WW-120637
Date Received: 03/27/12

Sample Type	Sample Time	Sample Date	Comments			
S-5B A	8:30	3/27/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	86	6.0	03/28/12	KB	2540 C
Total Organic Carbon*	mg/L	2.3*	0.5	03/30/12	RIA*	SM 5310 C
Carbon Dissolved	mg/L	0.012	0.010	03/29/12	MC	200.7
Nitrate-N	mg/L	0.13	0.01	03/27/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	03/27/12	LL	300.0
Ammonia-N *	mg/L	0.03*	0.02	03/30/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.38	0.2	03/30/12	MC	SM4500 NH3 C
Chloride	mg/L	38.6	3.0	03/27/12	LL	300.0
Total Phosphorous (P)	mg/L	0.053	0.005	03/29/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.30	0.2	03/30/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	1.0*	0.5	03/30/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.16	NA	03/30/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.27	NA	03/30/12	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.006	0.005	03/27/12	MC	4500-P
Particulate Organic Carbon	mg/L	1.3	NA	03/30/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.08	NA	03/30/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.43	NA	03/30/12	MC	Calculation
Chlorophyll A	mg/m^3	17.9*	0.2	04/06/12	ABS*	SM 10200H

$$TN = DON (0.27) + PON (0.08) + NH_4 (0.03) + NO_3 (0.13) + NO_2 (0.002) = 0.512$$

BRL=below reportable limits

*see attached

By: 
Ronald J. Shari
Laboratory Director

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.
Attn: Mr. Ron Saari
8 Jan Sebastian Drive
Sandwich, MA 02563

Date Received: 3/28/2012
Date Reported: 4/25/2012
P.O. #:
Work Order #: 1203-06127

DESCRIPTION: PLYMOUTH ENV.

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory and our subcontracted laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844, NY-11726

If you have any questions regarding this work, or if we may be of further assistance, please contact us.

Approved by:



Data Reporting

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/28/2012

Work Order #: 1203-06127

Sample # 001

SAMPLE DESCRIPTION: WW-120630 S-6A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/27/2012 @ 10:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.02	0.02	mg/l	SM 4500-NH3 C	3/30/2012	TV
Chlorophyll A	See Attached		mg/m ³	SM 10200-H	4/6/2012	*AQ
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	3/30/2012	JRG
Dissolved TOC	0.56	0.5	mg/l	EPA 415.1	3/30/2012	JRG

Sample # 002

SAMPLE DESCRIPTION: WW-120631 S-12

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/27/2012 @ 10:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.02	0.02	mg/l	SM 4500-NH3 C	3/30/2012	TV
Chlorophyll A	See Attached		mg/m ³	SM 10200-H	4/6/2012	*AQ
TOC Low Level	0.66	0.5	mg/l	SM-5310B	3/30/2012	JRG
Dissolved TOC	0.64	0.5	mg/l	EPA 415.1	3/30/2012	JRG

Sample # 003

SAMPLE DESCRIPTION: WW-120632 S-3A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/27/2012 @ 09:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.02	0.02	mg/l	SM 4500-NH3 C	3/30/2012	TV
Chlorophyll A	See Attached		mg/m ³	SM 10200-H	4/6/2012	*AQ
TOC Low Level	0.96	0.5	mg/l	SM-5310B	3/30/2012	JRG
Dissolved TOC	0.55	0.5	mg/l	EPA 415.1	3/30/2012	JRG

Sample # 004

SAMPLE DESCRIPTION: WW-120633 S-2L

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/27/2012 @ 09:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.04	0.04	mg/l	SM 4500-NH3 C	3/30/2012	TV
Chlorophyll A	See Attached		mg/m ³	SM 10200-H	4/6/2012	*AQ
TOC Low Level	1.1	0.5	mg/l	SM-5310B	3/30/2012	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	3/30/2012	JRG

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 3/28/2012

Work Order #: 1203-06127

Sample # 005

SAMPLE DESCRIPTION: WW-120634 S-8A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/27/2012 @ 08:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.04	0.02	mg/l	SM 4500-NH3 C	3/29/2012	SJC
Chlorophyll A	See Attached		mg/m ³	SM 10200-H	4/6/2012	*AQ
TOC Low Level	1.4	0.5	mg/l	SM-5310B	3/30/2012	JRG
Dissolved TOC	0.87	0.5	mg/l	EPA 415.1	3/30/2012	JRG

Sample # 006

SAMPLE DESCRIPTION: WW-120635 S-4A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/27/2012 @ 09:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.04	0.02	mg/l	SM 4500-NH3 C	3/29/2012	SJC
Chlorophyll A	See Attached		mg/m ³	SM 10200-H	4/6/2012	*AQ
TOC Low Level	1.5	0.5	mg/l	SM-5310B	3/30/2012	JRG
Dissolved TOC	1.2	0.5	mg/l	EPA 415.1	3/30/2012	JRG

Sample # 007

SAMPLE DESCRIPTION: WW-120636 S-8B

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/27/2012 @ 09:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.02	0.02	mg/l	SM 4500-NH3 C	3/30/2012	TV
Chlorophyll A	See Attached		mg/m ³	SM 10200-H	4/6/2012	*AQ
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	3/30/2012	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	3/30/2012	JRG

Sample # 008

SAMPLE DESCRIPTION: WW-120637 S-4A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/27/2012 @ 08:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.03	0.02	mg/l	SM 4500-NH3 C	3/29/2012	SJC
Chlorophyll A	See Attached		mg/m ³	SM 10200-H	4/6/2012	*AQ
TOC Low Level	2.3	0.5	mg/l	SM-5310B	3/30/2012	JRG
Dissolved TOC	1.0	0.5	mg/l	EPA 415.1	3/30/2012	JRG

* Samples analyzed by Aquatec Biological Sciences, Inc.

①

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of Custody

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
NW-120630 3/27/12	1010	S-6A	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
NW-120631 3/27/12	1025	S-12	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

Y. Savally 3/27/12 1055

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of CustodyClient:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
3/27/12	S-3A	0925	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
3/27/12	S-2C	0950	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

L. Lavalley 3/27/12 1055

Laboratory:

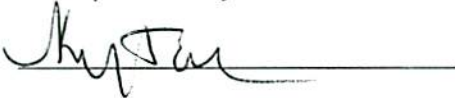
Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of CustodyClient:

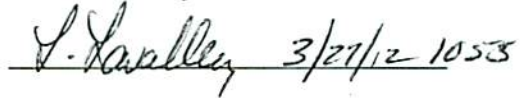
Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
1W-120634 3/27/12	0845	S-8A	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
1W-120635 3/27/12	0910	S-4A	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

Relinquished By: Date/Time



Received By: Date/Time:

 3/27/12 1053

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of Custody

62

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
1W-120636 3/27/12	0815	S-8B	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
1W-120637 3/27/12	0830	S-5B	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

P. Savalley 3/27/12 1053

ENVIROTECH LABORATORIES, INC.**MA CERT. NO.: M-MA 063**

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Eel River SW Sampling**Comments:****Project Number:** S-8B**Collection Date:** 06/19/12 **Collection Time:** 0830**Sampled By:** K. Tower**Lab Order Number:** WW-121334**Date Received:** 06/19/12

Sample Type	Sample Time	Sample Date	Comments			
S-8B A						
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	BRL	6.0	06/20/12	KB	2540 C
Total Organic Carbon*	mg/L	<0.5*	0.5	06/22/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	06/25/12	MC	200.7
Nitrate-N	mg/L	0.09	0.01	06/19/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	06/19/12	LL	300.0
Ammonia-N *	mg/L	0.06*	0.02	06/27/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	06/21/12	MC	SM4500 NH3 C
Chloride	mg/L	BRL	3.0	06/19/12	LL	300.0
Total Phosphorous (P)	mg/L	BRL	0.005	06/22/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	06/21/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	06/22/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.15	NA	06/27/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	<0.14	NA	06/27/12	Calculation	Calculation
Chlorophyll-a	*	<0.2*	*	06/27/12	ec Biological Sc	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	06/21/12	KB	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	06/22/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	06/27/12	Calculation	Calculation
Total Dissolved Nitrogen	mg/L	<0.29	NA	06/21/12	Calculation	Calculation

BRL=below reportable limits

*see attached

By:

Ronald J. Saari
Laboratory Director

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: Eel River SW Sampling
Project Number: S-8A
Collection Date: 06/19/12 **Collection Time:** 0845
Sampled By: K. Tower
Lab Order Number: WW-121335
Date Received: 06/19/12

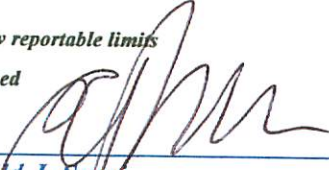
Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-8A A						
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	268	6.0	06/22/12	KB	2540 C
Total Organic Carbon*	mg/L	2.4*	0.5	06/22/12	RIA*	SM 5310 C
Boron	mg/L	0.040	0.010	06/25/12	MC	200.7
Nitrate-N	mg/L	0.12	0.01	06/19/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	06/19/12	LL	300.0
Ammonia-N *	mg/L	0.06*	0.02	06/27/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.33	0.2	06/21/12	MC	SM4500 NH3 C
Chloride	mg/L	137	3.0	06/20/12	LL	300.0
Total Phosphorous (P)	mg/L	0.032	0.005	06/22/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.24	0.2	06/21/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	2.2*	0.5	06/22/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.18	NA	06/27/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	0.18	NA	06/27/12	Calculation	Calculation
Chlorophyll-a	*	2.7*	*	06/27/12	ec Biological Sc	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	06/21/12	KB	4500-P
Particulate Organic Carbon	mg/L	0.2	NA	06/22/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.09	NA	06/27/12	Calculation	Calculation
Total Dissolved Nitrogen	mg/L	0.36	NA	06/21/12	Calculation	Calculation

$$TN = DON(0.18) + PON(0.09) + NH_4(0.06) + NO_3(0.12) + NO_2(0.002) = 0.452$$

BRL=below reportable limits

*see attached

By: 
 Ronald J. Sauer
 Laboratory Director

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

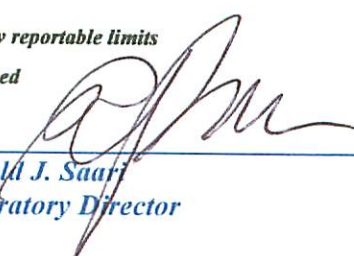
ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-5B
Collection Date: 06/19/12 **Collection Time:** 0900
Sampled By: K. Tower
Lab Order Number: WW-121336
Date Received: 06/19/12

Sample Type	Sample Time	Sample Date	Comments			
S-5B A						
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	263	6.0	06/22/12	KB	2540 C
Total Organic Carbon*	mg/L	2.3*	0.5	06/22/12	RIA*	SM 5310 C
Boron	mg/L	0.038	0.010	06/25/12	MC	200.7
Nitrate-N	mg/L	0.12	0.01	06/19/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	06/19/12	LL	300.0
Ammonia-N *	mg/L	0.03*	0.02	06/27/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	06/22/12	MC	SM4500 NH3 C
Chloride	mg/L	138	3.0	06/20/12	LL	300.0
Total Phosphorous (P)	mg/L	0.033	0.005	06/22/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	06/22/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	2.2*	0.5	06/22/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.15	NA	06/27/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	<0.17	NA	06/27/12	Calculation	Calculation
Chlorophyll-a	*	3.2*	*	06/27/12	ec Biological Sc	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	06/21/12	KB	4500-P
Particulate Organic Carbon	mg/L	0.1	NA	06/22/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	06/27/12	Calculation	Calculation
Total Dissolved Nitrogen	mg/L	<0.32	NA	06/21/12	Calculation	Calculation

$$TN = DON(.088) + PON(.1) + NH_4(.03) + NO_3(.12) + NO_2(.002) = .337$$

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number: S-4A

Collection Date: 06/19/12 **Collection Time:** 0915

Sampled By: K. Tower

Lab Order Number: WW-121337

Date Received: 06/19/12

Sample Type	Sample Time	Sample Date	Comments			
S-4A A						
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	68	6.0	06/22/12	KB	2540 C
Total Organic Carbon*	mg/L	2.6*	0.5	06/22/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	06/25/12	MC	200.7
Nitrate-N	mg/L	0.09	0.01	06/19/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	06/19/12	LL	300.0
Ammonia-N *	mg/L	0.04*	0.02	06/27/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	06/22/12	MC	SM4500 NH3 C
Chloride	mg/L	27.9	3.0	06/19/12	LL	300.0
Total Phosphorous (P)	mg/L	0.033	0.005	06/22/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	06/22/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	2.5*	0.5	06/22/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.13	NA	06/27/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	<0.16	NA	06/27/12	Calculation	Calculation
Chlorophyll-a	*	0.7*	*	06/27/12	ec Biological Sc	*
Ortho Phosphorous (P)	mg/L	0.008	0.005	06/21/12	KB	4500-P
Particulate Organic Carbon	mg/L	0.1	NA	06/22/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	06/27/12	Calculation	Calculation
Total Dissolved Nitrogen	mg/L	<0.29	NA	06/21/12	Calculation	Calculation

BRL=below reportable limits

*see attached

By:

Ronald J. Saari
Laboratory Director

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: Eel River SW Sampling
Project Number: S-3A
Collection Date: 06/19/12 **Collection Time:** 0830
Sampled By: K. Tower
Lab Order Number: WW-121338
Date Received: 06/19/12

Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-3A A	09:30	06/19/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	73	6.0	06/22/12	KB	2540 C
Total Organic Carbon*	mg/L	2.0*	0.5	06/22/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	06/25/12	MC	200.7
Nitrate-N	mg/L	0.16	0.01	06/19/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	06/19/12	LL	300.0
Ammonia-N *	mg/L	0.02*	0.02	06/27/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.46	0.2	06/22/12	MC	SM4500 NH3 C
Chloride	mg/L	29.1	3.0	06/19/12	LL	300.0
Total Phosphorous (P)	mg/L	0.037	0.005	06/22/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.31	0.2	06/22/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	1.9*	0.5	06/22/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.18	NA	06/27/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	0.29	NA	06/27/12	Calculation	Calculation
Chlorophyll-a	*	9.2*	*	06/27/12	ec Biological Sc	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	06/21/12	KB	4500-P
Particulate Organic Carbon	mg/L	0.1	NA	06/22/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.15	NA	06/27/12	Calculation	Calculation
Total Dissolved Nitrogen	mg/L	0.47	NA	06/21/12	Calculation	Calculation

BRL=below reportable limits

*see attached

By: 
 Ronald J. Sauri
 Laboratory Director

= .622

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

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(508)888-6460 1-800-339-6460
FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management
K. Towers/ 11 Lincoln St.
Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number: S-2C

Collection Date: 06/19/12 **Collection Time:** 09:45

Sampled By: K. Tower

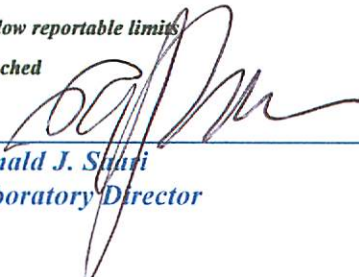
Lab Order Number: WW-121339

Date Received: 06/19/12

Sample Type	Sample Time	Sample Date	Comments			
S-2C A	09:45	06/19/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	65	6.0	06/22/12	KB	2540 C
Total Organic Carbon*	mg/L	2.2*	0.5	06/22/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	06/25/12	MC	200.7
Nitrate-N	mg/L	0.11	0.01	06/19/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	06/19/12	LL	300.0
Ammonia-N *	mg/L	<0.02*	0.02	06/27/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.29	0.2	06/22/12	MC	SM4500 NH3 C
Chloride	mg/L	26.2	3.0	06/19/12	LL	300.0
Total Phosphorous (P)	mg/L	0.027	0.005	06/22/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	06/22/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	1.8*	0.5	06/22/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.11	NA	06/27/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	06/27/12	Calculation	Calculation
Chlorophyll-a	*	10.5*	*	06/27/12	ec Biological Sc	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	06/21/12	KB	4500-P
Particulate Organic Carbon	mg/L	0.4	NA	06/22/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.09	NA	06/27/12	Calculation	Calculation
Total Dissolved Nitrogen	mg/L	<0.31	NA	06/21/12	Calculation	Calculation

BRL=below reportable limits

*see attached

By: 

Ronald J. Spurr

Laboratory Director

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number: S-6A

Collection Date: 06/19/12 **Collection Time:** 10:00

Sampled By: K. Tower

Lab Order Number: WW-121340

Date Received: 06/19/12

Sample Type	Sample Time	Sample Date	Comments			
S-6A A	10:00	06/21/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	60	6.0	06/22/12	KB	2540 C
Total Organic Carbon*	mg/L	1.9*	0.5	06/22/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	06/25/12	MC	200.7
Nitrate-N	mg/L	0.22	0.01	06/19/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	06/19/12	LL	300.0
Ammonia-N *	mg/L	0.04*	0.02	06/27/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.23	0.2	06/22/12	MC	SM4500 NH3 C
Chloride	mg/L	19.4	3.0	06/19/12	LL	300.0
Total Phosphorous (P)	mg/L	0.047	0.005	06/22/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	06/22/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	1.7*	0.5	06/22/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.26	NA	06/27/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	<0.16	NA	06/27/12	Calculation	Calculation
Chlorophyll-a	*	0.6*	*	06/27/12	ec Biological Sc	*
Ortho Phosphorous (P)	mg/L	0.009	0.005	06/21/12	KB	4500-P
Particulate Organic Carbon	mg/L	0.2	NA	06/22/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.03	NA	06/27/12	Calculation	Calculation
Total Dissolved Nitrogen	mg/L	<0.42	NA	06/21/12	Calculation	Calculation

$$TN = DON (.04) + PON (.018) + NH_4 (.04) + NO_3 (.22) + NO_2 (.002) = .357$$

BRL=below reportable limits

*see attached

By:

Ronald J. Saari
Laboratory Director

ANALYSIS OF VARIANCE

TABLE 1

ANALYSIS OF VARIANCE
TABLE 1
ANALYSIS OF VARIANCE
TABLE 1

Source of Variation		Degrees of Freedom		Mean Square		F-Value	
Between Groups	Within Groups	Total	Error	Between Groups	Within Groups	Total	Error
1	1	2	1	1	1	2	1
2	1	2	1	1	1	2	1
3	1	2	1	1	1	2	1
4	1	2	1	1	1	2	1
5	1	2	1	1	1	2	1
6	1	2	1	1	1	2	1
7	1	2	1	1	1	2	1
8	1	2	1	1	1	2	1
9	1	2	1	1	1	2	1
10	1	2	1	1	1	2	1
11	1	2	1	1	1	2	1
12	1	2	1	1	1	2	1
13	1	2	1	1	1	2	1
14	1	2	1	1	1	2	1
15	1	2	1	1	1	2	1
16	1	2	1	1	1	2	1
17	1	2	1	1	1	2	1
18	1	2	1	1	1	2	1
19	1	2	1	1	1	2	1
20	1	2	1	1	1	2	1
21	1	2	1	1	1	2	1
22	1	2	1	1	1	2	1
23	1	2	1	1	1	2	1
24	1	2	1	1	1	2	1
25	1	2	1	1	1	2	1
26	1	2	1	1	1	2	1
27	1	2	1	1	1	2	1
28	1	2	1	1	1	2	1
29	1	2	1	1	1	2	1
30	1	2	1	1	1	2	1
31	1	2	1	1	1	2	1
32	1	2	1	1	1	2	1
33	1	2	1	1	1	2	1
34	1	2	1	1	1	2	1
35	1	2	1	1	1	2	1
36	1	2	1	1	1	2	1
37	1	2	1	1	1	2	1
38	1	2	1	1	1	2	1
39	1	2	1	1	1	2	1
40	1	2	1	1	1	2	1
41	1	2	1	1	1	2	1
42	1	2	1	1	1	2	1
43	1	2	1	1	1	2	1
44	1	2	1	1	1	2	1
45	1	2	1	1	1	2	1
46	1	2	1	1	1	2	1
47	1	2	1	1	1	2	1
48	1	2	1	1	1	2	1
49	1	2	1	1	1	2	1
50	1	2	1	1	1	2	1
51	1	2	1	1	1	2	1
52	1	2	1	1	1	2	1
53	1	2	1	1	1	2	1
54	1	2	1	1	1	2	1
55	1	2	1	1	1	2	1
56	1	2	1	1	1	2	1
57	1	2	1	1	1	2	1
58	1	2	1	1	1	2	1
59	1	2	1	1	1	2	1
60	1	2	1	1	1	2	1
61	1	2	1	1	1	2	1
62	1	2	1	1	1	2	1
63	1	2	1	1	1	2	1
64	1	2	1	1	1	2	1
65	1	2	1	1	1	2	1
66	1	2	1	1	1	2	1
67	1	2	1	1	1	2	1
68	1	2	1	1	1	2	1
69	1	2	1	1	1	2	1
70	1	2	1	1	1	2	1
71	1	2	1	1	1	2	1
72	1	2	1	1	1	2	1
73	1	2	1	1	1	2	1
74	1	2	1	1	1	2	1
75	1	2	1	1	1	2	1
76	1	2	1	1	1	2	1
77	1	2	1	1	1	2	1
78	1	2	1	1	1	2	1
79	1	2	1	1	1	2	1
80	1	2	1	1	1	2	1
81	1	2	1	1	1	2	1
82	1	2	1	1	1	2	1
83	1	2	1	1	1	2	1
84	1	2	1	1	1	2	1
85	1	2	1	1	1	2	1
86	1	2	1	1	1	2	1
87	1	2	1	1	1	2	1
88	1	2	1	1	1	2	1
89	1	2	1	1	1	2	1
90	1	2	1	1	1	2	1
91	1	2	1	1	1	2	1
92	1	2	1	1	1	2	1
93	1	2	1	1	1	2	1
94	1	2	1	1	1	2	1
95	1	2	1	1	1	2	1
96	1	2	1	1	1	2	1
97	1	2	1	1	1	2	1
98	1	2	1	1	1	2	1
99	1	2	1	1	1	2	1
100	1	2	1	1	1	2	1

ANALYSIS OF VARIANCE

TABLE 1

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-12
Collection Date: 06/19/12 **Collection Time:** 10:25
Sampled By: K. Tower
Lab Order Number: WW-121341
Date Received: 06/19/12

Sample Type	Sample Time	Sample Date	Comments			
S-12 A	10:25	06/21/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	56	6.0	06/22/12	KB	2540 C
Total Organic Carbon*	mg/L	2.4*	0.5	06/22/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	06/25/12	MC	200.7
Nitrate-N	mg/L	0.21	0.01	06/19/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	06/19/12	LL	300.0
Ammonia-N *	mg/L	0.02*	0.02	06/27/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.28	0.2	06/22/12	MC	SM4500 NH3 C
Chloride	mg/L	17.8	3.0	06/19/12	LL	300.0
Total Phosphorous (P)	mg/L	0.028	0.005	06/22/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.28	0.2	06/22/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	2.4*	0.5	06/22/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.23	NA	06/27/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	0.26	NA	06/27/12	Calculation	Calculation
Chlorophyll-a	*	0.9*	*	06/27/12	ec Biological Sc	*
Ortho Phosphorous (P)	mg/L	0.007	0.005	06/21/12	KB	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	06/22/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	06/27/12	Calculation	Calculation
Total Dissolved Nitrogen	mg/L	0.49	NA	06/21/12	Calculation	Calculation

BRL=below reportable limits

*see attached

By:

Ronald J. Saffari
 Laboratory Director

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 6/20/12

Work Order #: 1206-12546

PLYMOUTH ENV.

Sample # 001

SAMPLE DESCRIPTION: WW-121334 S-8B**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 6/19/2012 @ 08:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.06	0.02	mg/l	SM 4500-NH3 C	6/27/12	MEM
Chlorophyll A	See Attached		mg/m ³	SM 10200-H	6/27/12	*AQ
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	6/22/12	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	6/22/12	JRG

Sample # 002

SAMPLE DESCRIPTION: WW-121335 S-8A**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 6/19/2012 @ 08:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.06	0.02	mg/l	SM 4500-NH3 C	6/27/12	MEM
Chlorophyll A	See Attached		mg/m ³	SM 10200-H	6/27/12	*AQ
TOC Low Level	2.4	0.5	mg/l	SM-5310B	6/22/12	JRG
Dissolved TOC	2.2	0.5	mg/l	EPA 415.1	6/22/12	JRG

Sample # 003

SAMPLE DESCRIPTION: WW-121336 S-5B**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 6/19/2012 @ 09:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.03	0.02	mg/l	SM 4500-NH3 C	6/27/12	MEM
Chlorophyll A	See Attached		mg/m ³	SM 10200-H	6/27/12	*AQ
TOC Low Level	2.3	0.5	mg/l	SM-5310B	6/22/12	JRG
Dissolved TOC	2.2	0.5	mg/l	EPA 415.1	6/22/12	JRG

Sample # 004

SAMPLE DESCRIPTION: WW-121337 S-4A**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 6/19/2012 @ 09:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.04	0.02	mg/l	SM 4500-NH3 C	6/27/12	MEM
Chlorophyll A	See Attached		mg/m ³	SM 10200-H	6/27/12	*AQ
TOC Low Level	2.6	0.5	mg/l	SM-5310B	6/22/12	JRG
Dissolved TOC	2.5	0.5	mg/l	EPA 415.1	6/22/12	JRG

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 6/20/12

Work Order #: 1206-12546

PLYMOUTH ENV.

Sample # 005

SAMPLE DESCRIPTION: WW-121338 S-3A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/19/2012 @ 09:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.02	0.02	mg/l	SM 4500-NH3 C	6/27/12	MEM
Chlorophyll A	See Attached		mg/m ³	SM 10200-H	6/27/12	*AQ
TOC Low Level	2.0	0.5	mg/l	SM-5310B	6/22/12	JRG
Dissolved TOC	1.9	0.5	mg/l	EPA 415.1	6/22/12	JRG

Sample # 006

SAMPLE DESCRIPTION: WW-121339 S-2C

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/19/2012 @ 09:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM 4500-NH3 C	6/27/12	MEM
Chlorophyll A	See Attached		mg/m ³	SM 10200-H	6/27/12	*AQ
TOC Low Level	2.2	0.5	mg/l	SM-5310B	6/22/12	JRG
Dissolved TOC	1.8	0.5	mg/l	EPA 415.1	6/22/12	JRG

Sample # 007

SAMPLE DESCRIPTION: WW-121340 S-6A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/19/2012 @ 10:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.04	0.02	mg/l	SM 4500-NH3 C	6/27/12	MEM
Chlorophyll A	See Attached		mg/m ³	SM 10200-H	6/27/12	*AQ
TOC Low Level	1.9	0.5	mg/l	SM-5310B	6/22/12	JRG
Dissolved TOC	1.7	0.5	mg/l	EPA 415.1	6/22/12	JRG

Sample # 008

SAMPLE DESCRIPTION: WW-121341 S-12

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/19/2012 @ 10:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.02	0.02	mg/l	SM 4500-NH3 C	6/27/12	MEM
Chlorophyll A	See Attached		mg/m ³	SM 10200-H	6/27/12	*AQ
TOC Low Level	2.4	0.5	mg/l	SM-5310B	6/22/12	JRG
Dissolved TOC	2.4	0.5	mg/l	EPA 415.1	6/22/12	JRG

* Samples analyzed by Aquatec Biological Sciences, Inc



Aquatec Biological Sciences, Inc.

273 Commerce Street
Williston, VT 05495
Tel: (802) 860 - 1638 Fax: (802) 658 - 3189

SDG: 13195
Project: 12012

Chlorophyll a Analytical Report

Project Name: Workorder No: 1206-12546

R. I. Analytical Laboratories, Inc.
41 Illinois Avenue

Tel: (800) 937-2580
Fax: (401) 738-1970

Warwick, RI 02888

E-Mail: kphelan@rianalytical.com

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.

Laboratory Sample Number / Client Sample Identification

Method Number : Description

Result (ug/L)

043022 / 1206-12546-001 : 6/19/2012 @ 8:30:00 AM

10200H3-C Chlorophyll a - Corrected; Analyzed: 6/27/2012 3:30:00 PM < 0.2

10200H3-U Chlorophyll a - Uncorrected; Analyzed: 6/27/2012 3:30:00 PM < 0.2

043023 / 1206-12546-002 : 6/19/2012 @ 8:45:00 AM

10200H3-C Chlorophyll a - Corrected; Analyzed: 6/27/2012 3:30:00 PM 2.7

10200H3-U Chlorophyll a - Uncorrected; Analyzed: 6/27/2012 3:30:00 PM 3.9

043024 / 1206-12546-003 : 6/19/2012 @ 9:00:00 AM

10200H3-C Chlorophyll a - Corrected; Analyzed: 6/27/2012 3:30:00 PM 3.2

10200H3-U Chlorophyll a - Uncorrected; Analyzed: 6/27/2012 3:30:00 PM 4.5

043025 / 1206-12546-004 : 6/19/2012 @ 9:15:00 AM

10200H3-C Chlorophyll a - Corrected; Analyzed: 6/27/2012 3:30:00 PM 0.7

10200H3-U Chlorophyll a - Uncorrected; Analyzed: 6/27/2012 3:30:00 PM 1.5

043026 / 1206-12546-005 : 6/19/2012 @ 9:30:00 AM

10200H3-C Chlorophyll a - Corrected; Analyzed: 6/27/2012 3:30:00 PM 9.2

10200H3-U Chlorophyll a - Uncorrected; Analyzed: 6/27/2012 3:30:00 PM 10.8

043027 / 1206-12546-006 : 6/19/2012 @ 9:45:00 AM

10200H3-C Chlorophyll a - Corrected; Analyzed: 6/27/2012 3:30:00 PM 10.5

10200H3-U Chlorophyll a - Uncorrected; Analyzed: 6/27/2012 3:30:00 PM 11.8

043028 / 1206-12546-007 : 6/19/2012 @ 10:00:00 AM

10200H3-C Chlorophyll a - Corrected; Analyzed: 6/27/2012 3:30:00 PM 0.6

10200H3-U Chlorophyll a - Uncorrected; Analyzed: 6/27/2012 3:30:00 PM 1.5

Chlorophyll a Analytical Report

Project Name: Workorder No: 1206-12546

R. I. Analytical Laboratories, Inc.
41 Illinois Avenue

Tel: (800) 937-2580

Fax: (401) 738-1970

Warwick, RI 02888

E-Mail: kphelan@rianalytical.com

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.

Laboratory Sample Number / Client Sample Identification

Method Number : Description

Result (ug/L)

043029 / 1206-12546-008 : 6/19/2012 @ 10:25:00 AM

10200H3-C Chlorophyll a - Corrected; Analyzed: 6/27/2012 3:30:00 PM

0.9

10200H3-U Chlorophyll a - Uncorrected; Analyzed: 6/27/2012 3:30:00 PM

1.9

Notes: P.O.# 27476



Aquatec Biological Sciences, Inc.

273 Commerce Street
Williston, VT 05495
Tel: (802) 860 - 1638 Fax: (802) 658 - 3189

SDG: 13195
Project: 12012

Chlorophyll a Analytical Report

Project Name: Workorder No: 1206-12546

R. I. Analytical Laboratories, Inc.
41 Illinois Avenue

Tel: (800) 937-2580

Fax: (401) 738-1970

Warwick, RI 02888

E-Mail: kphelan@rianalytical.com

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.

Laboratory Sample Number / Client Sample Identification

Method Number : Description

Result (ug/L)

043022 / 1206-12546-001 : 6/19/2012 @ 8:30:00 AM

10200H3-C Chlorophyll a - Corrected; Analyzed: 6/27/2012 3:30:00 PM

< 0.2

10200H3-U Chlorophyll a - Uncorrected; Analyzed: 6/27/2012 3:30:00 PM

< 0.2

043023 / 1206-12546-002 : 6/19/2012 @ 8:45:00 AM

10200H3-C Chlorophyll a - Corrected; Analyzed: 6/27/2012 3:30:00 PM

2.7

10200H3-U Chlorophyll a - Uncorrected; Analyzed: 6/27/2012 3:30:00 PM

3.9

043024 / 1206-12546-003 : 6/19/2012 @ 9:00:00 AM

10200H3-C Chlorophyll a - Corrected; Analyzed: 6/27/2012 3:30:00 PM

3.2

10200H3-U Chlorophyll a - Uncorrected; Analyzed: 6/27/2012 3:30:00 PM

4.5

043025 / 1206-12546-004 : 6/19/2012 @ 9:15:00 AM

10200H3-C Chlorophyll a - Corrected; Analyzed: 6/27/2012 3:30:00 PM

0.7

10200H3-U Chlorophyll a - Uncorrected; Analyzed: 6/27/2012 3:30:00 PM

1.5

043026 / 1206-12546-005 : 6/19/2012 @ 9:30:00 AM

10200H3-C Chlorophyll a - Corrected; Analyzed: 6/27/2012 3:30:00 PM

9.2

10200H3-U Chlorophyll a - Uncorrected; Analyzed: 6/27/2012 3:30:00 PM

10.8

043027 / 1206-12546-006 : 6/19/2012 @ 9:45:00 AM

10200H3-C Chlorophyll a - Corrected; Analyzed: 6/27/2012 3:30:00 PM

10.5

10200H3-U Chlorophyll a - Uncorrected; Analyzed: 6/27/2012 3:30:00 PM

11.8

043028 / 1206-12546-007 : 6/19/2012 @ 10:00:00 AM

10200H3-C Chlorophyll a - Corrected; Analyzed: 6/27/2012 3:30:00 PM

0.6

10200H3-U Chlorophyll a - Uncorrected; Analyzed: 6/27/2012 3:30:00 PM

1.5

(2) Surfactant

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of Custody

①

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

W121334

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
6/19/12	0830	S-8B	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
6/19/12	0845	S-8A	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

W121335

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

Rdavalley 06/19/12 1430

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of CustodyClient:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

ww121336

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
6/19/12	0900	S-SB	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
6/19/12	0915	S-4A	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

ww121337

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

Adenaly 06/19/12 1430

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of Custody

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

W121338

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
6/19/12	0930	S-3A	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
6/19/12	0945	S-2C	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

W121339

Relinquished By: Date/Time

Kim Tan

Received By: Date/Time:

Polawally 06/19/12 1430

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of CustodyClient:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: **Eel River SW Sampling -Plymouth MA**
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
6/19/12	1000	S-6A	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
6/19/12	1025	S-12	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

Relinquished By: Date/Time



Received By: Date/Time:

 6/19/12 1430

Chlorophyll a Analytical Report

Project Name: Workorder No: 1206-12546

R. I. Analytical Laboratories, Inc.
41 Illinois Avenue

Tel: (800) 937-2580

Fax: (401) 738-1970

Warwick, RI 02888

E-Mail: kphelan@rianalytical.com

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater.

Laboratory Sample Number / Client Sample Identification

Method Number : Description

Result (ug/L)

043029 / 1206-12546-008 : 6/19/2012 @ 10:25:00 AM

10200H3-C Chlorophyll a - Corrected; Analyzed: 6/27/2012 3:30:00 PM

0.9

10200H3-U Chlorophyll a - Uncorrected; Analyzed: 6/27/2012 3:30:00 PM

1.9

Notes: P.O.# 27476

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management
K. Towers/ 11 Lincoln St.
Plymouth, MA

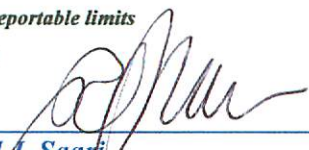
ProjectName: Harbor Sampling **Comments:**
Project Number: S-7
Collection Date: 06/19/12 **Collection Time:** 1215
Sampled By: K. Tower
Lab Order Number: WW-121332
Date Received: 06/19/12

Sample Type	Sample Time	Sample Date	Comments			
S-7 A						
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N/Nitrite-N	mg/L	BRL	0.01	06/20/12	MC	4500-NO3
Total Organic Carbon*	mg/L	0.50*	0.5	06/22/12	RIA*	SM 5310 C
Ammonia-N *	mg/L	0.02*	0.02	06/27/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.53	0.2	06/21/12	MC	SM4500 NH3 C
Total Phosphorous (P)	mg/L	0.043	0.005	06/22/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.34	0.2	06/21/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	06/22/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.03	NA	06/27/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	0.32	NA	06/27/12	Calculation	Calculation
Ortho Phosphorous (P)	mg/L	0.009	0.005	06/21/12	KB	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	06/22/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.19	NA	06/27/12	Calculation	Calculation
Total Dissolved Nitrogen	mg/L	<0.35	NA	06/21/12	Calculation	Calculation

$$TN = DON (.32) + PON (.19) + NH_3 (.02) + NO_3/NO_2 (.005) = .535$$

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Harbor Sampling

Comments:

Project Number: S-10

Collection Date: 06/19/12 **Collection Time:** 1230

Sampled By: K. Tower

Lab Order Number: WW-121333

Date Received: 06/19/12

Sample Type	Sample Time	Sample Date	Comments			
S-10 A						
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N/Nitrite-N	mg/L	BRL	0.01	06/20/12	MC	4500-NO3
Total Organic Carbon*	mg/L	<0.5*	0.5	06/22/12	RIA*	SM 5310 C
Ammonia-N *	mg/L	<0.02*	0.02	06/27/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.41	0.2	06/21/12	MC	SM4500 NH3 C
Total Phosphorous (P)	mg/L	0.040	0.005	06/22/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.38	0.2	06/21/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	06/22/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.03	NA	06/27/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	0.36	NA	06/27/12	Calculation	Calculation
Ortho Phosphorous (P)	mg/L	0.008	0.005	06/21/12	KB	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	06/22/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.03	NA	06/27/12	Calculation	Calculation
Total Dissolved Nitrogen	mg/L	<0.39	NA	06/21/12	Calculation	Calculation

$$\text{TN} = \text{DON} (.36) + \text{PON} (.03) + \text{NH}_4 (.01) + \text{NO}_3/\text{NO}_2 (.005) = .405$$

BRL=below reportable limits

*see attached

By:

Ronald J. Sauri

Laboratory Director

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.
Attn: Mr. Ron Saari
8 Jan Sebastian Drive
Sandwich, MA 02563

Date Received: 6/20/12
Date Reported: 6/27/12
P.O. #:
Work Order #: 1206-12636

DESCRIPTION: PLYMOUTH ENV.

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.
The Certificate of Analysis shall not be reproduced except in full, without written approval of R.I. Analytical.
Results relate only to samples submitted to the laboratory for analysis.
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:



Sharon Baker
MIS / Data Reporting Manager

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 6/20/12

Work Order #: 1206-12636

PLYMOUTH ENV.

Sample # 001

SAMPLE DESCRIPTION: WW-121332 S-7

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/19/2012 @ 12:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.02	0.02	mg/l	SM 4500-NH3 C	6/27/12	MEM
TOC Low Level	0.50	0.5	mg/l	SM-5310B	6/22/12	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	6/22/12	JRG

Sample # 002

SAMPLE DESCRIPTION: WW-121333 S-10

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/19/2012 @ 12:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM 4500-NH3 C	6/27/12	MEM
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	6/22/12	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	6/22/12	JRG

6

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of Custody

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: **Harbor Sampling -Plymouth MA**
Sampler: Kim Tower (KT)

1-121968

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
8/29/12	1020	S-7	1	Plastic	TOC	H2SO4
1	1	S-7	1	Plastic	NO3, NO2, Ortho,	NONE
1	1	S-7	1	1 Liter Plastic	TKN, NH3, TP	H2SO4
1	1	S-7	1	Plastic	Dissolved	None
1-121969	8/29/12	S-10	1	Plastic	TOC	H2SO4
1	1	S-10	1	Plastic	NO3, NO2, Ortho, Dissolved	NONE
1	1	S-10	1	1 Liter Plastic	TKN, NH3, TP	H2SO4
1	1	S-10	1	Plastic	Dissolved	None

NOTE: Analysis needed for reporting in lowest detection possible; O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Kjeldahl Nitrogen, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

L. Lavalley 8/29/12 1255

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management
K. Towers/ 11 Lincoln St.
Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number: S-6A

Collection Date: 07/19/12 **Collection Time:** 10:30

Sampled By: K Tower

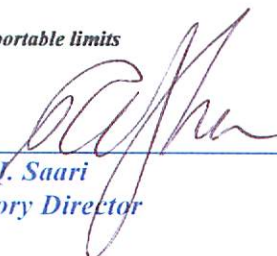
Lab Order Number: WW-121625

Date Received: 07/19/12

Sample Type	Sample Time	Sample Date	Comments			
S-6A A	10:30	07/19/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	62	6.0	07/20/12	KB	2540 C
Total Organic Carbon*	mg/L	5.7*	0.5	07/25/12	RIA*	SM 5310 C
Boron	mg/L	0.014	0.010	07/20/12	MC	200.7
Nitrate-N	mg/L	0.16	0.01	07/19/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	07/19/12	LL	300.0
Ammonia-N *	mg/L	0.12*	0.02	07/26/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.30	0.2	08/02/12	MC	SM4500 NH3 C
Chloride	mg/L	19.2	3.0	07/19/12	LL	300.0
Total Phosphorous (P)	mg/L	0.094	0.005	07/26/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	08/02/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	5.4*	0.5	07/25/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.28	NA	07/26/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	< 0.08	NA	08/02/12	Calculation	Calculation
Chlorophyll-a	*	8.61*	*	07/23/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.047	0.005	07/19/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.3	NA	07/25/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.10	NA	08/02/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.36	NA	08/02/12	Calculation	Calculation

BRL=below reportable limits

*see attached

By: 

Ronald J. Saari
Laboratory Director

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

Project Name: Eel River SW Sampling

Comments:

Project Number: S-12

Collection Date: 07/19/12 **Collection Time:** 11:00

Sampled By: K Tower

Lab Order Number: WW-121626

Date Received: 07/19/12

Sample Type	Sample Time	Sample Date	Comments			
S-12 A	10:30	07/19/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	65	6.0	07/20/12	KB	2540 C
Total Organic Carbon*	mg/L	8.1*	0.5	07/25/12	RIA*	SM 5310 C
Boron	mg/L	0.018	0.010	07/20/12	MC	200.7
Nitrate-N	mg/L	0.12	0.01	07/19/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	07/19/12	LL	300.0
Ammonia-N *	mg/L	0.05*	0.02	07/26/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.40	0.2	08/02/12	MC	SM4500 NH3 C
Chloride	mg/L	17.8	3.0	07/19/12	LL	300.0
Total Phosphorous (P)	mg/L	0.14	0.005	07/26/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.29	0.2	08/02/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	7.1*	0.5	07/25/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.17	NA	07/26/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	0.24	NA	08/02/12	Calculation	Calculation
Chlorophyll-a	*	18.6*	*	07/23/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.060	0.005	07/19/12	MC	4500-P
Particulate Organic Carbon	mg/L	1.0	NA	07/25/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.11	NA	08/02/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.41	NA	08/02/12	Calculation	Calculation

$TN = DON(.24) + PON(.11) + NH_4(.05) + NO_3(.12) + NO_2(.002)$

BRL=below reportable limits

*see attached

By:

Ronald J. Sagri

Laboratory Director

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-8 B
Collection Date: 07/19/12 **Collection Time:** 08:45
Sampled By: K Tower
Lab Order Number: WW-121627
Date Received: 07/19/12

Sample Type	Sample Time	Sample Date	Comments			
S-8B A	08:45	07/19/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	7.0	6.0	07/20/12	KB	2540 C
Total Organic Carbon*	mg/L	<0.5*	0.5	07/25/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	07/20/12	MC	200.7
Nitrate-N	mg/L	0.09	0.01	07/19/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	07/19/12	LL	300.0
Ammonia-N *	mg/L	0.08*	0.02	07/26/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	08/02/12	MC	SM4500 NH3 C
Chloride	mg/L	BRL	3.0	07/19/12	LL	300.0
Total Phosphorous (P)	mg/L	BRL	0.005	07/26/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	08/02/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	07/25/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.17	NA	07/26/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	<0.12	NA	08/02/12	Calculation	Calculation
Chlorophyll-a	*	ND*	*	07/23/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	07/19/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	07/25/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	08/02/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.29	NA	08/02/12	Calculation	Calculation

BRL=below reportable limits

*see attached

By: 

Ronald J. Sauri
 Laboratory Director

$$TN = DON(0.06) + PON(0.1) + NH_4(0.08) + NO_3(0.09) + NO_2(0.002) = .332$$

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number: S-8 A

Collection Date: 07/19/12 Collection Time: 09:00

Sampled By: K Tower

Lab Order Number: WW-121628

Date Received: 07/19/12

Sample Type	Sample Time	Sample Date	Comments			
S-8A A	09:00	07/19/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	49	6.0	07/20/12	KB	2540 C
Total Organic Carbon*	mg/L	3.2*	0.5	07/25/12	RIA*	SM 5310 C
Boron	mg/L	0.015	0.010	07/20/12	MC	200.7
Nitrate-N	mg/L	0.13	0.01	07/19/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	07/19/12	LL	300.0
Ammonia-N *	mg/L	0.10*	0.02	07/26/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	08/02/12	MC	SM4500 NH3 C
Chloride	mg/L	46.1	3.0	07/19/12	LL	300.0
Total Phosphorous (P)	mg/L	0.093	0.005	07/26/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	08/02/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	2.9*	0.5	07/25/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.23	NA	07/26/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	<0.10	NA	08/02/12	Calculation	Calculation
Chlorophyll-a	*	9.01*	*	07/23/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.037	0.005	07/19/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.3	NA	07/25/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	08/02/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.33	NA	08/02/12	Calculation	Calculation

BRL=below reportable limits

*see attached

By:

Ronald J. Saari

Laboratory Director

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
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(508)888-6460 1-800-339-6460
FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number: S-5-B

Collection Date: 07/19/12 **Collection Time:** 09:15

Sampled By: K Tower

Lab Order Number: WW-121629

Date Received: 07/19/12

Sample Type	Sample Time	Sample Date	Comments			
S-5B A	09:15	07/19/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	47	6.0	07/20/12	KB	2540 C
Total Organic Carbon*	mg/L	3.1*	0.5	07/25/12	RIA*	SM 5310 C
Boron	mg/L	0.014	0.010	07/20/12	MC	200.7
Nitrate-N	mg/L	0.13	0.01	07/19/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	07/19/12	LL	300.0
Ammonia-N *	mg/L	0.11*	0.02	07/26/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.22	0.2	08/02/12	MC	SM4500 NH3 C
Chloride	mg/L	46.1	3.0	07/19/12	LL	300.0
Total Phosphorous (P)	mg/L	0.097	0.005	07/26/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.2	08/02/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	2.9*	0.5	07/25/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.24	NA	07/26/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	0.10	NA	08/02/12	Calculation	Calculation
Chlorophyll-a	*	11.8*	*	07/23/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.037	0.005	07/19/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.2	NA	07/25/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.01	NA	08/02/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.34	NA	08/02/12	Calculation	Calculation

BRL=below reportable limits

*see attached

By:

Ronald J. Saari
Laboratory Director

ENVIROTECH LABORATORIES, INC.**MA CERT. NO.: M-MA 063**

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

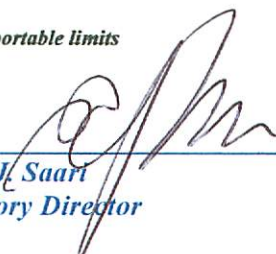
ProjectName: Eel River SW Sampling**Comments:****Project Number:** S4 A**Collection Date:** 07/19/12 **Collection Time:** 09:25**Sampled By:** K Tower**Lab Order Number:** WW-121630**Date Received:** 07/19/12

Sample Type	Sample Time	Sample Date	Comments			
S-4A A	09:25	07/19/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	69	6.0	07/20/12	KB	2540 C
Total Organic Carbon*	mg/L	3.9*	0.5	07/25/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	07/20/12	MC	200.7
Nitrate-N	mg/L	0.10	0.01	07/19/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	07/19/12	LL	300.0
Ammonia-N *	mg/L	0.08*	0.02	07/26/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.32	0.2	08/02/12	MC	SM4500 NH3 C
Chloride	mg/L	27.3	3.0	07/19/12	LL	300.0
Total Phosphorous (P)	mg/L	0.057	0.005	07/26/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.24	0.2	08/02/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	3.6*	0.5	07/25/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.18	NA	07/26/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	0.16	NA	08/02/12	Calculation	Calculation
Chlorophyll-a	*	2.45*	*	07/23/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.029	0.005	07/19/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.3	NA	07/25/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.08	NA	08/02/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.34	NA	08/02/12	Calculation	Calculation

BRL=below reportable limits

*see attached

By:


Ronald J. Saari
Laboratory Director

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Tuesday, September 18, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

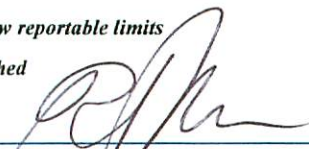
ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-3 A
Collection Date: 07/19/12 **Collection Time:** 09:40
Sampled By: K Tower
Lab Order Number: WW-121631
Date Received: 07/19/12

Sample Type	Sample Time	Sample Date	Comments			
S-3 A A	09:40	07/19/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	78	6.0	07/20/12	KB	2540 C
Total Organic Carbon*	mg/L	3.5*	0.5	07/25/12	RIA*	SM 5310 C
Boron	mg/L	0.010	0.010	07/20/12	MC	200.7
Nitrate-N	mg/L	0.21	0.01	07/19/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	07/19/12	LL	300.0
Ammonia-N *	mg/L	0.10*	0.02	07/26/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	08/02/12	MC	SM4500 NH3 C
Chloride	mg/L	30.2	3.0	07/19/12	LL	300.0
Total Phosphorous (P)	mg/L	0.060	0.005	07/26/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	08/02/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	3.1*	0.5	07/25/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.31	NA	07/26/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	<0.10	NA	08/02/12	Calculation	Calculation
Chlorophyll-a	*	16.0*	*	07/23/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.023	0.005	07/19/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.4	NA	07/25/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	08/02/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.41	NA	08/02/12	Calculation	Calculation

$$TN = DON(.03) + PON(.1) + NH_4(.10) + NO_3(.21) + NO_2(.002) = .462$$

BRL=below reportable limits

*see attached

By: 

Ronald J. Sauri
 Laboratory Director

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Tuesday, September 18, 2012

Plymouth Environmental Management
 K.Towers/ 11 Lincoln St.
 Plymouth, MA

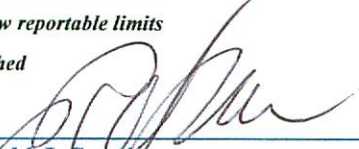
ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-2 L
Collection Date: 07/19/12 **Collection Time:** 10:00
Sampled By: K Tower
Lab Order Number: WW-121632
Date Received: 07/19/12

Sample Type	Sample Time	Sample Date	Comments			
S-2 C A	10:00	07/19/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	65	6.0	07/20/12	KB	2540 C
Total Organic Carbon*	mg/L	3.7*	0.5	07/25/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	07/20/12	MC	200.7
Nitrate-N	mg/L	0.11	0.01	07/19/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	07/19/12	LL	300.0
Ammonia-N *	mg/L	0.06*	0.02	07/26/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.36	0.2	08/02/12	MC	SM4500 NH3 C
Chloride	mg/L	26.4	3.0	07/19/12	LL	300.0
Total Phosphorous (P)	mg/L	0.083	0.005	07/26/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	08/02/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	2.9*	0.5	07/25/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.17	NA	07/26/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	<0.14	NA	08/02/12	Calculation	Calculation
Chlorophyll-a	*	93.3*	*	07/23/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.014	0.005	07/19/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.8	NA	07/25/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.16	NA	08/02/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.31	NA	08/02/12	Calculation	Calculation

$$TN = DON (.07) + PON (.08) + NH_4 (.06) + NO_3 (.11) + NO_2 (.002) = .322$$

BRL=below reportable limits

*see attached

By: 
 Ronald J. Sacci
 Laboratory Director

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.
Attn: Mr. Ron Saari
8 Jan Sebastian Drive
Sandwich, MA 02563

Date Received: 7/20/12
Date Reported: 7/27/12
P.O. #:
Work Order #: 1207-14970

DESCRIPTION: PLYMOUTH ENV.

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

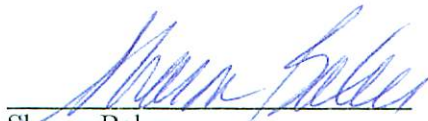
Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.
The Certificate of Analysis shall not be reproduced except in full, without written approval of R.I. Analytical.
Results relate only to samples submitted to the laboratory for analysis.
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:



Sharon Baker
MIS / Data Reporting Manager

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 7/20/12

Work Order #: 1207-14970

PLYMOUTH ENV.

Sample # 005

SAMPLE DESCRIPTION: WW-121629 S-5B

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 7/19/2012 @ 09:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.11	0.02	mg/l	SM 4500-NH3 C	7/26/12	SJC
TOC Low Level	3.1	0.5	mg/l	SM-5310B	7/25/12	JRG
Dissolved TOC	2.9	0.5	mg/l	EPA 415.1	7/25/12	JRG

Sample # 006

SAMPLE DESCRIPTION: WW-121630 S-4A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 7/19/2012 @ 09:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.08	0.02	mg/l	SM 4500-NH3 C	7/26/12	SJC
TOC Low Level	3.9	0.5	mg/l	SM-5310B	7/25/12	JRG
Dissolved TOC	3.6	0.5	mg/l	EPA 415.1	7/25/12	JRG

Sample # 007

SAMPLE DESCRIPTION: WW-121631 S-3A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 7/19/2012 @ 09:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.10	0.02	mg/l	SM 4500-NH3 C	7/26/12	SJC
TOC Low Level	3.5	0.5	mg/l	SM-5310B	7/25/12	JRG
Dissolved TOC	3.1	0.5	mg/l	EPA 415.1	7/25/12	JRG

Sample # 008

SAMPLE DESCRIPTION: WW-121632 S-2L

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 7/19/2012 @ 10:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.06	0.02	mg/l	SM 4500-NH3 C	7/26/12	SJC
TOC Low Level	3.7	0.5	mg/l	SM-5310B	7/25/12	JRG
Dissolved TOC	2.9	0.5	mg/l	EPA 415.1	7/25/12	JRG

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 7/20/12

Work Order #: 1207-14970

PLYMOUTH ENV.

Sample # 001

SAMPLE DESCRIPTION: WW-121625 S-6A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 7/19/2012 @ 10:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.12	0.02	mg/l	SM 4500-NH3 C	7/26/12	SJC
TOC Low Level	5.7	0.5	mg/l	SM-5310B	7/25/12	JRG
Dissolved TOC	5.4	0.5	mg/l	EPA 415.1	7/25/12	JRG

Sample # 002

SAMPLE DESCRIPTION: WW-121626 S-12

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 7/19/2012 @ 11:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.05	0.02	mg/l	SM 4500-NH3 C	7/26/12	NJJ
TOC Low Level	8.1	0.5	mg/l	SM-5310B	7/25/12	JRG
Dissolved TOC	7.1	0.5	mg/l	EPA 415.1	7/25/12	JRG

Sample # 003

SAMPLE DESCRIPTION: WW-121627 S-8B

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 7/19/2012 @ 08:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.08	0.02	mg/l	SM 4500-NH3 C	7/26/12	SJC
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	7/25/12	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	7/25/12	JRG

Sample # 004

SAMPLE DESCRIPTION: WW-121628 S-8A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 7/19/2012 @ 09:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Ammonia (as N)	0.10	0.02	mg/l	SM 4500-NH3 C	7/26/12	SJC
TOC Low Level	3.2	0.5	mg/l	SM-5310B	7/25/12	JRG
Dissolved TOC	2.9	0.5	mg/l	EPA 415.1	7/25/12	JRG



ANALYTICAL REPORT

Lab Number:	L1212944
Client:	Envirotech Laboratories, Inc. 8 Jan Sebastian Drive Unit 12 Sandwich, MA 02563
ATTN:	Ron Saari
Phone:	(800) 339-6460
Project Name:	PLYMOUTH ENVIRONMENTAL MGMNT
Project Number:	Not Specified
Report Date:	07/27/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: PLYMOUTH ENVIRONMENTAL MGMNT
Project Number: Not Specified

Lab Number: L1212944
Report Date: 07/27/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1212944-01	WW-121625	S-6A	07/19/12 10:30
L1212944-02	WW-121626	S-12	07/19/12 11:00
L1212944-03	WW-121627	S-8B	07/19/12 08:45
L1212944-04	WW-121628	S-8A	07/19/12 09:00
L1212944-05	WW-121629	S-5B	07/19/12 09:15
L1212944-06	WW-121630	S-4A	07/19/12 09:25
L1212944-07	WW-121631	S-3A	07/19/12 09:40
L1212944-08	WW-121632	S-2L	07/19/12 10:00

Project Name: PLYMOUTH ENVIRONMENTAL MGMNT
Project Number: Not Specified

Lab Number: L1212944
Report Date: 07/27/12

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEX data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: PLYMOUTH ENVIRONMENTAL MGMNT
Project Number: Not Specified

Lab Number: L1212944
Report Date: 07/27/12

Case Narrative (continued)

Sample Receipt

The analysis of Chlorophyll A was received with the method required holding time exceeded and was performed at the client's request.

Chlorophyll A

A laboratory duplicate could not be performed due to insufficient sample volume available for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Kelly Stenstrom

Title: Technical Director/Representative

Date: 07/27/12

INORGANICS & MISCELLANEOUS

Serial_No:07271214:22

Project Name: PLYMOUTH ENVIRONMENTAL MGMNT

Lab Number: L1212944

Project Number: Not Specified

Report Date: 07/27/12

SAMPLE RESULTS

Lab ID: L1212944-01

Date Collected: 07/19/12 10:30

Client ID: WW-121625

Date Received: 07/20/12

Sample Location: S-6A

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	8.61		mg/m3	2.00	NA	1	07/20/12 17:30	07/23/12 08:35	30, 10200H	DM



Serial_No:07271214:22

Project Name: PLYMOUTH ENVIRONMENTAL MGMNT

Lab Number: L1212944

Project Number: Not Specified

Report Date: 07/27/12

SAMPLE RESULTS

Lab ID: L1212944-02

Date Collected: 07/19/12 11:00

Client ID: WW-121626

Date Received: 07/20/12

Sample Location: S-12

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	18.6		mg/m3	2.00	NA	1	07/20/12 17:30	07/23/12 08:35	30, 10200H	DM



Project Name: PLYMOUTH ENVIRONMENTAL MGMNT
Project Number: Not Specified

Lab Number: L1212944
Report Date: 07/27/12

SAMPLE RESULTS

Lab ID: L1212944-03
Client ID: WW-121627
Sample Location: S-8B
Matrix: Water

Date Collected: 07/19/12 08:45
Date Received: 07/20/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	ND		mg/m3	2.00	NA	1	07/20/12 17:30	07/23/12 08:35	30, 10200H	DM



Project Name: PLYMOUTH ENVIRONMENTAL MGMNT
Project Number: Not Specified

Lab Number: L1212944
Report Date: 07/27/12

SAMPLE RESULTS

Lab ID: L1212944-04
Client ID: WW-121628
Sample Location: S-8A
Matrix: Water

Date Collected: 07/19/12 09:00
Date Received: 07/20/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	9.01		mg/m3	2.00	NA	1	07/20/12 17:30	07/23/12 08:35	30, 10200H	DM



Project Name: PLYMOUTH ENVIRONMENTAL MGMNT
Project Number: Not Specified

Lab Number: L1212944
Report Date: 07/27/12

SAMPLE RESULTS

Lab ID: L1212944-05
Client ID: WW-121629
Sample Location: S-5B
Matrix: Water

Date Collected: 07/19/12 09:15
Date Received: 07/20/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	11.8		mg/m3	2.00	NA	1	07/20/12 17:30	07/23/12 08:35	30, 10200H	DM



Project Name: PLYMOUTH ENVIRONMENTAL MGMNT
Project Number: Not Specified

Lab Number: L1212944
Report Date: 07/27/12

SAMPLE RESULTS

Lab ID: L1212944-06
Client ID: WW-121630
Sample Location: S-4A
Matrix: Water

Date Collected: 07/19/12 09:25
Date Received: 07/20/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	2.45		mg/m3	2.00	NA	1	07/20/12 17:30	07/23/12 08:35	30, 10200H	DM



Serial_No:07271214:22

Project Name: PLYMOUTH ENVIRONMENTAL MGMNT

Lab Number: L1212944

Project Number: Not Specified

Report Date: 07/27/12

SAMPLE RESULTS

Lab ID: L1212944-07

Date Collected: 07/19/12 09:40

Client ID: WW-121631

Date Received: 07/20/12

Sample Location: S-3A

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	16.0		mg/m3	2.00	NA	1	07/20/12 17:30	07/23/12 08:35	30, 10200H	DM



Project Name: PLYMOUTH ENVIRONMENTAL MGMNT
Project Number: Not Specified

Lab Number: L1212944
Report Date: 07/27/12

SAMPLE RESULTS

Lab ID: L1212944-08
Client ID: WW-121632
Sample Location: S-2L
Matrix: Water

Date Collected: 07/19/12 10:00
Date Received: 07/20/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	93.3		mg/m3	2.00	NA	1	07/20/12 17:30	07/23/12 08:35	30, 10200H	DM



Project Name: PLYMOUTH ENVIRONMENTAL MGMN

Lab Number: L1212944

Project Number: Not Specified

Report Date: 07/27/12

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-08 Batch: WG549939-1									
Chlorophyll A	ND	mg/m3	2.00	NA	1	07/20/12 17:30	07/23/12 08:35	30, 10200H	DM



Project Name: PLYMOUTH ENVIRONMENTAL MGMNT

Lab Number: L1212944

Project Number: Not Specified

Report Date: 07/27/12

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212944-01A	Brown Plastic 1000ml unpreserved	A	N/A	3	Y	Absent	CHLORO-A(1)
L1212944-02A	Brown Plastic 1000ml unpreserved	A	N/A	3	Y	Absent	CHLORO-A(1)
L1212944-03A	Brown Plastic 1000ml unpreserved	A	N/A	3	Y	Absent	CHLORO-A(1)
L1212944-04A	Brown Plastic 1000ml unpreserved	A	N/A	3	Y	Absent	CHLORO-A(1)
L1212944-05A	Brown Plastic 1000ml unpreserved	A	N/A	3	Y	Absent	CHLORO-A(1)
L1212944-06A	Brown Plastic 1000ml unpreserved	A	N/A	3	Y	Absent	CHLORO-A(1)
L1212944-07A	Brown Plastic 1000ml unpreserved	A	N/A	3	Y	Absent	CHLORO-A(1)
L1212944-08A	Brown Plastic 1000ml unpreserved	A	N/A	3	Y	Absent	CHLORO-A(1)

*Values in parentheses indicate holding time in days

Project Name: PLYMOUTH ENVIRONMENTAL MGMNT
Project Number: Not Specified

Lab Number: L1212944
Report Date: 07/27/12

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: Data Usability Report



Project Name: PLYMOUTH ENVIRONMENTAL MGMNT
Project Number: Not Specified

Lab Number: L1212944
Report Date: 07/27/12

Data Qualifiers

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report



Project Name: PLYMOUTH ENVIRONMENTAL MGMNT
Project Number: Not Specified

Lab Number: L1212944
Report Date: 07/27/12

REFERENCES

- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised May 11, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate). Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D, Fecal Coliform-EC Medium 9221E).

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP (Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterolert, E.Coli 9223.

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP (Silvex), Dalapon, Volatile Organics, Acid Extractables (Phenols), Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8082, 8330, 8151A, 8260B, 8270C, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9030B, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

Non-Potable Water (Inorganic Parameters: (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1,

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6010C, 6020, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9030B, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8081B, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 6010C, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050, 9065, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, 8151A, 8015B, 8082, 8082A, 8081A, 8081B.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, 2540G, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 624, 8260B, 8270C, 8270D, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012A, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C, 3546, 3580, 3580A, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. **NELAP Accredited.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 3005A, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S₂-D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. **NELAP Accredited.**
Non-Potable Water (Inorganic Parameters: EPA 3005A, 3015, 1312, 6010B, 6010C, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X. Organic Parameters: EPA 8260B)

Solid & Hazardous Waste (Inorganic Parameters: EPA 3050B, 1311, 1312, 6010B, 6010C, 9030B, 9010B, 9012A, 9014. Organic Parameters: EPA 5035, 5030B, 8260B, 8015B, 8015C.)

Department of Defense, L-A-B Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix. **EPA 9071**: Total Petroleum Hydrocarbons, Oil & Grease

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of CustodyClient:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us

Project Name: Eel River SW Sampling -Plymouth MA

Sampler: Kim Tower (KT)

WW/2/625

(v)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
7/19/12	1030	S-6A	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
7/19/12	1100	S-12	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

WW/2/626

(v)

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

P. Kivaly 07/19/12 1200

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of CustodyClient:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
7/19/12	0845	S-8B	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
7/19/12	0900	S-8A	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

Plawsky 07/19/12 1200

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of CustodyClient:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
7/19/12	0915	S-5B	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
7/19/12	0925	S-4A	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

Relinquished By: Date/Time

Kim Tan

Received By: Date/Time:

R. Senally 07/19/12 1200

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of CustodyClient:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

WM21631
(U)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
7/19/12	0940	S-3A	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
7/19/12	1000	S-2C	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

WM21632
(U)

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

Danally 07/19/12 1200

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

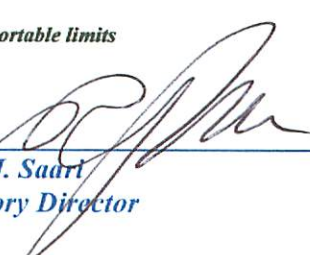
ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-8B
Collection Date: 8/29/12 **Collection Time:** 8:30
Sampled By: K. Tower
Lab Order Number: WW-121960
Date Received: 08/29/12

Sample Type	Sample Time	Sample Date	Comments			
S-8B A	8:30	8/29/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	BRL	6.0	09/06/12	KB	2540 C
Total Organic Carbon*	mg/L	<0.5*	0.5	09/04/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	09/06/12	MC	200.7
Nitrate-N	mg/L	BRL	0.01	08/29/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	08/29/12	LL	300.0
Ammonia-N * <i>NH₄</i>	mg/L	0.12*	0.02	09/06/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	09/07/12	MC	SM4500 NH3 C
Chloride	mg/L	BRL	3.0	08/29/12	LL	300.0
Total Phosphorous (P)	mg/L	BRL	0.005	08/30/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	09/07/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	09/04/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.13	NA	09/06/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	<0.08	NA	09/12/12	Calculation	Calculation
Chlorophyll-a	*	ND*	*	08/31/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	08/29/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	09/04/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	09/12/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.21	NA	09/12/12	Calculation	Calculation

$$TN = DON(0.04) + PON(0.11) + NH_4(0.12) + NO_3(0.005) + NO_2(0.002) = 0.267$$

BRL=below reportable limits

*see attached

By: 
 Ronald J. Sadri
 Laboratory Director

ENVIROTECH LABORATORIES, INC.**MA CERT. NO.: M-MA 063**

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management
K. Towers/ 11 Lincoln St.
Plymouth, MA

ProjectName: Eel River SW Sampling
Project Number: S-8A
Collection Date: 8/29/12 **Collection Time:** 8:45
Sampled By: K. Tower
Lab Order Number: WW-121961
Date Received: 08/29/12

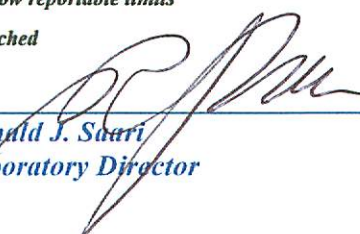
Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-8A A	8:45	8/29/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	87	6.0	09/06/12	KB	2540 C
Total Organic Carbon*	mg/L	3.3*	0.5	09/04/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	09/06/12	MC	200.7
Nitrate-N	mg/L	0.13	0.01	08/29/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	08/29/12	LL	300.0
Ammonia-N *	mg/L	0.05*	0.02	09/06/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	09/07/12	MC	SM4500 NH3 C
Chloride	mg/L	33.5	3.0	08/29/12	LL	300.0
Total Phosphorous (P)	mg/L	0.057	0.005	08/30/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	09/07/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	3.3*	0.5	09/04/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.18	NA	09/06/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	<0.15	NA	09/12/12	Calculation	Calculation
Chlorophyll-a	*	4.29*	*	08/31/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.019	0.005	08/29/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	09/04/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	09/12/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.33	NA	09/12/12	Calculation	Calculation

BRL=below reportable limits

*see attached

By:


Ronald J. Saari
Laboratory Director

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management
K. Towers/ 11 Lincoln St.
Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number: S-5B

Collection Date: 8/29/12 Collection Time: 9:00

Sampled By: K. Tower

Lab Order Number: WW-121962

Date Received: 08/29/12

Sample Type	Sample Time	Sample Date	Comments			
S-5B A	9:00	8/29/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	85	6.0	09/06/12	KB	2540 C
Total Organic Carbon*	mg/L	3.4*	0.5	09/04/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	09/06/12	MC	200.7
Nitrate-N	mg/L	0.13	0.01	08/29/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	08/29/12	LL	300.0
Ammonia-N *	mg/L	0.04*	0.02	09/06/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.22	0.2	09/07/12	MC	SM4500 NH3 C
Chloride	mg/L	33.5	3.0	08/29/12	LL	300.0
Total Phosphorous (P)	mg/L	0.057	0.005	08/30/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	09/07/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	3.2*	0.5	09/04/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.17	NA	09/06/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	<0.16	NA	09/12/12	Calculation	Calculation
Chlorophyll-a	*	3.84*	*	08/31/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.019	0.005	08/29/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.2	NA	09/04/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.02	NA	09/12/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.33	NA	09/12/12	Calculation	Calculation

BRL=below reportable limits

*see attached

By: 
Ronald J. Saggi
Laboratory Director

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management
K. Towers/ 11 Lincoln St.
Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number: S-4A

Collection Date: 8/29/12 **Collection Time:** 9:15

Sampled By: K Tower

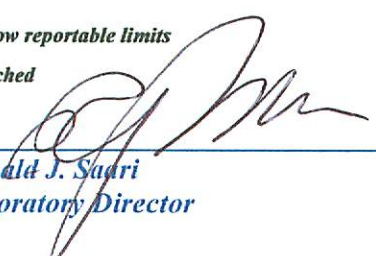
Lab Order Number: WW-121963

Date Received: 08/29/12

Sample Type	Sample Time	Sample Date	Comments			
S-4A A	9:15	8/29/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	76	6.0	09/06/12	KB	2540 C
Total Organic Carbon*	mg/L	6.0*	0.5	09/04/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	09/06/12	MC	200.7
Nitrate-N	mg/L	0.12	0.01	08/29/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	08/29/12	LL	300.0
Ammonia-N *	mg/L	0.04*	0.02	09/06/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.43	0.2	09/07/12	MC	SM4500 NH3 C
Chloride	mg/L	23.7	3.0	08/29/12	LL	300.0
Total Phosphorous (P)	mg/L	0.050	0.005	08/30/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.30	0.2	09/07/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	6.0*	0.5	09/04/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.16	NA	09/06/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	0.26	NA	09/12/12	Calculation	Calculation
Chlorophyll-a	*	3.75*	*	08/31/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.025	0.005	08/29/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	09/04/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.13	NA	09/12/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.42	NA	09/12/12	Calculation	Calculation

BRL=below reportable limits

*see attached

By: 

Ronald J. Satri
Laboratory Director

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number: S-2C

Collection Date: 8/29/12 **Collection Time:** 9:30

Sampled By: K Tower

Lab Order Number: WW-121964

Date Received: 08/29/12

Sample Type	Sample Time	Sample Date	Comments			
S-2C A	9:30	8/29/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	65	6.0	09/06/12	KB	2540 C
Total Organic Carbon*	mg/L	2.3*	0.5	09/04/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	09/06/12	MC	200.7
Nitrate-N	mg/L	0.10	0.01	08/29/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	08/29/12	LL	300.0
Ammonia-N *	mg/L	0.03*	0.02	09/06/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.25	0.2	09/07/12	MC	SM4500 NH3 C
Chloride	mg/L	24.9	3.0	08/29/12	LL	300.0
Total Phosphorous (P)	mg/L	0.043	0.005	08/30/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	09/07/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	2.0*	0.5	09/04/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.13	NA	09/06/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	<0.17	NA	09/12/12	Calculation	Calculation
Chlorophyll-a	*	12.6*	*	08/31/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	08/29/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.3	NA	09/04/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.05	NA	09/12/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.30	NA	09/12/12	Calculation	Calculation

BRL=below reportable limits

*see attached

By:

Ronald J. Sauri

Laboratory Director

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Wednesday, September 19, 2012

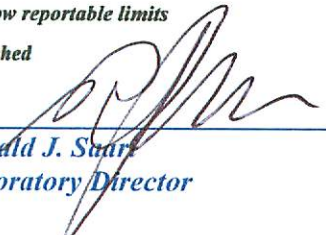
Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-12
Collection Date: 8/29/12 **Collection Time:** 11:30
Sampled By: K. Tower
Lab Order Number: WW-121965
Date Received: 08/29/12

Sample Type	Sample Time	Sample Date	Comments			
S-12 A	11:30	8/29/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	56	6.0	09/06/12	KB	2540 C
Total Organic Carbon*	mg/L	4.8*	0.5	09/04/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	09/06/12	MC	200.7
Nitrate-N	mg/L	0.10	0.01	08/29/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	08/29/12	LL	300.0
Ammonia-N *	mg/L	0.02*	0.02	09/06/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.31	0.2	09/07/12	MC	SM4500 NH3 C
Chloride	mg/L	16.6	3.0	08/29/12	LL	300.0
Total Phosphorous (P)	mg/L	0.080	0.005	08/30/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.24	0.2	09/07/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	4.5*	0.5	09/04/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.12	NA	09/06/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	0.22	NA	09/12/12	Calculation	Calculation
Chlorophyll-a	*	4.06*	*	08/31/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.021	0.005	08/29/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.3	NA	09/04/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.07	NA	09/12/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.34	NA	09/12/12	Calculation	Calculation

BRL=below reportable limits

*see attached

By: 
 Ronald J. Stuart
 Laboratory Director

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number: S-6A

Collection Date: 8/29/12 **Collection Time:** 11:45

Sampled By: K. Tower

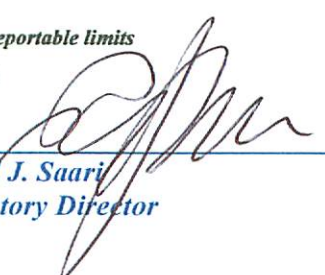
Lab Order Number: WW-121966

Date Received: 08/29/12

Sample Type	Sample Time	Sample Date	Comments			
S-6A A	11:45	8/29/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	60	6.0	09/06/12	KB	2540 C
Total Organic Carbon*	mg/L	3.5*	0.5	09/04/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	09/06/12	MC	200.7
Nitrate-N	mg/L	0.15	0.01	08/29/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	08/29/12	LL	300.0
Ammonia-N *	mg/L	0.02*	0.02	09/06/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.23	0.2	09/07/12	MC	SM4500 NH3 C
Chloride	mg/L	18.1	3.0	08/29/12	LL	300.0
Total Phosphorous (P)	mg/L	0.077	0.005	08/30/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.2	09/07/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	3.5*	0.5	09/04/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.17	NA	09/06/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	0.19	NA	09/12/12	Calculation	Calculation
Chlorophyll-a	*	4.03*	*	08/31/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.020	0.005	08/29/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	09/04/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.02	NA	09/12/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.36	NA	09/12/12	Calculation	Calculation

BRL=below reportable limits

*see attached

By: 

Ronald J. Saari
Laboratory Director

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Tuesday, December 11, 2012

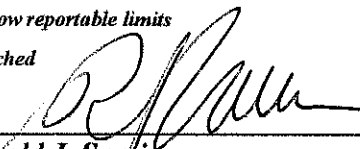
Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-3A
Collection Date: 8/29/12 **Collection Time:** S-3A
Sampled By: K. Tower
Lab Order Number: WW-121967
Date Received: 08/29/12

Sample Type	Sample Time	Sample Date	Comments			
S-3A A	12:00	8/29/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	71	6.0	09/06/12	KB	2540 C
Total Organic Carbon*	mg/L	2.4*	0.5	09/04/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	09/06/12	MC	200.7
Nitrate N	mg/L	0.17	0.01	08/29/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	08/29/12	LL	300.0
Ammonia-N *	mg/L	0.08*	0.02	09/06/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.26	0.2	09/07/12	MC	SM4500 NH3 C
Chloride	mg/L	27.5	3.0	08/29/12	LL	300.0
Total Phosphorous (P)	mg/L	0.043	0.005	08/30/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	09/07/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	2.3*	0.5	09/04/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.25	NA	09/06/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	<0.12	NA	09/12/12	Calculation	Calculation
Chlorophyll-a	*	3.75*	*	08/31/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.010	0.005	08/29/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.1	NA	09/04/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.06	NA	09/12/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.37	NA	09/12/12	Calculation	Calculation

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.
Attn: Mr. Ron Saari
8 Jan Sebastian Drive
Sandwich, MA 02563

Date Received: 8/30/2012
Date Reported: 9/7/2012
P.O. #:
Work Order #: 1208-18222

DESCRIPTION: PLYMOUTH ENV.

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.
The Certificate of Analysis shall not be reproduced except in full, without written approval of R.I. Analytical.
Results relate only to samples submitted to the laboratory for analysis.
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:



Sharon Baker
MIS / Data Reporting

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 8/30/2012

Work Order #: 1208-18222

Sample # 001

SAMPLE DESCRIPTION: WW-121960 S-8B

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 8/29/2012 @ 08:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.12	0.02	mg/l	SM 4500-NH3 C	9/6/2012 13:58	MEM
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	9/4/2012 7:00	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	9/4/2012 7:00	JRG

Sample # 002

SAMPLE DESCRIPTION: WW-121961 S-8A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 8/29/2012 @ 08:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.05	0.02	mg/l	SM 4500-NH3 C	9/6/2012 13:58	MEM
TOC Low Level	3.3	0.5	mg/l	SM-5310B	9/4/2012 7:00	JRG
Dissolved TOC	3.3	0.5	mg/l	EPA 415.1	9/4/2012 7:00	JRG

Sample # 003

SAMPLE DESCRIPTION: WW-121962 S-5B

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 8/29/2012 @ 09:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.04	0.02	mg/l	SM 4500-NH3 C	9/6/2012 13:58	MEM
TOC Low Level	3.4	0.5	mg/l	SM-5310B	9/4/2012 7:00	JRG
Dissolved TOC	3.2	0.5	mg/l	EPA 415.1	9/4/2012 7:00	JRG

Sample # 004

SAMPLE DESCRIPTION: WW-121963 S-4A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 8/29/2012 @ 09:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.04	0.02	mg/l	SM 4500-NH3 C	9/6/2012 13:58	MEM
TOC Low Level	6.0	0.5	mg/l	SM-5310B	9/4/2012 7:00	JRG
Dissolved TOC	6.0	0.5	mg/l	EPA 415.1	9/4/2012 7:00	JRG

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 8/30/2012

Work Order #: 1208-18222

Sample # 005

SAMPLE DESCRIPTION: WW-121964 S-2C

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 8/29/2012 @ 09:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.03	0.02	mg/l	SM 4500-NH3 C	9/6/2012 13:58	MEM
TOC Low Level	2.3	0.5	mg/l	SM-5310B	9/4/2012 7:00	JRG
Dissolved TOC	2.0	0.5	mg/l	EPA 415.1	9/4/2012 7:00	JRG

Sample # 006

SAMPLE DESCRIPTION: WW-121965 S-12

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 8/29/2012 @ 11:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.02	0.02	mg/l	SM 4500-NH3 C	9/6/2012 13:58	MEM
TOC Low Level	4.8	0.5	mg/l	SM-5310B	9/4/2012 7:00	JRG
Dissolved TOC	4.5	0.5	mg/l	EPA 415.1	9/4/2012 7:00	JRG

Sample # 007

SAMPLE DESCRIPTION: WW-121966 S-6A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 8/29/2012 @ 11:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.02	0.02	mg/l	SM 4500-NH3 C	9/6/2012 13:58	MEM
TOC Low Level	3.5	0.5	mg/l	SM-5310B	9/4/2012 7:00	JRG
Dissolved TOC	3.5	0.5	mg/l	EPA 415.1	9/4/2012 7:00	JRG

Sample # 008

SAMPLE DESCRIPTION: WW-121967 S-3A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 8/29/2012 @ 12:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.08	0.02	mg/l	SM 4500-NH3 C	9/7/2012 13:55	SJC
TOC Low Level	2.4	0.5	mg/l	SM-5310B	9/4/2012 7:00	JRG
Dissolved TOC	2.3	0.5	mg/l	EPA 415.1	9/4/2012 7:00	JRG



ANALYTICAL REPORT

Lab Number:	L 1215420
Client:	Envirotech Laboratories, Inc. 8 Jan Sebastian Drive Unit 12 Sandwich, MA 02563
ATTN:	Ron Saari
Phone:	(800) 339-6460
Project Name:	PLYMOUTH ENVIRONMENTAL MANAGEM
Project Number:	Not Specified
Report Date:	09/06/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM
Project Number: Not Specified

Lab Number: L1215420
Report Date: 09/06/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1215420-01	WW-121960	S-8B	08/29/12 08:30
L1215420-02	WW-121961	S-8A	08/29/12 08:45
L1215420-03	WW-121962	S-5B	08/29/12 09:00
L1215420-04	WW-121963	S-4A	08/29/12 09:15
L1215420-05	WW-121964	S-2C	08/29/12 09:30
L1215420-06	WW-121965	S-12	08/29/12 11:30
L1215420-07	WW-121966	S-6A	08/29/12 11:45
L1215420-08	WW-121967	S-3A	08/29/12 12:00

Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM
Project Number: Not Specified

Lab Number: L1215420
Report Date: 09/06/12

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM
Project Number: Not Specified

Lab Number: L1215420
Report Date: 09/06/12

Case Narrative (continued)

Chlorophyll A

WG557903: A Laboratory Duplicate could not be performed due to insufficient sample volume available for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Elizabeth Simmons

Title: Technical Director/Representative

Date: 09/06/12

INORGANICS & MISCELLANEOUS

Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM

Lab Number: L1215420

Project Number: Not Specified

Report Date: 09/06/12

SAMPLE RESULTS

Lab ID: L1215420-01

Date Collected: 08/29/12 08:30

Client ID: WW-121960

Date Received: 08/29/12

Sample Location: S-8B

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	ND		mg/m3	2.00	NA	1	08/29/12 21:00	08/31/12 09:40	30, 10200H	DM



Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM**Lab Number:** L1215420**Project Number:** Not Specified**Report Date:** 09/06/12**SAMPLE RESULTS**

Lab ID: L1215420-02

Date Collected: 08/29/12 08:45

Client ID: WW-121961

Date Received: 08/29/12

Sample Location: S-8A

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	4.29		mg/m3	2.00	NA	1	08/29/12 21:00	08/31/12 09:40	30, 10200H	DM



Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM
Project Number: Not Specified

Lab Number: L1215420
Report Date: 09/06/12

SAMPLE RESULTS

Lab ID: L1215420-03
Client ID: WW-121962
Sample Location: S-5B
Matrix: Water

Date Collected: 08/29/12 09:00
Date Received: 08/29/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	3.84		mg/m3	2.00	NA	1	08/29/12 21:00	08/31/12 09:40	30, 10200H	DM



Serial_No:09061210:10

Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM

Lab Number: L1215420

Project Number: Not Specified

Report Date: 09/06/12

SAMPLE RESULTS

Lab ID: L1215420-04

Date Collected: 08/29/12 09:15

Client ID: WW-121963

Date Received: 08/29/12

Sample Location: S-4A

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	3.75		mg/m3	2.00	NA	1	08/29/12 21:00	08/31/12 09:40	30, 10200H	DM



Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM

Lab Number: L1215420

Project Number: Not Specified

Report Date: 09/06/12

SAMPLE RESULTS

Lab ID: L1215420-05

Date Collected: 08/29/12 09:30

Client ID: WW-121964

Date Received: 08/29/12

Sample Location: S-2C

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	12.6		mg/m3	2.00	NA	1	08/29/12 21:00	08/31/12 09:40	30, 10200H	DM



Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM
Project Number: Not Specified

Lab Number: L1215420
Report Date: 09/06/12

SAMPLE RESULTS

Lab ID: L1215420-06
Client ID: WW-121965
Sample Location: S-12
Matrix: Water

Date Collected: 08/29/12 11:30
Date Received: 08/29/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	4.06		mg/m3	2.00	NA	1	08/29/12 21:00	08/31/12 09:40	30, 10200H	DM



Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM

Lab Number: L1215420

Project Number: Not Specified

Report Date: 09/06/12

SAMPLE RESULTS

Lab ID: L1215420-07

Date Collected: 08/29/12 11:45

Client ID: WW-121966

Date Received: 08/29/12

Sample Location: S-6A

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	4.03		mg/m3	2.00	NA	1	08/29/12 21:00	08/31/12 09:40	30, 10200H	DM



Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM
Project Number: Not Specified

Lab Number: L1215420
Report Date: 09/06/12

SAMPLE RESULTS

Lab ID: L1215420-08
Client ID: WW-121967
Sample Location: S-3A
Matrix: Water

Date Collected: 08/29/12 12:00
Date Received: 08/29/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	3.75		mg/m3	2.00	NA	1	08/29/12 21:00	08/31/12 09:40	30, 10200H	DM



Project Name: PLYMOUTH ENVIRONMENTAL MANA

Lab Number: L1215420

Project Number: Not Specified

Report Date: 09/06/12

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-08 Batch: WG557903-1									
Chlorophyll A	ND	mg/m3	2.00	NA	1	08/29/12 21:00	08/31/12 09:40	30, 10200H	DM



Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM

Lab Number: L1215420

Project Number: Not Specified

Report Date: 09/06/12

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1215420-01A	Brown Plastic 1000ml unpreserved	A	N/A	3	Y	Absent	CHLORO-A(1)
L1215420-02A	Brown Plastic 1000ml unpreserved	A	N/A	3	Y	Absent	CHLORO-A(1)
L1215420-03A	Brown Plastic 1000ml unpreserved	A	N/A	3	Y	Absent	CHLORO-A(1)
L1215420-04A	Brown Plastic 1000ml unpreserved	A	N/A	3	Y	Absent	CHLORO-A(1)
L1215420-05A	Brown Plastic 1000ml unpreserved	A	N/A	3	Y	Absent	CHLORO-A(1)
L1215420-06A	Brown Plastic 1000ml unpreserved	A	N/A	3	Y	Absent	CHLORO-A(1)
L1215420-07A	Brown Plastic 1000ml unpreserved	A	N/A	3	Y	Absent	CHLORO-A(1)
L1215420-08A	Brown Plastic 1000ml unpreserved	A	N/A	3	Y	Absent	CHLORO-A(1)

*Values in parentheses indicate holding time in days



Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM

Lab Number: L1215420

Project Number: Not Specified

Report Date: 09/06/12

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A - Spectra identified as "Aldol Condensation Product".
- B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
- C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
- M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: Data Usability Report



Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM**Lab Number:** L1215420**Project Number:** Not Specified**Report Date:** 09/06/12**Data Qualifiers**

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM
Project Number: Not Specified

Lab Number: L1215420
Report Date: 09/06/12

REFERENCES

- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of Custody

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
8/29/12	0830	S-8B	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
8/29/12	0845	S-8A	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

S. Lavalley 8/29/12 1255

6

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of CustodyClient:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: **Eel River SW Sampling -Plymouth MA**
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
W-121962 8/29/12	0900	S-5B	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
W-121963 8/29/12	0915	S-4A	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

Relinquished By: Date/Time

Kim Tower

Received By:

Date/Time:

L. Savally 8/29/12 1255

6

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of Custody

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
W-121964 8/29/12	0930	S-2C	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
12-121965 8/29/12	1130	S-12	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

J. Saville 8/29/12 1255

6

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of Custody

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: **Eel River SW Sampling -Plymouth MA**
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
W-121966 8/29/12	1145	S-6A	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
W-121967 8/29/12	1200	S-3A	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

L. Savally 8/29/12 1255

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management

K.Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Harbor Sampling

Comments:

Project Number: S-7

Collection Date: 8/29/12 Collection Time: 10:20

Sampled By: K Tower

Lab Order Number: WW-121968

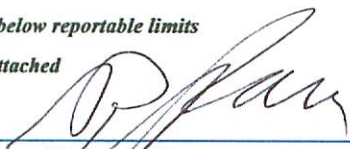
Date Received: 08/29/12

Sample Type	Sample Time	Sample Date	Comments			
S-7 A	10:20	8/29/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N/Nitrite-N	mg/L	BRL	0.01	08/30/12	MC	4500-NO3
Total Organic Carbon*	mg/L	<0.5*	0.5	09/04/12	RIA*	SM 5310 C
Ammonia-N *	mg/L	<0.10*	0.02	09/06/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	09/12/12	MC	SM4500 NH3 C
Total Phosphorous (P)	mg/L	0.013	0.005	08/30/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	09/12/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	09/04/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.11	NA	09/06/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	<0.10	NA	09/12/12	Calculation	Calculation
Ortho Phosphorous (P)	mg/L	0.007	0.005	08/29/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	09/04/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	09/12/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.21	NA	09/12/12	Calculation	Calculation

$$TN = DON(0.05) + PON(0.1) + NH_4(0.05) + NO_3/NO_2(0.005) = .205$$

BRL=below reportable limits

*see attached

By: 
Ronald L. Sauri
Laboratory Director

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Wednesday, September 19, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Harbor Sampling

Comments:

Project Number: S-10

Collection Date: 8/29/12 **Collection Time:** 10:30

Sampled By: K. Tower

Lab Order Number: WW-121969

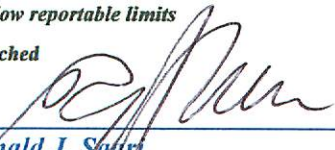
Date Received: 08/29/12

Sample Type	Sample Time	Sample Date	Comments			
S-10 A	10:30	8/29/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N/Nitrite-N	mg/L	BRL	0.01	08/30/12	MC	4500-NO3
Total Organic Carbon*	mg/L	<0.5*	0.5	09/04/12	RIA*	SM 5310 C
Ammonia-N *	mg/L	<0.10*	0.02	09/06/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.24	0.2	09/12/12	MC	SM4500 NH3 C
Total Phosphorous (P)	mg/L	0.063	0.005	08/30/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	09/12/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	<0.5*	0.5	09/04/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.11	NA	09/06/12	Calculation	Calculation
Dissolved Organic Nitrogen	mg/L	<0.10	NA	09/12/12	Calculation	Calculation
Ortho Phosphorous (P)	mg/L	0.015	0.005	08/29/12	MC	4500-P
Particulate Organic Carbon	mg/L	BRL	NA	09/04/12	Calculation	SM 5310 C
Particulate Organic Nitrogen	mg/L	< 0.04	NA	09/12/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.21	NA	09/12/12	Calculation	Calculation

$$TN = DON (.05) + PON (.02) + NH_4 (.05) + NO_3/NO_2 (.005) = .125$$

BRL=below reportable limits

*see attached

By: 
Ronald J. Satri
Laboratory Director

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.
Attn: Mr. Ron Saari
8 Jan Sebastian Drive
Sandwich, MA 02563

Date Received: 8/30/2012
Date Reported: 9/6/2012
P.O. #:
Work Order #: 1208-18221

DESCRIPTION: PLYMOUTH ENV.

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.

The specific methodologies are listed in the methods column of the Certificate of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

The Certificate of Analysis shall not be reproduced except in full, without written approval of R.I. Analytical.

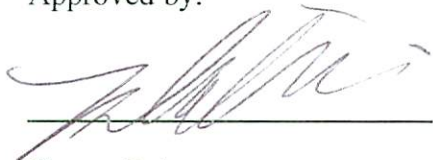
Results relate only to samples submitted to the laboratory for analysis.

Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:



Sharon Baker
MIS / Data Reporting

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.

Date Received: 8/30/2012

Work Order #: 1208-18221

Sample # 001

SAMPLE DESCRIPTION: WW-121968 S-7

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 8/29/2012 @ 10:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.10	0.10	mg/l	SM 4500-NH3 C	9/6/2012 13:58	MEM
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	9/4/2012 7:00	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	9/4/2012 7:00	JRG

Sample # 002

SAMPLE DESCRIPTION: WW-121969 S-10

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 8/29/2012 @ 10:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.10	0.10	mg/l	SM 4500-NH3 C	9/6/2012 13:58	MEM
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	9/4/2012 7:00	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	9/4/2012 7:00	JRG

6

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of Custody

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: **Harbor Sampling** -Plymouth MA
Sampler: Kim Tower (KT)

16-121968

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
8/29/12	1020	S-7	1	Plastic	TOC	H2SO4
1	1	S-7	1	Plastic	NO3, NO2, Ortho,	NONE
1	1	S-7	1	1 Liter Plastic	TKN, NH3, TP	H2SO4
1	1	S-7	1	Plastic	Dissolved	None
8/29/12	1030	S-10	1	Plastic	TOC	H2SO4
1	1	S-10	1	Plastic	NO3, NO2, Ortho, Dissolved	NONE
1	1	S-10	1	1 Liter Plastic	TKN, NH3, TP	H2SO4
1	1	S-10	1	Plastic	Dissolved	None

16-121969

NOTE: Analysis needed for reporting in lowest detection possible; O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Kjeldahl Nitrogen, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

L. Lavalley 8/29/12 1255

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Tuesday, December 11, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Eel River SW Sampling **Comments:**

Project Number: S-8B

Collection Date: 10/3/12 **Collection Time:** 10:35

Sampled By: Kim Tower

Lab Order Number: WW-122306

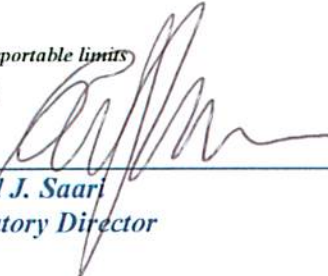
Date Received: 10/03/12

Sample Type	Sample Time	Sample Date	Comments			
S-8B A	10:35	10/3/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	BRL	6.0	10/07/12	KB	2540 C
Total Organic Carbon*	mg/L	BRL*	0.5	10/10/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	10/11/12	MC	200.7
Nitrate-N	mg/L	BRL	0.01	10/04/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/04/12	LL	300.0
Ammonia-N *	mg/L	0.15*	0.02	10/12/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Chloride	mg/L	BRL	3.0	10/04/12	LL	300.0
Total Phosphorous (P)	mg/L	BRL	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	BRL*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.16	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.05	NA	11/26/12	MC	Calculation
Chlorophyll-a	*	ND*	*	10/05/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	10/04/12	MC	4500-P
Particulate Organic Carbon	mg/L	ND	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.21	NA	11/26/12	MC	Calculation

$$TN = DON (0.025) + PON (0.1) + NO_3 (0.005) + NO_2 (0.002) + NH_4 (0.15) = 0.282$$

BRL=below reportable limits

*see attached

By: 

Ronald J. Saari
Laboratory Director

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Tuesday, December 11, 2012

Plymouth Environmental Management
K. Towers/ 11 Lincoln St.
Plymouth, MA

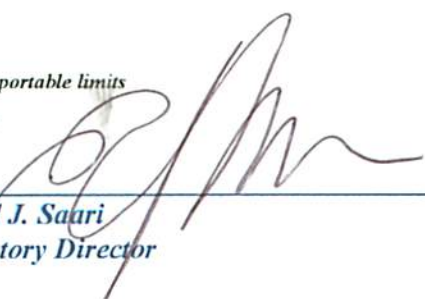
ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-5B
Collection Date: 10/3/12 **Collection Time:** 10:45
Sampled By: Kim Tower
Lab Order Number: WW-122307
Date Received: 10/03/12

Sample Type	Sample Time	Sample Date	Comments			
S-5B A	10:45	10/3/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	85	6.0	10/07/12	KB	2540 C
Total Organic Carbon*	mg/L	3.0*	0.5	10/10/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	10/11/12	MC	200.7
Nitrate-N	mg/L	0.17	0.01	10/04/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/04/12	LL	300.0
Ammonia-N *	mg/L	0.10*	0.02	10/12/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.47	0.2	11/26/12	MC	SM4500 NH3 C
Chloride	mg/L	35.1	3.0	10/04/12	LL	300.0
Total Phosphorous (P)	mg/L	0.040	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.37	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	3.0*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.27	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.27	NA	11/26/12	MC	Calculation
Chlorophyll-a	*	2.62*	*	10/05/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.009	0.005	10/04/12	MC	4500-P
Particulate Organic Carbon	mg/L	ND	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.10	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.54	NA	11/26/12	MC	Calculation

$$TN = DON(0.27) + PON(0.1) + NO_3(0.17) + NO_2(0.002) + NH_4(0.10) = 0.642$$

BRL=below reportable limits

*see attached

By: 
Ronald J. Sauri
Laboratory Director

ENVIROTECH LABORATORIES, INC.

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Tuesday, December 11, 2012

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number: S-4A

Collection Date: 10/3/12 **Collection Time:** 10:55

Sampled By: Kim Tower

Lab Order Number: WW-122308

Date Received: 10/03/12

Sample Type	Sample Time	Sample Date	Comments			
S-4A A	10:55	10/3/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	77	6.0	10/10/12	KB	2540 C
Total Organic Carbon*	mg/L	3.7*	0.5	10/10/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	10/11/12	MC	200.7
Nitrate-N	mg/L	0.12	0.01	10/04/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/04/12	LL	300.0
Ammonia-N *	mg/L	0.08*	0.02	10/12/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.21	0.2	11/26/12	MC	SM4500 NH3 C
Chloride	mg/L	27.1	3.0	10/04/12	LL	300.0
Total Phosphorous (P)	mg/L	0.025	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	3.6*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.20	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.12	NA	11/26/12	MC	Calculation
Chlorophyll-a	*	2.84*	*	10/05/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.008	0.005	10/04/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.10	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.01	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.32	NA	11/26/12	MC	Calculation

$$TN = DON(0.06) + PON(0.005) + NO_3(0.12) + NO_2(0.002) + NH_4(0.08) = 0.267$$

BRL=below reportable limits

*see attached

By:

Ronald J. Saari
Laboratory Director

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 Plymouth, MA

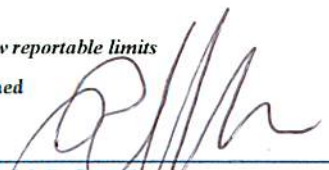
ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-3A
Collection Date: 10/3/12 **Collection Time:** 11:05
Sampled By: Kim Tower
Lab Order Number: WW-122309
Date Received: 10/03/12

Sample Type	Sample Time	Sample Date	Comments			
S-3A A	11:05	10/3/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	81	6.0	10/10/12	KB	2540 C
Total Organic Carbon*	mg/L	1.4*	0.5	10/10/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	10/11/12	MC	200.7
Nitrate-N	mg/L	0.20	0.01	10/04/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/04/12	LL	300.0
Ammonia-N *	mg/L	0.06*	0.02	10/12/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.22	0.2	11/26/12	MC	SM4500 NH3 C
Chloride	mg/L	29.8	3.0	10/04/12	LL	300.0
Total Phosphorous (P)	mg/L	0.027	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	1.3*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.28	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.14	NA	11/26/12	MC	Calculation
Chlorophyll-a	*	17.3*	*	10/05/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.006	0.005	10/04/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.10	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.02	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.42	NA	11/26/12	MC	Calculation

$$TN = DON(0.07) + PON(0.01) + NO_3(0.2) + NO_2(0.002) + NH_4(0.06) = 0.342$$

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

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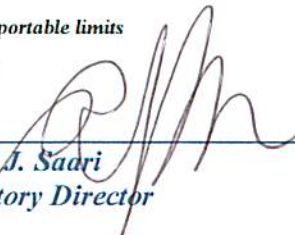
ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-2C
Collection Date: 10/3/12 **Collection Time:** 11:30
Sampled By: kim Tower
Lab Order Number: WW-122310
Date Received: 10/03/12

Sample Type	Sample Time	Sample Date	Comments			
S-2C A	11:30	10/3/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	75	6.0	10/10/12	KB	2540 C
Total Organic Carbon*	mg/L	1.7*	0.5	10/10/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	10/11/12	MC	200.7
Nitrate-N	mg/L	0.12	0.01	10/04/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/04/12	LL	300.0
Ammonia-N *	mg/L	0.06*	0.02	10/12/12	RA data*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Chloride	mg/L	29.0	3.0	10/04/12	LL	300.0
Total Phosphorous (P)	mg/L	0.027	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	1.4*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.18	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.14	NA	11/26/12	MC	Calculation
Chlorophyll-a	*	18.1*	*	10/05/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	10/04/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.30	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.32	NA	11/26/12	MC	Calculation

$$TN = DON(0.07) + PON(0.1) + NO_3(0.12) + NO_2(0.002) + NH_4(0.06) = 0.352$$

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

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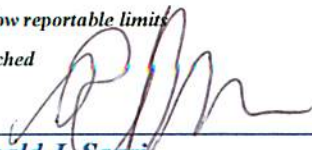
ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-6A
Collection Date: 10/3/12 **Collection Time:** 11:45
Sampled By: Kim Tower
Lab Order Number: WW-122311
Date Received: 10/03/12

Sample Type	Sample Time	Sample Date	Comments			
S-6A A	11:45	10/3/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	61	6.0	10/10/12	KB	2540 C
Total Organic Carbon*	mg/L	2.1*	0.5	10/10/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	10/11/12	MC	200.7
Nitrate-N	mg/L	0.19	0.01	10/04/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/04/12	LL	300.0
Ammonia-N *	mg/L	0.04*	0.02	10/12/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Chloride	mg/L	18.6	3.0	10/04/12	LL	300.0
Total Phosphorous (P)	mg/L	0.038	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	1.9*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.23	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.16	NA	11/26/12	MC	Calculation
Chlorophyll-a	*	2.35*	*	10/05/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.012	0.005	10/04/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.20	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.39	NA	11/26/12	MC	Calculation

$$TN = DON(0.08) + PON(0.1) + NO_3(0.19) + NO_2(0.002) + NH_4(0.04) = 0.412$$

BRL=below reportable limits

*see attached

By: 
 Ronald J. Sauri
 Laboratory Director

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 Plymouth, MA

ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-12
Collection Date: 10/3/12 **Collection Time:** 12:00
Sampled By: Kim Tower
Lab Order Number: WW-122312
Date Received: 10/03/12

Sample Type	Sample Time	Sample Date	Comments			
S-12 A	12:00	10/3/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	50	6.0	10/10/12	KB	2540 C
Total Organic Carbon*	mg/L	2.8*	0.5	10/10/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	10/11/12	MC	200.7
Nitrate-N	mg/L	0.14	0.01	10/04/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/04/12	LL	300.0
Ammonia-N *	mg/L	0.03*	0.02	10/12/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Chloride	mg/L	16.8	3.0	10/04/12	LL	300.0
Total Phosphorous (P)	mg/L	0.057	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	2.6*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.17	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.17	NA	11/26/12	MC	Calculation
Chlorophyll-a	*	15.0*	*	10/05/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.006	0.005	10/04/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.20	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.34	NA	11/26/12	MC	Calculation

$$TN = DON(0.085) + PON(0.1) + NO_3(0.14) + NO_2(0.002) + NH_4(0.03) = 0.357$$

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

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 Plymouth, MA

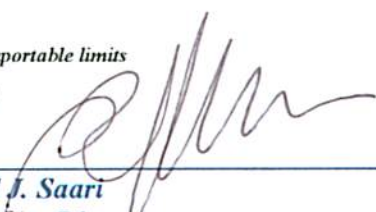
ProjectName: Eel River SW Sampling **Comments:**
Project Number: S-8A
Collection Date: 10/3/12 **Collection Time:** 12:15
Sampled By: Kim Tower
Lab Order Number: WW-122313
Date Received: 10/03/12

Sample Type	Sample Time	Sample Date	Comments			
S-8A A	12:15	10/3/12				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	49	6.0	10/10/12	KB	2540 C
Total Organic Carbon*	mg/L	2.8*	0.5	10/10/12	RIA*	SM 5310 C
Boron	mg/L	BRL	0.010	10/11/12	MC	200.7
Nitrate-N	mg/L	0.14	0.01	10/04/12	LL	300.0
Nitrite-N	mg/L	BRL	0.004	10/04/12	LL	300.0
Ammonia-N *	mg/L	0.04*	0.02	10/12/12	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.20	0.2	11/26/12	MC	SM4500 NH3 C
Chloride	mg/L	16.8	3.0	10/04/12	LL	300.0
Total Phosphorous (P)	mg/L	0.053	0.005	10/11/12	MC	4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.2	11/26/12	MC	SM4500 NH3 C
Dissolved Total Organic Carbon	mg/L	2.5*	0.5	10/10/12	RIA*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.18	NA	11/26/12	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.16	NA	11/26/12	MC	Calculation
Chlorophyll-a	*	11.4*	*	10/05/12	Alpha Analytical	*
Ortho Phosphorous (P)	mg/L	0.007	0.005	10/04/12	MC	4500-P
Particulate Organic Carbon	mg/L	0.30	NA	11/26/12	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	11/26/12	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.34	NA	11/26/12	MC	Calculation

$$TN = DON(0.08) + PON(0.1) + NO_3(0.14) + NO_2(0.002) + NH_4(0.04) = 0.362$$

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.
 Date Received: 10/4/2012
 Work Order #: 1210-20861

Sample # 001

SAMPLE DESCRIPTION: WW-122306 S-8B

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/03/2012 @ 10:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.15	0.02	mg/l	SM 4500-NH3 C	10/12/2012 11:41	MEM
TOC Low Level	<0.5	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	<0.5	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG

Sample # 002

SAMPLE DESCRIPTION: WW-122307 S-5B

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/03/2012 @ 10:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.10	0.02	mg/l	SM 4500-NH3 C	10/12/2012 11:41	MEM
TOC Low Level	3.0	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	3.0	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG

Sample # 003

SAMPLE DESCRIPTION: WW-122308 S-4A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/03/2012 @ 10:55

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.08	0.02	mg/l	SM 4500-NH3 C	10/12/2012 11:41	MEM
TOC Low Level	3.7	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	3.6	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG

Sample # 004

SAMPLE DESCRIPTION: WW-122309 S-3A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/03/2012 @ 11:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.06	0.02	mg/l	SM 4500-NH3 C	10/12/2012 11:41	MEM
TOC Low Level	1.4	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	1.3	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

Envirotech Laboratories, Inc.
 Date Received: 10/4/2012
 Work Order #: 1210-20861

Sample # 005

SAMPLE DESCRIPTION: WW-122310 S-2C

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/03/2012 @ 11:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.06	0.02	mg/l	SM 4500-NH3 C	10/12/2012 11:41	MEM
TOC Low Level	1.7	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	1.4	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG

Sample # 006

SAMPLE DESCRIPTION: WW-122311 S-6A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/03/2012 @ 11:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.04	0.02	mg/l	SM 4500-NH3 C	10/12/2012 11:41	MEM
TOC Low Level	2.1	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	1.9	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG

Sample # 007

SAMPLE DESCRIPTION: WW-122312 S-12

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/03/2012 @ 12:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.03	0.02	mg/l	SM 4500-NH3 C	10/12/2012 11:41	MEM
TOC Low Level	2.8	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	2.6	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG

Sample # 008

SAMPLE DESCRIPTION: WW-122313 S-8A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/03/2012 @ 12:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.04	0.02	mg/l	SM 4500-NH3 C	10/12/2012 11:41	MEM
TOC Low Level	2.8	0.5	mg/l	SM-5310B	10/10/2012 8:30	JRG
Dissolved TOC	2.5	0.5	mg/l	EPA 415.1	10/10/2012 8:30	JRG

Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM
Project Number: Not Specified

Lab Number: L1217732
Report Date: 10/09/12

SAMPLE RESULTS

Lab ID: L1217732-01
Client ID: WW-122306
Sample Location: S-8B
Matrix: Water

Date Collected: 10/03/12 10:35
Date Received: 10/03/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	ND		mg/m3	2.00	NA	1	10/03/12 22:30	10/05/12 08:42	30, 10200H	DM



Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM

Lab Number: L1217732

Project Number: Not Specified

Report Date: 10/09/12

SAMPLE RESULTS

Lab ID: L1217732-02

Date Collected: 10/03/12 10:45

Client ID: WW-122307

Date Received: 10/03/12

Sample Location: S-5B

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	2.62		mg/m3	2.00	NA	1	10/03/12 22:30	10/05/12 08:42	30, 10200H	DM



Serial_No:10091215:07

Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM
Project Number: Not Specified

Lab Number: L1217732
Report Date: 10/09/12

SAMPLE RESULTS

Lab ID: L1217732-03
Client ID: WW-122308
Sample Location: S-4A
Matrix: Water

Date Collected: 10/03/12 10:55
Date Received: 10/03/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	2.84		mg/m3	2.00	NA	1	10/03/12 22:30	10/05/12 08:42	30, 10200H	DM



Serial_No:10091215:07

Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM

Lab Number: L1217732

Project Number: Not Specified

Report Date: 10/09/12

SAMPLE RESULTS

Lab ID: L1217732-04

Date Collected: 10/03/12 11:05

Client ID: WW-122309

Date Received: 10/03/12

Sample Location: S-3A

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	17.3		mg/m3	2.00	NA	1	10/03/12 22:30	10/05/12 08:42	30, 10200H	DM



Serial_No:10091215:07

Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM
Project Number: Not Specified

Lab Number: L1217732
Report Date: 10/09/12

SAMPLE RESULTS

Lab ID: L1217732-05
Client ID: WW-122310
Sample Location: S-2C
Matrix: Water

Date Collected: 10/03/12 11:30
Date Received: 10/03/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	18.1		mg/m3	2.00	NA	1	10/03/12 22:30	10/05/12 08:42	30, 10200H	DM



Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM
Project Number: Not Specified

Lab Number: L1217732
Report Date: 10/09/12

SAMPLE RESULTS

Lab ID: L1217732-06
Client ID: WW-122311
Sample Location: S-6A
Matrix: Water

Date Collected: 10/03/12 11:45
Date Received: 10/03/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	2.35		mg/m3	2.00	NA	1	10/03/12 22:30	10/05/12 08:42	30, 10200H	DM



Serial_No:10091215:07

Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM
Project Number: Not Specified

Lab Number: L1217732
Report Date: 10/09/12

SAMPLE RESULTS

Lab ID: L1217732-07
Client ID: WW-122312
Sample Location: S-12
Matrix: Water

Date Collected: 10/03/12 12:00
Date Received: 10/03/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	15.0		mg/m3	2.00	NA	1	10/03/12 22:30	10/05/12 08:42	30, 10200H	DM



Serial_No:10091215:07

Project Name: PLYMOUTH ENVIRONMENTAL MANAGEM

Lab Number: L1217732

Project Number: Not Specified

Report Date: 10/09/12

SAMPLE RESULTS

Lab ID: L1217732-08

Date Collected: 10/03/12 12:15

Client ID: WW-122313

Date Received: 10/03/12

Sample Location: S-8A

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	11.4		mg/m3	2.00	NA	1	10/03/12 22:30	10/05/12 08:42	30, 10200H	DM



Project Name: PLYMOUTH ENVIRONMENTAL MANA

Lab Number: L1217732

Project Number: Not Specified

Report Date: 10/09/12

Method Blank Analysis

Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-08 Batch: WG564871-1										
Chlorophyll A	ND		mg/m3	2.00	NA	1	10/03/12 22:30	10/05/12 08:42	30, 10200H	DM

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of Custody

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
10/3/12	S-8B	1035	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
10/3/12	S-5B	1045	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

L. Jawell 10/3/12 1350

6

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of Custody

Client:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
10/3/12	1055	S-4A	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
10/3/12	1105	S-3A	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

J. Savally 10/3/12 1350

(2)

Laboratory:

Envirotech Laboratories, 8 Sebastian Drive, Unit 12, Sandwich Ma 02563
(508) 888-6460

Chain of CustodyClient:

Town of Plymouth - DPW Environmental Management Attn: Kim Tower
11 Lincoln Street, Plymouth, MA 02360 /508-747-1620 x198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
10/3/12	1200	S-12	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4
10/3/12	1215	S-8A	1	1 Liter Plastic	Dissolved	NONE
			1	1 Liter Plastic	TKN, NH3, TP	H2SO4
			1	1 Liter Plastic	Ortho, Boron, TDS, Chloride, NO2, NO3	NONE
			1	Plastic	Chlorophyll-a	None
			1	Plastic	TOC	H2SO4

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

L. Sawally 10/3/12 1350