

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

8 Jan Sebastian Drive
 Sandwich, MA 02563
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Thursday, May 17, 2018

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

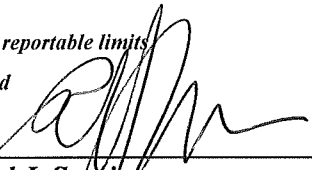
ProjectName: GW Eel River
Project Number: DW-1
Sampled By: Kim Tower
Lab Order Number: WW-180577
Date Received: 04/09/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
DW-1 A	10:00	04/10/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Nitrogen	mg/L	2.59	NA	04/13/18	KB	Calculation
Total Dissolved Solids	mg/L	280	6.0	04/11/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	420	10	04/09/18	RL	EPA 120.1
Total Organic Carbon*	mg/L	ND*	*	04/12/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	04/13/18	RIA*	*
Total Iron	mg/L	BRL	0.01	04/18/18	MC	EPA 200.7
Mercury*	mg/L	<0.0005*	0.0005	04/16/18	RIA*	EPA 245.1
Boron	mg/L	BRL	0.010	04/18/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	04/18/18	MC	EPA 200.7
Nitrate-N	mg/L	2.59	0.01	04/09/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/09/18	RL	EPA 300.0
Ammonia-N *	mg/L	0.02*	0.02	04/18/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	04/13/18	KB	SM4500-Norg B-C
pH grab	pH units	5.30	NA	04/09/18	RL	SM 4500 H-B
Chloride	mg/L	140	3.0	04/10/18	RL	EPA 300.0
Total Phosphorous (P)	mg/L	0.008	0.005	04/19/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	04/13/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	ND*	*	04/12/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	2.61	NA	05/16/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	05/16/18	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.006	0.005	04/10/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	ND	NA	05/16/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	05/16/18	RIA*	Calculation
Total Dissolved Nitrogen	mg/L	2.59	NA	04/13/18	BCL*	Calculation
Turbidity	NTU	BRL	0.2	04/09/18	RL	SM 2130 B

BRL=below reportable limits

*see attached

By: 
 Ronald J. Sauri
 Laboratory Director

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07432

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-180577 DW-1
Sample Type : GRAB
Sample Date / Time : 4/09/2018 @ 10:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Ammonia (as N)	0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	4/18/2018	9:30	KLE
Volatile Organic Compounds							
Benzene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07432

Project Name: PLYMOUTH ENV.

Sample Number:	001						
Sample Description:	WW-180577 DW-1						
Sample Type :	GRAB						
Sample Date / Time :	4/09/2018 @ 10:00						
PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Methylene Chloride	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Styrene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Toluene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
MTBE	<2	2	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Acetone	<10	10	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	4/13/2018	19:35	RAT
Surrogates			RANGE				
Dibromofluoromethane	100		86-118%	SW-846 8260C	4/13/2018	19:35	RAT
Toluene-d8	101		88-110%	SW-846 8260C	4/13/2018	19:35	RAT
4-Bromofluorobenzene	100		86-115%	SW-846 8260C	4/13/2018	19:35	RAT
1,2 Dichloroethane-d4	101		80-120%	SW-846 8260C	4/13/2018	19:35	RAT
Total Metals							
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	4/16/2018	16:20	JRW
Mercury Digestion				EPA 245.1	4/16/2018	15:33	DDP

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Thursday, May 17, 2018

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

ProjectName: GW Eel River
Project Number: A-17
Sampled By: Kim Tower
Lab Order Number: WW-180578
Date Received: 04/09/18

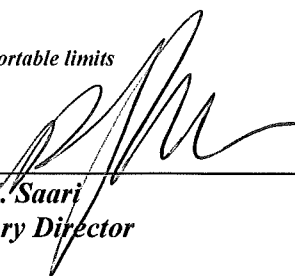
Comments:

Sample Type		Sample Time	Sample Date	Comments		
A17	A	12:05	04/09/18			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Nitrogen	mg/L	2.63	NA	04/13/18	KB	Calculation
Total Dissolved Solids	mg/L	280	6.0	04/11/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	418	10	04/09/18	RL	EPA 120.1
Total Organic Carbon*	mg/L	ND*	*	04/12/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	04/13/18	RIA*	*
Total Iron	mg/L	BRL	0.01	04/18/18	MC	EPA 200.7
Mercury*	mg/L	<0.0005*	0.0005	04/16/18	RIA*	EPA 245.1
Boron	mg/L	BRL	0.010	04/18/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	04/18/18	MC	EPA 200.7
Nitrate-N	mg/L	2.63	0.01	04/09/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/09/18	RL	EPA 300.0
Ammonia-N *	mg/L	<0.02*	0.02	04/18/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	04/13/18	KB	SM4500-Norg B-C
pH grab	pH units	5.31	NA	04/09/18	RL	SM 4500 H-B
Chloride	mg/L	140	3.0	04/10/18	RL	EPA 300.0
Total Phosphorous (P)	mg/L	0.008	0.005	04/19/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	04/13/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	ND*	*	04/12/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	2.63	NA	04/18/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	05/16/18	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.005	0.005	04/10/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	ND	NA	05/16/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	05/16/18	RIA*	Calculation
Total Dissolved Nitrogen	mg/L	2.63	NA	04/13/18	KB	Calculation
Turbidity	NTU	BRL	0.2	04/09/18	RL	SM 2130 B

BRL=below reportable limits

*see attached

By:


Ronald J. Saari
Laboratory Director

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07432

Project Name: PLYMOUTH ENV.

Sample Number: 002
Sample Description: WW-180578 A17
Sample Type : GRAB
Sample Date / Time : 4/09/2018 @ 12:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	4/18/2018	9:30	KLE
Volatile Organic Compounds							
Benzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:03	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07432

Project Name: PLYMOUTH ENV.

Sample Number: 002
Sample Description: WW-180578 A17
Sample Type : GRAB
Sample Date / Time : 4/09/2018 @ 12:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Methylene Chloride	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
Styrene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
Toluene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
MTBE	<2	2	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
Acetone	<10	10	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	4/13/2018 20:03	RAT
Surrogates			RANGE			
Dibromofluoromethane	100		86-118%	SW-846 8260C	4/13/2018 20:03	RAT
Toluene-d8	102		88-110%	SW-846 8260C	4/13/2018 20:03	RAT
4-Bromofluorobenzene	100		86-115%	SW-846 8260C	4/13/2018 20:03	RAT
1,2 Dichloroethane-d4	99		80-120%	SW-846 8260C	4/13/2018 20:03	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	4/16/2018 16:24	JRW
Mercury Digestion				EPA 245.1	4/16/2018 15:33	DDP

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, May 18, 2018

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

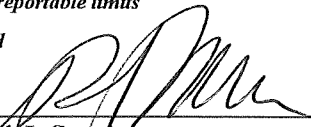
ProjectName: GW Eel River
Project Number: A-13
Sampled By: Kim Tower
Lab Order Number: WW-180579
Date Received: 04/09/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
A13 A	13:35	04/09/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Nitrogen	mg/L	1.32	NA	04/13/18	KB	Calculation
Total Dissolved Solids	mg/L	470	6.0	04/11/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	845	10	04/09/18	RL	EPA 120.1
Total Organic Carbon*	mg/L	0.458*	*	04/12/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	04/13/18	RIA*	*
Total Iron	mg/L	1.89	0.01	04/18/18	MC	EPA 200.7
Mercury*	mg/L	<0.0005*	0.0005	04/13/18	RIA*	EPA 245.1
Boron	mg/L	BRL	0.010	04/18/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	04/18/18	MC	EPA 200.7
Nitrate-N	mg/L	1.04	0.01	04/09/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/09/18	RL	EPA 300.0
Ammonia-N *	mg/L	0.11*	0.02	04/18/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.28	0.2	04/13/18	KB	SM4500-Norg B-C
pH grab	pH units	4.98	NA	04/09/18	RL	SM 4500 H-B
Chloride	mg/L	270	3.0	04/09/18	RL	EPA 300.0
Total Phosphorous (P)	mg/L	0.008	0.005	04/19/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.25	0.20	04/13/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	ND*	*	04/12/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	1.15	NA	05/16/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.14	NA	05/16/18	MC	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	04/10/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.46	NA	05/16/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.03	NA	05/16/18	RIA*	Calculation
Total Dissolved Nitrogen	mg/L	1.29	NA	04/13/18	KB	Calculation
Turbidity	NTU	BRL	0.2	04/09/18	RL	SM 2130 B

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saam
 Laboratory Director

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07432

Project Name: PLYMOUTH ENV.

Sample Number: 003
Sample Description: WW-180579 A13
Sample Type : GRAB
Sample Date / Time : 4/09/2018 @ 13:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Ammonia (as N)	0.11	0.02	mg/l	SM4500NH3-B,H 18-21ed	4/18/2018	9:30	KLE
Volatile Organic Compounds							
Benzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	4/13/2018	20:30	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07432

Project Name: PLYMOUTH ENV.

Sample Number: 003
Sample Description: WW-180579 A13
Sample Type : GRAB
Sample Date / Time : 4/09/2018 @ 13:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Methylene Chloride	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
Styrene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
Toluene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
MTBE	<2	2	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
Acetone	<10	10	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	4/13/2018 20:30	RAT
Surrogates			RANGE			
Dibromofluoromethane	99		86-118%	SW-846 8260C	4/13/2018 20:30	RAT
Toluene-d8	100		88-110%	SW-846 8260C	4/13/2018 20:30	RAT
4-Bromofluorobenzene	98		86-115%	SW-846 8260C	4/13/2018 20:30	RAT
1,2 Dichloroethane-d4	105		80-120%	SW-846 8260C	4/13/2018 20:30	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	4/16/2018 16:27	JRW
Mercury Digestion				EPA 245.1	4/16/2018 15:33	DDP

[illegible]



CERTIFICATE OF ANALYSIS

D8D1115

prepared for:

Envirotech Laboratories, Inc

Ronald Saari
8 Jan Sebastian Drive Unit 12
Sandwich, MA 02563

Project Name: Mashpee Water District

Project / PO Number: N/A

Received: 04/12/2018 18:25

Reported: 04/20/2018 15:16

Report Comments

Samples were received in proper condition and the reported results conform to applicable accreditation standard unless otherwise noted.

Reviewed and Approved By:

Ron Warila
Director, Environmental
04/20/2018 15:16

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included.

Microbac Laboratories, Inc.

61 Louisa Viens Drive | Dayville, CT 06241 | 860.774.6814 p | www.microbac.com

Page 1 of 14

804123 - 804129

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LABORATORY REPORT

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

Date Received: 4/11/2018
Date Reported: 4/18/2018
P.O. Number

Work Order #: 1804-07432

Project Name: PLYMOUTH ENV.

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable, indication of sample analysis at our Hudson, MA laboratory and/or subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:



Dawne E. Smart
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):

Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508, ME RI00015, NH 2070, NY 11726

Hudson MA * M-MA1117, RI LAO00319

Laboratory:

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

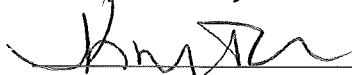
Chain of Custody*Lines*Client:

Town of Plymouth - Department of Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, 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
4/9/18	1000	DW-1	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride	NONE
			1	500ml Plastic	B, Cu, Hg, FE	HN03
			1	Glass	Ortho-phosphate	NONE
4/9/18	1205	A17	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride	NONE
			1	500ml Plastic	B, Cu, Hg, FE	HN03
			1	Glass	Ortho-phosphate	NONE

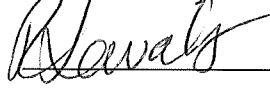
NOTE: Analysis needed for reporting in lowest detection possible; Total Dissolved Solids, O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen, Boron, Chloride,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

Relinquished By: Date/Time



Received By:

Date/Time:

 04/09/18 1415

Laboratory:

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

Chain of CustodyClient:

Town of Plymouth - Department of Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us
Project Name: **GW Eel River -Plymouth MA**
Sampler: Kim Tower (KT)

WW-180579

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
4/9/18	1335	A13	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride	NONE
			1	500ml Plastic	B, Cu, Hg, FE	HN03
			1	Glass	Ortho-phosphate	NONE
			2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride	NONE
			1	500ml Plastic	B, Cu, Hg, FE	HN03
			1	Glass	Ortho-phosphate	NONE

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:

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

Sunday, May 20, 2018

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

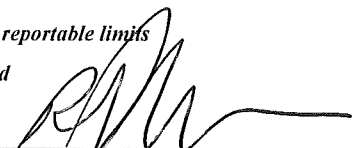
ProjectName: GW Eel River
Project Number: A-19
Sampled By: KT
Lab Order Number: WW-180588
Date Received: 04/10/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
A-19 A	11:30	04/10/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Nitrogen	mg/L	1.43	NA	04/13/18	KB	Calculation
Total Dissolved Solids	mg/L	110	6.0	04/23/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	157	10	04/10/18	RL	EPA 120.1
Total Organic Carbon*	mg/L	0.236	*	04/16/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	04/13/18	RIA*	*
Total Iron	mg/L	0.04	0.01	04/18/18	MC	EPA 200.7
Mercury*	mg/L	<0.0005*	0.0005	04/17/18	RIA*	EPA 245.1
Boron	mg/L	BRL	0.010	04/18/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	04/18/18	MC	EPA 200.7
Nitrate-N	mg/L	1.43	0.01	04/10/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/10/18	RL	EPA 300.0
Ammonia-N *	mg/L	<0.02*	0.02	04/18/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	04/13/18	KB	SM4500-Norg B-C
pH grab	pH units	5.46	NA	04/10/18	RL	SM 4500 H-B
Chloride	mg/L	48	3.0	04/10/18	RL	EPA 300.0
Total Phosphorous (P)	mg/L	0.011	0.005	04/19/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	04/13/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	ND*	*	04/16/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	1.43	NA	05/17/18	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	05/17/18	KB	Calculation
Ortho Phosphorous (P)	mg/L	0.006	0.005	04/10/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	<0.04	NA	05/17/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	05/17/18	RIA*	Calculation
Total Dissolved Nitrogen	mg/L	1.43	NA	04/13/18	KB	Calculation
Turbidity	NTU	1.4	0.2	04/10/18	RL	SM 2130 B

BRL=below reportable limits

*see attached

By: 
 Ronald J. Sahri
 Laboratory Director

LABORATORY REPORT

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

Date Received: 4/11/2018
Date Reported: 4/19/2018
P.O. Number

Work Order #: 1804-07431

Project Name: PLYMOUTH ENV.

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable, indication of sample analysis at our Hudson, MA laboratory and/or subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:



Dawne E. Smart
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):

Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508, ME RI00015, NH 2070, NY 11726

Hudson MA * M-MA1117, RI LAO00319

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07431

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-180588 A19
Sample Type : GRAB
Sample Date / Time : 4/10/2018 @ 11:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	4/18/2018	9:30	KLE
Volatile Organic Compounds							
Benzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:24	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07431

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-180588 A19
Sample Type : GRAB
Sample Date / Time : 4/10/2018 @ 11:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Methylene Chloride	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
Styrene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
Toluene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
MTBE	<2	2	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
Acetone	<10	10	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	4/13/2018 22:24	RAT
Surrogates			RANGE			
Dibromofluoromethane	113		86-118%	SW-846 8260C	4/13/2018 22:24	RAT
Toluene-d8	104		88-110%	SW-846 8260C	4/13/2018 22:24	RAT
4-Bromofluorobenzene	99		86-115%	SW-846 8260C	4/13/2018 22:24	RAT
1,2 Dichloroethane-d4	109		80-120%	SW-846 8260C	4/13/2018 22:24	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	4/17/2018 15:33	JRW
Mercury Digestion				EPA 245.1	4/17/2018 14:17	DDP

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

Sunday, May 20, 2018

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

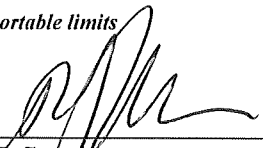
ProjectName: GW Eel River
Project Number: A-15
Sampled By: KT
Lab Order Number: WW-180589
Date Received: 04/10/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
A 15 A	13:30	04/10/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Nitrogen	mg/L	2.47	NA	04/13/18	KB	Calculation
Total Dissolved Solids	mg/L	130	6.0	04/23/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	201	10	04/10/18	RL	EPA 120.1
Total Organic Carbon*	mg/L	ND*	*	04/16/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	04/13/18	RIA*	*
Total Iron	mg/L	0.02	0.01	04/18/18	MC	EPA 200.7
Mercury*	mg/L	<0.0005*	0.0005	04/17/18	RIA*	EPA 245.1
Boron	mg/L	0.010	0.010	04/18/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	04/18/18	MC	EPA 200.7
Nitrate-N	mg/L	2.47	0.01	04/10/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/10/18	RL	EPA 300.0
Ammonia-N *	mg/L	0.05*	0.02	04/18/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	04/13/18	KB	SM4500-Norg B-C
pH grab	pH units	6.00	NA	04/10/18	RL	SM 4500 H-B
Chloride	mg/L	52	3.0	04/10/18	RL	EPA 300.0
Total Phosphorous (P)	mg/L	0.030	0.005	04/19/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	04/13/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	ND*	*	04/16/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	2.52	NA	05/17/18	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.15	NA	05/17/18	KB	Calculation
Ortho Phosphorous (P)	mg/L	0.028	0.005	04/10/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	ND	NA	05/17/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	05/17/18	RIA*	Calculation
Total Dissolved Nitrogen	mg/L	2.47	NA	04/13/18	KB	Calculation
Turbidity	NTU	BRL	0.2	04/10/18	RL	SM 2130 B

BRL=below reportable limits

*see attached

By: 
 Ronald J. Sauri
 Laboratory Director

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07431

Project Name: PLYMOUTH ENV.

Sample Number: 002
Sample Description: WW-180589 A15
Sample Type : GRAB
Sample Date / Time : 4/10/2018 @ 13:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Ammonia (as N)	0.05	0.02	mg/l	SM 1500NH3-B ₂ H 18-21ed	4/18/2018	9:30	KLE
Volatile Organic Compounds							
Benzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	4/13/2018	22:52	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07431

Project Name: PLYMOUTH ENV.

Sample Number: 002
Sample Description: WW-180589 A15
Sample Type : GRAB
Sample Date / Time : 4/10/2018 @ 13:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Methylene Chloride	<1	1	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
Naphthalene	<1	1	ug/l	SW 846 8260C	4/13/2018 22:52	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
Styrene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
Toluene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
MTBE	<2	2	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
Acetone	<10	10	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	4/13/2018 22:52	RAT
Surrogates			RANGE			
Dibromofluoromethane	110		86-118%	SW-846 8260C	4/13/2018 22:52	RAT
Toluene-d8	104		88-110%	SW-846 8260C	4/13/2018 22:52	RAT
4-Bromofluorobenzene	100		86-115%	SW-846 8260C	4/13/2018 22:52	RAT
1,2 Dichloroethane-d4	108		80-120%	SW-846 8260C	4/13/2018 22:52	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	4/17/2018 15:41	JRW
Mercury Digestion				EPA 245.1	4/17/2018 14:17	DDP

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

Sunday, May 20, 2018

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

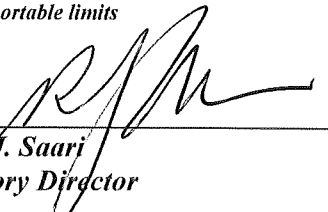
ProjectName: GW Eel River
Project Number: 7 SR
Sampled By: KT
Lab Order Number: WW-180590
Date Received: 04/10/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
7 SR A	15:05	04/10/18	**Acetone			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Nitrogen	mg/L	<0.32	NA	04/13/18	KB	Calculation
Total Dissolved Solids	mg/L	360	6.0	04/23/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	648	10	04/10/18	RL	EPA 120.1
Total Organic Carbon*	mg/L	ND*	*	04/16/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	23**	*	04/13/18	RIA*	*
Total Iron	mg/L	BRL	0.01	04/18/18	MC	EPA 200.7
Mercury*	mg/L	<0.0005*	0.0005	04/17/18	RIA*	EPA 245.1
Boron	mg/L	BRL	0.010	04/18/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	04/18/18	MC	EPA 200.7
Nitrate-N	mg/L	0.12	0.01	04/10/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/10/18	RL	EPA 300.0
Ammonia-N *	mg/L	<0.02*	0.02	04/18/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	04/13/18	KB	SM4500-Norg B-C
pH grab	pH units	5.34	NA	04/10/18	RL	SM 4500 H-B
Chloride	mg/L	220	3.0	04/10/18	RL	EPA 300.0
Total Phosphorous (P)	mg/L	BRL	0.005	04/19/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	04/13/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	ND*	*	04/16/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	<0.14	NA	05/17/18	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	05/17/18	KB	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	04/10/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	ND	NA	05/17/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	05/17/18	RIA*	Calculation
Total Dissolved Nitrogen	mg/L	<0.32	NA	04/13/18	KB	Calculation
Turbidity	NTU	BRL	0.2	04/10/18	RL	SM 2130 B

BRL=below reportable limits

*see attached

By: 
 Ronald A. Saari
 Laboratory Director

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07431

Project Name: PLYMOUTH ENV.

Sample Number: 003
Sample Description: WW-180590 7SR
Sample Type : GRAB
Sample Date / Time : 4/10/2018 @ 15:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM-4500NH3-B,H 18-21ed	4/18/2018	9:30	KLE
Volatile Organic Compounds							
Benzene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
Chloroform	1.5	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	4/13/2018	23:20	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07431

Project Name: PLYMOUTH ENV.

Sample Number: 003
Sample Description: WW-180590 7SR
Sample Type : GRAB
Sample Date / Time : 4/10/2018 @ 15:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Methylene Chloride	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
Styrene	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
Toluene	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
MTBE	<2	2	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
Acetone	23	10	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	4/13/2018 23:20	RAT
Surrogates			RANGE			
Dibromofluoromethane	110		86-118%	SW-846 8260C	4/13/2018 23:20	RAT
Toluene-d8	103		88-110%	SW-846 8260C	4/13/2018 23:20	RAT
4-Bromofluorobenzene	95		86-115%	SW-846 8260C	4/13/2018 23:20	RAT
1,2 Dichloroethane-d4	113		80-120%	SW-846 8260C	4/13/2018 23:20	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	4/17/2018 15:45	JRW
Mercury Digestion				EPA 245.1	4/17/2018 14:17	DDP

[illegible]

Date: 04/16/18

[illegible]

Laboratory:

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

Chain of CustodyClient:

Town of Plymouth - Department of Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us
Project Name: **GW Eel River -Plymouth MA**
Sampler: Kim Tower (KT)

WW-180588

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
4/10/18	1130	A19	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride	NONE
			1	500ml Plastic	B, Cu, Hg, FE	HN03
			1	Glass	Ortho-phosphate	NONE
4/10/18	1330	A15	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride	NONE
			1	500ml Plastic	B, Cu, Hg, FE	HN03
			1	Glass	Ortho-phosphate	NONE

WW-180589

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:

R. Navas 04/10/18 1610

Laboratory:

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

Chain of CustodyClient:

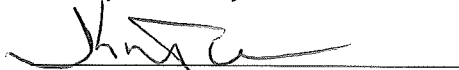
Town of Plymouth - Department of Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us
Project Name: **GW Eel River -Plymouth MA**
Sampler: Kim Tower (KT)

66-80590

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
4/10/18	1505	7512	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride	NONE
			1	500ml Plastic	B, Cu, Hg, FE	HN03
			1	Glass	Ortho-phosphate	NONE
			2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride	NONE
			1	500ml Plastic	B, Cu, Hg, FE	HN03
			1	Glass	Ortho-phosphate	NONE

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:

 04/10/18 1610

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

Sunday, May 20, 2018

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

ProjectName: GW Eel River
Project Number: A 21 A
Sampled By: Kim Tower
Lab Order Number: WW-180604
Date Received: 04/11/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
A 21 A A	11:00	04/11/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
pH	pH units	6.59	NA	04/11/18	RL	SM 4500 H-B
Total Dissolved Solids	mg/L	66	6.0	04/23/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	115	10	04/11/18	RL	EPA 120.1
Total Organic Carbon*	mg/L	0.598*	*	04/16/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	04/17/18	RIA*	*
Total Iron	mg/L	1.41	0.01	04/18/18	MC	EPA 200.7
Mercury*	mg/L	<0.0005*	0.0005	04/17/18	RIA*	EPA 245.1
Boron	mg/L	BRL	0.010	04/18/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	04/18/18	MC	EPA 200.7
Nitrate-N	mg/L	0.08	0.01	04/11/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/11/18	RL	EPA 300.0
Ammonia-N *	mg/L	0.09*	0.02	04/18/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.49	0.2	04/20/18	KB	SM4500-Norg B-C
Turbidity	NTU	BRL	1.0	04/11/18	RL	SM 2130 B
Chloride	mg/L	28	3.0	04/11/18	RL	EPA 300.0
Total Phosphorous (P)	mg/L	0.028	0.005	04/19/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.35	0.20	04/20/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	ND*	*	04/16/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	0.17	NA	05/17/18	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.26	NA	05/17/18	KB	Calculation
Ortho Phosphorous (P)	mg/L	0.012	0.005	04/11/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	<0.40	NA	05/17/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.14	NA	05/17/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.43	NA	05/17/18	KB	Calculation

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

LABORATORY REPORT

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

Date Received: 4/12/2018
Date Reported: 4/19/2018
P.O. Number

Work Order #: 1804-07520

Project Name: PLYMOUTH ENV.

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable, indication of sample analysis at our Hudson, MA laboratory and/or subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:



Dawne E. Smart
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):

Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508, ME RI00015, NH 2070, NY 11726

Hudson MA * M-MA1117, RI LA000319

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07520

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-180604 A21-A
Sample Type : GRAB
Sample Date / Time : 4/11/2018 @ 11:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Ammonia (as N)	0.09	0.02	mg/l	SM4500NH3-B,H 18-21ed	4/18/2018	15:00	KLE
Volatile Organic Compounds							
Benzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:49	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07520

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-180604 A21-A
Sample Type : GRAB
Sample Date / Time : 4/11/2018 @ 11:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Methylene Chloride	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
Styrene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
Toluene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
MTBE	<2	2	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
Acetone	<10	10	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	4/17/2018 12:49	RAT
Surrogates			RANGE			
Dibromofluoromethane	100		86-118%	SW-846 8260C	4/17/2018 12:49	RAT
Toluene-d8	100		88-110%	SW-846 8260C	4/17/2018 12:49	RAT
4-Bromofluorobenzene	99		86-115%	SW-846 8260C	4/17/2018 12:49	RAT
1,2 Dichloroethane-d4	102		80-120%	SW-846 8260C	4/17/2018 12:49	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	4/17/2018 15:46	JRW
Mercury Digestion				EPA 245.1	4/17/2018 14:17	DDP

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, May 21, 2018

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

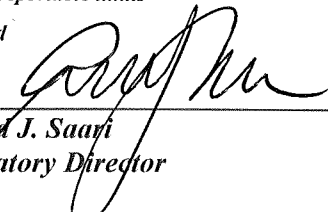
ProjectName: GW Eel River
Project Number: 5S
Sampled By: Kim Tower
Lab Order Number: WW-180605
Date Received: 04/11/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
5S A	12:30	04/11/18	**Chloroform			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
pH	pH units	5.11	NA	04/11/18	RL	SM 4500 H-B
Total Dissolved Solids	mg/L	BRL	6.0	04/30/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	1,700	10	04/12/18	RL	EPA 120.1
Total Organic Carbon*	mg/L	ND*	*	04/16/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	3.4**	*	04/17/18	RIA*	*
Total Iron	mg/L	0.18	0.01	04/18/18	MC	EPA 200.7
Mercury*	mg/L	<0.0005*	0.0005	04/17/18	RIA*	EPA 245.1
Boron	mg/L	BRL	0.010	04/18/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	04/18/18	MC	EPA 200.7
Nitrate-N	mg/L	0.58	0.01	04/11/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/11/18	RL	EPA 300.0
Ammonia-N *	mg/L	0.04*	0.02	04/18/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	04/20/18	KB	SM4500-Norg B-C
Turbidity	NTU	1.6	1.0	04/11/18	RL	SM 2130 B
Chloride	mg/L	550	3.0	04/13/18	RL	EPA 300.0
Total Phosphorous (P)	mg/L	0.026	0.005	04/19/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	04/20/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	ND*	*	04/16/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	0.62	NA	05/17/18	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.16	NA	05/17/18	KB	Calculation
Ortho Phosphorous (P)	mg/L	0.009	0.005	04/11/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	ND	NA	05/17/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	05/17/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	<0.78	NA	05/17/18	KB	Calculation

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07520

Project Name: PLYMOUTH ENV.

Sample Number: 002
Sample Description: WW-180605 5S
Sample Type : GRAB
Sample Date / Time : 4/11/2018 @ 12:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Ammonia (as N)	0.04	0.02	mg/l	SM 4500NH3-B,H 18-21ed	4/18/2018	15:00	KLE
Volatile Organic Compounds							
Benzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Chloroform	3.4	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07520

Project Name: PLYMOUTH ENV.

Sample Number: 002
Sample Description: WW-180605 5S
Sample Type : GRAB
Sample Date / Time : 4/11/2018 @ 12:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Methylene Chloride	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Styrene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Toluene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
MTBE	<2	2	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Acetone	<10	10	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Surrogates			RANGE			
Dibromofluoromethane	102		86-118%	SW-846 8260C	4/17/2018 13:16	RAT
Toluene-d8	99		88-110%	SW-846 8260C	4/17/2018 13:16	RAT
4-Bromofluorobenzene	98		86-115%	SW-846 8260C	4/17/2018 13:16	RAT
1,2 Dichloroethane-d4	100		80-120%	SW-846 8260C	4/17/2018 13:16	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	4/17/2018 15:50	JRW
Mercury Digestion				EPA 245.1	4/17/2018 14:17	DDP

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

Sunday, May 20, 2018

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

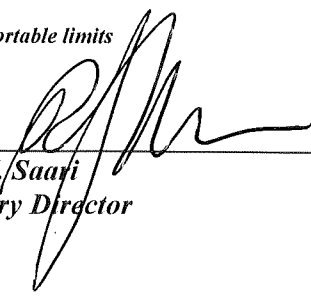
ProjectName: GW Eel River
Project Number: 2SR
Sampled By: Kim Tower
Lab Order Number: WW-180606
Date Received: 04/11/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
2SR A	09:25	04/11/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
pH	pH units	5.35	NA	04/11/18	RL	SM 4500 H-B
Total Dissolved Solids	mg/L	110	6.0	04/30/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	180	10	04/11/18	RL	EPA 120.1
Total Organic Carbon*	mg/L	0.367*	*	04/16/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	04/17/18	RIA*	*
Total Iron	mg/L	0.02	0.01	04/18/18	MC	EPA 200.7
Mercury*	mg/L	<0.0005*	0.0005	04/17/18	RIA*	EPA 245.1
Boron	mg/L	0.019	0.010	04/18/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	04/18/18	MC	EPA 200.7
Nitrate-N	mg/L	0.83	0.01	04/11/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/11/18	RL	EPA 300.0
Ammonia-N *	mg/L	<0.02*	0.02	04/18/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.29	0.2	04/20/18	KB	SM4500-Norg B-C
Turbidity	NTU	BRL	1.0	04/11/18	RL	SM 2130 B
Chloride	mg/L	52	3.0	04/11/18	RL	EPA 300.0
Total Phosphorous (P)	mg/L	BRL	0.005	04/19/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.24	0.20	04/20/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.237*	*	04/16/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	0.83	NA	05/17/18	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.22	NA	05/17/18	KB	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	04/11/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.13	NA	05/17/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.05	NA	05/17/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	1.07	NA	05/17/18	KB	Calculation

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07520

Project Name: PLYMOUTH ENV.

Sample Number: 003
Sample Description: WW-180606 2SR
Sample Type : GRAB
Sample Date / Time : 4/11/2018 @ 09:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	4/18/2018	15:00	KLE
Volatile Organic Compounds							
Benzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
1,2-Dibromoothane(EDB)	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:44	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07520

Project Name: PLYMOUTH ENV.

Sample Number: 003
Sample Description: WW-180606 2SR
Sample Type : GRAB
Sample Date / Time : 4/11/2018 @ 09:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Methylene Chloride	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
Styrene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
Toluene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
MTBE	<2	2	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
Acetone	<10	10	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	4/17/2018 13:44	RAT
Surrogates			RANGE			
Dibromofluoromethane	100		86-118%	SW-846 8260C	4/17/2018 13:44	RAT
Toluene-d8	100		88-110%	SW-846 8260C	4/17/2018 13:44	RAT
4-Bromofluorobenzene	98		86-115%	SW-846 8260C	4/17/2018 13:44	RAT
1,2 Dichloroethane-d4	101		80-120%	SW-846 8260C	4/17/2018 13:44	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	4/17/2018 15:51	JRW
Mercury Digestion				EPA 245.1	4/17/2018 14:17	DDP

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

Sunday, May 20, 2018

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

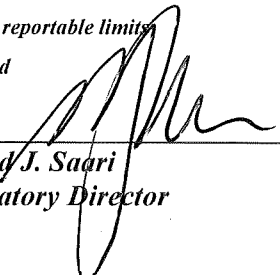
ProjectName: GW Eel River
Project Number: 2DR
Sampled By: Kim Tower
Lab Order Number: WW-180607
Date Received: 04/11/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
2 DR A	09:55	04/11/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
pH	pH units	5.78	NA	04/11/18	RL	SM 4500 H-B
Total Dissolved Solids	mg/L	290	6.0	04/30/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	539	10	04/12/18	RL	EPA 120.1
Total Organic Carbon*	mg/L	0.350*	*	04/16/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	04/17/18	RIA*	*
Total Iron	mg/L	9.98	0.01	04/18/18	MC	EPA 200.7
Mercury*	mg/L	<0.0005*	0.0005	04/17/18	RIA*	EPA 245.1
Boron	mg/L	BRL	0.010	04/18/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	04/18/18	MC	EPA 200.7
Nitrate-N	mg/L	BRL	0.01	04/12/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/12/18	RL	EPA 300.0
Ammonia-N *	mg/L	0.02*	0.02	04/18/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.22	0.2	04/20/18	KB	SM4500-Norg B-C
Turbidity	NTU	2.8	1.0	04/11/18	RL	SM 2130 B
Chloride	mg/L	170	3.0	04/13/18	RL	EPA 300.0
Total Phosphorous (P)	mg/L	0.023	0.005	04/19/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	04/20/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	ND*	*	04/16/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	<0.03	NA	05/17/18	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	05/17/18	KB	Calculation
Ortho Phosphorous (P)	mg/L	0.011	0.005	04/11/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	<0.15	NA	05/17/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	< 0.02	NA	05/17/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	<0.21	NA	05/17/18	KB	Calculation

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07520

Project Name: PLYMOUTH ENV.

Sample Number: 004
Sample Description: WW-180607 2DR
Sample Type : GRAB
Sample Date / Time : 4/11/2018 @ 09:55

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Ammonia (as N)	0.02	0.02	mg/l	SM-1500NH3-B,H 18-21ed	4/18/2018	15:00	KLE
Volatile Organic Compounds							
Benzene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	4/17/2018	14:11	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07520

Project Name: PLYMOUTH ENV.

Sample Number: 004
Sample Description: WW-180607 2DR
Sample Type : GRAB
Sample Date / Time : 4/11/2018 @ 09:55

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Methylene Chloride	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
Styrene	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
Toluene	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
MTBE	<2	2	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
Acetone	<10	10	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	4/17/2018 14:11	RAT
Surrogates			RANGE			
Dibromofluoromethane	103		86-118%	SW-846 8260C	4/17/2018 14:11	RAT
Toluene-d8	101		88-110%	SW-846 8260C	4/17/2018 14:11	RAT
4-Bromofluorobenzene	98		86-115%	SW-846 8260C	4/17/2018 14:11	RAT
1,2 Dichloroethane-d4	99		80-120%	SW-846 8260C	4/17/2018 14:11	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	4/17/2018 15:52	JRW
Mercury Digestion				EPA 245.1	4/17/2018 14:17	DDP

CHAIN OF CUSTODY FORM

PWS: Project Name: Plymouth Env.

Sampler: KT

ENVIROTECH LABS, INC.

8 Jan Sebastian Dr., Unit 12

Sandwich, MA 02563

(508)888-6460

1-800-339-6460

FAX (508)888-6446

RI Analytical

M RI 015

Address 41 Illinois Avenue

Warwick, RI 02888

Phone# 401-737-8500

Fax# 401-738-1970

Lab ID #	Date	Time	Comp	Grab	Station location	Container	Pres.	Sample type	Analysis requested
WW-180604	04/11/18	1100	X		A21-A	P	H ₂ SO ₄	Groundwater	Ammonia-N (0.02 mdl)
						P	HNO ₃		Mercury
						2 VOA	HCl		EPA 8260 Extended
WW-180605	04/11/18	1230	X		5S	P	H ₂ SO ₄	Groundwater	Ammonia-N (0.02 mdl)
						P	HNO ₃		Mercury
						2 VOA	HCl		EPA 8260 Extended
WW-180606	04/11/18	0925	X		2SR	P	H ₂ SO ₄	Groundwater	Ammonia-N (0.02 mdl)
						P	HNO ₃		Mercury
						2 VOA	HCl		EPA 8260 Extended
WW-180607	04/11/18	0955	X		2DR	P	H ₂ SO ₄	Groundwater	Ammonia-N (0.02 mdl)
						P	HNO ₃		Mercury
						2 VOA	HCl		EPA 8260 Extended
Ammonia-N low level 0.02 mg/L									

Relinquished:

Received:

Date/Time

Received:

Date/Time

M. Watson
4/12/18 1330
4/12/18 1030
Contact lab with any exceeded MCL
P2

Date: 04/16/18

[illegible]

**Laboratory:**

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

Chain of Custody**Client:**

Town of Plymouth - Department of Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, 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
4/11/18	1100	A21-A	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride	NONE
			1	500ml Plastic	B, Cu, Hg, FE	HN03
			1	Glass	Ortho-phosphate	NONE
4/11/18	1230	55	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride	NONE
			1	500ml Plastic	B, Cu, Hg, FE	HN03
			1	Glass	Ortho-phosphate	NONE

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:

MKS

Date/Time:

4:20

(L)

Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Department of Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, 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
4/11/18	0925	252	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride	NONE
			1	500ml Plastic	B, Cu, Hg, FE	HN03
			1	Glass	Ortho-phosphate	NONE
4/11/18	0955	202	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride	NONE
			1	500ml Plastic	B, Cu, Hg, FE	HN03
			1	Glass	Ortho-phosphate	NONE

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:

MKS 4/11/18

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

Sunday, May 20, 2018

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

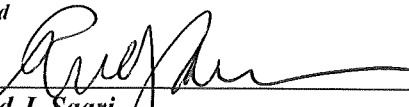
ProjectName: GW Eel River
Project Number: BRADFORD
Sampled By: Kim Tower
Lab Order Number: WW-180617
Date Received: 04/12/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
BRADFORD A	08:30	04/12/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	41	6.0	04/30/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	62	10	04/12/18	RL	EPA 120.1
Total Organic Carbon*	mg/L	0.616*	*	04/18/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	04/19/18	RIA*	*
Total Iron	mg/L	3.03	0.01	04/17/18	MC	EPA 200.7
Mercury*	mg/L	<0.0005*	0.0005	04/19/18	RIA*	EPA 245.1
Boron	mg/L	0.017	0.010	04/17/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	04/17/18	MC	EPA 200.7
Nitrate-N	mg/L	0.09	0.01	04/12/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/12/18	RL	EPA 300.0
Ammonia-N *	mg/L	<0.02*	0.02	04/20/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.23	0.2	04/20/18	KB	SM4500-Norg B-C
pH grab	pH units	5.94	NA	04/12/18	RL	SM 4500 H-B
Chloride	mg/L	13	3.0	04/12/18	RL	EPA 300.0
Total Phosphorous (P)	mg/L	0.015	0.005	04/19/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.23	0.20	04/20/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	ND*	*	04/18/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	<0.11	NA	05/17/18	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.21	NA	05/17/18	KB	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	04/12/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	<0.42	NA	05/17/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	05/17/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.32	NA	05/17/18	KB	Calculation
Turbidity	NTU	ND	0.2	04/12/18	RL	SM 2130 B

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

LABORATORY REPORT

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

Date Received: 4/16/2018
Date Reported: 4/23/2018
P.O. Number

Work Order #: 1804-07713

Project Name: PLYMOUTH ENV.

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable, indication of sample analysis at our Hudson, MA laboratory and/or subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:



Dawne E. Smart
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):

Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508, ME RI00015, NH 2070, NY 11726

Hudson MA * M-MA1117, RI LAO00319

131 Coolidge Street, Suite 105, Hudson, MA 01749
P: 978-568-0041 F: 978-568-0078

41 Illinois Avenue, Warwick, RI 02888
P: 401-737-8500 F: 401-737-1970

15 Lark Industrial Drive, Smithfield, RI 02828
P: 401-737-8500 F: 401-349-0844

www.rianalytical.com

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07713

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-180617 BRADFORD
Sample Type : GRAB
Sample Date / Time : 4/12/2018 @ 08:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	4/20/2018	19:00	LAA
Volatile Organic Compounds							
Benzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	4/17/2018	12:48	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07713

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-180617 BRADFORD
Sample Type : GRAB
Sample Date / Time : 4/12/2018 @ 08:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Methylene Chloride	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
Styrene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
Toluene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
MTBE	<2	2	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
Acetone	<10	10	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	4/17/2018 12:48	RAT
Surrogates			RANGE			
Dibromofluoromethane	111		86-118%	SW-846 8260C	4/17/2018 12:48	RAT
Toluene-d8	104		88-110%	SW-846 8260C	4/17/2018 12:48	RAT
4-Bromofluorobenzene	101		86-115%	SW-846 8260C	4/17/2018 12:48	RAT
1,2 Dichloroethane-d4	111		80-120%	SW-846 8260C	4/17/2018 12:48	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	4/19/2018 12:17	JRW
Mercury Digestion				EPA 245.1	4/19/2018 10:55	DDP

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

Sunday, May 20, 2018

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

ProjectName: GW Eel River
Project Number: GW 1
Sampled By: Kim Tower
Lab Order Number: WW-180618
Date Received: 04/12/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
DW 1 A	09:15	04/12/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	BRL	6.0	04/30/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	ND	10	04/12/18	RL	EPA 120.1
Total Organic Carbon*	mg/L	0.265*	*	04/18/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	04/17/18	RIA*	*
Total Iron	mg/L	BRL	0.01	04/17/18	MC	EPA 200.7
Mercury*	mg/L	<0.0005*	0.0005	04/19/18	RIA*	EPA 245.1
Boron	mg/L	0.011	0.010	04/17/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	04/17/18	MC	EPA 200.7
Nitrate-N	mg/L	BRL	0.01	04/12/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/12/18	RL	EPA 300.0
Ammonia-N *	mg/L	0.05*	0.02	04/20/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	04/20/18	KB	SM4500-Norg B-C
pH grab	pH units	5.96	NA	04/12/18	RL	SM 4500 H-B
Chloride	mg/L	BRL	3.0	04/12/18	RL	EPA 300.0
Total Phosphorous (P)	mg/L	BRL	0.005	04/19/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	04/20/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	ND*	*	04/18/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	<0.06	NA	05/17/18	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.15	NA	05/17/18	KB	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	04/12/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	ND	NA	05/17/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	05/17/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	<0.21	NA	05/17/18	KB	Calculation
Turbidity	NTU	ND	0.2	04/12/18	RL	SM 2130 B

BRL=below reportable limits

*see attached

By: 
 Ronald J. Sadri
 Laboratory Director

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07713

Project Name: PLYMOUTH ENV.

Sample Number: 002
Sample Description: WW-180618 GW-1
Sample Type : GRAB
Sample Date / Time : 4/12/2018 @ 09:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Ammonia (as N)	0.05	0.02	mg/l	SM4500NH3-B ₅ H 18-21ed	4/20/2018	19:00	LAA
Volatile Organic Compounds							
Benzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	4/17/2018	13:16	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1804-07713

Project Name: PLYMOUTH ENV.

Sample Number: 002
Sample Description: WW-180618 GW-1
Sample Type : GRAB
Sample Date / Time : 4/12/2018 @ 09:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Methylene Chloride	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Styrene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Toluene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
MTBE	<2	2	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Acetone	<10	10	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	4/17/2018 13:16	RAT
Surrogates			RANGE			
Dibromofluoromethane	112		86-118%	SW-846 8260C	4/17/2018 13:16	RAT
Toluene-d8	100		88-110%	SW-846 8260C	4/17/2018 13:16	RAT
4-Bromofluorobenzene	101		86-115%	SW-846 8260C	4/17/2018 13:16	RAT
1,2 Dichloroethane-d4	112		80-120%	SW-846 8260C	4/17/2018 13:16	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	4/19/2018 12:21	JRW
Mercury Digestion				EPA 245.1	4/19/2018 10:55	DDP

CHAIN OF CUSTODY FORM

ENVIROTECH LABS, INC.

8 Jan Sebastian Dr., Unit 12

Sandwich, MA 02563

(508)888-6460

1-800-339-6460

FAX (508)888-6446

RI Analytical

M RI 015

41 Illinois Avenue

Warwick, RI 02888

Phone# 401-737-8500

Fax# 401-738-1970

PWS:

Project Name: Plymouth Env.

Sampler:

KT

Lab ID #

Date

Time

Comp

Grab

Station location

Container

Pres.

Sample type

Analysis requested

WW-180617

04/12/18

0830

X

Bradford

P

H₂SO₄

Groundwater

Ammonia-N (0.02 mdl)

P

HNO₃

Mercury

EPA 8260 Extended

2 VOA

HCl

Mercury

EPA 8260 Extended

P

H₂SO₄

Groundwater

Ammonia-N (0.02 mdl)

P

HNO₃

Mercury

EPA 8260 Extended

WW-180618

04/12/18

0915

X

GW-1

P

H₂SO₄

Groundwater

Ammonia-N (0.02 mdl)

P

HNO₃

Mercury

EPA 8260 Extended

2 VOA

HCl

Mercury

EPA 8260 Extended

Ammonia-N low level 0.02 mg/L

Relinquished:

Date/Time

Received:

Address:

Relinquished:

Date/Time

Received:

Address:

M. V. V. V.

4/12/18

1540

3.92 MCL

3.92 MCL

Contact lab with any exceeded MCL

Page 1 of 1

Date: 04/18/18

804198- 804204

[illegible]

(Signature)

Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Department of Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us
Project Name: **GW Eel River -Plymouth MA**
Sampler: Kim Tower (KT)

WW-180617

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
4/12/18	0830	Bradford	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride	NONE
			1	500ml Plastic	B, Cu, Hg, FE	HN03
			1	Glass	Ortho-phosphate	NONE
4/12/18	0915	GW-1	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride	NONE
			1	500ml Plastic	B, Cu, Hg, FE	HN03
				Glass	Ortho-phosphate	NONE <i>Broken</i>

WW-180618

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

(Signature)

Received By: Date/Time:

(Signature) 04/12/18 1438

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, 2018

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

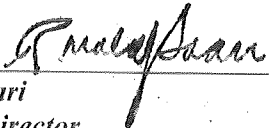
ProjectName: GW Eel River
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-182497
Date Received: 10/30/18

Comments:

Sample Type		Sample Time	Sample Date	Comments		
A13	A	1010	10/30/18			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Total Dissolved Solids		mg/L	780	6.0	11/08/18	KB SM 2540 C
Specific Conductance		uhoms/cm	992	10	10/30/18	LL EPA 120.1
Total Organic Carbon*		mg/L	0.551*	0.5	10/30/18	NEC* SM 5310 C
Volatile Organic Compounds*		ug/L	ND*	*	11/09/18	RIA* *
Total Iron		mg/L	4.43	0.01	11/01/18	MC EPA 200.7
Boron		mg/L	0.020	0.010	11/01/18	MC EPA 200.7
Copper		mg/L	BRL	0.003	11/01/18	MC EPA 200.7
Nitrate-N		mg/L	0.86	0.01	10/30/18	LL EPA 300.0
Nitrite-N		mg/L	BRL	0.006	10/30/18	LL EPA 300.0
Ammonia-N *		mg/L	0.19*	0.02	11/13/18	RIA* SM4500 NH3 C
Total Kjeldhal Nitrogen		mg/L	0.35	0.2	11/08/18	KB SM4500-Norg B-C
pH grab		pH units	5.26	NA	10/30/18	LL SM 4500 H-B
Chloride		mg/L	320	3.0	10/30/18	LL EPA 300.0
Mercury*		mg/L	<0.0005*	0.0005	11/09/18	RIA* EPA 245.1
Total Phosphorous (P)		mg/L	0.011	0.005	11/11/18	MC SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	0.32	0.20	11/08/18	KB SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	0.256*	0.50	10/30/18	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	1.05	NA	11/29/18	MC Calculation
Dissolved Organic Nitrogen		mg/L	0.13	NA	11/29/18	MC Calculation
Ortho Phosphorous (P)		mg/L	0.007	0.005	11/01/18	MC SM 4500-P
Particulate Organic Carbon		mg/L	0.30	NA	11/29/18	MC SM 5310 C
Particulate Organic Nitrogen		mg/L	0.03	NA	11/29/18	MC Calculation
Total Dissolved Nitrogen		mg/L	1.2	NA	11/09/18	KB Calculation
Turbidity		NTU	BRL	0.2	10/30/18	LL SM 2130 B

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, December 3, 2018

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

ProjectName: GW Eel River

Comments:

Project Number:

Sampled By: Kim Tower

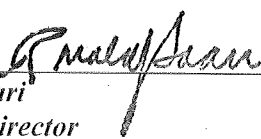
Lab Order Number: WW-182498

Date Received: 10/30/18

Sample Type	Sample Time	Sample Date	Comments			
A17 A	1225	10/30/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	220	6.0	11/08/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	344	10	10/30/18	LL	EPA 120.1
Total Organic Carbon*	mg/L	0.227*	0.5	10/30/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	11/09/18	RIA*	*
Total Iron	mg/L	0.01	0.01	11/01/18	MC	EPA 200.7
Boron	mg/L	BRL	0.010	11/01/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	11/01/18	MC	EPA 200.7
Nitrate-N	mg/L	3.36	0.01	10/30/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	10/30/18	LL	EPA 300.0
Ammonia-N *	mg/L	<0.02*	0.02	11/13/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/08/18	KB	SM4500-Norg B-C
pH grab	pH units	5.65	NA	10/30/18	LL	SM 4500 H-B
Chloride	mg/L	100	3.0	10/30/18	LL	EPA 300.0
Mercury*	mg/L	<0.0005*	0.0005	11/14/18	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.012	0.005	11/11/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	11/08/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	ND*	0.50	10/30/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	3.36	NA	11/29/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	11/29/18	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.009	0.005	11/01/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	<0.13	NA	11/29/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	11/29/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	3.4	NA	11/09/18	KB	Calculation
Turbidity	NTU	BRL	0.2	10/30/18	LL	SM 2130 B

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, December 3, 2018

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

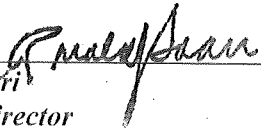
ProjectName: GW Eel River
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-182499
Date Received: 10/30/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
A19 A	1315	10/30/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	110	6.0	11/08/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	178	10	10/30/18	LL	EPA 120.1
Total Organic Carbon*	mg/L	0.291*	0.5	10/30/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	11/09/18	RIA*	*
Total Iron	mg/L	0.13	0.01	11/01/18	MC	EPA 200.7
Boron	mg/L	BRL	0.010	11/01/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	11/02/18	MC	EPA 200.7
Nitrate-N	mg/L	0.98	0.01	10/30/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	10/30/18	LL	EPA 300.0
Ammonia-N *	mg/L	0.02*	0.02	11/13/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/08/18	KB	SM4500-Norg B-C
pH grab	pH units	5.64	NA	10/30/18	LL	SM 4500 H-B
Chloride	mg/L	52	3.0	10/30/18	LL	EPA 300.0
Mercury*	mg/L	<0.0005*	0.0005	11/14/18	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.011	0.005	11/11/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	11/08/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.153*	0.50	10/30/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	1.00	NA	11/29/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	11/29/18	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.010	0.005	11/01/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.14	NA	11/29/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	11/29/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.98	NA	11/09/18	KB	Calculation
Turbidity	NTU	2.9	0.2	10/30/18	LL	SM 2130 B

BRL=below reportable limits

*see attached

By: 
Ronald J. Sadri
Laboratory Director

LABORATORY REPORT

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

Date Received: 11/7/2018
Date Reported: 11/15/2018
Date Revised: 12/11/2018 REV A

P.O. Number

Work Order #: 1811-23926
Project Name: PLYMOUTH ENV.

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable, indication of sample analysis at our Hudson, MA laboratory and/or subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:



Melissa A. Manamon
QA /QC Officer

Laboratory Certification Numbers (as applicable to sample's origin state):

Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508 Hudson MA * M-MA1117, RI LAO00319

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23926

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-182497 A-13
Sample Type : GRAB
Sample Date / Time : 10/30/2018 @ 10:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.19	0.02	mg/l	SM4500NH3-B,H 18-21ed	11/13/2018 7:00	KLE
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23926

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-182497 A-13
Sample Type : GRAB
Sample Date / Time : 10/30/2018 @ 10:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Methylene Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Styrene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Toluene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
MTBE	<2	2	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Acetone	<10	10	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	11/9/2018 14:18	RAT
Surrogates			RANGE			
Dibromofluoromethane	101		86-118%	SW-846 8260C	11/9/2018 14:18	RAT
Toluene-d8	98		88-110%	SW-846 8260C	11/9/2018 14:18	RAT
4-Bromofluorobenzene	101		86-115%	SW-846 8260C	11/9/2018 14:18	RAT
1,2 Dichloroethane-d4	100		80-120%	SW-846 8260C	11/9/2018 14:18	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	11/14/2018 16:19	JNC
Mercury Digestion				EPA 245.1	11/14/2018 15:07	JMS

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23926

Project Name: PLYMOUTH ENV.

Sample Number: 002
Sample Description: WW-182498 A17
Sample Type : GRAB
Sample Date / Time : 10/30/2018 @ 12:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	11/13/2018 7:00	KLE
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23926

Project Name: PLYMOUTH ENV.

Sample Number: 002
Sample Description: WW-182498 A17
Sample Type : GRAB
Sample Date / Time : 10/30/2018 @ 12:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Methylene Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Styrene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Toluene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
MTBE	<2	2	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Acetone	<10	10	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	11/9/2018 14:45	RAT
Surrogates			RANGE			
Dibromofluoromethane	101		86-118%	SW-846 8260C	11/9/2018 14:45	RAT
Toluene-d8	98		88-110%	SW-846 8260C	11/9/2018 14:45	RAT
4-Bromofluorobenzene	99		86-115%	SW-846 8260C	11/9/2018 14:45	RAT
1,2 Dichloroethane-d4	101		80-120%	SW-846 8260C	11/9/2018 14:45	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	11/14/2018 16:22	JNC
Mercury Digestion				EPA 245.1	11/14/2018 15:07	JMS

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23926

Project Name: PLYMOUTH ENV.

Sample Number: 003
Sample Description: WW-182499 A19
Sample Type : GRAB
Sample Date / Time : 10/30/2018 @ 13:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	11/13/2018 7:00	KLE
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23926

Project Name: PLYMOUTH ENV.

Sample Number: 003
Sample Description: WW-182499 A19
Sample Type : GRAB
Sample Date / Time : 10/30/2018 @ 13:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Methylene Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Styrene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Toluene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
MTBE	<2	2	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Acetone	<10	10	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	11/9/2018 15:13	RAT
Surrogates			RANGE			
Dibromofluoromethane	102		86-118%	SW-846 8260C	11/9/2018 15:13	RAT
Toluene-d8	99		88-110%	SW-846 8260C	11/9/2018 15:13	RAT
4-Bromofluorobenzene	100		86-115%	SW-846 8260C	11/9/2018 15:13	RAT
1,2 Dichloroethane-d4	97		80-120%	SW-846 8260C	11/9/2018 15:13	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	11/14/2018 16:23	JNC
Mercury Digestion				EPA 245.1	11/14/2018 15:07	JMS

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23926

Project Name: PLYMOUTH ENV.

Revision includes removal of reportable Benzene in sample -001 due to a misidentification oversight.

Electronically signed and approved by: Brian L. Barnette Date: 11/08/18

MC

Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Department of Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, 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
10/30/18	1010	A13	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride B, Cu, Hg, FE	NONE
			1	Glass	Ortho-phosphate	NONE
			2	Glass Vial	VOC	
10/30/18	1225	A17		1	1 Liter Plastic	Dissolved, TKN, TOC diss low TDS
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride B, Cu, Hg, FE	
			1	Glass	Ortho-phosphate	

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 10/30/18 1400

Received By:

Date/Time:

[Signature] 10/30/18

MC

Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Department of Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us
Project Name: **GW Eel River -Plymouth MA**
Sampler: Kim Tower (KT)

10/30/18 1315 A19

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
10/30/18	1315	A19	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride B, Cu, Hg, FE	NONE
			1	Glass	Ortho-phosphate	NONE
				2	Glass Vial	VOC
				1	1 Liter Plastic	Dissolved, TKN, TOC diss low TDS
				1	1 Liter Plastic	TKN, TN, TP, TOC Low
				1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride B, Cu, Hg, FE
				1	Glass	Ortho-phosphate

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 Ta 10/30/18 1410

Received By: Date/Time:

[Signature] 10/30/18

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, December 3, 2018

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

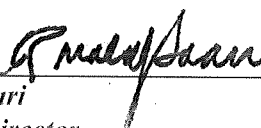
ProjectName: GW Eel River
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-182520
Date Received: 10/31/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
2SR A	09:30	10/31/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	88	6.0	11/08/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	135	10	10/31/18	LL	EPA 120.1
Total Organic Carbon*	mg/L	0.927*	0.5	10/31/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	11/09/18	RIA*	*
Total Iron	mg/L	0.49	0.01	11/09/18	MC	EPA 200.7
Boron	mg/L	0.052	0.010	11/09/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	11/09/18	MC	EPA 200.7
Nitrate-N	mg/L	2.25	0.01	10/31/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	10/31/18	LL	EPA 300.0
Ammonia-N *	mg/L	<0.02*	0.02	11/13/18	MC	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.32	0.2	11/08/18	KB	SM4500-Norg B-C
pH grab	pH units	5.48	NA	10/31/18	LL	SM 4500 H-B
Chloride	mg/L	35	3.0	10/31/18	LL	EPA 300.0
Mercury*	mg/L	<0.0005*	0.0005	11/08/18	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.024	0.005	11/11/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	11/08/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.587*	0.50	10/31/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	2.27	NA	11/30/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	11/30/18	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.012	0.005	11/01/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.34	NA	11/30/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.12	NA	11/30/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	2.3	NA	11/09/18	KB	Calculation
Turbidity	NTU	7.7	0.2	10/31/18	LL	SM 2130 B

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, December 3, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: GW Eel River**Comments:****Project Number:****Sampled By:** Kim Tower**Lab Order Number:** WW-182521**Date Received:** 10/31/18

Sample Type		Sample Time	Sample Date	Comments		
2DR	A	10:05	10/31/18			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Total Dissolved Solids		mg/L	220	6.0	11/08/18	KB SM 2540 C
Specific Conductance		uhoms/cm	369	10	10/31/18	LL EPA 120.1
Total Organic Carbon*		mg/L	1.06*	0.5	10/31/18	NEC* SM 5310 C
Volatile Organic Compounds*		ug/L	ND*	*	10/31/18	RIA* *
Total Iron		mg/L	5.46	0.01	11/09/18	MC EPA 200.7
Boron		mg/L	0.032	0.010	11/09/18	MC EPA 200.7
Copper		mg/L	0.003	0.003	11/09/18	MC EPA 200.7
Nitrate-N		mg/L	BRL	0.01	10/31/18	LL EPA 300.0
Nitrite-N		mg/L	BRL	0.006	10/31/18	LL EPA 300.0
Ammonia-N *		mg/L	<0.02*	0.02	11/13/18	MC SM4500 NH3 C
Total Kjeldhal Nitrogen		mg/L	BRL	0.2	11/08/18	KB SM4500-Norg B-C
pH grab		pH units	6.03	NA	10/31/18	LL SM 4500 H-B
Chloride		mg/L	120	3.0	11/01/18	LL EPA 300.0
Mercury*		mg/L	<0.0005*	0.0005	11/08/18	RIA* EPA 245.1
Total Phosphorous (P)		mg/L	0.059	0.005	11/11/18	MC SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	BRL	0.20	11/08/18	KB SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	0.730*	0.50	10/31/18	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	<0.03	NA	11/30/18	MC Calculation
Dissolved Organic Nitrogen		mg/L	<0.18	NA	11/30/18	MC Calculation
Ortho Phosphorous (P)		mg/L	0.007	0.005	11/01/18	MC SM 4500-P
Particulate Organic Carbon		mg/L	0.33	NA	11/30/18	MC SM 5310 C
Particulate Organic Nitrogen		mg/L	ND	NA	11/30/18	MC Calculation
Total Dissolved Nitrogen		mg/L	<0.21	NA	11/09/18	KB Calculation
Turbidity		NTU	4.6	0.2	10/31/18	LL SM 2130 B

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, December 3, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

Project Name: GW Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-182522

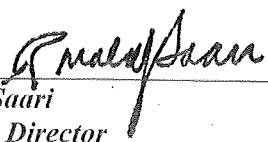
Date Received: 10/31/18

Sample Type		Sample Time	Sample Date	Comments		
A15	A	12:00	10/31/18			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Total Dissolved Solids		mg/L	140	6.0	11/08/18	KB SM 2540 C
Specific Conductance		uhoms/cm	202	10	10/31/18	LL EPA 120.1
Total Organic Carbon*		mg/L	0.424*	0.5	10/31/18	NEC* SM 5310 C
Volatile Organic Compounds*		ug/L	ND	*	11/09/18	RIA* *
Total Iron		mg/L	0.13	0.01	11/09/18	MC EPA 200.7
Boron		mg/L	0.030	0.010	11/09/18	MC EPA 200.7
Copper		mg/L	0.004	0.003	11/09/18	MC EPA 200.7
Nitrate-N		mg/L	2.31	0.01	10/31/18	LL EPA 300.0
Nitrite-N		mg/L	BRL	0.006	10/31/18	LL EPA 300.0
Ammonia-N *		mg/L	<0.02*	0.02	11/13/18	MC SM4500 NH3 C
Total Kjeldhal Nitrogen		mg/L	BRL	0.2	11/21/18	KB SM4500-Norg B-C
pH grab		pH units	6.24	NA	10/31/18	LL SM 4500 H-B
Chloride		mg/L	48	3.0	10/31/18	LL EPA 300.0
Mercury*		mg/L	<0.0005*	0.0005	11/08/18	RIA* EPA 245.1
Total Phosphorous (P)		mg/L	0.022	0.005	11/11/18	MC SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	BRL	0.20	11/21/18	KB SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	0.162*	0.50	10/31/18	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	2.31	NA	11/30/18	MC Calculation
Dissolved Organic Nitrogen		mg/L	<0.18	NA	11/30/18	MC Calculation
Ortho Phosphorous (P)		mg/L	0.013	0.005	11/01/18	MC SM 4500-P
Particulate Organic Carbon		mg/L	0.26	NA	11/30/18	MC SM 5310 C
Particulate Organic Nitrogen		mg/L	ND	NA	11/30/18	MC Calculation
Total Dissolved Nitrogen		mg/L	2.3	NA	11/21/18	KB Calculation
Turbidity		NTU	2.0	0.2	10/31/18	LL SM 2130 B

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, December 3, 2018

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

Project Name: GW Eel River

Comments:

Project Number:

Sampled By: Kim Tower

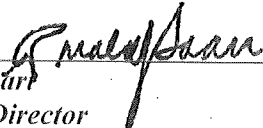
Lab Order Number: WW-182523

Date Received: 10/31/18

Sample Type		Sample Time	Sample Date	Comments		
DW-1	A	1245	10/31/18			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	480	6.0	11/08/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	857	10	11/01/18	LL	EPA 120.1
Total Organic Carbon*	mg/L	0.164*	0.5	10/31/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND	*	11/09/18	RIA*	*
Total Iron	mg/L	0.074	0.01	11/09/18	MC	EPA 200.7
Boron	mg/L	0.019	0.010	11/09/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	11/09/18	MC	EPA 200.7
Nitrate-N	mg/L	0.10	0.01	10/31/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	10/31/18	LL	EPA 300.0
Ammonia-N *	mg/L	<0.02*	0.02	11/13/18	MC	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/21/18	KB	SM4500-Norg B-C
pH grab	pH units	5.77	NA	10/31/18	LL	SM 4500 H-B
Chloride	mg/L	280	3.0	11/01/18	LL	EPA 300.0
Mercury*	mg/L	<0.0005*	0.0005	11/08/18	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.022	0.005	11/11/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	11/21/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	ND*	0.50	10/31/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.12	NA	11/30/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	11/30/18	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.014	0.005	11/01/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	<0.06	NA	11/30/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	11/30/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.30	NA	11/21/18	KB	Calculation
Turbidity	NTU	1.3	0.2	10/31/18	LL	SM 2130 B

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saur
 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, December 3, 2018

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

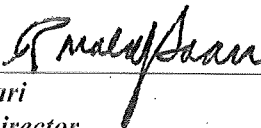
ProjectName: GW Eel River
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-182524
Date Received: 10/31/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
7SR A	1335	10/31/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	480	6.0	11/08/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	851	10	11/01/18	LL	EPA 120.1
Total Organic Carbon*	mg/L	0.138	0.5	10/31/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND	*	11/09/18	RIA*	*
Total Iron	mg/L	0.05	0.01	11/09/18	MC	EPA 200.7
Boron	mg/L	0.017	0.010	11/09/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	11/09/18	MC	EPA 200.7
Nitrate-N	mg/L	0.10	0.01	10/31/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	10/31/18	LL	EPA 300.0
Ammonia-N *	mg/L	<0.02*	0.02	11/13/18	MC	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/21/18	KB	SM4500-Norg B-C
pH grab	pH units	5.72	NA	10/31/18	LL	SM 4500 H-B
Chloride	mg/L	270	3.0	11/01/18	LL	EPA 300.0
Mercury*	mg/L	<0.0005*	0.0005	11/08/18	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	BRL	0.005	11/11/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	11/21/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	ND*	0.50	10/31/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.12	NA	11/30/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	11/30/18	MC	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	11/01/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	<0.04	NA	11/30/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	11/30/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.30	NA	11/21/18	KB	Calculation
Turbidity	NTU	BRL	0.2	10/31/18	LL	SM 2130 B

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

LABORATORY REPORT

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

Date Received: 11/7/2018
Date Reported: 11/14/2018
P.O. Number

Work Order #: 1811-23931

Project Name: PLYMOUTH ENV.

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable, indication of sample analysis at our Hudson, MA laboratory and/or subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:



Dawne E. Smart
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):

Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508 Hudson MA * M-MA1117, RI LAO00319

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23931

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-182520 2SR
Sample Type : GRAB
Sample Date / Time : 10/31/2018 @ 09:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	11/13/2018 7:00	KLE
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23931

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-182520 2SR
Sample Type : GRAB
Sample Date / Time : 10/31/2018 @ 09:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Methylene Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Styrene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Toluene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
MTBE	<2	2	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Acetone	<10	10	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	11/9/2018 17:28	RAT
Surrogates			RANGE			
Dibromofluoromethane	99		86-118%	SW-846 8260C	11/9/2018 17:28	RAT
Toluene-d8	98		88-110%	SW-846 8260C	11/9/2018 17:28	RAT
4-Bromofluorobenzene	100		86-115%	SW-846 8260C	11/9/2018 17:28	RAT
1,2 Dichloroethane-d4	99		80-120%	SW-846 8260C	11/9/2018 17:28	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	11/8/2018 16:29	JRW
Mercury Digestion				EPA 245.1	11/8/2018 15:54	JNC

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23931

Project Name: PLYMOUTH ENV.

Sample Number: 002
Sample Description: WW-182521 2DR
Sample Type : GRAB
Sample Date / Time : 10/31/2018 @ 10:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	11/13/2018 7:00	KLE
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23931

Project Name: PLYMOUTH ENV.

Sample Number: 002
Sample Description: WW-182521 2DR
Sample Type : GRAB
Sample Date / Time : 10/31/2018 @ 10:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Methylene Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Styrene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Toluene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
MTBE	<2	2	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Acetone	<10	10	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	11/9/2018 17:55	RAT
Surrogates			RANGE			
Dibromofluoromethane	102		86-118%	SW-846 8260C	11/9/2018 17:55	RAT
Toluene-d8	96		88-110%	SW-846 8260C	11/9/2018 17:55	RAT
4-Bromofluorobenzene	98		86-115%	SW-846 8260C	11/9/2018 17:55	RAT
1,2 Dichloroethane-d4	97		80-120%	SW-846 8260C	11/9/2018 17:55	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	11/8/2018 16:34	JRW
Mercury Digestion				EPA 245.1	11/8/2018 15:54	JNC

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23931

Project Name: PLYMOUTH ENV.

Sample Number: 003
Sample Description: WW-182522 A15
Sample Type : GRAB
Sample Date / Time : 10/31/2018 @ 12:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	11/13/2018 7:00	KLE
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:22	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23931

Project Name: PLYMOUTH ENV.

Sample Number: 003
Sample Description: WW-182522 A15
Sample Type : GRAB
Sample Date / Time : 10/31/2018 @ 12:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
Methylene Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
Styrene	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
Toluene	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
MTBE	<2	2	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
Acetone	<10	10	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	11/9/2018	18:22	RAT
Surrogates			RANGE				
Dibromofluoromethane	102		86-118%	SW-846 8260C	11/9/2018	18:22	RAT
Toluene-d8	101		88-110%	SW-846 8260C	11/9/2018	18:22	RAT
4-Bromofluorobenzene	99		86-115%	SW-846 8260C	11/9/2018	18:22	RAT
1,2 Dichloroethane-d4	97		80-120%	SW-846 8260C	11/9/2018	18:22	RAT
Total Metals							
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	11/8/2018	16:35	JRW
Mercury Digestion				EPA 245.1	11/8/2018	15:54	JNC

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23931

Project Name: PLYMOUTH ENV.

Sample Number: 004
Sample Description: WW-182523 DW-1
Sample Type : GRAB
Sample Date / Time : 10/31/2018 @ 12:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	11/13/2018 7:00	KLE
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23931

Project Name: PLYMOUTH ENV.

Sample Number: 004
Sample Description: WW-182523 DW-1
Sample Type : GRAB
Sample Date / Time : 10/31/2018 @ 12:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Methylene Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Styrene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Toluene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
MTBE	<2	2	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Acetone	<10	10	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	11/9/2018 18:49	RAT
Surrogates			RANGE			
Dibromofluoromethane	99		86-118%	SW-846 8260C	11/9/2018 18:49	RAT
Toluene-d8	98		88-110%	SW-846 8260C	11/9/2018 18:49	RAT
4-Bromofluorobenzene	102		86-115%	SW-846 8260C	11/9/2018 18:49	RAT
1,2 Dichloroethane-d4	95		80-120%	SW-846 8260C	11/9/2018 18:49	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	11/8/2018 16:36	JRW
Mercury Digestion				EPA 245.1	11/8/2018 15:54	JNC

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23931

Project Name: PLYMOUTH ENV.

Sample Number: 005
Sample Description: WW-182524 7SR
Sample Type : GRAB
Sample Date / Time : 10/31/2018 @ 13:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	11/13/2018 7:00	KLE
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23931

Project Name: PLYMOUTH ENV.

Sample Number: 005
Sample Description: WW-182524 7SR
Sample Type : GRAB
Sample Date / Time : 10/31/2018 @ 13:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Methylene Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Styrene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Toluene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
MTBE	<2	2	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Acetone	<10	10	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	11/9/2018 19:16	RAT
Surrogates			RANGE			
Dibromofluoromethane	101		86-118%	SW-846 8260C	11/9/2018 19:16	RAT
Toluene-d8	100		88-110%	SW-846 8260C	11/9/2018 19:16	RAT
4-Bromofluorobenzene	99		86-115%	SW-846 8260C	11/9/2018 19:16	RAT
1,2 Dichloroethane-d4	99		80-120%	SW-846 8260C	11/9/2018 19:16	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	11/8/2018 16:37	JRW
Mercury Digestion				EPA 245.1	11/8/2018 15:54	JNC

New England ChromaChem
6 Nichols Street
Salem, MA 01970
978-744-6600

Massachusetts DEP Lab. M-MA072

Client: Envirotech Laboratory, Inc.
State: Liquid

[illegible][illegible]

Electronically signed and approved by:

Blair L. Bornstein

Date: 11/08/18

Laboratory:

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

Chain of Custody**Client:**

Town of Plymouth - Department of Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, 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
10-31-18	0930	252	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride B, Cu, Hg, FE	NONE
			1	Glass	Ortho-phosphate	NONE
10-31-18	1005	202	2	Glass Vial	VOC	
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low TDS	
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride B, Cu, Hg, FE	
			1	Glass	Ortho-phosphate	

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

KTu

Received By: Date/Time:

R. Sen 10/31/18 1410

Laboratory:

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

Chain of CustodyClient:

Town of Plymouth - Department of Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, 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
10-31-18	1200	A15	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride B, Cu, Hg, FE	NONE
			1	Glass	Ortho-phosphate	NONE
10-31-18	1245	DW-1	2	Glass Vial	VOC	
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low TDS	
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride B, Cu, Hg, FE	
			1	Glass	Ortho-phosphate	

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

KT

Received By: Date/Time:

AS 10/31/18 1410

Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Department of Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us

Project Name: **GW Eel River -Plymouth MA**

Sampler: Kim Tower (KT)

WW-82524

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
10-31-18	1335	752	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride B, Cu, Hg, FE	NONE
			1	Glass	Ortho-phosphate	NONE
				2	Glass Vial	VOC
				1	1 Liter Plastic	Dissolved, TKN, TOC diss low TDS
				1	1 Liter Plastic	TKN, TN, TP, TOC Low
				1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride B, Cu, Hg, FE
				1	Glass	Ortho-phosphate

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

KT

Received By: Date/Time:

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, December 3, 2018

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

ProjectName: GW Eel River
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-182533
Date Received: 11/01/18

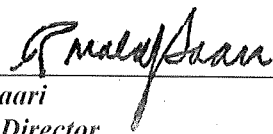
Comments:

Sample Type	Sample Time	Sample Date	Comments			
Bradford A	08:00	11/01/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	72	6.0	11/08/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	110	10	11/01/18	LL	EPA 120.1
Total Organic Carbon*	mg/L	0.977*	0.5	11/01/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	*	*	11/09/18	RIA*	*
Total Iron	mg/L	0.14	0.01	11/14/18	MC	EPA 200.7
Boron	mg/L	BRL	0.010	11/14/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	11/14/18	MC	EPA 200.7
Nitrate-N	mg/L	0.06	0.01	11/01/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	11/01/18	LL	EPA 300.0
Ammonia-N *	mg/L	<0.02*	0.02	11/13/18	MC	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/29/18	KB	SM4500-Norg B-C
pH grab	pH units	6.84	NA	11/01/18	LL	SM 4500 H-B
Chloride	mg/L	17	3.0	11/01/18	LL	EPA 300.0
Mercury*	mg/L	<0.0005*	0.0005	11/14/18	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.011	0.005	11/11/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	11/29/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.814*	0.50	11/01/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.08	NA	12/01/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	12/01/18	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.007	0.005	11/01/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.16	NA	12/01/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	12/01/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.26	NA	12/03/18	KB	Calculation
Turbidity	NTU	2.4	0.2	11/01/18	LL	SM 2130 B

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, December 3, 2018

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

ProjectName: GW Eel River

Comments:

Project Number:

Sampled By: Kim Tower

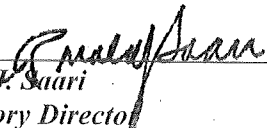
Lab Order Number: WW-182534

Date Received: 11/01/18

Sample Type	Sample Time	Sample Date	Comments			
GW-1 A	0830	11/01/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	BRL	6.0	11/08/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	BRL	10	11/01/18	LL	EPA 120.1
Total Organic Carbon*	mg/L	0.211	0.5	11/01/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	11/09/18	RIA*	*
Total Iron	mg/L	BRL	0.01	11/14/18	MC	EPA 200.7
Boron	mg/L	BRL	0.010	11/14/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	11/14/18	MC	EPA 200.7
Nitrate-N	mg/L	BRL	0.01	11/01/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	11/01/18	LL	EPA 300.0
Ammonia-N *	mg/L	<0.02*	0.02	11/13/18	MC	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/29/18	KB	SM4500-Norg B-C
pH grab	pH units	6.71	NA	11/01/18	LL	SM 4500 H-B
Chloride	mg/L	BRL	3.0	11/01/18	LL	EPA 300.0
Mercury*	mg/L	<0.0005*	0.0005	11/14/18	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	BRL	0.005	11/11/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	11/29/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	ND*	0.50	11/01/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.03	NA	12/01/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	12/01/18	MC	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	11/01/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	<0.11	NA	12/01/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	12/01/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.21	NA	12/03/18	KB	Calculation
Turbidity	NTU	BRL	0.2	11/01/18	LL	SM 2130 B

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, December 3, 2018

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

ProjectName: GW Eel River
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-182535
Date Received: 11/01/18

Comments:

Sample Type		Sample Time	Sample Date	Comments		
A21A	A	1130	11/01/18			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	85	6.0	11/08/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	130	10	11/01/18	LL	EPA 120.1
Total Organic Carbon*	mg/L	0.997	0.5	11/01/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	ND*	*	11/09/18	RIA*	*
Total Iron	mg/L	1.50	0.01	11/14/18	MC	EPA 200.7
Boron	mg/L	BRL	0.010	11/14/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	11/14/18	MC	EPA 200.7
Nitrate-N	mg/L	BRL	0.01	11/01/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	11/01/18	LL	EPA 300.0
Ammonia-N *	mg/L	0.19*	0.02	11/13/18	MC	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.46	0.2	11/29/18	KB	SM4500-Norg B-C
pH grab	pH units	6.65	NA	11/01/18	LL	SM 4500 H-B
Chloride	mg/L	30	3.0	11/01/18	LL	EPA 300.0
Mercury*	mg/L	<0.0005*	0.0005	11/14/18	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.039	0.005	11/11/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.44	0.20	11/29/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.987*	0.50	11/01/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.19	NA	12/01/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.25	NA	12/01/18	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.037	0.005	11/01/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.01	NA	12/01/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.02	NA	12/03/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.44	NA	12/03/18	KB	Calculation
Turbidity	NTU	1.4	0.2	11/01/18	LL	SM 2130 B

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, December 3, 2018

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

ProjectName: GW Eel River
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-182536
Date Received: 11/01/18

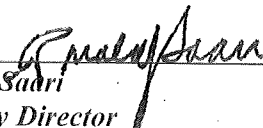
Comments:

Sample Type	Sample Time	Sample Date	Comments			
5S A	13:00	11/01/18	**Chloroform			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	860	6.0	11/08/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	1,540	10	11/01/18	LL	EPA 120.1
Total Organic Carbon*	mg/L	0.175	0.5	11/01/18	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	3.6**	*	11/09/18	RIA*	*
Total Iron	mg/L	BRL	0.01	11/14/18	MC	EPA 200.7
Boron	mg/L	BRL	0.010	11/14/18	MC	EPA 200.7
Copper	mg/L	BRL	0.003	11/14/18	MC	EPA 200.7
Nitrate-N	mg/L	0.54	0.01	11/01/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	11/01/18	LL	EPA 300.0
Ammonia-N *	mg/L	<0.02*	0.02	11/13/18	MC	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	11/29/18	KB	SM4500-Norg B-C
pH grab	pH units	5.32	NA	11/01/18	LL	SM 4500 H-B
Chloride	mg/L	500	3.0	11/02/18	LL	EPA 300.0
Mercury*	mg/L	<0.0005*	0.0005	11/14/18	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.031	0.005	11/11/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	11/29/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	ND*	0.50	11/01/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.54	NA	12/01/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	12/01/18	MC	Calculation
Ortho Phosphorous (P)	mg/L	0.011	0.005	11/01/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	<0.08	NA	12/01/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	12/01/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.54	NA	12/03/18	KB	Calculation
Turbidity	NTU	BRL	0.2	11/01/18	RL	SM 2130 B

BRL=below reportable limits

*see attached

By:


 Ronald J. Saari
 Laboratory Director

LABORATORY REPORT

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

Date Received: 11/7/2018
Date Reported: 11/15/2018
P.O. Number

Work Order #: 1811-23929

Project Name: PLYMOUTH ENV.

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable, indication of sample analysis at our Hudson, MA laboratory and/or subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:



Dawne E. Smart
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):

Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508 Hudson MA * M-MA1117, RI LAO00319

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23929

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-182533 BRADFORD
Sample Type : GRAB
Sample Date / Time : 11/01/2018 @ 08:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	11/13/2018	7:00	KLE
Volatile Organic Compounds							
Benzene	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
Bromodichloromethane	5.7	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
Bromoform	4.4	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
Chloroform	7.5	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
Dibromochloromethane	5.4	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	15:40	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23929

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-182533 BRADFORD
Sample Type : GRAB
Sample Date / Time : 11/01/2018 @ 08:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
Methylene Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
Styrene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
Toluene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
MTBE	<2	2	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
Acetone	<10	10	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	11/9/2018 15:40	RAT
Surrogates			RANGE			
Dibromofluoromethane	100		86-118%	SW-846 8260C	11/9/2018 15:40	RAT
Toluene-d8	100		88-110%	SW-846 8260C	11/9/2018 15:40	RAT
4-Bromofluorobenzene	99		86-115%	SW-846 8260C	11/9/2018 15:40	RAT
1,2 Dichloroethane-d4	101		80-120%	SW-846 8260C	11/9/2018 15:40	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	11/14/2018 16:25	JNC
Mercury Digestion				EPA 245.1	11/14/2018 15:07	JMS

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23929

Project Name: PLYMOUTH ENV.

Sample Number: 002
Sample Description: WW-182534 GW-1
Sample Type : GRAB
Sample Date / Time : 11/01/2018 @ 08:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	11/13/2018 7:00	KLE
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23929

Project Name: PLYMOUTH ENV.

Sample Number: 002
Sample Description: WW-182534 GW-1
Sample Type : GRAB
Sample Date / Time : 11/01/2018 @ 08:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Methylene Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Styrene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Toluene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
MTBE	<2	2	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Acetone	<10	10	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	11/9/2018 16:07	RAT
Surrogates			RANGE			
Dibromofluoromethane	101		86-118%	SW-846 8260C	11/9/2018 16:07	RAT
Toluene-d8	100		88-110%	SW-846 8260C	11/9/2018 16:07	RAT
4-Bromofluorobenzene	99		86-115%	SW-846 8260C	11/9/2018 16:07	RAT
1,2 Dichloroethane-d4	101		80-120%	SW-846 8260C	11/9/2018 16:07	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	11/14/2018 16:26	JNC
Mercury Digestion				EPA 245.1	11/14/2018 15:07	JMS

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23929

Project Name: PLYMOUTH ENV.

Sample Number: 003
Sample Description: WW-182535 A21-A
Sample Type : GRAB
Sample Date / Time : 11/01/2018 @ 11:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Ammonia (as N)	0.19	0.02	mg/l	SM4500NH3-B,H 18-21ed	11/13/2018	7:00	KLE
Volatile Organic Compounds							
Benzene	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
Chloroform	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	16:34	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23929

Project Name: PLYMOUTH ENV.

Sample Number: 003
Sample Description: WW-182535 A21-A
Sample Type : GRAB
Sample Date / Time : 11/01/2018 @ 11:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
Methylene Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
Styrene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
Toluene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
MTBE	<2	2	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
Acetone	<10	10	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	11/9/2018 16:34	RAT
Surrogates			RANGE			
Dibromofluoromethane	100		86-118%	SW-846 8260C	11/9/2018 16:34	RAT
Toluene-d8	100		88-110%	SW-846 8260C	11/9/2018 16:34	RAT
4-Bromofluorobenzene	102		86-115%	SW-846 8260C	11/9/2018 16:34	RAT
1,2 Dichloroethane-d4	100		80-120%	SW-846 8260C	11/9/2018 16:34	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	11/14/2018 16:27	JNC
Mercury Digestion				EPA 245.1	11/14/2018 15:07	JMS

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23929

Project Name: PLYMOUTH ENV.

Sample Number: 004
Sample Description: WW-182536 5S
Sample Type : GRAB
Sample Date / Time : 11/01/2018 @ 13:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	11/13/2018	7:00	KLE
Volatile Organic Compounds							
Benzene	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
Bromobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
Bromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
Bromodichloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
Bromoform	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
Bromomethane	<5	5	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
n-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
Sec-butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
tert-Butylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
Chlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
Chloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
Chloroform	3.6	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
Chloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
2-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
4-Chlorotoluene	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
Dibromochloromethane	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
Dibromomethane	<2	2	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
Dichlorodifluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
trans-1,2-Dichloroethylene	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
cis-1,3-Dichloropropene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
trans-1,3-Dichloropropylene	<0.4	0.4	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
1,3-Dichloropropene (total)	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
Ethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT
Isopropylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018	17:01	RAT

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1811-23929

Project Name: PLYMOUTH ENV.

Sample Number: 004
Sample Description: WW-182536 5S
Sample Type : GRAB
Sample Date / Time : 11/01/2018 @ 13:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
Methylene Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
Naphthalene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
n-Propylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
Styrene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
Tetrachloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
Toluene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
Trichloroethene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
1,2,3-Trichloropropane	<2	2	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
Vinyl Chloride	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
o-Xylene	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
m,p-Xylene	<2	2	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
MTBE	<2	2	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
Carbon Disulfide	<1	1	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
Acetone	<10	10	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
2-Butanone(MEK)	<10	10	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
4-Methyl-2-pentanone(MIBK)	<10	10	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
2-Hexanone	<10	10	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
Vinyl Acetate	<50	50	ug/l	SW-846 8260C	11/9/2018 17:01	RAT
Surrogates			RANGE			
Dibromofluoromethane	102		86-118%	SW-846 8260C	11/9/2018 17:01	RAT
Toluene-d8	100		88-110%	SW-846 8260C	11/9/2018 17:01	RAT
4-Bromofluorobenzene	100		86-115%	SW-846 8260C	11/9/2018 17:01	RAT
1,2 Dichloroethane-d4	99		80-120%	SW-846 8260C	11/9/2018 17:01	RAT
Total Metals						
Mercury	<0.0005	0.0005	mg/l	EPA 245.1	11/14/2018 16:28	JNC
Mercury Digestion				EPA 245.1	11/14/2018 15:07	JMS

New England ChromaChem
6 Nichols Street
Salem, MA 01970
978-744-6600

Massachusetts DEP Lab. M-MA072

Client: Envirotech Laboratory, Inc.
State: Liquid

[illegible][illegible]

Electronically signed and approved by:

Bern L. Bornstein

Date: 11/08/18

Laboratory:

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

Chain of CustodyClient:

Town of Plymouth - Department of Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us
Project Name: GW Eel River -Plymouth MA
Sampler: Kim Tower (KT)

W-182533

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
11-1-18	0800	Bradford	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride B, Cu, Hg, FE	NONE
			1	Glass	Ortho-phosphate	NONE
11-1-18	0830	B GW-1		2	Glass Vial	VOC
				1	1 Liter Plastic	Dissolved, TKN, TOC diss low TDS
				1	1 Liter Plastic	TKN, TN, TP, TOC Low
				1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride B, Cu, Hg, FE
				1	Glass	Ortho-phosphate

W-182534

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

KT

Received By: Date/Time:

Alvarez 11/01/18 1430

Laboratory:

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

Chain of CustodyClient:

Town of Plymouth - Department of Marine & Environmental Affairs Attn: Kim Tower

26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us

Project Name: GW Eel River -Plymouth MA

Sampler: Kim Tower (KT)

W-182535

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
11-1-18	1130	A21-A	2	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low TDS	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	H2SO4
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride B, Cu, Hg, FE	NONE
			1	Glass	Ortho-phosphate	NONE
11-1-18	1300	55	2	Glass Vial	VOC	
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low TDS	
			1	1 Liter Plastic	TKN, TN, TP, TOC Low	
			1	500ml Plastic	Ph/cond, turb, NO2, NO3, Chloride B, Cu, Hg, FE	
			1	Glass	Ortho-phosphate	

W-182536

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:

Rauls 11/01/18 1430

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, June 25, 2018

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

ProjectName: Harbor Sampling- Plymouth

Comments:

Project Number:

Sampled By: KT

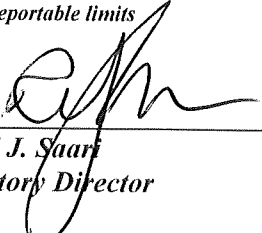
Lab Order Number: WW-181101

Date Received: 06/07/18

Sample Type		Sample Time	Sample Date	Comments		
S-10	A	0840	06/07/18			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
						Method
Nitrate-N/Nitrite-N		mg/L	0.04	0.01	06/07/18	MC
Total Organic Carbon*		mg/L	2.58	*	06/12/18	NEC*
Ammonia-N *		mg/L	<0.02*	0.02	06/12/18	RIA*
Total Kjeldhal Nitrogen		mg/L	0.31	0.2	06/21/18	KB
Total Phosphorous (P)		mg/L	0.036	0.005	06/12/18	MC
Dissolved Kjeldhal Nitrogen		mg/L	0.28	0.20	06/21/18	KB
Dissolved Total Organic Carbon		mg/L	1.99	*	06/12/18	NEC*
Dissolved Inorganic Nitrogen		mg/L	<0.06	NA	06/25/18	MC
Dissolved Organic Nitrogen		mg/L	<0.26	NA	06/25/18	MC
Chlorophyll-a		*	2.31*	*	06/09/18	Alpha*
Ortho Phosphorous (P)		mg/L	BRL	0.005	06/07/18	MC
Particulate Organic Carbon		mg/L	0.59	NA	06/25/18	NEC*
Particulate Organic Nitrogen		mg/L	0.03	NA	06/25/18	KB
Total Dissolved Nitrogen		mg/L	0.32	NA	06/25/18	MC
E coli		CFU/100mL	<5	<1	06/07/18	MC

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

Serial_No:06141820:45

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1821441

Project Number: Not Specified

Report Date: 06/14/18

SAMPLE RESULTS

Lab ID: L1821441-01

Client ID: WW-181101

Sample Location: Not Specified

Date Collected: 06/07/18 08:40

Date Received: 06/08/18

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	2.31		mg/m3	2.00	NA	1	06/08/18 10:45	06/09/18 16:00	121,10200H	AG



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, June 25, 2018

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

ProjectName: Harbor Sampling- Plymouth

Comments:

Project Number:

Sampled By: KT

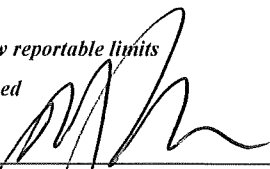
Lab Order Number: WW-181102

Date Received: 06/07/18

Sample Type	Sample Time	Sample Date	Comments			
S-7 A	0850	06/07/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N/Nitrite-N	mg/L	0.07	0.01	06/07/18	MC	SM 4500-NO3 E
Total Organic Carbon*	mg/L	1.65	*	06/12/18	NEC*	SM 5310 C
Ammonia-N *	mg/L	<0.02	0.02	06/12/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.34	0.2	06/21/18	KB	SM4500-Norg B-C
Total Phosphorous (P)	mg/L	0.033	0.005	06/12/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.31	0.20	06/21/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.28	*	06/12/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	<0.09	NA	06/25/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.29	NA	06/25/18	MC	Calculation
Chlorophyll-a	*	2.48*	*	06/09/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	06/07/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.37	NA	06/25/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.03	NA	06/25/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.38	NA	06/25/18	MC	Calculation
E coli	CFU/100mL	<5	<1	06/07/18	MC	EPA 1603

BRL=below reportable limits

*see attached

By: 

Ronald J. Sqari
Laboratory Director

Serial_No:06141820:45

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1821441

Project Number: Not Specified

Report Date: 06/14/18

SAMPLE RESULTS

Lab ID: L1821441-02

Date Collected: 06/07/18 08:50

Client ID: WW-181102

Date Received: 06/08/18

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	2.48		mg/m3	2.00	NA	1	06/08/18 10:45	06/09/18 16:00	121,10200H	AG



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, June 27, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Harbor Sampling- Plymouth

Comments:

Project Number:

Sampled By: KT

Lab Order Number: WW-181103

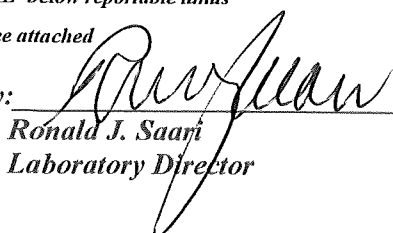
Date Received: 06/07/18

Sample Type	Sample Time	Sample Date	Comments			
S-8A A	0900	06/07/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N/Nitrite-N	mg/L	0.11	0.01	06/07/18	MC	SM 4500-NO3 E
Total Organic Carbon*	mg/L	1.82	*	06/12/18	NEC*	SM 5310 C
Ammonia-N *	mg/L	<0.02*	0.02	06/12/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.34	0.2	06/21/18	KB	SM4500-Norg B-C
Total Phosphorous (P)	mg/L	0.025	0.005	06/12/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.27	0.20	06/21/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.55	*	06/12/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	<0.13	NA	06/25/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.25	NA	06/25/18	MC	Calculation
Chlorophyll-a	*	2.17*	*	06/09/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	06/07/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.27	NA	06/25/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.07	NA	06/25/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.38	NA	06/25/18	MC	Calculation
E coli	CFU/100mL	10	<1	06/07/18	MC	EPA 1603

BRL=below reportable limits

*see attached

By:


Ronald J. Saari
Laboratory Director

Serial_No:06141820:45

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1821441

Project Number: Not Specified

Report Date: 06/14/18

SAMPLE RESULTS

Lab ID: L1821441-03

Client ID: WW-181103

Sample Location: Not Specified

Date Collected: 06/07/18 09:00

Date Received: 06/08/18

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	2.17		mg/m3	2.00	NA	1	06/08/18 10:45	06/09/18 16:00	121,10200H	AG



Date: 06/13/18

DEP MDL REQUIRED by Method
Contact lab with any Exceeded MCL

LABORATORY REPORT

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

Date Received: 6/8/2018
Date Reported: 6/14/2018
P.O. Number

Work Order #: 1806-12003

Project Name: PLYMOUTH ENV.

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable, indication of sample analysis at our Hudson, MA laboratory and/or subcontracted results are noted and subcontracted reports are enclosed in their entirety.

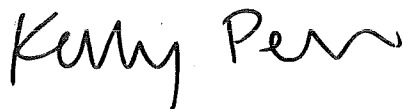
All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:



Kelly Pereira
Project Manager

Laboratory Certification Numbers (as applicable to sample's origin state):

Warwick RI * RI LA100033, MA M-RI015, CT PH-0508, ME RI00015, NH 2070, NY 11726

Hudson MA * M-MA1117, RI LAO00319

131 Coolidge Street, Suite 105, Hudson, MA 01749
P: 978-568-0041 F: 978-568-0078

41 Illinois Avenue, Warwick, RI 02888
P: 401-737-8500 F: 401-738-1970

15 Lark Industrial Drive, Smithfield, RI 02828
P: 401-737-8500 F: 401-349-0844

www.rianalytical.com

R.I. Analytical Laboratories, Inc.**Laboratory Report**

Envirotech Laboratories, Inc.

Work Order #: 1806-12003

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-181101 S-10
Sample Type : GRAB
Sample Date / Time : 6/07/2018 @ 08:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	6/12/2018 8:30	KLE

Sample Number: 002
Sample Description: WW-181102 S-7
Sample Type : GRAB
Sample Date / Time : 6/07/2018 @ 08:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	6/12/2018 8:30	KLE

Sample Number: 003
Sample Description: WW-181103 S-8A
Sample Type : GRAB
Sample Date / Time : 6/07/2018 @ 09:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	6/12/2018 8:30	KLE

[illegible]

mk 5.3

1806-12003



ANALYTICAL REPORT

Lab Number:	L1821441
Client:	Envirotech Laboratories, Inc. 8 Jan Sebastian Drive Unit 12 Sandwich, MA 02563
ATTN:	Ron Saari
Phone:	(800) 339-6460
Project Name:	PLYMOUTH ENVIRONMENTAL MGMT
Project Number:	Not Specified
Report Date:	06/14/18

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), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Serial_No:06141820:45

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1821441
Report Date: 06/14/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1821441-01	WW-181101	WATER	Not Specified	06/07/18 08:40	06/08/18
L1821441-02	WW-181102	WATER	Not Specified	06/07/18 08:50	06/08/18
L1821441-03	WW-181103	WATER	Not Specified	06/07/18 09:00	06/08/18

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1821441
Report Date: 06/14/18

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 NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. 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. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. 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. All specific QC 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. 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 (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar 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. Air canisters will be disposed after 3 business days from the date the project is completed.

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

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1821441
Report Date: 06/14/18

Case Narrative (continued)

Chlorophyll A

L1821441-01, -02 and -03 were analyzed with the method required holding time exceeded.

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:



Amita Naik

Title: Technical Director/Representative

Date: 06/14/18

INORGANICS & MISCELLANEOUS

Serial_No:06141820:45

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1821441

Project Number: Not Specified

Report Date: 06/14/18

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): 01-03 Batch: WG1124154-1										
Chlorophyll A	ND		mg/m3	2.00	NA	1	06/08/18 10:45	06/09/18 16:00	121,10200H	AG



Serial_No:06141820:45

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1821441
Report Date: 06/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1124154-2 QC Sample: L1821441-02 Client ID: WW-181102						
Chlorophyll A	2.48	2.38	mg/m3	4		

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Serial_No: 06141820:45
Lab Number: L1821441
Report Date: 06/14/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1821441-01A	Brown Plastic 1000ml unpreserved	A	NA		2.5	Y	Absent		CHLORO-A(1)
L1821441-01B	Brown Plastic 1000ml unpreserved	A	NA		2.5	Y	Absent		CHLORO-A(1)
L1821441-02A	Brown Plastic 1000ml unpreserved	A	NA		2.5	Y	Absent		CHLORO-A(1)
L1821441-02B	Brown Plastic 1000ml unpreserved	A	NA		2.5	Y	Absent		CHLORO-A(1)
L1821441-03A	Brown Plastic 1000ml unpreserved	A	NA		2.5	Y	Absent		CHLORO-A(1)
L1821441-03B	Brown Plastic 1000ml unpreserved	A	NA		2.5	Y	Absent		CHLORO-A(1)

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1821441

Project Number: Not Specified

Report Date: 06/14/18

GLOSSARY

Acronyms

EDL	- Estimated 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 EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
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.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
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.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

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.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

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 ten times (10x) the concentration found in the blank. For MCP-related

Report Format: Data Usability Report



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1821441
Report Date: 06/14/18

Data Qualifiers

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. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

- 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 lower value for the two columns 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.
- 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.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1821441
Report Date: 06/14/18

REFERENCES

- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

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.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO₃-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B
EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.
Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH₃-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO₃-F, EPA 353.2: Nitrate-N, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO₄-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: 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
EPA 625: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.
Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

21821441

CHAIN OF CUSTODY FORM

8 Jan Sebastian Dr., Unit 12

(508)888-6460/1-800-339-6460

FAX (508)888-6446

Alpha Analytical

Westborough, MA 02346

Phone# 508-898-9220

Fax # _____

Analysis Requested

Chlorophyll-a

Chlorophyll-a

Chlorophyll-a

Proj. No.	Project Name: Plymouth Environmental Management
-----------	---

Sampler: NT

[illegible]

in question

Date/Time

Received:

Relinquished

Date/Time

Received:

In quished

Date/Time

Received:

Relinquished:

Date/Time

Received:

ENC

Chain of Custody

Laboratory:

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

Client:

Town of Plymouth - Department of Marine and Environmental Affairs
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)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
6/7/18	0840	S-10	1	500mL	NO2/NO3	NONE
			1	1 Liter Plastic	Dissolved TKN, TOC, TDS, diss Low	NONE
			1	1 Liter Plastic	TKN, TN, NH3, TP, TOC low	NONE
			1	Glass	Ortho	NONE
			1	100mL Plastic	Bacteria e-coli	NONE
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE
6/7/18	0850	S-7	1	500mL	NO2/NO3	NONE
			1	1 Liter Plastic	Dissolved TKN, TOC, TDS, diss Low	NONE
			1	1 Liter Plastic	TKN, TN, NH3, TP, TOC low	NONE
			1	Glass	Ortho	NONE
			1	100mL Plastic	Bacteria e-coli	NONE
			2	1 Liter Amber Plastic	Chlorophyll-a	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, Bacteria E-coli, Chlorophyll-a

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

Rever 06/07/18 1430

LSC

Laboratory:

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

Chain of CustodyClient:

Town of Plymouth - Department of Marine and Environmental Affairs
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)

6W-181103

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
6/7/18	0900	S-8A	1	500mL	NO2/NO3	NONE
			1	1 Liter Plastic	Dissolved TKN, TOC, TDS, diss Low	NONE
			1	1 Liter Plastic	TKN, TN, NH3, TP, TOC low	NONE
			1	Glass	Ortho	NONE
			1	100mL Plastic	Bacteria e-coli	NONE
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE
			1	500mL	NO2/NO3	NONE
			1	1 Liter Plastic	Dissolved TKN, TOC, TDS, diss Low	NONE
			1	1 Liter Plastic	TKN, TN, NH3, TP, TOC low	NONE
			1	Glass	Ortho	NONE
			1	100mL Plastic	Bacteria e-coli	NONE
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE

10
45
45

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, Bacteria E-coli, Chlorophyll-a

Relinquished By: Date/Time

KT

Received By:

Date/Time:

KT 06/07/18 1430

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, August 9, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

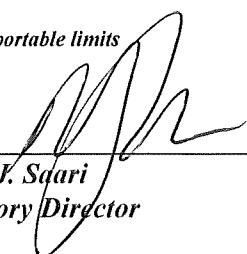
Lab Order Number: WW-181439

Date Received: 07/11/18

Sample Type		Sample Time	Sample Date	Comments		
S-10	A	1040	07/11/18			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Nitrate-N/Nitrite-N		mg/L	0.03	0.01	07/11/18	MC SM 4500-NO3 E
Total Dissolved Solids		mg/L	35,400	6.0	07/27/18	KB SM 2540 C
Total Organic Carbon*		mg/L	1.71*	0.5	07/18/18	NEC* SM 5310 C
Ammonia-N *		mg/L	0.11*	0.02	07/18/18	RIA* SM4500 NH3 C
Total Kjeldhal Nitrogen		mg/L	0.33	0.2	07/25/18	KB SM4500-Norg B-C
Total Phosphorous (P)		mg/L	0.026	0.005	07/12/18	MC SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	0.29	0.20	07/25/18	KB SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	0.844*	0.50	07/12/18	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.14	NA	08/09/18	MC Calculation
Dissolved Organic Nitrogen		mg/L	0.18	NA	08/09/18	MC Calculation
Chlorophyll-a		*	2.24*	*	07/15/18	Alpha* *
Ortho Phosphorous (P)		mg/L	0.012	0.005	07/12/18	MC SM 4500-P
Particulate Organic Carbon		mg/L	0.866	NA	08/09/18	NEC* SM 5310 C
Particulate Organic Nitrogen		mg/L	0.04	NA	08/09/18	RIA* Calculation
Total Dissolved Nitrogen		mg/L	0.32	NA	08/09/18	MC Calculation
E coli		CFU/100mL	20	<1	07/11/18	MC EPA 1603

BRL=below reportable limits

*see attached

By: 

Ronald J. Sqari
Laboratory Director

Serial_No:07191817:01

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1826431
Report Date: 07/19/18

SAMPLE RESULTS

Lab ID: L1826431-01
Client ID: WW-181439
Sample Location: Not Specified

Date Collected: 07/11/18 10:40
Date Received: 07/12/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	2.54		mg/m3	2.00	NA	1	07/12/18 21:45	07/15/18 14:15	121,10200H	AG



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, August 9, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

Project Name: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-181440

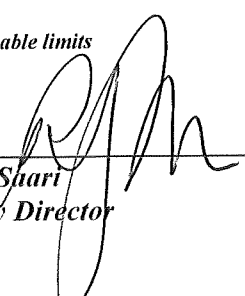
Date Received: 07/11/18

Sample Type		Sample Time	Sample Date	Comments		
S-7	A	1050	07/11/18			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Nitrate-N/Nitrite-N		mg/L	0.06	0.01	07/11/18	MC SM 4500-NO3 E
Total Dissolved Solids		mg/L	35,900	6.0	07/27/18	KB SM 2540 C
Total Organic Carbon*		mg/L	1.74*	0.5	07/18/18	NEC* SM 5310 C
Ammonia-N *		mg/L	0.056*	0.02	07/18/18	RIA* SM4500 NH3 C
Total Kjeldhal Nitrogen		mg/L	0.36	0.2	07/25/18	KB SM4500-Norg B-C
Total Phosphorous (P)		mg/L	0.016	0.005	07/12/18	MC SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	0.23	0.20	07/25/18	KB SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	1.12*	0.50	07/18/18	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.12	NA	08/09/18	MC Calculation
Dissolved Organic Nitrogen		mg/L	0.17	NA	08/09/18	MC Calculation
Chlorophyll-a		*	3.63*	*	07/15/18	Alpha* *
Ortho Phosphorous (P)		mg/L	0.013	0.005	07/12/18	MC SM 4500-P
Particulate Organic Carbon		mg/L	0.62	NA	08/09/18	NEC* SM 5310 C
Particulate Organic Nitrogen		mg/L	0.13	NA	08/09/18	RIA* Calculation
Total Dissolved Nitrogen		mg/L	0.29	NA	08/09/18	MC Calculation
E coli		CFU/100mL	160	<1	07/11/18	MC EPA 1603

BRL=below reportable limits

*see attached

By:


Ronald J. Saari
Laboratory Director

Serial_No:07191817:01

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1826431
Report Date: 07/19/18

SAMPLE RESULTS

Lab ID: L1826431-02
Client ID: WW-181440
Sample Location: Not Specified

Date Collected: 07/11/18 10:50
Date Received: 07/12/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	3.63		mg/m3	2.00	NA	1	07/12/18 21:45	07/15/18 14:15	121,10200H	AG



Laboratory:

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

Chain of CustodyClient:

Town of Plymouth - Department of Marine and Environmental Affairs
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)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
7/11/18	1040	S-10	1	1 Liter Plastic	Dissolved TKN, TOC diss low, TDS, NO2, NO3	NONE
			1	1 Liter Plastic	TKN, TN, NH3, TP, TOC low	H2SO4
			1	Glass	Ortho	NONE
			1	100mL Plastic	Bacteria e-coli	NONE
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE
7/11/18	1050	S-7	1	1 Liter Plastic	Dissolved TKN, TOC diss low, TDS, NO2, NO3	NONE
			1	1 Liter Plastic	TKN, TN, NH3, TP, TOC low	H2SO4
			1	Glass	Ortho	NONE
			1	100mL Plastic	Bacteria e-coli	NONE
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE

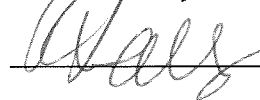
NOTE: Analysis needed for reporting in lowest detection possible; O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Kjeldahl Nitrogen, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen, Bacteria E-coli,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

Relinquished By: Date/Time



Received By:

Date/Time:

 07/11/18 1400

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

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

Thursday, August 9, 2018

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

ProjectName: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

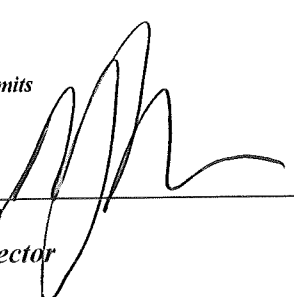
Lab Order Number: WW-181441

Date Received: 07/11/18

Sample Type	Sample Time	Sample Date	Comments			
S-10 2-4 HST A	12:45	07/11/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N/Nitrite-N	mg/L	0.02	0.01	07/11/18	MC	SM 4500-NO3 E
Total Dissolved Solids	mg/L	36,100	6.0	07/27/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	BRL*	0.5	07/18/18	NEC*	SM 5310 C
Ammonia-N *	mg/L	0.041*	0.02	07/18/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.36	0.2	07/25/18	KB	SM4500-Norg B-C
Total Phosphorous (P)	mg/L	0.028	0.005	07/12/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.22	0.20	07/25/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	BRL*	0.50	07/18/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.06	NA	08/09/18	MC	Calculation
Dissoived Organic Nitrogen	mg/L	0.18	NA	08/09/18	MC	Calculation
Chlorophyll-a	*	3.78*	*	07/15/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.021	0.005	07/12/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	ND	NA	08/09/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.14	NA	08/09/18	RIA*	Calculation
Total Dissolved Nitrogen	mg/L	0.24	NA	08/09/18	MC	Calculation
E coli	CFU/100mL	10	<1	07/11/18	MC	EPA 1603

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

Serial_No:07191817:01

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1826431

Project Number: Not Specified

Report Date: 07/19/18

SAMPLE RESULTS

Lab ID: L1826431-03

Date Collected: 07/11/18 12:45

Client ID: WW-181441

Date Received: 07/12/18

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	3.78		mg/m3	2.00	NA	1	07/12/18 21:45	07/15/18 14:15	121,10200H	AG



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, August 9, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

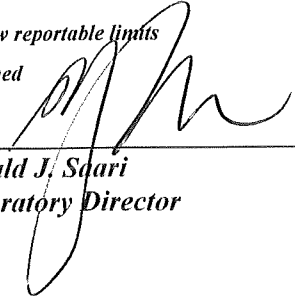
Lab Order Number: WW-181442

Date Received: 07/11/18

Sample Type	Sample Time	Sample Date	Comments			
S-7 2-4 HST A	1255	07/11/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N/Nitrite-N	mg/L	0.04	0.01	07/11/18	MC	SM 4500-NO3 E
Total Dissolved Solids	mg/L	35,900	6.0	07/27/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	1.60*	0.5	07/18/18	NEC*	SM 5310 C
Ammonia-N *	mg/L	0.042*	0.02	07/18/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.27	0.2	07/25/18	KB	SM4500-Norg B-C
Total Phosphorous (P)	mg/L	0.029	0.005	07/12/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	07/25/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.582*	0.50	07/18/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.08	NA	08/09/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.16	NA	08/09/18	MC	Calculation
Chlorophyll-a	*	3.33*	*	07/12/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.019	0.005	07/12/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	1.02	NA	08/09/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.07	NA	08/09/18	RIA*	Calculation
Total Dissolved Nitrogen	mg/L	<0.24	NA	08/09/18	MC	Calculation
E coli	CFU/100mL	15	<1	07/11/18	MC	EPA 1603

BRL=below reportable limits

*see attached

By: 

Ronald J. Sqari
Laboratory Director

Serial_No:07191817:01

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1826431

Project Number: Not Specified

Report Date: 07/19/18

SAMPLE RESULTS

Lab ID: L1826431-04

Date Collected: 07/11/18 12:55

Client ID: WW-181442

Date Received: 07/12/18

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	3.33		mg/m3	2.00	NA	1	07/12/18 21:45	07/15/18 14:15	121,10200H	AG



Laboratory:

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

Chain of CustodyClient:

Town of Plymouth - Department of Marine and Environmental Affairs
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)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
7/11/18	1245	S-10 2-4HST	1	1 Liter Plastic	Dissolved TKN, TOC diss low, TDS, NO2, NO3	NONE
			1	1 Liter Plastic	TKN, TN, NH3, TP, TOC low	H2SO4
			1	Glass	Ortho	NONE
			1	100mL Plastic	Bacteria e-coli	NONE
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE
7/11/18	1255	S-7 2-4HST	1	1 Liter Plastic	Dissolved TKN, TOC diss low, TDS, NO2, NO3	NONE
			1	1 Liter Plastic	TKN, TN, NH3, TP, TOC low	H2SO4
			1	Glass	Ortho	NONE
			1	100mL Plastic	Bacteria e-coli	NONE
			2	1 Liter Amber Plastic	Chlorophyll-a	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, Bacteria E-coli, Chlorophyll-a

Relinquished By: Date/Time

Kim Tower

Received By:

Date/Time:

K. Delv 7/11/18 1400

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, August 9, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

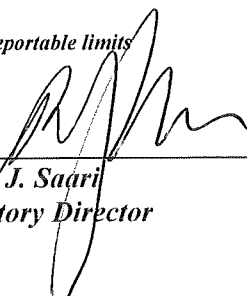
Lab Order Number: WW-181443

Date Received: 07/11/18

Sample Type	Sample Time	Sample Date	Comments			
S-8 2-4HST A	13:05	07/11/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N/Nitrite-N	mg/L	0.05	0.01	07/11/18	MC	SM 4500-NO3 E
Total Dissolved Solids	mg/L	35,800	6.0	07/27/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	1.50*	0.5	07/18/18	NEC*	SM 5310 C
Ammonia-N *	mg/L	0.055*	0.02	07/18/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.40	0.2	08/03/18	KB	SM4500-Norg B-C
Total Phosphorous (P)	mg/L	0.032	0.005	07/12/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.28	0.20	08/03/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.654*	0.50	07/18/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.11	NA	08/09/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.23	NA	08/09/18	MC	Calculation
Chlorophyll-a	*	3.03*	*	07/15/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.020	0.005	07/12/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.85	NA	08/09/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.12	NA	08/09/18	RIA*	Calculation
Total Dissolved Nitrogen	mg/L	0.33	NA	08/09/18	MC	Calculation
E coli	CFU/100mL	30	<1	07/11/18	MC	EPA 1603

BRL=below reportable limits

*see attached

By: 

Ronald J. Saari
Laboratory Director

Serial_No:07191817:01

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1826431
Report Date: 07/19/18

SAMPLE RESULTS

Lab ID: L1826431-05
Client ID: WW-181443
Sample Location: Not Specified

Date Collected: 07/11/18 13:05
Date Received: 07/12/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	3.03		mg/m3	2.00	NA	1	07/12/18 21:45	07/15/18 14:15	121,10200H	AG



Laboratory:

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

Chain of CustodyClient:

Town of Plymouth - Department of Marine and Environmental Affairs
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)

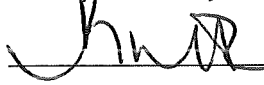
WW-181443

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
7/11/18	1305	S-8A 24455	1	1 Liter Plastic	Dissolved TKN, TOC diss low, TDS, NO2, NO3	NONE
			1	1 Liter Plastic	TKN, TN, NH3, TP, TOC low	H2SO4
			1	Glass	Ortho	NONE
			1	100mL Plastic	Bacteria e-coli	NONE
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE
			1	1 Liter Plastic	Dissolved TKN, TOC diss low, TDS, NO2, NO3	NONE
			1	1 Liter Plastic	TKN, TN, NH3, TP, TOC low	H2SO4
			1	Glass	Ortho	NONE
			1	100mL Plastic	Bacteria e-coli	NONE
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE

30

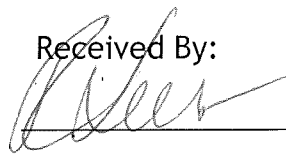
NOTE: Analysis needed for reporting in lowest detection possible; O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Kjeldahl Nitrogen, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen, Bacteria E-coli,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

Relinquished By: Date/Time



Received By:

Date/Time:

 7/11/18 1400

Serial_No:07191817:01

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1826431

Project Number: Not Specified

Report Date: 07/19/18

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): 01-05 Batch: WG1135158-1										
Chlorophyll A	ND		mg/m3	2.00	NA	1	07/12/18 21:45	07/15/18 14:15	121,10200H	AG





ANALYTICAL REPORT

Lab Number:	L1826431
Client:	Envirotech Laboratories, Inc. 8 Jan Sebastian Drive Unit 12 Sandwich, MA 02563
ATTN:	Ron Saari
Phone:	(800) 339-6460
Project Name:	PLYMOUTH ENVIRONMENTAL MGMT
Project Number:	Not Specified
Report Date:	07/19/18

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), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Serial_No:07191817:01

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1826431
Report Date: 07/19/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1826431-01	WW-181439	WATER	Not Specified	07/11/18 10:40	07/12/18
L1826431-02	WW-181440	WATER	Not Specified	07/11/18 10:50	07/12/18
L1826431-03	WW-181441	WATER	Not Specified	07/11/18 12:45	07/12/18
L1826431-04	WW-181442	WATER	Not Specified	07/11/18 12:55	07/12/18
L1826431-05	WW-181443	WATER	Not Specified	07/11/18 13:05	07/12/18

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1826431
Report Date: 07/19/18

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 NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. 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. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. 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. All specific QC 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. 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 (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar 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. Air canisters will be disposed after 3 business days from the date the project is completed.

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

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1826431
Report Date: 07/19/18

Case Narrative (continued)

Chlorophyll A

L1826431-01 through -05 were analyzed with the method required holding time exceeded.

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:  Cristin Walker

Title: Technical Director/Representative

Date: 07/19/18

INORGANICS & MISCELLANEOUS

Serial_No:07191817:01

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1826431
Report Date: 07/19/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1135158-2 QC Sample: L1826431-05 Client ID: WW-181443						
Chlorophyll A	3.03	3.39	mg/m3	11		



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Serial_No:07191817:01
Lab Number: L1826431
Report Date: 07/19/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1826431-01A	Brown Plastic 1000ml unpreserved	A	N/A	N/A	3.6	Y	Absent		CHLORO-A(1)
L1826431-01B	Brown Plastic 1000ml unpreserved	A	N/A	N/A	3.6	Y	Absent		CHLORO-A(1)
L1826431-02A	Brown Plastic 1000ml unpreserved	A	N/A	N/A	3.6	Y	Absent		CHLORO-A(1)
L1826431-02B	Brown Plastic 1000ml unpreserved	A	N/A	N/A	3.6	Y	Absent		CHLORO-A(1)
L1826431-03A	Brown Plastic 1000ml unpreserved	A	N/A	N/A	3.6	Y	Absent		CHLORO-A(1)
L1826431-03B	Brown Plastic 1000ml unpreserved	A	N/A	N/A	3.6	Y	Absent		CHLORO-A(1)
L1826431-04A	Brown Plastic 1000ml unpreserved	A	N/A	N/A	3.6	Y	Absent		CHLORO-A(1)
L1826431-04B	Brown Plastic 1000ml unpreserved	A	N/A	N/A	3.6	Y	Absent		CHLORO-A(1)
L1826431-05A	Brown Plastic 1000ml unpreserved	A	N/A	N/A	3.6	Y	Absent		CHLORO-A(1)
L1826431-05B	Brown Plastic 1000ml unpreserved	A	N/A	N/A	3.6	Y	Absent		CHLORO-A(1)

*Values in parentheses indicate holding time in days



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1826431
Report Date: 07/19/18

GLOSSARY

Acronyms

EDL	- Estimated 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 EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
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.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
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.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

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.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: Data Usability Report



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1826431
Report Date: 07/19/18

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 ten times (10x) 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. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- 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 lower value for the two columns 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.
- 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.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1826431
Report Date: 07/19/18

REFERENCES

- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF.
Standard Methods Online.

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.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO₃-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B
EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.
Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH₃-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO₃-F, EPA 353.2: Nitrate-N, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO₄-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: 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
EPA 625: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.
Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

L1826431

Page 18 of 18

LABORATORY REPORT

Envirotech Laboratories, Inc.
Attn: Mr. Ron Saari
8 Jan Sebastian Drive
Unit 12
Sandwich, MA 02563

Date Received: 7/16/2018
Date Reported: 7/23/2018
P.O. Number

Work Order #: 1807-15000

Project Name: PLYMOUTH ENV.

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable, indication of sample analysis at our Hudson, MA laboratory and/or subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:



Dawne E. Smart
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):

Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508, ME RI00015, NH 2070, NY 11726

Hudson MA * M-MA1117. RI LAO00319

131 Coolidge Street, Suite 105, Hudson, MA 01749
P: 978-568-0041 F: 978-568-0078

41 Illinois Avenue, Warwick, RI 02888
P: 401-737-8500 F: 401-738-1970

15 Lark Industrial Drive, Smithfield, RI 02828
P: 401-737-8500 F: 401-349-0844

www.rianalytical.com

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1807-15000

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-181439 S-10
Sample Type : GRAB
Sample Date / Time : 7/11/2018 @ 10:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.11	0.02	mg/l	SM4500NH3-B,H 18-21ed	7/18/2018 20:30	LAA

Sample Number: 002
Sample Description: WW-181440 S-7
Sample Type : GRAB
Sample Date / Time : 7/11/2018 @ 10:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.056	0.02	mg/l	SM4500NH3-B,H 18-21ed	7/18/2018 20:30	LAA

Sample Number: 003
Sample Description: WW-181441 S-10 AT 2-4 HST
Sample Type : GRAB
Sample Date / Time : 7/11/2018 @ 12:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.041	0.02	mg/l	SM4500NH3-B,H 18-21ed	7/18/2018 20:30	LAA

Sample Number: 004
Sample Description: WW-181442 S-7 AT 2-4 HST
Sample Type : GRAB
Sample Date / Time : 7/11/2018 @ 12:55

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.042	0.02	mg/l	SM4500NH3-B,H 18-21ed	7/18/2018 20:30	LAA

R.I. Analytical Laboratories, Inc.**Laboratory Report**

Envirotech Laboratories, Inc.

Work Order #: 1807-15000

Project Name: PLYMOUTH ENV.

Sample Number: 005
Sample Description: WW-181443 S-8A AT 2-4 HST
Sample Type : GRAB
Sample Date / Time : 7/11/2018 @ 13:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.055	0.02	mg/l	SM4500NH3-B,H 18-21ed	7/18/2018 20:30	LAA

CHAIN OF CUSTODY FORM

ENVIROTECH LABS, INC.

R! Analytical

8 Jan Sebastian Dr., Unit 12

MR1015

PWS:

Project Name:

Plymouth Env.

Sandwich, MA 02563

Address

41 Illinois Avenue

(508) 888-6460

Warwick PI 03888

Sampler:

3

1-800-339-6460

Phone# 401-737-8500

FAX (508) 888-6446

401-738-1970

Lab ID #	Date	Time	Comp	Grab	Station location	Container	Pres.	Sample type	Analysis requested
WW-181439	07/11/18	1040		X	S-10	P	H ₂ SO ₄	Harbor	Ammonia-N (0.02 mdl)
WW-181440	07/11/18	1050		X	S-7	P	H ₂ SO ₄	Harbor	Ammonia-N (0.02 mdl)
WW-181441	07/11/18	1245		X	S-10 at 2-4 HST	P	H ₂ SO ₄	Harbor	Ammonia-N (0.02 mdl)
WW-181442	07/11/18	1255		X	S-7 at 2-4 HST	P	H ₂ SO ₄	Harbor	Ammonia-N (0.02 mdl)
WW-181443	07/11/18	1305		X	S-8A at 2-4 HST	P	H ₂ SO ₄	Harbor	Ammonia-N (0.02 mdl)

510

Ammonia-N low level 0.02 mg/L
Total TOC low level 0.5 mg/L
dissolved TOC low level 0.5 mg/L

**TOC dissolved samples are filtered
Contact lab with any exceeded MCL**

4.0.3
1807-15000

Date: 07/18/18

807211 - 807221

[illegible]

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, September 13, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

Project Name: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-181708

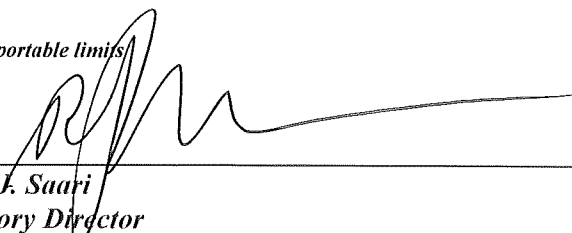
Date Received: 08/08/18

Sample Type	Sample Time	Sample Date	Comments			
S-10 A	09:25	08/08/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N/Nitrite-N	mg/L	BRL	0.01	08/08/18	MC	SM 4500-NO3 E
Total Dissolved Solids	mg/L	34,000	6.0	08/23/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	3.36	0.5	08/17/18	NEC*	SM 5310 C
Ammonia-N *	mg/L	0.11*	0.02	08/21/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.52	0.2	08/23/18	KB	SM4500-Norg B-C
Total Phosphorous (P)	mg/L	0.022	0.005	08/13/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.37	0.20	08/23/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.67	0.50	08/17/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.11	NA	09/07/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.26	NA	09/07/18	MC	Calculation
Chlorophyll-a	*	2.44*	*	08/12/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.017	0.005	08/09/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	1.69	NA	09/13/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.15	NA	09/13/18	RIA*	Calculation
Total Dissolved Nitrogen	mg/L	0.37	NA	09/07/18	MC	Calculation
E coli	CFU/100mL	<5	<1	08/08/18	MC	EPA 1603

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

Thursday, September 13, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

Project Name: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-181709

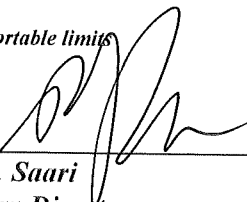
Date Received: 08/08/18

Sample Type	Sample Time	Sample Date	Comments			
S-7 A	09:35	08/08/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N/Nitrite-N	mg/L	BRL	0.01	08/08/18	MC	SM 4500-NO3 E
Total Dissolved Solids	mg/L	34,300	6.0	08/23/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	2.40	0.5	08/17/18	NEC*	SM 5310 C
Ammonia-N *	mg/L	0.07	0.02	08/21/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.23	0.2	08/23/18	KB	SM4500-Norg B-C
Total Phosphorous (P)	mg/L	0.037	0.005	08/13/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.20	08/23/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.50	0.50	08/17/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.07	NA	09/07/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.14	NA	09/07/18	MC	Calculation
Chlorophyll-a	*	ND*	*	08/12/18	ALPHA*	*
Ortho Phosphorous (P)	mg/L	0.027	0.005	08/09/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.9	NA	09/13/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.02	NA	09/13/18	RIA*	Calculation
Total Dissolved Nitrogen	mg/L	0.21	NA	09/07/18	MC	Calculation
E coli	CFU/100mL	75	<1	08/08/18	MC	EPA 1603

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

Thursday, September 13, 2018

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

ProjectName: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

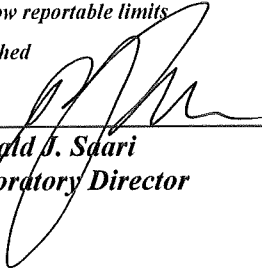
Lab Order Number: WW-181710

Date Received: 08/08/18

Sample Type	Sample Time	Sample Date	Comments			
S-10 HST A	11:35	08/08/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N/Nitrite-N	mg/L	BRL	0.01	08/08/18	MC	SM 4500-NO3 E
Total Dissolved Solids	mg/L	34,100	6.0	08/23/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	2.18	0.5	08/17/18	NEC*	SM 5310 C
Ammonia-N *	mg/L	0.04	0.02	08/21/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	08/17/18	KB	SM4500-Norg B-C
Total Phosphorous (P)	mg/L	0.037	0.005	08/13/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	08/17/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.55	0.50	08/17/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.04	NA	09/07/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.16	NA	09/07/18	MC	Calculation
Chlorophyll-a	*	2.51*	*	08/12/18	ALPHA*	*
Ortho Phosphorous (P)	mg/L	0.022	0.005	08/09/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.63	NA	09/13/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	09/13/18	RIA*	Calculation
Total Dissolved Nitrogen	mg/L	<0.20	NA	09/07/18	MC	Calculation
E coli	CFU/100mL	<5	<1	08/08/18	MC	EPA 1603

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*

Thursday, September 13, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: *Harbor Sampling*

Comments:

Project Number:

Sampled By: *Kim Tower*

Lab Order Number: *WW-181711*

Date Received: *08/08/18*

Sample Type		Sample Time	Sample Date	Comments		
S-7 HST	A	11:45	08/08/18			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N/Nitrite-N	mg/L	BRL	0.01	08/08/18	MC	SM 4500-NO3 E
Total Dissolved Solids	mg/L	34,200	6.0	08/23/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	1.84	0.5	08/17/18	NEC*	SM 5310 C
Ammonia-N *	mg/L	0.07	0.02	08/21/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	08/24/18	KB	SM4500-Norg B-C
Total Phosphorous (P)	mg/L	0.042	0.005	08/13/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	08/24/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	2.13	0.50	08/17/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.07	NA	09/07/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.16	NA	09/07/18	MC	Calculation
Chlorophyll-a	*	4.05*	*	08/12/18	ALPHA*	*
Ortho Phosphorous (P)	mg/L	0.022	0.005	08/09/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	ND	NA	09/13/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	09/13/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	<0.20	NA	09/07/18	MC	Calculation
E coli	CFU/100mL	65	<1	08/08/18	MC	EPA 1603

BRL=below reportable limits

**see attached*

By:

Ronald J. Sapri
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

Thursday, September 13, 2018

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

ProjectName: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

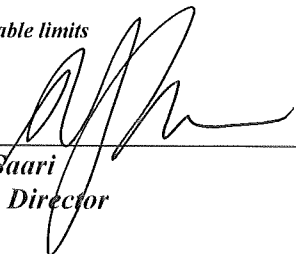
Lab Order Number: WW-181712

Date Received: 08/08/18

Sample Type	Sample Time	Sample Date	Comments			
S-8A HST A	11:55	08/08/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N/Nitrite-N	mg/L	BRL	0.01	08/08/18	MC	SM 4500-NO3 E
Total Dissolved Solids	mg/L	33,500	6.0	08/23/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	2.16	0.5	08/17/18	NEC*	SM 5310 C
Ammonia-N *	mg/L	0.11	0.02	08/21/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.75	0.2	08/24/18	KB	SM4500-Norg B-C
Total Phosphorous (P)	mg/L	0.035	0.005	08/13/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.74	0.20	08/24/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.09	0.50	08/17/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.11	NA	09/07/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.63	NA	09/07/18	MC	Calculation
Chlorophyll-a	*	2.74*	*	08/12/18	ALPHA*	*
Ortho Phosphorous (P)	mg/L	0.024	0.005	08/08/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	1.07	NA	09/13/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.01	NA	09/13/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.74	NA	09/07/18	MC	Calculation
E coli	CFU/100mL	170	<1	08/08/18	MC	EPA 1603

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

LABORATORY REPORT

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

Date Received: 8/16/2018
Date Reported: 8/23/2018
P.O. Number

Work Order #: 1808-17601

Project Name: PLYMOUTH ENV.

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable, indication of sample analysis at our Hudson, MA laboratory and/or subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:



Dawne E. Smart
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):

Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508, ME RI00015, NH 2070, NY 11726

Hudson MA * M-MA1117, RI LAO00319

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1808-17601

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-181708 S-10
Sample Type : GRAB
Sample Date / Time : 8/08/2018 @ 09:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.11	0.02	mg/l	SM4500NH3-B,H 18-21ed	8/21/2018 20:30	LAA

Sample Number: 002
Sample Description: WW-181709 S-7
Sample Type : GRAB
Sample Date / Time : 8/08/2018 @ 09:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.07	0.02	mg/l	SM4500NH3-B,H 18-21ed	8/21/2018 20:30	LAA

Sample Number: 003
Sample Description: WW-181710 S-10 HST
Sample Type : GRAB
Sample Date / Time : 8/08/2018 @ 11:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.04	0.02	mg/l	SM4500NH3-B,H 18-21ed	8/21/2018 20:30	LAA

Sample Number: 004
Sample Description: WW-181711 S-7 HST
Sample Type : GRAB
Sample Date / Time : 8/08/2018 @ 11:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.07	0.02	mg/l	SM4500NH3-B,H 18-21ed	8/21/2018 20:30	LAA

R.I. Analytical Laboratories, Inc.**Laboratory Report**

Envirotech Laboratories, Inc.

Work Order #: 1808-17601

Project Name: PLYMOUTH ENV.

Sample Number: 005
Sample Description: WW-181712 S-8A HST
Sample Type : GRAB
Sample Date / Time : 8/08/2018 @ 11:55

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.06	0.02	mg/l	SM4500NH3-B,H 18-21ed	8/21/2018 20:30	LAA

10941-8081



ANALYTICAL REPORT

Lab Number: L1831010

Client: Envirotech Laboratories, Inc.
8 Jan Sebastian Drive
Unit 12
Sandwich, MA 02563

ATTN: Ron Saari

Phone: (800) 339-6460

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Project Number: Not Specified

Report Date: 08/19/18

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), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Serial_No:08191819:10

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1831010
Report Date: 08/19/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1831010-01	WW-181708	WATER	S-10	08/08/18 09:25	08/09/18
L1831010-02	WW-181709	WATER	S-7	08/08/18 09:35	08/09/18
L1831010-03	WW-181710	WATER	S-10 HST	08/08/18 11:35	08/09/18
L1831010-04	WW-181711	WATER	S-7 HST	08/08/18 11:45	08/09/18
L1831010-05	WW-181712	WATER	S-8A HST	08/08/18 11:55	08/09/18

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1831010
Report Date: 08/19/18

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 NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. 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. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. 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. All specific QC 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. 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 (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar 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. Air canisters will be disposed after 3 business days from the date the project is completed.

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

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

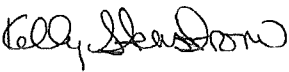
Lab Number: L1831010
Report Date: 08/19/18

Case Narrative (continued)

Chlorophyll A

L1831010-01 through -05 were filtered with the method required holding time exceeded.

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: 08/19/18

INORGANICS & MISCELLANEOUS

Serial_No:08191819:10

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1831010
Report Date: 08/19/18

SAMPLE RESULTS

Lab ID: L1831010-01
Client ID: WW-181708
Sample Location: S-10

Date Collected: 08/08/18 09:25
Date Received: 08/09/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	2.44		mg/m3	2.00	NA	1	08/09/18 20:25	08/12/18 17:00	121,10200H	AG



Serial_No:08191819:10

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1831010

Project Number: Not Specified

Report Date: 08/19/18

SAMPLE RESULTS

Lab ID: L1831010-02

Date Collected: 08/08/18 09:35

Client ID: WW-181709

Date Received: 08/09/18

Sample Location: S-7

Field Prep: Not Specified

Sample Depth:

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	08/09/18 20:25	08/12/18 17:00	121,10200H	AG



Serial_No:08191819:10

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1831010

Project Number: Not Specified

Report Date: 08/19/18

SAMPLE RESULTS

Lab ID: L1831010-03

Date Collected: 08/08/18 11:35

Client ID: WW-181710

Date Received: 08/09/18

Sample Location: S-10 HST

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	2.51		mg/m3	2.00	NA	1	08/09/18 20:25	08/12/18 17:00	121,10200H	AG



Serial_No:08191819:10

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1831010
Report Date: 08/19/18

SAMPLE RESULTS

Lab ID: L1831010-04
Client ID: WW-181711
Sample Location: S-7 HST

Date Collected: 08/08/18 11:45
Date Received: 08/09/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	4.05		mg/m3	2.00	NA	1	08/09/18 20:25	08/12/18 17:00	121,10200H	AG



Serial_No:08191819:10

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1831010
Report Date: 08/19/18

SAMPLE RESULTS

Lab ID: L1831010-05
Client ID: WW-181712
Sample Location: S-8A HST

Date Collected: 08/08/18 11:55
Date Received: 08/09/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	2.74		mg/m3	2.00	NA	1	08/09/18 20:25	08/12/18 17:00	121,10200H	AG



Serial_No:08191819:10

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1831010

Project Number: Not Specified

Report Date: 08/19/18

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): 01-05 Batch: WG1144869-1										
Chlorophyll A	ND		mg/m3	2.00	NA	1	08/09/18 20:25	08/12/18 17:00	121,10200H	AG



Serial_No:08191819:10

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1831010
Report Date: 08/19/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05	QC Batch ID: WG1144869-2	QC Sample: L1831122-02	Client ID: DUP Sample			
Chlorophyll A	3.73	3.70	mg/m3	1		

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Serial_No: 08191819:10
Lab Number: L1831010
Report Date: 08/19/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1831010-01A	Brown Plastic 1000ml unpreserved	A	NA		3.9	Y	Absent		CHLORO-A(1)
L1831010-01B	Brown Plastic 1000ml unpreserved	A	NA		3.9	Y	Absent		CHLORO-A(1)
L1831010-02A	Brown Plastic 1000ml unpreserved	A	NA		3.9	Y	Absent		CHLORO-A(1)
L1831010-02B	Brown Plastic 1000ml unpreserved	A	NA		3.9	Y	Absent		CHLORO-A(1)
L1831010-03A	Brown Plastic 1000ml unpreserved	A	NA		3.9	Y	Absent		CHLORO-A(1)
L1831010-03B	Brown Plastic 1000ml unpreserved	A	NA		3.9	Y	Absent		CHLORO-A(1)
L1831010-04A	Brown Plastic 1000ml unpreserved	A	NA		3.9	Y	Absent		CHLORO-A(1)
L1831010-04B	Brown Plastic 1000ml unpreserved	A	NA		3.9	Y	Absent		CHLORO-A(1)
L1831010-05A	Brown Plastic 1000ml unpreserved	A	NA		3.9	Y	Absent		CHLORO-A(1)
L1831010-05B	Brown Plastic 1000ml unpreserved	A	NA		3.9	Y	Absent		CHLORO-A(1)

Serial No. 0019
L183T010

Page 18 of 18

Date: 08/17/18

808331 - 808341

[illegible]

me

Chain of Custody

Laboratory:

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

Client:

Town of Plymouth - Department of Marine and Environmental Affairs
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us
Project Name: Harbor Sampling -Plymouth MA
Sampler: Kim Tower (KT)

WW-181708

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
8/8/18	0925	S-10	1	1 Liter Plastic	Dissolved TKN, TOC diss low, TDS, NO2, NO3	NONE
			1	1 Liter Plastic	TKN, TN, NH3, TP, TOC low	H2SO4
			1	Glass	Ortho	NONE
			1	100mL Plastic	Bacteria e-coli	NONE
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE
8/8/18	0935	S-7	1	1 Liter Plastic	Dissolved TKN, TOC diss low, TDS, NO2, NO3	NONE
			1	1 Liter Plastic	TKN, TN, NH3, TP, TOC low	H2SO4
			1	Glass	Ortho	NONE
			1	100mL Plastic	Bacteria e-coli	NONE
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE

WW-181709

CS

FS

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, Bacteria E-coli, Chlorophyll-a

Relinquished By: Date/Time

KT 8/8/18 1510

Received By: Date/Time:

[Signature]

**Laboratory:**

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

Chain of Custody**Client:**

Town of Plymouth - Department of Marine and Environmental Affairs
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us
Project Name: **Harbor Sampling** -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
8/8/18	1135	S-10 HST	1	1 Liter Plastic	Dissolved TKN, TOC diss low, TDS, NO2, NO3	NONE
			1	1 Liter Plastic	TKN, TN, NH3, TP, TOC low	H2SO4
			1	Glass	Ortho	NONE
			1	100mL Plastic	Bacteria e-coli	NONE
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE
8/8/18	1145	S-7 HST	1	1 Liter Plastic	Dissolved TKN, TOC diss low, TDS, NO2, NO3	NONE
			1	1 Liter Plastic	TKN, TN, NH3, TP, TOC low	H2SO4
			1	Glass	Ortho	NONE
			1	100mL Plastic	Bacteria e-coli	NONE
			2	1 Liter Amber Plastic	Chlorophyll-a	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, Bacteria E-coli, Chlorophyll-a

Relinquished By: Date/Time

8/8/18 1520

Received By:

Date/Time:

mc

Chain of Custody

Laboratory:

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

Client:

Town of Plymouth - Department of Marine and Environmental Affairs
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us
Project Name: **Harbor Sampling -Plymouth MA**
Sampler: Kim Tower (KT)

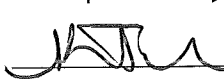
WW-181712

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
8/8/18	1155	S-8A HST	1	1 Liter Plastic	Dissolved TKN, TOC diss low, TDS, NO2, NO3	NONE
			1	1 Liter Plastic	TKN, TN, NH3, TP, TOC low	H2SO4
			1	Glass	Ortho	NONE
			1	100mL Plastic	Bacteria e-coli	NONE
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE
			1	1 Liter Plastic	Dissolved TKN, TOC diss low, TDS, NO2, NO3	NONE
			1	1 Liter Plastic	TKN, TN, NH3, TP, TOC low	H2SO4
			1	Glass	Ortho	NONE
			1	100mL Plastic	Bacteria e-coli	NONE
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE

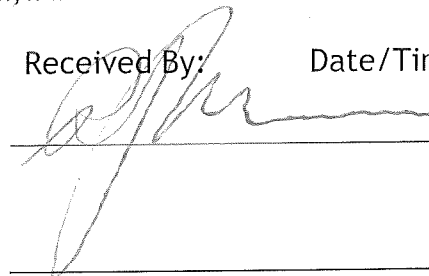
170

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, Bacteria E-coli, Chlorophyll-a

Relinquished By: Date/Time

 8/18/18 1510

Received By: Date/Time:



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MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive
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FAX (508)888-6446

Friday, October 12, 2018

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

ProjectName: S-10 2-4 HST
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-182006
Date Received: 09/10/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-10 A	12:50	09-10-18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N/Nitrite-N	mg/L	0.06	0.01	09/11/18	MC	SM 4500-NO3 E
Total Organic Carbon*	mg/L	3.40	0.5	09/14/18	NEC*	SM 5310 C
Ammonia-N *	mg/L	0.12*	0.02	09/19/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.54	0.2	09/15/18	KB	SM4500-Norg B-C
Phosphorous (P)	mg/L	0.029	0.005	09/15/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.37	0.20	09/15/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	2.29	0.50	09/14/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.18	NA	10/11/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.25	NA	10/11/18	MC	Calculation
Chlorophyll-a	*	4.41*	*	09/10/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.017	0.005	09/11/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	1.11	NA	10/11/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.17	NA	10/11/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.43	NA	10/11/18	MC	Calculation
E coli	CFU/100mL	<5	<1	09/10/18	MC	EPA 1603

$$TN = DON(0.25) + PON(0.17) + NH_3(0.12) + NO_2/NO_3(0.06) = 0.60$$

BRL=below reportable limits

*see attached

By:

Ronald J. Saari
Laboratory Director

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1835767

Project Number: Not Specified

Report Date: 09/19/18

SAMPLE RESULTS

Lab ID: L1835767-01

Date Collected: 09/10/18 12:50

Client ID: WW-182006

Date Received: 09/10/18

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	4.41		mg/m3	2.00	NA	1	09/10/18 23:40	09/13/18 12:25	121,10200H	AG



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Friday, October 12, 2018

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

ProjectName: S-7 2-4 HST
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-182007
Date Received: 09/10/18

Comments:

Sample Type		Sample Time	Sample Date	Comments		
S-7	A	12:40	09/10/18			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N/Nitrite-N	mg/L	0.08	0.01	09/11/18	MC	SM 4500-NO3 E
Total Organic Carbon*	mg/L	2.74	0.5	09/14/18	NEC*	SM 5310 C
Ammonia-N *	mg/L	0.05*	0.02	09/19/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.22	0.2	09/15/18	KB	SM4500-Norg B-C
Phosphorous (P)	mg/L	0.028	0.005	09/15/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.20	09/15/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.27	0.50	09/14/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.13	NA	10/11/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.16	NA	10/11/18	MC	Calculation
Chlorophyll-a	*	4.63*	*	09/13/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.016	0.005	09/11/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	1.47	NA	10/11/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.01	NA	10/11/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.29	NA	10/11/18	MC	Calculation
E coli	CFU/100mL	<5	<1	09/10/18	MC	EPA 1603

$$TN = DON(0.16) + PON(0.01) + NH_3(0.05) + NO_2/NO_3(0.06) = 0.28$$

BRL=below reportable limits

*see attached

By:

Ronald J. Saari
Laboratory Director

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1835767
Report Date: 09/19/18

SAMPLE RESULTS

Lab ID: L1835767-02
Client ID: WW-182007
Sample Location: Not Specified

Date Collected: 09/10/18 12:40
Date Received: 09/10/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	4.63		mg/m3	2.00	NA	1	09/10/18 23:40	09/13/18 12:25	121,10200H	AG



ENVIROTECH LABORATORIES, INC.

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Friday, October 12, 2018

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

ProjectName: S-8A 2-4 HST
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-182008
Date Received: 09/10/18

Comments:

Sample Type		Sample Time	Sample Date	Comments			
S-8A	A	12:30	09/10/18				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N/Nitrite-N		mg/L	0.03	0.01	09/11/18	MC	SM 4500-NO3 E
Total Organic Carbon*		mg/L	2.48	0.5	09/14/18	NEC*	SM 5310 C
Ammonia-N *		mg/L	0.07*	0.02	09/19/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen		mg/L	0.40	0.2	09/15/18	KB	SM4500-Norg B-C
Phosphorous (P)		mg/L	0.028	0.005	09/15/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	0.36	0.20	09/15/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	1.93	0.50	09/14/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.10	NA	10/11/18	MC	Calculation
Dissolved Organic Nitrogen		mg/L	0.29	NA	10/11/18	MC	Calculation
Chlorophyll-a		*	5.53*	*	09/13/18	Alpha*	*
Ortho Phosphorous (P)		mg/L	0.015	0.005	09/11/18	MC	SM 4500-P
Particulate Organic Carbon		mg/L	0.55	NA	10/11/18	NEC*	SM 5310 C
Particulate Organic Nitrogen		mg/L	0.04	NA	10/11/18	KB	Calculation
Total Dissolved Nitrogen		mg/L	0.39	NA	10/11/18	MC	Calculation
E coli		CFU/100mL	<5	<1	09/10/18	MC	EPA 1603

$$TN = DON(0.29) + PON(0.04) + NH_3(0.07) + NO_2/NO_3(0.03) = 0.43$$

BRL=below reportable limits

*see attached

By:

Ronald J. Saari
Laboratory Director

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1835767
Report Date: 09/19/18

SAMPLE RESULTS

Lab ID: L1835767-03
Client ID: WW-182008
Sample Location: Not Specified

Date Collected: 09/10/18 12:30
Date Received: 09/10/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	5.53		mg/m3	2.00	NA	1	09/10/18 23:40	09/13/18 12:25	121,10200H	AG



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Sunday, May 20, 2018

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

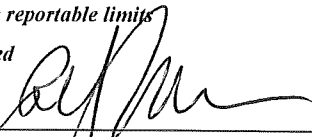
Project Name: Eel River SW
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-180750
Date Received: 04/30/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-8B A	09:00	04/30/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Specific Conductance	uhoms/cm	BRL	10	04/30/18	LL	EPA 120.1
Total Organic Carbon*	mg/L	0.254*	*	05/04/18	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	05/07/18	KB	EPA 200.7
Nitrate-N	mg/L	BRL	0.01	04/30/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/30/18	LL	EPA 300.0
Ammonia-N *	mg/L	0.090*	0.02	05/07/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	05/11/18	KB	SM4500-Norg B-C
pH grab	pH units	6.28	NA	04/30/18	LL	SM 4500 H-B
Turbidity	NTU	BRL	1.0	04/30/18	LL	SM 2130 B
Chloride	mg/L	BRL	3.0	04/30/18	LL	EPA 300.0
Total Phosphorous (P)	mg/L	BRL	0.005	05/09/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	05/11/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.252*	*	05/04/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	<0.10	NA	05/17/18	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.11	NA	05/17/18	KB	Calculation
Chlorophyll-a	*	ND*	*	05/02/18	ALPHA*	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	04/30/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	ND	NA	05/17/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	05/17/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	<0.21	NA	05/17/18	KB	Calculation
E coli	CFU/100mL	<5	<1	04/30/18	MC	EPA 1603

BRL=below reportable limits

*see attached

By: 
 Ronald J. Sahri
 Laboratory Director

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1815338

Project Number: Not Specified

Report Date: 05/08/18

SAMPLE RESULTS

Lab ID: L1815338-01

Date Collected: 04/30/18 09:00

Client ID: WW-180750

Date Received: 05/01/18

Sample Location: S-8B

Field Prep: Not Specified

Sample Depth:

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	05/01/18 22:56	05/02/18 12:55	121,10200H	AG



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MA CERT. NO.: M-MA 063

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Sunday, May 20, 2018

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

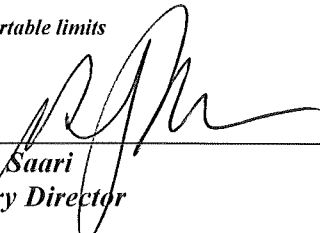
ProjectName: Eel River SW
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-180751
Date Received: 04/30/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-5B A	09:50	04/30/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Nitrogen	mg/L	0.76	NA	05/17/18	KB	Calculation
Total Dissolved Solids	mg/L	140	6.0	05/11/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	226	10	04/30/18	LL	EPA 120.1
Total Organic Carbon*	mg/L	2.87*	*	05/04/18	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	05/07/18	KB	EPA 200.7
Nitrate-N	mg/L	0.20	0.01	04/30/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/30/18	LL	EPA 300.0
Ammonia-N *	mg/L	0.092*	0.02	05/07/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.56	0.2	05/11/18	KB	SM4500-Norg B-C
pH grab	pH units	6.83	NA	04/30/18	LL	SM 4500 H-B
Turbidity	NTU	2.5	1.0	04/30/18	LL	SM 2130 B
Chloride	mg/L	67	3.0	04/30/18	LL	EPA 300.0
Total Phosphorous (P)	mg/L	0.010	0.005	05/09/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.34	0.20	05/11/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	2.67*	*	05/04/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	0.29	NA	05/17/18	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.25	NA	05/17/18	KB	Calculation
Chlorophyll-a	*	19*	*	05/02/18	ALPHA*	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	04/30/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.20	NA	05/17/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.22	NA	05/17/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.54	NA	05/17/18	KB	Calculation
E coli	CFU/100mL	85	<1	04/30/18	MC	EPA 1603

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1815338
Report Date: 05/08/18

SAMPLE RESULTS

Lab ID: L1815338-02
Client ID: WW-180751
Sample Location: S-5B

Date Collected: 04/30/18 09:50
Date Received: 05/01/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	19.0		mg/m3	2.00	NA	1	05/01/18 22:56	05/02/18 12:55	121,10200H	AG



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Monday, May 21, 2018

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

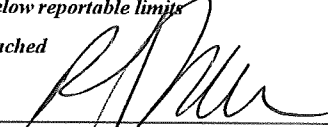
ProjectName: Eel River SW
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-180752
Date Received: 04/30/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-4A A	10:05	04/30/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Nitrogen	mg/L	0.72	NA	05/17/18	KB	Calculation
Total Dissolved Solids	mg/L	82	6.0	05/11/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	128	10	04/30/18	LL	EPA 120.1
Total Organic Carbon*	mg/L	4.73*	*	05/04/18	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	05/07/18	KB	EPA 200.7
Nitrate-N	mg/L	0.10	0.01	04/30/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/30/18	LL	EPA 300.0
Ammonia-N *	mg/L	0.064*	0.02	05/07/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.62	0.2	05/11/18	KB	SM4500-Norg B-C
pH grab	pH units	6.73	NA	04/30/18	LL	SM 4500 H-B
Turbidity	NTU	2.7	1.0	04/30/18	LL	SM 2130 B
Chloride	mg/L	34	3.0	04/30/18	LL	EPA 300.0
Total Phosphorous (P)	mg/L	0.028	0.005	05/09/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.50	0.20	05/11/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	4.56*	*	05/04/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	0.16	NA	05/17/18	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.44	NA	05/11/18	KB	Calculation
Chlorophyll-a	*	5.27*	*	05/02/18	ALPHA*	*
Ortho Phosphorous (P)	mg/L	0.009	0.005	04/30/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.17	NA	05/17/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.12	NA	05/17/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.60	NA	05/17/18	KB	Calculation
E coli	CFU/100mL	30	<1	04/30/18	MC	EPA 1603

BRL=below reportable limits

*see attached

By: 
 Ronald J. Shari
 Laboratory Director

Project Name: PLYMOUTH ENVIRONMENTAL MGMT**Lab Number:** L1815338**Project Number:** Not Specified**Report Date:** 05/08/18**SAMPLE RESULTS**

Lab ID: L1815338-03

Client ID: WW-180752

Sample Location: S-4A

Date Collected: 04/30/18 10:05

Date Received: 05/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	5.27		mg/m3	2.00	NA	1	05/01/18 22:56	05/02/18 12:55	121,10200H	AG



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Sunday, May 20, 2018

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

ProjectName: Eel River SW
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-180753
Date Received: 04/30/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-8A A	10:15	04/30/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Nitrogen	mg/L	0.46	NA	05/17/18	KB	Calculation
Total Dissolved Solids	mg/L	79	6.0	05/11/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	128	10	04/30/18	LL	EPA 120.1
Total Organic Carbon*	mg/L	4.95*	*	05/04/18	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	05/07/18	KB	EPA 200.7
Nitrate-N	mg/L	0.11	0.01	04/30/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/30/18	LL	EPA 300.0
Ammonia-N *	mg/L	0.056*	0.02	05/07/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.35	0.2	05/11/18	KB	SM4500-Norg B-C
pH grab	pH units	6.69	NA	04/30/18	LL	SM 4500 H-B
Turbidity	NTU	1.7	1.0	04/30/18	LL	SM 2130 B
Chloride	mg/L	34	3.0	04/30/18	LL	EPA 300.0
Total Phosphorous (P)	mg/L	0.031	0.005	05/09/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.32	0.20	05/11/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	4.58*	*	05/04/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	0.17	NA	05/17/18	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.26	NA	05/11/18	KB	Calculation
Chlorophyll-a	*	6.57*	*	05/02/18	ALPHA*	*
Ortho Phosphorous (P)	mg/L	0.010	0.005	04/30/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.37	NA	05/17/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.03	NA	05/17/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.43	NA	05/17/18	KB	Calculation
E coli	CFU/100mL	15	<1	04/30/18	MC	EPA 1603

BRL=below reportable limits

*see attached

By: 
Ronald J. Shari
Laboratory Director

Project Name: PLYMOUTH ENVIRONMENTAL MGMT**Lab Number:** L1815338**Project Number:** Not Specified**Report Date:** 05/08/18**SAMPLE RESULTS**

Lab ID: L1815338-04

Date Collected: 04/30/18 10:15

Client ID: WW-180753

Date Received: 05/01/18

Sample Location: S-8A

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	6.57		mg/m3	2.00	NA	1	05/01/18 22:56	05/02/18 12:55	121,10200H	AG



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Sunday, May 20, 2018

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

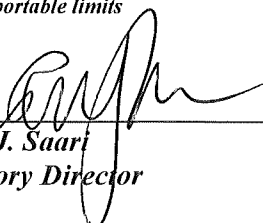
ProjectName: Eel River SW
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-180754
Date Received: 04/30/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-3A A	10:35	04/30/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Nitrogen	mg/L	0.59	NA	05/17/18	KB	Calculation
Total Dissolved Solids	mg/L	73	6.0	05/16/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	122	10	04/30/18	LL	EPA 120.1
Total Organic Carbon*	mg/L	1.70*	*	05/04/18	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	05/07/18	KB	EPA 200.7
Nitrate-N	mg/L	0.22	0.01	04/30/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/30/18	LL	EPA 300.0
Ammonia-N *	mg/L	0.13*	0.02	05/07/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.37	0.2	05/11/18	KB	SM4500-Norg B-C
pH grab	pH units	6.77	NA	04/30/18	LL	SM 4500 H-B
Turbidity	NTU	2.9	1.0	04/30/18	LL	SM 2130 B
Chloride	mg/L	30	3.0	04/30/18	LL	EPA 300.0
Total Phosphorous (P)	mg/L	0.019	0.005	05/09/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	05/11/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.29*	*	05/04/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	0.35	NA	05/17/18	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.07	NA	05/17/18	KB	Calculation
Chlorophyll-a	*	15.6*	*	05/02/18	ALPHA*	*
Ortho Phosphorous (P)	mg/L	0.009	0.005	04/30/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.41	NA	05/17/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.17	NA	05/17/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	<0.42	NA	05/17/18	KB	Calculation
E coli	CFU/100mL	5	<1	04/30/18	MC	EPA 1603

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1815338
Report Date: 05/08/18

SAMPLE RESULTS

Lab ID: L1815338-05
Client ID: WW-180754
Sample Location: S-3A

Date Collected: 04/30/18 10:35
Date Received: 05/01/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	15.6		mg/m3	2.00	NA	1	05/01/18 22:56	05/02/18 12:55	121,10200H	AG



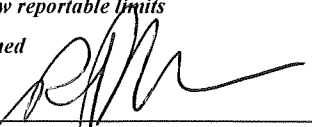
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FAX (508)888-6446**

Sunday, May 20, 2018*Plymouth Environmental Management**K. Towers/ 11 Lincoln St.**Plymouth, MA***ProjectName:** *Eel River SW***Comments:****Project Number:****Sampled By:** *Kim Tower***Lab Order Number:** *WW-180755***Date Received:** *04/30/18*

Sample Type		Sample Time	Sample Date	Comments		
S-2C	A	11:00	04/30/18			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Total Nitrogen		mg/L	0.57	NA	05/17/18	KB Calculation
Total Dissolved Solids		mg/L	64	6.0	05/16/18	KB SM 2540 C
Specific Conductance		uhoms/cm	110	10	04/30/18	LL EPA 120.1
Total Organic Carbon*		mg/L	1.82*	*	05/04/18	NEC* SM 5310 C
Boron		mg/L	BRL	0.010	05/07/18	KB EPA 200.7
Nitrate-N		mg/L	0.11	0.01	04/30/18	LL EPA 300.0
Nitrite-N		mg/L	BRL	0.006	04/30/18	LL EPA 300.0
Ammonia-N *		mg/L	0.057*	0.02	05/07/18	RIA* SM4500 NH3 C
Total Kjeldhal Nitrogen		mg/L	0.46	0.2	05/11/18	KB SM4500-Norg B-C
pH grab		pH units	6.85	NA	04/30/18	LL SM 4500 H-B
Turbidity		NTU	2.2	1.0	04/30/18	LL SM 2130 B
Chloride		mg/L	28	3.0	04/30/18	LL EPA 300.0
Total Phosphorous (P)		mg/L	0.021	0.005	05/09/18	MC SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	0.25	0.20	05/11/18	KB SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	1.37*	*	05/04/18	NEC* SM 5310C
Dissolved Inorganic Nitrogen		mg/L	0.17	NA	05/17/18	KB Calculation
Dissolved Organic Nitrogen		mg/L	0.19	NA	05/17/18	KB Calculation
Chlorophyll-a		*	21.6*	*	05/02/18	ALPHA* *
Ortho Phosphorous (P)		mg/L	0.006	0.005	04/30/18	MC SM 4500-P
Particulate Organic Carbon		mg/L	0.45	NA	05/17/18	NEC* SM 5310 C
Particulate Organic Nitrogen		mg/L	0.21	NA	05/17/18	KB Calculation
Total Dissolved Nitrogen		mg/L	0.36	NA	05/17/18	KB Calculation
E coli		CFU/100mL	<5	<1	04/30/18	MC EPA 1603

BRL=below reportable limits***see attached**

By: 
Ronald J. Shari
Laboratory Director

Serial_No:05081811:11

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1815338

Project Number: Not Specified

Report Date: 05/08/18

SAMPLE RESULTS

Lab ID: L1815338-06

Date Collected: 04/30/18 11:00

Client ID: WW-180755

Date Received: 05/01/18

Sample Location: S-2C

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	21.6		mg/m3	2.00	NA	1	05/01/18 22:56	05/02/18 12:55	121,10200H	AG



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Sunday, May 20, 2018

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

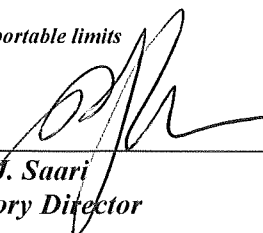
Project Name: Eel River SW
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-180756
Date Received: 04/30/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-6A A	11:20	04/30/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Nitrogen	mg/L	0.52	NA	05/17/18	KB	Calculation
Total Dissolved Solids	mg/L	52	6.0	05/16/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	89	10	04/30/18	LL	EPA 120.1
Total Organic Carbon*	mg/L	1.58*	*	05/04/18	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	05/07/18	KB	EPA 200.7
Nitrate-N	mg/L	0.27	0.01	04/30/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/30/18	LL	EPA 300.0
Ammonia-N *	mg/L	0.043*	0.02	05/07/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.25	0.2	05/14/18	KB	SM4500-Norg B-C
pH grab	pH units	6.46	NA	04/30/18	LL	SM 4500 H-B
Turbidity	NTU	1.1	1.0	04/30/18	LL	SM 2130 B
Chloride	mg/L	22	3.0	04/30/18	LL	EPA 300.0
Total Phosphorous (P)	mg/L	0.016	0.005	05/09/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.25	0.20	05/14/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.27*	*	05/04/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	0.31	NA	05/17/18	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.21	NA	05/17/18	KB	Calculation
Chlorophyll-a	*	2.75*	*	05/02/18	ALPHA*	*
Ortho Phosphorous (P)	mg/L	0.009	0.005	04/30/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.31	NA	05/17/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	05/17/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.52	NA	05/17/18	KB	Calculation
E coli	CFU/100mL	5	<1	04/30/18	MC	EPA 1603

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1815338
Report Date: 05/08/18

SAMPLE RESULTS

Lab ID: L1815338-07
 Client ID: WW-180756
 Sample Location: S-6A

Date Collected: 04/30/18 11:20
 Date Received: 05/01/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	2.75		mg/m3	2.00	NA	1	05/01/18 22:56	05/02/18 12:55	121,10200H	AG



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Sunday, May 20, 2018

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 K.Towers/ 11 Lincoln St.
 Plymouth, MA

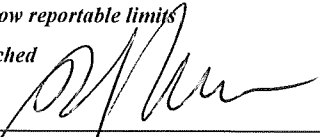
ProjectName: Eel River SW
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-180757
Date Received: 04/30/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-12 A	11:40	04/30/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Nitrogen	mg/L	0.57	NA	05/17/18	KB	Calculation
Total Dissolved Solids	mg/L	48	6.0	05/16/18	KB	SM 2540 C
Specific Conductance	uhoms/cm	83	10	04/30/18	LL	EPA 120.1
Total Organic Carbon*	mg/L	1.84*	*	05/04/18	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	05/07/18	KB	EPA 200.7
Nitrate-N	mg/L	0.26	0.01	04/30/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/30/18	LL	EPA 300.0
Ammonia-N *	mg/L	0.035*	0.02	05/07/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.31	0.2	05/14/18	KB	SM4500-Norg B-C
pH grab	pH units	6.48	NA	04/30/18	LL	SM 4500 H-B
Turbidity	NTU	1.2	1.0	04/30/18	LL	SM 2130 B
Chloride	mg/L	21	3.0	04/30/18	LL	EPA 300.0
Total Phosphorous (P)	mg/L	0.014	0.005	05/09/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.26	0.20	05/14/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.55*	*	05/04/18	NEC*	SM 5310C
Dissolved Inorganic Nitrogen	mg/L	0.30	NA	05/17/18	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.23	NA	05/17/18	KB	Calculation
Chlorophyll-a	*	4.18*	*	05/02/18	ALPHA*	*
Ortho Phosphorous (P)	mg/L	0.006	0.005	04/30/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.29	NA	05/17/18	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.05	NA	05/17/18	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.52	NA	05/17/18	KB	Calculation
E coli	CFU/100mL	<5	<1	04/30/18	MC	EPA 1603

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1815338
Report Date: 05/08/18

SAMPLE RESULTS

Lab ID: L1815338-08
Client ID: WW-180757
Sample Location: S-12

Date Collected: 04/30/18 11:40
Date Received: 05/01/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	4.18		mg/m3	2.00	NA	1	05/01/18 22:56	05/02/18 12:55	121,10200H	AG





ANALYTICAL REPORT

Lab Number:	L1815338
Client:	Envirotech Laboratories, Inc. 8 Jan Sebastian Drive Unit 12 Sandwich, MA 02563
ATTN:	Ron Saari
Phone:	(800) 339-6460
Project Name:	PLYMOUTH ENVIRONMENTAL MGMT
Project Number:	Not Specified
Report Date:	05/08/18

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), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Serial_No:05081811:11

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1815338
Report Date: 05/08/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1815338-01	WW-180750	WATER	S-8B	04/30/18 09:00	05/01/18
L1815338-02	WW-180751	WATER	S-5B	04/30/18 09:50	05/01/18
L1815338-03	WW-180752	WATER	S-4A	04/30/18 10:05	05/01/18
L1815338-04	WW-180753	WATER	S-8A	04/30/18 10:15	05/01/18
L1815338-05	WW-180754	WATER	S-3A	04/30/18 10:35	05/01/18
L1815338-06	WW-180755	WATER	S-2C	04/30/18 11:00	05/01/18
L1815338-07	WW-180756	WATER	S-6A	04/30/18 11:20	05/01/18
L1815338-08	WW-180757	WATER	S-12	04/30/18 11:40	05/01/18

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1815338
Report Date: 05/08/18

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 NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. 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. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. 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. All specific QC 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. 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 (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar 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. Air canisters will be disposed after 3 business days from the date the project is completed.

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

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1815338
Report Date: 05/08/18

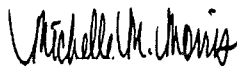
Case Narrative (continued)

Chlorophyll A

L1815338-01 through -08 were analyzed with the method required holding time exceeded.

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:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 05/08/18

INORGANICS & MISCELLANEOUS

Serial_No:05081811:11

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1815338

Project Number: Not Specified

Report Date: 05/08/18

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: WG1111619-1										
Chlorophyll A	ND		mg/m3	2.00	NA	1	05/01/18 22:56	05/02/18 12:55	121,10200H	AG



Serial_No:05081811:11

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1815338
Report Date: 05/08/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1111619-2 QC Sample: L1815338-08 Client ID: WW-180757						
Chlorophyll A	4.18	3.13	mg/m3	29		

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Serial_No:05081811:11
Lab Number: L1815338
Report Date: 05/08/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(**)
L1815338-01A	Brown Plastic 1000ml unpreserved	A	NA		4.6	Y	Absent		CHLORO-A(1)
L1815338-01B	Brown Plastic 1000ml unpreserved	A	NA		4.6	Y	Absent		CHLORO-A(1)
L1815338-02A	Brown Plastic 1000ml unpreserved	A	NA		4.6	Y	Absent		CHLORO-A(1)
L1815338-02B	Brown Plastic 1000ml unpreserved	A	NA		4.6	Y	Absent		CHLORO-A(1)
L1815338-03A	Brown Plastic 1000ml unpreserved	A	NA		4.6	Y	Absent		CHLORO-A(1)
L1815338-03B	Brown Plastic 1000ml unpreserved	A	NA		4.6	Y	Absent		CHLORO-A(1)
L1815338-04A	Brown Plastic 1000ml unpreserved	A	NA		4.6	Y	Absent		CHLORO-A(1)
L1815338-04B	Brown Plastic 1000ml unpreserved	A	NA		4.6	Y	Absent		CHLORO-A(1)
L1815338-05A	Brown Plastic 1000ml unpreserved	A	NA		4.6	Y	Absent		CHLORO-A(1)
L1815338-05B	Brown Plastic 1000ml unpreserved	A	NA		4.6	Y	Absent		CHLORO-A(1)
L1815338-06A	Brown Plastic 1000ml unpreserved	A	NA		4.6	Y	Absent		CHLORO-A(1)
L1815338-06B	Brown Plastic 1000ml unpreserved	A	NA		4.6	Y	Absent		CHLORO-A(1)
L1815338-07A	Brown Plastic 1000ml unpreserved	A	NA		4.6	Y	Absent		CHLORO-A(1)
L1815338-07B	Brown Plastic 1000ml unpreserved	A	NA		4.6	Y	Absent		CHLORO-A(1)
L1815338-08A	Brown Plastic 1000ml unpreserved	A	NA		4.6	Y	Absent		CHLORO-A(1)
L1815338-08B	Brown Plastic 1000ml unpreserved	A	NA		4.6	Y	Absent		CHLORO-A(1)

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1815338

Project Number: Not Specified

Report Date: 05/08/18

GLOSSARY

Acronyms

EDL	- Estimated 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 EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
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.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
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.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

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.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

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 ten times (10x) the concentration found in the blank. For MCP-related

Report Format: Data Usability Report



Project Name: PLYMOUTH ENVIRONMENTAL MGMT**Lab Number:** L1815338**Project Number:** Not Specified**Report Date:** 05/08/18**Data Qualifiers**

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. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

- 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 lower value for the two columns 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.
- 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.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1815338
Report Date: 05/08/18

REFERENCES

- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

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.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO₃-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH₃-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO₃-F, EPA 353.2:** Nitrate-N, **EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO₄-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: 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
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.
Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**
EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

L 1815 338

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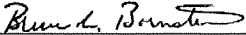
New England ChromaChem
6 Nichols Street
Salem, MA 01970
978-744-6600

Massachusetts DEP Lab. M-MA072

Client: Envirotech Laboratory, Inc.
 State: Liquid

Lab ID	Client ID	Date Sampled	Analytical Results									
			TOC mg/L									
805070	WW-180750 Total TOC	04/30/18	0.254									
805071	WW-180750 Dissolved TOC	04/30/18	0.432									
805072	WW-180751 Total TOC	04/30/18	2.87									
805073	WW-180751 Dissolved TOC	04/30/18	2.83									
805074	WW-180752 Total TOC	04/30/18	4.73									
805075	WW-180752 Dissolved TOC	04/30/18	4.74									
805076	WW-180753 Total TOC	04/30/18	4.95									
805077	WW-180753 Dissolved TOC	04/30/18	4.76									
805078	WW-180754 Total TOC	04/30/18	1.70									
805079	WW-180754 Dissolved TOC	04/30/18	1.47									
805080	WW-180755 Total TOC	04/30/18	1.82									
805081	WW-180755 Dissolved TOC	04/30/18	1.55									
805082	WW-180756 Total TOC	04/30/18	1.58									
805083	WW-180756 Dissolved TOC	04/30/18	1.45									
805084	WW-180757A Total TOC	04/30/18	1.84									
805085	WW-180757A Dissolved TOC	04/30/18	1.73									
805086	WW-180757B Blank Dissolved TOC	04/30/18	0.180									
	NEC Blank	05/04/18	0.102									

Analytical Methodology						
Analyte	Method	Detection Limit	PQL	Units	Date Analyzed	Cert Status
TOC	Standard Methods 5310C	0.200	1.00	mg/L	05/04/18	N

Electronically signed and approved by: 	Date: 05/04/18
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805070-805085

[illegible]

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1805-09360

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-180750 S-8B
Sample Type : GRAB
Sample Date / Time : 4/30/2018 @ 09:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.090	0.02	mg/l	SM4500NH3-B,H 18-21ed	5/7/2018 20:00	LAA

Sample Number: 002
Sample Description: WW-180751 S-5B
Sample Type : GRAB
Sample Date / Time : 4/30/2018 @ 09:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.092	0.02	mg/l	SM4500NH3-B,H 18-21ed	5/7/2018 20:00	LAA

Sample Number: 003
Sample Description: WW-180752 S-4A
Sample Type : GRAB
Sample Date / Time : 4/30/2018 @ 10:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.064	0.02	mg/l	SM4500NH3-B,H 18-21ed	5/7/2018 20:00	LAA

Sample Number: 004
Sample Description: WW-180753 S-8A
Sample Type : GRAB
Sample Date / Time : 4/30/2018 @ 10:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.056	0.02	mg/l	SM4500NH3-B,H 18-21ed	5/7/2018 20:00	LAA

R.I. Analytical Laboratories, Inc.**Laboratory Report**

Envirotech Laboratories, Inc.

Work Order #: 1805-09360

Project Name: PLYMOUTH ENV.

Sample Number: 005
Sample Description: WW-180754 S-3A
Sample Type : GRAB
Sample Date / Time : 4/30/2018 @ 10:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.13	0.02	mg/l	SM4500NH3-B,H 18-21ed	5/7/2018 20:00	LAA

Sample Number: 006
Sample Description: WW-180755 S-2C
Sample Type : GRAB
Sample Date / Time : 4/30/2018 @ 11:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.057	0.02	mg/l	SM4500NH3-B,H 18-21ed	5/7/2018 20:00	LAA

Sample Number: 007
Sample Description: WW-180756 S-6A
Sample Type : GRAB
Sample Date / Time : 4/30/2018 @ 11:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.043	0.02	mg/l	SM4500NH3-B,H 18-21ed	5/7/2018 20:00	LAA

Sample Number: 008
Sample Description: WW-180757 S-12
Sample Type : GRAB
Sample Date / Time : 4/30/2018 @ 11:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.035	0.02	mg/l	SM4500NH3-B,H 18-21ed	5/7/2018 20:00	LAA

[illegible]

LABORATORY REPORT

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

Date Received: 5/3/2018
Date Reported: 5/10/2018
P.O. Number

Work Order #: 1805-09360

Project Name: PLYMOUTH ENV.

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable, indication of sample analysis at our Hudson, MA laboratory and/or subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:



Dawne E. Smart
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):

Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508, ME RI00015, NH 2070, NY 11726

Hudson MA * M-MA1117, RI LAO00319

131 Coolidge Street, Suite 105, Hudson, MA 01749
P: 978-568-0041 F: 978-568-0078

41 Illinois Avenue, Warwick, RI 02888
P: 401-737-8500 F: 401-738-1970

15 Lark Industrial Drive, Smithfield, RI 02828
P: 401-737-8500 F: 401-349-0844

www.rianalytical.com

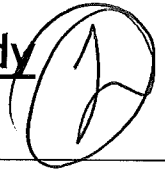
Date: 05/04/18

805070-805080

CHAIN OF CUSTODY FORM										ENVIROTECH LABS, INC. 8 Jan Sebastian Dr., Unit 12 Sandwich, MA 02563 (508)888-6460 1-800-339-6460 FAX (508)888-8446		NE Chromachem Address 6 Nichols Street Salem, MA 01970 Phone# 978-744-6600 Fax# 206 984 2474	
PWS:		Project Name: Plymouth ENV.											
Sampler:		KT											
Lab ID #	Date	Time	Com	Grab	Station location	DEP ID	Container	Pres.	Sample type	Analysis requested			
WW-180750	04/30/18	0900		X	S-8B		2VOA	H2SO4	GW	Total TOC low 805070			
							2VOA	H2SO4	GW	Dissolved TOC low 805070			
WW-180751	04/30/18	0950		X	S-5B		2VOA	H2SO4	GW	Total TOC low 805072			
							2VOA	H2SO4	GW	Dissolved TOC low 805072			
WW-180752	04/30/18	1005		X	S-4A		2VOA	H2SO4	GW	Total TOC low 805074			
							2VOA	H2SO4	GW	Dissolved TOC low 805074			
WW-180753	04/30/18	1015		X	S-8A		2VOA	H2SO4	GW	Total TOC low 805076			
							2VOA	H2SO4	GW	Dissolved TOC low 805076			
WW-180754	04/30/18	1035		X	S-3A		2VOA	H2SO4	GW	Total TOC low 805078			
							2VOA	H2SO4	GW	Dissolved TOC low 805078			
WW-180755	04/30/18	1100		X	S-2C		2VOA	H2SO4	GW	Total TOC low 805080			
							2VOA	H2SO4	GW	Dissolved TOC low 805080			
WW-180756	04/30/18	1120		X	S-6A		2VOA	H2SO4	GW	Total TOC low 805082			
							2VOA	H2SO4	GW	Dissolved TOC low 805082			
WW-180757A	04/30/18	1140		X	S-12		2VOA	H2SO4	GW	Total TOC low 805084			
							2VOA	H2SO4	GW	Dissolved TOC low 805084			
WW-180757B	04/30/18			X	Blank		2VOA	H2SO4	GW	Dissolved TOC low 805086			
							Total TOC low level 0.5 mg/L						
							dissolved TOC low level 0.5 mg/L						
Relinquished:		Date/Time		Received:									
[Signature]		05/18/18		WPS									
Relinquished:		Date/Time		Received:									
WPS		5/3 100		[Signature]									
DEP MDL REQUIRED by Method													
Contact lab with any Exceeded MCL													

Laboratory:

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

Chain of CustodyClient:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us
Project Name: **Eel River SW Sampling -Plymouth MA**
Sampler: Kim Tower (KT)

WW-180750

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
4/30/18	0900	S-8B	1	1 Liter Plastic	TOC Dissolved, TDS, TKN	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride	NONE
			1	100mL Plastic	Bacteria	NONE
4/30/18	0950	S-5B	1	1 Liter Plastic	TOC Dissolved, TDS, TKN	
			1	1 Liter Plastic	TKN, NH3, TOC LOW	
			2	1 Liter Amber	Chlorophyll-a	
			1	Glass	Orthophosphate	
			1	500mL Plastic	NO3, NO2, Chloride	
			1	100mL Plastic	Bacteria	

WW-180751

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

Kim Miller 4/30/18 1300



Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us
Project Name: **Eel River SW Sampling -Plymouth MA**
Sampler: Kim Tower (KT)

NW-180752

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
4/30/18	1005	S-4A	1	1 Liter Plastic	TOC Dissolved, TDS, TKN	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride	NONE
			1	100mL Plastic	Bacteria	NONE 30
NW-180753	4/30/18	1015	S-8A	1	1 Liter Plastic	TOC Dissolved, TDS, TKN
				1	1 Liter Plastic	TKN, NH3, TOC LOW
				2	1 Liter Amber	Chlorophyll-a
				1	Glass	Orthophosphate
				1	500mL Plastic	NO3, NO2, Chloride
				1	100mL Plastic	Bacteria 15

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

Olivia Mulvaney 4/30/18 1300

Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, 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
WW-180754 4/30/18	1035	S-3A	1	1 Liter Plastic	TOC Dissolved, TDS, TKN	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride	NONE
			1	100mL Plastic	Bacteria	NONE 5
WW-180755 4/30/18	1100	S-2C		1	1 Liter Plastic	TOC Dissolved, TDS, TKN
				1	1 Liter Plastic	TKN, NH3, TOC LOW
				2	1 Liter Amber	Chlorophyll-a
				1	Glass	Orthophosphate
				1	500mL Plastic	NO3, NO2, Chloride
				1	100mL Plastic	Bacteria 5

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

Olivia Mulane 4/30/18 1300



Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

W-180756

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
4/30/18	1120	S-6A	1	1 Liter Plastic	TOC Dissolved, TDS, TKN	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride	NONE
			1	100mL Plastic	Bacteria	NONE
4/30/18	1140	S-12	1	1 Liter Plastic	TOC Dissolved, TDS, TKN	
			1	1 Liter Plastic	TKN, NH3, TOC LOW	
			2	1 Liter Amber	Chlorophyll-a	
			1	Glass	Orthophosphate	
			1	500mL Plastic	NO3, NO2, Chloride	
			1	100mL Plastic	Bacteria	

W-180757

Relinquished By: Date/Time

KT

Received By: Date/Time:

Olivia McLeary 4/30/18 1300

CHAIN OF CUSTODY FORM

Client: Plymouth Env.

ENVIROTECH LABS, INC.

8 Jan Sebastian Dr., Unit 12

Sandwich, MA 02563

(508)888-6460/1-800-339-6460

FAX (508)888-6446

Address:

Phone#:

Fax #:

Proj. No. Project Name: Eel River project

Sampler:

Lab ID #	Date	Time	Comp	Grab	Sample location	Analysis Requested
					GW Eel River	24 Nitrite-N Low, Nitrate-N Low, pH grab, Turbidity low
					groundwater samples	Specific Conductance, Chloride, Fe, B, Cu, Hg, Ortho Phos (P) low
						Total Phos (P) low, Total Dissolved Solids, Kjeldhal Nitrogen (low)
						Kjeldhal Nitrogen Dissolved, Total Organic Carbon*
						TOC Dissolved*, VOC, Ammonia-N low*, Dissolved Organic N
						Dissolved Inorganic N, Particulate Organic Carbon
						Particulate Organic Nitrogen, Total Dissolved Nitrogen
					SW Eel River	21 Nitrite-N Low, Nitrate-N Low, Chloride, Boron, Ortho Phos (P) low
					Surfacewater samples	Total Phos (P) low, pH grab, Sp cond, Turbidity, E. coli
						Kjeldhal Nitrogen (low), Kjeldhal Nitrogen Dissolved
						Total Organic Carbon*, TOC Dissolved*, Ammonia-N low*
						Chlorophyll-a, Dissolved Inorganic N, Dissolved Organic N
						Particulate Organic Carbon, Particulate Organic Nitrogen
						Total Dissolved Nitrogen
					Harbor Samples	16 Nitrate-N/Nitrite-N, Ortho Phos (P) low, Total Phos (p) low
						Kjeldhal Nitrogen (low), Kjeldhal Nitrogen Diss
						Total Organic Carbon*, TOC Dissolved*, Ammonia-N low*
						Dissolved Inorganic N, Dissolved Organic N
						Particulate Organic Carbon, Particulate Organic Nitrogen
						Total Dissolved Nitrogen, E coli, Chlorophyll-a, Turbidity

Relinquished:	Date/Time	Received:	Relinquished:	Date/Time	Received:
Relinquished:	Date/Time	Received:	Relinquished:	Date/Time	Received:

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

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 FAX (508)888-6446

Tuesday, December 4, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number:

Sampled By: KT

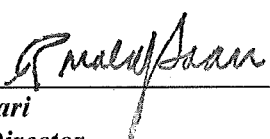
Lab Order Number: WW-181245

Date Received: 06/21/18

Sample Type	Sample Time	Sample Date	Comments			
S8B A	10:40	06/21/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	BRL	6.0	06/29/18	ZC	SM 2540 C
Chloride grab	mg/L	BRL	3.0	06/21/18	RL	EPA 300.0
Total Organic Carbon*	mg/L	0.180*	0.5	06/21/18	NEC*	SM 5310 C
Boron	mg/L	ND*	0.010	07/23/18	NEC*	EPA 200.7
Nitrate-N	mg/L	BRL	0.01	06/21/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	06/21/18	RL	EPA 300.0
Ammonia-N *	mg/L	0.11*	0.02	06/26/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	06/28/18	KB	SM4500-Norg B-C
Total Phosphorous (P)	mg/L	BRL	0.005	06/26/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	06/28/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	ND*	0.50	06/21/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.11	NA	07/21/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.09	NA	07/21/18	MC	Calculation
Chlorophyll-a	*	ND*	*	06/25/18	Alpha ^a	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	06/21/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	<0.08	NA	07/21/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	07/21/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.2	NA	07/21/18	MC	Calculation
E coli	CFU/100mL	<5	<1	06/21/18	MC	EPA 1603

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
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Tuesday, December 4, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number:

Sampled By: KT

Lab Order Number: WW-181246

Date Received: 06/21/18

Sample Type	Sample Time	Sample Date	Comments			
S-8A A	10:50	06/21/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	180	6.0	06/29/18	ZC	SM 2540 C
Chloride grab	mg/L	77	3.0	06/21/18	RL	EPA 300.0
Total Organic Carbon*	mg/L	1.93*	0.5	06/21/18	NEC*	SM 5310 C
Boron	mg/L	ND*	0.010	07/23/18	NEC*	EPA 200.7
Nitrate-N	mg/L	BRL	0.01	06/21/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	06/21/18	RL	EPA 300.0
Ammonia-N *	mg/L	0.13*	0.02	06/26/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.79	0.2	06/28/18	KB	SM4500-Norg B-C
Total Phosphorous (P)	mg/L	0.048	0.005	06/26/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.46	0.20	06/28/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.37*	0.50	06/21/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.13	NA	07/21/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.33	NA	07/21/18	MC	Calculation
Chlorophyll-a	*	22.1*	*	06/25/18	Alpha ^a	*
Ortho Phosphorous (P)	mg/L	0.024	0.005	06/21/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.56	NA	07/21/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.33	NA	07/21/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.46	NA	07/21/18	MC	Calculation
E coli	CFU/100mL	35	<1	06/21/18	MC	EPA 1603

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

ENVIROTECH LABORATORIES, INC.
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Tuesday, December 4, 2018

Plymouth Environmental Management

K.Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number:

Sampled By: KT

Lab Order Number: WW-181247

Date Received: 06/21/18

Sample Type	Sample Time	Sample Date	Comments			
S-5B A	11:00	06/21/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	160	6.0	06/29/18	ZC	SM 2540 C
Chloride grab	mg/L	79	3.0	06/21/18	RL	EPA 300.0
Total Organic Carbon*	mg/L	2.14*	0.5	06/21/18	NEC*	SM 5310 C
Boron	mg/L	ND*	0.010	07/23/18	NEC*	EPA 200.7
Nitrate-N	mg/L	BRL	0.01	06/21/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	06/21/18	RL	EPA 300.0
Ammonia-N *	mg/L	0.045*	0.02	06/26/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.74	0.2	06/28/18	KB	SM4500-Norg B-C
Total Phosphorous (P)	mg/L	0.049	0.005	06/26/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.46	0.20	06/28/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.27*	0.50	06/21/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.06	NA	07/21/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.42	NA	07/21/18	MC	Calculation
Chlorophyll-a	*	24.0*	*	06/25/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.026	0.005	06/21/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.87	NA	07/21/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.28	NA	07/21/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.46	NA	07/21/18	MC	Calculation
E coli	CFU/100mL	80	<1	06/21/18	MC	EPA 1603

BRL=below reportable limits

*see attached

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

ENVIROTECH LABORATORIES, INC.
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Tuesday, December 4, 2018

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

ProjectName: *Eel River SW Sampling*

Comments:

Project Number:

Sampled By: *KT*

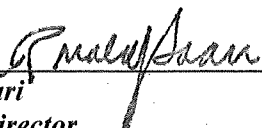
Lab Order Number: *WW-181248*

Date Received: *06/21/18*

Sample Type	Sample Time	Sample Date	Comments			
S-4A A	1120	06/21/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	76	6.0	06/29/18	ZC	SM 2540 C
Chloride grab	mg/L	35	3.0	06/21/18	RL	EPA 300.0
Total Organic Carbon*	mg/L	2.88*	0.5	06/21/18	NEC*	SM 5310 C
Boron	mg/L	ND*	0.010	07/23/18	NEC*	EPA 200.7
Nitrate-N	mg/L	BRL	0.01	06/21/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	06/21/18	RL	EPA 300.0
Ammonia-N *	mg/L	0.07*	0.02	06/26/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.74	0.2	06/28/18	KB	SM4500-Norg B-C
Total Phosphorous (P)	mg/L	0.027	0.005	06/26/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.32	0.20	06/28/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	2.11	0.50	06/21/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.08	NA	07/21/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.25	NA	07/21/18	MC	Calculation
Chlorophyll-a	*	5.77*	*	06/25/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.013	0.005	06/21/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.77	NA	07/21/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.42	NA	07/21/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.32	NA	07/21/18	MC	Calculation
E coli	CFU/100mL	310	<1	06/21/18	MC	EPA 1603

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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Tuesday, December 4, 2018

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

ProjectName: *Eel River SW Sampling*

Comments:

Project Number:

Sampled By: *KT*

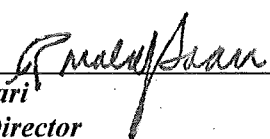
Lab Order Number: *WW-181249*

Date Received: *06/21/18*

Sample Type	Sample Time	Sample Date	Comments			
S-3A A	1140	06/21/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	80	6.0	06/29/18	ZC	SM 2540 C
Chloride grab	mg/L	33	3.0	06/21/18	RL	EPA 300.0
Total Organic Carbon*	mg/L	1.69*	0.5	06/21/18	NEC*	SM 5310 C
Boron	mg/L	ND*	0.010	07/23/18	NEC*	EPA 200.7
Nitrate-N	mg/L	0.14	0.01	06/21/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	06/21/18	RL	EPA 300.0
Ammonia-N *	mg/L	0.04*	0.02	06/26/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.37	0.2	06/28/18	KB	SM4500-Norg B-C
Total Phosphorous (P)	mg/L	0.024	0.005	06/26/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.23	0.20	06/28/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.05*	0.50	06/21/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.18	NA	07/21/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.19	NA	07/21/18	MC	Calculation
Chlorophyll-a	*	9.36*	*	06/25/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.009	0.005	06/21/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.64	NA	07/21/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.14	NA	07/21/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.37	NA	07/21/18	MC	Calculation
E coli	CFU/100mL	60	<1	06/21/18	MC	EPA 1603

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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Tuesday, December 4, 2018

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

ProjectName: Eel River SW Sampling

Comments:

Project Number:

Sampled By: KT

Lab Order Number: WW-181250

Date Received: 06/21/18

Sample Type	Sample Time	Sample Date	Comments			
S-2C A	1155	06/21/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	64	6.0	06/29/18	ZC	SM 2540 C
Chloride grab	mg/L	29	3.0	06/21/18	RL	EPA 300.0
Total Organic Carbon*	mg/L	1.87*	0.5	06/21/18	NEC*	SM 5310 C
Boron	mg/L	ND*	0.010	07/23/18	NEC*	EPA 200.7
Nitrate-N	mg/L	0.06	0.01	06/21/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	06/21/18	RL	EPA 300.0
Ammonia-N *	mg/L	0.03*	0.02	06/26/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.48	0.2	06/28/18	KB	SM4500-Norg B-C
Total Phosphorous (P)	mg/L	0.017	0.005	06/26/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.23	0.20	06/28/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.14*	0.50	06/21/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.09	NA	07/21/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.20	NA	07/21/18	MC	Calculation
Chlorophyll-a	*	11.5*	*	06/25/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.007	0.005	06/21/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.73	NA	07/21/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.25	NA	07/21/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.29	NA	07/21/18	MC	Calculation
E coli	CFU/100mL	10	<1	06/21/18	MC	EPA 1603

BRL=below reportable limits

*see attached

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

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

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FAX (508)888-6446

Tuesday, December 4, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.
Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number:

Sampled By: KT

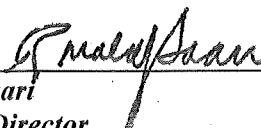
Lab Order Number: WW-181251

Date Received: 06/21/18

Sample Type	Sample Time	Sample Date	Comments			
S-6A A	1220	06/21/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	66	6.0	06/29/18	ZC	SM 2540 C
Chloride grab	mg/L	22	3.0	06/21/18	RL	EPA 300.0
Total Organic Carbon*	mg/L	1.84*	0.5	06/21/18	NEC*	SM 5310 C
Boron	mg/L	ND*	0.010	07/23/18	NEC*	EPA 200.7
Nitrate-N	mg/L	0.18	0.01	06/21/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	06/21/18	RL	EPA 300.0
Ammonia-N *	mg/L	0.03*	0.02	06/26/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.24	0.2	06/30/18	KB	SM4500-Norg B-C
Total Phosphorous (P)	mg/L	0.024	0.005	06/26/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	06/30/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.47*	0.50	06/21/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.21	NA	07/21/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.17	NA	07/21/18	MC	Calculation
Chlorophyll-a	*	ND*	*	06/25/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.023	0.005	06/21/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.37	NA	07/21/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.04	NA	07/21/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.38	NA	07/21/18	MC	Calculation
E coli	CFU/100mL	85	<1	07/21/18	MC	EPA 1603

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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FAX (508)888-6446

Tuesday, December 4, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number:

Sampled By: KT

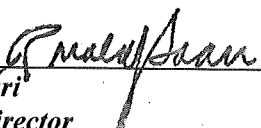
Lab Order Number: WW-181252

Date Received: 06/21/18

Sample Type	Sample Time	Sample Date	Comments			
S-12 A	1240	06/21/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	62	6.0	06/29/18	ZC	SM 2540 C
Chloride grab	mg/L	22	3.0	06/21/18	RL	EPA 300.0
Total Organic Carbon*	mg/L	2.97*	0.5	06/21/18	NEC*	SM 5310 C
Boron	mg/L	ND*	0.010	07/23/18	NEC*	EPA 200.7
Nitrate-N	mg/L	0.16	0.01	06/21/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	06/21/18	RL	EPA 300.0
Ammonia-N *	mg/L	0.03*	0.02	06/26/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.35	0.2	06/30/18	KB	SM4500-Norg B-C
Total Phosphorous (P)	mg/L	0.030	0.005	06/26/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.35	0.20	06/30/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.96*	0.50	06/21/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.19	NA	07/21/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.32	NA	07/21/18	MC	Calculation
Chlorophyll-a	*	2.45*	*	06/25/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.027	0.005	06/21/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	1.01	NA	07/21/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	07/21/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.51	NA	07/21/18	MC	Calculation
E. coli	CFU/100mL	15	<1	06/21/18	MC	EPA 1603

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

Serial_No:07021819:24

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1823700

Project Number: Not Specified

Report Date: 07/02/18

SAMPLE RESULTS

Lab ID: L1823700-01

Date Collected: 06/21/18 10:40

Client ID: WW-181245

Date Received: 06/22/18

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

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	06/22/18 21:30	06/25/18 11:15	121,10200H	AG



Serial_No:07021819:24

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1823700

Project Number: Not Specified

Report Date: 07/02/18

SAMPLE RESULTS

Lab ID: L1823700-02

Date Collected: 06/21/18 10:50

Client ID: WW-181246

Date Received: 06/22/18

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	22.1		mg/m3	2.00	NA	1	06/22/18 21:30	06/25/18 11:15	121,10200H	AG



Serial_No:07021819:24

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1823700
Report Date: 07/02/18

SAMPLE RESULTS

Lab ID: L1823700-03
Client ID: WW-181247
Sample Location: Not Specified

Date Collected: 06/21/18 11:00
Date Received: 06/22/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	24.0		mg/m3	2.00	NA	1	06/22/18 21:30	06/25/18 11:15	121,10200H	AG



Serial_No:07021819:24

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1823700
Report Date: 07/02/18

SAMPLE RESULTS

Lab ID: L1823700-04
Client ID: WW-181248
Sample Location: Not Specified

Date Collected: 06/21/18 11:20
Date Received: 06/22/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	5.77		mg/m3	2.00	NA	1	06/22/18 21:30	06/25/18 11:15	121,10200H	AG



Serial_No:07021819:24

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1823700
Report Date: 07/02/18

SAMPLE RESULTS

Lab ID: L1823700-05
Client ID: WW-181249
Sample Location: Not Specified

Date Collected: 06/21/18 11:40
Date Received: 06/22/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	9.36		mg/m3	2.00	NA	1	06/22/18 21:30	06/25/18 11:15	121,10200H	AG



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1823700
Report Date: 07/02/18

SAMPLE RESULTS

Lab ID: L1823700-06
Client ID: WW-181250
Sample Location: Not Specified

Date Collected: 06/21/18 11:55
Date Received: 06/22/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	11.5		mg/m3	2.00	NA	1	06/22/18 21:30	06/25/18 11:15	121,10200H	AG



Serial_No:07021819:24

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1823700

Project Number: Not Specified

Report Date: 07/02/18

SAMPLE RESULTS

Lab ID: L1823700-07

Date Collected: 06/21/18 12:20

Client ID: WW-181251

Date Received: 06/22/18

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

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	06/22/18 21:30	06/25/18 11:15	121,10200H	AG



Serial_No:07021819:24

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Project Number: Not Specified

Lab Number: L1823700

Report Date: 07/02/18

SAMPLE RESULTS

Lab ID: L1823700-08

Client ID: WW-181252

Sample Location: Not Specified

Date Collected: 06/21/18 12:40

Date Received: 06/22/18

Field Prep: Not Specified

Sample Depth:

Matrix: Water

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	06/22/18 21:30	06/25/18 11:15	121,10200H	AG



Date: 06/26/18

New England ChromaChem
6 Nichols Street
Salem, MA 01970
978-744-6600

Massachusetts DEP Lab. M-MA072

Client: Envirotech Laboratory, Inc.
State: Liquid

[illegible][illegible]

Electronically signed and approved by:

Blair L. Bornstein

Date: 07/23/18

LABORATORY REPORT

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

Date Received: 6/22/2018
Date Reported: 6/29/2018
P.O. Number

Work Order #: 1806-13175

Project Name: PLYMOUTH ENV.

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable, indication of sample analysis at our Hudson, MA laboratory and/or subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:



Dawne E. Smart
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):

Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508, ME RI00015, NH 2070, NY 11726

Hudson MA * M-MA1117. RI LAO00319

131 Coolidge Street, Suite 105, Hudson, MA 01749
P: 978-568-0041 F: 978-568-0078

41 Illinois Avenue, Warwick, RI 02888
P: 401-737-8500 F: 401-738-1970

15 Lark Industrial Drive, Smithfield, RI 02828
P: 401-737-8500 F: 401-349-0844

www.rianalytical.com

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1806-13175

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-181245 S-8B
Sample Type : GRAB
Sample Date / Time : 6/21/2018 @ 10:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.11	0.02	mg/l	SM4500NH3-B,H 18-21ed	6/26/2018 22:00	LAA

Sample Number: 002
Sample Description: WW-181246 S-8A
Sample Type : GRAB
Sample Date / Time : 6/21/2018 @ 10:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.13	0.02	mg/l	SM4500NH3-B,H 18-21ed	6/26/2018 22:00	LAA

Sample Number: 003
Sample Description: WW-181247 S-5B
Sample Type : GRAB
Sample Date / Time : 6/21/2018 @ 11:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.045	0.020	mg/l	SM4500NH3-B,H 18-21ed	6/26/2018 22:00	LAA

Sample Number: 004
Sample Description: WW-181248 S-4A
Sample Type : GRAB
Sample Date / Time : 6/21/2018 @ 11:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.07	0.02	mg/l	SM4500NH3-B,H 18-21ed	6/26/2018 22:00	LAA

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1806-13175

Project Name: PLYMOUTH ENV.

Sample Number: 005
Sample Description: WW-181249 S-3A
Sample Type : GRAB
Sample Date / Time : 6/21/2018 @ 11:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.04	0.02	mg/l	SM4500NH3-B,H 18-21ed	6/26/2018 22:00	LAA

Sample Number: 006
Sample Description: WW-181250 S-2C
Sample Type : GRAB
Sample Date / Time : 6/21/2018 @ 11:55

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.03	0.02	mg/l	SM4500NH3-B,H 18-21ed	6/26/2018 22:00	LAA

Sample Number: 007
Sample Description: WW-181251 S-6A
Sample Type : GRAB
Sample Date / Time : 6/21/2018 @ 12:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.03	0.02	mg/l	SM4500NH3-B,H 18-21ed	6/26/2018 22:00	LAA

Sample Number: 008
Sample Description: WW-181252 S-12
Sample Type : GRAB
Sample Date / Time : 6/21/2018 @ 12:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.03	0.02	mg/l	SM4500NH3-B,H 18-21ed	6/26/2018 22:00	LAA

WJC

Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us
Project Name: **Eel River SW Sampling -Plymouth MA**
Sampler: Kim Tower (KT)

W-181245

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
6/21/18	1040	S-8B	1	1 Liter Plastic	TOC Dissolved, TDS, TKN	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	250mL Plastic	NO3, NO2, Chloride	NONE
			1	250mL Plastic	Boron	HNO3
			1	100mL Plastic	Bacteria	NONE
6/21/18	1050	S-8A	1	1 Liter Plastic	TOC Dissolved, TDS, TKN	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	250mL Plastic	NO3, NO2, Chloride	NONE
			1	250mL Plastic	Boron	HNO3
			1	100mL Plastic	Bacteria	NONE

6/21

355

W-181246

35

Relinquished By: Date/Time

Kim Tu

Received By: Date/Time:

Plawes 06/21/18 1345

WSE

Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, 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
6/21/18	1100	S-5B	1	1 Liter Plastic	TOC Dissolved, TDS, TKN	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	250mL Plastic	NO3, NO2, Chloride	NONE
			1	250mL Plastic	Boron	HNO3
			1	100mL Plastic	Bacteria	NONE
6/21/18	1120	S-4A	1	1 Liter Plastic	TOC Dissolved, TDS, TKN	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	250mL Plastic	NO3, NO2, Chloride	NONE
			1	250mL Plastic	Boron	HNO3
			1	100mL Plastic	Bacteria	NONE

W-181247

W-181248

6/21

310

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

R. DeLley 06/21/18 1345

WTL

Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, 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
6/21/18	1140	S-3A	1	1 Liter Plastic	TOC Dissolved, TDS, TKN	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	250mL Plastic	NO3, NO2, Chloride	NONE
			1	250mL Plastic	Boron	HNO3
			1	100mL Plastic	Bacteria	NONE
6/21/18	1155	S-2C	1	1 Liter Plastic	TOC Dissolved, TDS, TKN	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	250mL Plastic	NO3, NO2, Chloride	NONE
			1	250mL Plastic	Boron	HNO3
			1	100mL Plastic	Bacteria	NONE

W-181249

W-181249
W-181250

60 6/21

10

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

Rodriguez 06/21/18 1345

WTC

Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, 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
6/21/18	1220	S-6A	1	1 Liter Plastic	TOC Dissolved, TDS, TKN	NONE
1	1	1	1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
1	1	2	1	1 Liter Amber	Chlorophyll-a	NONE
1	1	1	1	Glass	Orthophosphate	NONE
1	1	1	1	250mL Plastic	NO3, NO2, Chloride	NONE
1	1	1	1	250mL Plastic	Boron	HNO3
1	1	1	1	100mL Plastic	Bacteria	NONE
6/21/18	1240	S-12	1	1 Liter Plastic	TOC Dissolved, TDS, TKN	NONE
1	1	1	1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
1	1	2	1	1 Liter Amber	Chlorophyll-a	NONE
1	1	1	1	Glass	Orthophosphate	NONE
1	1	1	1	250mL Plastic	NO3, NO2, Chloride	NONE
1	1	1	1	250mL Plastic	Boron	HNO3
1	1	1	1	100mL Plastic	Bacteria	NONE

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

Kim Tower 06/21/18 1345

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

Sunday, December 2, 2018

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

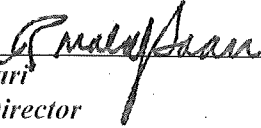
ProjectName: Surface Water
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-181502
Date Received: 07/19/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-8B A	0930	07/19/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	BRL	6.0	07/27/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	0.192*	0.5	07/19/18	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	08/06/18	NEC	EPA 200.7
Nitrate-N	mg/L	BRL	0.01	07/19/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	07/19/18	LL	EPA 300.0
Ammonia-N *	mg/L	0.07*	0.02	07/24/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	07/27/18	KB	SM4500-Norg B-C
Chloride	mg/L	BRL	3.0	07/19/18	LL	EPA 300.0
Total Phosphorous (P)	mg/L	BRL	0.005	07/20/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	07/27/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.069*	0.50	07/19/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.08	NA	08/18/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.13	NA	08/18/18	MC	Calculation
Chlorophyll-a	*	ND*	*	07/22/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	07/19/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.12	NA	08/18/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	08/18/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.21	NA	08/09/18	KB	Calculation
E. coli	CFU/100ml	<5	5	07/19/18	MC	EPA 1603

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

Sunday, December 2, 2018

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

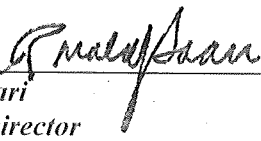
Project Name: Surface Water
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-181503
Date Received: 07/19/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-8A A	10:00	07/19/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	160	6.0	07/27/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	2.15*	0.5	07/19/18	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	08/06/18	NEC	EPA 200.7
Nitrate-N	mg/L	0.06	0.01	07/19/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	07/19/18	RL	EPA 300.0
Ammonia-N *	mg/L	0.03*	0.02	07/24/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.66	0.2	08/03/18	KB	SM4500-Norg B-C
Chloride	mg/L	73	3.0	07/19/18	RL	EPA 300.0
Total Phosphorous (P)	mg/L	0.020	0.005	07/20/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.62	0.20	08/03/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.64*	0.50	07/19/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.09	NA	08/18/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.59	NA	08/18/18	MC	Calculation
Chlorophyll-a	*	11.9*	*	07/22/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.014	0.005	07/19/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.51	NA	08/18/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.04	NA	08/18/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.68	NA	08/09/18	KB	Calculation
E. coli	CFU/100ml	220	5	07/19/18	MC	EPA 1603

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, December 3, 2018

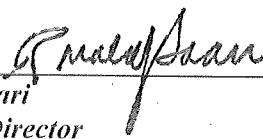
Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: Surface Water **Comments:**
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-181504
Date Received: 07/19/18

Sample Type		Sample Time	Sample Date	Comments		
S-5B	A	1015	07/19/18			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	160	6.0	07/27/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	2.18*	0.5	07/19/18	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	08/06/18	NEC	EPA 200.7
Nitrate-N	mg/L	0.07	0.01	07/19/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	07/19/18	LL	EPA 300.0
Ammonia-N *	mg/L	<0.02*	0.02	07/24/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.62	0.2	08/03/18	KB	SM4500-Norg B-C
Chloride	mg/L	72	3.0	07/19/18	LL	EPA 300.0
Total Phosphorous (P)	mg/L	0.046	0.005	07/20/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.36	0.20	08/03/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.81*	0.50	07/19/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.09	NA	08/18/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.34	NA	08/18/18	MC	Calculation
Chlorophyll-a	*	12.0*	*	07/22/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.012	0.005	07/19/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.37	NA	08/18/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.26	NA	08/18/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.43	NA	08/09/18	KB	Calculation
Coli	CFU/100ml	320	5	07/19/18	MC	EPA 1603

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

Sunday, December 2, 2018

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

ProjectName: Surface Water

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-181505

Date Received: 07/19/18

Sample Type	Sample Time	Sample Date	Comments			
S-4A A	1035	07/19/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	92	6.0	08/01/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	2.87*	0.5	07/19/18	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	08/06/18	NEC	EPA 200.7
Nitrate-N	mg/L	BRL	0.01	07/19/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	07/19/18	LL	EPA 300.0
Ammonia-N *	mg/L	<0.02*	0.02	07/24/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.36	0.2	08/03/18	KB	SM4500-Norg B-C
Chloride	mg/L	36	3.0	07/19/18	LL	EPA 300.0
Total Phosphorous (P)	mg/L	0.026	0.005	07/20/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.27	0.20	08/03/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	2.07*	0.50	07/19/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.03	NA	08/18/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.25	NA	08/18/18	MC	Calculation
Chlorophyll-a	*	78.2*	*	07/22/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.009	0.005	07/19/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.80	NA	08/18/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.09	NA	08/18/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.27	NA	08/09/18	KB	Calculation
E. coli	CFU/100ml	100	5	07/19/18	MC	EPA 1603

BRL=below reportable limits

*see attached

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

ENVIROTECH LABORATORIES, INC.
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8 Jan Sebastian Drive
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 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Sunday, December 2, 2018

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

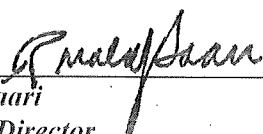
ProjectName: Surface Water **Comments:**
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-181506
Date Received: 07/19/18

Sample Type	Sample Time	Sample Date	Comments			
S-3A A	1045	07/19/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	98	6.0	08/01/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	2.19*	0.5	07/19/18	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	08/06/18	NEC	EPA 200.7
Nitrate-N	mg/L	0.15	0.01	07/19/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	07/19/18	RL	EPA 300.0
Ammonia-N *	mg/L	0.04*	0.02	07/24/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.35	0.2	08/03/18	KB	SM4500-Norg B-C
Chloride	mg/L	34	3.0	07/19/18	RL	EPA 300.0
Total Phosphorous (P)	mg/L	0.036	0.005	07/20/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	08/03/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.32*	0.50	07/19/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.19	NA	08/18/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.16	NA	08/18/18	MC	Calculation
Chlorophyll-a	*	11.0*	*	07/22/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.007	0.005	07/19/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.87	NA	08/18/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.15	NA	08/18/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.35	NA	08/09/18	KB	Calculation
E. coli	CFU/100ml	40	5	07/19/18	MC	EPA 1603

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
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Sunday, December 2, 2018

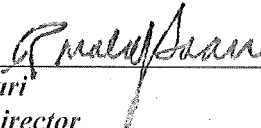
Plymouth Environmental Management
 K. Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: Surface Water **Comments:**
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-181507
Date Received: 07/19/18

Sample Type	Sample Time	Sample Date	Comments			
S-2C A	1105	07/19/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	89	6.0	08/01/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	2.51*	0.5	07/19/18	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	08/06/18	NEC	EPA 200.7
Nitrate-N	mg/L	0.06	0.01	07/19/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	07/19/18	LL	EPA 300.0
Ammonia-N *	mg/L	0.02*	0.02	07/24/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.30	0.2	08/03/18	KB	SM4500-Norg B-C
Chloride	mg/L	29	3.0	07/19/18	LL	EPA 300.0
Total Phosphorous (P)	mg/L	0.041	0.005	07/20/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	08/03/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.80*	0.50	07/19/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.08	NA	08/18/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	08/18/18	MC	Calculation
Chlorophyll-a	*	13.6*	*	07/22/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	07/19/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.71	NA	08/18/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.10	NA	08/18/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.26	NA	08/09/18	KB	Calculation
E. coli	CFU/100ml	5	5	07/19/18	MC	EPA 1603

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

Sunday, December 2, 2018

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

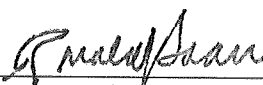
ProjectName: Surface Water
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-181508
Date Received: 07/19/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-6A A	1125	07/19/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	80	6.0	08/01/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	2.24*	0.5	07/19/18	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	08/06/18	NEC	EPA 200.7
Nitrate-N	mg/L	0.10	0.01	07/19/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	07/19/18	LL	EPA 300.0
Ammonia-N *	mg/L	0.02*	0.02	07/24/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	08/15/18	KB	SM4500-Norg B-C
Chloride	mg/L	23	3.0	07/19/18	LL	EPA 300.0
Total Phosphorous (P)	mg/L	0.012	0.005	07/20/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	08/15/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	2.06*	0.50	07/19/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.12	NA	08/18/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	08/18/18	MC	Calculation
Chlorophyll-a	*	ND*	*	07/22/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.009	0.005	07/19/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.18	NA	08/18/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	08/18/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	< 0.30	NA	08/20/18	KB	Calculation
E. coli	CFU/100ml	25	5	07/19/18	MC	EPA 1603

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
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Sunday, December 2, 2018

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

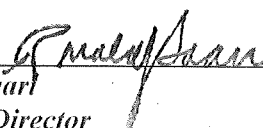
ProjectName: Surface Water
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-181509
Date Received: 07/19/18

Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-12 A	1145	07/19/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	77	6.0	08/01/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	3.25*	0.5	07/19/18	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	08/06/18	NEC	EPA 200.7
Nitrate-N	mg/L	BRL	0.01	07/19/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	07/19/18	RL	EPA 300.0
Ammonia-N *	mg/L	<0.02*	0.02	07/24/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.22	0.2	08/15/18	KB	SM4500-Norg B-C
Chloride	mg/L	22	3.0	07/19/18	RL	EPA 300.0
Total Phosphorous (P)	mg/L	0.027	0.005	07/20/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	08/15/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	2.53*	0.50	07/19/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.03	NA	08/18/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.18	NA	08/18/18	MC	Calculation
Chlorophyll-a	*	2.02*	*	07/22/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.008	0.005	07/19/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.72	NA	08/18/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.02	NA	08/18/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	< 0.21	NA	08/20/18	KB	Calculation
E. coli	CFU/100ml	15	5	07/19/18	MC	EPA 1603

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

Date: 07/25/18

LABORATORY REPORT

Envirotech Laboratories, Inc.
Attn: Mr. Ron Saari
8 Jan Sebastian Drive
Unit 12
Sandwich, MA 02563

Date Received: 7/19/2018
Date Reported: 7/27/2018
P.O. Number

Work Order #: 1807-15435

Project Name: PLYMOUTH ENV.

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable, indication of sample analysis at our Hudson, MA laboratory and/or subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:



Paul Perrotti
President

Laboratory Certification Numbers (as applicable to sample's origin state):

Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508, ME RI00015, NH 2070, NY 11726

Hudson MA * M-MA1117, RI LAO00319

131 Coolidge Street, Suite 105, Hudson, MA 01749
P: 978-568-0041 F: 978-568-0078

41 Illinois Avenue, Warwick, RI 02888
P: 401-737-8500 F: 401-738-1970

15 Lark Industrial Drive, Smithfield, RI 02828
P: 401-737-8500 F: 401-349-0844

www.rianalytical.com

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1807-15435

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-181502 S-8B
Sample Type : GRAB
Sample Date / Time : 7/19/2018 @ 09:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.07	0.02	mg/l	SM4500NH3-B,H 18-21ed	7/24/2018 14:00	LAA

Sample Number: 002
Sample Description: WW-181503 S-8A
Sample Type : GRAB
Sample Date / Time : 7/19/2018 @ 10:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.03	0.02	mg/l	SM4500NH3-B,H 18-21ed	7/24/2018 14:00	LAA

Sample Number: 003
Sample Description: WW-181504 S-5B
Sample Type : GRAB
Sample Date / Time : 7/19/2018 @ 10:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	7/24/2018 14:00	LAA

Sample Number: 004
Sample Description: WW-181505 S-4A
Sample Type : GRAB
Sample Date / Time : 7/19/2018 @ 10:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	7/24/2018 14:00	LAA

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1807-15435

Project Name: PLYMOUTH ENV.

Sample Number: 005
Sample Description: WW-181506 S-3A
Sample Type : GRAB
Sample Date / Time : 7/19/2018 @ 10:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.04	0.02	mg/l	SM4500NH3-B,H 18-21ed	7/24/2018 14:00	LAA

Sample Number: 006
Sample Description: WW-181507 S-2C
Sample Type : GRAB
Sample Date / Time : 7/19/2018 @ 11:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	7/24/2018 14:00	LAA

Sample Number: 007
Sample Description: WW-181508 S-6A
Sample Type : GRAB
Sample Date / Time : 7/19/2018 @ 11:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	7/24/2018 14:00	LAA

Sample Number: 008
Sample Description: WW-181509 S-12
Sample Type : GRAB
Sample Date / Time : 7/19/2018 @ 11:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.02	0.02	mg/l	SM4500NH3-B,H 18-21ed	7/24/2018 14:00	LAA

Massachusetts DEP Lab. M-MA072

[illegible][illegible]

Bern L. Bornstein

Date: 08/06/18

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1827759
Report Date: 07/25/18

SAMPLE RESULTS

Lab ID: L1827759-01
Client ID: WW-181502
Sample Location: Not Specified

Date Collected: 07/19/18 09:30
Date Received: 07/19/18
Field Prep: Not Specified

Sample Depth:
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	07/19/18 20:10	07/22/18 11:30	121,10200H	AG



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1827759
Report Date: 07/25/18

SAMPLE RESULTS

Lab ID: L1827759-02
Client ID: WW-181503
Sample Location: Not Specified

Date Collected: 07/19/18 10:00
Date Received: 07/19/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	11.9		mg/m3	2.00	NA	1	07/19/18 20:10	07/22/18 11:30	121,10200H	AG



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1827759
Report Date: 07/25/18

SAMPLE RESULTS

Lab ID: L1827759-03
Client ID: WW-181504
Sample Location: Not Specified

Date Collected: 07/19/18 10:15
Date Received: 07/19/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	12.0		mg/m3	2.00	NA	1	07/19/18 20:10	07/22/18 11:30	121,10200H	AG



Serial_No:07251815:20

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1827759

Project Number: Not Specified

Report Date: 07/25/18

SAMPLE RESULTS

Lab ID: L1827759-04

Date Collected: 07/19/18 10:35

Client ID: WW-181505

Date Received: 07/19/18

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	78.2		mg/m3	2.00	NA	1	07/19/18 20:10	07/22/18 11:30	121,10200H	AG



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1827759
Report Date: 07/25/18

SAMPLE RESULTS

Lab ID: L1827759-05
Client ID: WW-181506
Sample Location: Not Specified

Date Collected: 07/19/18 10:45
Date Received: 07/19/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	11.0		mg/m3	2.00	NA	1	07/19/18 20:10	07/22/18 11:30	121,10200H	AG



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1827759
Report Date: 07/25/18

SAMPLE RESULTS

Lab ID: L1827759-06
Client ID: WW-181507
Sample Location: Not Specified

Date Collected: 07/19/18 11:05
Date Received: 07/19/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	13.6		mg/m3	2.00	NA	1	07/19/18 20:10	07/22/18 11:30	121,10200H	AG



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1827759
Report Date: 07/25/18

SAMPLE RESULTS

Lab ID: L1827759-07
Client ID: WW-181508
Sample Location: Not Specified

Date Collected: 07/19/18 11:25
Date Received: 07/19/18
Field Prep: Not Specified

Sample Depth:
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	07/19/18 20:10	07/22/18 11:30	121,10200H	AG



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1827759
Report Date: 07/25/18

SAMPLE RESULTS

Lab ID: L1827759-08
Client ID: WW-181509
Sample Location: Not Specified

Date Collected: 07/19/18 11:45
Date Received: 07/19/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	2.02		mg/m3	2.00	NA	1	07/19/18 20:10	07/22/18 11:30	121,10200H	AG



MC

Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

WW181502

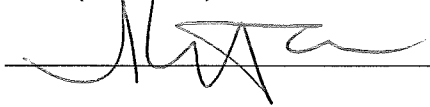
Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
7/19/18	0930	S-8B	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	250mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE
7/19/19	1000	S-8A	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	250mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE

WW181503

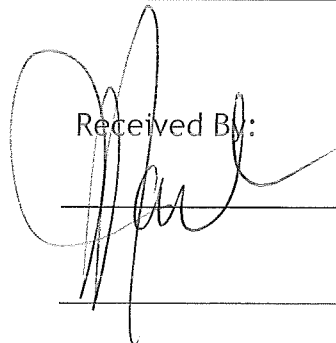
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220

Relinquished By: Date/Time



Received By: Date/Time:

 7/19/18 1330

Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, 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
7/19/18	1015	S-5B	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	250mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE
7/19/18	1035	S-4A	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	250mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE

Relinquished By: Date/Time

Kim Tower

Received By:

Date/Time:

7/19/18 1330

Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

WW181506

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
7/19/18	1045	S-3A	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	250mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE
7/19/18	1105	S-2C	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	250mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE

40

5

Relinquished By: Date/Time

Kim Tower

Received By:

Date/Time:

[Signature] 7/19/18 1330

me

Laboratory:

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

Chain of Custody

Client:

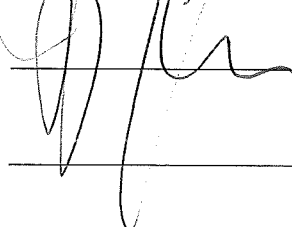
Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us
Project Name: Eel River SW Sampling -Plymouth MA
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
7/19/18	1125	S-6A	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	250mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE
7/19/18	1145	S-12	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	250mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE

Relinquished By: Date/Time



Received By: Date/Time:


_____ 7/19/18 1330

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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, December 3, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.
Plymouth, MA

ProjectName: Eel River SW sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-181842

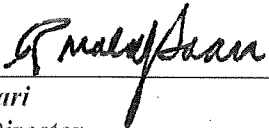
Date Received: 08/23/18

Sample Type		Sample Time	Sample Date	Comments		
S-8B	A	10:30	08/23/18			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Total Dissolved Solids		mg/L	BRL	6.0	08/29/18	KB SM 2540 C
Total Organic Carbon*		mg/L	0.382*	0.5	08/23/18	NEC* SM 5310 C
Boron		mg/L	BRL	0.010	08/23/18	MC EPA 200.7
Nitrate-N		mg/L	BRL	0.01	08/23/18	LL EPA 300.0
Nitrite-N		mg/L	BRL	0.006	08/23/18	LL EPA 300.0
Ammonia-N *		mg/L	0.030*	0.02	08/28/18	RIA* SM4500 NH3 C
Total Kjeldhal Nitrogen		mg/L	BRL	0.2	09/11/18	KB SM4500-Norg B-C
Chloride		mg/L	BRL	3.0	08/23/18	LL EPA 300.0
Total Phosphorous (P)		mg/L	BRL	0.005	10/07/18	MC SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	BRL	0.20	09/11/18	KB SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	ND*	0.50	08/23/18	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	<0.04	NA	09/22/18	MC Calculation
Dissolved Organic Nitrogen		mg/L	<0.17	NA	09/22/18	MC Calculation
Chlorophyll-a		*	ND*	*	08/26/18	Alpha* *
Ortho Phosphorous (P)		mg/L	BRL	0.005	08/23/18	MC SM 4500-P
Particulate Organic Carbon		mg/L	<0.28	NA	09/22/18	MC SM 5310 C
Particulate Organic Nitrogen		mg/L	ND	NA	09/22/18	MC Calculation
Total Dissolved Nitrogen		mg/L	< 0.21	NA	09/12/18	KB Calculation
E coli		CFU/100ml	<5	5	08/23/18	MC EPA 1603

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, December 3, 2018

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

ProjectName: Eel River SW sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-181843

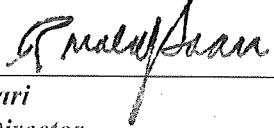
Date Received: 08/23/18

Sample Type		Sample Time	Sample Date	Comments		
S-8A	A	10:45	08/23/18			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Total Dissolved Solids		mg/L	120	6.0	08/29/18	KB SM 2540 C
Total Organic Carbon*		mg/L	2.66*	0.5	08/23/18	NEC* SM 5310 C
Boron		mg/L	ND*	0.010	08/30/18	NEC* EPA 200.7
Nitrate-N		mg/L	0.10	0.01	08/23/18	LL EPA 300.0
Nitrite-N		mg/L	BRL	0.006	08/23/18	LL EPA 300.0
Ammonia-N *		mg/L	0.072*	0.02	08/28/18	RIA* SM4500 NH3 C
Total Kjeldhal Nitrogen		mg/L	0.33	0.2	09/11/18	KB SM4500-Norg B-C
Chloride		mg/L	53	3.0	08/23/18	LL EPA 300.0
Total Phosphorous (P)		mg/L	0.015	0.005	10/07/18	MC SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	0.31	0.20	09/11/18	KB SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	2.34*	0.50	08/23/18	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.17	NA	09/22/18	MC Calculation
Dissolved Organic Nitrogen		mg/L	0.24	NA	09/22/18	MC Calculation
Chlorophyll-a		*	5.42*	*	08/26/18	Alpha* *
Ortho Phosphorous (P)		mg/L	0.015	0.005	08/23/18	MC SM 4500-P
Particulate Organic Carbon		mg/L	0.32	NA	09/22/18	MC SM 5310 C
Particulate Organic Nitrogen		mg/L	0.02	NA	09/22/18	MC Calculation
Total Dissolved Nitrogen		mg/L	0.41	NA	09/12/18	KB Calculation
E coli		CFU/100ml	75	5	08/23/18	MC EPA 1603

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, December 3, 2018

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

ProjectName: Eel River SW sampling

Comments:

Project Number:

Sampled By: Kim Tower

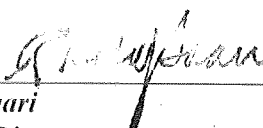
Lab Order Number: WW-181844

Date Received: 08/23/18

Sample Type	Sample Time	Sample Date	Comments			
S-5B A	11:00	08/23/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	130	6.0	08/29/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	2.78*	0.5	08/23/18	NEC*	SM 5310 C
Boron	mg/L	ND*	0.010	08/30/18	NEC*	EPA 200.7
Nitrate-N	mg/L	0.10	0.01	08/23/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	08/23/18	LL	EPA 300.0
Ammonia-N *	mg/L	0.095*	0.02	08/28/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.33	0.2	09/11/18	KB	SM4500-Norg B-C
Chloride	mg/L	53	3.0	08/23/18	LL	EPA 300.0
Total Phosphorous (P)	mg/L	0.019	0.005	10/07/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.27	0.20	09/11/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	2.34*	0.50	08/23/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.20	NA	09/22/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.18	NA	09/22/18	MC	Calculation
Chlorophyll-a	*	5.75*	*	08/26/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.014	0.005	08/23/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.44	NA	09/22/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.06	NA	09/22/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.37	NA	09/12/18	KB	Calculation
E. coli	CFU/100ml	100	5	08/23/18	MC	EPA 1603

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
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Monday, December 3, 2018

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

ProjectName: Eel River SW sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-181845

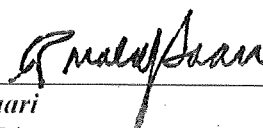
Date Received: 08/23/18

Sample Type	Sample Time	Sample Date	Comments			
S-4A A	1120	08/23/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	95	6.0	09/07/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	6.40*	0.5	08/23/18	NEC*	SM 5310 C
Boron	mg/L	ND*	0.010	08/30/18	NEC*	EPA 200.7
Nitrate-N	mg/L	BRL	0.01	08/23/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	08/23/18	LL	EPA 300.0
Ammonia-N *	mg/L	0.024*	0.02	08/28/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.63	0.2	09/11/18	KB	SM4500-Norg B-C
Chloride	mg/L	35	3.0	08/23/18	LL	EPA 300.0
Total Phosphorous (P)	mg/L	0.020	0.005	10/07/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.49	0.20	09/11/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	5.60*	0.50	08/23/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.03	NA	09/22/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.47	NA	09/22/18	MC	Calculation
Chlorophyll-a	*	42.5*	*	08/26/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.012	0.005	08/23/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.80	NA	09/22/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.14	NA	09/22/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.49	NA	09/12/18	KB	Calculation
E coli	CFU/100ml	180	5	08/23/18	MC	EPA 1603

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, December 3, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.
Plymouth, MA

ProjectName: Eel River SW sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-181846

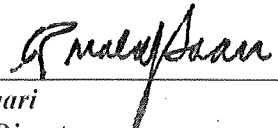
Date Received: 08/23/18

Sample Type		Sample Time	Sample Date	Comments		
S-3A	A	11:35	08/23/18			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Total Dissolved Solids		mg/L	82	6.0	09/07/18	KB SM 2540 C
Total Organic Carbon*		mg/L	2.01*	0.5	08/23/18	NEC* SM 5310 C
Boron		mg/L	ND*	0.010	08/30/18	NEC* EPA 200.7
Nitrate-N		mg/L	0.14	0.01	08/23/18	LL EPA 300.0
Nitrite-N		mg/L	BRL	0.006	08/23/18	LL EPA 300.0
Ammonia-N *		mg/L	0.032*	0.02	08/28/18	RIA* SM4500 NH3 C
Total Kjeldhal Nitrogen		mg/L	0.25	0.2	09/12/18	KB SM4500-Norg B-C
Chloride		mg/L	32	3.0	08/23/18	LL EPA 300.0
Total Phosphorous (P)		mg/L	0.019	0.005	10/07/18	MC SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	BRL	0.20	09/12/18	KB SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	1.66*	0.50	08/23/18	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.17	NA	09/22/18	MC Calculation
Dissolved Organic Nitrogen		mg/L	<0.17	NA	09/22/18	MC Calculation
Chlorophyll-a		*	7.13*	*	08/26/18	Alpha* *
Ortho Phosphorous (P)		mg/L	0.011	0.005	08/23/18	MC SM 4500-P
Particulate Organic Carbon		mg/L	0.35	NA	09/22/18	MC SM 5310 C
Particulate Organic Nitrogen		mg/L	<0.05	NA	09/22/18	MC Calculation
Total Dissolved Nitrogen		mg/L	< 0.34	NA	09/12/18	KB Calculation
E coli		CFU/100ml	45	5	08/23/18	MC EPA 1603

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, December 3, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: Eel River SW sampling

Comments:

Project Number:

Sampled By: Kim Tower

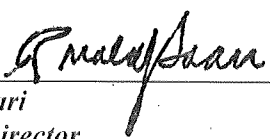
Lab Order Number: WW-181847

Date Received: 08/23/18

Sample Type	Sample Time	Sample Date	Comments			
S-2C A	11:50	08/23/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	72	6.0	09/07/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	1.85*	0.5	08/23/18	NEC*	SM 5310 C
Boron	mg/L	ND*	0.010	08/30/18	NEC*	EPA 200.7
Nitrate-N	mg/L	0.07	0.01	08/23/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	08/23/18	LL	EPA 300.0
Ammonia-N *	mg/L	0.042*	0.02	08/28/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.37	0.2	09/15/18	KB	SM4500-Norg B-C
Chloride	mg/L	28	3.0	08/23/18	LL	EPA 300.0
Total Phosphorous (P)	mg/L	BRL	0.005	10/07/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.34	0.20	09/15/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.39*	0.50	08/23/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.11	NA	09/22/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.30	NA	09/22/18	MC	Calculation
Chlorophyll-a	*	11.2*	*	08/26/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	08/23/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.46	NA	09/22/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.03	NA	09/22/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.41	NA	09/18/18	KB	Calculation
E coli	CFU/100ml	10	5	08/23/18	MC	EPA 1603

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, December 3, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: Eel River SW sampling

Comments:

Project Number:

Sampled By: Kim Tower

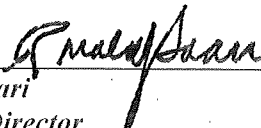
Lab Order Number: WW-181848

Date Received: 08/23/18

Sample Type		Sample Time	Sample Date	Comments		
S-6A	A	12:20	08/23/18			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
						Method
Total Dissolved Solids		mg/L	59	6.0	09/07/18	KB
Total Organic Carbon*		mg/L	2.62*	0.5	08/23/18	NEC*
Boron		mg/L	ND*	0.010	08/30/18	NEC*
Nitrate-N		mg/L	0.10	0.01	08/23/18	LL
Nitrite-N		mg/L	BRL	0.006	08/23/18	LL
Ammonia-N *		mg/L	0.028*	0.02	08/28/18	RIA*
Total Kjeldhal Nitrogen		mg/L	0.28	0.2	09/15/18	KB
Chloride		mg/L	20	3.0	08/23/18	LL
Total Phosphorous (P)		mg/L	BRL	0.005	10/07/18	MC
Dissolved Kjeldhal Nitrogen		mg/L	BRL	0.20	09/15/18	KB
Dissolved Total Organic Carbon		mg/L	2.02*	0.50	08/23/18	NEC*
Dissolved Inorganic Nitrogen		mg/L	0.13	NA	09/22/18	MC
Dissolved Organic Nitrogen		mg/L	<0.17	NA	09/22/18	MC
Chlorophyll-a		*	ND*	*	08/26/18	Alpha*
Ortho Phosphorous (P)		mg/L	BRL	0.005	08/23/18	MC
Particulate Organic Carbon		mg/L	0.60	NA	09/22/18	MC
Particulate Organic Nitrogen		mg/L	<0.08	NA	09/22/18	MC
Total Dissolved Nitrogen		mg/L	< 0.30	NA	09/18/18	KB
E coli		CFU/100ml	50	5	08/23/18	MC

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

LABORATORY REPORT

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

Date Received: 8/24/2018
Date Reported: 8/31/2018
P.O. Number

Work Order #: 1808-18213

Project Name: PLYMOUTH ENV.

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable, indication of sample analysis at our Hudson, MA laboratory and/or subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:



Dawne E. Smart
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):

Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508, ME RI00015, NH 2070, NY 11726

Hudson MA * M-MA1117, RI LAO00319

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1808-18213

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: S-8B
Sample Type : GRAB
Sample Date / Time : 8/23/2018 @ 10:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.030	0.02	mg/l	SM4500NH3-B,H 18-21ed	8/28/2018 7:00	KLE

Sample Number: 002
Sample Description: S-8A
Sample Type : GRAB
Sample Date / Time : 8/23/2018 @ 10:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.072	0.02	mg/l	SM4500NH3-B,H 18-21ed	8/28/2018 7:00	KLE

Sample Number: 003
Sample Description: S-5B
Sample Type : GRAB
Sample Date / Time : 8/23/2018 @ 11:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.095	0.02	mg/l	SM4500NH3-B,H 18-21ed	8/28/2018 7:00	KLE

Sample Number: 004
Sample Description: S-4A
Sample Type : GRAB
Sample Date / Time : 8/23/2018 @ 11:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.024	0.02	mg/l	SM4500NH3-B,H 18-21ed	8/28/2018 7:00	KLE

R.I. Analytical Laboratories, Inc.**Laboratory Report**

Envirotech Laboratories, Inc.

Work Order #: 1808-18213

Project Name: PLYMOUTH ENV.

Sample Number: 005
Sample Description: S-3A
Sample Type : GRAB
Sample Date / Time : 8/23/2018 @ 11:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.032	0.02	mg/l	SM4500NH3-B,H 18-21ed	8/28/2018 7:00	KLE

Sample Number: 006
Sample Description: S-2C
Sample Type : GRAB
Sample Date / Time : 8/23/2018 @ 11:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.042	0.02	mg/l	SM4500NH3-B,H 18-21ed	8/28/2018 7:00	KLE

Sample Number: 007
Sample Description: S-6A
Sample Type : GRAB
Sample Date / Time : 8/23/2018 @ 12:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.028	0.02	mg/l	SM4500NH3-B,H 18-21ed	8/28/2018 7:00	KLE

[illegible]

1808-18213

Date: 08/30/18

New England ChromaChem
6 Nichols Street
Salem, MA 01970
978-744-6600

Massachusetts DEP Lab. M-MA072

Client: Envirotech Laboratory, Inc.
State: Liquid

[illegible][illegible]

Electronically signed and approved by: Bruce L. Bornstein

Date: 08/30/18

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1833392
Report Date: 08/30/18

SAMPLE RESULTS

Lab ID: L1833392-01
Client ID: WW-181842
Sample Location: Not Specified

Date Collected: 08/23/18 10:30
Date Received: 08/23/18
Field Prep: Not Specified

Sample Depth:
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	08/23/18 23:00	08/26/18 14:55	121,10200H	AG



Project Name: PLYMOUTH ENVIRONMENTAL MGMT**Lab Number:** L1833392**Project Number:** Not Specified**Report Date:** 08/30/18**SAMPLE RESULTS****Lab ID:** L1833392-02**Date Collected:** 08/23/18 10:45**Client ID:** WW-181843**Date Received:** 08/23/18**Sample Location:** Not Specified**Field Prep:** Not Specified**Sample Depth:****Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	5.42		mg/m3	2.00	NA	1	08/23/18 23:00	08/26/18 14:55	121,10200H	AG



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1833392
Report Date: 08/30/18

SAMPLE RESULTS

Lab ID: L1833392-03
Client ID: WW-181844
Sample Location: Not Specified

Date Collected: 08/23/18 11:00
Date Received: 08/23/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	5.75		mg/m3	2.00	NA	1	08/23/18 23:00	08/26/18 14:55	121,10200H	AG



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1833392
Report Date: 08/30/18

SAMPLE RESULTS

Lab ID: L1833392-04
Client ID: WW-181845
Sample Location: Not Specified

Date Collected: 08/23/18 11:20
Date Received: 08/23/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	42.5		mg/m3	2.00	NA	1	08/23/18 23:00	08/26/18 14:55	121,10200H	AG



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1833392
Report Date: 08/30/18

SAMPLE RESULTS

Lab ID: L1833392-05
Client ID: WW-181846
Sample Location: Not Specified

Date Collected: 08/23/18 11:35
Date Received: 08/23/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	7.13		mg/m3	2.00	NA	1	08/23/18 23:00	08/26/18 14:55	121,10200H	AG



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1833392
Report Date: 08/30/18

SAMPLE RESULTS

Lab ID: L1833392-06
Client ID: WW-181847
Sample Location: Not Specified

Date Collected: 08/23/18 11:50
Date Received: 08/23/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	11.2		mg/m3	2.00	NA	1	08/23/18 23:00	08/26/18 14:55	121,10200H	AG



Serial_No:08301820:31

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1833392

Project Number: Not Specified

Report Date: 08/30/18

SAMPLE RESULTS

Lab ID: L1833392-07

Date Collected: 08/23/18 12:20

Client ID: WW-181848

Date Received: 08/23/18

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

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	08/23/18 23:00	08/26/18 14:55	121,10200H	AG



MC

Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, 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
08/23/18	1030	S-8B	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE
08/23/18	1045	S-8A	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE

Relinquished By: Date/Time

Kim Tower

Received By:

Date/Time:

08/23/18 1320

8/23/18
1500 MC

MC

Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, 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
08/23/18	1100	S-5B	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE
08/23/18	1120	S-4A	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

Kim Tower 08/23/18 1320

Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, 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
08/23/18	1135	S-3A	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE
08/23/18	1150	S-2C	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

Kim Tower 08/23/18 1320



Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, 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
08/23/18	1220	S-6A	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE
08/23/18			1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

Kim Tower 08/23/18 1320

50

W-181848

W-181849 - 0 filter Blank

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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, December 3, 2018

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

ProjectName: Eel River SW Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-182266

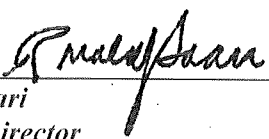
Date Received: 10/01/18

Sample Type		Sample Time	Sample Date	Comments		
S-8B	A	10:20	10/01/18			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
						Method
Total Dissolved Solids		mg/L	BRL	6.0	10/15/18	KB
Chloride grab		mg/L	BRL	3.0	10/01/18	LL
Total Organic Carbon*		mg/L	0.220*	0.5	10/01/18	NEC*
Boron		mg/L	BRL	0.010	10/10/18	MC
Nitrate-N		mg/L	BRL	0.01	10/01/18	LL
Nitrite-N		mg/L	BRL	0.006	10/01/18	LL
Ammonia-N *		mg/L	0.029*	0.02	10/10/18	RIA*
Total Kjeldhal Nitrogen		mg/L	BRL	0.2	10/16/18	KB
Total Phosphorous (P)		mg/L	BRL	0.005	10/07/18	MC
Dissolved Kjeldhal Nitrogen		mg/L	BRL	0.20	10/16/18	KB
Dissolved Total Organic Carbon		mg/L	ND	0.50	10/01/18	NEC*
Dissolved Inorganic Nitrogen		mg/L	<0.04	NA	10/30/18	MC
Dissolved Organic Nitrogen		mg/L	<0.17	NA	10/30/18	MC
Chlorophyll-a		*	ND*	*	10/03/18	Alpha*
Ortho Phosphorous (P)		mg/L	BRL	0.005	10/02/18	MC
Particulate Organic Carbon		mg/L	<0.10	NA	10/30/18	MC
Particulate Organic Nitrogen		mg/L	ND	NA	10/30/18	MC
Total Dissolved Nitrogen		mg/L	<0.21	NA	10/17/18	KB
E. coli		CFU/100ml	<5	5	10/01/18	MC

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, December 3, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.
 Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number:

Sampled By: Kim Tower

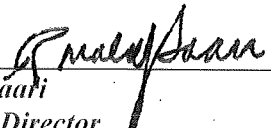
Lab Order Number: WW-182267

Date Received: 10/01/18

Sample Type		Sample Time	Sample Date	Comments		
S-8A	A	10:40	10/01/18			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
						Method
Total Dissolved Solids		mg/L	130	6.0	10/15/18	KB
Total Organic Carbon*		mg/L	3.21*	0.5	10/01/18	NEC*
Boron		mg/L	BRL	0.010	10/10/18	MC
Nitrate-N		mg/L	0.16	0.01	10/01/18	LL
Nitrite-N		mg/L	BRL	0.006	10/01/18	LL
Ammonia-N *		mg/L	0.029*	0.02	10/10/18	RIA*
Total Kjeldhal Nitrogen		mg/L	0.35	0.2	10/16/18	KB
Chloride		mg/L	48	3.0	10/01/18	LL
Total Phosphorous (P)		mg/L	0.013	0.005	10/07/18	MC
Dissolved Kjeldhal Nitrogen		mg/L	0.33	0.20	10/16/18	KB
Dissolved Total Organic Carbon		mg/L	2.85*	0.50	10/01/18	NEC*
Dissolved Inorganic Nitrogen		mg/L	0.19	NA	10/30/18	MC
Dissolved Organic Nitrogen		mg/L	0.30	NA	10/30/18	MC
Chlorophyll-a		*	3.61*	*	10/03/18	Alpha*
Ortho Phosphorous (P)		mg/L	0.009	0.005	10/02/18	MC
Particulate Organic Carbon		mg/L	0.36	NA	10/30/18	MC
Particulate Organic Nitrogen		mg/L	0.02	NA	10/30/18	MC
Total Dissolved Nitrogen		mg/L	0.49	NA	10/17/18	KB
E. coli		CFU/100ml	75	5	10/01/18	MC

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, December 3, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.
Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-182268

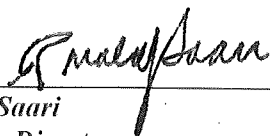
Date Received: 10/01/18

Sample Type		Sample Time	Sample Date	Comments		
S-5B	A	10:50	10/01/18			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
						Method
Total Dissolved Solids		mg/L	130	6.0	10/15/18	KB
Total Organic Carbon*		mg/L	3.23*	0.5	10/01/18	NEC*
Boron		mg/L	BRL	0.010	10/10/18	MC
Nitrate-N		mg/L	0.16	0.01	10/01/18	LL
Nitrite-N		mg/L	BRL	0.006	10/01/18	LL
Ammonia-N *		mg/L	0.053*	0.02	10/10/18	RIA*
Total Kjeldhal Nitrogen		mg/L	0.33	0.2	10/16/18	KB
Chloride		mg/L	48	3.0	10/01/18	LL
Total Phosphorous (P)		mg/L	0.016	0.005	10/07/18	MC
Dissolved Kjeldhal Nitrogen		mg/L	0.31	0.20	10/16/18	KB
Dissolved Total Organic Carbon		mg/L	2.77*	0.50	10/01/18	NEC*
Dissolved Inorganic Nitrogen		mg/L	0.21	NA	10/30/18	MC
Dissolved Organic Nitrogen		mg/L	0.26	NA	10/30/18	MC
Chlorophyll-a		*	3.13*	*	10/03/18	Alpha*
Ortho Phosphorous (P)		mg/L	0.013	0.005	10/02/18	MC
Particulate Organic Carbon		mg/L	0.46	NA	10/30/18	MC
Particulate Organic Nitrogen		mg/L	0.02	NA	10/30/18	MC
Total Dissolved Nitrogen		mg/L	0.47	NA	10/17/18	KB
E. coli		CFU/100ml	80	5	10/01/18	MC

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, December 3, 2018

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

ProjectName: Eel River SW Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-182269

Date Received: 10/01/18

Sample Type	Sample Time	Sample Date	Comments			
S-4A A	11:15	10/01/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	100	6.0	10/15/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	6.22*	0.5	10/01/18	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	10/10/18	MC	EPA 200.7
Nitrate-N	mg/L	0.06	0.01	10/01/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	10/01/18	LL	EPA 300.0
Ammonia-N *	mg/L	0.036*	0.02	10/10/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	1.8	0.2	10/16/18	KB	SM4500-Norg B-C
Chloride	mg/L	32	3.0	10/01/18	LL	EPA 300.0
Total Phosphorous (P)	mg/L	0.020	0.005	10/07/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.43	0.20	10/16/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	5.22*	0.50	10/01/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.10	NA	10/30/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	0.39	NA	10/30/18	MC	Calculation
Chlorophyll-a	*	276*	*	10/03/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.017	0.005	10/02/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	1.00	NA	10/30/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	1.37	NA	10/30/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	0.49	NA	10/17/18	KB	Calculation
E. coli	CFU/100ml	240	5	10/01/18	MC	EPA 1603

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, December 3, 2018

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

ProjectName: Eel River SW Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-182270

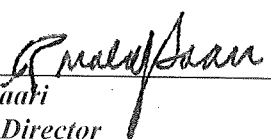
Date Received: 10/01/18

Sample Type	Sample Time	Sample Date	Comments			
S-3A A	11:30	10/01/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	89	6.0	10/15/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	1.43*	0.5	10/01/18	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	10/10/18	MC	EPA 200.7
Nitrate-N	mg/L	0.16	0.01	10/01/18	LL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	10/01/18	LL	EPA 300.0
Ammonia-N *	mg/L	0.041*	0.02	10/10/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	BRL	0.2	10/17/18	KB	SM4500-Norg B-C
Chloride	mg/L	33	3.0	10/01/18	LL	EPA 300.0
Total Phosphorous (P)	mg/L	0.015	0.005	10/07/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	10/17/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.16*	0.50	10/01/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.20	NA	10/30/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.16	NA	10/30/18	MC	Calculation
Chlorophyll-a	*	5.49*	*	10/03/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.009	0.005	10/02/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.27	NA	10/30/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	10/30/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.36	NA	10/17/18	KB	Calculation
E coli	CFU/100ml	30	5	10/01/18	MC	EPA 1603

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, December 3, 2018

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

ProjectName: Eel River SW Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-182271

Date Received: 10/01/18

Sample Type		Sample Time	Sample Date	Comments		
S-2C	A	11:45	10/01/18			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Total Dissolved Solids		mg/L	85	6.0	10/15/18	KB SM 2540 C
Total Organic Carbon*		mg/L	1.56*	0.5	10/01/18	NEC* SM 5310 C
Boron		mg/L	BRL	0.010	10/10/18	MC EPA 200.7
Nitrate-N		mg/L	0.06	0.01	10/01/18	LL EPA 300.0
Nitrite-N		mg/L	BRL	0.006	10/01/18	LL EPA 300.0
Ammonia-N *		mg/L	0.040*	0.02	10/10/18	RIA* SM4500 NH3 C
Total Kjeldhal Nitrogen		mg/L	0.30	0.2	10/17/18	KB SM4500-Norg B-C
Chloride		mg/L	29	3.0	10/01/18	LL EPA 300.0
Total Phosphorous (P)		mg/L	0.019	0.005	10/07/18	MC SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	BRL	0.20	10/17/18	KB SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	1.31*	0.50	10/01/18	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.10	NA	10/30/18	MC Calculation
Dissolved Organic Nitrogen		mg/L	<0.16	NA	10/30/18	MC Calculation
Chlorophyll-a		*	14.7*	*	10/03/18	Alpha* *
Ortho Phosphorous (P)		mg/L	0.011	0.005	10/02/18	MC SM 4500-P
Particulate Organic Carbon		mg/L	0.35	NA	10/30/18	MC SM 5310 C
Particulate Organic Nitrogen		mg/L	<0.10	NA	10/30/18	MC Calculation
Total Dissolved Nitrogen		mg/L	<0.26	NA	10/17/18	KB Calculation
E. coli		CFU/100ml	<5	5	10/01/18	MC EPA 1603

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, December 3, 2018

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Eel River SW Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-182272

Date Received: 10/01/18

Sample Type		Sample Time	Sample Date	Comments		
S-6A	A	12:05	10/01/18			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
Total Dissolved Solids		mg/L	150	6.0	10/15/18	KB
Total Organic Carbon*		mg/L	1.55*	0.5	10/01/18	NEC*
Boron		mg/L	BRL	0.010	10/10/18	MC
Nitrate-N		mg/L	0.16	0.01	10/01/18	LL
Nitrite-N		mg/L	BRL	0.006	10/01/18	LL
Ammonia-N *		mg/L	0.050*	0.02	10/10/18	RIA*
Total Kjeldhal Nitrogen		mg/L	BRL	0.2	10/17/18	KB
Chloride		mg/L	21	3.0	10/01/18	LL
Total Phosphorous (P)		mg/L	0.015	0.005	10/07/18	MC
Dissolved Kjeldhal Nitrogen		mg/L	BRL	0.20	10/17/18	KB
Dissolved Total Organic Carbon		mg/L	1.17*	0.50	10/01/18	NEC*
Dissolved Inorganic Nitrogen		mg/L	0.21	NA	10/30/18	MC
Dissolved Organic Nitrogen		mg/L	<0.15	NA	10/30/18	MC
Chlorophyll-a		*	ND*	*	10/03/18	Alpha*
Ortho Phosphorous (P)		mg/L	0.009	0.005	10/02/18	MC
Particulate Organic Carbon		mg/L	0.38	NA	10/30/18	MC
Particulate Organic Nitrogen		mg/L	ND	NA	10/30/18	MC
Total Dissolved Nitrogen		mg/L	<0.36	NA	10/18/18	KB
E. coli		CFU/100ml	<5	5	10/01/18	MC

BRL=below reportable limits

*see attached

By:

Ronald J. Saafi
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, December 3, 2018

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

ProjectName: Eel River SW Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-182273

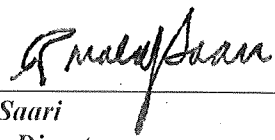
Date Received: 10/01/18

Sample Type	Sample Time	Sample Date	Comments			
S-12 A	12:15	10/01/18				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Solids	mg/L	62	6.0	10/15/18	KB	SM 2540 C
Total Organic Carbon*	mg/L	1.90*	0.5	10/01/18	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	10/10/18	MC	EPA 200.7
Nitrate-N	mg/L	0.10	0.01	10/01/18	RL	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	10/01/18	RL	EPA 300.0
Ammonia-N *	mg/L	0.041*	0.02	10/10/18	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.32	0.2	10/17/18	KB	SM4500-Norg B-C
Chloride	mg/L	20	3.0	10/01/18	RL	EPA 300.0
Total Phosphorous (P)	mg/L	0.011	0.005	10/07/18	MC	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	10/17/18	KB	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.53*	0.50	10/01/18	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.14	NA	10/30/18	MC	Calculation
Dissolved Organic Nitrogen	mg/L	<0.16	NA	10/30/18	MC	Calculation
Chlorophyll-a	*	2.94*	*	10/03/18	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.005	0.005	10/02/18	MC	SM 4500-P
Particulate Organic Carbon	mg/L	0.37	NA	10/30/18	MC	SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.12	NA	10/30/18	MC	Calculation
Total Dissolved Nitrogen	mg/L	<0.30	NA	10/18/18	KB	Calculation
E. coli	CFU/100ml	30	5	10/01/18	MC	EPA 1603

BRL=below reportable limits

*see attached

By:



Ronald J. Saari
 Laboratory Director

Serial_No:10101811:09

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1839458

Project Number: Not Specified

Report Date: 10/10/18

SAMPLE RESULTS

Lab ID: L1839458-01

Date Collected: 10/01/18 10:20

Client ID: WW-182266

Date Received: 10/01/18

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

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	10/01/18 21:18	10/03/18 10:00	121,10200H	AG



Serial_No:10101811:09

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1839458

Project Number: Not Specified

Report Date: 10/10/18

SAMPLE RESULTS

Lab ID: L1839458-02

Date Collected: 10/01/18 10:40

Client ID: WW-182267

Date Received: 10/01/18

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	3.61		mg/m3	2.00	NA	1	10/01/18 21:18	10/03/18 10:00	121,10200H	AG



Serial_No:10101811:09

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1839458

Project Number: Not Specified

Report Date: 10/10/18

SAMPLE RESULTS

Lab ID: L1839458-03

Date Collected: 10/01/18 10:50

Client ID: WW-182268

Date Received: 10/01/18

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	3.13		mg/m3	2.00	NA	1	10/01/18 21:18	10/03/18 10:00	121,10200H	AG



Serial_No:10101811:09

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1839458

Project Number: Not Specified

Report Date: 10/10/18

SAMPLE RESULTS

Lab ID: L1839458-04

Date Collected: 10/01/18 11:15

Client ID: WW-182269

Date Received: 10/01/18

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	276		mg/m3	2.00	NA	1	10/01/18 21:18	10/03/18 10:00	121,10200H	AG



Serial_No:10101811:09

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1839458

Project Number: Not Specified

Report Date: 10/10/18

SAMPLE RESULTS

Lab ID: L1839458-05

Date Collected: 10/01/18 11:30

Client ID: WW-182270

Date Received: 10/01/18

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	5.49		mg/m3	2.00	NA	1	10/01/18 21:18	10/03/18 10:00	121,10200H	AG



Serial_No:10101811:09

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1839458

Project Number: Not Specified

Report Date: 10/10/18

SAMPLE RESULTS

Lab ID: L1839458-06

Date Collected: 10/01/18 11:45

Client ID: WW-182271

Date Received: 10/01/18

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	14.7		mg/m3	2.00	NA	1	10/01/18 21:18	10/03/18 10:00	121,10200H	AG



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L1839458
Report Date: 10/10/18

SAMPLE RESULTS

Lab ID: L1839458-07
Client ID: WW-182272
Sample Location: Not Specified

Date Collected: 10/01/18 12:05
Date Received: 10/01/18
Field Prep: Not Specified

Sample Depth:
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	10/01/18 21:18	10/03/18 10:00	121,10200H	AG



Serial_No:10101811:09

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L1839458

Project Number: Not Specified

Report Date: 10/10/18

SAMPLE RESULTS

Lab ID: L1839458-08

Client ID: WW-182273

Sample Location: Not Specified

Date Collected: 10/01/18 12:15

Date Received: 10/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chlorophyll A	2.94		mg/m3	2.00	NA	1	10/01/18 21:18	10/03/18 10:00	121,10200H	AG



New England ChromaChem
6 Nichols Street
Salem, MA 01970
978-744-6600

Massachusetts DEP Lab. M-MA072

Client: Envirotech Laboratory, Inc.
State: Liquid

[illegible][illegible]

Electronically signed and approved by:

Ben L. Barnate

Date: 10/11/18

New England ChromaChem
6 Nichols Street
Salem, MA 01970
978-744-6600

Massachusetts DEP Lab. M-MA072

Client: Envirotech Laboratory, Inc.
State: Liquid

[illegible][illegible]

Electronically signed and approved by:

Bern L. Bornstein

Date: 10/11/18

LABORATORY REPORT

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

Date Received: 10/2/2018
Date Reported: 10/12/2018
P.O. Number

Work Order #: 1810-21244

Project Name: PLYMOUTH ENV.

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable, indication of sample analysis at our Hudson, MA laboratory and/or subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:



Dawne E. Smart
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):

Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508, ME RI00015, NH 2070, NY 11726
Hudson MA * M-MA1117, RI LAO00319

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1810-21244

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-182266 S-8B
Sample Type : GRAB
Sample Date / Time : 10/01/2018 @ 10:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.029	0.02	mg/l	SM4500NH3-B,H 18-21ed	10/10/2018 8:00	APD

Sample Number: 002
Sample Description: WW-182267 S-8A
Sample Type : GRAB
Sample Date / Time : 10/01/2018 @ 10:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.029	0.02	mg/l	SM4500NH3-B,H 18-21ed	10/10/2018 8:00	APD

Sample Number: 003
Sample Description: WW-182268 S-5B
Sample Type : GRAB
Sample Date / Time : 10/01/2018 @ 10:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.053	0.02	mg/l	SM4500NH3-B,H 18-21ed	10/10/2018 8:00	APD

Sample Number: 004
Sample Description: WW-182269 S-4A
Sample Type : GRAB
Sample Date / Time : 10/01/2018 @ 11:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.036	0.02	mg/l	SM4500NH3-B,H 18-21ed	10/10/2018 8:00	APD

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 1810-21244

Project Name: PLYMOUTH ENV.

Sample Number: 005
Sample Description: WW-182270 S-3A
Sample Type : GRAB
Sample Date / Time : 10/01/2018 @ 11:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.041	0.02	mg/l	SM4500NH3-B,H 18-21ed	10/10/2018 8:00	APD

Sample Number: 006
Sample Description: WW-182271 S-2C
Sample Type : GRAB
Sample Date / Time : 10/01/2018 @ 11:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.040	0.02	mg/l	SM4500NH3-B,H 18-21ed	10/10/2018 8:00	APD

Sample Number: 007
Sample Description: WW-182272 S-6A
Sample Type : GRAB
Sample Date / Time : 10/01/2018 @ 12:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.050	0.02	mg/l	SM4500NH3-B,H 18-21ed	10/10/2018 8:00	APD

Sample Number: 008
Sample Description: WW-182273 S-12
Sample Type : GRAB
Sample Date / Time : 10/01/2018 @ 12:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.041	0.02	mg/l	SM4500NH3-B,H 18-21ed	10/10/2018 8:00	APD

JC

Laboratory:

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

Chain of Custody

Client:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@townhall.plymouth.ma.us
Project Name: **Eel River SW Sampling -Plymouth MA**
Sampler: Kim Tower (KT)

WW-182266

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
10/1/18	1020	S-8B	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE
10/1/18	1040	S-8A	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE

CS

JS

Relinquished By: Date/Time

KT

Received By: Date/Time:

Blum 10/01/18 1320

Laboratory:

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

Chain of CustodyClient:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, 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
10/1/18	1050	S-5B	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE
10/1/18	1115	S-4A	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE

Relinquished By: Date/Time



Received By:

Date/Time:

 10/1/18 1320

Laboratory:

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

Chain of CustodyClient:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, 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
10/1/18	1130	S-3A	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE
10/1/18	1145	S-2C	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE

Relinquished By: Date/Time

KT

Received By: Date/Time:

KT10/01/18 1320

Laboratory:

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

Chain of CustodyClient:

Town of Plymouth - Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, 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
10/1/18	1205	S-6A	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE
10/1/18	1215	S-12	1	1 Liter Plastic	Diss TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, NH3, TOC LOW, TP	H2SO4
			2	1 Liter Amber	Chlorophyll-a	NONE
			1	Glass	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride, Boron	NONE
			1	100mL Plastic	Bacteria	NONE

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

New 10/1/18 1320