

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, July 5, 2023

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230309

Date Received: 03/08/23

Sample Type	Sample Time	Sample Date	Comments			
DW-1 A	07:30	03/08/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.61	0.01	03/09/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	03/09/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.82	NA	03/17/23	KF	Calculation
Total Dissolved Solids	mg/L	34	6.0	03/14/23	AH	SM 2540 C.
Dissolved Total Phosphorous	mg/L	BRL	0.005	03/14/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	0.722	0.017	03/08/23	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	1.74*	*	03/16/23	NEC*	*
Total Iron	mg/L	4.52	0.050	03/11/23	KB	EPA 200.7
Boron	mg/L	0.015	0.010	03/11/23	KB	EPA 200.7
Copper	mg/L	0.004	0.003	03/11/23	KB	EPA 200.7
Ammonia-N *	mg/L	BRL	0.02	03/14/23	RIA*	SM4500 NH3 C
Chloride	mg/L	13	3.0	03/09/23	KF	EPA 300.0
Kjeldhal Nitrogen	mg/L	0.21	0.10	04/06/23	IP	SM4500 Norg B-C
Ortho Phosphorous (P)	mg/L	BRL	0.005	03/08/23	IP	SM 4500-P
Mercury*	mg/L	BRL	0.0002	03/13/23	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.022	0.005	03/23/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	03/16/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.438	0.017	03/08/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.61	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.2	NA	07/05/23	KB	Calculation
Particulate Organic Carbon	mg/L	0.284	NA	03/23/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.21	NA	03/21/23	RIA*	Calculation

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By:

Ronald J. Saari

Laboratory Director

ENVIROTECH LABORATORIES, INC.
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Wednesday, July 5, 2023

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

ProjectName: Groundwater Eel River **Comments:**
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-230309
Date Received: 03/08/23

Sample Type		Sample Time	Sample Date	Comments			
DW-1	A	07:30	03/08/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Nitrogen		mg/L	0.61	NA	03/17/23	KF	Calculation

*Trace to low levels of chloroform are occasionally detected in ground water in coastline areas.

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Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230310

Date Received: 03/08/23

Sample Type	Sample Time	Sample Date	Comments			
Bradford A	08:00	03/08/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.61	0.01	03/09/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	03/09/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.82	NA	07/05/23	KB	Calculation
Total Dissolved Solids	mg/L	34	6.0	03/14/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.007	0.005	03/14/23	IP	SM 4500-P-B,E
Total Organic Carbon*	mg/L	0.706	0.017	03/08/23	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	1.72*	*	03/16/23	NEC*	*
Total Iron	mg/L	4.61	0.050	03/11/23	KB	EPA 200.7
Boron	mg/L	0.015	0.010	03/11/23	KB	EPA 200.7
Copper	mg/L	0.004	0.003	03/11/23	KB	EPA 200.7
Ammonia-N *	mg/L	BRL	0.02	03/14/23	RIA*	SM4500 NH3 C
Chloride	mg/L	13	3.0	03/09/23	KF	EPA 300.0
Kjeldhal Nitrogen	mg/L	0.21	0.10	04/06/23	IP	SM4500 Norg B-C
Mercury*	mg/L	BRL	0.0002	03/13/23	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.021	0.005	03/23/23	IP	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	03/16/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.454	0.017	03/08/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.61	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.2	NA	07/05/23	KB	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	03/08/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.252	NA	03/23/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.21	NA	07/05/23	KB	Calculation

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Wednesday, July 5, 2023

Plymouth Environmental Management

K.Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230310

Date Received: 03/08/23

Sample Type		Sample Time	Sample Date	Comments		
Bradford	A	08:00	03/08/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
Total Dissolved Nitrogen		mg/L	0.61	NA	07/05/23	KB
						Calculation

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Thursday, July 6, 2023

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

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230311

Date Received: 03/08/23

Sample Type		Sample Time	Sample Date	Comments		
A13	A	08:20	03/08/23			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.60	0.01	03/09/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	03/09/23	KF	EPA 300.0
Total Nitrogen	mg/L	1.0	NA	07/05/23	KB	Calculation
Total Dissolved Solids	mg/L	270	6.0	03/14/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.013	0.005	03/14/23	IP	SM 4500-P-B,E
Total Organic Carbon*	mg/L	0.557	0.017	03/08/23	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	3.25	*	03/16/23	NEC*	*
Total Iron	mg/L	9.38	0.050	03/11/23	KB	EPA 200.7
Boron	mg/L	0.068	0.010	03/11/23	KB	EPA 200.7
Copper	mg/L	BRL	0.003	03/11/23	KB	EPA 200.7
Ammonia-N *	mg/L	0.17	0.02	03/14/23	RIA*	SM4500 NH3 C
Chloride	mg/L	148	3.0	03/09/23	KF	EPA 300.0
Kjeldhal Nitrogen	mg/L	0.42	0.10	04/06/23	IP	SM4500 Norg B-C
Mercury*	mg/L	BRL	0.0002	03/16/23	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.096	0.005	03/23/23	IP	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.28	0.20	03/16/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.074	0.017	03/08/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.77	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.11	NA	07/05/23	KB	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	03/08/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.483	NA	03/23/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.14	NA	07/05/23	KB	Calculation

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Thursday, July 6, 2023

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

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230311

Date Received: 03/08/23

Sample Type		Sample Time	Sample Date	Comments			
A13	A	08:20	03/08/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Nitrogen		mg/L	0.88	NA	07/05/23	KB	Calculation

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Wednesday, July 5, 2023

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230312

Date Received: 03/08/23

Sample Type	Sample Time	Sample Date	Comments			
A17 A	08:50	03/08/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	2.3	0.01	03/09/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	03/09/23	KF	EPA 300.0
Total Nitrogen	mg/L	2.9	NA	07/05/23	KB	Calculation
Total Dissolved Solids	mg/L	552	6.0	03/14/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.016	0.005	03/14/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	0.411	0.017	03/08/23	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	1.87*	*	03/16/23	NEC*	*
Total Iron	mg/L	0.162	0.050	03/11/23	KB	EPA 200.7
Boron	mg/L	0.175	0.010	03/11/23	KB	EPA 200.7
Copper	mg/L	BRL	0.003	03/11/23	KB	EPA 200.7
Ammonia-N *	mg/L	BRL	0.02	03/14/23	RIA*	SM4500 NH3 C
Chloride	mg/L	290	3.0	03/09/23	KF	EPA 300.0
Kjeldhal Nitrogen	mg/L	0.56	0.10	04/06/23	IP	SM4500 Norg B-C
Mercury*	mg/L	BRL	0.0002	03/16/23	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.016	0.005	03/23/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.42	0.20	03/16/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.142	0.017	03/08/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	2.3	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.42	NA	07/05/23	KB	Calculation
Ortho Phosphorous (P)	mg/L	0.008	0.005	03/08/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.269	NA	03/23/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.14	NA	07/05/23	KB	Calculation

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We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

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

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230312

Date Received: 03/08/23

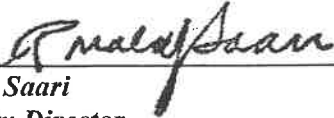
Sample Type		Sample Time	Sample Date	Comments			
A17	A	08:50	03/08/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Nitrogen		mg/L	2.7	NA	07/05/23	KB	Calculation

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Wednesday, July 5, 2023

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

ProjectName: Groundwater Eel River **Comments:**
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-230313
Date Received: 03/08/23

Sample Type		Sample Time	Sample Date	Comments		
2S	A	09:10	03/08/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Nitrate-N		mg/L	0.70	0.01	03/09/23	KF EPA 300.0
Nitrite-N		mg/L	BRL	0.006	03/09/23	KF EPA 300.0
Total Nitrogen		mg/L	1.7	NA	07/05/23	KB Calculation
Total Dissolved Solids		mg/L	158	6.0	03/14/23	AH SM 2540 C
Dissolved Total Phosphorous		mg/L	BRL	0.005	03/14/23	AH SM 4500-P-B,E
Total Organic Carbon*		mg/L	0.651	0.017	03/08/23	NEC* SM 5310 C
Volatile Organic Compounds*		ug/L	None Detected	*	03/16/23	NEC* *
Total Iron		mg/L	0.438	0.050	03/11/23	KB EPA 200.7
Boron		mg/L	0.013	0.010	03/11/23	KB EPA 200.7
Copper		mg/L	BRL	0.003	03/11/23	KB EPA 200.7
Ammonia-N *		mg/L	BRL	0.02	03/14/23	RIA* SM4500 NH3 C
Chloride		mg/L	85	3.0	03/09/23	KF EPA 300.0
Kjeldhal Nitrogen		mg/L	0.98	0.10	04/06/23	IP SM4500 Norg B-C
Mercury*		mg/L	BRL	0.0002	03/13/23	RIA* EPA 245.1
Total Phosphorous (P)		mg/L	0.127	0.005	03/28/23	AH SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	0.21	0.20	03/16/23	IP SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	0.282	0.017	03/08/23	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.70	NA	07/05/23	KB Calculation
Dissolved Organic Nitrogen		mg/L	0.21	NA	07/05/23	KB Calculation
Ortho Phosphorous (P)		mg/L	BRL	0.005	03/08/23	IP SM 4500-P
Particulate Organic Carbon		mg/L	0.369	NA	03/23/23	NEC* SM 5310 C
Particulate Organic Nitrogen		mg/L	0.77	NA	07/05/23	KB Calculation

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Plymouth, MA

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230313

Date Received: 03/08/23

Sample Type		Sample Time	Sample Date	Comments		
2S	A	09:10	03/08/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
Total Dissolved Nitrogen		mg/L	0.91	NA	07/05/23	KB
						Calculation

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Plymouth, MA

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230314

Date Received: 03/08/23

Sample Type	Sample Time	Sample Date	Comments			
2D A	09:20	03/08/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.61	0.01	03/09/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	03/09/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.89	NA	07/05/23	KB	Calculation
Total Dissolved Solids	mg/L	104	6.0	03/14/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.009	0.005	03/23/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	1.64	0.017	03/08/23	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	None Detected	*	03/16/23	NEC*	*
Total Iron	mg/L	3.37	0.050	03/11/23	KB	EPA 200.7
Boron	mg/L	0.015	0.010	03/11/23	KB	EPA 200.7
Copper	mg/L	BRL	0.003	03/11/23	KB	EPA 200.7
Ammonia-N *	mg/L	BRL	0.02	03/15/23	RIA*	SM4500 NH3 C
Chloride	mg/L	52	3.0	03/09/23	KF	EPA 300.0
Kjeldhal Nitrogen	mg/L	0.28	0.10	04/06/23	IP	SM4500 Norg B-C
Mercury*	mg/L	BRL	0.0002	03/13/23	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.081	0.005	03/28/23	IP	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.20	03/16/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.36	0.017	03/08/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.61	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.21	NA	07/05/23	KB	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	03/08/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.28	NA	03/23/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.07	NA	07/05/23	KB	Calculation

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ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230314

Date Received: 03/08/23

Sample Type		Sample Time	Sample Date	Comments		
2D	A	09:20	03/08/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
Total Dissolved Nitrogen		mg/L	0.82	NA	07/05/23	KB
						Calculation

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ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230315

Date Received: 03/08/23

Sample Type		Sample Time	Sample Date	Comments		
5S	A	09:45	03/08/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Nitrate-N		mg/L	0.85	0.01	03/09/23	KF EPA 300.0
Nitrite-N		mg/L	BRL	0.006	03/09/23	KF EPA 300.0
Total Nitrogen		mg/L	1.1	NA	07/05/23	KB Calculation
Total Dissolved Solids		mg/L	164	6.0	03/14/23	AH SM 2540 C
Dissolved Total Phosphorous		mg/L	0.055	0.005	03/23/23	AH SM 4500-P-B,E
Total Organic Carbon*		mg/L	0.661	0.017	03/08/23	NEC* SM 5310 C
Volatile Organic Compounds*		ug/L	3.49*	*	03/16/23	NEC* *
Total Iron		mg/L	0.354	0.050	03/11/23	KB EPA 200.7
Boron		mg/L	0.014	0.010	03/11/23	KB EPA 200.7
Copper		mg/L	BRL	0.003	03/11/23	KB EPA 200.7
Ammonia-N *		mg/L	BRL	0.02	03/15/23	RIA* SM4500 NH3 C
Chloride		mg/L	83	3.0	03/09/23	KF EPA 300.0
Kjeldhal Nitrogen		mg/L	0.21	0.10	04/06/23	IP SM4500 Norg B-C
Mercury*		mg/L	BRL	0.0002	03/13/23	RIA* EPA 245.1
Total Phosphorous (P)		mg/L	0.069	0.005	03/28/23	AH SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	BRL	0.20	03/17/23	IP SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	0.483	0.017	03/08/23	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.85	NA	07/05/23	KB Calculation
Dissolved Organic Nitrogen		mg/L	<0.2	NA	07/05/23	KB Calculation
Ortho Phosphorous (P)		mg/L	0.055	0.005	03/08/23	IP SM 4500-P
Particulate Organic Carbon		mg/L	0.178	NA	03/23/23	NEC* SM 5310 C
Particulate Organic Nitrogen		mg/L	<0.21	NA	07/05/23	KB Calculation

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

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

Wednesday, July 5, 2023

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230315

Date Received: 03/08/23

Sample Type		Sample Time	Sample Date	Comments		
5S	A	09:45	03/08/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
Total Dissolved Nitrogen		mg/L	0.85	NA	07/05/23	KB
						Calculation

*Trace to low levels of chloroform are occasionally detected in ground water in coastline areas.

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We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 

Ronald J. Saari

Laboratory Director

ENVIROTECH LABORATORIES, INC.

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Wednesday, July 5, 2023

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230316

Date Received: 03/08/23

Sample Type	Sample Time	Sample Date	Comments			
A15 A	10:10	03/08/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	1.6	0.01	03/09/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	03/09/23	KF	EPA 300.0
Total Nitrogen	mg/L	2.0	NA	07/05/23	KB	Calculation
Total Dissolved Solids	mg/L	120	6.0	03/14/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.033	0.005	03/23/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	0.349	0.017	03/08/23	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	None Detected	*	03/16/23	NEC*	*
Total Iron	mg/L	4.42	0.050	03/11/23	KB	EPA 200.7
Boron	mg/L	0.026	0.010	03/11/23	KB	EPA 200.7
Copper	mg/L	BRL	0.003	03/11/23	KB	EPA 200.7
Ammonia-N *	mg/L	0.022	0.02	03/15/23	RIA*	SM4500 NH3 C
Chloride	mg/L	39	3.0	03/09/23	KF	EPA 300.0
Kjeldhal Nitrogen	mg/L	0.35	0.10	04/06/23	IP	SM4500 Norg B-C
Mercury*	mg/L	BRL	0.0002	03/13/23	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.308	0.005	03/28/23	IP	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.35	0.20	03/17/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.039	0.017	03/08/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	1.6	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.3	NA	07/05/23	KB	Calculation
Ortho Phosphorous (P)	mg/L	0.031	0.005	03/08/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.31	NA	03/23/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	07/05/23	KB	Calculation

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By:

Ronald J. Saari

Laboratory Director

ENVIROTECH LABORATORIES, INC.

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FAX (508)888-6446

Wednesday, July 5, 2023

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230316

Date Received: 03/08/23

Sample Type		Sample Time	Sample Date	Comments		
A15	A	10:10	03/08/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Total Dissolved Nitrogen		mg/L	2.0	NA	07/05/23	KB Calculation

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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FAX (508)888-6446

Wednesday, July 5, 2023

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Groundwarer Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230317

Date Received: 03/08/23

Sample Type	Sample Time	Sample Date	Comments			
7SR A	10:40	03/08/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.98	0.01	03/09/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	03/09/23	KF	EPA 300.0
Total Nitrogen	mg/L	1.5	NA	07/05/23	KB	Calculation
Total Dissolved Solids	mg/L	986	6.0	03/14/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.011	0.005	03/23/23	IP	SM 4500-P-B,E
Total Organic Carbon*	mg/L	0.205	0.017	03/08/23	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	None Detected	*	03/16/23	NEC*	*
Total Iron	mg/L	4.10	0.050	03/11/23	KB	EPA 200.7
Boron	mg/L	0.020	0.010	03/11/23	KB	EPA 200.7
Copper	mg/L	0.003	0.003	03/11/23	KB	EPA 200.7
Ammonia-N *	mg/L	BRL	0.02	03/15/23	RIA*	SM4500 NH3 C
Chloride	mg/L	540	3.0	03/09/23	KF	EPA 300.0
Kjeldhal Nitrogen	mg/L	0.56	0.10	04/06/23	IP	SM4500 Norg B-C
Mercury*	mg/L	BRL	0.0002	03/13/23	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.287	0.005	03/28/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.35	0.20	04/11/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	BRL	0.017	03/08/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.98	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.35	NA	07/05/23	KB	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	03/08/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.205	NA	03/23/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.21	NA	07/05/23	KB	Calculation

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

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

Wednesday, July 5, 2023

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

ProjectName: Groundwarer Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230317

Date Received: 03/08/23

Sample Type		Sample Time	Sample Date	Comments		
7SR	A	10:40	03/08/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
Total Dissolved Nitrogen		mg/L	1.3	NA	04/13/23	IP
						Calculation

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.

We certify that the following results are true and accurate to the best of our knowledge.

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: 3/9/2023
Date Reported: 3/16/2023
P.O. Number WW-230309-17

Work Order #: 2303-03872

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 subcontracted results are noted and subcontracted reports are enclosed in their entirety.

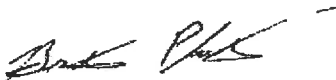
All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

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:



Brent Plant
Data Reporting

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2303-03872

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-230309 DW-1
Sample Type : GRAB
Sample Date / Time : 3/08/2023 @ 07:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	3/14/2023 11:06	KPG
Total Metals						
Mercury	<0.00020	0.00020	mg/L	EPA 245.1	3/13/2023 13:49	RMS
Mercury Digestion				EPA 245.1	3/11/2023 10:30	GSW

Sample Number: 002
Sample Description: WW-230310 BRADFORD
Sample Type : GRAB
Sample Date / Time : 3/08/2023 @ 08:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	3/14/2023 11:06	KPG
Total Metals						
Mercury	<0.00020	0.00020	mg/L	EPA 245.1	3/13/2023 13:50	RMS
Mercury Digestion				EPA 245.1	3/11/2023 10:30	GSW

Sample Number: 003
Sample Description: WW-230311 A13
Sample Type : GRAB
Sample Date / Time : 3/08/2023 @ 08:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.17	0.020	mg/L	SM4500NH3-B,H 18-21ed	3/14/2023 11:06	KPG
Total Metals						
Mercury	<0.00020	0.00020	mg/L	EPA 245.1	3/16/2023 14:57	RMS
Mercury Digestion				EPA 245.1	3/11/2023 10:30	GSW

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2303-03872

Project Name: PLYMOUTH ENV.

Sample Number: 004
Sample Description: WW-230312 A17
Sample Type : GRAB
Sample Date / Time : 3/08/2023 @ 08:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	3/14/2023 11:06	KPG
Total Metals						
Mercury	<0.00020	0.00020	mg/L	EPA 245.1	3/16/2023 15:01	RMS
Mercury Digestion				EPA 245.1	3/11/2023 10:30	GSW

Sample Number: 005
Sample Description: WW-230313 2S
Sample Type : GRAB
Sample Date / Time : 3/08/2023 @ 09:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	3/14/2023 11:06	KPG
Total Metals						
Mercury	<0.00020	0.00020	mg/L	EPA 245.1	3/13/2023 13:52	RMS
Mercury Digestion				EPA 245.1	3/11/2023 10:30	GSW

Sample Number: 006
Sample Description: WW-230314 2D
Sample Type : GRAB
Sample Date / Time : 3/08/2023 @ 09:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	3/15/2023 12:46	KPG
Total Metals						
Mercury	<0.00020	0.00020	mg/L	EPA 245.1	3/13/2023 13:53	RMS
Mercury Digestion				EPA 245.1	3/11/2023 10:30	GSW

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2303-03872

Project Name: PLYMOUTH ENV.

Sample Number: 007
Sample Description: WW-230315 5S
Sample Type : GRAB
Sample Date / Time : 3/08/2023 @ 09:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	3/15/2023 12:46	KPG
Total Metals						
Mercury	<0.00020	0.00020	mg/L	EPA 245.1	3/13/2023 13:54	RMS
Mercury Digestion				EPA 245.1	3/11/2023 10:30	GSW

Sample Number: 008
Sample Description: WW-230316 A15
Sample Type : GRAB
Sample Date / Time : 3/08/2023 @ 10:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.022	0.020	mg/L	SM4500NH3-B,H 18-21ed	3/15/2023 12:46	KPG
Total Metals						
Mercury	<0.00020	0.00020	mg/L	EPA 245.1	3/13/2023 13:35	RMS
Mercury Digestion				EPA 245.1	3/11/2023 10:30	GSW

Sample Number: 009
Sample Description: WW-230317 7SR
Sample Type : GRAB
Sample Date / Time : 3/08/2023 @ 10:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	3/15/2023 12:46	KPG
Total Metals						
Mercury	<0.00020	0.00020	mg/L	EPA 245.1	3/13/2023 13:46	RMS
Mercury Digestion				EPA 245.1	3/11/2023 10:30	GSW

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

Sample Information

EPA Method 524.2 Rev 4.1 Volatile Organic Compounds in Water	
Lab ID:	303207
Client:	Envirotech Laboratory, Inc.
Client ID:	WW-230309
State:	Liquid
Date Sampled:	03/08/23
Date Received:	03/16/23
Date Analyzed:	03/16/23

Regulated VOC's	Results (ug/L)	MCL (ug/L)
Benzene	ND	5
Carbon Tetrachloride	ND	5
1,1-Dichloroethene	ND	7
1,2-Dichloroethane	ND	5
1,2-Dichlorobenzene	ND	600
1,4-Dichlorobenzene	ND	5
Trichloroethene	ND	5
1,1,1-Trichloroethane	ND	200
Vinyl Chloride	ND	2
Chlorobenzene	ND	100
cis-1,2-dichloroethene	ND	70
trans-1,2-dichloroethene	ND	100
1,2-Dichloropropane	ND	5
Ethylbenzene	ND	700
Styrene	ND	100
Tetrachloroethene	ND	5
Toluene	ND	1000
Xylenes(Total)	ND	10000
Methylene Chloride	ND	5
1,2,4-Trichlorobenzene	ND	70
1,1,2-Trichloroethane	ND	5

* Acetone Detection Limit = 10 ug/L
 ND = < Method Detection Limit
 NA = Not Analyzed
 MRL = 0.5 ug/L
 Dilution Factor = 1

Unregulated VOC's	Results (ug/L)
Acetone*	ND
Bromobenzene	ND
Bromochloromethane	ND
Bromodichloromethane	ND
Bromoform	ND
Bromomethane	ND
2-Butanone	ND
N-Butylbenzene	ND
Sec-Butylbenzene	ND
Tert-Butylbenzene	ND
Chloroethane	ND
Chloroform	1.74
Chloromethane	ND
2-Chlorotoluene	ND
4-Chlorotoluene	ND
Dibromochloromethane	ND
1,2-Dibromo-3-Chloropropane	ND
1,2-Dibromoethane	ND
Dibromomethane	ND
1,3-Dichlorobenzene	ND
Dichlorodifluoromethane	ND
1,1-Dichloroethane	ND
1,3-Dichloropropane	ND
2,2-Dichloropropane	ND
1,1-Dichloropropene	ND
cis-1,3-Dichloropropene	ND
trans-1,3-Dichloropropene	ND
Hexachlorobutadiene	ND
Isopropylbenzene	ND
P-Isopropyltoluene	ND
Methyl-tert-butyl ether	ND
Naphthalene	ND
N-Propylbenzene	ND
1,1,1,2-Tetrachloroethane	ND
1,1,2,2-Tetrachloroethane	ND
1,2,3-Trichlorobenzene	ND
Trichlorofluoromethane	ND
1,2,3-Trichloropropane	ND
1,2,4-Trimethylbenzene	ND
1,3,5-Trimethylbenzene	ND

MCL TTHM's = 80 ug/L
 Method Detection Limit = 0.5 ug/L
 Analysis performed per 310CMR42

Surrogate Standard Recoveries	%
Benzene-d6	98
4-Bromofluorobenzene	101
1,2-Dichlorobenzene-d4	106

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

Sample Information

EPA Method 524.2 Rev 4.1 Volatile Organic Compounds in Water	
Lab ID:	303208
Client:	Envirotech Laboratory, Inc.
Client ID:	WW-230310
State:	Liquid
Date Sampled:	03/08/23
Date Received:	03/16/23
Date Analyzed:	03/16/23

Regulated VOC's	Results (ug/L)	MCL (ug/L)
Benzene	ND	5
Carbon Tetrachloride	ND	5
1,1-Dichloroethene	ND	7
1,2-Dichloroethane	ND	5
1,2-Dichlorobenzene	ND	600
1,4-Dichlorobenzene	ND	5
Trichloroethene	ND	5
1,1,1-Trichloroethane	ND	200
Vinyl Chloride	ND	2
Chlorobenzene	ND	100
cis-1,2-dichloroethene	ND	70
trans-1,2-dichloroethene	ND	100
1,2-Dichloropropane	ND	5
Ethylbenzene	ND	700
Styrene	ND	100
Tetrachloroethene	ND	5
Toluene	ND	1000
Xylenes(Total)	ND	10000
Methylene Chloride	ND	5
1,2,4-Trichlorobenzene	ND	70
1,1,2-Trichloroethane	ND	5

* Acetone Detection Limit = 10 ug/L
 ND = < Method Detection Limit
 NA = Not Analyzed
 MRL = 0.5 ug/L
 Dilution Factor = 1

Unregulated VOC's	Results (ug/L)
Acetone*	ND
Bromobenzene	ND
Bromochloromethane	ND
Bromodichloromethane	ND
Bromoform	ND
Bromomethane	ND
2-Butanone	ND
N-Butylbenzene	ND
Sec-Butylbenzene	ND
Tert-Butylbenzene	ND
Chloroethane	ND
Chloroform	1.72
Chloromethane	ND
2-Chlorotoluene	ND
4-Chlorotoluene	ND
Dibromochloromethane	ND
1,2-Dibromo-3-Chloropropane	ND
1,2-Dibromoethane	ND
Dibromomethane	ND
1,3-Dichlorobenzene	ND
Dichlorodifluoromethane	ND
1,1-Dichloroethane	ND
1,3-Dichloropropane	ND
2,2-Dichloropropane	ND
1,1-Dichloropropene	ND
cis-1,3-Dichloropropene	ND
trans-1,3-Dichloropropene	ND
Hexachlorobutadiene	ND
Isopropylbenzene	ND
P-Isopropyltoluene	ND
Methyl-tert-butyl ether	ND
Naphthalene	ND
N-Propylbenzene	ND
1,1,1,2-Tetrachloroethane	ND
1,1,2,2-Tetrachloroethane	ND
1,2,3-Trichlorobenzene	ND
Trichlorofluoromethane	ND
1,2,3-Trichloropropane	ND
1,2,4-Trimethylbenzene	ND
1,3,5-Trimethylbenzene	ND

MCL TTHM's = 80 ug/L
 Method Detection Limit = 0.5 ug/L
 Analysis performed per 310CMR42

Surrogate Standard Recoveries	%
Benzene-d6	96
4-Bromofluorobenzene	96
1,2-Dichlorobenzene-d4	102

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

Sample Information

EPA Method 524.2 Rev 4.1 Volatile Organic Compounds in Water	
Lab ID:	303209
Client:	Envirotech Laboratory, Inc.
Client ID:	WW-230311
State:	Liquid
Date Sampled:	03/08/23
Date Received:	03/16/23
Date Analyzed:	03/16/23

Regulated VOC's	Results (ug/L)	MCL (ug/L)
Benzene	ND	5
Carbon Tetrachloride	ND	5
1,1-Dichloroethene	ND	7
1,2-Dichloroethane	ND	5
1,2-Dichlorobenzene	ND	600
1,4-Dichlorobenzene	ND	5
Trichloroethene	ND	5
1,1,1-Trichloroethane	ND	200
Vinyl Chloride	ND	2
Chlorobenzene	ND	100
cis-1,2-dichloroethene	ND	70
trans-1,2-dichloroethene	ND	100
1,2-Dichloropropane	ND	5
Ethylbenzene	ND	700
Styrene	ND	100
Tetrachloroethene	ND	5
Toluene	ND	1000
Xylenes(Total)	ND	10000
Methylene Chloride	ND	5
1,2,4-Trichlorobenzene	ND	70
1,1,2-Trichloroethane	ND	5

* Acetone Detection Limit = 10 ug/L

ND = < Method Detection Limit

NA = Not Analyzed

MRL = 0.5 ug/L

Dilution Factor = 1

Surrogate Standard Recoveries	%
Benzene-d6	100
4-Bromofluorobenzene	101
1,2-Dichlorobenzene-d4	108

Unregulated VOC's	Results (ug/L)
Acetone*	ND
Bromobenzene	ND
Bromochloromethane	ND
Bromodichloromethane	ND
Bromoform	ND
Bromomethane	ND
2-Butanone	ND
N-Butylbenzene	ND
Sec-Butylbenzene	ND
Tert-Butylbenzene	ND
Chloroethane	ND
Chloroform	ND
Chloromethane	ND
2-Chlorotoluene	ND
4-Chlorotoluene	ND
Dibromochloromethane	ND
1,2-Dibromo-3-Chloropropane	ND
1,2-Dibromoethane	ND
Dibromomethane	ND
1,3-Dichlorobenzene	ND
Dichlorodifluoromethane	ND
1,1-Dichloroethane	ND
1,3-Dichloropropane	ND
2,2-Dichloropropane	ND
1,1-Dichloropropene	ND
cis-1,3-Dichloropropene	ND
trans-1,3-Dichloropropene	ND
Hexachlorobutadiene	ND
Isopropylbenzene	ND
P-Isopropyltoluene	ND
Methyl-tert-butyl ether	3.25
Naphthalene	ND
N-Propylbenzene	ND
1,1,1,2-Tetrachloroethane	ND
1,1,2,2-Tetrachloroethane	ND
1,2,3-Trichlorobenzene	ND
Trichlorofluoromethane	ND
1,2,3-Trichloropropane	ND
1,2,4-Trimethylbenzene	ND
1,3,5-Trimethylbenzene	ND

MCL TTHM's = 80 ug/L

Method Detection Limit = 0.5 ug/L

Analysis performed per 310CMR42

Electronically signed and approved by Mr. Bruce A. Bornstein, Lab Director

Date: 3/20/2023

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

Sample Information

EPA Method 524.2 Rev 4.1 Volatile Organic Compounds in Water	
Lab ID:	303210
Client:	Envirotech Laboratory, Inc.
Client ID:	WW-230312
State:	Liquid
Date Sampled:	03/08/23
Date Received:	03/16/23
Date Analyzed:	03/16/23

Regulated VOC's	Results (ug/L)	MCL (ug/L)
Benzene	ND	5
Carbon Tetrachloride	ND	5
1,1-Dichloroethene	ND	7
1,2-Dichloroethane	ND	5
1,2-Dichlorobenzene	ND	600
1,4-Dichlorobenzene	ND	5
Trichloroethene	ND	5
1,1,1-Trichloroethane	ND	200
Vinyl Chloride	ND	2
Chlorobenzene	ND	100
cis-1,2-dichloroethene	ND	70
trans-1,2-dichloroethene	ND	100
1,2-Dichloropropane	ND	5
Ethylbenzene	ND	700
Styrene	ND	100
Tetrachloroethene	ND	5
Toluene	ND	1000
Xylenes(Total)	ND	10000
Methylene Chloride	ND	5
1,2,4-Trichlorobenzene	ND	70
1,1,2-Trichloroethane	ND	5

* Acetone Detection Limit = 10 ug/L

ND = < Method Detection Limit

NA = Not Analyzed

MRL = 0.5 ug/L

Dilution Factor = 1

Surrogate Standard Recoveries	%
Benzene-d6	98
4-Bromofluorobenzene	99
1,2-Dichlorobenzene-d4	103

Unregulated VOC's	Results (ug/L)
Acetone*	ND
Bromobenzene	ND
Bromochloromethane	ND
Bromodichloromethane	ND
Bromoform	ND
Bromomethane	ND
2-Butanone	ND
N-Butylbenzene	ND
Sec-Butylbenzene	ND
Tert-Butylbenzene	ND
Chloroethane	ND
Chloroform	1.87
Chloromethane	ND
2-Chlorotoluene	ND
4-Chlorotoluene	ND
Dibromochloromethane	ND
1,2-Dibromo-3-Chloropropane	ND
1,2-Dibromoethane	ND
Dibromomethane	ND
1,3-Dichlorobenzene	ND
Dichlorodifluoromethane	ND
1,1-Dichloroethane	ND
1,3-Dichloropropane	ND
2,2-Dichloropropane	ND
1,1-Dichloropropene	ND
cis-1,3-Dichloropropene	ND
trans-1,3-Dichloropropene	ND
Hexachlorobutadiene	ND
Isopropylbenzene	ND
P-Isopropyltoluene	ND
Methyl-tert-butyl ether	ND
Naphthalene	ND
N-Propylbenzene	ND
1,1,1,2-Tetrachloroethane	ND
1,1,2,2-Tetrachloroethane	ND
1,2,3-Trichlorobenzene	ND
Trichlorofluoromethane	ND
1,2,3-Trichloropropane	ND
1,2,4-Trimethylbenzene	ND
1,3,5-Trimethylbenzene	ND

MCL TTHM's = 80 ug/L

Method Detection Limit = 0.5 ug/L

Analysis performed per 310CMR42

Electronically signed and approved by Mr. Bruce A. Bornstein, Lab Director

Date: 3/20/2023

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978-744-6600

Sample Information

EPA Method 524.2 Rev 4.1 Volatile Organic Compounds in Water	
Lab ID:	303211
Client:	Envirotech Laboratory, Inc.
Client ID:	WW-230313
State:	Liquid
Date Sampled:	03/08/23
Date Received:	03/16/23
Date Analyzed:	03/16/23

Regulated VOC's	Results (ug/L)	MCL (ug/L)
Benzene	ND	5
Carbon Tetrachloride	ND	5
1,1-Dichloroethene	ND	7
1,2-Dichloroethane	ND	5
1,2-Dichlorobenzene	ND	600
1,4-Dichlorobenzene	ND	5
Trichloroethene	ND	5
1,1,1-Trichloroethane	ND	200
Vinyl Chloride	ND	2
Chlorobenzene	ND	100
cis-1,2-dichloroethene	ND	70
trans-1,2-dichloroethene	ND	100
1,2-Dichloropropane	ND	5
Ethylbenzene	ND	700
Styrene	ND	100
Tetrachloroethene	ND	5
Toluene	ND	1000
Xylenes(Total)	ND	10000
Methylene Chloride	ND	5
1,2,4-Trichlorobenzene	ND	70
1,1,2-Trichloroethane	ND	5

* Acetone Detection Limit = 10 ug/L

ND = < Method Detection Limit

NA = Not Analyzed

MRL = 0.5 ug/L

Dilution Factor = 1

Surrogate Standard Recoveries	%
Benzene-d6	102
4-Bromofluorobenzene	101
1,2-Dichlorobenzene-d4	103

Unregulated VOC's	Results (ug/L)
Acetone*	ND
Bromobenzene	ND
Bromochloromethane	ND
Bromodichloromethane	ND
Bromoform	ND
Bromomethane	ND
2-Butanone	ND
N-Butylbenzene	ND
Sec-Butylbenzene	ND
Tert-Butylbenzene	ND
Chloroethane	ND
Chloroform	ND
Chloromethane	ND
2-Chlorotoluene	ND
4-Chlorotoluene	ND
Dibromochloromethane	ND
1,2-Dibromo-3-Chloropropane	ND
1,2-Dibromoethane	ND
Dibromomethane	ND
1,3-Dichlorobenzene	ND
Dichlorodifluoromethane	ND
1,1-Dichloroethane	ND
1,3-Dichloropropane	ND
2,2-Dichloropropane	ND
1,1-Dichloropropene	ND
cis-1,3-Dichloropropene	ND
trans-1,3-Dichloropropene	ND
Hexachlorobutadiene	ND
Isopropylbenzene	ND
P-Isopropyltoluene	ND
Methyl-tert-butyl ether	ND
Naphthalene	ND
N-Propylbenzene	ND
1,1,1,2-Tetrachloroethane	ND
1,1,2,2-Tetrachloroethane	ND
1,2,3-Trichlorobenzene	ND
Trichlorofluoromethane	ND
1,2,3-Trichloropropane	ND
1,2,4-Trimethylbenzene	ND
1,3,5-Trimethylbenzene	ND

MCL TTHM's = 80 ug/L

Method Detection Limit = 0.5 ug/L

Analysis performed per 310CMR42

Electronically signed and approved by Mr. Bruce A. Bornstein, Lab Director

Date: 3/20/2023

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

Sample Information

EPA Method 524.2 Rev 4.1 Volatile Organic Compounds in Water	
Lab ID:	303212
Client:	Envirotech Laboratory, Inc.
Client ID:	WW-230314
State:	Liquid
Date Sampled:	03/08/23
Date Received:	03/16/23
Date Analyzed:	03/16/23

Regulated VOC's	Results (ug/L)	MCL (ug/L)
Benzene	ND	5
Carbon Tetrachloride	ND	5
1,1-Dichloroethene	ND	7
1,2-Dichloroethane	ND	5
1,2-Dichlorobenzene	ND	600
1,4-Dichlorobenzene	ND	5
Trichloroethene	ND	5
1,1,1-Trichloroethane	ND	200
Vinyl Chloride	ND	2
Chlorobenzene	ND	100
cis-1,2-dichloroethene	ND	70
trans-1,2-dichloroethene	ND	100
1,2-Dichloropropane	ND	5
Ethylbenzene	ND	700
Styrene	ND	100
Tetrachloroethene	ND	5
Toluene	ND	1000
Xylenes(Total)	ND	10000
Methylene Chloride	ND	5
1,2,4-Trichlorobenzene	ND	70
1,1,2-Trichloroethane	ND	5

* Acetone Detection Limit = 10 ug/L

ND = < Method Detection Limit

NA = Not Analyzed

MRL = 0.5 ug/L

Dilution Factor = 1

Surrogate Standard Recoveries	%
Benzene-d6	98
4-Bromofluorobenzene	106
1,2-Dichlorobenzene-d4	108

Unregulated VOC's	Results (ug/L)
Acetone*	ND
Bromobenzene	ND
Bromochloromethane	ND
Bromodichloromethane	ND
Bromoform	ND
Bromomethane	ND
2-Butanone	ND
N-Butylbenzene	ND
Sec-Butylbenzene	ND
Tert-Butylbenzene	ND
Chloroethane	ND
Chloroform	ND
Chloromethane	ND
2-Chlorotoluene	ND
4-Chlorotoluene	ND
Dibromochloromethane	ND
1,2-Dibromo-3-Chloropropane	ND
1,2-Dibromoethane	ND
Dibromomethane	ND
1,3-Dichlorobenzene	ND
Dichlorodifluoromethane	ND
1,1-Dichloroethane	ND
1,3-Dichloropropane	ND
2,2-Dichloropropane	ND
1,1-Dichloropropene	ND
cis-1,3-Dichloropropene	ND
trans-1,3-Dichloropropene	ND
Hexachlorobutadiene	ND
Isopropylbenzene	ND
P-Isopropyltoluene	ND
Methyl-tert-butyl ether	ND
Naphthalene	ND
N-Propylbenzene	ND
1,1,1,2-Tetrachloroethane	ND
1,1,2,2-Tetrachloroethane	ND
1,2,3-Trichlorobenzene	ND
Trichlorofluoromethane	ND
1,2,3-Trichloropropane	ND
1,2,4-Trimethylbenzene	ND
1,3,5-Trimethylbenzene	ND

MCL TTHM's = 80 ug/L

Method Detection Limit = 0.5 ug/L

Analysis performed per 310CMR42

Electronically signed and approved by Mr. Bruce A. Bornstein, Lab Director

Date: 3/20/2023

New England Chromachem
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978-744-6600

Sample Information

EPA Method 524.2 Rev 4.1 Volatile Organic Compounds in Water	
Lab ID:	303213
Client:	Envirotech Laboratory, Inc.
Client ID:	WW-230315
State:	Liquid
Date Sampled:	03/08/23
Date Received:	03/16/23
Date Analyzed:	03/16/23

Regulated VOC's	Results (ug/L)	MCL (ug/L)
Benzene	ND	5
Carbon Tetrachloride	ND	5
1,1-Dichloroethene	ND	7
1,2-Dichloroethane	ND	5
1,2-Dichlorobenzene	ND	600
1,4-Dichlorobenzene	ND	5
Trichloroethene	ND	5
1,1,1-Trichloroethane	ND	200
Vinyl Chloride	ND	2
Chlorobenzene	ND	100
cis-1,2-dichloroethene	ND	70
trans-1,2-dichloroethene	ND	100
1,2-Dichloropropane	ND	5
Ethylbenzene	ND	700
Styrene	ND	100
Tetrachloroethene	ND	5
Toluene	ND	1000
Xylenes(Total)	ND	10000
Methylene Chloride	ND	5
1,2,4-Trichlorobenzene	ND	70
1,1,2-Trichloroethane	ND	5

* Acetone Detection Limit = 50 ug/L

ND = < Method Detection Limit

NA = Not Analyzed

MRL = 2.5 ug/L

Note: This sample exhibited excessive foaming and could not be analyzed at a lower detection limit.

Unregulated VOC's	Results (ug/L)
Acetone*	ND
Bromobenzene	ND
Bromochloromethane	ND
Bromodichloromethane	ND
Bromoform	ND
Bromomethane	ND
2-Butanone	ND
N-Butylbenzene	ND
Sec-Butylbenzene	ND
Tert-Butylbenzene	ND
Chloroethane	ND
Chloroform	3.40
Chloromethane	ND
2-Chlorotoluene	ND
4-Chlorotoluene	ND
Dibromochloromethane	ND
1,2-Dibromo-3-Chloropropane	ND
1,2-Dibromoethane	ND
Dibromomethane	ND
1,3-Dichlorobenzene	ND
Dichlorodifluoromethane	ND
1,1-Dichloroethane	ND
1,3-Dichloropropane	ND
2,2-Dichloropropane	ND
1,1-Dichloropropene	ND
cis-1,3-Dichloropropene	ND
trans-1,3-Dichloropropene	ND
Hexachlorobutadiene	ND
Isopropylbenzene	ND
P-Isopropyltoluene	ND
Methyl-tert-butyl ether	ND
Naphthalene	ND
N-Propylbenzene	ND
1,1,1,2-Tetrachloroethane	ND
1,1,2,2-Tetrachloroethane	ND
1,2,3-Trichlorobenzene	ND
Trichlorofluoromethane	ND
1,2,3-Trichloropropane	ND
1,2,4-Trimethylbenzene	ND
1,3,5-Trimethylbenzene	ND

MCL TTHM's = 80 ug/L

Method Detection Limit = 2.5 ug/L

Analysis performed per 310CMR42

Surrogate Standard Recoveries	%
Benzene-d6	102
4-Bromofluorobenzene	95
1,2-Dichlorobenzene-d4	95

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978-744-6600

Sample Information

EPA Method 524.2 Rev 4.1 Volatile Organic Compounds in Water	
Lab ID:	303214
Client:	Envirotech Laboratory, Inc.
Client ID:	WW-230316
State:	Liquid
Date Sampled:	03/08/23
Date Received:	03/16/23
Date Analyzed:	03/16/23

Regulated VOC's	Results (ug/L)	MCL (ug/L)
Benzene	ND	5
Carbon Tetrachloride	ND	5
1,1-Dichloroethene	ND	7
1,2-Dichloroethane	ND	5
1,2-Dichlorobenzene	ND	600
1,4-Dichlorobenzene	ND	5
Trichloroethene	ND	5
1,1,1-Trichloroethane	ND	200
Vinyl Chloride	ND	2
Chlorobenzene	ND	100
cis-1,2-dichloroethene	ND	70
trans-1,2-dichloroethene	ND	100
1,2-Dichloropropane	ND	5
Ethylbenzene	ND	700
Styrene	ND	100
Tetrachloroethene	ND	5
Toluene	ND	1000
Xylenes(Total)	ND	10000
Methylene Chloride	ND	5
1,2,4-Trichlorobenzene	ND	70
1,1,2-Trichloroethane	ND	5

* Acetone Detection Limit = 10 ug/L

ND = < Method Detection Limit

NA = Not Analyzed

MRL = 0.5 ug/L

Dilution Factor = 1

Surrogate Standard Recoveries	%
Benzene-d6	100
4-Bromofluorobenzene	103
1,2-Dichlorobenzene-d4	105

Unregulated VOC's	Results (ug/L)
Acetone*	ND
Bromobenzene	ND
Bromochloromethane	ND
Bromodichloromethane	ND
Bromoform	ND
Bromomethane	ND
2-Butanone	ND
N-Butylbenzene	ND
Sec-Butylbenzene	ND
Tert-Butylbenzene	ND
Chloroethane	ND
Chloroform	ND
Chloromethane	ND
2-Chlorotoluene	ND
4-Chlorotoluene	ND
Dibromochloromethane	ND
1,2-Dibromo-3-Chloropropane	ND
1,2-Dibromoethane	ND
Dibromomethane	ND
1,3-Dichlorobenzene	ND
Dichlorodifluoromethane	ND
1,1-Dichloroethane	ND
1,3-Dichloropropane	ND
2,2-Dichloropropane	ND
1,1-Dichloropropene	ND
cis-1,3-Dichloropropene	ND
trans-1,3-Dichloropropene	ND
Hexachlorobutadiene	ND
Isopropylbenzene	ND
P-Isopropyltoluene	ND
Methyl-tert-butyl ether	ND
Naphthalene	ND
N-Propylbenzene	ND
1,1,1,2-Tetrachloroethane	ND
1,1,2,2-Tetrachloroethane	ND
1,2,3-Trichlorobenzene	ND
Trichlorofluoromethane	ND
1,2,3-Trichloropropane	ND
1,2,4-Trimethylbenzene	ND
1,3,5-Trimethylbenzene	ND

MCL TTHM's = 80 ug/L

Method Detection Limit = 0.5 ug/L

Analysis performed per 310CMR42

Electronically signed and approved by Mr. Bruce A. Bornstein, Lab Director

Date: 3/20/2023

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

Sample Information

EPA Method 524.2 Rev 4.1 Volatile Organic Compounds in Water	
Lab ID:	303215
Client:	Envirotech Laboratory, Inc.
Client ID:	WW-230317
State:	Liquid
Date Sampled:	03/08/23
Date Received:	03/16/23
Date Analyzed:	03/16/23

Regulated VOC's	Results (ug/L)	MCL (ug/L)
Benzene	ND	5
Carbon Tetrachloride	ND	5
1,1-Dichloroethene	ND	7
1,2-Dichloroethane	ND	5
1,2-Dichlorobenzene	ND	600
1,4-Dichlorobenzene	ND	5
Trichloroethene	ND	5
1,1,1-Trichloroethane	ND	200
Vinyl Chloride	ND	2
Chlorobenzene	ND	100
cis-1,2-dichloroethene	ND	70
trans-1,2-dichloroethene	ND	100
1,2-Dichloropropane	ND	5
Ethylbenzene	ND	700
Styrene	ND	100
Tetrachloroethene	ND	5
Toluene	ND	1000
Xylenes(Total)	ND	10000
Methylene Chloride	ND	5
1,2,4-Trichlorobenzene	ND	70
1,1,2-Trichloroethane	ND	5

* Acetone Detection Limit = 10 ug/L
 ND = < Method Detection Limit
 NA = Not Analyzed
 MRL = 0.5 ug/L
 Dilution Factor = 1

Unregulated VOC's	Results (ug/L)
Acetone*	ND
Bromobenzene	ND
Bromochloromethane	ND
Bromodichloromethane	ND
Bromoform	ND
Bromomethane	ND
2-Butanone	ND
N-Butylbenzene	ND
Sec-Butylbenzene	ND
Tert-Butylbenzene	ND
Chloroethane	ND
Chloroform	ND
Chloromethane	ND
2-Chlorotoluene	ND
4-Chlorotoluene	ND
Dibromochloromethane	ND
1,2-Dibromo-3-Chloropropane	ND
1,2-Dibromoethane	ND
Dibromomethane	ND
1,3-Dichlorobenzene	ND
Dichlorodifluoromethane	ND
1,1-Dichloroethane	ND
1,3-Dichloropropane	ND
2,2-Dichloropropane	ND
1,1-Dichloropropene	ND
cis-1,3-Dichloropropene	ND
trans-1,3-Dichloropropene	ND
Hexachlorobutadiene	ND
Isopropylbenzene	ND
P-Isopropyltoluene	ND
Methyl-tert-butyl ether	ND
Naphthalene	ND
N-Propylbenzene	ND
1,1,1,2-Tetrachloroethane	ND
1,1,2,2-Tetrachloroethane	ND
1,2,3-Trichlorobenzene	ND
Trichlorofluoromethane	ND
1,2,3-Trichloropropane	ND
1,2,4-Trimethylbenzene	ND
1,3,5-Trimethylbenzene	ND

MCL TTHM's = 80 ug/L
 Method Detection Limit = 0.5 ug/L
 Analysis performed per 310CMR42

Surrogate Standard Recoveries	%
Benzene-d6	95
4-Bromofluorobenzene	97
1,2-Dichlorobenzene-d4	102

New England ChromaChem
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Salem, MA 01970
978-744-6600

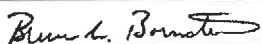
MA DEP Lab. M-MA072 RI Lab. LAO00364

Client: Envirotech Laboratory, Inc.
State: Liquid

			Analytical Results									
Lab ID	Client ID	Date Sampled	TOC mg/L									
303216	WW-230309 Total	03/08/23	0.722									
303217	WW-230309 Dissolved	03/08/23	0.603									
303218	WW-230310 Total	03/08/23	0.706									
303219	WW-230310 Dissolved	03/08/23	0.619									
303220	WW-230311 Total	03/08/23	0.557									
303221	WW-230311 Dissolved	03/08/23	0.239									
303222	WW-230312 Total	03/08/23	0.411									
303223	WW-230312 Dissolved	03/08/23	0.307									
303224	WW-230313 Total	03/08/23	0.651									
303225	WW-230313 Dissolved	03/08/23	0.447									
303226	WW-230314 Total	03/08/23	1.64									
303227	WW-230314 Dissolved	03/08/23	1.52									
303228	WW-230315 Total	03/08/23	0.661									
303229	WW-230315 Dissolved	03/08/23	0.648									
303230	WW-230316 Total	03/08/23	0.349									
303231	WW-230316 Dissolved	03/08/23	0.204									
303232	WW-230317A Total	03/08/23	0.205									
303233	WW-230317A Dissolved	03/08/23	0.126									
303234	WW-230317B Dissolved	03/08/23	0.165									

Analytical Methodology							
Analyte	Method	Detection Limit	MRL	Units	Date Analyzed	Cert Status	DF
TOC	Standard Methods 5310C	0.0170	0.051	mg/L	03/16/23	NA	1

Form: Mis

Electronically signed and approved by: 	Date: 03/16/23
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Laboratory:

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

Chain of CustodyClient:

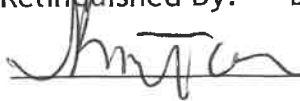
Town of Plymouth - Department of Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@plymouth-ma.gov
Project Name: **Groundwater Eel River -Plymouth MA**
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
3/8/23	0730	DW-1	3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TOC, NH3	NONE
			1	250ml Plastic	Chloride, No2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	NONE
3/8/23	0800	Bradford	3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS, TP	NONE
			1	1 Liter Plastic	TKN, TN, TOC, NH3	NONE
			1	250ml Plastic	Chloride, No2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	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

PLEASE FILTER PHOSPHORUS IN LAB - THANK YOU!

Relinquished By: Date/Time



Received By: Date/Time:

 3/8/23 1130

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@plymouth-ma.gov
Project Name: **Groundwater Eel River -Plymouth MA**
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
3/8/23	0820	A13	3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TOC, NH3	NONE
			1	250ml Plastic	Chloride, No2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	NONE
3/8/23	0850	A17	3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS, TP	NONE
			1	1 Liter Plastic	TKN, TN, TOC, MH3	NONE
			1	250ml Plastic	Chloride, No2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	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

PLEASE FILTER PHOSPHORUS IN LAB - THANK YOU!

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

Kim Tower 3/8/23 1130

Laboratory:

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

Chain of Custody**Client:**

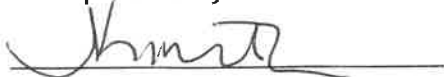
Town of Plymouth - Department of Marine & Environmental Affairs Attn: Kim Tower
26 Court Street, Plymouth, MA 02360 /508-747-1620 x10198, ktower@plymouth-ma.gov
Project Name: **Groundwater Eel River -Plymouth MA**
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
0313 3/8/23	0910	25	3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TOC, NH3	NONE
			1	250ml Plastic	Chloride, NO2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	NONE
0314 3/8/23	0920	20	3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS, TP	NONE
			1	1 Liter Plastic	TKN, TN, TOC, NH3	NONE
			1	250ml Plastic	Chloride, NO2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	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

PLEASE FILTER PHOSPHORUS IN LAB - THANK YOU!

Relinquished By: Date/Time



Received By: Date/Time:

 3/8/23 1130

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@plymouth-ma.gov
Project Name: **Groundwater Eel River -Plymouth MA**
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
0315 3/8/23	0945	55	3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TOC, NH3	NONE
			1	250ml Plastic	Chloride, No2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	NONE
0316 3/8/23	1010	A15	3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS, TP	NONE
			1	1 Liter Plastic	TKN, TN, TOC, MH3	NONE
			1	250ml Plastic	Chloride, No2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	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

PLEASE FILTER PHOSPHORUS IN LAB - THANK YOU!

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

KT 3/8/23 1130

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@plymouth-ma.gov
Project Name: **Groundwater Eel River -Plymouth MA**
Sampler: Kim Tower (KT)

0317

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
3/8/23	1040	752	3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TOC, NH3	NONE
			1	250ml Plastic	Chloride, NO2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	NONE
			3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS, TP	NONE
			1	1 Liter Plastic	TKN, TN, TOC, NH3	NONE
			1	250ml Plastic	Chloride, NO2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	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

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Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

Kim Tower 3/8/23 1130

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 11, 2023

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

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231527

Date Received: 08/22/23

Sample Type	Sample Time	Sample Date	Comments			
Bradford A	08:00	08/22/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.12	0.01	08/24/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	08/24/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.33	NA	11/06/23	KB	Calculation
Total Dissolved Solids	mg/L	52	6.0	08/23/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	BRL	0.005	08/29/23	IP	SM 4500-P-B,E
Total Organic Carbon*	mg/L	1.22	0.017	09/06/23	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	*See Attached	*	08/29/23	NEC*	*
Total Iron	mg/L	4.48	0.050	09/21/23	KB	EPA 200.7
Boron	mg/L	BRL	0.010	09/21/23	KB	EPA 200.7
Copper	mg/L	0.007	0.003	09/21/23	KB	EPA 200.7
Ammonia-N *	mg/L	0.037	0.02	09/01/23	RIA*	SM4500 NH3 C
Chloride	mg/L	14	3.0	08/24/23	KF	EPA 300.0
Kjeldhal Nitrogen	mg/L	0.21	0.10	08/29/23	IP	SM4500 Norg B-C
Mercury*	mg/L	BRL	0.0002	09/05/23	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.034	0.005	08/29/23	IP	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.20	08/29/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.378	0.017	09/06/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.16	NA	11/06/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.17	NA	11/06/23	KB	Calculation
Ortho Phosphorous (P)	mg/L	0.005	0.005	08/22/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.84	NA	12/05/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	11/06/23	KB	Calculation

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.

We certify that the following results are true and accurate to the best of our knowledge.

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 11, 2023

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

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231527

Date Received: 08/22/23

Sample Type		Sample Time	Sample Date	Comments		
Bradford	A	08:00	08/22/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
Total Dissolved Nitrogen		mg/L	0.33	NA	11/06/23	KB
						Calculation

*Trace to low levels of chloroform are occasionally detected in ground water in coastline areas.

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We certify that the following results are true and accurate to the best of our knowledge.

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*see attached

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Ronald J. Saari
Laboratory Director

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

Monday, December 11, 2023

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

ProjectName: Groundwater Eel River **Comments:**
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-231528
Date Received: 08/22/23

Sample Type		Sample Time	Sample Date	Comments		
A13	A	08:20	08/22/23			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.13	0.01	08/23/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	08/23/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.55	NA	11/06/23	KB	Calculation
Total Dissolved Solids	mg/L	290	6.0	08/23/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.022	0.005	08/29/23	IP	SM 4500-P-B,E
Total Organic Carbon*	mg/L	0.837	0.017	09/06/23	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	*See Attached	*	08/29/23	NEC*	*
Total Iron	mg/L	5.35	0.050	09/21/23	KB	EPA 200.7
Boron	mg/L	0.021	0.010	09/21/23	KB	EPA 200.7
Copper	mg/L	BRL	0.003	09/21/23	KB	EPA 200.7
Ammonia-N *	mg/L	0.16	0.02	09/01/23	RIA*	SM4500 NH3 C
Chloride	mg/L	170	3.0	08/24/23	KF	EPA 300.0
Kjeldhal Nitrogen	mg/L	0.42	0.10	08/29/23	IP	SM4500 Norg B-C
Mercury*	mg/L	BRL	0.0002	09/05/23	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.066	0.005	08/29/23	IP	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.35	0.20	08/28/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.062	0.017	09/06/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.29	NA	11/06/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.19	NA	11/06/23	KB	Calculation
Ortho Phosphorous (P)	mg/L	0.018	0.005	08/22/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.78	NA	12/05/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.07	NA	11/06/23	KB	Calculation

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.

We certify that the following results are true and accurate to the best of our knowledge.

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 11, 2023

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

ProjectName: Groundwater Eel River **Comments:**
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-231528
Date Received: 08/22/23

Sample Type		Sample Time	Sample Date	Comments		
A13	A	08:20	08/22/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
Total Dissolved Nitrogen		mg/L	0.48	NA	11/06/23	KB
						Calculation

*MTBE limit is 70 ug/L.

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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FAX (508)888-6446

Monday, December 11, 2023

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

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231529

Date Received: 08/22/23

Sample Type		Sample Time	Sample Date	Comments		
A17	A	08:45	08/22/23			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	3.0	0.01	08/23/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	08/23/23	KF	EPA 300.0
Total Nitrogen	mg/L	3.5	NA	11/06/23	KB	Calculation
Total Dissolved Solids	mg/L	1400	6.0	08/23/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.017	0.005	08/29/23	IP	SM 4500-P-B,E
Total Organic Carbon*	mg/L	0.436	0.017	09/06/23	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	*See Attached	*	08/29/23	NEC*	*
Total Iron	mg/L	0.429	0.050	09/21/23	KB	EPA 200.7
Boron	mg/L	0.177	0.010	09/21/23	KB	EPA 200.7
Copper	mg/L	BRL	0.003	09/21/23	KB	EPA 200.7
Ammonia-N *	mg/L	BRL	0.02	09/01/23	RIA*	SM4500 NH3 C
Chloride	mg/L	710	3.0	12/11/23	KF	EPA 300.0
Kjeldhal Nitrogen	mg/L	0.49	0.10	08/29/23	IP	SM4500 Norg B-C
Mercury*	mg/L	0.00027	0.0002	09/05/23	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.058	0.005	08/29/23	IP	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.42	0.20	08/29/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	BRL	0.017	09/06/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	3.0	NA	11/06/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.42	NA	11/06/23	KB	Calculation
Ortho Phosphorous (P)	mg/L	0.012	0.005	08/22/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.44	NA	12/05/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.07	NA	11/06/23	KB	Calculation

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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

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

Monday, December 11, 2023

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

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231529

Date Received: 08/22/23

Sample Type		Sample Time	Sample Date	Comments		
A17	A	08:45	08/22/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
Total Dissolved Nitrogen		mg/L	3.4	NA	11/06/23	KB
						Calculation

*Trace to low levels of chloroform are occasionally detected in ground water in coastline areas.

Chloroform and three other trihalomethanes (THMs)— bromodichloromethane, dibromochloromethane, and bromoform—are disinfection by-products

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.

We certify that the following results are true and accurate to the best of our knowledge.

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 11, 2023

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231530

Date Received: 08/22/23

Sample Type	Sample Time	Sample Date	Comments			
2D A	09:00	08/22/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.15	0.01	08/23/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	08/23/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.43	NA	11/06/23	KB	Calculation
Total Dissolved Solids	mg/L	150	6.0	08/23/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.008	0.005	09/07/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	1.54	0.017	09/06/23	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	*See Attached	*	08/29/23	NEC*	*
Total Iron	mg/L	1.91	0.050	09/21/23	KB	EPA 200.7
Boron	mg/L	BRL	0.010	09/21/23	KB	EPA 200.7
Copper	mg/L	BRL	0.003	09/21/23	KB	EPA 200.7
Ammonia-N *	mg/L	BRL	0.02	09/01/23	RIA*	SM4500 NH3 C
Chloride	mg/L	73	3.0	08/24/23	KF	EPA 300.0
Kjeldhal Nitrogen	mg/L	0.28	0.10	08/29/23	IP	SM4500 Norg B-C
Mercury*	mg/L	BRL	0.0002	09/05/23	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.060	0.005	09/07/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.20	08/29/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.572	0.017	09/06/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.15	NA	11/06/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.21	NA	11/06/23	KB	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	08/22/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.97	NA	12/05/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.07	NA	11/06/23	KB	Calculation

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We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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MA CERT. NO.: M-MA 063

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Monday, December 11, 2023

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

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231530

Date Received: 08/22/23

Sample Type		Sample Time	Sample Date	Comments		
2D	A	09:00	08/22/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
Total Dissolved Nitrogen		mg/L	0.36	NA	11/06/23	KB
						Calculation

*Tetrachloroethylene (PCE) limit is 5 ug/L, source may be discharge from factories and dry cleaners

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.

We certify that the following results are true and accurate to the best of our knowledge.

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 11, 2023

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231531

Date Received: 08/22/23

Sample Type		Sample Time	Sample Date	Comments		
2S	A	09:15	08/22/23			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	1.8	0.01	08/23/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	08/23/23	KF	EPA 300.0
Total Nitrogen	mg/L	2.4	NA	11/06/23	KB	Calculation
Total Dissolved Solids	mg/L	310	6.0	08/23/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.008	0.005	09/07/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	0.596	0.017	09/06/23	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	*See Attached	*	08/29/23	NEC*	*
Total Iron	mg/L	0.700	0.050	09/21/23	KB	EPA 200.7
Boron	mg/L	BRL	0.010	09/21/23	KB	EPA 200.7
Copper	mg/L	BRL	0.003	09/21/23	KB	EPA 200.7
Ammonia-N *	mg/L	0.050	0.02	09/01/23	RIA*	SM4500 NH3 C
Chloride	mg/L	170	3.0	08/24/23	KF	EPA 300.0
Kjeldhal Nitrogen	mg/L	0.63	0.10	08/29/23	IP	SM4500 Norg B-C
Mercury*	mg/L	<0.00020	0.0002	09/05/23	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.020	0.005	09/07/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.56	0.20	08/29/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.033	0.017	09/06/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	1.9	NA	11/06/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.51	NA	11/06/23	KB	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	08/22/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.56	NA	12/05/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.07	NA	11/06/23	KB	Calculation

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.

We certify that the following results are true and accurate to the best of our knowledge.

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 11, 2023

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

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231531

Date Received: 08/22/23

Sample Type		Sample Time	Sample Date	Comments		
2S	A	09:15	08/22/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
Total Dissolved Nitrogen		mg/L	2.36	NA	11/06/23	KB
						Calculation

*Tetrachloroethylene (PCE) limit is 5 ug/L, source may be discharge from factories and dry cleaners

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.

We certify that the following results are true and accurate to the best of our knowledge.

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**see attached*

By: 
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Laboratory Director

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

Monday, December 11, 2023

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Groundwater Eel River

Comments: Total phos originally tested
09/07/23 retested 09/11/23

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231532

Date Received: 08/22/23

Sample Type		Sample Time	Sample Date	Comments		
A19	A	09:40	08/22/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Nitrate-N		mg/L	0.64	0.01	08/23/23	KF EPA 300.0
Nitrite-N		mg/L	BRL	0.006	08/23/23	KF EPA 300.0
Total Nitrogen		mg/L	0.85	NA	11/06/23	KB Calculation
Total Dissolved Solids		mg/L	52	6.0	08/23/23	AH SM 2540 C
Dissolved Total Phosphorous		mg/L	0.035	0.005	09/11/23	AH SM 4500-P-B,E
Total Organic Carbon*		mg/L	1.10	0.017	09/06/23	NEC* SM 5310 C
Volatile Organic Compounds*		ug/L	*None Detected	*	08/29/23	NEC* *
Total Iron		mg/L	0.412	0.050	09/21/23	KB EPA 200.7
Boron		mg/L	BRL	0.010	09/21/23	KB EPA 200.7
Copper		mg/L	0.011	0.003	09/21/23	KB EPA 200.7
Ammonia-N *		mg/L	0.026	0.02	09/01/23	RIA* SM4500 NH3 C
Chloride		mg/L	18	3.0	08/24/23	KF EPA 300.0
Kjeldhal Nitrogen		mg/L	0.21	0.10	08/29/23	IP SM4500 Norg B-C
Mercury*		mg/L	BRL	0.0002	09/05/23	RIA* EPA 245.1
Total Phosphorous (P)		mg/L	0.022	0.005	09/11/23	AH SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	BRL	0.20	08/29/23	IP SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	3.63	0.017	09/06/23	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.67	NA	11/06/23	KB Calculation
Dissolved Organic Nitrogen		mg/L	<0.17	NA	11/06/23	KB Calculation
Ortho Phosphorous (P)		mg/L	0.005	0.005	08/22/23	IP SM 4500-P
Particulate Organic Carbon		mg/L	ND	NA	12/05/23	NEC* SM 5310 C
Particulate Organic Nitrogen		mg/L	<0.21	NA	11/06/23	KB Calculation

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.

We certify that the following results are true and accurate to the best of our knowledge.

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

Monday, December 11, 2023

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Groundwater Eel River

Comments: Total phos originally tested
09/07/23 retested 09/11/23

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231532

Date Received: 08/22/23

Sample Type		Sample Time	Sample Date	Comments			
A19	A	09:40	08/22/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Dissolved Nitrogen		mg/L	0.64	NA	11/06/23	KB	Calculation

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By:

Ronald J. Saari

Laboratory Director

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 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Tuesday, December 12, 2023

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

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231533

Date Received: 08/22/23

Sample Type		Sample Time	Sample Date	Comments		
5S	A	10:10	08/22/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
						Method
Nitrate-N		mg/L	0.65	0.01	08/23/23	KF
Nitrite-N		mg/L	BRL	0.006	08/23/23	KF
Total Nitrogen		mg/L	0.93	NA	11/06/23	KB
Total Dissolved Solids		mg/L	1100	6.0	08/23/23	AH
Dissolved Total Phosphorous		mg/L	0.023	0.005	09/07/23	AH
Total Organic Carbon*		mg/L	0.843	0.017	09/06/23	NEC*
Volatile Organic Compounds*		ug/L	*See Attached	*	08/29/23	NEC*
Total Iron		mg/L	0.898	0.050	09/21/23	KB
Boron		mg/L	0.019	0.010	09/21/23	KB
Copper		mg/L	BRL	0.003	09/21/23	KB
Ammonia-N *		mg/L	BRL	0.02	09/01/23	RIA*
Chloride		mg/L	120	3.0	08/24/23	KF
Kjeldhal Nitrogen		mg/L	0.28	0.10	08/30/23	IP
Mercury*		mg/L	BRL	0.0002	09/05/23	RIA*
Total Phosphorous (P)		mg/L	0.112	0.005	09/07/23	AH
Dissolved Kjeldhal Nitrogen		mg/L	0.21	0.20	08/30/23	IP
Dissolved Total Organic Carbon		mg/L	BRL	0.017	09/06/23	NEC*
Dissolved Inorganic Nitrogen		mg/L	0.65	NA	11/06/23	KB
Dissolved Organic Nitrogen		mg/L	<0.21	NA	11/06/23	KB
Ortho Phosphorous (P)		mg/L	0.010	0.005	08/22/23	IP
Particulate Organic Carbon		mg/L	0.84	NA	12/05/23	NEC*
Particulate Organic Nitrogen		mg/L	0.07	NA	11/06/23	KB

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

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Tuesday, December 12, 2023

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

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231533

Date Received: 08/22/23

Sample Type		Sample Time	Sample Date	Comments		
5S	A	10:10	08/22/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
Total Dissolved Nitrogen		mg/L	0.86	NA	11/06/23	KB
						Calculation

*Trace to low levels of chloroform are occasionally detected in ground water in coastline areas.

Chloroform and three other trihalomethanes (THMs)— bromodichloromethane, dibromochloromethane, and bromoform—are disinfection by-products

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

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FAX (508)888-6446

Monday, December 11, 2023

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

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231534

Date Received: 08/22/23

Sample Type		Sample Time	Sample Date	Comments		
A15	A	10:45	08/22/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Nitrate-N		mg/L	1.6	0.01	08/23/23	KF EPA 300.0
Nitrite-N		mg/L	BRL	0.006	08/23/23	KF EPA 300.0
Total Nitrogen		mg/L	1.8	NA	11/06/23	KB Calculation
Total Dissolved Solids		mg/L	130	6.0	08/23/23	AH SM 2540 C
Dissolved Total Phosphorous		mg/L	0.042	0.005	09/07/23	AH SM 4500-P-B,E
Total Organic Carbon*		mg/L	0.688	0.017	09/06/23	NEC* SM 5310 C
Volatile Organic Compounds*		ug/L	None Detected	*	08/29/23	NEC* *
Total Iron		mg/L	6.39	0.050	09/21/23	KB EPA 200.7
Boron		mg/L	0.018	0.010	09/21/23	KB EPA 200.7
Copper		mg/L	BRL	0.003	09/21/23	KB EPA 200.7
Ammonia-N *		mg/L	BRL	0.02	09/01/23	RIA* SM4500 NH3 C
Chloride		mg/L	42	3.0	08/24/23	KF EPA 300.0
Kjeldhal Nitrogen		mg/L	0.21	0.10	08/30/23	IP SM4500 Norg B-C
Mercury*		mg/L	BRL	0.0002	09/05/23	RIA* EPA 245.1
Total Phosphorous (P)		mg/L	0.102	0.005	09/07/23	AH SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	BRL	0.20	08/30/23	IP SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	0.092	0.017	09/06/23	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	<0.21	NA	11/06/23	KB Calculation
Dissolved Organic Nitrogen		mg/L	<0.21	NA	11/06/23	KB Calculation
Ortho Phosphorous (P)		mg/L	0.038	0.005	08/22/23	IP SM 4500-P
Particulate Organic Carbon		mg/L	0.60	NA	12/05/23	NEC* SM 5310 C
Particulate Organic Nitrogen		mg/L	<0.21	NA	11/06/23	KB Calculation

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We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By:

Ronald J. Saari

Laboratory Director

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

Monday, December 11, 2023

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

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231534

Date Received: 08/22/23

Sample Type		Sample Time	Sample Date	Comments		
A15	A	10:45	08/22/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
Total Dissolved Nitrogen		mg/L	1.6	NA	11/06/23	KB
						Calculation

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.

We certify that the following results are true and accurate to the best of our knowledge.

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**see attached*

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Laboratory Director

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Monday, December 11, 2023

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231535

Date Received: 08/22/23

Sample Type	Sample Time	Sample Date	Comments			
7SR A	11:10	08/22/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.41	0.01	08/23/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	08/23/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.62	NA	11/06/23	KB	Calculation
Total Dissolved Solids	mg/L	820	6.0	08/23/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	BRL	0.005	09/07/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	0.340	0.017	09/06/23	NEC*	SM 5310 C
Volatile Organic Compounds*	ug/L	None Detected	*	08/29/23	NEC*	*
Total Iron	mg/L	6.97	0.050	09/21/23	KB	EPA 200.7
Boron	mg/L	0.014	0.010	09/21/23	KB	EPA 200.7
Copper	mg/L	BRL	0.003	09/21/23	KB	EPA 200.7
Ammonia-N *	mg/L	BRL	0.02	09/01/23	RIA*	SM4500 NH3 C
Chloride	mg/L	500	3.0	12/11/23	KF	EPA 300.0
Kjeldhal Nitrogen	mg/L	0.21	0.10	09/07/23	IP	SM4500 Norg B-C
Mercury*	mg/L	BRL	0.0002	09/05/23	RIA*	EPA 245.1
Total Phosphorous (P)	mg/L	0.020	0.005	09/07/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	09/07/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	BRL	0.017	09/06/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.41	NA	11/06/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.21	NA	11/06/23	KB	Calculation
Ortho Phosphorous (P)	mg/L	BRL	0.005	08/22/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.34	NA	12/05/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.21	NA	11/06/23	KB	Calculation

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By:

Ronald J. Saari

Laboratory Director

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Monday, December 11, 2023

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Groundwater Eel River

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231535

Date Received: 08/22/23

Sample Type		Sample Time	Sample Date	Comments		
7SR	A	11:10	08/22/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
Total Dissolved Nitrogen		mg/L	0.41	NA	11/06/23	KB
						Calculation

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We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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

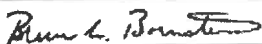
MA DEP Lab. M-MA072 RI Lab. LAO00364

Client: Envirotech Laboratory, Inc.
 State: Liquid

			Analytical Results									
Lab ID	Client ID	Date Sampled	TOC mg/L									
309012	WW-231527 Total	08/22/23	1.22									
309013	WW-231527 Dissolved	08/22/23	0.946									
309014	WW-231528 Total	08/22/23	0.837									
309015	WW-231528 Dissolved	08/22/23	0.630									
309016	WW-231529 Total	08/22/23	0.436									
309017	WW-231529 Dissolved	08/22/23	0.397									
309018	WW-231530 Total	08/22/23	1.54									
309019	WW-231530 Dissolved	08/22/23	1.14									
309020	WW-231531 Total	08/22/23	0.596									
309021	WW-231531 Dissolved	08/22/23	0.601									
309022	WW-231532 Total	08/22/23	1.10									
309023	WW-231532 Dissolved	08/22/23	4.20									
309024	WW-231533 Total	08/22/23	0.843									
309025	WW-231533 Dissolved	08/22/23	0.384									
309026	WW-231534 Total	08/22/23	0.688									
309027	WW-231534 Dissolved	08/22/23	0.660									
309028	WW-231535A Total	08/22/23	0.340									
309029	WW-231535A Dissolved	08/22/23	0.323									
309030	WW-231535B Dissolved	08/22/23	0.568									

Analytical Methodology							
Analyte	Method	Detection Limit	MRL	Units	Date Analyzed	Cert Status	DF
TOC	Standard Methods 5310C	0.0170	0.051	mg/L	09/06/23	NA	1

Form: Mis

Electronically signed and approved by: 	Date: 09/08/23
--	----------------

CHAIN OF CUSTODY FORM										ENVIROTECH LABS, INC.		NE Chromachem	
Project Name: Plymouth ENV.										8 Jan Sebastian Dr., Unit 12		Address	
Sampler: KT										(508)888-6460		6 Nichols Street	
PWS:										1-800-339-6460		Salem, MA 01970	
Date										FAX (508)888-6446		Phone# 978-744-6600	
Time										Pres.		Fax# 206 984 2474	
Lab ID #	Date	Time	Com	Grab	Station location	DEP ID	Container	Sample type	Analysis requested				
WW-231527	08/22/23	0800		X	Bradford		2VOA	H2SO4	GW	Total TOC low	3/9/21		
WW-231528	08/22/23	0820		X	A13		2VOA	H2SO4	GW	Dissolved TOC low	3/9/21		
WW-231529	08/22/23	0845		X	A17		2VOA	H2SO4	GW	Total TOC low	3/9/21		
WW-231530	08/22/23	0910		X	2D		2VOA	H2SO4	GW	Dissolved TOC low	3/9/21		
WW-231531	08/22/23	0915		X	2S		2VOA	H2SO4	GW	Total TOC low	3/9/21		
WW-231532	08/22/23	0940		X	A19		2VOA	H2SO4	GW	Dissolved TOC low	3/9/21		
WW-231533	08/22/23	1010		X	5S		2VOA	H2SO4	GW	Total TOC low	3/9/21		
WW-231534	08/22/23	1045		X	A15		2VOA	H2SO4	GW	Dissolved TOC low	3/9/21		
WW-231535A	08/22/23	1110		X	7SR		2VOA	H2SO4	GW	Total TOC low	3/9/21		
WW-231535B	08/22/23	1600		X	Filtered Blank		1VOA	H2SO4	GW	Dissolved TOC low	3/9/21		
										Total TOC low level 0.5 mg/L			
Relinquished: <i>[Signature]</i>										dissolved TOC low level 0.5 mg/L			
Date/Time: 8/20/23										DEP MDL REQUIRED by Method			
Relinquished: <i>[Signature]</i>										Contact lab with any Exceeded MCL			
Date/Time: 8/20/23													



R.I. ANALYTICAL
Specialists in Environmental Services

LABORATORY REPORT

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

Date Received: 8/28/2023
Date Reported: 9/6/2023
P.O. Number WW-231527-35

Work Order #: 2308-14545

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 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:

Kristin Phelan
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

Report Qualifiers & Abbreviations

These qualifiers/abbreviations may or may not be present in this report.

Qualifier	Descriptions
*	Recovery outside of acceptance limits
B	Analyte detected in method blank at a level about the detection limit
D	Surrogate diluted out to reach a parameter result within the instrument calibration curve
E	Parameter result exceeds calibration curve
J	Estimated result based on MDL
Abbreviation	Definition
BLK	Method Blank
CFU	Colony Forming Unit
DF	Dilution Factor
DL	Detection Limit
LCS(D)	Laboratory Control Standard (Duplicate)
MCL	Maximum Contaminant Level
MDL	Method Detection Limit
MPN	Most Probable Number
MS(D)	Matrix Spike (Duplicate)
QC	Quality Control
RPD	Relative Percent Difference
TIC	Tentatively Identified Compound
TNTC	Too Numerous to Count
*CS	Field data provided by the client

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2308-14545

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-231527 BRADFORD
Sample Type : GRAB
Sample Date / Time : 8/22/2023 @ 08:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.037	0.020	mg/L	SM4500NH3-B,H 18-21ed	9/1/2023 9:21	VC
Total Metals						
Mercury	<0.00020	0.00020	mg/L	EPA 245.1	9/5/2023 16:10	KK
Mercury Digestion				EPA 245.1	8/29/2023 9:57	KK

Sample Number: 002
Sample Description: WW-231528 A13
Sample Type : GRAB
Sample Date / Time : 8/22/2023 @ 08:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.16	0.020	mg/L	SM4500NH3-B,H 18-21ed	9/1/2023 9:21	VC
Total Metals						
Mercury	<0.00020	0.00020	mg/L	EPA 245.1	9/5/2023 16:15	KK
Mercury Digestion				EPA 245.1	8/29/2023 9:57	KK

Sample Number: 003
Sample Description: WW-231529 A17
Sample Type : GRAB
Sample Date / Time : 8/22/2023 @ 08:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	9/1/2023 9:21	VC
Total Metals						
Mercury	0.00027	0.00020	mg/L	EPA 245.1	9/5/2023 16:16	KK
Mercury Digestion				EPA 245.1	8/29/2023 9:57	KK

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2308-14545

Project Name: PLYMOUTH ENV.

Sample Number: 004
Sample Description: WW-231530 2D
Sample Type : GRAB
Sample Date / Time : 8/22/2023 @ 09:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	9/1/2023 9:21	VC
Total Metals						
Mercury	<0.00020	0.00020	mg/L	EPA 245.1	9/5/2023 16:17	KK
Mercury Digestion				EPA 245.1	8/29/2023 9:57	KK

Sample Number: 005
Sample Description: WW-231531 2S
Sample Type : GRAB
Sample Date / Time : 8/22/2023 @ 09:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.050	0.020	mg/L	SM4500NH3-B,H 18-21ed	9/1/2023 9:21	VC
Total Metals						
Mercury	<0.00020	0.00020	mg/L	EPA 245.1	9/5/2023 16:18	KK
Mercury Digestion				EPA 245.1	8/29/2023 9:57	KK

Sample Number: 006
Sample Description: WW-231532 A19
Sample Type : GRAB
Sample Date / Time : 8/22/2023 @ 09:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.026	0.020	mg/L	SM4500NH3-B,H 18-21ed	9/1/2023 9:21	VC
Total Metals						
Mercury	<0.00020	0.00020	mg/L	EPA 245.1	9/5/2023 16:21	KK
Mercury Digestion				EPA 245.1	8/29/2023 9:57	KK

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2308-14545

Project Name: PLYMOUTH ENV.

Sample Number: 007
Sample Description: WW-231533 5S
Sample Type : GRAB
Sample Date / Time : 8/22/2023 @ 10:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	9/1/2023 9:21	VC
Total Metals						
Mercury	<0.00020	0.00020	mg/L	EPA 245.1	9/5/2023 16:23	KK
Mercury Digestion				EPA 245.1	8/29/2023 9:57	KK

Sample Number: 008
Sample Description: WW-231534 A15
Sample Type : GRAB
Sample Date / Time : 8/22/2023 @ 10:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	9/1/2023 9:21	VC
Total Metals						
Mercury	<0.00020	0.00020	mg/L	EPA 245.1	9/5/2023 16:24	KK
Mercury Digestion				EPA 245.1	8/29/2023 9:57	KK

Sample Number: 009
Sample Description: WW-231535 7SR
Sample Type : GRAB
Sample Date / Time : 8/22/2023 @ 11:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	9/1/2023 9:21	VC
Total Metals						
Mercury	<0.00020	0.00020	mg/L	EPA 245.1	9/5/2023 16:25	KK
Mercury Digestion				EPA 245.1	8/29/2023 9:57	KK

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

MA DEP Lab. M-MA072 RI Lab. LAO00364

Sample Information

EPA Method 624.1 Volatile Organic Compounds	
Lab ID:	308535
Client:	Envirotech Laboratory, Inc.
Client ID:	WW-231527
State:	Liquid
Date Sampled:	08/22/23
Date Received:	08/29/23
Date Analyzed:	08/29/23

Analytical Results

Parameter	Results (ug/L)	Parameter	Results (ug/L)
Acetone*	ND	1,1-Dichloroethene	ND
Acrolein	ND	cis-1,2-dichloroethene	ND
Acrylonitrile	ND	trans-1,2-dichloroethene	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-dichloropropene	ND
Bromoform	ND	trans-1,3-dichloropropene	ND
Bromomethane	ND	Ethylbenzene	ND
2-Butanone	ND	2-Hexanone	ND
Carbon Disulfide	ND	Methylene Chloride	ND
Carbon Tetrachloride	ND	4-Methyl-2-pentanone	ND
Chlorobenzene	ND	Methyl-tert-butyl ether	ND
Chloroethane	ND	Styrene	ND
2-Chloroethylvinyl Ether	ND	1,1,2,2-Tetrachloroethane	ND
Chloroform	1.03	Tetrachloroethene	ND
Chloromethane	ND	Toluene	ND
Dibromochloromethane	ND	1,1,1-Trichloroethane	ND
Dibromomethane	ND	1,1,2-Trichloroethane	ND
1,2-Dichlorobenzene	ND	Trichloroethene	ND
1,3-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,4-Dichlorobenzene	ND	Vinyl Chloride	ND
1,1-Dichloroethane	ND	Vinyl Acetate	ND
1,2-Dichloroethane	ND	Total Xylenes	ND

Surrogate Standard Recoveries

Benzene-d6	96
4-Bromofluorobenzene	98
1,2-Dichlorobenzene-d4	110

ND = < Method Detection Limit

NA = Not Analyzed

Dilution Factor = 1

Method Detection Limit = 1 ug/L

MRL = 1 ug/L

*Acetone Method Detection Limit = 10 ug/L

Analysis performed per 310CMR42

MA DEP Lab. M-MA072 RI Lab. LAO00364

Electronically signed and approved by: Mr. Bruce A. Bornstein, Lab Director	8/30/2023 Date
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New England ChromaChem
6 Nichols Street
Salem, MA 01970
978-744-6600

MA DEP Lab. M-MA072 RI Lab. LAO00364

Sample Information

EPA Method 624.1 Volatile Organic Compounds	
Lab ID:	308536
Client:	Envirotech Laboratory, Inc.
Client ID:	WW-231528
State:	Liquid
Date Sampled:	08/22/23
Date Received:	08/29/23
Date Analyzed:	08/29/23

Analytical Results

Parameter	Results (ug/L)	Parameter	Results (ug/L)
Acetone*	ND	1,1-Dichloroethene	ND
Acrolein	ND	cis-1,2-dichloroethene	ND
Acrylonitrile	ND	trans-1,2-dichloroethene	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-dichloropropene	ND
Bromoform	ND	trans-1,3-dichloropropene	ND
Bromomethane	ND	Ethylbenzene	ND
2-Butanone	ND	2-Hexanone	ND
Carbon Disulfide	ND	Methylene Chloride	ND
Carbon Tetrachloride	ND	4-Methyl-2-pentanone	ND
Chlorobenzene	ND	Methyl-tert-butyl ether	1.93
Chloroethane	ND	Styrene	ND
2-Chloroethylvinyl Ether	ND	1,1,2,2-Tetrachloroethane	ND
Chloroform	ND	Tetrachloroethene	ND
Chloromethane	ND	Toluene	ND
Dibromochloromethane	ND	1,1,1-Trichloroethane	ND
Dibromomethane	ND	1,1,2-Trichloroethane	ND
1,2-Dichlorobenzene	ND	Trichloroethene	ND
1,3-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,4-Dichlorobenzene	ND	Vinyl Chloride	ND
1,1-Dichloroethane	ND	Vinyl Acetate	ND
1,2-Dichloroethane	ND	Total Xylenes	ND

Surrogate Standard Recoveries

Benzene-d6	94
4-Bromofluorobenzene	99
1,2-Dichlorobenzene-d4	108

ND = < Method Detection Limit

NA = Not Analyzed

Dilution Factor = 1

Method Detection Limit = 1 ug/L

MRL = 1 ug/L

*Acetone Method Detection Limit = 10 ug/L

Analysis performed per 310CMR42

MA DEP Lab. M-MA072 RI Lab. LAO00364

Electronically signed and approved by: Mr. Bruce A. Bornstein, Lab Director	8/30/2023 Date
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New England ChromaChem
6 Nichols Street
Salem, MA 01970
978-744-6600

MA DEP Lab. M-MA072 RI Lab. LAO00364

Sample Information

EPA Method 624.1 Volatile Organic Compounds	
Lab ID:	308537
Client:	Envirotech Laboratory, Inc.
Client ID:	WW-231529
State:	Liquid
Date Sampled:	08/22/23
Date Received:	08/29/23
Date Analyzed:	08/29/23

Analytical Results

Parameter	Results (ug/L)	Parameter	Results (ug/L)
Acetone*	ND	1,1-Dichloroethene	ND
Acrolein	ND	cis-1,2-dichloroethene	ND
Acrylonitrile	ND	trans-1,2-dichloroethene	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	4.44	cis-1,3-dichloropropene	ND
Bromoform	3.13	trans-1,3-dichloropropene	ND
Bromomethane	ND	Ethylbenzene	ND
2-Butanone	ND	2-Hexanone	ND
Carbon Disulfide	ND	Methylene Chloride	ND
Carbon Tetrachloride	ND	4-Methyl-2-pentanone	ND
Chlorobenzene	ND	Methyl-tert-butyl ether	ND
Chloroethane	ND	Styrene	ND
2-Chloroethylvinyl Ether	ND	1,1,2,2-Tetrachloroethane	ND
Chloroform	7.13	Tetrachloroethene	ND
Chloromethane	ND	Toluene	ND
Dibromochloromethane	7.05	1,1,1-Trichloroethane	ND
Dibromomethane	ND	1,1,2-Trichloroethane	ND
1,2-Dichlorobenzene	ND	Trichloroethene	ND
1,3-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,4-Dichlorobenzene	ND	Vinyl Chloride	ND
1,1-Dichloroethane	ND	Vinyl Acetate	ND
1,2-Dichloroethane	ND	Total Xylenes	ND

Surrogate Standard Recoveries

Benzene-d6	94
4-Bromofluorobenzene	98
1,2-Dichlorobenzene-d4	109

ND = < Method Detection Limit

NA = Not Analyzed

Dilution Factor = 1

Method Detection Limit = 1 ug/L

MRL= 1 ug/L

*Acetone Method Detection Limit = 10 ug/L

Analysis performed per 310CMR42

MA DEP Lab. M-MA072 RI Lab. LAO00364

Electronically signed and approved by: Mr. Bruce A. Bornstein, Lab Director	8/30/2023 Date
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New England ChromaChem
6 Nichols Street
Salem, MA 01970
978-744-6600

MA DEP Lab. M-MA072 RI Lab. LAO00364

Sample Information

EPA Method 624.1 Volatile Organic Compounds	
Lab ID:	308538
Client:	Envirotech Laboratory, Inc.
Client ID:	WW-231530
State:	Liquid
Date Sampled:	08/22/23
Date Received:	08/29/23
Date Analyzed:	08/29/23

Analytical Results

Parameter	Results (ug/L)	Parameter	Results (ug/L)
Acetone*	ND	1,1-Dichloroethene	ND
Acrolein	ND	cis-1,2-dichloroethene	ND
Acrylonitrile	ND	trans-1,2-dichloroethene	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-dichloropropene	ND
Bromoform	ND	trans-1,3-dichloropropene	ND
Bromomethane	ND	Ethylbenzene	ND
2-Butanone	ND	2-Hexanone	ND
Carbon Disulfide	ND	Methylene Chloride	ND
Carbon Tetrachloride	ND	4-Methyl-2-pentanone	ND
Chlorobenzene	ND	Methyl-tert-butyl ether	ND
Chloroethane	ND	Styrene	ND
2-Chloroethylvinyl Ether	ND	1,1,2,2-Tetrachloroethane	ND
Chloroform	ND	Tetrachloroethene	2.46
Chloromethane	ND	Toluene	ND
Dibromochloromethane	ND	1,1,1-Trichloroethane	ND
Dibromomethane	ND	1,1,2-Trichloroethane	ND
1,2-Dichlorobenzene	ND	Trichloroethene	ND
1,3-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,4-Dichlorobenzene	ND	Vinyl Chloride	ND
1,1-Dichloroethane	ND	Vinyl Acetate	ND
1,2-Dichloroethane	ND	Total Xylenes	ND

Surrogate Standard Recoveries

Benzene-d6	94
4-Bromofluorobenzene	104
1,2-Dichlorobenzene-d4	103

ND = < Method Detection Limit

NA = Not Analyzed

Dilution Factor = 1

Method Detection Limit = 1 ug/L

MRL = 1 ug/L

*Acetone Method Detection Limit = 10 ug/L

Analysis performed per 310CMR42

MA DEP Lab. M-MA072 RI Lab. LAO00364

Electronically signed and approved by: Mr. Bruce A. Bornstein, Lab Director	8/30/2023 Date
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New England ChromaChem
6 Nichols Street
Salem, MA 01970
978-744-6600

MA DEP Lab. M-MA072 RI Lab. LAO00364

Sample Information

EPA Method 624.1 Volatile Organic Compounds	
Lab ID:	308539
Client:	Envirotech Laboratory, Inc.
Client ID:	WW-231531
State:	Liquid
Date Sampled:	08/22/23
Date Received:	08/29/23
Date Analyzed:	08/29/23

Analytical Results

Parameter	Results (ug/L)	Parameter	Results (ug/L)
Acetone*	ND	1,1-Dichloroethene	ND
Acrolein	ND	cis-1,2-dichloroethene	ND
Acrylonitrile	ND	trans-1,2-dichloroethene	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-dichloropropene	ND
Bromoform	ND	trans-1,3-dichloropropene	ND
Bromomethane	ND	Ethylbenzene	ND
2-Butanone	ND	2-Hexanone	ND
Carbon Disulfide	ND	Methylene Chloride	ND
Carbon Tetrachloride	ND	4-Methyl-2-pentanone	ND
Chlorobenzene	ND	Methyl-tert-butyl ether	ND
Chloroethane	ND	Styrene	ND
2-Chloroethylvinyl Ether	ND	1,1,2,2-Tetrachloroethane	ND
Chloroform	ND	Tetrachloroethene	1.12
Chloromethane	ND	Toluene	ND
Dibromochloromethane	ND	1,1,1-Trichloroethane	ND
Dibromomethane	ND	1,1,2-Trichloroethane	ND
1,2-Dichlorobenzene	ND	Trichloroethene	ND
1,3-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,4-Dichlorobenzene	ND	Vinyl Chloride	ND
1,1-Dichloroethane	ND	Vinyl Acetate	ND
1,2-Dichloroethane	ND	Total Xylenes	ND

Surrogate Standard Recoveries

Benzene-d6	99
4-Bromofluorobenzene	99
1,2-Dichlorobenzene-d4	107

ND = < Method Detection Limit

NA = Not Analyzed

Dilution Factor = 1

Method Detection Limit = 1 ug/L

MRL = 1 ug/L

*Acetone Method Detection Limit = 10 ug/L

Analysis performed per 310CMR42

MA DEP Lab. M-MA072 RI Lab. LAO00364

Electronically signed and approved by: Mr. Bruce A. Bornstein, Lab Director	8/30/2023 Date
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New England ChromaChem
6 Nichols Street
Salem, MA 01970
978-744-6600

MA DEP Lab. M-MA072 RI Lab. LAO00364

Sample Information

EPA Method 624.1 Volatile Organic Compounds	
Lab ID:	308540
Client:	Envirotech Laboratory, Inc.
Client ID:	WW-231532
State:	Liquid
Date Sampled:	08/22/23
Date Received:	08/29/23
Date Analyzed:	08/29/23

Analytical Results

Parameter	Results (ug/L)	Parameter	Results (ug/L)
Acetone*	ND	1,1-Dichloroethene	ND
Acrolein	ND	cis-1,2-dichloroethene	ND
Acrylonitrile	ND	trans-1,2-dichloroethene	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-dichloropropene	ND
Bromoform	ND	trans-1,3-dichloropropene	ND
Bromomethane	ND	Ethylbenzene	ND
2-Butanone	ND	2-Hexanone	ND
Carbon Disulfide	ND	Methylene Chloride	ND
Carbon Tetrachloride	ND	4-Methyl-2-pentanone	ND
Chlorobenzene	ND	Methyl-tert-butyl ether	ND
Chloroethane	ND	Styrene	ND
2-Chloroethylvinyl Ether	ND	1,1,2,2-Tetrachloroethane	ND
Chloroform	ND	Tetrachloroethene	ND
Chloromethane	ND	Toluene	ND
Dibromochloromethane	ND	1,1,1-Trichloroethane	ND
Dibromomethane	ND	1,1,2-Trichloroethane	ND
1,2-Dichlorobenzene	ND	Trichloroethene	ND
1,3-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,4-Dichlorobenzene	ND	Vinyl Chloride	ND
1,1-Dichloroethane	ND	Vinyl Acetate	ND
1,2-Dichloroethane	ND	Total Xylenes	ND

Surrogate Standard Recoveries

Benzene-d6	97
4-Bromofluorobenzene	93
1,2-Dichlorobenzene-d4	106

ND = < Method Detection Limit

NA = Not Analyzed

Dilution Factor = 5

Method Detection Limit = 2.5 ug/L

MRL = 1 ug/L

*Acetone Method Detection Limit = 25 ug/L

Analysis performed per 310CMR42

MA DEP Lab. M-MA072 RI Lab. LAO00364

Electronically signed and approved by: Mr. Bruce A. Bornstein, Lab Director	8/30/2023 Date
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New England ChromaChem
6 Nichols Street
Salem, MA 01970
978-744-6600

MA DEP Lab. M-MA072 RI Lab. LAO00364

Sample Information

EPA Method 624.1 Volatile Organic Compounds	
Lab ID:	308541
Client:	Envirotech Laboratory, Inc.
Client ID:	WW-231533
State:	Liquid
Date Sampled:	08/22/23
Date Received:	08/29/23
Date Analyzed:	08/29/23

Analytical Results

Parameter	Results (ug/L)	Parameter	Results (ug/L)
Acetone*	ND	1,1-Dichloroethene	ND
Acrolein	ND	cis-1,2-dichloroethene	ND
Acrylonitrile	ND	trans-1,2-dichloroethene	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	1.43	cis-1,3-dichloropropene	ND
Bromoform	ND	trans-1,3-dichloropropene	ND
Bromomethane	ND	Ethylbenzene	ND
2-Butanone	ND	2-Hexanone	ND
Carbon Disulfide	ND	Methylene Chloride	ND
Carbon Tetrachloride	ND	4-Methyl-2-pentanone	ND
Chlorobenzene	ND	Methyl-tert-butyl ether	ND
Chloroethane	ND	Styrene	ND
2-Chloroethylvinyl Ether	ND	1,1,2,2-Tetrachloroethane	ND
Chloroform	3.12	Tetrachloroethene	ND
Chloromethane	ND	Toluene	ND
Dibromochloromethane	2.18	1,1,1-Trichloroethane	ND
Dibromomethane	ND	1,1,2-Trichloroethane	ND
1,2-Dichlorobenzene	ND	Trichloroethene	ND
1,3-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,4-Dichlorobenzene	ND	Vinyl Chloride	ND
1,1-Dichloroethane	ND	Vinyl Acetate	ND
1,2-Dichloroethane	ND	Total Xylenes	ND

Surrogate Standard Recoveries

Benzene-d6	95
4-Bromofluorobenzene	100
1,2-Dichlorobenzene-d4	101

ND = < Method Detection Limit

NA = Not Analyzed

Dilution Factor = 1

Method Detection Limit = 1 ug/L

MRL = 1 ug/L

*Acetone Method Detection Limit = 10 ug/L

Analysis performed per 310CMR42

MA DEP Lab. M-MA072 RI Lab. LAO00364

Electronically signed and approved by: Mr. Bruce A. Bornstein, Lab Director	8/30/2023 Date
--	-------------------

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

MA DEP Lab. M-MA072 RI Lab. LAO00364

Sample Information

EPA Method 624.1 Volatile Organic Compounds	
Lab ID:	308542
Client:	Envirotech Laboratory, Inc.
Client ID:	WW-231534
State:	Liquid
Date Sampled:	08/22/23
Date Received:	08/29/23
Date Analyzed:	08/29/23

Analytical Results

Parameter	Results (ug/L)	Parameter	Results (ug/L)
Acetone*	ND	1,1-Dichloroethene	ND
Acrolein	ND	cis-1,2-dichloroethene	ND
Acrylonitrile	ND	trans-1,2-dichloroethene	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-dichloropropene	ND
Bromoform	ND	trans-1,3-dichloropropene	ND
Bromomethane	ND	Ethylbenzene	ND
2-Butanone	ND	2-Hexanone	ND
Carbon Disulfide	ND	Methylene Chloride	ND
Carbon Tetrachloride	ND	4-Methyl-2-pentanone	ND
Chlorobenzene	ND	Methyl-tert-butyl ether	ND
Chloroethane	ND	Styrene	ND
2-Chloroethylvinyl Ether	ND	1,1,2,2-Tetrachloroethane	ND
Chloroform	ND	Tetrachloroethene	ND
Chloromethane	ND	Toluene	ND
Dibromochloromethane	ND	1,1,1-Trichloroethane	ND
Dibromomethane	ND	1,1,2-Trichloroethane	ND
1,2-Dichlorobenzene	ND	Trichloroethene	ND
1,3-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,4-Dichlorobenzene	ND	Vinyl Chloride	ND
1,1-Dichloroethane	ND	Vinyl Acetate	ND
1,2-Dichloroethane	ND	Total Xylenes	ND

Surrogate Standard Recoveries

Benzene-d6	97
4-Bromofluorobenzene	102
1,2-Dichlorobenzene-d4	110

ND = < Method Detection Limit

NA = Not Analyzed

Dilution Factor = 1

Method Detection Limit = 1 ug/L

MRL = 1 ug/L

*Acetone Method Detection Limit = 10 ug/L

Analysis performed per 310CMR42

MA DEP Lab. M-MA072 RI Lab. LAO00364

Electronically signed and approved by: Mr. Bruce A. Bornstein, Lab Director	8/30/2023 Date
---	-------------------

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

MA DEP Lab. M-MA072 RI Lab. LAO00364

Sample Information

EPA Method 624.1 Volatile Organic Compounds	
Lab ID:	308543
Client:	Envirotech Laboratory, Inc.
Client ID:	WW-231535
State:	Liquid
Date Sampled:	08/22/23
Date Received:	08/29/23
Date Analyzed:	08/29/23

Analytical Results

Parameter	Results (ug/L)	Parameter	Results (ug/L)
Acetone*	ND	1,1-Dichloroethene	ND
Acrolein	ND	cis-1,2-dichloroethene	ND
Acrylonitrile	ND	trans-1,2-dichloroethene	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-dichloropropene	ND
Bromoform	ND	trans-1,3-dichloropropene	ND
Bromomethane	ND	Ethylbenzene	ND
2-Butanone	ND	2-Hexanone	ND
Carbon Disulfide	ND	Methylene Chloride	ND
Carbon Tetrachloride	ND	4-Methyl-2-pentanone	ND
Chlorobenzene	ND	Methyl-tert-butyl ether	ND
Chloroethane	ND	Styrene	ND
2-Chloroethylvinyl Ether	ND	1,1,2,2-Tetrachloroethane	ND
Chloroform	ND	Tetrachloroethene	ND
Chloromethane	ND	Toluene	ND
Dibromochloromethane	ND	1,1,1-Trichloroethane	ND
Dibromomethane	ND	1,1,2-Trichloroethane	ND
1,2-Dichlorobenzene	ND	Trichloroethene	ND
1,3-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,4-Dichlorobenzene	ND	Vinyl Chloride	ND
1,1-Dichloroethane	ND	Vinyl Acetate	ND
1,2-Dichloroethane	ND	Total Xylenes	ND

Surrogate Standard Recoveries

Benzene-d6	97
4-Bromofluorobenzene	97
1,2-Dichlorobenzene-d4	102

ND = < Method Detection Limit

NA = Not Analyzed

Dilution Factor = 1

Method Detection Limit = 1 ug/L

MRL = 1 ug/L

*Acetone Method Detection Limit = 10 ug/L

Analysis performed per 310CMR42

MA DEP Lab. M-MA072 RI Lab. LAO00364

Electronically signed and approved by: Mr. Bruce A. Bornstein, Lab Director	8/30/2023 Date
---	-------------------

c

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@plymouth-ma.gov
Project Name: **Groundwater Eel River -Plymouth MA**
Sampler: Kim Tower (KT)

NW-231527

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
08/22	0800	Broadford	3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TOC, NH3	NONE
			1	250ml Plastic	Chloride, No2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	NONE
8/22	0820	A13	3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS, TP	NONE
			1	1 Liter Plastic	TKN, TN, TOC, MH3	NONE
			1	250ml Plastic	Chloride, No2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	NONE

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SCANNED
Re- DEC 13 2023

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

PLEASE FILTER PHOSPHORUS IN LAB - THANK YOU!

Relinquished By: _____ Date/Time: _____



Received By: _____ Date/Time: _____

 08/22/23 1145

—

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

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
8/22	0845	A17	3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TOC, NH3	NONE
			1	250ml Plastic	Chloride, NO2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	NONE
8/22	0910	2D	3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS, TP	NONE
			1	1 Liter Plastic	TKN, TN, TOC, NH3	NONE
			1	250ml Plastic	Chloride, NO2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	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

PLEASE FILTER PHOSPHORUS IN LAB - THANK YOU!

Relinquished By: Date/Time

Received By: _____ Date/Time: _____

NS

08/22/23 1145

c

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@plymouth-ma.gov
Project Name: **Groundwater Eel River -Plymouth MA**
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
8/22	0915	2S	3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TOC, NH3	NONE
			1	250ml Plastic	Chloride, No2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	NONE
8/22	0940	A19	3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS, TP	NONE
			1	1 Liter Plastic	TKN, TN, TOC, MH3	NONE
			1	250ml Plastic	Chloride, No2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	NONE

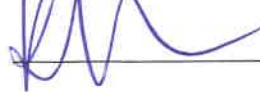
NOTE: Analysis needed for reporting in lowest detection possible; Total Dissolved Solids, O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen, Boron, Chloride,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

PLEASE FILTER PHOSPHORUS IN LAB - THANK YOU!

Relinquished By: _____ Date/Time: _____



Received By: _____ Date/Time: _____

 08/22/23 1145

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@plymouth-ma.gov
Project Name: **Groundwater Eel River -Plymouth MA**
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
8/22	1010	55	3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TOC, NH3	NONE
			1	250ml Plastic	Chloride, NO2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	NONE
8/22	1045	A25	3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS, TP	NONE
			1	1 Liter Plastic	TKN, TN, TOC, NH3	NONE
			1	250ml Plastic	Chloride, NO2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	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

PLEASE FILTER PHOSPHORUS IN LAB - THANK YOU!

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

_____ 08/22/23 1148

C

Chain of Custody

Laboratory:

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

Client:

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

1535

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
8/22	1110	7502	3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS	NONE
			1	1 Liter Plastic	TKN, TN, TOC, NH3	NONE
			1	250ml Plastic	Chloride, No2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	NONE
			3	Glass Vial	VOC	HCL
			1	1 Liter Plastic	Dissolved, TKN, TOC diss low, TDS, TP	NONE
			1	1 Liter Plastic	TKN, TN, TOC, MH3	NONE
			1	250ml Plastic	Chloride, No2, NO3	NONE
			1	500ml Plastic	B, Cu, Hg, Fe	NONE
			1	Plastic	Extra - Total Phosphorus and Ortho-phosphate PLEASE FILTER TP AT LAB	NONE

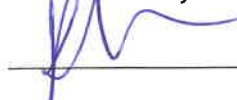
NOTE: Analysis needed for reporting in lowest detection possible; Total Dissolved Solids, O-Phosphate, Total Phosphate, Ammonia, Nitrate, Nitrite, Total Dissolved Nitrogen, Dissolved Inorganic Nitrogen, Dissolved Organic Nitrogen, Particulate Organic Carbon, Particulate Organic Nitrogen, Boron, Chloride,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

PLEASE FILTER PHOSPHORUS IN LAB - THANK YOU!

Relinquished By: _____ Date/Time: _____



Received By: _____ Date/Time: _____

 08/22/23 1145

Calculations $0 \leq \alpha < 0.2$

Lab ID	Date	TKN <0.2	Dissolve TKN	NH3 <0.02	NO3 <0.01	NO2 <0.006	Total Nitrogen	T Diss Nitrogen	Diss Inorg Nitrogen	Diss Org Nitrogen	Particulate Org Nitrogen
WW-231527	8/22/2023	0.21	0.21	0.037	0.12	<0.006	0.330	0.33	0.16	0.17	0.00
WW-231528	8/22/2023	0.42	0.35	0.160	0.13	<0.006	0.550	0.48	0.29	0.19	0.07
WW-231529	8/22/2023	0.49	0.42	<0.02	3	<0.006	3.490	3.42	3.00	<0.42	0.07
WW-231530	8/22/2023	0.28	0.21	<0.02	0.15	<0.006	0.430	0.36	0.15	<0.21	0.07
WW-231531	8/22/2023	0.63	0.56	0.05	1.8	<0.006	2.430	2.36	1.85	0.51	0.07
WW-231532	8/22/2023	0.21	<0.20	0.03	0.64	<0.006	0.850	0.64	0.67	<0.17	<0.21
WW-231533	8/22/2023	0.28	0.21	<0.02	0.65	<0.006	0.930	0.86	0.65	<0.21	0.07
WW-231534	8/22/2023	0.21	<0.2	<0.02	1.6	<0.006	1.810	1.60	1.60	<0.2	<0.21
WW-231535	8/22/2023	0.21	<0.2	<0.02	0.41	<0.006	0.620	0.41	0.41	<0.2	<0.21
							0.000	0.00	0.00	0.00	0.00
							0.000	0.00	0.00	0.00	0.00
							0.000	0.00	0.00	0.00	0.00
							0.000	0.00	0.00	0.00	0.00
							0.000	0.00	0.00	0.00	0.00
							0.000	0.00	0.00	0.00	0.00
							0.000	0.00	0.00	0.00	0.00
							0.000	0.00	0.00	0.00	0.00
							0.000	0.00	0.00	0.00	0.00
							0.000	0.00	0.00	0.00	0.00
							0.000	0.00	0.00	0.00	0.00
Formulae							0.000	0.00	0.00	0.00	0.00

[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

Wednesday, July 5, 2023

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-230435

Date Received: 03/29/23

Sample Type	Sample Time	Sample Date	Comments			
S-5B A	08:50	03/29/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.53	0.01	03/29/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	03/29/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.88	NA	04/13/23	IP	Calculation
Total Dissolved Solids	mg/L	110	6.0	04/04/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.026	0.005	04/06/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	1.22	0.017	03/29/23	NEC*	SM 5310 C
Boron	mg/L	0.012	0.010	04/08/23	KB	EPA 200.7
Total Kjeldhal Nitrogen	mg/L	0.35	0.2	04/11/23	IP	SM4500-Norg B-C
Chloride	mg/L	51	3.0	03/29/23	KF	EPA 300.0
Ortho Phosphorous (P)	mg/L	BRL	0.005	03/29/23	IP	SM 4500-P
Total Phosphorous (P)	mg/L	0.024	0.005	04/06/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.28	0.20	04/11/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.24	0.017	03/29/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.53	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.28	NA	07/05/23	KB	Calculation
Particulate Organic Carbon	mg/L	BRL	NA	04/07/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.07	NA	04/13/23	RIA*	Calculation
Total Dissolved Nitrogen	mg/L	0.81	NA	04/13/23	IP	Calculation
E coli	CFU/100ml	5	5	03/29/23	WM @ 13:30	EPA 1603
Ammonia-N	mg/L	<0.020	0.2	04/10/23	RIA*	10-107-06-05-J

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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

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

Wednesday, July 5, 2023

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-230435*
Date Received: *03/29/23*

Sample Type		Sample Time	Sample Date	Comments			
S-5B	A	08:50	03/29/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

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

Friday, July 7, 2023

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-230436

Date Received: 03/29/23

Sample Type		Sample Time	Sample Date	Comments		
S-4A	A	09:10	03/29/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Nitrate-N		mg/L	0.44	0.01	03/29/23	KF EPA 300.0
Nitrite-N		mg/L	BRL	0.006	03/29/23	KF EPA 300.0
Total Nitrogen		mg/L	1.4	NA	04/13/23	IP Calculation
Total Dissolved Solids		mg/L	130	6.0	04/04/23	AH SM 2540 C
Dissolved Total Phosphorous		mg/L	0.014	0.005	04/06/23	AH SM 4500-P-B,E
Total Organic Carbon*		mg/L	2.56	0.017	03/29/23	NEC* SM 5310 C
Boron		mg/L	0.011	0.010	04/08/23	KB EPA 200.7
Total Kjeldhal Nitrogen		mg/L	0.91	0.2	04/11/23	IP SM4500-Norg B-C
Chloride		mg/L	57	3.0	03/29/23	KF EPA 300.0
Total Phosphorous (P)		mg/L	0.129	0.005	04/06/23	AH SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	0.35	0.20	04/11/23	IP SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	2.14	0.017	03/29/23	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.44	NA	07/05/23	KB Calculation
Dissolved Organic Nitrogen		mg/L	0.35	NA	07/05/23	KB Calculation
Ortho Phosphorous (P)		mg/L	BRL	0.005	03/29/23	IP SM 4500-P
Particulate Organic Carbon		mg/L	0.420	NA	04/07/23	NEC* SM 5310 C
Particulate Organic Nitrogen		mg/L	0.56	NA	04/13/23	RIA* Calculation
Total Dissolved Nitrogen		mg/L	0.79	NA	04/13/23	IP Calculation
E coli		CFU/100mL	10	<1	03/29/23	KF EPA 1603
Ammonia-N		mg/L	<0.020	0.2	04/10/23	RIA* 10-107-06-05-J

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.

We certify that the following results are true and accurate to the best of our knowledge.

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

Friday, July 7, 2023

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-230436

Date Received: 03/29/23

Sample Type		Sample Time	Sample Date	Comments		
S-4A	A	09:10	03/29/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
						Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

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

Friday, July 7, 2023

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-230437

Date Received: 03/29/23

Sample Type		Sample Time	Sample Date	Comments		
S-8A	A	09:10	03/29/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Nitrate-N		mg/L	0.45	0.01	03/29/23	KF EPA 300.0
Nitrite-N		mg/L	BRL	0.006	03/29/23	KF EPA 300.0
Total Nitrogen		mg/L	0.80	NA	04/13/23	IP Calculation
Total Dissolved Solids		mg/L	120	6.0	04/04/23	AH SM 2540 C
Dissolved Total Phosphorous		mg/L	0.010	0.005	04/06/23	AH SM 4500-P-B,E
Total Organic Carbon*		mg/L	2.16	0.017	03/29/23	NEC* SM 5310 C
Boron		mg/L	BRL	0.010	04/08/23	KB EPA 200.7
Total Kjeldhal Nitrogen		mg/L	0.35	0.2	04/11/23	IP SM4500-Norg B-C
Chloride		mg/L	56	3.0	03/29/23	KF EPA 300.0
Total Phosphorous (P)		mg/L	0.026	0.005	04/11/23	AH SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	0.21	0.20	04/11/23	IP SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	2.23	0.017	03/29/23	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.45	NA	07/05/23	KB Calculation
Dissolved Organic Nitrogen		mg/L	0.21	NA	07/05/23	KB Calculation
Ortho Phosphorous (P)		mg/L	BRL	0.005	03/29/23	IP SM 4500-P
Particulate Organic Carbon		mg/L	BRL	NA	04/07/23	NEC* SM 5310 C
Particulate Organic Nitrogen		mg/L	0.14	NA	04/13/23	RIA* Calculation
Total Dissolved Nitrogen		mg/L	0.66	NA	04/13/23	IP Calculation
E coli		CFU/100mL	20	<1	03/29/23	KF EPA 1603
Ammonia-N		mg/L	<0.020	0.2	04/10/23	RIA* 10-107-06-05-J

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.

We certify that the following results are true and accurate to the best of our knowledge.

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

Friday, July 7, 2023

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-230437

Date Received: 03/29/23

Sample Type		Sample Time	Sample Date	Comments		
S-8A	A	09:10	03/29/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
						Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By:


Ronald J. Saari

Laboratory Director

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MA CERT. NO.: M-MA 063

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

Friday, July 7, 2023

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-230438

Date Received: 03/29/23

Sample Type		Sample Time	Sample Date	Comments		
S-3A	A	09:20	03/29/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Nitrate-N		mg/L	0.57	0.01	03/29/23	KF EPA 300.0
Nitrite-N		mg/L	BRL	0.006	03/29/23	KF EPA 300.0
Total Nitrogen		mg/L	0.85	NA	04/13/23	IP Calculation
Total Dissolved Solids		mg/L	90	6.0	04/04/23	AH SM 2540 C
Dissolved Total Phosphorous		mg/L	0.006	0.005	04/06/23	AH SM 4500-P-B,E
Total Organic Carbon*		mg/L	0.910	0.017	03/29/23	NEC* SM 5310 C
Boron		mg/L	0.010	0.010	04/08/23	KB EPA 200.7
Total Kjeldhal Nitrogen		mg/L	0.28	0.2	04/12/23	IP SM4500-Norg B-C
Chloride		mg/L	38	3.0	03/29/23	KF EPA 300.0
Total Phosphorous (P)		mg/L	0.021	0.005	04/11/23	AH SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	0.21	0.20	04/11/23	IP SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	1.00	0.017	03/29/23	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.57	NA	07/05/23	KB Calculation
Dissolved Organic Nitrogen		mg/L	0.21	NA	07/05/23	KB Calculation
Ortho Phosphorous (P)		mg/L	BRL	0.005	03/29/23	IP SM 4500-P
Particulate Organic Carbon		mg/L	BRL	NA	04/07/23	NEC* SM 5310 C
Particulate Organic Nitrogen		mg/L	0.07	NA	07/05/23	KB Calculation
Total Dissolved Nitrogen		mg/L	0.78	NA	04/13/23	IP Calculation
E coli		CFU/100mL	10	<1	03/29/23	KF EPA 1603
Ammonia-N		mg/L	<0.020	0.2	04/10/23	RIA* 10-107-06-05-J

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.

We certify that the following results are true and accurate to the best of our knowledge.

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

Friday, July 7, 2023

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-230438

Date Received: 03/29/23

Sample Type		Sample Time	Sample Date	Comments		
S-3A	A	09:20	03/29/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
						Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

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

Friday, July 7, 2023

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-230439

Date Received: 03/29/23

Sample Type		Sample Time	Sample Date	Comments		
S-2C	A	09:30	03/29/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Nitrate-N		mg/L	0.47	0.01	03/29/23	KF EPA 300.0
Nitrite-N		mg/L	BRL	0.006	03/29/23	KF EPA 300.0
Total Nitrogen		mg/L	0.75	NA	04/12/23	IP Calculation
Total Dissolved Solids		mg/L	74	6.0	04/04/23	AH SM 2540 C
Dissolved Total Phosphorous		mg/L	0.017	0.005	04/17/23	AH SM 4500-P-B,E
Total Organic Carbon*		mg/L	0.858	0.017	03/29/23	NEC* SM 5310 C
Boron		mg/L	0.019	0.010	04/08/23	KB EPA 200.7
Total Kjeldhal Nitrogen		mg/L	0.28	0.2	04/12/23	IP SM4500-Norg B-C
Chloride		mg/L	31	3.0	03/29/23	KF EPA 300.0
Total Phosphorous (P)		mg/L	0.019	0.005	04/11/23	AH SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	BRL	0.20	04/12/23	IP SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	1.04	0.017	03/29/23	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.47	NA	07/05/23	KB Calculation
Dissolved Organic Nitrogen		mg/L	<0.20	NA	07/05/23	KB Calculation
Ortho Phosphorous (P)		mg/L	BRL**	0.005	06/08/23	AH SM 4500-P
Particulate Organic Carbon		mg/L	BRL	NA	04/07/23	NEC* SM 5310 C
Particulate Organic Nitrogen		mg/L	BRL	NA	07/05/23	KB Calculation
Total Dissolved Nitrogen		mg/L	0.47	NA	04/12/23	IP Calculation
E coli		CFU/100mL	< 5	<1	03/29/23	KF EPA 1603
Ammonia-N		mg/L	<0.020	0.2	04/10/23	*RIA 10-107-06-05-J

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.

We certify that the following results are true and accurate to the best of our knowledge.

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

Friday, July 7, 2023

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-230439
Date Received: 03/29/23

Sample Type		Sample Time	Sample Date	Comments			
S-2C	A	09:30	03/29/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

** Original sample had 0.140 mg/L, suspect bottle for ortho-Phos contaminated. Retested at later date with different bottle.

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.

We certify that the following results are true and accurate to the best of our knowledge.

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

Friday, July 7, 2023

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-230440

Date Received: 03/29/23

Sample Type		Sample Time	Sample Date	Comments		
S-6A	A	09:40	03/29/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Nitrate-N		mg/L	0.58	0.01	03/29/23	KF EPA 300.0
Nitrite-N		mg/L	BRL	0.006	03/29/23	KF EPA 300.0
Total Nitrogen		mg/L	0.79	NA	04/12/23	IP Calculation
Total Dissolved Solids		mg/L	48	6.0	04/04/23	AH SM 2540 C
Dissolved Total Phosphorous		mg/L	0.014	0.005	04/06/23	AH SM 4500-P-B,E
Total Organic Carbon*		mg/L	1.12	0.017	03/29/23	NEC* SM 5310 C
Boron		mg/L	0.015	0.010	04/08/23	KB EPA 200.7
Total Kjeldhal Nitrogen		mg/L	0.21	0.2	04/12/23	IP SM4500-Norg B-C
Chloride		mg/L	19	3.0	03/29/23	KF EPA 300.0
Total Phosphorous (P)		mg/L	0.014	0.005	04/11/23	AH SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	0.21	0.20	04/12/23	IP SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	1.09	0.017	03/29/23	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.58	NA	07/05/23	KB Calculation
Dissolved Organic Nitrogen		mg/L	0.21	NA	07/05/23	KB Calculation
Ortho Phosphorous (P)		mg/L	0.012	0.005	03/29/23	IP SM 4500-P
Particulate Organic Carbon		mg/L	0.03	NA	04/07/23	NEC* SM 5310 C
Particulate Organic Nitrogen		mg/L	BRL	NA	07/05/23	KB Calculation
Total Dissolved Nitrogen		mg/L	0.79	NA	04/12/23	IP Calculation
E coli		CFU/100mL	< 5	<1	03/29/23	KF EPA 1603
Ammonia-N		mg/L	<0.020	0.2	04/10/23	RIA* 10-107-06-05-J

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.

We certify that the following results are true and accurate to the best of our knowledge.

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

Friday, July 7, 2023

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-230440

Date Received: 03/29/23

Sample Type		Sample Time	Sample Date	Comments		
S-6A	A	09:40	03/29/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
						Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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

MA DEP Lab. M-MA072 RI Lab. LAO00364

Client: Envirotech Laboratory, Inc.
State: Liquid

[illegible][illegible]

Form: Mis

Electronically signed and approved by:

Ben L. Borne

Date: 04/06/23

LABORATORY REPORT

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

Date Received: 4/5/2023
Date Reported: 4/11/2023
P.O. Number WW-230435-440

Work Order #: 2304-05440

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 subcontracted results are noted and subcontracted reports are enclosed in their entirety.

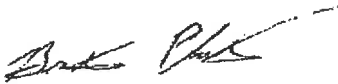
All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

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:



Brent Plant
Data Reporting

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2304-05440

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-230435 S-5B
Sample Type : GRAB
Sample Date / Time : 3/29/2023 @ 08:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	4/10/2023 10:21	VC

Sample Number: 002
Sample Description: WW-230436 S-4A
Sample Type : GRAB
Sample Date / Time : 3/29/2023 @ 09:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	4/10/2023 10:21	VC

Sample Number: 003
Sample Description: WW-230437 S-8A
Sample Type : GRAB
Sample Date / Time : 3/29/2023 @ 09:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	4/10/2023 10:21	VC

Sample Number: 004
Sample Description: WW-230438 S-3A
Sample Type : GRAB
Sample Date / Time : 3/29/2023 @ 09:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	4/10/2023 10:21	VC

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2304-05440

Project Name: PLYMOUTH ENV.

Sample Number: 005
Sample Description: WW-230439 S-2C
Sample Type : GRAB
Sample Date / Time : 3/29/2023 @ 09:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	4/10/2023 10:21	VC

Sample Number: 006
Sample Description: WW-230440 S-6A
Sample Type : GRAB
Sample Date / Time : 3/29/2023 @ 09:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	4/10/2023 10:21	VC

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@plymouth-ma.gov
Project Name: **Eel River SW Sampling** -Plymouth MA
Sampler: Kim Tower (KT)

NW-230435

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
3-29-23	0800	S-5B	1	500ml Plastic	Diss TKN, TOC diss low, TDS, Diss Phosphorus	NONE
			1	500ml Plastic	TKN, NH3, TOC low, TP	NONE
			1	Plastic	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride	NONE
			1	250mL	Boron	HN03
			1	100mL Plastic	Bacteria - Eoli	NONE
3-29-23	0910	S-4A	1	500ml Plastic	Diss TKN, TOC diss low, TDS, Diss Phosphorus	NONE
			1	500ml Plastic	TKN, NH3, TOC low, TP	NONE
			1	Plastic	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride	NONE
			1	250mL	Boron	HN03
			1	100mL Plastic	Bacteria - Eoli	NONE

0436

5 03/29/23
WY
1330

10

Relinquished By: Date/Time

Kim Tower 3/29/23

Received By: Date/Time:

JP 10:30 3/29/23

SCANNED

JUL 06 2023

5

Chain of Custody

Laboratory:

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

Client:

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

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
0437 3/29/23	0910	S-8A	1	500ml Plastic	Diss TKN, TOC diss low, TDS, Diss Phosphorus	NONE
			1	500ml Plastic	TKN, NH3, TOC low, TP	NONE
			1	Plastic	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride	NONE
			1	250mL	Boron	HN03
			1	100mL Plastic	Bacteria - Eoli	NONE
0438 3/29/23	0920	S-3A	1	500ml Plastic	Diss TKN, TOC diss low, TDS, Diss Phosphorus	NONE
			1	500ml Plastic	TKN, NH3, TOC low, TP	NONE
			1	Plastic	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride	NONE
			1	250mL	Boron	HN03
			1	100mL Plastic	Bacteria - Eoli	NONE

20

10

Relinquished By: Date/Time



Received By: Date/Time:

 10:30 3/29/23

S

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@plymouth-ma.gov
Project Name: **Eel River SW Sampling -Plymouth MA**
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
3/29/23	0930	S-2C	1	500ml Plastic	Diss TKN, TOC diss low, TDS, Diss Phosphorus	NONE
			1	500ml Plastic	TKN, NH3, TOC low, TP	NONE
			1	Plastic	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride	NONE
			1	250mL	Boron	HN03
			1	100mL Plastic	Bacteria - Eoli	NONE
3/29/23	0940	S-6A	1	500ml Plastic	Diss TKN, TOC diss low, TDS, Diss Phosphorus	NONE
			1	500ml Plastic	TKN, NH3, TOC low, TP	NONE
			1	Plastic	Orthophosphate	NONE
			1	500mL Plastic	NO3, NO2, Chloride	NONE
			1	250mL	Boron	HN03
			1	100mL Plastic	Bacteria - Eoli	NONE

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

JP 10:30 3/29/23

[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

Friday, July 7, 2023

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-230620

Date Received: 04/25/23

Sample Type		Sample Time	Sample Date	Comments		
S-5B	A	08:30	04/25/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Nitrate-N		mg/L	0.21	0.01	04/26/23	KF EPA 300.0
Nitrite-N		mg/L	BRL	0.006	04/26/23	KF EPA 300.0
Total Nitrogen		mg/L	0.49	NA	05/11/23	IP Calculation
Total Dissolved Solids		mg/L	100	6.0	04/28/23	AH SM 2540 C
Dissolved Total Phosphorous		mg/L	0.013	0.005	05/04/23	AH SM 4500-P-B,E
Total Organic Carbon*		mg/L	1.83	0.017	05/03/23	NEC* SM 5310 C
Boron		mg/L	BRL	0.010	05/04/23	KB EPA 200.7
Ammonia-N *		mg/L	0.073	0.02	05/08/23	RIA* SM4500 NH3 C
Total Kjeldhal Nitrogen		mg/L	0.28	0.2	04/26/23	IP SM4500-Norg B-C
Chloride		mg/L	49	3.0	04/26/23	KF EPA 300.0
Total Phosphorous (P)		mg/L	0.031	0.005	05/10/23	IP SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	BRL	0.20	04/26/23	IP SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	1.44	0.017	05/03/23	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.28	NA	07/05/23	KB Calculation
Dissolved Organic Nitrogen		mg/L	<0.13	NA	07/05/23	KB Calculation
Chlorophyll-a		*	4.87	*	05/01/23	Alpha* *
Ortho Phosphorous (P)		mg/L	BRL	0.005	04/27/23	IP SM 4500-P
Particulate Organic Carbon		mg/L	0.39	NA	05/15/23	NEC* SM 5310 C
Particulate Organic Nitrogen		mg/L	<0.28	NA	07/05/23	KB Calculation
Total Dissolved Nitrogen		mg/L	0.21	NA	05/11/23	IP Calculation
E coli		CFU/100ml	10	5	04/25/23	KF @ 15:30 EPA 1603

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.

We certify that the following results are true and accurate to the best of our knowledge.

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

Friday, July 7, 2023

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-230620

Date Received: 04/25/23

Sample Type		Sample Time	Sample Date	Comments			
S-5B	A	08:30	04/25/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By:


Ronald J. Saari

Laboratory Director

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 FAX (508)888-6446

Friday, July 7, 2023

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-230621

Date Received: 04/25/23

Sample Type	Sample Time	Sample Date	Comments			
S-8B A	08:40	04/25/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.15	0.01	04/26/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/26/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.57	NA	05/11/23	IP	Calculation
Total Dissolved Solids	mg/L	140	6.0	04/28/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.015	0.005	05/04/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	2.45	0.017	05/03/23	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	05/04/23	KB	EPA 200.7
Ammonia-N *	mg/L	0.12	0.02	05/08/23	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.42	0.2	04/26/23	IP	SM4500-Norg B-C
Chloride	mg/L	66	3.0	04/26/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.043	0.005	05/10/23	IP	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.20	04/26/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.74	0.017	05/03/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.27	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.09	NA	07/05/23	KB	Calculation
Chlorophyll-a	*	38.7	*	05/01/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.006	0.005	04/27/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.71	NA	05/15/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.21	NA	05/15/23	RIA*	Calculation
Total Dissolved Nitrogen	mg/L	0.36	NA	05/11/23	IP	Calculation
E coli	CFU/100ml	5	5	04/25/23	KF @ 15:30	EPA 1603

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.

We certify that the following results are true and accurate to the best of our knowledge.

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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Friday, July 7, 2023

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-230621**

Date Received: **04/25/23**

Sample Type		Sample Time	Sample Date	Comments			
S-8B	A	08:40	04/25/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

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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Friday, July 7, 2023

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-230622

Date Received: 04/25/23

Sample Type		Sample Time	Sample Date	Comments			
S-4A	A	08:50	04/25/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N		mg/L	0.14	0.01	04/26/23	KF	EPA 300.0
Nitrite-N		mg/L	BRL	0.006	04/26/23	KF	EPA 300.0
Total Nitrogen		mg/L	0.70	NA	05/11/23	IP	Calculation
Total Dissolved Solids		mg/L	140	6.0	04/28/23	AH	SM 2540 C
Dissolved Total Phosphorous		mg/L	0.015	0.005	05/04/23	AH	SM 4500-P-B,E
Total Organic Carbon*		mg/L	2.59	0.017	05/03/23	NEC*	SM 5310 C
Boron		mg/L	BRL	0.010	05/04/23	KB	EPA 200.7
Ammonia-N *		mg/L	0.090	0.02	05/08/23	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen		mg/L	0.56	0.2	04/26/23	IP	SM4500-Norg B-C
Chloride		mg/L	67	3.0	04/26/23	KF	EPA 300.0
Total Phosphorous (P)		mg/L	0.068	0.005	05/10/23	IP	SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	0.28	0.20	04/26/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	1.95	0.017	05/03/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.23	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen		mg/L	0.19	NA	07/05/23	KB	Calculation
Chlorophyll-a		*	29.0	*	05/01/23	Alpha*	*
Ortho Phosphorous (P)		mg/L	BRL	0.005	04/27/23	IP	SM 4500-P
Particulate Organic Carbon		mg/L	0.64	NA	05/15/23	NEC*	SM 5310 C
Particulate Organic Nitrogen		mg/L	0.28	NA	05/15/23	RIA*	Calculation
Total Dissolved Nitrogen		mg/L	0.42	NA	05/11/23	IP	Calculation
E coli		CFU/100ml	5	5	04/25/23	KF @ 15:30	EPA 1603

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.

We certify that the following results are true and accurate to the best of our knowledge.

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

Friday, July 7, 2023

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-230622

Date Received: 04/25/23

Sample Type		Sample Time	Sample Date	Comments			
S-4A	A	08:50	04/25/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

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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Friday, July 7, 2023

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-230623

Date Received: 04/25/23

Sample Type		Sample Time	Sample Date	Comments			
S-3A	A	08:55	04/25/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N		mg/L	0.27	0.01	04/26/23	KF	EPA 300.0
Nitrite-N		mg/L	BRL	0.006	04/26/23	KF	EPA 300.0
Total Nitrogen		mg/L	0.76	NA	05/11/23	IP	Calculation
Total Dissolved Solids		mg/L	86	6.0	04/28/23	AH	SM 2540 C
Dissolved Total Phosphorous		mg/L	0.012	0.005	05/04/23	AH	SM 4500-P-B,E
Total Organic Carbon*		mg/L	1.35	0.017	05/03/23	NEC*	SM 5310 C
Boron		mg/L	BRL	0.010	05/04/23	KB	EPA 200.7
Ammonia-N *		mg/L	0.077	0.02	05/08/23	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen		mg/L	0.49	0.2	04/26/23	IP	SM4500-Norg B-C
Chloride		mg/L	39	3.0	04/26/23	KF	EPA 300.0
Total Phosphorous (P)		mg/L	0.027	0.005	05/10/23	IP	SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	0.35	0.20	04/26/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	1.12	0.017	05/03/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.35	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen		mg/L	0.27	NA	07/05/23	KB	Calculation
Chlorophyll-a		*	5.14	*	05/01/23	Alpha*	*
Ortho Phosphorous (P)		mg/L	BRL	0.005	04/27/23	IP	SM 4500-P
Particulate Organic Carbon		mg/L	0.23	NA	05/15/23	NEC*	SM 5310 C
Particulate Organic Nitrogen		mg/L	0.14	NA	05/15/23	RIA*	Calculation
Total Dissolved Nitrogen		mg/L	0.62	NA	05/11/23	IP	Calculation
E coli		CFU/100ml	<5	5	04/25/23	KF @ 15:30	EPA 1603

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

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

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

Friday, July 7, 2023

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-230623*

Date Received: *04/25/23*

Sample Type		Sample Time	Sample Date	Comments			
S-3A	A	08:55	04/25/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

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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Friday, July 7, 2023

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-230624

Date Received: 04/25/23

Sample Type		Sample Time	Sample Date	Comments		
S-2C	A	09:05	04/25/23			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.16	0.01	04/26/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	04/26/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.58	NA	05/11/23	IP	Calculation
Total Dissolved Solids	mg/L	64	6.0	04/28/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.011	0.005	05/04/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	1.27	0.017	05/03/23	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	05/04/23	KB	EPA 200.7
Ammonia-N *	mg/L	0.089	0.02	05/08/23	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.42	0.2	04/26/23	IP	SM4500-Norg B-C
Chloride	mg/L	34	3.0	04/26/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.025	0.005	05/10/23	IP	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.28	0.20	04/26/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.01	0.017	05/03/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.25	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.19	NA	07/05/23	KB	Calculation
Chlorophyll-a	*	10.8	*	05/01/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	04/27/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.26	NA	05/15/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.14	NA	05/15/23	RIA*	Calculation
Total Dissolved Nitrogen	mg/L	0.44	NA	05/11/23	IP	Calculation
E coli	CFU/100ml	5	5	04/25/23	KF @ 15:30	EPA 1603

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.

We certify that the following results are true and accurate to the best of our knowledge.

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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Friday, July 7, 2023

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-230624

Date Received: 04/25/23

Sample Type		Sample Time	Sample Date	Comments			
S-2C	A	09:05	04/25/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

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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Friday, July 7, 2023

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-230625

Date Received: 04/25/23

Sample Type		Sample Time	Sample Date	Comments			
S-6A	A	09:15	04/25/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N		mg/L	0.29	0.01	04/26/23	KF	EPA 300.0
Nitrite-N		mg/L	BRL	0.006	04/26/23	KF	EPA 300.0
Total Nitrogen		mg/L	0.64	NA	05/11/23	IP	Calculation
Total Dissolved Solids		mg/L	54	6.0	04/28/23	AH	SM 2540 C
Dissolved Total Phosphorous		mg/L	0.010	0.005	05/10/23	IP	SM 4500-P-B,E
Total Organic Carbon*		mg/L	1.76	0.017	05/03/23	NEC*	SM 5310 C
Boron		mg/L	BRL	0.010	05/04/23	KB	EPA 200.7
Ammonia-N *		mg/L	0.11	0.02	05/08/23	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen		mg/L	0.35	0.2	04/26/23	IP	SM4500-Norg B-C
Chloride		mg/L	20	3.0	04/26/23	KF	EPA 300.0
Total Phosphorous (P)		mg/L	0.017	0.005	05/10/23	IP	SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	0.35	0.20	04/26/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	1.40	0.017	05/03/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.40	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen		mg/L	0.24	NA	07/05/23	KB	Calculation
Chlorophyll-a		*	3.88	*	05/01/23	Alpha*	*
Ortho Phosphorous (P)		mg/L	BRL	0.005	04/27/23	IP	SM 4500-P
Particulate Organic Carbon		mg/L	0.36	NA	05/15/23	NEC*	SM 5310 C
Particulate Organic Nitrogen		mg/L	BRL	NA	05/15/23	RIA*	Calculation
Total Dissolved Nitrogen		mg/L	0.64	NA	05/11/23	IP	Calculation
E coli		CFU/100ml	15	5	04/25/23	KF @ 15:30	EPA 1603

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.

We certify that the following results are true and accurate to the best of our knowledge.

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

Friday, July 7, 2023

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-230625

Date Received: 04/25/23

Sample Type		Sample Time	Sample Date	Comments			
S-6A	A	09:15	04/25/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By:


Ronald J. Saari

Laboratory Director

Date: 05/04/23

LABORATORY REPORT

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

Date Received: 4/28/2023
Date Reported: 5/9/2023
P.O. Number WW-230620-625

Work Order #: 2304-06856

Project Name: PLYMOUTH ENV.

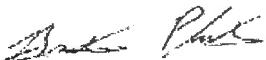
Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable subcontracted results are noted and subcontracted reports are enclosed in their entirety.

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:  for



Kristin Phelan
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2304-06856

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-230620 S-5B
Sample Type : GRAB
Sample Date / Time : 4/25/2023 @ 08:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.073	0.020	mg/L	SM4500NH3-B,H 18-21ed	5/8/2023 11:51	KPG

Sample Number: 002
Sample Description: WW-230621 S-8B
Sample Type : GRAB
Sample Date / Time : 4/25/2023 @ 08:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.12	0.020	mg/L	SM4500NH3-B,H 18-21ed	5/8/2023 11:51	KPG

Sample Number: 003
Sample Description: WW-230622 S-4A
Sample Type : GRAB
Sample Date / Time : 4/25/2023 @ 08:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.090	0.020	mg/L	SM4500NH3-B,H 18-21ed	5/8/2023 11:51	KPG

Sample Number: 004
Sample Description: WW-230623 S-3A
Sample Type : GRAB
Sample Date / Time : 4/25/2023 @ 08:55

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.077	0.020	mg/L	SM4500NH3-B,H 18-21ed	5/8/2023 11:51	KPG

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2304-06856

Project Name: PLYMOUTH ENV.

Sample Number: 005
Sample Description: WW-230624 S-2C
Sample Type : GRAB
Sample Date / Time : 4/25/2023 @ 09:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.089	0.020	mg/L	SM4500NH3-B,H 18-21ed	5/8/2023 11:51	KPG

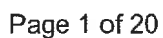
Sample Number: 006
Sample Description: WW-230625 S-6A
Sample Type : GRAB
Sample Date / Time : 4/25/2023 @ 09:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.11	0.020	mg/L	SM4500NH3-B,H 18-21ed	5/8/2023 11:51	KPG



Lab Number:	L2322415
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:	05/08/23

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).



Project Name:	PLYMOUTH ENVIRONMENTAL MGMT
Project Number:	Not Specified

Lab Number: L2322415
Report Date: 05/08/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2322415-01	WW-230620	WATER	Not Specified	04/25/23 08:30	04/26/23
L2322415-02	WW-230621	WATER	Not Specified	04/25/23 08:40	04/26/23
L2322415-03	WW-230622	WATER	Not Specified	04/25/23 08:50	04/26/23
L2322415-04	WW-230623	WATER	Not Specified	04/25/23 08:55	04/26/23
L2322415-05	WW-230624	WATER	Not Specified	04/25/23 09:05	04/26/23
L2322415-06	WW-230625	WATER	Not Specified	04/25/23 09:15	04/26/23

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2322415
Report Date: 05/08/23

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. 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 Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data 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.

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 Alpha Project Manager 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 Project Management at 800-624-9220 with any questions.

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2322415
Report Date: 05/08/23

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

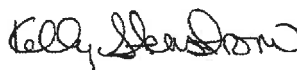
L2322415-01 through -05: The analysis of Chlorophyll A was received with the method required holding time exceeded.

Chlorophyll A

L2322415-06: The sample was 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:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 05/08/23

INORGANICS & MISCELLANEOUS

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2322415
Report Date: 05/08/23

SAMPLE RESULTS

Lab ID: L2322415-01
Client ID: WW-230620
Sample Location: Not Specified

Date Collected: 04/25/23 08:30
Date Received: 04/26/23
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	4.87		mg/m3	2.00	NA	1	04/28/23 11:05	05/01/23 11:25	121,10200H	MKT



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2322415
Report Date: 05/08/23

SAMPLE RESULTS

Lab ID: L2322415-02
Client ID: WW-230621
Sample Location: Not Specified

Date Collected: 04/25/23 08:40
Date Received: 04/26/23
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	38.7		mg/m3	2.00	NA	1	04/28/23 11:05	05/01/23 11:25	121,10200H	MKT



Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Project Number: Not Specified

Lab Number: L2322415

Report Date: 05/08/23

SAMPLE RESULTS

Lab ID: L2322415-03

Client ID: WW-230622

Sample Location: Not Specified

Date Collected: 04/25/23 08:50

Date Received: 04/26/23

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	29.0		mg/m3	2.00	NA	1	04/28/23 11:05	05/01/23 11:25	121,10200H	MKT



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2322415
Report Date: 05/08/23

SAMPLE RESULTS

Lab ID: L2322415-04
Client ID: WW-230623
Sample Location: Not Specified

Date Collected: 04/25/23 08:55
Date Received: 04/26/23
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	5.14		mg/m3	2.00	NA	1	04/28/23 11:05	05/01/23 11:25	121,10200H	MKT



Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Project Number: Not Specified

Lab Number: L2322415

Report Date: 05/08/23

SAMPLE RESULTS

Lab ID: L2322415-05

Client ID: WW-230624

Sample Location: Not Specified

Date Collected: 04/25/23 09:05

Date Received: 04/26/23

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	10.8		mg/m3	2.00	NA	1	04/28/23 11:05	05/01/23 11:25	121,10200H	MKT



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2322415
Report Date: 05/08/23

SAMPLE RESULTS

Lab ID: L2322415-06
Client ID: WW-230625
Sample Location: Not Specified

Date Collected: 04/25/23 09:15
Date Received: 04/26/23
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	3.88		mg/m3	2.00	NA	1	04/28/23 11:05	05/01/23 11:25	121,10200H	MKT



Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L2322415

Project Number: Not Specified

Report Date: 05/08/23

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): 01-06 Batch: WG1772547-1										
Chlorophyll A	ND		mg/m3	2.00	NA	1	04/28/23 11:05	05/01/23 11:25	121,10200H	MKT



Lab Duplicate Analysis
Batch Quality Control

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2322415
Report Date: 05/08/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s):	01-06	QC Batch ID: WG1772547-2	QC Sample: L2322866-03	Client ID: DUP Sample		
Chlorophyll A	13.0	8.05	mg/m3	47	Q	35



Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information
Cooler A
Custody Seal Absent

Container Information		Initial		Final	Temp		Frozen		Analysis(*)
Container ID	Container Type	Cooler	pH	pH	deg C	Pres	Seal	Date/Time	
L2322415-01A	Brown Plastic 1000ml unpreserved	A	NA		4.2	Y	Absent		CHLORO-A(1)
L2322415-01B	Brown Plastic 1000ml unpreserved	A	NA		4.2	Y	Absent		CHLORO-A(1)
L2322415-02A	Brown Plastic 1000ml unpreserved	A	NA		4.2	Y	Absent		CHLORO-A(1)
L2322415-02B	Brown Plastic 1000ml unpreserved	A	NA		4.2	Y	Absent		CHLORO-A(1)
L2322415-03A	Brown Plastic 1000ml unpreserved	A	NA		4.2	Y	Absent		CHLORO-A(1)
L2322415-03B	Brown Plastic 1000ml unpreserved	A	NA		4.2	Y	Absent		CHLORO-A(1)
L2322415-04A	Brown Plastic 1000ml unpreserved	A	NA		4.2	Y	Absent		CHLORO-A(1)
L2322415-04B	Brown Plastic 1000ml unpreserved	A	NA		4.2	Y	Absent		CHLORO-A(1)
L2322415-05A	Brown Plastic 1000ml unpreserved	A	NA		4.2	Y	Absent		CHLORO-A(1)
L2322415-05B	Brown Plastic 1000ml unpreserved	A	NA		4.2	Y	Absent		CHLORO-A(1)
L2322415-06A	Brown Plastic 1000ml unpreserved	A	NA		4.2	Y	Absent		CHLORO-A(1)
L2322415-06B	Brown Plastic 1000ml unpreserved	A	NA		4.2	Y	Absent		CHLORO-A(1)



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2322415
Report Date: 05/08/23

GLOSSARY

Acronyms

- DL - 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 limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
 - 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.
 - LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
 - LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
- 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. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
 - 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.
 - NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
 - 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.

Report Format: DU Report with 'J' Qualifiers



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

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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.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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 Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- 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.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- 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.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

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Project Number: Not Specified

Lab Number: L2322415
Report Date: 05/08/23

Data Qualifiers

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- 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.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2322415
Report Date: 05/08/23

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 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D/8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; 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, SM4500NO₂-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, 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 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: 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 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, 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, EPA 537.1.

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, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

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

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@plymouth-ma.gov
Project Name: **Eel River SW Sampling -Plymouth MA**
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
4/25/23	0830	S-5B	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli 10	NONE
			2	Amber plastic	Chlorophyll-a	NONE
4/25/23	0840	S-8B	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli 5	NONE
			2	Amber plastic	Chlorophyll-a	NONE

Relinquished By: Date/Time

Kim Tower

Received By:

Date/Time:

04/25/23 1530KF
9:45

SCANNED
JUL 06 2023

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@plymouth-ma.gov
Project Name: **Eel River SW Sampling -Plymouth MA**
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
4/25/23	0850	S-4A	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
1	1	1	1	Plastic	TKM, Total N, Total P, TOC	NONE
1	1	1	1	Plastic	Orthophosphate	NONE
1	1	1	1	Plastic	NO3, NO2, Chloride	NONE
1	1	1	1	Plastic	Boron	HN03
1	1	1	1	Plastic	Bacteria - Eoli 5	NONE
1	1	1	2	Amber plastic	Chlorophyll-a	NONE
4/25/23	0855	S-3A	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
1	1	1	1	Plastic	TKM, Total N, Total P, TOC	NONE
1	1	1	1	Plastic	Orthophosphate	NONE
1	1	1	1	Plastic	NO3, NO2, Chloride	NONE
1	1	1	1	Plastic	Boron	HN03
1	1	1	1	Plastic	Bacteria - Eoli 15	NONE
1	1	1	2	Amber plastic	Chlorophyll-a	NONE

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

[Signature] 04/25/23 948

✓

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@plymouth-ma.gov
Project Name: **Eel River SW Sampling** -Plymouth MA
Sampler: Kim Tower (KT)

NW-230624

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
4/25/23	0905	S-2C	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli 5	NONE
			2	Amber plastic	Chlorophyll-a	NONE
4/25/23	0915	S-6A	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli 15	NONE
			2	Amber plastic	Chlorophyll-a	NONE

NW-230625

Relinquished By: Date/Time

Kim Tower

Received By:

Date/Time:

[Signature] 04/25/23 945

305113-305125

CHAIN OF CUSTODY FORM

ENVIROTECH LABS, INC.

NE Chromachem

8 Jan Sebastian Dr., Unit 12

Sandwich, MA 02563

Address

6 Nichols Street

(508)888-6460

Salem, MA 01970

1-800-339-6460

Phone#

978-744-6600

FAX (508)888-6446

Fax#

206 984 2474

Project Name: Plymouth ENV.

KT

Sampler:

Analysis requested

Sample type

Container

Pres.

Station location

DEP ID

Time

Date

Lab ID #

WW-230620

04/25/23

0830

X

S-5B

2 VOA

H2SO4

SW

TOC Low

305113

WW-230621

04/25/23

0840

X

S-8B

2 VOA

H2SO4

SW

TOC Low

305115

WW-230622

04/25/23

0850

X

S-4A

2 VOA

H2SO4

SW

TOC Low

305117

WW-230623

04/25/23

0855

X

S-3A

2 VOA

H2SO4

SW

TOC Low

305119

WW-230624

04/25/23

0905

X

S-2C

2 VOA

H2SO4

SW

TOC Low

305120

WW-230625A

04/25/23

0915

X

S-6A

2 VOA

H2SO4

SW

TOC Low

305123

WW-230625B

04/25/23

1600

X

Filtered Blank

2 VOA

H2SO4

Blank

TOC Dissolved

305125

Relinquished:

W-A

Date/Time

5/1/23 1700

Received:

UPS

Relinquished:

UPS

Date/Time

05/03/23

Received:

MD



CHAIN OF CUSTODY FORM

Alpha Analytical

8 Jan Sebastian Dr., Unit 12

Address: 8 Walkup Drive

Westborough, MA 02346

FAX (508) 888-6446

Phone#: 508-898-9220

附录:

[illegible]

Wished: 

Received:

1

Relinquished:

Date/Time 4/26/27

Received:

Wished:

Received:

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Relinquished

Date/Time

Received:

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
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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

Wednesday, November 29, 2023

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-230753

Date Received: 05/09/23

Sample Type	Sample Time	Sample Date	Comments			
S-5B A	09:05	05/09/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.14	0.01	05/09/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	05/09/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.63	NA	07/05/23	KF	Calculation
Total Dissolved Solids	mg/L	84	6.0	05/16/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.016	0.005	05/15/23	IP	SM 4500-P-B,E
Total Organic Carbon*	mg/L	1.82	0.017	05/23/23	NEC*	SM 5310 C
Boron	mg/L	0.010	0.010	05/18/23	KB	EPA 200.7
Ammonia-N *	mg/L	BRL	0.02	05/16/23	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.49	0.2	05/16/23	IP	SM4500-Norg B-C
Chloride	mg/L	47	3.0	05/09/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.045	0.005	05/18/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.28	0.20	05/16/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	2.28	0.017	05/23/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.14	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.28	NA	07/05/23	KB	Calculation
Chlorophyll-a	*	11.5	*	05/12/23	RIA*	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	05/11/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	BRL	NA	11/29/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.21	NA	07/05/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.42	NA	07/05/23	KF	Calculation
E coli	CFU/100ml	15	5	05/09/23	GB @ 13:45	EPA 1603

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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

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

Wednesday, November 29, 2023

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-230753*
Date Received: *05/09/23*

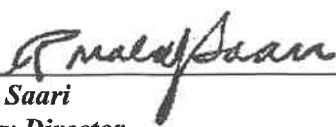
Sample Type		Sample Time	Sample Date	Comments			
S-5B	A	09:05	05/09/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

**see attached*

By: 
Ronald J. Saari
Laboratory Director

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

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

Wednesday, November 29, 2023

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-230754
Date Received: 05/09/23

Sample Type		Sample Time	Sample Date	Comments		
S-8A	A	09:15	05/09/23			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.16	0.01	05/09/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	05/09/23	KF	EPA 300.0
Total Nitrogen	mg/L	1.5	NA	07/05/23	KF	Calculation
Total Dissolved Solids	mg/L	100	6.0	05/16/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.019	0.005	05/18/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	2.94	0.017	05/23/23	NEC*	SM 5310 C
Boron	mg/L	0.011	0.010	05/18/23	KB	EPA 200.7
Ammonia-N *	mg/L	BRL	0.02	05/15/23	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	1.3	0.2	05/16/23	IP	SM4500-Norg B-C
Chloride	mg/L	58	3.0	05/09/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.197	0.005	05/18/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.49	0.20	05/16/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	2.16	0.017	05/23/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.16	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.49	NA	07/05/23	KB	Calculation
Chlorophyll-a	*	38.6	*	05/12/23	RIA*	*
Ortho Phosphorous (P)	mg/L	0.008	0.005	05/11/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.78	NA	11/29/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.81	NA	07/05/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.65	NA	07/05/23	KF	Calculation
E coli	CFU/100ml	50	5	05/09/23	GB @ 13:45	EPA 1603

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

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

Wednesday, November 29, 2023

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-230754

Date Received: 05/09/23

Sample Type		Sample Time	Sample Date	Comments			
S-8A	A	09:15	05/09/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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

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

Wednesday, November 29, 2023*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-230755***Date Received:** *05/09/23*

Sample Type		Sample Time	Sample Date	Comments		
S-4A	A	09:25	05/09/23			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.13	0.01	05/09/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	05/09/23	KF	EPA 300.0
Total Nitrogen	mg/L	1.6	NA	07/05/23	KF	Calculation
Total Dissolved Solids	mg/L	100	6.0	05/16/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.018	0.005	05/18/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	2.77	0.017	05/23/23	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	05/18/23	KB	EPA 200.7
Ammonia-N *	mg/L	BRL	0.02	05/16/23	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	1.5	0.2	05/16/23	IP	SM4500-Norg B-C
Chloride	mg/L	47	3.0	05/09/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.199	0.005	05/18/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.42	0.20	05/16/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	2.19	0.017	05/23/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.13	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.42	NA	07/05/23	KB	Calculation
Chlorophyll-a	*	90.4	*	05/12/23	RIA*	*
Ortho Phosphorous (P)	mg/L	0.006	0.005	05/11/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.58	NA	11/29/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	1.08	NA	07/05/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.55	NA	07/05/23	KF	Calculation
E coli	CFU/100ml	35	5	05/09/23	GB @ 13:45	EPA 1603

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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

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

Wednesday, November 29, 2023

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-230755*
Date Received: *05/09/23*

Sample Type		Sample Time	Sample Date	Comments			
S-4A	A	09:25	05/09/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

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**see attached*

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ENVIROTECH LABORATORIES, INC.

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Wednesday, November 29, 2023

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-230756
Date Received: 05/09/23

Sample Type		Sample Time	Sample Date	Comments		
S-3A	A	09:35	05/09/23			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.20	0.01	05/09/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	05/09/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.48	NA	07/05/23	KF	Calculation
Total Dissolved Solids	mg/L	68	6.0	05/16/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.008	0.005	05/18/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	1.20	0.017	05/23/23	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	05/19/23	KB	EPA 200.7
Ammonia-N *	mg/L	BRL	0.02	05/16/23	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.28	0.2	05/16/23	IP	SM4500-Norg B-C
Chloride	mg/L	35	3.0	05/09/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.052	0.005	05/18/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.20	05/16/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.10	0.017	05/23/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.20	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.21	NA	07/05/23	KB	Calculation
Chlorophyll-a	*	13.6	*	05/12/23	RIA*	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	05/11/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.10	NA	11/29/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.07	NA	07/05/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.41	NA	07/05/23	KF	Calculation
E coli	CFU/100ml	20	5	05/09/23	GB @ 13:45	EPA 1603

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

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Wednesday, November 29, 2023

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-230756*
Date Received: *05/09/23*

Sample Type		Sample Time	Sample Date	Comments			
S-3A	A	09:35	05/09/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

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Wednesday, November 29, 2023

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-230757

Date Received: 05/09/23

Sample Type	Sample Time	Sample Date	Comments			
S-2C A	09:45	05/09/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.15	0.01	05/09/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	05/09/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.64	NA	07/05/23	KF	Calculation
Total Dissolved Solids	mg/L	50	6.0	05/16/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.007	0.005	05/18/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	1.28	0.017	05/23/23	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	05/19/23	KB	EPA 200.7
Ammonia-N *	mg/L	BRL	0.02	05/16/23	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.49	0.2	05/16/23	IP	SM4500-Norg B-C
Chloride	mg/L	33	3.0	05/09/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.035	0.005	05/18/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.35	0.20	05/16/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.23	0.017	05/23/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.15	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.35	NA	07/05/23	KB	Calculation
Chlorophyll-a	*	13.4	*	05/12/23	RIA*	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	05/11/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.05	NA	11/29/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.14	NA	07/05/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.50	NA	07/05/23	KF	Calculation
E coli	CFU/100ml	BRL	5	05/09/23	GB @ 13:45	EPA 1603

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We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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Wednesday, November 29, 2023

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-230757*

Date Received: *05/09/23*

Sample Type		Sample Time	Sample Date	Comments		
S-2C	A	09:45	05/09/23			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

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Laboratory Director

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FAX (508)888-6446

Wednesday, November 29, 2023

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-230758

Date Received: 05/09/23

Sample Type	Sample Time	Sample Date	Comments			
S-6A A	09:55	05/09/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.21	0.01	05/09/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	05/09/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.49	NA	07/05/23	KF	Calculation
Total Dissolved Solids	mg/L	40	6.0	05/16/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.009	0.005	05/18/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	1.79	0.017	05/23/23	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	05/19/23	KB	EPA 200.7
Ammonia-N *	mg/L	BRL	0.02	05/16/23	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.28	0.2	05/16/23	IP	SM4500-Norg B-C
Chloride	mg/L	19	3.0	05/09/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.021	0.005	05/18/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	05/16/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.57	0.017	05/23/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.21	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	BRL	NA	07/05/23	KB	Calculation
Chlorophyll-a	*	ND	*	05/12/23	RIA*	*
Ortho Phosphorous (P)	mg/L	0.007	0.005	05/11/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.22	NA	11/29/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.28	NA	07/05/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.21	NA	07/05/23	KF	Calculation
E coli	CFU/100ml	25	5	05/09/23	GB @ 13:45	EPA 1603

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.

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*see attached

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Laboratory Director

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FAX (508)888-6446

Wednesday, November 29, 2023

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-230758*
Date Received: *05/09/23*

Sample Type		Sample Time	Sample Date	Comments			
S-6A	A	09:55	05/09/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

**see attached*

By: 
Ronald J. Saari
Laboratory Director



ANALYTICAL REPORT

Lab Number:	L2325453
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:	05/23/23

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-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2325453
Report Date: 05/23/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2325453-01	WW-230753	WATER	Not Specified	05/09/23 09:05	05/09/23
L2325453-02	WW-230754	WATER	Not Specified	05/09/23 09:15	05/09/23
L2325453-03	WW-230755	WATER	Not Specified	05/09/23 09:25	05/09/23
L2325453-04	WW-230756	WATER	Not Specified	05/09/23 09:35	05/09/23
L2325453-05	WW-230757	WATER	Not Specified	05/09/23 09:45	05/09/23
L2325453-06	WW-230758	WATER	Not Specified	05/09/23 09:55	05/09/23

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2325453
Report Date: 05/23/23

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. 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 Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data 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.

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 Alpha Project Manager 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 Project Management at 800-624-9220 with any questions.

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2325453
Report Date: 05/23/23

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

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:  Ashaley Moynihan

Title: Technical Director/Representative

Date: 05/23/23

INORGANICS & MISCELLANEOUS

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2325453
Report Date: 05/23/23

SAMPLE RESULTS

Lab ID: L2325453-01
Client ID: WW-230753
Sample Location: Not Specified

Date Collected: 05/09/23 09:05
Date Received: 05/09/23
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	05/10/23 08:55	05/12/23 12:20	121,10200H	MKT



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2325453
Report Date: 05/23/23

SAMPLE RESULTS

Lab ID: L2325453-02
Client ID: WW-230754
Sample Location: Not Specified

Date Collected: 05/09/23 09:15
Date Received: 05/09/23
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	38.6		mg/m3	2.00	NA	1	05/10/23 08:55	05/12/23 12:20	121,10200H	MKT



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2325453
Report Date: 05/23/23

SAMPLE RESULTS

Lab ID: L2325453-03
Client ID: WW-230755
Sample Location: Not Specified

Date Collected: 05/09/23 09:25
Date Received: 05/09/23
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	90.4		mg/m3	2.00	NA	1	05/10/23 08:55	05/12/23 12:20	121,10200H	MKT



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2325453
Report Date: 05/23/23

SAMPLE RESULTS

Lab ID: L2325453-04
Client ID: WW-230756
Sample Location: Not Specified

Date Collected: 05/09/23 09:35
Date Received: 05/09/23
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	05/10/23 08:55	05/12/23 12:20	121,10200H	MKT



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2325453
Report Date: 05/23/23

SAMPLE RESULTS

Lab ID: L2325453-05
Client ID: WW-230757
Sample Location: Not Specified

Date Collected: 05/09/23 09:45
Date Received: 05/09/23
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	13.4		mg/m3	2.00	NA	1	05/10/23 08:55	05/12/23 12:20	121,10200H	MKT



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2325453
Report Date: 05/23/23

SAMPLE RESULTS

Lab ID: L2325453-06
Client ID: WW-230758
Sample Location: Not Specified

Date Collected: 05/09/23 09:55
Date Received: 05/09/23
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	05/10/23 08:55	05/12/23 12:20	121,10200H	MKT



Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L2325453

Project Number: Not Specified

Report Date: 05/23/23

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): 01-06 Batch: WG1777158-1										
Chlorophyll A	ND		mg/m3	2.00	NA	1	05/10/23 08:55	05/12/23 12:20	121,10200H	MKT



Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information
Cooler A Custody Seal Absent

Container Information		Initial		Final	Temp	Frozen		Analysis(*)
Container ID	Container Type	Cooler	pH	pH	deg C	Pres	Seal	
L2325453-01A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.1	Y	Absent	CHLORO-A(1)
L2325453-01B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.1	Y	Absent	CHLORO-A(1)
L2325453-02A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.1	Y	Absent	CHLORO-A(1)
L2325453-02B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.1	Y	Absent	CHLORO-A(1)
L2325453-03A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.1	Y	Absent	CHLORO-A(1)
L2325453-03B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.1	Y	Absent	CHLORO-A(1)
L2325453-04A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.1	Y	Absent	CHLORO-A(1)
L2325453-04B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.1	Y	Absent	CHLORO-A(1)
L2325453-05A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.1	Y	Absent	CHLORO-A(1)
L2325453-05B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.1	Y	Absent	CHLORO-A(1)
L2325453-06A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.1	Y	Absent	CHLORO-A(1)
L2325453-06B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.1	Y	Absent	CHLORO-A(1)



Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L2325453

Project Number: Not Specified

Report Date: 05/23/23

GLOSSARY

Acronyms

DL	- 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 limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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.
LCS D	- 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.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

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. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
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.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
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.

Report Format: DU Report with 'J' Qualifiers



Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L2325453

Project Number: Not Specified

Report Date: 05/23/23

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.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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 Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- 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.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- 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.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2325453
Report Date: 05/23/23

Data Qualifiers

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- 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.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2325453
Report Date: 05/23/23

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 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D/8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; 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, SM4500NO2-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, 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 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: 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 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, 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, EPA 537.1.

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, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

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

Alpha Analytical

Address: 8 Walkup Drive

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

FAX (508) 888-6446

container	Pres.	Sample Type
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p	ice	surface water
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P	ice	surface water
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P	ice	surface water
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P	ice	surface water

P	ice	surface water
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ice	surface water
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LABORATORY REPORT

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

Date Received: 5/11/2023
Date Reported: 5/17/2023
P.O. Number WW-230435-440

Work Order #: 2305-07589

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 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:



Kristin Phelan
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2305-07589

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-230753 S-5B
Sample Type : GRAB
Sample Date / Time : 5/09/2023 @ 09:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	5/16/2023 8:28	VC

Sample Number: 002
Sample Description: WW-230754 S-8A
Sample Type : GRAB
Sample Date / Time : 5/09/2023 @ 09:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	5/15/2023 9:38	VC

Sample Number: 003
Sample Description: WW-230755 S-4A
Sample Type : GRAB
Sample Date / Time : 5/09/2023 @ 09:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	5/16/2023 8:28	VC

Sample Number: 004
Sample Description: WW-230756 S-3A
Sample Type : GRAB
Sample Date / Time : 5/09/2023 @ 09:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	5/16/2023 8:28	VC

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

Envirotech Laboratories, Inc.

Work Order #: 2305-07589

Project Name: PLYMOUTH ENV.

Sample Number: 005
Sample Description: WW-230757 S-2C
Sample Type : GRAB
Sample Date / Time : 5/09/2023 @ 09:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	5/16/2023 8:28	VC

Sample Number: 006
Sample Description: WW-230758 S-6A
Sample Type : GRAB
Sample Date / Time : 5/09/2023 @ 09:55

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	5/16/2023 8:28	VC

S

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@plymouth-ma.gov
Project Name: **Eel River SW Sampling -Plymouth MA**
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
5/9/23	0905	S-5B	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
1	1	1	1	Plastic	TKM, Total N, Total P, TOC	NONE
1	1	1	1	Plastic	Orthophosphate	NONE
1	1	1	1	Plastic	NO3, NO2, Chloride	NONE
1	1	1	1	Plastic	Boron	HN03
1	1	1	1	Plastic	Bacteria - Eoli 15	NONE
1	1	1	2	Amber plastic	Chlorophyll-a	NONE
5/9/23	0915	S-8A	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
1	1	1	1	Plastic	TKM, Total N, Total P, TOC	NONE
1	1	1	1	Plastic	Orthophosphate	NONE
1	1	1	1	Plastic	NO3, NO2, Chloride	NONE
1	1	1	1	Plastic	Boron	HN03
1	1	1	1	Plastic	Bacteria - Eoli 50	NONE
1	1	1	2	Amber plastic	Chlorophyll-a	NONE

Relinquished By: Date/Time

Kim Tower

Received By:

Date/Time:

1/2 5/9/23 1100

SCANNED
NOV 30 2023

05/09/23
BHS GB

WW-230753

0754

S

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@plymouth-ma.gov
Project Name: **Eel River SW Sampling -Plymouth MA**
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
0755 5/9/23	0925	S-4A	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli 35	NONE
			2	Amber plastic	Chlorophyll-a	NONE
0756 5/9/23	0935	S-3A	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli 20	NONE
			2	Amber plastic	Chlorophyll-a	NONE

Relinquished By: Date/Time

Kim Tower

Received By:

16 JF

Date/Time:

5/9/23 1100

5

Chain of Custody

Laboratory:

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

Client:

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

0757

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
5/9/23	0945	S-2C	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli 25	NONE
			2	Amber plastic	Chlorophyll-a	NONE
5/9/23	0955	S-6A	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli 25	NONE
			2	Amber plastic	Chlorophyll-a	NONE

0758

Relinquished By: Date/Time

Kim Tower

Received By: Date/Time:

Kim Tower 5/9/23 1100

SCANNED
NOV 30 2023

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 10, 2023

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-231200

Date Received: 07/11/23

Sample Type	Sample Time	Sample Date	Comments			
S-2C A	08:55	07/11/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	BRL	0.01	07/11/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	07/11/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.21	NA	09/05/23	KB	Calculation
Total Dissolved Solids	mg/L	72	6.0	07/17/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.013	0.005	07/17/23		SM 4500-P-B,E
Total Organic Carbon*	mg/L	NT*	0.017			SM 5310 C
Boron	mg/L	BRL	0.010	09/01/23	KB	EPA 200.7
Ammonia-N *	mg/L	BRL	0.02	07/25/23	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.21	0.2	07/19/23	IP	SM4500-Norg B-C
Chloride	mg/L	33	3.0	07/11/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.040	0.005	07/17/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	BRL	0.20	07/18/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	NT*	0.017			EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.03	NA	09/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.20	NA	09/05/23	KB	Calculation
Chlorophyll-a	*	13.0	*	07/14/23	RIA*	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	07/13/23	AH	SM 4500-P
Particulate Organic Carbon	mg/L	NT*	NA			SM 5310 C
Particulate Organic Nitrogen	mg/L	<0.21	NA	09/05/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	<0.21	NA	09/05/23	KB	Calculation
E coli	CFU/100ml	30	5	07/11/23	GB @ 13:00	EPA 1603

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.

We certify that the following results are true and accurate to the best of our knowledge.

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 10, 2023

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-231200

Date Received: 07/11/23

Sample Type		Sample Time	Sample Date	Comments			
S-2C	A	08:55	07/11/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

*Not Tested, samples damaged in shipment to subcontracted lab.

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By:

Ronald J. Saari

Laboratory Director

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FAX (508)888-6446

Sunday, December 10, 2023

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-231201

Date Received: 07/11/23

Sample Type	Sample Time	Sample Date	Comments			
S-6A A	09:10	07/11/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	BRL	0.01	07/11/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	07/11/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.35	NA	09/05/23	KB	Calculation
Total Dissolved Solids	mg/L	54	6.0	07/17/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.026	0.005	07/17/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	NT*	0.017			SM 5310 C
Boron	mg/L	0.010	0.010	09/01/23	KB	EPA 200.7
Ammonia-N *	mg/L	BRL	0.02	07/25/23	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.35	0.2	07/19/23	IP	SM4500-Norg B-C
Chloride	mg/L	21	3.0	07/11/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.070	0.005	07/17/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.20	07/19/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	NT*	0.017			EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.03	NA	09/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.21	NA	09/05/23	KB	Calculation
Chlorophyll-a	*	6.24	*	07/14/23	RIA*	*
Ortho Phosphorous (P)	mg/L	0.012	0.005	07/13/23	AH	SM 4500-P
Particulate Organic Carbon	mg/L	NT*	NA			SM 5310 C
Particulate Organic Nitrogen	mg/L	0.14	NA	09/05/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.21	NA	09/05/23	KB	Calculation
E coli	CFU/100ml	135	5	07/11/23	GB @ 13:00	EPA 1603

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.

We certify that the following results are true and accurate to the best of our knowledge.

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 10, 2023

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-231201*
Date Received: *07/11/23*

Sample Type		Sample Time	Sample Date	Comments		
S-6A	A	09:10	07/11/23			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

*Not Tested, samples damaged in shipment to subcontracted lab.

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.

We certify that the following results are true and accurate to the best of our knowledge.

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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Sunday, December 10, 2023

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-231202

Date Received: 07/11/23

Sample Type	Sample Time	Sample Date	Comments			
S-5B A	08:15	07/11/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	BRL	0.01	07/11/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	07/11/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.42	NA	09/05/23	KB	Calculation
Total Dissolved Solids	mg/L	110	6.0	07/17/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.042	0.005	07/17/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	NT*	0.017			SM 5310 C
Boron	mg/L	0.034	0.010	08/31/23	KB	EPA 200.7
Ammonia-N *	mg/L	0.18	0.02	07/25/23	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	0.42	0.2	07/19/23	IP	SM4500-Norg B-C
Chloride	mg/L	53	3.0	07/11/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.092	0.005	07/17/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.35	0.20	07/19/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	NT*	0.017			EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.18	NA	09/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.17	NA	09/05/23	KB	Calculation
Chlorophyll-a	*	7.62	*	07/14/23	RIA*	*
Ortho Phosphorous (P)	mg/L	0.028	0.005	07/13/23	AH	SM 4500-P
Particulate Organic Carbon	mg/L	NT*	NA			SM 5310 C
Particulate Organic Nitrogen	mg/L	0.07	NA	09/05/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.35	NA	09/05/23	KB	Calculation
E coli	CFU/100ml	130	5	07/11/23	GB @ 13:00	EPA 1603

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
 Ronald J. Saari
 Laboratory Director

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

8 Jan Sebastian Drive
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FAX (508)888-6446

Sunday, December 10, 2023

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-231202**

Date Received: **07/11/23**

Sample Type		Sample Time	Sample Date	Comments			
S-5B	A	08:15	07/11/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

*Not Tested, samples damaged in shipment to subcontracted lab.

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.

We certify that the following results are true and accurate to the best of our knowledge.

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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Sunday, December 10, 2023

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-231203

Date Received: 07/11/23

Sample Type	Sample Time	Sample Date	Comments			
S-4A A	08:25	07/11/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	BRL	0.01	07/12/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	07/12/23	KF	EPA 300.0
Total Nitrogen	mg/L	1.1	NA	09/05/23	KB	Calculation
Total Dissolved Solids	mg/L	100	6.0	07/19/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.025	0.005	07/17/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	NT*	0.017			SM 5310 C
Boron	mg/L	0.032	0.010	08/31/23	KB	EPA 200.7
Ammonia-N *	mg/L	0.044	0.02	07/25/23	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen	mg/L	1.1	0.2	07/19/23	IP	SM4500-Norg B-C
Chloride	mg/L	40	3.0	07/12/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.198	0.005	07/17/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.28	0.20	07/19/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	NT*	0.017			EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.04	NA	09/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.24	NA	09/05/23	KB	Calculation
Chlorophyll-a	*	19.6	*	07/14/23	RIA*	*
Ortho Phosphorous (P)	mg/L	0.012	0.005	07/13/23	AH	SM 4500-P
Particulate Organic Carbon	mg/L	NT*	NA			SM 5310 C
Particulate Organic Nitrogen	mg/L	0.82	NA	09/05/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.28	NA	09/05/23	KB	Calculation
E coli	CFU/100ml	295	5	07/11/23	GB @ 13:00	EPA 1603

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.

We certify that the following results are true and accurate to the best of our knowledge.

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 10, 2023

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-231203

Date Received: 07/11/23

Sample Type		Sample Time	Sample Date	Comments			
S-4A	A	08:25	07/11/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

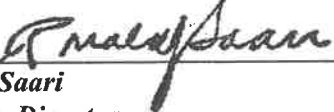
*Not Tested, samples damaged in shipment to subcontracted lab.

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.

We certify that the following results are true and accurate to the best of our knowledge.

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 10, 2023

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-231204

Date Received: 07/11/23

Sample Type		Sample Time	Sample Date	Comments			
S-8A	A	08:15	07/11/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N		mg/L	BRL	0.01	07/11/23	KF	EPA 300.0
Nitrite-N		mg/L	BRL	0.006	07/11/23	KF	EPA 300.0
Total Nitrogen		mg/L	0.42	NA	09/05/23	KB	Calculation
Total Dissolved Solids		mg/L	110	6.0	07/19/23	AH	SM 2540 C
Dissolved Total Phosphorous		mg/L	0.027	0.005	07/17/23	AH	SM 4500-P-B,E
Total Organic Carbon*		mg/L	NT*	0.017			SM 5310 C
Boron		mg/L	0.046	0.010	08/31/23	KB	EPA 200.7
Ammonia-N *		mg/L	0.030	0.02	07/25/23	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen		mg/L	0.42	0.2	07/20/23	IP	SM4500-Norg B-C
Chloride		mg/L	40	3.0	07/12/23	KF	EPA 300.0
Total Phosphorous (P)		mg/L	0.082	0.005	07/17/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	0.21	0.20	07/19/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	NT*	0.017			EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.03	NA	09/05/23	KB	Calculation
Dissolved Organic Nitrogen		mg/L	0.18	NA	09/05/23	KB	Calculation
Chlorophyll-a		*	6.20	*	07/14/23	RIA*	*
Ortho Phosphorous (P)		mg/L	0.012	0.005	07/13/23	AH	SM 4500-P
Particulate Organic Carbon		mg/L	NT*	NA			SM 5310 C
Particulate Organic Nitrogen		mg/L	0.21	NA	09/05/23	KB	Calculation
Total Dissolved Nitrogen		mg/L	0.21	NA	09/05/23	KB	Calculation
E coli		CFU/100ml	190	5	07/11/23	GB @ 13:00	EPA 1603

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.

We certify that the following results are true and accurate to the best of our knowledge.

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 10, 2023

*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-231204*

Date Received: *07/11/23*

Sample Type		Sample Time	Sample Date	Comments			
S-8A	A	08:15	07/11/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

**Not Tested, samples damaged in shipment to subcontracted lab.*

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

**see attached*

By: *Ronald J. Saari*
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 10, 2023

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-231205

Date Received: 07/11/23

Sample Type		Sample Time	Sample Date	Comments			
S-3A	A	08:45	07/11/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N		mg/L	BRL	0.01	07/11/23	KF	EPA 300.0
Nitrite-N		mg/L	BRL	0.006	07/11/23	KF	EPA 300.0
Total Nitrogen		mg/L	0.42	NA	09/05/23	KB	Calculation
Total Dissolved Solids		mg/L	104	6.0	07/19/23	AH	SM 2540 C
Dissolved Total Phosphorous		mg/L	0.016	0.005	07/17/23	AH	SM 4500-P-B,E
Total Organic Carbon*		mg/L	NT*	0.017			SM 5310 C
Boron		mg/L	0.030	0.010	08/31/23	KB	EPA 200.7
Ammonia-N *		mg/L	BRL	0.02	07/25/23	RIA*	SM4500 NH3 C
Total Kjeldhal Nitrogen		mg/L	0.42	0.2	07/20/23	IP	SM4500-Norg B-C
Chloride		mg/L	41	3.0	07/12/23	KF	EPA 300.0
Total Phosphorous (P)		mg/L	0.055	0.005	07/25/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	0.35	0.20	07/20/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	NT*	0.017			EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	<0.03	NA	09/05/23	KB	Calculation
Dissolved Organic Nitrogen		mg/L	0.35	NA	09/05/23	KB	Calculation
Chlorophyll-a		*	4.68	*	07/14/23	RIA*	*
Ortho Phosphorous (P)		mg/L	0.011	0.005	07/13/23	AH	SM 4500-P
Particulate Organic Carbon		mg/L	NT*	NA			SM 5310 C
Particulate Organic Nitrogen		mg/L	0.07	NA	09/05/23	KB	Calculation
Total Dissolved Nitrogen		mg/L	0.35	NA	09/05/23	KB	Calculation
E coli		CFU/100ml	205	5	07/11/23	GB @ 13:00	EPA 1603

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.

We certify that the following results are true and accurate to the best of our knowledge.

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 10, 2023

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-231205*
Date Received: *07/11/23*

Sample Type		Sample Time	Sample Date	Comments		
S-3A	A	08:45	07/11/23			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

*Not Tested, samples damaged in shipment to subcontracted lab.

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

**see attached*

By: 
Ronald J. Saari
Laboratory Director



R.I. ANALYTICAL
Specialists in Environmental Services

LABORATORY REPORT

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

Date Received: 7/17/2023
Date Reported: 7/31/2023
P.O. Number WW-231200-205

Work Order #: 2307-11856

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 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:

Kristin Phelan
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

Report Qualifiers & Abbreviations

These qualifiers/abbreviations may or may not be present in this report.

Qualifier	Descriptions
*	Recovery outside of acceptance limits
B	Analyte detected in method blank at a level about the detection limit
D	Surrogate diluted out to reach a parameter result within the instrument calibration curve
E	Parameter result exceeds calibration curve
J	Estimated result based on MDL

Abbreviation	Definition
BLK	Method Blank
CFU	Colony Forming Unit
DF	Dilution Factor
DL	Detection Limit
LCS(D)	Laboratory Control Standard (Duplicate)
MCL	Maximum Contaminant Level
MDL	Method Detection Limit
MPN	Most Probable Number
MS(D)	Matrix Spike (Duplicate)
QC	Quality Control
RPD	Relative Percent Difference
TIC	Tentatively Identified Compound
TNTC	Too Numerous to Count
*CS	Field data provided by the client

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2307-11856

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-231200 S-2C
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 08:55

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	7/25/2023 9:25	VC

Sample Number: 002
Sample Description: WW-231201 S-6A
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 09:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	7/25/2023 11:21	VC

Sample Number: 003
Sample Description: WW-231202 S-5B
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 08:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.18	0.020	mg/L	SM4500NH3-B,H 18-21ed	7/25/2023 9:25	VC

Sample Number: 004
Sample Description: WW-231203 S-4A
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 08:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.044	0.020	mg/L	SM4500NH3-B,H 18-21ed	7/25/2023 9:25	VC

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2307-11856

Project Name: PLYMOUTH ENV.

Sample Number: 005
Sample Description: WW-231204 S-8A
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 08:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.030	0.020	mg/L	SM4500NH3-B,H 18-21ed	7/25/2023 9:25	VC

Sample Number: 006
Sample Description: WW-231205 S-34
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 08:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	7/25/2023 9:25	VC



ANALYTICAL REPORT

Lab Number:	L2339383
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:	07/25/23

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-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2339383
Report Date: 07/25/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2339383-01	WW-231200	WATER	Not Specified	07/11/23 08:55	07/11/23
L2339383-02	WW-231201	WATER	Not Specified	07/11/23 09:10	07/11/23
L2339383-03	WW-231202	WATER	Not Specified	07/11/23 08:15	07/11/23
L2339383-04	WW-231203	WATER	Not Specified	07/11/23 08:25	07/11/23
L2339383-05	WW-231204	WATER	Not Specified	07/11/23 08:35	07/11/23
L2339383-06	WW-231205	WATER	Not Specified	07/11/23 08:45	07/11/23

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2339383
Report Date: 07/25/23

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. 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 Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data 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.

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 Alpha Project Manager 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 Project Management at 800-624-9220 with any questions.

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2339383
Report Date: 07/25/23

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Chlorophyll A

WG1802222: A Laboratory Duplicate could not be performed due to insufficient sample volume available for analysis.

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

Authorized Signature: *Tiffani Morrissey* - Tiffani Morrissey

Title: Technical Director/Representative

Date: 07/25/23

INORGANICS & MISCELLANEOUS

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Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2339383
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2339383-01
Client ID: WW-231200
Sample Location: Not Specified

Date Collected: 07/11/23 08:55
Date Received: 07/11/23
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	13.0		mg/m3	2.00	NA	1	07/12/23 07:50	07/14/23 11:00	121,10200H	MKT

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2339383
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2339383-02
Client ID: WW-231201
Sample Location: Not Specified

Date Collected: 07/11/23 09:10
Date Received: 07/11/23
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	6.24		mg/m3	2.00	NA	1	07/12/23 07:50	07/14/23 11:00	121,10200H	MKT



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2339383
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2339383-03
Client ID: WW-231202
Sample Location: Not Specified

Date Collected: 07/11/23 08:15
Date Received: 07/11/23
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	7.62		mg/m3	2.00	NA	1	07/12/23 07:50	07/14/23 11:00	121,10200H	MKT

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2339383
Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2339383-04
Client ID: WW-231203
Sample Location: Not Specified

Date Collected: 07/11/23 08:25
Date Received: 07/11/23
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	19.6		mg/m3	2.00	NA	1	07/12/23 07:50	07/14/23 11:00	121,10200H	MKT

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Project Number: Not Specified

Lab Number: L2339383

Report Date: 07/25/23

SAMPLE RESULTS

Lab ID: L2339383-05

Client ID: WW-231204

Sample Location: Not Specified

Date Collected: 07/11/23 08:35

Date Received: 07/11/23

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	6.20		mg/m3	2.00	NA	1	07/12/23 07:50	07/14/23 11:00	121,10200H	MKT

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L2339383

Project Number: Not Specified

Report Date: 07/25/23

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): 01-06 Batch: WG1802222-1										
Chlorophyll A	ND		mg/m3	2.00	NA	1	07/12/23 07:50	07/14/23 11:00	121,10200H	MKT

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information
Cooler A
Custody Seal Absent

Container Information		Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
Container ID	Container Type								
L2339383-01A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.3	Y	Absent		CHLORO-A(1)
L2339383-01B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.3	Y	Absent		CHLORO-A(1)
L2339383-02A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.3	Y	Absent		CHLORO-A(1)
L2339383-02B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.3	Y	Absent		CHLORO-A(1)
L2339383-03A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.3	Y	Absent		CHLORO-A(1)
L2339383-03B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.3	Y	Absent		CHLORO-A(1)
L2339383-04A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.3	Y	Absent		CHLORO-A(1)
L2339383-04B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.3	Y	Absent		CHLORO-A(1)
L2339383-05A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.3	Y	Absent		CHLORO-A(1)
L2339383-05B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.3	Y	Absent		CHLORO-A(1)
L2339383-06A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.3	Y	Absent		CHLORO-A(1)
L2339383-06B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.3	Y	Absent		CHLORO-A(1)

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L2339383

Project Number: Not Specified

Report Date: 07/25/23

GLOSSARY

Acronyms

DL	- 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 limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
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.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
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.

Report Format: DU Report with 'J' Qualifiers

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L2339383

Project Number: Not Specified

Report Date: 07/25/23

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.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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 Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- 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.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- 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.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2339383
Report Date: 07/25/23

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- 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 exceedances 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.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2339383
Report Date: 07/25/23

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 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpeneol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpeneol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS.

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, SM4500NO₂-B**

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, **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 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: 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 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, 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, EPA 537.1.

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, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

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

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

Alpha Analytical

Address: 8 Walkup Drive

Westborough, MA 02346

508-898-9220

計 2 年

[illegible]

Relinquished:

Date/Time

Recent:

Relinquished:

Date/Time

Received:

Religious

WASH. J. S. 1970

Received

References

Name/Time

Received:

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@plymouth-ma.gov
Project Name: **Eel River SW Sampling -Plymouth MA**
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
7/11/23	0855	S-2C	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli	NONE
			2	Amber plastic	Chlorophyll-a	NONE
7/11/23	0910	S-6A	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli	NONE
			2	Amber plastic	Chlorophyll-a	NONE

Relinquished By: Date/Time

KT

Received By: Date/Time:

At 7/11 11:00

7/13 1900 Emailed Kim re: high e-coli for S-4A sample -100

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@plymouth-ma.gov
Project Name: **Eel River SW Sampling -Plymouth MA**
Sampler: Kim Tower (KT)

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
W231202 7/11/23	0815	S-5B	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli 130	NONE
			2	Amber plastic	Chlorophyll-a	NONE
W231203 7/11/23	0825	S-4A	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli 295	NONE
			2	Amber plastic	Chlorophyll-a	NONE

Relinquished By: Date/Time

KT

Received By: Date/Time:

AH 7/11 11:00

✓

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@plymouth-ma.gov
Project Name: **Eel River SW Sampling** -Plymouth MA
Sampler: Kim Tower (KT)

0231204

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
7/11/23	0835	S-8A	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli 190	NONE
			2	Amber plastic	Chlorophyll-a	NONE
7/11/23	0845	S-3A	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli 205	NONE
			2	Amber plastic	Chlorophyll-a	NONE

0231205

Relinquished By: Date/Time

KT

Received By: Date/Time:

AH 11:00 7/11

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

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

Wednesday, December 6, 2023

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-231400

Date Received: 08/08/23

Sample Type	Sample Time	Sample Date	Comments			
S-5B A	08:15	08/08/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	BRL	0.01	08/08/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	08/08/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.49	NA	08/21/23	IP	Calculation
Total Dissolved Solids	mg/L	110	6.0	08/08/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.014	0.005	08/14/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	1.88	0.017	08/18/23	NEC*	SM 5310 C
Boron	mg/L	0.011	0.010	08/31/23	KB	EPA 200.7
Total Kjeldhal Nitrogen	mg/L	0.49	0.2	08/16/23	IP	SM4500-Norg B-C
Chloride	mg/L	52	3.0	08/08/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.063	0.005	08/14/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.20	08/16/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.39	0.017	08/18/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.04	NA	12/01/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.21	NA	12/01/23	KB	Calculation
Chlorophyll-a	*	6.33	*	08/09/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	08/10/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.49	NA	08/22/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.28	NA	12/01/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.21	NA	08/21/23	IP	Calculation
E coli	CFU/100ml	15	5	08/08/23	GB @ 13:45	EPA 1603
Ammonia-N	mg/L	BRL	0.2	08/16/23	RIA*	10-107-06-05-J

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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

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

Wednesday, December 6, 2023

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-231400
Date Received: 08/08/23

Sample Type		Sample Time	Sample Date	Comments			
S-5B	A	08.15	08/08/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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By: 
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Laboratory Director

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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 5, 2023

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-231401
Date Received: 08/08/23

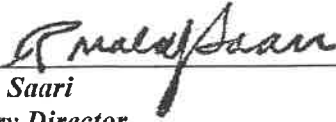
Sample Type	Sample Time	Sample Date	Comments			
S-4A A	08:25	08/08/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.61	0.01	08/08/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	08/08/23	KF	EPA 300.0
Total Nitrogen	mg/L	1.6	NA	08/21/23	IP	Calculation
Total Dissolved Solids	mg/L	98	6.0	08/08/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.017	0.005	08/14/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	2.24	0.017	08/18/23	NEC*	SM 5310 C
Boron	mg/L	0.030	0.010	08/31/23	KB	EPA 200.7
Total Kjeldhal Nitrogen	mg/L	0.98	0.2	08/16/23	IP	SM4500-Norg B-C
Chloride	mg/L	42	3.0	08/08/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.106	0.005	08/14/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.28	0.20	08/16/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.50	0.017	08/18/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.61	NA	12/01/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.28	NA	12/01/23	KB	Calculation
Chlorophyll-a	*	14.0	*	08/09/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.006	0.005	08/10/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.74	NA	08/22/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.70	NA	12/01/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.90	NA	08/21/23	IP	Calculation
E coli	CFU/100ml	45	5	08/08/23	GB @ 13:45	EPA 1603
Ammonia-N	mg/L	BRL	0.2	08/16/23	RIA*	10-107-06-05-J

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.

We certify that the following results are true and accurate to the best of our knowledge.

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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Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446*

Tuesday, December 5, 2023

*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-231401*
Date Received: *08/08/23*

Sample Type		Sample Time	Sample Date	Comments		
S-4A	A	08:25	08/08/23			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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We certify that the following results are true and accurate to the best of our knowledge.

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**see attached*

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

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

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Sandwich, MA 02563
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Tuesday, December 5, 2023

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

ProjectName: Eel River SW Sampling
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-231402
Date Received: 08/08/23

Comments:

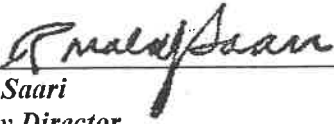
Sample Type	Sample Time	Sample Date	Comments			
S-8A A	08:30	08/08/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.61	0.01	08/08/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	08/08/23	KF	EPA 300.0
Total Nitrogen	mg/L	1.6	NA	08/21/23	IP	Calculation
Total Dissolved Solids	mg/L	82	6.0	08/08/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.030	0.005	08/14/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	2.15	0.017	08/18/23	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	08/31/23	KB	EPA 200.7
Total Kjeldhal Nitrogen	mg/L	0.98	0.2	08/16/23	IP	SM4500-Norg B-C
Chloride	mg/L	41	3.0	08/08/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.119	0.005	08/14/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.20	08/16/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.52	0.017	08/18/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.61	NA	12/01/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.21	NA	12/01/23	KB	Calculation
Chlorophyll-a	*	47.0	*	08/09/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.007	0.005	08/10/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.63	NA	08/22/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.77	NA	08/22/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.83	NA	08/21/23	IP	Calculation
E coli	CFU/100ml	60	5	08/08/23	GB @ 13:45	EPA 1603
Ammonia-N	mg/L	BRL	0.2	08/16/23	RIA*	10-107-06-05-J

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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

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

Tuesday, December 5, 2023

*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-231402*

Date Received: *08/08/23*

Sample Type		Sample Time	Sample Date	Comments			
S-8A	A	08:30	08/08/23				
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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**see attached*

By:

Ronald J. Saari

Laboratory Director

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Tuesday, December 5, 2023

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-231403

Date Received: 08/08/23

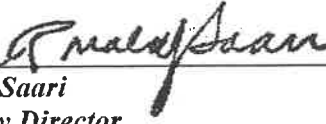
Sample Type	Sample Time	Sample Date	Comments			
S-3A A	08:40	08/08/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.66	0.01	08/08/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	08/08/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.95	NA	08/21/23	IP	Calculation
Total Dissolved Solids	mg/L	100	6.0	08/08/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.013	0.005	08/14/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	1.30	0.017	08/18/23	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	08/31/23	KB	EPA 200.7
Total Kjeldhal Nitrogen	mg/L	0.28	0.2	08/17/23	IP	SM4500-Norg B-C
Chloride	mg/L	44	3.0	08/08/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.035	0.005	08/14/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.20	08/17/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.918	0.017	08/18/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.66	NA	12/01/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.21	NA	12/01/23	KB	Calculation
Chlorophyll-a	*	3.64	*	08/09/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.008	0.005	08/10/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.382	NA	08/22/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.07	NA	08/22/23	RIA*	Calculation
Total Dissolved Nitrogen	mg/L	0.88	NA	08/21/23	IP	Calculation
E coli	CFU/100ml	90	5	08/08/23	GB @ 13:45	EPA 1603
Ammonia-N	mg/L	BRL	0.2	08/16/23	RIA*	10-107-06-05-J

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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FAX (508)888-6446*

Tuesday, December 5, 2023

*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-231403*

Date Received: *08/08/23*

Sample Type		Sample Time	Sample Date	Comments		
S-3A	A	08:40	08/08/23			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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**see attached*

By:

Ronald J. Saari

Laboratory Director

ENVIROTECH LABORATORIES, INC.

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Sandwich, MA 02563
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FAX (508)888-6446

Tuesday, December 5, 2023

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-231401

Date Received: 08/08/23

Sample Type	Sample Time	Sample Date	Comments			
S-4A A	08:25	08/08/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.61	0.01	08/08/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	08/08/23	KF	EPA 300.0
Total Nitrogen	mg/L	1.6	NA	08/21/23	IP	Calculation
Total Dissolved Solids	mg/L	98	6.0	08/08/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.017	0.005	08/14/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	2.24	0.017	08/18/23	NEC*	SM 5310 C
Boron	mg/L	0.030	0.010	08/31/23	KB	EPA 200.7
Total Kjeldhal Nitrogen	mg/L	0.98	0.2	08/16/23	IP	SM4500-Norg B-C
Chloride	mg/L	42	3.0	08/08/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.106	0.005	08/14/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.28	0.20	08/16/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.50	0.017	08/18/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.61	NA	12/01/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.28	NA	12/01/23	KB	Calculation
Chlorophyll-a	*	14.0	*	08/09/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.006	0.005	08/10/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.74	NA	08/22/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.70	NA	12/01/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.89	NA	08/21/23	IP	Calculation
E coli	CFU/100ml	45	5	08/08/23	GB @ 13:45	EPA 1603
Ammonia-N	mg/L	BRL	0.2	08/16/23	RIA*	10-107-06-05-J

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*see attached

By: 
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Laboratory Director

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FAX (508)888-6446*

Tuesday, December 5, 2023

*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-231401*

Date Received: *08/08/23*

Sample Type		Sample Time	Sample Date	Comments		
S-4A	A	08:25	08/08/23			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

**see attached*

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

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

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

Tuesday, December 5, 2023

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-231402

Date Received: 08/08/23

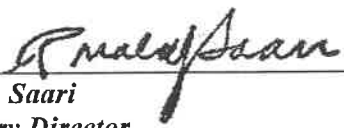
Sample Type	Sample Time	Sample Date	Comments			
S-8A A	08:30	08/08/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.61	0.01	08/08/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	08/08/23	KF	EPA 300.0
Total Nitrogen	mg/L	1.6	NA	08/21/23	IP	Calculation
Total Dissolved Solids	mg/L	82	6.0	08/08/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.030	0.005	08/14/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	2.15	0.017	08/16/23	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	08/31/23	KB	EPA 200.7
Total Kjeldhal Nitrogen	mg/L	0.98	0.2	08/16/23	IP	SM4500-Norg B-C
Chloride	mg/L	41	3.0	08/08/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.119	0.005	08/14/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.20	08/16/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.52	0.017	08/16/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.61	NA	12/01/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.21	NA	12/01/23	KB	Calculation
Chlorophyll-a	*	47.0	*	08/09/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.007	0.005	08/10/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.63	NA	08/22/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.77	NA	08/22/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.82	NA	08/21/23	IP	Calculation
E coli	CFU/100ml	60	5	08/08/23	GB @ 13:45	EPA 1603
Ammonia-N	mg/L	BRL	0.2	08/16/23	RIA*	10-107-06-05-J

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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

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

Tuesday, December 5, 2023

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-231402*
Date Received: *08/08/23*

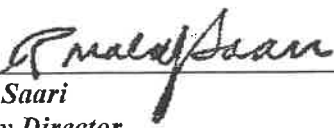
Sample Type		Sample Time	Sample Date	Comments		
S-8A	A	08:30	08/08/23			
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

**see attached*

By: 
Ronald J. Saari
Laboratory Director

ENVIROTECH LABORATORIES, INC.

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FAX (508)888-6446

Tuesday, December 5, 2023

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-231403

Date Received: 08/08/23

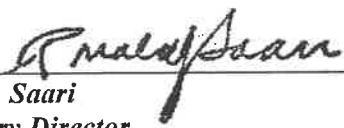
Sample Type	Sample Time	Sample Date	Comments			
S-3A A	08:40	08/08/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.66	0.01	08/08/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	08/08/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.95	NA	08/21/23	IP	Calculation
Total Dissolved Solids	mg/L	100	6.0	08/08/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.013	0.005	08/14/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	1.30	0.017	08/18/23	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	08/31/23	KB	EPA 200.7
Total Kjeldhal Nitrogen	mg/L	0.28	0.2	08/17/23	IP	SM4500-Norg B-C
Chloride	mg/L	44	3.0	08/08/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.035	0.005	08/14/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.20	08/17/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.918	0.017	08/18/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.66	NA	12/01/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.21	NA	12/01/23	KB	Calculation
Chlorophyll-a	*	3.64	*	08/09/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.008	0.005	08/10/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.382	NA	08/22/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.07	NA	08/22/23	RIA*	Calculation
Total Dissolved Nitrogen	mg/L	0.87	NA	08/21/23	IP	Calculation
E coli	CFU/100ml	90	5	08/08/23	GB @ 13:45	EPA 1603
Ammonia-N	mg/L	BRL	0.2	08/16/23	RIA*	10-107-06-05-J

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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

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

Tuesday, December 5, 2023

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-231403*
Date Received: *08/08/23*

Sample Type		Sample Time	Sample Date	Comments		
S-3A	A	08:40	08/08/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
						Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

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 5, 2023

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-231404

Date Received: 08/08/23

Sample Type		Sample Time	Sample Date	Comments		
S-2C	A	08:55	08/08/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst Method
Nitrate-N		mg/L	0.60	0.01	08/08/23	KF EPA 300.0
Nitrite-N		mg/L	BRL	0.006	08/08/23	KF EPA 300.0
Total Nitrogen		mg/L	1.4	NA	08/21/23	IP Calculation
Total Dissolved Solids		mg/L	92	6.0	08/08/23	AH SM 2540 C
Dissolved Total Phosphorous		mg/L	0.014	0.005	08/14/23	AH SM 4500-P-B,E
Total Organic Carbon*		mg/L	1.46	0.017	08/18/23	NEC* SM 5310 C
Boron		mg/L	BRL	0.010	08/31/23	KB EPA 200.7
Total Kjeldhal Nitrogen		mg/L	0.84	0.2	08/17/23	IP SM4500-Norg B-C
Chloride		mg/L	37	3.0	08/08/23	KF EPA 300.0
Total Phosphorous (P)		mg/L	0.038	0.005	08/14/23	AH SM 4500-P
Dissolved Kjeldhal Nitrogen		mg/L	0.35	0.20	08/17/23	IP SM4500 Norg B-C
Dissolved Total Organic Carbon		mg/L	1.02	0.017	08/18/23	NEC* EPA 415.1
Dissolved Inorganic Nitrogen		mg/L	0.60	NA	12/01/23	KB Calculation
Dissolved Organic Nitrogen		mg/L	<0.35	NA	12/01/23	KB Calculation
Chlorophyll-a		*	19.0	*	08/09/23	Alpha* *
Ortho Phosphorous (P)		mg/L	BRL	0.005	08/10/23	IP SM 4500-P
Particulate Organic Carbon		mg/L	0.44	NA	08/22/23	NEC* SM 5310 C
Particulate Organic Nitrogen		mg/L	0.49	NA	12/01/23	KB Calculation
Total Dissolved Nitrogen		mg/L	0.95	NA	08/21/23	IP Calculation
E coli		CFU/100ml	5	5	08/08/23	GB @ 13:455 EPA 1603
Ammonia-N		mg/L	BRL	0.2	08/16/23	RIA* 10-107-06-05-J

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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

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

Tuesday, December 5, 2023

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-231404*

Date Received: *08/08/23*

Sample Type		Sample Time	Sample Date	Comments		
S-2C	A	08:55	08/08/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
						Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

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**see attached*

By:

Ronald J. Saari

Laboratory Director

ENVIROTECH LABORATORIES, INC.

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

Tuesday, December 5, 2023

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-231403

Date Received: 08/08/23

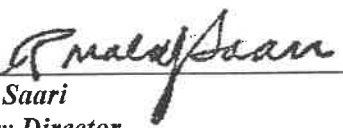
Sample Type	Sample Time	Sample Date	Comments			
S-3A A	08:40	08/08/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	0.66	0.01	08/08/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	08/08/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.94	NA	08/21/23	IP	Calculation
Total Dissolved Solids	mg/L	100	6.0	08/08/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.013	0.005	08/14/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	1.30	0.017	08/18/23	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	08/31/23	KB	EPA 200.7
Total Kjeldhal Nitrogen	mg/L	0.28	0.2	08/17/23	IP	SM4500-Norg B-C
Chloride	mg/L	44	3.0	08/08/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.035	0.005	08/14/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.20	08/17/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	0.918	0.017	08/18/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	0.66	NA	12/01/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.21	NA	12/01/23	KB	Calculation
Chlorophyll-a	*	3.64	*	08/09/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.008	0.005	08/10/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.382	NA	08/22/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.07	NA	08/22/23	RIA*	Calculation
Total Dissolved Nitrogen	mg/L	0.87	NA	08/21/23	IP	Calculation
E coli	CFU/100ml	90	5	08/08/23	GB @ 13:45	EPA 1603
Ammonia-N	mg/L	BRL	0.2	08/16/23	RIA*	10-107-06-05-J

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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FAX (508)888-6446

Tuesday, December 5, 2023

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-231403

Date Received: 08/08/23

Sample Type		Sample Time	Sample Date	Comments		
S-3A	A	08:40	08/08/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
						Method

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.

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*see attached

By:


Ronald J. Saari

Laboratory Director

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FAX (508)888-6446

Tuesday, December 5, 2023

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

ProjectName: Eel River SW Sampling
Project Number:
Sampled By: Kim Tower
Lab Order Number: WW-231405
Date Received: 08/08/23

Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-6A A	09:15	08/08/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Nitrate-N	mg/L	BRL	0.01	08/08/23	KF	EPA 300.0
Nitrite-N	mg/L	BRL	0.006	08/08/23	KF	EPA 300.0
Total Nitrogen	mg/L	0.42	NA	08/21/23	IP	Calculation
Total Dissolved Solids	mg/L	50	6.0	08/08/23	AH	SM 2540 C
Dissolved Total Phosphorous	mg/L	0.008	0.005	08/14/23	AH	SM 4500-P-B,E
Total Organic Carbon*	mg/L	1.88	0.017	08/16/23	NEC*	SM 5310 C
Boron	mg/L	BRL	0.010	08/31/23	KB	EPA 200.7
Total Kjeldhal Nitrogen	mg/L	0.42	0.2	08/17/23	IP	SM4500-Norg B-C
Chloride	mg/L	21	3.0	08/09/23	KF	EPA 300.0
Total Phosphorous (P)	mg/L	0.027	0.005	08/14/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.28	0.20	08/17/23	IP	SM4500 Norg B-C
Dissolved Total Organic Carbon	mg/L	1.18	0.017	08/16/23	NEC*	EPA 415.1
Dissolved Inorganic Nitrogen	mg/L	<0.04	NA	12/01/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.02	NA	12/01/23	KB	Calculation
Chlorophyll-a	*	7.19	*	08/09/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	08/10/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.70	NA	09/01/23	NEC*	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.14	NA	08/22/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.28	NA	12/01/23	KB	Calculation
E coli	CFU/100ml	30	5	08/08/23	GB @ 13:45	EPA 1603
Ammonia-N	mg/L	BRL	0.2	08/16/23	RIA*	10-107-06-05-J

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.

We certify that the following results are true and accurate to the best of our knowledge.

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 5, 2023

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-231405

Date Received: 08/08/23

Sample Type		Sample Time	Sample Date	Comments		
S-6A	A	09:15	08/08/23			
Parameters		Units	Test Results	Reportable Limits	Date Analyzed	Analyst
						Method

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By:


Ronald J. Saari
Laboratory Director

Date: 08/21/23

[illegible]



R.I. ANALYTICAL
Specialists in Environmental Services

LABORATORY REPORT

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

Date Received: 8/15/2023
Date Reported: 8/18/2023
P.O. Number WW-231400-5

Work Order #: 2308-13788

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 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:

Kristin Phelan
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

Report Qualifiers & Abbreviations

These qualifiers/abbreviations may or may not be present in this report.

Qualifier	Descriptions
*	Recovery outside of acceptance limits
B	Analyte detected in method blank at a level about the detection limit
D	Surrogate diluted out to reach a parameter result within the instrument calibration curve
E	Parameter result exceeds calibration curve
J	Estimated result based on MDL
Abbreviation	Definition
BLK	Method Blank
CFU	Colony Forming Unit
DF	Dilution Factor
DL	Detection Limit
LCS(D)	Laboratory Control Standard (Duplicate)
MCL	Maximum Contaminant Level
MDL	Method Detection Limit
MPN	Most Probably Number
MS(D)	Matrix Spike (Duplicate)
QC	Quality Control
RPD	Relative Percent Difference
TIC	Tentatively Identified Compound
TNTC	Too Numerous to Count
*CS	Field data provided by the client

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2308-13788

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-231400 S-5B
Sample Type : GRAB
Sample Date / Time : 8/08/2023 @ 08:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	8/16/2023 7:59	VC

Sample Number: 002
Sample Description: WW-231401 A-4A
Sample Type : GRAB
Sample Date / Time : 8/08/2023 @ 08:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	8/16/2023 7:59	VC

Sample Number: 003
Sample Description: WW-231402 S-8A
Sample Type : GRAB
Sample Date / Time : 8/08/2023 @ 08:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	8/16/2023 7:59	VC

Sample Number: 004
Sample Description: WW-231403 S-3A
Sample Type : GRAB
Sample Date / Time : 8/08/2023 @ 08:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	8/16/2023 7:59	VC

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

Envirotech Laboratories, Inc.

Work Order #: 2308-13788

Project Name: PLYMOUTH ENV.

Sample Number: 005
Sample Description: WW-231404 S-2C
Sample Type : GRAB
Sample Date / Time : 8/08/2023 @ 08:55

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	8/16/2023 7:59	VC

Sample Number: 006
Sample Description: WW-231405 S-6A
Sample Type : GRAB
Sample Date / Time : 8/08/2023 @ 09:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	8/16/2023 7:59	VC



ANALYTICAL REPORT

Lab Number: L2345672

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: 08/22/23

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-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name:	PLYMOUTH ENVIRONMENTAL MGMT
Project Number:	Not Specified

Lab Number: L2345672
Report Date: 08/22/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2345672-01	WW-231400	WATER	Not Specified	08/08/23 08:15	08/08/23
L2345672-02	WW-231401	WATER	Not Specified	08/08/23 08:25	08/08/23
L2345672-03	WW-231402	WATER	Not Specified	08/08/23 08:30	08/08/23
L2345672-04	WW-231403	WATER	Not Specified	08/08/23 08:40	08/08/23
L2345672-05	WW-231404	WATER	Not Specified	08/08/23 08:55	08/08/23
L2345672-06	WW-231405	WATER	Not Specified	08/08/23 09:15	08/08/23

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2345672
Report Date: 08/22/23

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. 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 Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data 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.

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 Alpha Project Manager 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 Project Management at 800-624-9220 with any questions.

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2345672
Report Date: 08/22/23

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Chlorophyll A

WG1813632-1: A Laboratory Duplicate could not be performed due to insufficient sample volume available for analysis.

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

Authorized Signature:



Ashaley Moynihan

Title: Technical Director/Representative

Date: 08/22/23

INORGANICS & MISCELLANEOUS

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2345672
Report Date: 08/22/23

SAMPLE RESULTS

Lab ID: L2345672-01
Client ID: WW-231400
Sample Location: Not Specified

Date Collected: 08/08/23 08:15
Date Received: 08/08/23
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	6.33		mg/m3	2.00	NA	1	08/09/23 06:55	08/09/23 14:09	121,10200H	JAI

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2345672
Report Date: 08/22/23

SAMPLE RESULTS

Lab ID: L2345672-02
Client ID: WW-231401
Sample Location: Not Specified

Date Collected: 08/08/23 08:25
Date Received: 08/08/23
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	14.0		mg/m3	2.00	NA	1	08/09/23 06:55	08/09/23 14:09	121,10200H	JAI



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2345672
Report Date: 08/22/23

SAMPLE RESULTS

Lab ID: L2345672-03
Client ID: WW-231402
Sample Location: Not Specified

Date Collected: 08/08/23 08:30
Date Received: 08/08/23
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	47.0		mg/m3	2.00	NA	1	08/09/23 06:55	08/09/23 14:09	121,10200H	JAI



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2345672
Report Date: 08/22/23

SAMPLE RESULTS

Lab ID: L2345672-04
Client ID: WW-231403
Sample Location: Not Specified

Date Collected: 08/08/23 08:40
Date Received: 08/08/23
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	3.64		mg/m3	2.00	NA	1	08/09/23 06:55	08/09/23 14:09	121,10200H	JAI

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2345672
Report Date: 08/22/23

SAMPLE RESULTS

Lab ID: L2345672-05
Client ID: WW-231404
Sample Location: Not Specified

Date Collected: 08/08/23 08:55
Date Received: 08/08/23
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	08/09/23 06:55	08/09/23 14:09	121,10200H	JAI



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2345672
Report Date: 08/22/23

SAMPLE RESULTS

Lab ID: L2345672-06
Client ID: WW-231405
Sample Location: Not Specified

Date Collected: 08/08/23 09:15
Date Received: 08/08/23
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	7.19		mg/m3	2.00	NA	1	08/09/23 06:55	08/09/23 14:09	121,10200H	JAI



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2345672
Report Date: 08/22/23

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): 01-06 Batch: WG1813632-1										
Chlorophyll A	ND		mg/m3	2.00	NA	1	08/09/23 06:55	08/09/23 14:09	121,10200H	JAI



Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L2345672

Project Number: Not Specified

Report Date: 08/22/23

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler
Custody Seal

A
Absent

Container Information			Initial			Frozen		
Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Date/Time	Analysis(*)
L2345672-01A	Brown Plastic 1000ml unpreserved	A	NA	3.6	Y	Absent		CHLORO-A(1)
L2345672-01B	Brown Plastic 1000ml unpreserved	A	NA	3.6	Y	Absent		CHLORO-A(1)
L2345672-02A	Brown Plastic 1000ml unpreserved	A	NA	3.6	Y	Absent		CHLORO-A(1)
L2345672-02B	Brown Plastic 1000ml unpreserved	A	NA	3.6	Y	Absent		CHLORO-A(1)
L2345672-03A	Brown Plastic 1000ml unpreserved	A	NA	3.6	Y	Absent		CHLORO-A(1)
L2345672-03B	Brown Plastic 1000ml unpreserved	A	NA	3.6	Y	Absent		CHLORO-A(1)
L2345672-04A	Brown Plastic 1000ml unpreserved	A	NA	3.6	Y	Absent		CHLORO-A(1)
L2345672-04B	Brown Plastic 1000ml unpreserved	A	NA	3.6	Y	Absent		CHLORO-A(1)
L2345672-05A	Brown Plastic 1000ml unpreserved	A	NA	3.6	Y	Absent		CHLORO-A(1)
L2345672-05B	Brown Plastic 1000ml unpreserved	A	NA	3.6	Y	Absent		CHLORO-A(1)
L2345672-06A	Brown Plastic 1000ml unpreserved	A	NA	3.6	Y	Absent		CHLORO-A(1)
L2345672-06B	Brown Plastic 1000ml unpreserved	A	NA	3.6	Y	Absent		CHLORO-A(1)

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L2345672

Project Number: Not Specified

Report Date: 08/22/23

GLOSSARY

Acronyms

DL	- 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 limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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.
LCS D	- 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.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
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.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
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.

Report Format: DU Report with 'I' Qualifiers



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2345672
Report Date: 08/22/23

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.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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 Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- 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.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- 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.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2345672
Report Date: 08/22/23

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- 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.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2345672
Report Date: 08/22/23

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 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS.

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, SM4500NO2-B

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, **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 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: 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 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, 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, EPA 537.1.

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, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

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

ENVIROTECH LABS, INC.

Alpha Analytical

Page 19 of 19

5

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@plymouth-ma.gov
Project Name: **Eel River SW Sampling** -Plymouth MA
Sampler: Kim Tower (KT)

W231400

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
8-8-23	0815	S-5B	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli 15	NONE
			2	Amber plastic	Chlorophyll-a	NONE
8-8-23	0825	S-4A	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli 45	NONE
			2	Amber plastic	Chlorophyll-a	NONE

W231401

08/08/23
13:56B

Relinquished By: Date/Time

[Signature]

Received By: Date/Time:

AH 8/8 10:30

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@plymouth-ma.gov
Project Name: **Eel River SW Sampling** - Plymouth MA
Sampler: Kim Tower (KT)

W231402

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
8-8-23	830	S-8A	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli	NONE
			2	Amber plastic	Chlorophyll-a	NONE
8-8-23	0840	S-3A	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli	NONE
			2	Amber plastic	Chlorophyll-a	NONE

W231403

Relinquished By: Date/Time



Received By: Date/Time:

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@plymouth-ma.gov
Project Name: **Eel River SW Sampling** -Plymouth MA
Sampler: Kim Tower (KT)

N231404

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
8-8-23	0855	S-2C	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli	NONE
			2	Amber plastic	Chlorophyll-a	NONE
8-8-23	0915	S-6A	1	Plastic	TDS, Diss (TKN, /toc, TP)	NONE
			1	Plastic	TKM, Total N, Total P, TOC	NONE
			1	Plastic	Orthophosphate	NONE
			1	Plastic	NO3, NO2, Chloride	NONE
			1	Plastic	Boron	HN03
			1	Plastic	Bacteria - Eoli	NONE
			2	Amber plastic	Chlorophyll-a	NONE

N231405

Relinquished By: Date/Time



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

Friday, August 4, 2023

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

ProjectName: S-10
Project Number: Harbor Sampling
Sampled By: Kim Towr
Lab Order Number: WW-231095
Date Received: 06/28/23

Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-10 A	09:31	06/28/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Kjeldhal Nitrogen	mg/L	0.56	0.60	07/18/23	IP	SM4500-Norg B-C
Total Nitrogen	mg/L	0.56	NA	07/21/23	IP	Calculation
E-coli	CFU/100 mL	110	<1	06/28/23	WM @ 13:45	SM 9213 D
Dissolved Total Phosphorous	mg/L	0.015	0.005	07/12/23	AH	SM 4500-P-B,E
Total Phosphorous (P)	mg/L	0.041	0.005	07/12/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.42	0.20	07/18/23	IP	SM4500 Norg B-C
Dissolved Inorganic Nitrogen	mg/L	<0.04	NA	08/02/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.42	NA	08/02/23	KB	Calculation
Chlorophyll-a	*	ND	*	07/02/23	RIA*	*
Ortho Phosphorous (P)	mg/L	0.012	0.005	06/29/23	AH	SM 4500-P
Particulate Organic Carbon	mg/L	<0.52	NA	08/02/23	KB	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.14	NA	08/02/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.42	NA	07/21/23	IP	Calculation
Nitrate-N	mg/L	<0.01	0.02	06/29/23	IP	SM 4500-NO3 E
Nitrite-N	mg/L	<0.01	0.010	06/28/23	IP	SM 4500-NO2-B
Ammonia-N	mg/L	BRL	0.2	07/11/23	RIA*	10-107-06-05-J
Total Organic Carbon	mg/L	0.52	0.50	07/05/23	RIA*	SM5310C
Dissolved Organic Carbon	mg/L	BRL	0.50	07/05/23	RIA*	SM5310C

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.

We certify that the following results are true and accurate to the best of our knowledge.

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

Friday, August 4, 2023

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

ProjectName: S-7
Project Number: Harbor Sampling
Sampled By: Kim Towr
Lab Order Number: WW-231096
Date Received: 06/28/23

Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-7 A	09:42	06/23/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Kjeldhal Nitrogen	mg/L	0.70	0.60	07/18/23	IP	SM4500-Norg B-C
Total Nitrogen	mg/L	0.70	NA	07/21/23	IP	Calculation
E-coli	CFU/100 mL	>400	<1	06/28/23	WM @ 13:45	SM 9213 D
Dissolved Total Phosphorous	mg/L	0.031	0.005	07/12/23	AH	SM 4500-P-B,E
Total Phosphorous (P)	mg/L	0.055	0.005	07/12/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.56	0.20	07/18/23	IP	SM4500 Norg B-C
Dissolved Inorganic Nitrogen	mg/L	<0.04	NA	08/02/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.56	NA	08/02/23	KB	Calculation
Chlorophyll-a	*	2.48	*	07/02/23	RIA*	*
Ortho Phosphorous (P)	mg/L	0.021	0.005	06/29/23	AH	SM 4500-P
Particulate Organic Carbon	mg/L	BRL	NA	08/02/23	KB	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.14	NA	08/02/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.56	NA	07/21/23	IP	Calculation
Nitrate-N	mg/L	<0.01	0.02	06/29/23	IP	SM 4500-NO3 E
Nitrite-N	mg/L	<0.01	0.010	06/28/23	IP	SM 4500-NO2-B
Ammonia-N	mg/L	BRL	0.2	07/11/23	RIA*	10-107-06-05-J
Total Organic Carbon	mg/L	0.54	0.50	07/05/23	RIA*	SM5310C
Dissolved Organic Carbon	mg/L	0.64	0.50	07/05/23	RIA*	SM5310C

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.

We certify that the following results are true and accurate to the best of our knowledge.

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

Friday, August 4, 2023

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

ProjectName: S-8A
Project Number: Harbor Sampling
Sampled By: Kim Tower
Lab Order Number: WW-231097
Date Received: 06/28/23

Comments:

Sample Type	Sample Time	Sample Date	Comments			
S-8A A	09:42	06/28/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Kjeldhal Nitrogen	mg/L	0.63	0.60	07/18/23	IP	SM4500-Norg B-C
Total Nitrogen	mg/L	0.63	NA	07/21/23	IP	Calculation
E-coli	CFU/100 mL	>400	<1	06/28/23	WM @ 13:45	SM 9213 D
Dissolved Total Phosphorous	mg/L	0.031	0.005	07/12/23	AH	SM 4500-P-B,E
Total Phosphorous (P)	mg/L	0.053	0.005	07/12/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.35	0.20	07/18/23	IP	SM4500 Norg B-C
Dissolved Inorganic Nitrogen	mg/L	<0.04	NA	08/02/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.35	NA	08/02/23	KB	Calculation
Chlorophyll-a	*	2.14	*	07/02/23	RIA*	*
Ortho Phosphorous (P)	mg/L	0.019	0.005	06/29/23	AH	SM 4500-P
Particulate Organic Carbon	mg/L	BRL	NA	08/02/23	KB	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.28	NA	08/02/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.35	NA	07/21/23	IP	Calculation
Nitrate-N	mg/L	<0.01	0.02	06/29/23	IP	SM 4500-NO3 E
Nitrite-N	mg/L	<0.01	0.010	06/28/23	IP	SM 4500-NO2-B
Ammonia-N	mg/L	BRL	0.2	07/11/23	RIA*	10-107-06-05-J
Total Organic Carbon	mg/L	0.53	0.50	07/05/23	RIA*	SM5310C
Dissolved Organic Carbon	mg/L	0.58	0.50	07/05/23	RIA*	SM5310C

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.

We certify that the following results are true and accurate to the best of our knowledge.

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: 6/29/2023
Date Reported: 7/12/2023
P.O. Number WW-231095-97B

Work Order #: 2306-10697

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 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:



Kristin Phelan
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2306-10697

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-231095 S-10 AT 2-4 HST
Sample Type : GRAB
Sample Date / Time : 6/28/2023 @ 09:31

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	7/11/2023 9:59	VC
TOC Low Level	0.52	0.50	mg/L	SM5310C 21 ed.	7/5/2023 17:56	BES
DOC	<0.50	0.50	mg/L	SM5310C 21 ed.	7/5/2023 17:56	BES

Sample Number: 002
Sample Description: WW-231096 S-7 AT 2-4 HST
Sample Type : GRAB
Sample Date / Time : 6/28/2023 @ 09:42

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	7/11/2023 13:53	KPG
TOC Low Level	0.54	0.50	mg/L	SM5310C 21 ed.	7/5/2023 17:56	BES
DOC	0.64	0.50	mg/L	SM5310C 21 ed.	7/5/2023 17:56	BES

Sample Number: 003
Sample Description: WW-231097A S-8A AT 2-4 HST
Sample Type : GRAB
Sample Date / Time : 6/28/2023 @ 09:42

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	7/11/2023 13:53	KPG
TOC Low Level	0.53	0.50	mg/L	SM5310C 21 ed.	7/5/2023 17:56	BES
DOC	0.58	0.50	mg/L	SM5310C 21 ed.	7/5/2023 17:56	BES

Sample Number: 004
Sample Description: WW-231097B FILTER BLANK
Sample Type : GRAB
Sample Date / Time : 6/28/2023 @ 16:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
DOC	<0.50	0.50	mg/L	SM5310C 21 ed.	7/5/2023 17:56	BES



ANALYTICAL REPORT

Lab Number:	L2337003
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:	07/13/23

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-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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



Project Name:	PLYMOUTH ENVIRONMENTAL MGMT
Project Number:	Not Specified

Lab Number: L2337003
Report Date: 07/13/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2337003-01	WW-231095	WATER	Not Specified	06/28/23 09:31	06/28/23
L2337003-02	WW-231096	WATER	Not Specified	06/28/23 09:42	06/28/23
L2337003-03	WW-231097	WATER	Not Specified	06/28/23 09:42	06/28/23

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2337003
Report Date: 07/13/23

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. 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 Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data 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.

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 Alpha Project Manager 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 Project Management at 800-624-9220 with any questions.

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2337003
Report Date: 07/13/23

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

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 O'Neill* Kelly O'Neill

Title: Technical Director/Representative

Date: 07/13/23

INORGANICS & MISCELLANEOUS

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2337003
Report Date: 07/13/23

SAMPLE RESULTS

Lab ID: L2337003-01
Client ID: WW-231095
Sample Location: Not Specified

Date Collected: 06/28/23 09:31
Date Received: 06/28/23
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	06/29/23 09:00	07/02/23 19:44	121,10200H	DRV



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2337003
Report Date: 07/13/23

SAMPLE RESULTS

Lab ID: L2337003-02
Client ID: WW-231096
Sample Location: Not Specified

Date Collected: 06/28/23 09:42
Date Received: 06/28/23
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	06/29/23 09:00	07/02/23 19:44	121,10200H	DRV



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2337003
Report Date: 07/13/23

SAMPLE RESULTS

Lab ID: L2337003-03
Client ID: WW-231097
Sample Location: Not Specified

Date Collected: 06/28/23 09:42
Date Received: 06/28/23
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	2.14		mg/m3	2.00	NA	1	06/29/23 09:00	07/02/23 19:44	121,10200H	DRV



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2337003
Report Date: 07/13/23

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: WG1797688-1										
Chlorophyll A	ND		mg/m3	2.00	NA	1	06/29/23 09:00	07/02/23 19:44	121,10200H	DRV



Lab Duplicate Analysis
Batch Quality Control

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2337003
Report Date: 07/13/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1797688-2 QC Sample: L2337003-03 Client ID: WW-231097						
Chlorophyll A	2.14	ND	mg/m3	NC		35



Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information
Cooler A Custody Seal Absent

Container Information			Initial		Final		Temp		Frozen		Analysis(*)
Container ID	Container Type	Cooler	pH	pH	deg C	Pres	Seal	Date/Time			
L2337003-01A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.8	Y	Absent				CHLORO-A(1)
L2337003-01B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.8	Y	Absent				CHLORO-A(1)
L2337003-02A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.8	Y	Absent				CHLORO-A(1)
L2337003-02B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.8	Y	Absent				CHLORO-A(1)
L2337003-03A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.8	Y	Absent				CHLORO-A(1)
L2337003-03B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.8	Y	Absent				CHLORO-A(1)



Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L2337003

Project Number: Not Specified

Report Date: 07/13/23

GLOSSARY

Acronyms

DL	- 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 limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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.
LCS D	- 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.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
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.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
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.

Report Format: DU Report with 'I' Qualifiers



Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L2337003

Project Number: Not Specified

Report Date: 07/13/23

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.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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 Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- 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.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- 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.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L2337003

Project Number: Not Specified

Report Date: 07/13/23

Data Qualifiers

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- 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.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2337003
Report Date: 07/13/23

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.



Alpha Analytical, Inc.
 Facility: **Company-wide**
 Department: **Quality Assurance**
 Title: **Certificate/Approval Program Summary**

ID No.: **17873**
 Revision 20
 Published Date: 6/16/2023 4:52:28 PM
 Page 1 of 1

Certification Information

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

Westborough Facility

EPA 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS.

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, SM4500NO₂-B

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, 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 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: 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 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, 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, EPA 537.1.

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, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

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

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@plymouth-ma.gov
Project Name: **Harbor Sampling** -Plymouth MA
Sampler: Kim Tower (KT)

NEED RESULTS FOR PERMITTING DEADLINE BY END OF FIRST WEEK OF AUGUST

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
6/28/23	9:31	S-10 @ 2-4 HST	1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE
6/28/23	9:42	S-7 @ 2-4 HST	1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			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:

 10:45 6/28/23

SCANNED
AUG 03 2023

SCANNED
AUG 04 2023

6/30 1100 Emailed Kim re: high
e-coli on 1096 + 1097 - KB

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@plymouth-ma.gov
Project Name: **Harbor Sampling** -Plymouth MA
Sampler: Kim Tower (KT)

NEED RESULTS FOR PERMITTING DEADLINE BY END OF FIRST WEEK OF AUGUST

WW-131097

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
6/28/23	9:42	S-8A @ 2-4 HST	1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE
			1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			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:

JP 10:45 6/28/23

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

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

Wednesday, September 6, 2023

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-231310

Date Received: 07/27/23

Sample Type	Sample Time	Sample Date	Comments			
S-10 Ebb A	07:10	07/27/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Kjeldhal Nitrogen	mg/L	1.3	0.60	08/15/23	IP	SM4500-Norg B-C
Total Nitrogen	mg/L	1.3	NA	08/21/23	IP	Calculation
E-coli	CFU/100 mL	<5	<1	07/27/23	WM @ 13:30	SM 9213 D
Dissolved Total Phosphorous	mg/L	0.027	0.005	08/01/23	AH	SM 4500-P-B,E
Total Phosphorous (P)	mg/L	0.044	0.005	08/01/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	1.2	0.20	08/15/23	IP	SM4500 Norg B-C
Dissolved Inorganic Nitrogen	mg/L	0.03	NA	09/04/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	1.2	NA	09/04/23	KB	Calculation
Chlorophyll-a	*	2.73	*	07/31/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.024	0.005	07/28/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	BRL	NA	09/04/23	KB	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.10	NA	09/04/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	1.2	NA	08/21/23	IP	Calculation
Nitrate-N	mg/L	BRL	0.02	07/28/23	IP	SM 4500-NO3 E
Nitrite-N	mg/L	BRL	0.010	07/28/23	IP	SM 4500-NO2-B
Ammonia-N	mg/L	0.031	0.2	08/07/23	RIA*	10-107-06-05-J
Total Organic Carbon	mg/L	<0.50	0.50	08/07/23	RIA*	SM5310C
Dissolved Organic Carbon	mg/L	<0.50	0.50	08/07/23	RIA*	SM5310C

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.

We certify that the following results are true and accurate to the best of our knowledge.

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 7, 2023

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

ProjectName: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231311

Date Received: 07/27/23

Sample Type *	Sample Time	Sample Date	Comments			
S-7 Ebb A	07:20	07/27/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Kjeldhal Nitrogen	mg/L	1.2	0.60	08/15/23	IP	SM4500-Norg B-C
Total Nitrogen	mg/L	1.2	NA	08/30/23	IP	Calculation
E-coli	CFU/100 mL	<5	<1	07/27/23	WM @ 13:30	SM 9213 D
Dissolved Phosphorous (P)	mg/L	0.029	0.005	08/01/23	AH	SM 4500-P
Total Phosphorous (P)	mg/L	0.051	0.005	08/01/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	1.1	0.20	08/15/23	IP	SM4500 Norg B-C
Dissolved Inorganic Nitrogen	mg/L	0.05	NA	09/04/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	1.1	NA	09/04/23	KB	Calculation
Chlorophyll-a	*	ND	*	07/31/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	BRL	0.005	07/28/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	BRL	NA	09/04/23	KB	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.10	NA	09/04/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	1.1	NA	08/21/23	IP	Calculation
Nitrate-N	mg/L	BRL	0.02	07/28/23	IP	SM 4500-NO3 E
Nitrite-N	mg/L	BRL	0.010	07/28/23	IP	SM 4500-NO2-B
Ammonia-N	mg/L	0.046	0.2	08/07/23	RIA*	10-107-06-05-J
Total Organic Carbon	mg/L	<0.50	0.50	08/07/23	RIA*	SM5310C
Dissolved Organic Carbon	mg/L	<0.50	0.50	08/07/23	RIA*	SM5310C

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By:


Ronald J. Saari
Laboratory Director

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

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

Wednesday, September 6, 2023

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

ProjectName: Harbor Sampling**Comments:****Project Number:****Sampled By:** Kim Tower**Lab Order Number:** WW-231312**Date Received:** 07/27/23

Sample Type	Sample Time	Sample Date	Comments			
S-10 HST A	09:00	07/27/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Kjeldhal Nitrogen	mg/L	0.98	0.60	08/15/23	IP	SM4500-Norg B-C
Total Nitrogen	mg/L	0.98	NA	08/21/23	IP	Calculation
E-coli	CFU/100 mL	<5	<1	07/27/23	WM @ 13:30	SM 9213 D
Dissolved Total Phosphorous	mg/L	0.026	0.005	08/01/23	AH	SM 4500-P-B,E
Total Phosphorous (P)	mg/L	0.041	0.005	08/01/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.91	0.20	08/15/23	IP	SM4500 Norg B-C
Dissolved Inorganic Nitrogen	mg/L	0.02	NA	09/04/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.89	NA	09/04/23	KB	Calculation
Chlorophyll-a	*	ND	*	07/31/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.016	0.005	07/28/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	BRL	NA	09/04/23	KB	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.07	NA	09/04/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.91	NA	08/21/23	IP	Calculation
Nitrate-N	mg/L	BRL	0.02	07/28/23	IP	SM 4500-NO3 E
Nitrite-N	mg/L	BRL	0.010	07/28/23	IP	SM 4500-NO2-B
Ammonia-N	mg/L	0.020	0.2	08/07/23	RIA*	10-107-06-05-J
Total Organic Carbon	mg/L	<0.50	0.50	08/07/23	RIA*	SM5310C
Dissolved Organic Carbon	mg/L	<0.50	0.50	08/07/23	RIA*	SM5310C

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

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

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

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

Wednesday, September 6, 2023

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231313

Date Received: 07/27/23

Sample Type	Sample Time	Sample Date	Comments			
S-7 HST A	09:10	07/27/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Kjeldhal Nitrogen	mg/L	1.1	0.60	08/15/23	IP	SM4500-Norg B-C
Total Nitrogen	mg/L	1.1	NA	08/21/23	IP	Calculation
E-coli	CFU/100 mL	<5	<1	07/27/23	WM @ 13:30	SM 9213 D
Dissolved Total Phosphorous	mg/L	0.025	0.005	08/01/23	AH	SM 4500-P-B,E
Total Phosphorous (P)	mg/L	0.045	0.005	08/01/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	1.1	0.20	08/15/23	IP	SM4500 Norg B-C
Dissolved Inorganic Nitrogen	mg/L	0.03	NA	09/04/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	1.1	NA	09/04/23	KB	Calculation
Chlorophyll-a	*	2.42	*	07/31/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.016	0.005	07/28/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	BRL	NA	09/04/23	KB	SM 5310 C
Particulate Organic Nitrogen	mg/L	BRL	NA	08/21/23	IP	Calculation
Total Dissolved Nitrogen	mg/L	1.1	NA	08/21/23	IP	Calculation
Nitrate-N	mg/L	BRL	0.02	07/28/23	IP	SM 4500-NO3 E
Nitrite-N	mg/L	BRL	0.010	07/28/23	IP	SM 4500-NO2-B
Ammonia-N	mg/L	0.030	0.2	08/07/23	RIA*	10-107-06-05-J
Total Organic Carbon	mg/L	<0.50	0.50	08/07/23	RIA*	SM5310C
Dissolved Organic Carbon	mg/L	<0.50	0.50	08/07/23	RIA*	SM5310C

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By:

Ronald J. Saari

Laboratory Director

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

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

Wednesday, September 6, 2023

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

ProjectName: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231314

Date Received: 07/27/23

Sample Type	Sample Time	Sample Date	Comments			
S-8 HST A	09:15	07/27/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Kjeldhal Nitrogen	mg/L	0.77	0.60	08/16/23	IP	SM4500-Norg B-C
Total Nitrogen	mg/L	0.77	NA	08/21/23	IP	Calculation
E-coli	CFU/100 mL	<5	<1	07/27/23	WM @ 13:30	SM 9213 D
Dissolved Total Phosphorous	mg/L	0.025	0.005	08/01/23	AH	SM 4500-P-B,E
Total Phosphorous (P)	mg/L	0.047	0.005	08/03/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.49	0.20	08/16/23	IP	SM4500 Norg B-C
Dissolved Inorganic Nitrogen	mg/L	<0.02	NA	09/04/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	<0.49	NA	09/04/23	KB	Calculation
Chlorophyll-a	*	ND	*	07/31/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.016	0.005	07/28/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	BRL	NA	09/04/23	KB	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.28	NA	09/04/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.52	NA	08/21/23	IP	Calculation
Nitrate-N	mg/L	BRL	0.02	07/28/23	IP	SM 4500-NO3 E
Nitrite-N	mg/L	BRL	0.010	07/28/23	IP	SM 4500-NO2-B
Ammonia-N	mg/L	<0.020	0.2	08/07/23	RIA*	10-107-06-05-J
Total Organic Carbon	mg/L	<0.50	0.50	08/07/23	RIA*	SM5310C
Dissolved Organic Carbon	mg/L	<0.50	0.50	08/07/23	RIA*	SM5310C

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director



ANALYTICAL REPORT

Lab Number:	L2343347
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:	08/10/23

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-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2343347
Report Date: 08/10/23

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. 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 Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data 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.

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 Alpha Project Manager 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 Project Management at 800-624-9220 with any questions.

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: *Tiffani Morrissey* - Tiffani Morrissey

Title: Technical Director/Representative

Date: 08/10/23

INORGANICS & MISCELLANEOUS

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L2343347

Project Number: Not Specified

Report Date: 08/10/23

SAMPLE RESULTS

Lab ID: L2343347-01

Date Collected: 07/27/23 07:10

Client ID: WW-231310

Date Received: 07/27/23

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	2.73		mg/m3	2.00	NA	1	07/28/23 06:45	07/31/23 13:45	121,10200H	LOF



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2343347
Report Date: 08/10/23

SAMPLE RESULTS

Lab ID: L2343347-02
Client ID: WW-231311
Sample Location: Not Specified

Date Collected: 07/27/23 07:20
Date Received: 07/27/23
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	07/28/23 06:45	07/31/23 13:45	121,10200H	LOF



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2343347
Report Date: 08/10/23

SAMPLE RESULTS

Lab ID: L2343347-03
Client ID: WW-231312
Sample Location: Not Specified

Date Collected: 07/27/23 09:00
Date Received: 07/27/23
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	07/28/23 06:45	07/31/23 13:45	121,10200H	LOF



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2343347
Report Date: 08/10/23

SAMPLE RESULTS

Lab ID: L2343347-04
Client ID: WW-231313
Sample Location: Not Specified

Date Collected: 07/27/23 09:10
Date Received: 07/27/23
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	2.42		mg/m3	2.00	NA	1	07/28/23 06:45	07/31/23 13:45	121,10200H	LOF



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2343347
Report Date: 08/10/23

SAMPLE RESULTS

Lab ID: L2343347-05
Client ID: WW-231314
Sample Location: Not Specified

Date Collected: 07/27/23 09:15
Date Received: 07/27/23
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	07/28/23 06:45	07/31/23 13:45	121,10200H	LOF

Lab Number: L2343347

Report Date: 08/10/23

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: WG1808866-1										
Chlorophyll A	ND		mg/m3	2.00	NA	1	07/28/23 06:45	07/31/23 13:45	121,10200H	LOF

Lab Duplicate Analysis
Batch Quality Control

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2343347
Report Date: 08/10/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s):	01-05 QC Batch ID: WG1808866-2	QC Sample: L2343347-05	Client ID: WW-231314			
Chlorophyll A	ND	2.01	mg/m3	NC		35



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2343347
Report Date: 08/10/23

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information
Cooler A
Custody Seal Absent

Container Information			Initial		Final		Temp		Frozen		Analysis(*)
Container ID	Container Type	Cooler	pH	pH	deg C	Pres	Seal	Date/Time			
L2343347-01A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.5	Y	Absent				CHLORO-A(1)
L2343347-01B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.5	Y	Absent				CHLORO-A(1)
L2343347-02A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.5	Y	Absent				CHLORO-A(1)
L2343347-02B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.5	Y	Absent				CHLORO-A(1)
L2343347-03A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.5	Y	Absent				CHLORO-A(1)
L2343347-03B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.5	Y	Absent				CHLORO-A(1)
L2343347-04A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.5	Y	Absent				CHLORO-A(1)
L2343347-04B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.5	Y	Absent				CHLORO-A(1)
L2343347-05A	Brown Plastic 1000ml unpreserved	A	NA	NA	2.5	Y	Absent				CHLORO-A(1)
L2343347-05B	Brown Plastic 1000ml unpreserved	A	NA	NA	2.5	Y	Absent				CHLORO-A(1)



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2343347
Report Date: 08/10/23

GLOSSARY

Acronyms

DL	- 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 limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
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.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
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.

Report Format: DU Report with 'J' Qualifiers



Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L2343347

Project Number: Not Specified

Report Date: 08/10/23

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.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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 Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- 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.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- 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.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2343347
Report Date: 08/10/23

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- 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.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Lab Number: L2343347
Report Date: 08/10/23

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 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS.

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, SM4500NO2-B

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, **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 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: 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 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, 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, EPA 537.1.

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, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

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



LABORATORY REPORT

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

Date Received: 8/1/2023
Date Reported: 8/8/2023
P.O. Number WW-231310-14B

Work Order #: 2308-12993

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 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:

Jaimie Holmes
Laboratory Manager

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

Report Qualifiers & Abbreviations

These qualifiers/abbreviations may or may not be present in this report.

Qualifier	Descriptions
*	Recovery outside of acceptance limits
B	Analyte detected in method blank at a level about the detection limit
D	Surrogate diluted out to reach a parameter result within the instrument calibration curve
E	Parameter result exceeds calibration curve
J	Estimated result based on MDL

Abbreviation	Definition
BLK	Method Blank
CFU	Colony Forming Unit
DF	Dilution Factor
DL	Detection Limit
LCS(D)	Laboratory Control Standard (Duplicate)
MCL	Maximum Contaminant Level
MDL	Method Detection Limit
MPN	Most Probably Number
MS(D)	Matrix Spike (Duplicate)
QC	Quality Control
RPD	Relative Percent Difference
TIC	Tentatively Identified Compound
TNTC	Too Numerous to Count
*CS	Field data provided by the client

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2308-12993

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-231310 S-10 EBB
Sample Type : GRAB
Sample Date / Time : 7/27/2023 @ 07:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.031	0.020	mg/L	SM4500NH3-B,H 18-21ed	8/7/2023 9:26	VC
TOC Low Level	<0.50	0.50	mg/L	SM5310C 21 ed.	8/7/2023 12:25	KPG
DOC	<0.50	0.50	mg/L	SM5310C 21 ed.	8/7/2023 12:25	KPG

Sample Number: 002
Sample Description: WW-231311 S-7 EBB
Sample Type : GRAB
Sample Date / Time : 7/27/2023 @ 07:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.046	0.020	mg/L	SM4500NH3-B,H 18-21ed	8/7/2023 9:26	VC
TOC Low Level	<0.50	0.50	mg/L	SM5310C 21 ed.	8/7/2023 12:25	KPG
DOC	<0.50	0.50	mg/L	SM5310C 21 ed.	8/7/2023 12:25	KPG

Sample Number: 003
Sample Description: WW-231312 S-10 HST
Sample Type : GRAB
Sample Date / Time : 7/27/2023 @ 09:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	8/7/2023 9:26	VC
TOC Low Level	<0.50	0.50	mg/L	SM5310C 21 ed.	8/7/2023 12:25	KPG
DOC	<0.50	0.50	mg/L	SM5310C 21 ed.	8/7/2023 12:25	KPG

Sample Number: 004
Sample Description: WW-231313 S-7 HST
Sample Type : GRAB
Sample Date / Time : 7/27/2023 @ 09:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
DOC	<0.50	0.50	mg/L	SM5310C 21 ed.	8/7/2023 12:25	KPG
TOC Low Level	<0.50	0.50	mg/L	SM5310C 21 ed.	8/7/2023 12:25	KPG
Ammonia (as N)	0.030	0.020	mg/L	SM4500NH3-B,H 18-21ed	8/7/2023 9:26	VC

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2308-12993

Project Name: PLYMOUTH ENV.

Sample Number: 005
Sample Description: WW-231314A S-8 HST
Sample Type : GRAB
Sample Date / Time : 7/27/2023 @ 09:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
DOC	<0.50	0.50	mg/L	SM5310C 21 ed.	8/7/2023 12:25	KPG
TOC Low Level	<0.50	0.50	mg/L	SM5310C 21 ed.	8/7/2023 12:25	KPG
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	8/7/2023 9:26	VC

Sample Number: 006
Sample Description: WW-231314B FILTER BLANK
Sample Type : GRAB
Sample Date / Time : 7/27/2023 @ 16:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
DOC	<0.50	0.50	mg/L	SM5310C 21 ed.	8/7/2023 12:25	KPG

2

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@plymouth-ma.gov
Project Name: **Harbor Sampling** -Plymouth MA
Sampler: Kim Tower (KT)

NEED RESULTS FOR PERMITTING DEADLINE BY BEGINNING OF SEPTEMBER

W1310

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
7-27-23	7:16	S-10 Ebb	1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE
7-27-23	7:20	S-7 Ebb	1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE

W1311

CS 7/27/23
WM
1330

CS

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:

JP 10:00 7/27

SCANNED

SEP 06 2023

5

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@plymouth-ma.gov
Project Name: **Harbor Sampling** -Plymouth MA
Sampler: Kim Tower (KT)

NEED RESULTS FOR PERMITTING DEADLINE BY BEGINNING OF SEPTEMBER

w1312

0900

0900

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
7-27-23	0900	S-10 HST	1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE
7-27-23	0900	S-7 HST	1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE

w1313

LS

LS

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:

 7/27/23

5

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@plymouth-ma.gov
Project Name: **Harbor Sampling** -Plymouth MA
Sampler: Kim Tower (KT)

NEED RESULTS FOR PERMITTING DEADLINE BY BEGINNING OF SEPTEMBER

W1314

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
7-27-23	0915	S-8 HST	1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE
			1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE

LS

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:

 10:00 7/27/23

CHAIN OF CUSTODY FORM

ENVIROTECH LABS, INC.

Alpha Analytical

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

Sandwich, MA 02563

**Address: 8 Walkup Drive
Westborough, MA 02346**

Sampler: Kim Tower

FAX (508) 888-6446

Phone#: 508-898-9220

333

[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

Wednesday, October 4, 2023

Plymouth Environmental Management

K. Towers/ 11 Lincoln St.

Plymouth, MA

ProjectName: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231584

Date Received: 08/29/23

Sample Type	Sample Time	Sample Date	Comments			
S-10 Ebb A	09:15	08/29/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Nitrogen	mg/L	0.42	NA	10/04/23	KB	Calculation
Dissolved Total Phosphorous	mg/L	0.023	0.005	09/07/23	AH	SM 4500-P-B,E
Total Kjeldhal Nitrogen	mg/L	0.42	0.2	09/07/23	IP	SM4500-Norg B-C
Ammonia-N*	mg/L	0.061	0.020	09/07/23	RIA*	SM4500 NH3 C
Total Phosphorous (P)	mg/L	0.043	0.005	09/11/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.20	09/07/23	IP	SM4500 Norg B-C
Dissolved Inorganic Nitrogen	mg/L	0.06	NA	10/04/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.15	NA	10/04/23	KB	Calculation
Chlorophyll-a	*	6.38	*	08/30/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.011	0.005	08/29/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	<0.51	NA	10/04/23	KB	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.21	NA	10/04/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.21	NA	10/04/23	KB	Calculation
E coli	CFU/100ml	5	5	08/29/23	GB @ 13:00	EPA 1603
Nitrate-N	mg/L	BRL	0.02	09/25/23	IP	SM 4500-NO3 E
Nitrite-N	mg/L	BRL	0.010	08/30/23	IP	SM 4500-NO2-B
Total Organic Carbon	mg/L	0.51	0.50	09/06/23	RIA*	SM5310C
Dissolved Organic Carbon	mg/L	BRL	0.50	09/06/23	RIA*	SM5310C

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By:

Ronald J. Saari

Laboratory Director

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

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

Wednesday, October 4, 2023

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

ProjectName: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231585

Date Received: 08/29/23

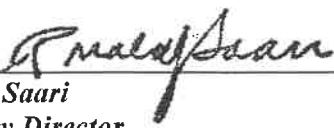
Sample Type	Sample Time	Sample Date	Comments			
S-7 Ebb A	09:30	08/29/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Nitrogen	mg/L	0.42	NA	10/04/23	KB	Calculation
Dissolved Total Phosphorous	mg/L	0.028	0.005	09/07/23	AH	SM 4500-P-B,E
Total Kjeldhal Nitrogen	mg/L	0.42	0.2	09/07/23	IP	SM4500-Norg B-C
Ammonia-N*	mg/L	0.024	0.020	09/07/23	RIA*	SM4500 NH3 C
Total Phosphorous (P)	mg/L	0.053	0.005	09/11/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.28	0.20	09/07/23	IP	SM4500 Norg B-C
Dissolved Inorganic Nitrogen	mg/L	0.02	NA	10/04/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.26	NA	10/04/23	KB	Calculation
Chlorophyll-a	*	11.2	*	08/30/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.010	0.005	08/29/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	<0.53	NA	10/04/23	KB	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.14	NA	10/04/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.28	NA	10/04/23	KB	Calculation
E coli	CFU/100ml	85	5	08/29/23	GB @ 13:00	EPA 1603
Nitrate-N	mg/L	BRL	0.02	09/25/23	IP	SM 4500-NO3 E
Nitrite-N	mg/L	BRL	0.010	08/30/23	IP	SM 4500-NO2-B
Total Organic Carbon	mg/L	0.53	0.50	09/06/23	RIA*	SM5310C
Dissolved Organic Carbon	mg/L	BRL	0.50	09/06/23	RIA*	SM5310C

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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

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

Wednesday, October 4, 2023

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

ProjectName: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231586

Date Received: 08/29/23

Sample Type	Sample Time	Sample Date	Comments			
S-10 HST A	11:20	08/29/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Nitrogen	mg/L	0.42	NA	10/04/23	KB	Calculation
Dissolved Total Phosphorous	mg/L	0.020	0.005	09/07/23	AH	SM 4500-P-B,E
Total Kjeldhal Nitrogen	mg/L	0.42	0.2	09/07/23	IP	SM4500-Norg B-C
Ammonia-N*	mg/L	BRL	0.020	09/07/23	RIA*	SM4500 NH3 C
Total Phosphorous (P)	mg/L	0.044	0.005	09/11/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.20	09/07/23	IP	SM4500 Norg B-C
Dissolved Inorganic Nitrogen	mg/L	<0.040	NA	10/04/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.21	NA	10/04/23	KB	Calculation
Chlorophyll-a	*	7.35	*	08/30/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.008	0.005	08/29/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	BRL	NA	10/04/23	KB	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.21	NA	10/04/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.21	NA	10/04/23	KB	Calculation
E coli	CFU/100ml	10	5	08/29/23	GB @ 13:00	EPA 1603
Nitrate-N	mg/L	BRL	0.02	09/25/23	IP	SM 4500-NO3 E
Nitrite-N	mg/L	BRL	0.010	08/30/23	IP	SM 4500-NO2-B
Total Organic Carbon	mg/L	BRL	0.50	09/06/23	RIA*	SM5310C
Dissolved Organic Carbon	mg/L	BRL	0.50	09/06/23	RIA*	SM5310C

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By:


Ronald J. Saari
Laboratory Director

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

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

Wednesday, October 4, 2023

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

ProjectName: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231587

Date Received: 08/29/23

Sample Type	Sample Time	Sample Date	Comments			
S-7 HST A	11:25	08/29/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Nitrogen	mg/L	0.42	NA	10/04/23	KB	Calculation
Dissolved Total Phosphorous	mg/L	0.020	0.005	09/07/23	AH	SM 4500-P-B,E
Total Kjeldhal Nitrogen	mg/L	0.42	0.2	09/07/23	IP	SM4500-Norg B-C
Ammonia-N*	mg/L	0.020	0.020	09/07/23	RIA*	SM4500 NH3 C
Total Phosphorous (P)	mg/L	0.044	0.005	09/11/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.21	0.20	09/07/23	IP	SM4500 Norg B-C
Dissolved Inorganic Nitrogen	mg/L	0.02	NA	10/04/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.19	NA	10/04/23	KB	Calculation
Chlorophyll-a	*	5.67	*	08/30/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.010	0.005	08/29/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	BRL	NA	10/04/23	KB	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.21	NA	10/04/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.21	NA	10/04/23	KB	Calculation
E coli	CFU/100ml	65	5	08/29/23	GB @ 13:00	EPA 1603
Nitrate-N	mg/L	BRL	0.02	09/25/23	IP	SM 4500-NO3 E
Nitrite-N	mg/L	BRL	0.010	08/30/23	IP	SM 4500-NO2-B
Total Organic Carbon	mg/L	BRL	0.50	09/06/23	RIA*	SM5310C
Dissolved Organic Carbon	mg/L	BRL	0.50	09/06/23	RIA*	SM5310C

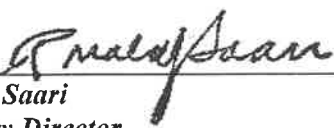
All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By:


Ronald J. Saari
Laboratory Director

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

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

Wednesday, October 4, 2023

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

ProjectName: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-231588

Date Received: 08/29/23

Sample Type	Sample Time	Sample Date	Comments			
S-8 A	11:30	08/29/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Total Nitrogen	mg/L	0.49	NA	10/04/23	KB	Calculation
Dissolved Total Phosphorous	mg/L	0.019	0.005	09/07/23	AH	SM 4500-P-B,E
Total Kjeldhal Nitrogen	mg/L	0.49	0.2	09/07/23	IP	SM4500-Norg B-C
Ammonia-N*	mg/L	0.027	0.020	09/07/23	RIA*	SM4500 NH3 C
Total Phosphorous (P)	mg/L	0.043	0.005	09/11/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.35	0.20	09/07/23	IP	SM4500 Norg B-C
Dissolved Inorganic Nitrogen	mg/L	0.03	NA	10/04/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.32	NA	10/04/23	KB	Calculation
Chlorophyll-a	*	NT**	*			*
Ortho Phosphorous (P)	mg/L	0.007	0.005	08/29/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	BRL	NA	10/04/23	KB	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.14	NA	10/04/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.35	NA	10/04/23	KB	Calculation
E coli	CFU/100ml	70	5	08/29/23	GB @ 13:00	EPA 1603
Nitrate-N	mg/L	BRL	0.02	09/25/23	IP	SM 4500-NO3 E
Nitrite-N	mg/L	BRL	0.010	08/30/23	IP	SM 4500-NO2-B
Total Organic Carbon	mg/L	BRL	0.50	09/06/23	RIA*	SM5310C
Dissolved Organic Carbon	mg/L	0.53	0.50	09/06/23	RIA*	SM5310C

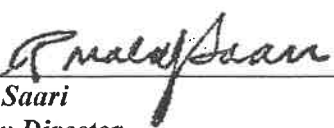
**Not Tested, no chlorophyll-a sample bottle submitted.

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.

We certify that the following results are true and accurate to the best of our knowledge.

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: 8/31/2023
Date Reported: 9/11/2023
P.O. Number WW-231584-588B

Work Order #: 2309-14843

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 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:

Katie Amaral, Ph.D., CMQ/OE
Laboratory Director

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

Report Qualifiers & Abbreviations

These qualifiers/abbreviations may or may not be present in this report.

Qualifier	Descriptions
*	Recovery outside of acceptance limits
B	Analyte detected in method blank at a level about the detection limit
D	Surrogate diluted out to reach a parameter result within the instrument calibration curve
E	Parameter result exceeds calibration curve
J	Estimated result based on MDL
Abbreviation	Definition
BLK	Method Blank
CFU	Colony Forming Unit
DF	Dilution Factor
DL	Detection Limit
LCS(D)	Laboratory Control Standard (Duplicate)
MCL	Maximum Contaminant Level
MDL	Method Detection Limit
MPN	Most Probable Number
MS(D)	Matrix Spike (Duplicate)
QC	Quality Control
RPD	Relative Percent Difference
TIC	Tentatively Identified Compound
TNTC	Too Numerous to Count
*CS	Field data provided by the client

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2309-14843

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-231584 S-10 EBB
Sample Type : GRAB
Sample Date / Time : 8/29/2023 @ 09:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.061	0.020	mg/L	SM4500NH3-B,H 18-21ed	9/7/2023 11:13	VC
TOC Low Level	0.51	0.50	mg/L	SM5310C 21 ed.	9/6/2023 16:50	BES
DOC	<0.50	0.50	mg/L	SM5310C 21 ed.	9/6/2023 16:50	BES

Sample Number: 002
Sample Description: WW-231585 S-7 EBB
Sample Type : GRAB
Sample Date / Time : 8/29/2023 @ 09:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.024	0.020	mg/L	SM4500NH3-B,H 18-21ed	9/7/2023 11:13	VC
TOC Low Level	0.53	0.50	mg/L	SM5310C 21 ed.	9/6/2023 16:50	BES
DOC	<0.50	0.50	mg/L	SM5310C 21 ed.	9/6/2023 16:50	BES

Sample Number: 003
Sample Description: WW-231586 S-10 HST
Sample Type : GRAB
Sample Date / Time : 8/29/2023 @ 11:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	9/7/2023 11:13	VC
TOC Low Level	<0.50	0.50	mg/L	SM5310C 21 ed.	9/6/2023 16:50	BES
DOC	<0.50	0.50	mg/L	SM5310C 21 ed.	9/6/2023 16:50	BES

Sample Number: 004
Sample Description: WW-231587 S-7 HST
Sample Type : GRAB
Sample Date / Time : 8/29/2023 @ 11:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	9/7/2023 11:13	VC
TOC Low Level	<0.50	0.50	mg/L	SM5310C 21 ed.	9/6/2023 16:50	BES
DOC	<0.50	0.50	mg/L	SM5310C 21 ed.	9/6/2023 16:50	BES

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2309-14843

Project Name: PLYMOUTH ENV.

Sample Number: 005
Sample Description: WW-231588A S-8 HST
Sample Type : GRAB
Sample Date / Time : 8/29/2023 @ 11:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	0.027	0.020	mg/L	SM4500NH3-B,H 18-21ed	9/7/2023 11:13	VC
TOC Low Level	<0.50	0.50	mg/L	SM5310C 21 ed.	9/6/2023 16:50	BES
DOC	0.53	0.50	mg/L	SM5310C 21 ed.	9/6/2023 16:50	BES

Total Organic Carbon - Result is less than Total Organic Carbon Dissolved, however results are within duplicate criteria of each other.

Sample Number: 006
Sample Description: WW-231588B FILTER BLANK
Sample Type : GRAB
Sample Date / Time : 8/29/2023 @ 16:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
DOC	<0.50	0.50	mg/L	SM5310C 21 ed.	9/6/2023 16:50	BES



ANALYTICAL REPORT

Lab Number:	L2350145
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:	09/12/23

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-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name:	PLYMOUTH ENVIRONMENTAL MGMT
Project Number:	Not Specified

Lab Number: L2350145
Report Date: 09/12/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2350145-01	WW-231584	WATER	Not Specified	08/29/23 09:15	08/29/23
L2350145-02	WW-231585	WATER	Not Specified	08/29/23 09:30	08/29/23
L2350145-03	WW-231586	WATER	Not Specified	08/29/23 11:20	08/29/23
L2350145-04	WW-231587	WATER	Not Specified	08/29/23 11:25	08/29/23
L2350145-05	WW-231588		Not Specified	08/29/23 11:30	08/29/23

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2350145
Report Date: 09/12/23

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. 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 Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data 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.

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 Alpha Project Manager 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 Project Management at 800-624-9220 with any questions.

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2350145
Report Date: 09/12/23

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L2350145-05: A sample identified as "WW-231588" was listed on the Chain of Custody, but not received. This was verified by the client.

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: 09/12/23

INORGANICS & MISCELLANEOUS

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2350145
Report Date: 09/12/23

SAMPLE RESULTS

Lab ID: L2350145-01
Client ID: WW-231584
Sample Location: Not Specified

Date Collected: 08/29/23 09:15
Date Received: 08/29/23
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	6.38		mg/m3	2.00	NA	1	08/29/23 21:49	08/30/23 20:45	121,10200H	JAI



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2350145
Report Date: 09/12/23

SAMPLE RESULTS

Lab ID: L2350145-02
Client ID: WW-231585
Sample Location: Not Specified

Date Collected: 08/29/23 09:30
Date Received: 08/29/23
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	08/29/23 21:49	08/30/23 20:45	121,10200H	JAI

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Project Number: Not Specified

Lab Number: L2350145

Report Date: 09/12/23

SAMPLE RESULTS

Lab ID: L2350145-03

Client ID: WW-231586

Sample Location: Not Specified

Date Collected: 08/29/23 11:20

Date Received: 08/29/23

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	7.35		mg/m3	2.00	NA	1	08/29/23 21:49	08/30/23 20:45	121,10200H	JAI

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2350145
Report Date: 09/12/23

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): 01-04 Batch: WG1821701-1										
Chlorophyll A	ND		mg/m3	2.00	NA	1	08/29/23 21:49	08/30/23 20:45	121,10200H	JAI

Lab Duplicate Analysis
Batch Quality Control

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2350145
Report Date: 09/12/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s):	01-04	QC Batch ID: WG1821701-2	QC Sample: L2350145-04	Client ID: WW-231587		
Chlorophyll A	5.67	5.47	mg/m3	4		35



Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information
Cooler A
Custody Seal Absent

Container Information		Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
Container ID	Container Type								
L2350145-01A	Brown Plastic 1000ml unpreserved	A	NA		4.7	Y	Absent		CHLORO-A(1)
L2350145-01B	Brown Plastic 1000ml unpreserved	A	NA		4.7	Y	Absent		CHLORO-A(1)
L2350145-02A	Brown Plastic 1000ml unpreserved	A	NA		4.7	Y	Absent		CHLORO-A(1)
L2350145-02B	Brown Plastic 1000ml unpreserved	A	NA		4.7	Y	Absent		CHLORO-A(1)
L2350145-03A	Brown Plastic 1000ml unpreserved	A	NA		4.7	Y	Absent		CHLORO-A(1)
L2350145-03B	Brown Plastic 1000ml unpreserved	A	NA		4.7	Y	Absent		CHLORO-A(1)
L2350145-04A	Brown Plastic 1000ml unpreserved	A	NA		4.7	Y	Absent		CHLORO-A(1)
L2350145-04B	Brown Plastic 1000ml unpreserved	A	NA		4.7	Y	Absent		CHLORO-A(1)

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L2350145

Project Number: Not Specified

Report Date: 09/12/23

GLOSSARY

Acronyms

DL	- 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 limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
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.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
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.

Report Format: DU Report with 'J' Qualifiers

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L2350145

Project Number: Not Specified

Report Date: 09/12/23

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.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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 Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- 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.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- 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.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2350145
Report Date: 09/12/23

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- 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.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2350145
Report Date: 09/12/23

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 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpeneol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpeneol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS.

EPA TO-15: Haloethane, 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, SM4500NO2-B**

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, **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 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: 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 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, 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, EPA 537.1.

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, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

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

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

NEED RESULTS FOR PERMITTING DEADLINE BY END OF FIRST WEEK OF OCTOBER

NW-73584

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
8/29/23	0915	S-9 E-9	1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE
8/29/23	0930	S-7 E-7	1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE

1585

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:

 08/29/23 1200

08/29/23
1300 E-9

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@plymouth-ma.gov
Project Name: **Harbor Sampling** -Plymouth MA
Sampler: Kim Tower (KT)

NEED RESULTS FOR PERMITTING DEADLINE BY END OF FIRST WEEK OF OCTOBER

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
8/29/20	1120	S-10 HST	1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE
8/29/20	1125	S-7 HST	1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			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:

 08/29/20 1200

5

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@plymouth-ma.gov
Project Name: **Harbor Sampling** -Plymouth MA
Sampler: Kim Tower (KT)

NEED RESULTS FOR PERMITTING DEADLINE BY END OF FIRST WEEK OF OCTOBER

WW-131588

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
8/29/23	1130	S-8 HST	1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE
			1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE

No chlorophyll-a for this sample - up

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

 08/29/23 1200

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

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

Wednesday, July 5, 2023

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

ProjectName: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230887

Date Received: 05/31/23

Sample Type	Sample Time	Sample Date	Comments			
S-10 2-4 HST A	11:00	05/31/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Kjeldhal Nitrogen	mg/L	0.91	0.60	06/01/23	IP	SM4500-Norg B-C
Total Nitrogen	mg/L	0.94	NA	06/30/23	IP	Calculation
Dissolved Total Phosphorous	mg/L	0.025	0.005	06/06/23	AH	SM 4500-P-B,E
Total Phosphorous (P)	mg/L	0.049	0.005	06/06/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.84	0.20	06/01/23	IP	SM4500 Norg B-C
Dissolved Inorganic Nitrogen	mg/L	0.03	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.84	NA	07/05/23	KB	Calculation
Chlorophyll-a	*	2.85	*	06/01/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.011	0.005	05/31/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.020	NA	07/05/23	KB	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.07	NA	07/05/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.87	NA	06/30/23	IP	Calculation
E coli	CFU/100ml	<5	5	05/31/23	WM @ 14:35	EPA 1603
Nitrate-N	mg/L	0.03	0.02	06/01/23	IP	SM 4500-NO3 E
Nitrite-N	mg/L	BRL	0.010	06/01/23	IP	SM 4500-NO2-B
Ammonia-N	mg/L	BRL	0.2	06/13/23	RIA*	10-107-06-05-J
Total Organic Carbon	mg/L	0.61	0.50	06/12/23	RIA*	SM5310C
Dissolved Organic Carbon	mg/L	0.59	0.50	06/12/23	RIA*	SM5310C

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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

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

Wednesday, July 5, 2023

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

ProjectName: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230888

Date Received: 05/31/23

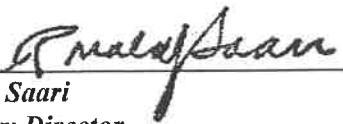
Sample Type	Sample Time	Sample Date	Comments			
S-7 2-4 HST A	11:05	05/31/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Kjeldhal Nitrogen	mg/L	0.84	0.60	06/01/23	IP	SM4500-Norg B-C
Total Nitrogen	mg/L	0.84	NA	06/30/23	IP	Calculation
Dissolved Total Phosphorous	mg/L	0.025	0.005	06/06/23	AH	SM 4500-P-B,E
Total Phosphorous (P)	mg/L	0.040	0.005	06/06/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.84	0.20	06/01/23	IP	SM4500 Norg B-C
Dissolved Inorganic Nitrogen	mg/L	0.05	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.80	NA	07/05/23	KB	Calculation
Chlorophyll-a	*	BRL	*	06/01/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.009	0.005	05/31/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.080	NA	07/05/23	KB	SM 5310 C
Particulate Organic Nitrogen	mg/L	ND	NA	07/05/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.84	NA	06/30/23	IP	Calculation
E coli	CFU/100ml	5	5	05/31/23	WM @ 14:35	EPA 1603
Nitrate-N	mg/L	BRL	0.02	06/01/23	IP	SM 4500-NO3 E
Nitrite-N	mg/L	BRL	0.010	06/01/23	IP	SM 4500-NO2-B
Ammonia-N	mg/L	0.045	0.2	06/13/23	RIA*	10-107-06-05-J
Total Organic Carbon	mg/L	0.63	0.50	06/12/23	RIA*	SM5310C
Dissolved Organic Carbon	mg/L	0.55	0.50	06/12/23	RIA*	SM5310C

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.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By: 
Ronald J. Saari
Laboratory Director

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

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

Wednesday, July 5, 2023

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

ProjectName: Harbor Sampling

Comments:

Project Number:

Sampled By: Kim Tower

Lab Order Number: WW-230889

Date Received: 05/31/23

Sample Type	Sample Time	Sample Date	Comments			
S-8A 2-4 HST A	11:05	05/31/23				
Parameters	Units	Test Results	Reportable Limits	Date Analyzed	Analyst	Method
Kjeldhal Nitrogen	mg/L	0.98	0.60	06/01/23	IP	SM4500-Norg B-C
Total Nitrogen	mg/L	0.70	NA	06/30/23	IP	Calculation
Dissolved Total Phosphorous	mg/L	0.024	0.005	06/06/23	AH	SM 4500-P-B,E
Total Phosphorous (P)	mg/L	0.041	0.005	06/06/23	AH	SM 4500-P
Dissolved Kjeldhal Nitrogen	mg/L	0.70	0.20	06/01/23	IP	SM4500 Norg B-C
Dissolved Inorganic Nitrogen	mg/L	<0.03	NA	07/05/23	KB	Calculation
Dissolved Organic Nitrogen	mg/L	0.70	NA	07/05/23	KB	Calculation
Chlorophyll-a	*	2.33	*	06/01/23	Alpha*	*
Ortho Phosphorous (P)	mg/L	0.009	0.005	05/31/23	IP	SM 4500-P
Particulate Organic Carbon	mg/L	0.060	NA	07/05/23	KB	SM 5310 C
Particulate Organic Nitrogen	mg/L	0.28	NA	07/05/23	KB	Calculation
Total Dissolved Nitrogen	mg/L	0.70	NA	06/30/23	IP	Calculation
E coli	CFU/100ml	<5	5	05/31/23	WM @ 14:35	EPA 1603
Nitrate-N	mg/L	BRL	0.02	06/01/23	IP	SM 4500-NO3 E
Nitrite-N	mg/L	BRL	0.010	06/01/23	IP	SM 4500-NO2-B
Ammonia-N	mg/L	BRL	0.2	06/13/23	RIA*	10-107-06-05-J
Total Organic Carbon	mg/L	0.61	0.50	06/12/23	RIA*	SM5310C
Dissolved Organic Carbon	mg/L	0.55	0.50	06/12/23	RIA*	SM5310C

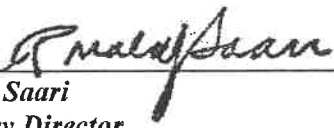
All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results.

We certify that the following results are true and accurate to the best of our knowledge.

BRL=below reportable limits

*see attached

By:


Ronald J. Saari
Laboratory Director



ANALYTICAL REPORT

Lab Number:	L2330185
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:	06/13/23

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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



Project Name:	PLYMOUTH ENVIRONMENTAL MGMT
Project Number:	Not Specified

Lab Number: L2330185
Report Date: 06/13/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2330185-01	WW-230887	WATER	Not Specified	05/31/23 11:00	05/31/23
L2330185-02	WW-230888	WATER	Not Specified	05/31/23 11:05	05/31/23
L2330185-03	WW-230889	WATER	Not Specified	05/31/23 11:05	05/31/23

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2330185
Report Date: 06/13/23

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. 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 Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data 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.

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 Alpha Project Manager 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 Project Management at 800-624-9220 with any questions.

Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2330185
Report Date: 06/13/23

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

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: *Tiffani Morrissey* - Tiffani Morrissey

Title: Technical Director/Representative

Date: 06/13/23

INORGANICS & MISCELLANEOUS

Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Project Number: Not Specified

Lab Number: L2330185

Report Date: 06/13/23

SAMPLE RESULTS

Lab ID: L2330185-01

Client ID: WW-230887

Sample Location: Not Specified

Date Collected: 05/31/23 11:00

Date Received: 05/31/23

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	2.85		mg/m3	2.00	NA	1	06/01/23 10:55	06/01/23 12:28	121,10200H	LOF



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2330185
Report Date: 06/13/23

SAMPLE RESULTS

Lab ID: L2330185-02
Client ID: WW-230888
Sample Location: Not Specified

Date Collected: 05/31/23 11:05
Date Received: 05/31/23
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	06/01/23 10:55	06/01/23 12:28	121,10200H	LOF



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2330185
Report Date: 06/13/23

SAMPLE RESULTS

Lab ID: L2330185-03
Client ID: WW-230889
Sample Location: Not Specified

Date Collected: 05/31/23 11:05
Date Received: 05/31/23
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	2.33		mg/m3	2.00	NA	1	06/01/23 10:55	06/01/23 12:28	121,10200H	LOF



Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L2330185

Project Number: Not Specified

Report Date: 06/13/23

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: WG1785984-1										
Chlorophyll A	ND		mg/m3	2.00	NA	1	06/01/23 10:55	06/01/23 12:28	121,10200H	LOF



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2330185
Report Date: 06/13/23

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information
Cooler A
Custody Seal Absent

Container Information		Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
Container ID	Container Type							
L2330185-01A	Brown Plastic 1000ml unpreserved	NA	NA	3.2	Y	Absent		CHLORO-A(1)
L2330185-01B	Brown Plastic 1000ml unpreserved	NA	NA	3.2	Y	Absent		CHLORO-A(1)
L2330185-02A	Brown Plastic 1000ml unpreserved	NA	NA	3.2	Y	Absent		CHLORO-A(1)
L2330185-02B	Brown Plastic 1000ml unpreserved	NA	NA	3.2	Y	Absent		CHLORO-A(1)
L2330185-03A	Brown Plastic 1000ml unpreserved	NA	NA	3.2	Y	Absent		CHLORO-A(1)
L2330185-03B	Brown Plastic 1000ml unpreserved	NA	NA	3.2	Y	Absent		CHLORO-A(1)



Project Name: PLYMOUTH ENVIRONMENTAL MGMT

Lab Number: L2330185

Project Number: Not Specified

Report Date: 06/13/23

GLOSSARY

Acronyms

DL	- 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 limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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.
LCS D	- 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.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
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.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
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.

Report Format: DU Report with 'J' Qualifiers



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2330185
Report Date: 06/13/23

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.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benzo(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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 Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- 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.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- 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.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2330185
Report Date: 06/13/23

Data Qualifiers

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- 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.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Project Name: PLYMOUTH ENVIRONMENTAL MGMT
Project Number: Not Specified

Lab Number: L2330185
Report Date: 06/13/23

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 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D/8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; 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, SM4500NO₂-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, **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 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: 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 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, 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, EPA 537.1.

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, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

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

LABORATORY REPORT

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

Date Received: 6/8/2023
Date Reported: 6/15/2023
P.O. Number WW-230887-889

Work Order #: 2306-09139

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 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:



Kristin Phelan
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

R.I. Analytical Laboratories, Inc.

Laboratory Report

Envirotech Laboratories, Inc.

Work Order #: 2306-09139

Project Name: PLYMOUTH ENV.

Sample Number: 001
Sample Description: WW-230887 S-10 AT 2-4 HST
Sample Type : GRAB
Sample Date / Time : 5/31/2023 @ 11:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	6/13/2023 11:17	VC
TOC Low Level	0.61	0.50	mg/L	SM5310C 21 ed.	6/12/2023 15:21	KPG
DOC	0.59	0.50	mg/L	SM5310C 21 ed.	6/12/2023 15:21	KPG

Sample Number: 002
Sample Description: WW-230888 S-7 AT 2-4 HST
Sample Type : GRAB
Sample Date / Time : 5/31/2023 @ 11:05

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	6/13/2023 11:17	VC
TOC Low Level	0.63	0.50	mg/L	SM5310C 21 ed.	6/12/2023 15:21	KPG
DOC	0.55	0.50	mg/L	SM5310C 21 ed.	6/12/2023 15:21	KPG

Sample Number: 003
Sample Description: WW-230889A S-8A AT 2-4 HST
Sample Type : GRAB
Sample Date / Time : 5/31/2023 @ 11:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Ammonia (as N)	<0.020	0.020	mg/L	SM4500NH3-B,H 18-21ed	6/13/2023 11:17	VC
TOC Low Level	0.61	0.50	mg/L	SM5310C 21 ed.	6/12/2023 15:21	KPG
DOC	0.55	0.50	mg/L	SM5310C 21 ed.	6/12/2023 15:21	KPG

Sample Number: 004
Sample Description: WW-230889B FILTER BLANK
Sample Type : GRAB
Sample Date / Time : 5/31/2023 @ 16:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
DOC	<0.50	0.50	mg/L	SM5310C 21 ed.	6/12/2023 15:21	KPG

2

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@plymouth-ma.gov
Project Name: **Harbor Sampling** -Plymouth MA
Sampler: Kim Tower (KT)

JULY

NEED RESULTS FOR PERMITTING DEADLINE BY END OF FIRST WEEK OF FOLLOWING MONTH

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
5/31/23	11:00 am	S-10 2-4 HST	1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE
5/31/23	11:05 am	S-7 2-4 HST	1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			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

Mike Cahill

5/31/23

Received By:

Date/Time:

11/5/23 1150

SCANNED
JUL 05 2023

D

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@plymouth-ma.gov
Project Name: **Harbor Sampling** -Plymouth MA
Sampler: Kim Tower (KT)

NEED RESULTS FOR PERMITTING DEADLINE BY END OF FIRST WEEK OF FOLLOWING MONTH

Date	Time	Sample ID	# bottles	Type bottle	Analysis	Preservative
5/31/23	11:05am	S-8A 2-4 H ST	1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			2	1 Liter Amber Plastic	Chlorophyll-a	NONE
			1	1 Liter Plastic	TDS, Diss (TKN, TOC, TP)	NONE
			1	1 Liter Plastic	TKN, TN, TP, TOC	NONE
			1	500mL Plastic	NO2, NO3	None
			1	Glass	Ortho	NONE
			1	Plastic	Bacteria e-coli	Sterile
			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

Mike Cahill

5/31/23

Received By: Date/Time:

12/22 5/31/23 1150

LABORATORY REPORT

Woodard & Curran, Inc.
Attn: Sean Driscoll
131 Camelot Drive
Plymouth, MA 02360

Date Received: 1/10/2023
Date Reported: 1/20/2023
P.O. Number

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

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 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

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 001
Sample Description: 475 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 1/10/2023 @ 10:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Alkalinity (as CaCO ₃)	6.8	1.0	mg/l	SM2320B 18-21ed	1/11/2023	16:50	JMF
Orthophosphate	<0.020	0.020	mg/l	SM 4500 P E-2011	1/11/2023	22:46	GR
Total Phosphorus (as P)	0.018	0.010	mg/L	SM4500P-B,E-2011	1/17/2023	12:00	JCH
Nitrite (as N)	<0.050	0.050	mg/l	EPA 300.0	1/12/2023	5:40	GR
Nitrate (as N)	3.7	0.050	mg/l	EPA 300.0	1/12/2023	5:40	GR
Chloride	240	1.0	mg/l	EPA 300.0	1/12/2023	5:40	GR
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	1/17/2023	8:50	KLS
Volatile Organic Compounds							
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Chloroform	2.2	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	1/13/2023	5:43	SGM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Bromoform	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Benzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Toluene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 001
Sample Description: 475 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 1/10/2023 @ 10:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Acetone	<10	10	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Acrolein	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Styrene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	5:43	SGM
Bromochloromethane	<1.0	1.0	ug/l	EPA 624.1	1/13/2023	5:43	SGM
Surrogates			RANGE	EPA 624.1	1/13/2023	5:43	SGM
Dibromofluoromethane	99		60-140%	EPA 624.1	1/13/2023	5:43	SGM
Toluene-D8	102		60-140%	EPA 624.1	1/13/2023	5:43	SGM
4-Bromofluorobenzene	101		60-140%	EPA 624.1	1/13/2023	5:43	SGM
Total Metals							
Boron	0.054	0.010	mg/L	EPA 200.7	1/12/2023	17:31	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	1/12/2023	17:31	KK
Sodium	110	0.050	mg/L	EPA 200.7	1/12/2023	17:31	KK
ICP Digestion				EPA 200.7	1/11/2023	16:38	KK

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 002
Sample Description: IS WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 1/10/2023 @ 12:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Alkalinity (as CaCO ₃)	5.9	1.0	mg/l	SM2320B 18-21ed	1/11/2023	16:50	JMF
Orthophosphate	<0.020	0.020	mg/l	SM 4500 P E-2011	1/11/2023	22:46	GR
Total Phosphorus (as P)	0.037	0.010	mg/L	SM4500P-B,E-2011	1/17/2023	17:45	ZAC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	1/12/2023	9:54	GR
Nitrate (as N)	0.92	0.050	mg/L	EPA 300.0	1/12/2023	9:54	GR
Chloride	16	1.0	mg/L	EPA 300.0	1/12/2023	9:54	GR
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	1/17/2023	8:50	KLS
Volatile Organic Compounds							
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Chloroform	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	1/13/2023	6:14	SGM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Bromoform	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Benzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Toluene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 002
Sample Description: IS WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 1/10/2023 @ 12:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Acetone	<10	10	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Acrolein	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Styrene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:14	SGM
Bromochloromethane	<1.0	1.0	ug/l	EPA 624.1	1/13/2023	6:14	SGM
Surrogates			RANGE	EPA 624.1	1/13/2023	6:14	SGM
Dibromofluoromethane	97		60-140%	EPA 624.1	1/13/2023	6:14	SGM
Toluene-D8	98		60-140%	EPA 624.1	1/13/2023	6:14	SGM
4-Bromofluorobenzene	92		60-140%	EPA 624.1	1/13/2023	6:14	SGM
Total Metals							
Boron	0.028	0.010	mg/L	EPA 200.7	1/12/2023	17:33	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	1/12/2023	17:33	KK
Sodium	10	0.050	mg/L	EPA 200.7	1/12/2023	17:33	KK
ICP Digestion				EPA 200.7	1/11/2023	16:38	KK

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 003
Sample Description: 6D WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 1/10/2023 @ 09:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Alkalinity (as CaCO ₃)	7.8	1.0	mg/l	SM2320B 18-21ed	1/11/2023	16:50	JMF
Orthophosphate	<0.020	0.020	mg/l	SM 4500 P E-2011	1/11/2023	22:46	GR
Total Phosphorus (as P)	0.014	0.010	mg/L	SM4500P-B,E-2011	1/17/2023	12:00	JCH
Nitrite (as N)	<0.050	0.050	mg/l	EPA 300.0	1/12/2023	3:49	GR
Nitrate (as N)	3.5	0.050	mg/l	EPA 300.0	1/12/2023	3:49	GR
Chloride	150	1.0	mg/l	EPA 300.0	1/12/2023	3:49	GR
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	1/17/2023	8:50	KLS
Volatile Organic Compounds							
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Chloroform	1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	1/13/2023	6:44	SGM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Bromoform	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Benzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Toluene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 003
Sample Description: 6D WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 1/10/2023 @ 09:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Acetone	<10	10	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Acrolein	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Styrene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	6:44	SGM
Bromochloromethane	<1.0	1.0	ug/l	EPA 624.1	1/13/2023	6:44	SGM
Surrogates			RANGE	EPA 624.1	1/13/2023	6:44	SGM
Dibromofluoromethane	101		60-140%	EPA 624.1	1/13/2023	6:44	SGM
Toluene-D8	97		60-140%	EPA 624.1	1/13/2023	6:44	SGM
4-Bromofluorobenzene	81		60-140%	EPA 624.1	1/13/2023	6:44	SGM
Total Metals							
Boron	0.038	0.010	mg/L	EPA 200.7	1/12/2023	17:34	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	1/12/2023	17:34	KK
Sodium	83	0.050	mg/L	EPA 200.7	1/12/2023	17:34	KK
ICP Digestion				EPA 200.7	1/11/2023	16:38	KK

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 004
Sample Description: 6S WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 1/10/2023 @ 09:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	13	1.0	mg/l	SM2320B 18-21ed	1/11/2023 16:50	JMF
Orthophosphate	<0.020	0.020	mg/l	SM 4500 P E-2011	1/11/2023 22:46	GR
Total Phosphorus (as P)	<0.010	0.010	mg/L	SM4500P-B,E-2011	1/17/2023 12:00	JCH
Nitrite (as N)	<0.050	0.050	mg/l	EPA 300.0	1/12/2023 2:13	GR
Nitrate (as N)	2.1	0.050	mg/l	EPA 300.0	1/12/2023 2:13	GR
Chloride	21	1.0	mg/l	EPA 300.0	1/12/2023 2:13	GR
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	1/16/2023 9:15	KLS
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	1/13/2023 7:14	SGM
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
Chloroform	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	1/13/2023 7:14	SGM
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	1/13/2023 7:14	SGM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
Bromoform	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
Benzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
Toluene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:14	SGM

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 004
Sample Description: 6S WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 1/10/2023 @ 09:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:14	SGM
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:14	SGM
Acetone	<10	10	ug/L	EPA 624.1	1/13/2023	7:14	SGM
Acrolein	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:14	SGM
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:14	SGM
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:14	SGM
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:14	SGM
Styrene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:14	SGM
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:14	SGM
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:14	SGM
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:14	SGM
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:14	SGM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:14	SGM
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:14	SGM
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:14	SGM
Bromochloromethane	<1.0	1.0	ug/l	EPA 624.1	1/13/2023	7:14	SGM
Surrogates			RANGE	EPA 624.1	1/13/2023	7:14	SGM
Dibromofluoromethane	98		60-140%	EPA 624.1	1/13/2023	7:14	SGM
Toluene-D8	96		60-140%	EPA 624.1	1/13/2023	7:14	SGM
4-Bromofluorobenzene	82		60-140%	EPA 624.1	1/13/2023	7:14	SGM
Total Metals							
Boron	0.025	0.010	mg/L	EPA 200.7	1/12/2023	17:36	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	1/12/2023	17:36	KK
Sodium	21	0.050	mg/L	EPA 200.7	1/12/2023	17:36	KK
ICP Digestion				EPA 200.7	1/11/2023	16:38	KK

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 005
Sample Description: A9 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 1/10/2023 @ 11:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	50	1.0	mg/l	SM2320B 18-21ed	1/11/2023 16:50	JMF
Orthophosphate	<0.020	0.020	mg/l	SM 4500 P E-2011	1/11/2023 22:46	GR
Total Phosphorus (as P)	0.021	0.010	mg/L	SM4500P-B,E-2011	1/17/2023 12:00	JCH
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	1/12/2023 9:23	GR
Nitrate (as N)	4.5	0.050	mg/L	EPA 300.0	1/12/2023 9:23	GR
Chloride	580	10	mg/l	EPA 300.0	1/18/2023 19:29	GR
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	1/17/2023 8:50	KLS
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	1/13/2023 7:44	SGM
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
Chloroform	6.1	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	1/13/2023 7:44	SGM
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	1/13/2023 7:44	SGM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
Bromoform	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
Benzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
Toluene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 7:44	SGM

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 005
Sample Description: A9 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 1/10/2023 @ 11:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:44	SGM
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:44	SGM
Acetone	<10	10	ug/L	EPA 624.1	1/13/2023	7:44	SGM
Acrolein	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:44	SGM
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:44	SGM
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:44	SGM
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:44	SGM
Styrene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:44	SGM
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:44	SGM
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:44	SGM
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:44	SGM
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:44	SGM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:44	SGM
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:44	SGM
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	7:44	SGM
Bromochloromethane	<1.0	1.0	ug/l	EPA 624.1	1/13/2023	7:44	SGM
Surrogates			RANGE	EPA 624.1	1/13/2023	7:44	SGM
Dibromofluoromethane	97		60-140%	EPA 624.1	1/13/2023	7:44	SGM
Toluene-D8	99		60-140%	EPA 624.1	1/13/2023	7:44	SGM
4-Bromofluorobenzene	82		60-140%	EPA 624.1	1/13/2023	7:44	SGM
Total Metals							
Boron	0.18	0.010	mg/L	EPA 200.7	1/12/2023	17:37	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	1/12/2023	17:37	KK
Sodium	390	1.0	mg/L	EPA 200.7	1/12/2023	18:07	KK
ICP Digestion				EPA 200.7	1/11/2023	16:38	KK

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 006
Sample Description: A8 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 1/10/2023 @ 11:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	110	1.0	mg/l	SM2320B 18-21ed	1/11/2023 16:50	JMF
Orthophosphate	3.1	0.020	mg/l	SM 4500 P E-2011	1/11/2023 22:46	GR
Total Phosphorus (as P)	2.9	0.010	mg/L	SM4500P-B,E-2011	1/17/2023 12:00	JCH
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	1/12/2023 8:51	GR
Nitrate (as N)	3.5	0.050	mg/L	EPA 300.0	1/12/2023 8:51	GR
Chloride	810	1.0	mg/L	EPA 300.0	1/12/2023 8:51	GR
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	1/17/2023 8:50	KLS
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	1/13/2023 8:15	SGM
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
Chloroform	6.4	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	1/13/2023 8:15	SGM
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	1/13/2023 8:15	SGM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
Bromoform	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
Benzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
Toluene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:15	SGM

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 006
Sample Description: A8 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 1/10/2023 @ 11:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:15	SGM
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:15	SGM
Acetone	<10	10	ug/L	EPA 624.1	1/13/2023	8:15	SGM
Acrolein	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:15	SGM
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:15	SGM
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:15	SGM
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:15	SGM
Styrene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:15	SGM
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:15	SGM
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:15	SGM
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:15	SGM
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:15	SGM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:15	SGM
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:15	SGM
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:15	SGM
Bromochloromethane	<1.0	1.0	ug/l	EPA 624.1	1/13/2023	8:15	SGM
Surrogates			RANGE	EPA 624.1	1/13/2023	8:15	SGM
Dibromofluoromethane	99		60-140%	EPA 624.1	1/13/2023	8:15	SGM
Toluene-D8	97		60-140%	EPA 624.1	1/13/2023	8:15	SGM
4-Bromofluorobenzene	78		60-140%	EPA 624.1	1/13/2023	8:15	SGM
Total Metals							
Boron	0.23	0.010	mg/L	EPA 200.7	1/12/2023	17:53	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	1/12/2023	17:53	KK
Sodium	483	1.0	mg/L	EPA 200.7	1/12/2023	18:09	KK
ICP Digestion				EPA 200.7	1/11/2023	16:38	KK

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Orthophosphate - Result is greater than Total Phosphorus (as P), however results are within duplicate criteria of each other.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 007
Sample Description: A10 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 1/10/2023 @ 12:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	13	1.0	mg/l	SM2320B 18-21ed	1/11/2023 16:50	JMF
Orthophosphate	<0.020	0.020	mg/l	SM 4500 P E-2011	1/11/2023 22:46	GR
Total Phosphorus (as P)	0.11	0.010	mg/L	SM4500P-B,E-2011	1/17/2023 17:45	ZAC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	1/12/2023 10:10	GR
Nitrate (as N)	2.5	0.050	mg/L	EPA 300.0	1/12/2023 10:10	GR
Chloride	310	10	mg/l	EPA 300.0	1/18/2023 19:14	GR
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	1/17/2023 8:50	KLS
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	1/13/2023 8:45	SGM
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
Chloroform	2.6	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	1/13/2023 8:45	SGM
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	1/13/2023 8:45	SGM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
Bromoform	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
Benzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
Toluene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023 8:45	SGM

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 007
Sample Description: A10 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 1/10/2023 @ 12:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:45	SGM
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:45	SGM
Acetone	<10	10	ug/L	EPA 624.1	1/13/2023	8:45	SGM
Acrolein	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:45	SGM
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:45	SGM
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:45	SGM
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:45	SGM
Styrene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:45	SGM
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:45	SGM
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:45	SGM
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:45	SGM
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:45	SGM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:45	SGM
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:45	SGM
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	8:45	SGM
Bromochloromethane	<1.0	1.0	ug/l	EPA 624.1	1/13/2023	8:45	SGM
Surrogates			RANGE	EPA 624.1	1/13/2023	8:45	SGM
Dibromofluoromethane	97		60-140%	EPA 624.1	1/13/2023	8:45	SGM
Toluene-D8	98		60-140%	EPA 624.1	1/13/2023	8:45	SGM
4-Bromofluorobenzene	103		60-140%	EPA 624.1	1/13/2023	8:45	SGM
Total Metals							
Boron	0.089	0.010	mg/L	EPA 200.7	1/12/2023	17:54	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	1/12/2023	17:54	KK
Sodium	200	0.050	mg/L	EPA 200.7	1/12/2023	17:54	KK
ICP Digestion				EPA 200.7	1/11/2023	16:38	KK

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 008
Sample Description: A11 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 1/10/2023 @ 10:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Alkalinity (as CaCO ₃)	5.9	1.0	mg/l	SM2320B 18-21ed	1/11/2023	16:50	JMF
Orthophosphate	<0.020	0.020	mg/l	SM 4500 P E-2011	1/11/2023	22:46	GR
Total Phosphorus (as P)	<0.010	0.010	mg/L	SM4500P-B,E-2011	1/17/2023	12:00	JCH
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	1/12/2023	8:03	GR
Nitrate (as N)	1.9	0.050	mg/L	EPA 300.0	1/12/2023	8:03	GR
Chloride	84	1.0	mg/L	EPA 300.0	1/12/2023	8:03	GR
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	1/17/2023	8:50	KLS
Volatile Organic Compounds							
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Chloroform	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	1/13/2023	9:15	SGM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Bromoform	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Benzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Toluene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 008
Sample Description: A11 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 1/10/2023 @ 10:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Acetone	<10	10	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Acrolein	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Styrene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:15	SGM
Bromochloromethane	<1.0	1.0	ug/l	EPA 624.1	1/13/2023	9:15	SGM
Surrogates			RANGE	EPA 624.1	1/13/2023	9:15	SGM
Dibromofluoromethane	140		60-140%	EPA 624.1	1/13/2023	9:15	SGM
Toluene-D8	94		60-140%	EPA 624.1	1/13/2023	9:15	SGM
4-Bromofluorobenzene	89		60-140%	EPA 624.1	1/13/2023	9:15	SGM
Total Metals							
Boron	0.015	0.010	mg/L	EPA 200.7	1/12/2023	17:56	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	1/12/2023	17:56	KK
Sodium	47	0.050	mg/L	EPA 200.7	1/12/2023	17:56	KK
ICP Digestion				EPA 200.7	1/11/2023	16:38	KK

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 009
Sample Description: A16 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 1/10/2023 @ 10:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Alkalinity (as CaCO ₃)	120	1.0	mg/l	SM2320B 18-21ed	1/11/2023	16:50	JMF
Orthophosphate	0.036	0.020	mg/l	SM 4500 P E-2011	1/11/2023	22:46	GR
Total Phosphorus (as P)	0.052	0.010	mg/L	SM4500P-B,E-2011	1/17/2023	12:00	JCH
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	1/12/2023	9:39	GR
Nitrate (as N)	3.1	0.050	mg/l	EPA 300.0	1/12/2023	9:39	GR
Chloride	820	10	mg/L	EPA 300.0	1/12/2023	9:39	GR
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	1/17/2023	8:50	KLS
Volatile Organic Compounds							
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Chloroform	6.5	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	1/13/2023	9:45	SGM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Dibromochloromethane	2.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Bromoform	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Benzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Toluene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2301-00508

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 009
Sample Description: A16 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 1/10/2023 @ 10:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Acetone	<10	10	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Acrolein	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Styrene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	1/13/2023	9:45	SGM
Bromochloromethane	<1.0	1.0	ug/l	EPA 624.1	1/13/2023	9:45	SGM
Surrogates			RANGE	EPA 624.1	1/13/2023	9:45	SGM
Dibromofluoromethane	100		60-140%	EPA 624.1	1/13/2023	9:45	SGM
Toluene-D8	98		60-140%	EPA 624.1	1/13/2023	9:45	SGM
4-Bromofluorobenzene	91		60-140%	EPA 624.1	1/13/2023	9:45	SGM
Total Metals							
Boron	0.23	0.010	mg/L	EPA 200.7	1/12/2023	17:57	KK
Copper	0.0053	0.0050	mg/L	EPA 200.7	1/12/2023	17:57	KK
Sodium	520	1.0	mg/L	EPA 200.7	1/12/2023	18:11	KK
ICP Digestion				EPA 200.7	1/11/2023	16:38	KK

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.



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Hudson, MA 01749-1331
Tel: 800-937-2580

Date		Time		Field Sample Identification		Grab or Composite	# of Containers & Type	Preservation Code P	TKN	TOTAL PHOS	NITRITE NO2	NITRATE NO3	ORTHO PHOS	ALKALINITY	CHLORIDE	COPPER	BORON	SODIUM	EPA 624 VOC
Collected	Collected																		
1/10/23	1000	475	WELL	quarterly	250 mL sulfuric	G	1P	S	GW	X									
1/10/23	1000	475	WELL	quarterly	250mL nitric	G	1P	N	GW							X	X		
1/10/23	1000	475	WELL	quarterly	VOC 40 mL thio	G	2V	T	GW										X
1/10/23	1000	475	WELL	quarterly	250 mL	G	1P	NP	GW		X								
1/10/23	1000	475	WELL	quarterly	250 mL	G	1P	NP	GW				X						
1/10/23	1000	475	WELL	quarterly	250 mL	G	1P	NP	GW					X					
1/10/23	1000	475	WELL	quarterly	250 mL	G	1P	NP	GW						X				

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant -----WWTP-----
Address:	131 Camelot Drive	P.O. Number:	Project Number:
City / State / Zip:	Plymouth MA 02360	Report To:	Sean d
Main Telephone:	508-830-4159 x207	Cell:	774-608-1213
Contact Person:	Sean d	Phone:	508-830-4159
		Sampled by:	
		Quote No:	
		Email addresses:	

Relinquished By Signatures		Received By Signatures	
Signature	Date	Signature	Date
AS	1/10/23 1440	MS	1/10/23 1440
RA	1/10/23 1730	SL	1/10/23 1730

Reporting Options		Project Comments	
MCP Standard		Email results to jfreeman@woodardcurran.com ; sdriscoll@woodardcurran.com .	
MWRA eSMART			
State Report & Upload			
		Project Comments	
		5.5	
		AK	
		Lab Use Only	
		Sample Pick Up Only	
		RIAL sampled; attach field hours	
		Received on Ice	
		No Ice	
		Turn Around Time	
		Normal	
		5-7 Business days	
		Rush - Date Due:	
		Worker No: 4301-00508	
		Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, SF=Sterile Preservatives; A=Ascorbic Acid, NH4=NH4Cl, DI=DI-H2O, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SH=NaOH, T=Na2S2O3, Z=ZnOAC	
		Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Mpse, O=	
		Page 1 of 9	



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Tel: 800-937-2580

Date	Time	Field Sample Identification	Grab or Composite	# of Containers & Type ^C	Preservation Code ^P	Matrix Code ^M	TKN	TOTAL PHOS	NITRITE NO2	NITRATE NO3	ORTHO PHOS	ALKALINITY	CHLORIDE	COPPER	BORON	SODIUM	EPA 624 VOC
10/23	1210	IS WELL quarterly 250 ml sulfuric	G	1P	S	GW	X	X									
10/23	1210	IS WELL quarterly 250ml nitric	G	1P	N	GW								X	X	X	
10/23	1210	IS WELL quarterly VOC 40 ml thio	G	2V	T	GW											X
10/23	1210	IS WELL quarterly 250 ml	G	1P	NP	GW			X	X							
10/23	1210	IS WELL quarterly 250 ml	G	1P	NP	GW					X						
10/23	1210	IS WELL quarterly 250 ml	G	1P	NP	GW						X					
10/23	1210	IS WELL quarterly 250 ml	G	1P	NP	GW							X				

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant -----WWTP-----
Address:	131 Camelot Drive	P.O. Number:	
City / State / Zip:	Plymouth MA 02360	Report To:	Sean d
Main Telephone:	508-830-4159 x207	Cell:	774-608-1213
Contact Person:	Sean d	Sampled by:	
		Quote No:	
		Email addresses	

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time
	10/23	1440		11/03	1440

Reporting Options	Project Comments
MCP Standard	
MVRA eSMART	
State Report & Upload	

Lab Use Only	
Sample Pick Up Only	
RIAL sampled; attach field hours	
Received on Ice	No Ice

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, DI=DI-H2O, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SH=NaOH, T=Na2S2O3, Z=ZnOAc

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=

Workorder No: 2301-00508

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Hudson, MA 01749-1331
Tel: 800-937-2580

EPA 624 VOC

[illegible]

Client Information

Company Name:	Woodard & Curran
Address:	131 Camelot Drive
City / State / Zip:	Plymouth MA 02360
Main Telephone:	508-830-4159 x207
Contact Person:	Sean d

Project Information

Project Name: Well Quarterly main plant		WMWTP	
P.O. Number:		Project Number:	
Report To: Sean d	Cell: 774-608-1213	Phone: 508-830-4159	
Sampled by:	Email addresses		
Quote No:			

Relinquished By Signatures

D B/Signatures	Date	Time	Received by Signatures	Date	Time
	11/02/23	1440		11/02/23	1440
	11/02/23	1730			

Turn Around Time

Turn Around Time		
X	Normal	X EMAIL Report
X	5-7 Business days	
Rush - Date Due: / /		

Reporting Options

MCP Standard

MWRA eSMART

State Report & Upload

Email results to ifreeman@woodardcurran.com; sdricoll@woodardcurran.com.

Project Comments

Lab Use Only

Sample Pick Up Only

RIAL sampled; attach field hours

Received on Ice	No Ice
-----------------	--------

Werkorder No:

2301-10508

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH₄Cl, DI=DI-H₂O, H=HCl, M=MeOH, N=HNO₃, NP=None, S=H₂SO₄, SH=NaOH, T=Na₂S₂O₃, Z=ZnOAc

C=Cement, CV=Cause water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=BulkSolid, WP=Wipe, O=

Tanin, Ison, Dacatin 5.7 or

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Grab or Composite

of Containers &
Type^CPreservation Code ^PMatrix Code ^M

TKN

TOTAL PHOS

NITRITE NO2

NITRATE NO3

ORTHO PHOS

ALKALINITY

CHLORIDE

COPPER

BORON

SODIUM

EPA 624 VOC

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant -----WWTP-----
Address:	131 Camelot Drive	P.O. Number:	Project Number:
City / State / Zip:	Plymouth MA 02360	Report To:	Sean d
Main Telephone:	508-830-4159 x207	Sampled by:	Cell: 774-608-1213
Contact Person:	Sean d	Quote No:	Phone: 508-830-4159
		Email addresses	

Relinquished By Signatures

Date	Time
------	------

Received By Signatures

Date	Time
------	------

Turn Around Time

☒	Normal	☒	EMAIL Report
-------------------------------------	--------	-------------------------------------	--------------

5-7 Business days

Rush - Date Due: /

Reporting Options

MCP Standard

MWR eSMART

State Report & Upload

Email results to jfreeman@woodardcurran.com, sdiscoll@woodardcurran.com,

Project Comments

Lab Use Only

Sample Pick Up Only

RIAL sampled; attach field hours

[illegible]

Workorder No: 2301-00508

Matrix Codes: GW=Groundwater, SW=Surface Water, W=Wal, ST=Dentine Freeze-dried, A=A=Ascorbic Acid, NH₄=NH₄Cl, DI=DI+H₂O, H=HCl, M=Mech, N=Nitro, NP=None, S=S-H₂SO₄, SH=NaOH, T=Na₂S₂O₃, Z=ZnOAc

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Tel: 800-937-2580

Date	Time	Field Sample Identification	Grab or Composite	# of Containers & Type ^C	Preservation Code ^P	Matrix Code ^M	TKN	TOTAL PHOS	NITRITE NO2	NITRATE NO3	ORTHO PHOS	ALKALINITY	CHLORIDE	COPPER	BORON	SODIUM	EPA 624 VOC
1/10/23	11:20	A9 WELL quarterly 250 mL sulfuric	G	1P	S	GW	X	X									
1/10/23	11:20	A9 WELL quarterly 250mL nitric	G	1P	N	GW								X	X	X	
1/10/23	11:20	A9 WELL quarterly VOC 40 mL thio	G	2V	T	GW											X
1/10/23	11:20	A9 WELL quarterly 250 mL	G	1P	NP	GW			X	X							
1/10/23	11:20	A9 WELL quarterly 250 mL	G	1P	NP	GW					X						
1/10/23	11:20	A9 WELL quarterly 250 mL	G	1P	NP	GW						X					
1/10/23	11:20	A9 WELL quarterly 250 mL	G	1P	NP	GW							X				

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant - WWTP
Address:	131 Camelot Drive	P.O. Number:	
City / State / Zip:	Plymouth MA 02360	Report To:	Sean d
Main Telephone:	508-830-4159 x207	Cell:	774-608-1213
Contact Person:	Sean d	Sampled by:	
		Quote No:	
		Email addresses	

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time
<i>[Signature]</i>	1/10/23	1440	<i>[Signature]</i>	1/10/23	1440

Reporting Options		Project Comments	
MCP Standard			
MWRA eSMART		Email results to jfreeman@woodardcurran.com; sdtriscoll@woodardcurran.com.	
State Report & Upload			
Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, DI=DI-H2O, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SH=NaOH, T=Na2S2O3, Z=ZnOAc		Turn Around Time	
Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=		Normal X EMAIL Report	
		5-7 Business days	
		Rush - Date Due: / /	
Lab Use Only			
Sample Pick Up Only			
RIAL sampled, attach field hours			
Received on Ice			
No Ice			
Workorder No: 2301-00508			
Page 5 of 9			

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Tel: 800-937-2580

Date Collected	Time Collected	Field Sample Identification	Grab or Composite	# of Containers & Type ^C	Preservation Code ^P	Matrix Code ^M	TKN	TOTAL PHOS	NITRITE NO2	NITRATE NO3	ORTHO PHOS	ALKALINITY	CHLORIDE	COPPER	BORON	SODIUM	EPA 624 VOC
1/10/23	12:25	A10 WELL quarterly 250 mL sulfuric	G	1P	S	GW	X	X									
1/10/23	12:25	A10 WELL quarterly 250mL nitric	G	1P	N	GW								X	X	X	
1/10/23	12:25	A10 WELL quarterly VOC 40 mL thio	G	2V	T	GW											X
1/10/23	12:25	A10 WELL quarterly 250 mL	G	1P	NP	GW			X	X							
1/10/23	12:25	A10 WELL quarterly 250 mL	G	1P	NP	GW					X						
1/10/23	12:25	A10 WELL quarterly 250 mL	G	1P	NP	GW						X					
1/10/23	12:25	A10 WELL quarterly 250 mL	G	1P	NP	GW							X				

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant -----WWTP-----
Address:	131 Camelot Drive	P.O. Number:	
City / State / Zip:	Plymouth MA 02360	Report To:	Sean d
Main Telephone:	508-830-4159 x207	Cell:	774-608-1213
Contact Person:	Sean d	Sampled by:	
		Quote No:	
		Email addresses	

Relinquished By Signatures		Received By Signatures	
Date	Time	Date	Time
1/10/23	1440	1/10/23	1440
1/10/23	1730		

Reporting Options		Project Comments	
MCP Standard			
MWRA eSMART			
State Report & Upload			
Email results to jfreeman@woodardcurran.com; sdtriscoll@woodardcurran.com.			
Lab Use Only			
Sample Pick Up Only			
RLAT sampled; attach field hours			
Received on Ice			
No Ice			
Workorder No: 2301-00508			

Combiners: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, DI=DI-H2O, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SH=NaOH, T=Na2S2O3, Z=ZnOAc

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=

5.5 or 144

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Tel: 800-937-2580

Date Collected	Time Collected	Field Sample Identification	Grab or Composite	# of Containers & Type ^C	Preservation Code ^P	Matrix Code ^M	TKN	TOTAL PHOS	NITRITE NO2	NITRATE NO3	ORTHO PHOS	ALKALINITY	CHLORIDE	COPPER	BORON	SODIUM	EPA 624 VOC
1/10/23	1030	All WELL quarterly 250 mL sulfuric	G	1P	S	GW	X	X									
1/16/23	1030	All WELL quarterly 250mL nitric	G	1P	N	GW								X	X	X	
1/16/23	1030	All WELL quarterly VOC 40 mL thio	G	2V	T	GW											X
1/10/23	1030	All WELL quarterly 250 mL	G	1P	NP	GW		X	X								
1/10/23	1030	All WELL quarterly 250 mL	G	1P	NP	GW				X							
1/10/23	1030	All WELL quarterly 250 mL	G	1P	NP	GW					X						
1/10/23	1030	All WELL quarterly 250 mL	G	1P	NP	GW						X					
1/10/23	1030	All WELL quarterly 250 mL	G	1P	NP	GW							X				

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant -----WWTP-----
Address:	131 Camelot Drive	P.O. Number:	
City / State / Zip:	Plymouth MA 02360	Report To:	Sean d
Main Telephone:	508-830-4159 x207	Cell:	774-608-1213
Contact Person:	Sean d	Sampled by:	
		Quote No:	
		Email addresses	

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time
<i>[Signature]</i>	1/10/23	1440	<i>[Signature]</i>	1/10/23	1440
<i>[Signature]</i>	1/10/23	1730			

Reporting Options		Project Comments	
MCP Standard		Email results to jfreeman@woodardcurran.com; sdtriscoll@woodardcurran.com.	
MMRA eSMART			
State Report & Upload			
Lab Use Only			
Sample Pick Up Only			
R/LAL sampled, attach field hours			
Received on Ice			
No Ice			
Workorder No: 2301-00508			

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, DI=DI-H2O, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SH=NaOH, T=Na2S2O3, Z=ZnOAc
Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=

LABORATORY REPORT

Woodard & Curran, Inc.
Attn: Sean Driscoll
131 Camelot Drive
Plymouth, MA 02360

Date Received: 2/16/2023
Date Reported: 2/22/2023
P.O. Number

Work Order #: 2302-02715

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

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 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.

Jonathan Augusto for
Approved by:



Brent Plant
Data Reporting

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2302-02715

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 001
Sample Description: WELL A8
Sample Type : GRAB
Sample Date / Time : 2/15/2023 @ 14:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	2.6	0.020	mg/L	SM 4500 P E-2011	2/16/2023 23:43	GR
Total Phosphorus (as P)	3.3	0.010	mg/L	SM4500P-B,E-2011	2/20/2023 13:00	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 002
Sample Description: WELL A9
Sample Type : GRAB
Sample Date / Time : 2/15/2023 @ 12:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	0.031	0.020	mg/L	SM 4500 P E-2011	2/16/2023 23:43	GR
Total Phosphorus (as P)	0.047	0.010	mg/L	SM4500P-B,E-2011	2/20/2023 13:00	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 003
Sample Description: WELL A10
Sample Type : GRAB
Sample Date / Time : 2/15/2023 @ 12:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	2/16/2023 23:43	GR
Total Phosphorus (as P)	0.025	0.010	mg/L	SM4500P-B,E-2011	2/20/2023 13:00	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2302-02715

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 004
Sample Description: WELL A11
Sample Type : GRAB
Sample Date / Time : 2/15/2023 @ 14:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	0.021	0.020	mg/L	SM 4500 P E-2011	2/16/2023 23:43	GR
Total Phosphorus (as P)	0.056	0.010	mg/L	SM4500P-B,E-2011	2/17/2023 11:30	JCH

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 005
Sample Description: WELL A16
Sample Type : GRAB
Sample Date / Time : 2/15/2023 @ 13:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	0.054	0.020	mg/L	SM 4500 P E-2011	2/16/2023 23:43	GR
Total Phosphorus (as P)	0.13	0.010	mg/L	SM4500P-B,E-2011	2/20/2023 13:00	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 006
Sample Description: WELL IS
Sample Type : GRAB
Sample Date / Time : 2/15/2023 @ 11:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	2/16/2023 23:43	GR
Total Phosphorus (as P)	0.038	0.010	mg/L	SM4500P-B,E-2011	2/20/2023 13:00	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2302-02715

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 007
Sample Description: WELL 475
Sample Type : GRAB
Sample Date / Time : 2/15/2023 @ 10:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	0.036	0.020	mg/L	SM 4500 P E-2011	2/16/2023 23:43	GR
Total Phosphorus (as P)	0.059	0.010	mg/L	SM4500P-B,E-2011	2/17/2023 11:30	JCH

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 008
Sample Description: WELL 6D
Sample Type : GRAB
Sample Date / Time : 2/15/2023 @ 11:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	0.027	0.020	mg/L	SM 4500 P E-2011	2/16/2023 23:43	GR
Total Phosphorus (as P)	0.082	0.010	mg/L	SM4500P-B,E-2011	2/17/2023 11:30	JCH

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 009
Sample Description: WELL 6S
Sample Type : GRAB
Sample Date / Time : 2/15/2023 @ 11:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	2/16/2023 23:43	GR
Total Phosphorus (as P)	0.034	0.010	mg/L	SM4500P-B,E-2011	2/20/2023 13:00	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date		Time		Field Sample Identification	
Collected	Collected				
2/15/23	14:15	Well (250 mL)	A8		
2/17/23		Well (250 mL)	A8		
2/23	12:20	Well (250 mL)	A9		
2/23		Well (250 mL)	A9		
2/23	12:30	Well (250 mL)	A10		
2/23		Well (250 mL)	A10		
2/23	14:40	Well (250 mL)	A11		
2/23		Well (250 mL)	A11		
2/23	13:50	Well (250 mL)	A16		
2/15/23		Well (250 mL)	A16		

Client Information

Company Name: **Woodard & Curran**
Address: **131 Camelot Drive**
City / State / Zip: **Plymouth, MA 02360**
Main Telephone: **508-830-4159**
Contact Person: **Sean Driscoll**

Project Information

Project Name: **Monthly Wells - Main Plant WWTP**
P.O. Number:
Report To: **Sean Driscoll** Cell: **401.578.9976** Phone:
Sampled by: **EMcNeill@woodardcurran.com**
Quote No: **rscott@woodardcurran.com**

Relinquished By Signatures

Date: **2/15/23** Time: **15:00**
Signature: *[Signature]*
Date: **2/16/23** Time: **15:00**
Signature: *[Signature]*
Date: **2/16/23** Time: **16:45**
Signature: *[Signature]*

Received By Signatures

Date: **2/15/23** Time: **15:00**
Signature: *[Signature]*
Date: **2/16/23** Time: **14:20**
Signature: *[Signature]*
Date: **2/16/23** Time: **16:45**
Signature: *[Signature]*

Turn Around Time

Normal ☒ EMAIL Report
5-7 Business days ☒
2 Business Days

Reporting Options

MCP Standard ☐
MWRA eSMART ☐
State Report & Upload ☐

Project Comments

Email results to **sdriscoll@woodardcurran.com** firemand@woodardcurran.com; kfontaine@woodardcurran.com; &
rscott@woodardcurran.com

Lab Use Only

Sample Pick Up Only ☒
RIAL sampled; attach field hours ☐
Received on Ice ☐ No Ice ☐

Workorder No: **2302 - 02315**

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, DI=DI-H2O, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SH=NaOH, T=Na2S2O8, Z=ZnOAc
Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date		Time		Field Sample Identification		Grab or Composite	# of Containers & Type	Preservation Code	Matrix Code	Total Phosphorus	Ortho Phosphate										
Collected	Time	Collected	Time	Well (250 mL)	IS																
2/15/23	11:46			Well (250 mL)	IS	G	1P	NP	GW	X											
2/15/23				Well (250 mL)	IS	G	1P	S	GW	X											
2/15/23	10:40			Well (250 mL)	475	G	1P	NP	GW	X											
2/15/23				Well (250 mL)	475	G	1P	S	GW	X											
2/15/23	11:00			Well (250 mL)	6D	G	1P	NP	GW	X											
2/15/23				Well (250 mL)	6D	G	1P	S	GW	X											
2/15/23	11:10			Well (250 mL)	6S	G	1P	NP	GW	X											
2/15/23				Well (250 mL)	6S	G	1P	S	GW	X											
2/15/23				Well (250 mL)		G	1P	NP	GW	X											
2/15/23				Well (250 mL)		G	1P	S	GW	X											

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Monthly Wells -- Main Plant WWTP
Address:	131 Camelot Drive	P.O. Number:	
City / State / Zip:	Plymouth, MA 02360	Report To:	Sean Driscoll
Main Telephone:	508-830-4159	Cell:	401.578.9976
Contact Person:	Sean Driscoll	Sampled by:	EMcNeil@woodardcurran.com
		Quote No:	rscott@woodardcurran.com

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time
	2/15/23	1500		2/15/23	1800
	2/16/23	1500		2/16/23	1420
	2/16/23	1645		2/16/23	1645

Reporting Options		Lab Use Only	
MCP Standard		Sample Pick Up Only	
MWRA eSMART		RIAL sampled: attach field hours	
State Report & Upload		Received on Ice	No Ice

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, DI=DI-H2O, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SH=NaOH, T=Na2S2O3, Z=ZnOAc
Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=

Workorder No 2302-02715

LABORATORY REPORT

Woodard & Curran, Inc.
Attn: Sean Driscoll
131 Camelot Drive
Plymouth, MA 02360

Date Received: 3/23/2023
Date Reported: 4/11/2023
P.O. Number

Work Order #: 2303-04749

Project Name: MONTHLY---- WELLS MAIN PLANT --- WWTP

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 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:



Kristin Phelan
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2303-04749

Project Name: MONTHLY---- WELLS MAIN PLANT --- WWTP

Sample Number: 001
Sample Description: WELL A16
Sample Type : GRAB
Sample Date / Time : 3/22/2023 @ 14:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	3/23/2023 23:16	GR
Total Phosphorus (as P)	0.068	0.010	mg/L	SM4500P-B,E-2011	3/31/2023 11:00	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 002
Sample Description: WELL 475
Sample Type : GRAB
Sample Date / Time : 3/22/2023 @ 09:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	3/23/2023 23:16	GR
Total Phosphorus (as P)	0.017	0.010	mg/L	SM4500P-B,E-2011	3/30/2023 15:10	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 003
Sample Description: WELL 6D
Sample Type : GRAB
Sample Date / Time : 3/22/2023 @ 10:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	3/23/2023 23:16	GR
Total Phosphorus (as P)	0.032	0.010	mg/L	SM4500P-B,E-2011	4/3/2023 14:28	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2303-04749

Project Name: MONTHLY---- WELLS MAIN PLANT --- WWTP

Sample Number: 004
Sample Description: WELL 6S
Sample Type : GRAB
Sample Date / Time : 3/22/2023 @ 10:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	3/23/2023 23:16	GR
Total Phosphorus (as P)	<0.010	0.010	mg/L	SM4500P-B,E-2011	3/30/2023 15:10	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date Collected		Time Collected	Field Sample Identification		Grab or Composite	# of Containers & Type	Preservation Code	Matrix Code	TP - TOTAL PHOS	ORTHO - ORTHO PHOS
3/22/2023	14:30		WELL 250 mL	ALC	G	1P	NP	GW		X
3/22/2023	14:30		WELL 250 mL	ALC	G	1P	S	GW	X	
3/22/2023	09:40		WELL 250 mL	475	G	1P	NP	GW	X	
3/22/2023	09:40		WELL 250 mL	475	G	1P	S	GW	X	
3/22/2023	10:10		WELL 250 mL	60	G	1P	NP	GW	X	
3/22/2023	10:10		WELL 250 mL	60	G	1P	S	GW	X	
3/22/2023	10:30		WELL 250 mL	65	G	1P	NP	GW		X
3/22/2023	10:30		WELL 250 mL	65	G	1P	S	GW	X	
3/22/2023			WELL 250 mL		G	1P	NP	GW		X
3/22/2023			WELL 250 mL		G	1P	S	GW	X	

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Monthly---- wells main plant --- WWTP
Address:	131 Camelot Drive	P.O. Number:	-----
City / State / Zip:	Plymouth MA 02360	Report To:	driscoll
Main Telephone:	508-830-4159 x207	Cell:	774-608-1213
Contact Person:	Sean Driscoll	Sampled by:	
		Quote No:	
		Email addresses	
		Phone:	508-830-4159

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time
<i>[Signature]</i>	3/22/2023	1518	<i>[Signature]</i>	3/23/23	1518
<i>[Signature]</i>	3/23/23	1245	<i>[Signature]</i>	3/23/23	1245

Reporting Options	Project Comments
MCP Standard	Temp. Upon Receipt 5.4 °C Workorder No 2303-04749
MWRA eSMART	
State Report & Upload	

LABORATORY REPORT

Woodard & Curran, Inc.
Attn: Sean Driscoll
131 Camelot Drive
Plymouth, MA 02360

Date Received: 3/23/2023
Date Reported: 4/13/2023
P.O. Number

Work Order #: 2303-04754

Project Name: MONTHLY ---- WELLS MAIN PLANT --- WWTP

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 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:



Kristin Phelan
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2303-04754

Project Name: MONTHLY ---- WELLS MAIN PLANT --- WWTP

Sample Number: 001
Sample Description: WELL 250 ML A8
Sample Type : GRAB
Sample Date / Time : 3/22/2023 @ 13:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	2.7	0.020	mg/L	SM 4500 P E-2011	3/23/2023 23:16	GR
Total Phosphorus (as P)	3.7	0.010	mg/L	SM4500P-B,E-2011	3/31/2023 11:00	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 002
Sample Description: WELL 250 ML A9
Sample Type : GRAB
Sample Date / Time : 3/22/2023 @ 11:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	0.028	0.020	mg/L	SM 4500 P E-2011	3/23/2023 23:16	GR
Total Phosphorus (as P)	0.020	0.010	mg/L	SM4500P-B,E-2011	4/12/2023 12:30	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Orthophosphate - Result is greater than Total Phosphorus (as P), however difference in results is less than the detection limit.

Sample Number: 003
Sample Description: WELL 250 ML A10
Sample Type : GRAB
Sample Date / Time : 3/22/2023 @ 11:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	0.021	0.020	mg/L	SM 4500 P E-2011	3/23/2023 23:16	GR
Total Phosphorus (as P)	0.041	0.010	mg/L	SM4500P-B,E-2011	3/31/2023 11:00	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2303-04754

Project Name: MONTHLY ---- WELLS MAIN PLANT --- WWTP

Sample Number: 004
Sample Description: WELL 250 ML A11
Sample Type : GRAB
Sample Date / Time : 3/22/2023 @ 14:31

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	0.024	0.020	mg/L	SM 4500 P E-2011	3/23/2023 23:16	GR
Total Phosphorus (as P)	0.016	0.010	mg/L	SM4500P-B,E-2011	4/12/2023 12:30	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Orthophosphate - Result is greater than Total Phosphorus (as P), however difference in results is less than the detection limit.

Sample Number: 005
Sample Description: WELL 250 ML IS
Sample Type : GRAB
Sample Date / Time : 3/22/2023 @ 10:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	3/23/2023 23:16	GR
Total Phosphorus (as P)	0.013	0.010	mg/L	SM4500P-B,E-2011	4/3/2023 14:28	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date		Time		Field Sample Identification		Grab or Composite	# of Containers & Type	Preservation Code	Matrix Code	TP - TOTAL PHOS	ORTHO - ORTHO PHOS										
Collected	Collected																				
3/22/2023	13:45	WELL 250 mL	AB	G	1P	NP	GW			X											
3/22/2023	13:45	WELL 250 mL	AB	G	1P	S	GW														
3/22/2023	11:20	WELL 250 mL	A9	G	1P	NP	GW			X											
3/22/2023	11:20	WELL 250 mL	A9	G	1P	S	GW														
3/22/2023	11:50	WELL 250 mL	A10	G	1P	NP	GW														
3/22/2023	11:50	WELL 250 mL	A10	G	1P	S	GW			X											
3/22/2023	14:31	WELL 250 mL	A11	G	1P	NP	GW														
3/22/2023	14:31	WELL 250 mL	A11	G	1P	S	GW			X											
3/22/2023	10:50	WELL 250 mL	IS	G	1P	NP	GW														
3/22/2023	10:50	WELL 250 mL	IS	G	1P	S	GW			X											

Client Information				Project Information			
Company Name:	Woodard & Curran	Project Name:	Monthly ---- wells main plant --- WWTP	Project Number:	-----	Cell:	774-808-1213
Address:	131 Camelot Drive	P.O. Number:		Report To:	driscoll	Phone:	508-830-4159
City / State / Zip:	Plymouth MA 02360	Sampled by:		Quoted No:			
Main Telephone:	508-830-4159 x207						
Contact Person:	Sean Driscoll						

Relinquished By Signatures		Date	Time	Received By Signatures		Date	Time	Turn Around Time	
<i>Spencer</i>		3/22/2023	15:10	<i>Sean Driscoll</i>		3/23/23	15:10	Normal	X
		3/23/23	17:45			3-23-23	17:45	5-7 Business days	X
								Rush - Date Due:	/ /

Reporting Options			Project Comments		
MCP Standard			Temp. Upon Receipt 5.4 °C		
MWRA eSMART					
State Report & Upload					
			Lab Use Only Sample Pick Up Only RIAL sampled; attach field hours Received on Ice No Ice Workorder No: 2303-04754 SH=NaOH, T=Na2S2O3, Z=ZnOAc		

LABORATORY REPORT

Woodard & Curran, Inc.
Attn: Sean Driscoll
131 Camelot Drive
Plymouth, MA 02360

Date Received: 4/19/2023
Date Reported: 5/2/2023
P.O. Number

Work Order #: 2304-06243

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

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 subcontracted results are noted and subcontracted reports are enclosed in their entirety.

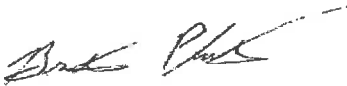
All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

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:



Brent Plant
Data Reporting

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2304-06243

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 001
Sample Description: A9 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 4/19/2023 @ 12:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	49	1.0	mg/L	SM2320B 18-21ed	4/20/2023 17:57	JMF
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	4/19/2023 23:54	JW
Total Phosphorus (as P)	0.020	0.010	mg/L	SM4500P-B,E-2011	4/27/2023 13:00	ZAC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	4/20/2023 14:19	JW
Nitrate (as N)	4.6	0.050	mg/L	EPA 300.0	4/20/2023 14:19	JW
Chloride	630	1.0	mg/L	EPA 300.0	4/20/2023 14:19	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	4/26/2023 9:30	JCH
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 11:09	GCL
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
Chloroform	6.4	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 11:09	GCL
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 11:09	GCL
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
Bromoform	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
Benzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
Toluene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:09	GCL

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2304-06243

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 001
Sample Description: A9 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 4/19/2023 @ 12:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:09	GCL
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:09	GCL
Acetone	<10	10	ug/L	EPA 624.1	4/22/2023	11:09	GCL
Acrolein	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:09	GCL
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:09	GCL
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:09	GCL
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:09	GCL
Styrene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:09	GCL
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:09	GCL
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:09	GCL
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:09	GCL
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:09	GCL
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:09	GCL
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:09	GCL
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:09	GCL
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:09	GCL
Surrogates			RANGE	EPA 624.1	4/22/2023	11:09	GCL
Dibromofluoromethane	105		60-140%	EPA 624.1	4/22/2023	11:09	GCL
Toluene-D8	100		60-140%	EPA 624.1	4/22/2023	11:09	GCL
4-Bromofluorobenzene	99		60-140%	EPA 624.1	4/22/2023	11:09	GCL
Total Metals							
Boron	0.17	0.010	mg/L	EPA 200.7	4/25/2023	12:28	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	4/25/2023	12:28	KK
Sodium	380	1.0	mg/L	EPA 200.7	4/25/2023	15:39	KK
ICP Digestion				EPA 200.7	4/22/2023	11:30	GSW

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2304-06243

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 002
Sample Description: A10 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 4/19/2023 @ 11:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	23	1.0	mg/L	SM2320B 18-21ed	4/20/2023 17:57	JMF
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	4/19/2023 23:54	JW
Total Phosphorus (as P)	<0.010	0.010	mg/L	SM4500P-B ₅ E-2011	4/26/2023 10:00	ZAC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	4/20/2023 14:35	JW
Nitrate (as N)	3.0	0.050	mg/L	EPA 300.0	4/20/2023 14:35	JW
Chloride	640	1.0	mg/L	EPA 300.0	4/20/2023 14:35	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	4/26/2023 9:30	JCH
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 11:38	GCL
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
Chloroform	1.4	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 11:38	GCL
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 11:38	GCL
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
Bromoform	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
Benzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
Toluene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 11:38	GCL

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2304-06243

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 002
Sample Description: A10 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 4/19/2023 @ 11:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:38	GCL
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:38	GCL
Acetone	<10	10	ug/L	EPA 624.1	4/22/2023	11:38	GCL
Acrolein	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:38	GCL
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:38	GCL
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:38	GCL
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:38	GCL
Styrene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:38	GCL
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:38	GCL
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:38	GCL
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:38	GCL
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:38	GCL
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:38	GCL
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:38	GCL
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:38	GCL
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	11:38	GCL
Surrogates			RANGE	EPA 624.1	4/22/2023	11:38	GCL
Dibromofluoromethane	105		60-140%	EPA 624.1	4/22/2023	11:38	GCL
Toluene-D8	100		60-140%	EPA 624.1	4/22/2023	11:38	GCL
4-Bromofluorobenzene	99		60-140%	EPA 624.1	4/22/2023	11:38	GCL
Total Metals							
Boron	0.12	0.010	mg/L	EPA 200.7	4/25/2023	12:30	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	4/25/2023	12:30	KK
Sodium	350	1.0	mg/L	EPA 200.7	4/25/2023	15:41	KK
ICP Digestion				EPA 200.7	4/22/2023	11:30	GSW

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2304-06243

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 003
Sample Description: A11 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 4/19/2023 @ 09:43

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	5.7	1.0	mg/L	SM2320B 18-21ed	4/20/2023 20:57	JMF
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	4/19/2023 23:54	JW
Total Phosphorus (as P)	0.014	0.010	mg/L	SM4500P-B,E-2011	4/26/2023 10:00	ZAC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	4/20/2023 14:51	JW
Nitrate (as N)	0.78	0.050	mg/L	EPA 300.0	4/20/2023 14:51	JW
Chloride	76	1.0	mg/L	EPA 300.0	4/20/2023 14:51	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	4/26/2023 9:30	JCH
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 12:06	GCL
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
Chloroform	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 12:06	GCL
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 12:06	GCL
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
Bromoform	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
Benzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
Toluene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:06	GCL

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2304-06243

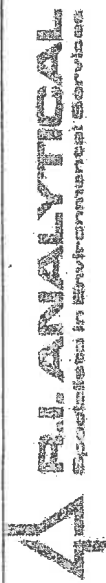
Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 003
Sample Description: A11 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 4/19/2023 @ 09:43

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:06	GCL
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:06	GCL
Acetone	<10	10	ug/L	EPA 624.1	4/22/2023	12:06	GCL
Acrolein	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:06	GCL
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:06	GCL
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:06	GCL
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:06	GCL
Styrene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:06	GCL
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:06	GCL
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:06	GCL
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:06	GCL
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:06	GCL
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:06	GCL
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:06	GCL
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:06	GCL
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:06	GCL
Surrogates			RANGE	EPA 624.1	4/22/2023	12:06	GCL
Dibromofluoromethane	109		60-140%	EPA 624.1	4/22/2023	12:06	GCL
Toluene-D8	103		60-140%	EPA 624.1	4/22/2023	12:06	GCL
4-Bromofluorobenzene	100		60-140%	EPA 624.1	4/22/2023	12:06	GCL
Total Metals							
Boron	<0.010	0.010	mg/L	EPA 200.7	4/25/2023	12:31	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	4/25/2023	12:31	KK
Sodium	45	0.050	mg/L	EPA 200.7	4/25/2023	14:50	KK
ICP Digestion				EPA 200.7	4/22/2023	11:30	GSW

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

EPA.624.1- Acrolein above QC acceptance criteria in LCS/LCSD. Samples 1 thru 3 were nondetect for this specific target analyte therefore, high bias can be reported.



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date Collected		Time Collected		Field Sample Identification		Grab or Composite	# of Containers & Type ^C	Preservation Code ^P	Matrix Code ^M	TKN	TOTAL PHOS	NITRITE NO2	NITRATE NO3	ORTHO PHOS	ALKALINITY	CHLORIDE	COPPER	BORON	SODIUM	EPA 624 VOC
Collected																				
4/19/23	1205	A9	WELL	quarterly	250 mL sulfuric	G	1P	S	GW	X	X									
			WELL	quarterly	250mL nitric	G	1P	N	GW								X	X		
			WELL	quarterly	VOC 40 mL thio	G	2V	T	GW											X
			WELL	quarterly	250 mL	G	1P	NP	GW			X	X							
			WELL	quarterly	250 mL	G	1P	NP	GW					X						
			WELL	quarterly	250 mL	G	1P	NP	GW						X					
			WELL	quarterly	250 mL	G	1P	NP	GW							X				

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant -----WWTP-----
Address:	131 Camelot Drive	P.O. Number:	
City / State / Zip:	Plymouth MA 02360	Report To:	Sean d
Main Telephone:	508-830-4159 x207	Cell:	774-608-1213
Contact Person:	Sean d	Sampled by:	
		Quote No:	
		Email addresses:	

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time
	4/19/23	1530		4/19/23	1530
	4/19/23	1800		4/19/23	1800

Reporting Options		Project Comments	
MCP Standard			
MWRA eSMART			
State Report & Upload			
Email results to ifreeman@woodardcurran.com; sdrcoll@woodardcurran.com.		Turnaround Time	
		Normal ☒ EMAIL Report	
		5-7 Business days ☒	
		Rush - Date Due: / /	

Lab Use Only	
Sample Pick Up Only	
RJAL sampled; attach field hours	
Received on Ice	
No Ice	
Workorder No:	774-608-1213

CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

[illegible]

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant -----WWTP-----
Address:	131 Camelot Drive	P.O. Number:	Project Number:
City / State / Zip:	Plymouth MA 02360	Report To:	Cell: 774-808-1213 Phone: 508-830-4159
Main Telephone:	508-830-4159 x207	Sampled by:	Email addresses
Contact Person:	Sean d	Quote No:	

Relinquished By Signatures		Date	Time	Received By Signatures		Date	Time
		4/19/23	1530			4/19/23	1530
		4/19/23	1800			4/19/23	1800

Reporting Options		Project Comments	Lab Use Only
MCP Standard		Email results to freeman@woodardcurran.com ; sdriscoll@woodardcurran.com .	Sample Pick Up Only ☒
MWRA eSMART			RIAL sampled; attach field hours ☐
State Report & Upload			Received on Ice ☐ No Ice ☐
			Workorder No: 2324-0677

LABORATORY REPORT

Woodard & Curran, Inc.
Attn: Sean Driscoll
131 Camelot Drive
Plymouth, MA 02360

Date Received: 4/19/2023
Date Reported: 5/2/2023
P.O. Number

Work Order #: 2304-06264

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

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 subcontracted results are noted and subcontracted reports are enclosed in their entirety.

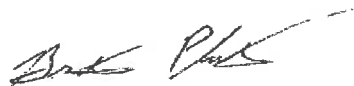
All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

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:



Brent Plant
Data Reporting

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2304-06264

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 001
Sample Description: WELL 475 QUARTERLY
Sample Type : GRAB
Sample Date / Time : 4/19/2023 @ 08:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	5.7	1.0	mg/L	SM2320B 18-21ed	4/20/2023 20:57	JMF
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	4/19/2023 23:54	JW
Total Phosphorus (as P)	<0.010	0.010	mg/L	SM4500P-B,E-2011	4/26/2023 10:00	ZAC
Hydrolyzable Phosphorus	<0.050	0.050	mg/L	SM 4500 P B,E-2011	5/1/2023 9:00	KLS
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	4/20/2023 13:00	JW
Nitrate (as N)	3.7	0.050	mg/L	EPA 300.0	4/20/2023 13:00	JW
Chloride	230	10	mg/L	EPA 300.0	4/22/2023 23:17	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	4/26/2023 9:30	JCH
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 5:04	GCL
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
Chloroform	2.8	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 5:04	GCL
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 5:04	GCL
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
Bromoform	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
Benzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL
Toluene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 5:04	GCL

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2304-06264

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 001
Sample Description: WELL 475 QUARTERLY
Sample Type : GRAB
Sample Date / Time : 4/19/2023 @ 08:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:04	GCL
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:04	GCL
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:04	GCL
Acetone	<10	10	ug/L	EPA 624.1	4/22/2023	5:04	GCL
Acrolein	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:04	GCL
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:04	GCL
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:04	GCL
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:04	GCL
Styrene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:04	GCL
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:04	GCL
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:04	GCL
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:04	GCL
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:04	GCL
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:04	GCL
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:04	GCL
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:04	GCL
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:04	GCL
Surrogates			RANGE	EPA 624.1	4/22/2023	5:04	GCL
Dibromofluoromethane	105		60-140%	EPA 624.1	4/22/2023	5:04	GCL
Toluene-D8	99		60-140%	EPA 624.1	4/22/2023	5:04	GCL
4-Bromofluorobenzene	101		60-140%	EPA 624.1	4/22/2023	5:04	GCL
Total Metals							
Boron	0.044	0.010	mg/L	EPA 200.7	4/25/2023	12:10	KK
Copper	0.016	0.0050	mg/L	EPA 200.7	4/25/2023	12:10	KK
Sodium	140	0.25	mg/L	EPA 200.7	4/25/2023	15:36	KK
ICP Digestion				EPA 200.7	4/22/2023	11:30	GSW

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2304-06264

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 002
Sample Description: WELL 6D QUARTERLY
Sample Type : GRAB
Sample Date / Time : 4/19/2023 @ 08:48

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Alkalinity (as CaCO ₃)	5.7	1.0	mg/L	SM2320B 18-21ed	4/20/2023	20:57	JMF
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	4/19/2023	23:54	JW
Total Phosphorus (as P)	0.011	0.010	mg/L	SM4500P-B,E-2011	4/26/2023	10:00	ZAC
Hydrolyzable Phosphorus	0.15	0.050	mg/L	SM 4500 P B,E-2011	5/1/2023	9:00	KLS
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	4/20/2023	11:56	JW
Nitrate (as N)	3.3	0.050	mg/L	EPA 300.0	4/20/2023	11:56	JW
Chloride	170	1.0	mg/L	EPA 300.0	4/20/2023	11:56	JW
TKN (as N)	0.64	0.50	mg/L	SM4500N Org-D 18-21ed	4/26/2023	9:30	JCH
Volatile Organic Compounds							
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Chloroform	1.5	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	4/22/2023	5:32	GCL
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Bromoform	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Benzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Toluene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2304-06264

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 002
Sample Description: WELL 6D QUARTERLY
Sample Type : GRAB
Sample Date / Time : 4/19/2023 @ 08:48

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Acetone	<10	10	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Acrolein	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Styrene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	5:32	GCL
Surrogates			RANGE	EPA 624.1	4/22/2023	5:32	GCL
Dibromofluoromethane	104		60-140%	EPA 624.1	4/22/2023	5:32	GCL
Toluene-D8	98		60-140%	EPA 624.1	4/22/2023	5:32	GCL
4-Bromofluorobenzene	99		60-140%	EPA 624.1	4/22/2023	5:32	GCL
Total Metals							
Boron	0.039	0.010	mg/L	EPA 200.7	4/25/2023	12:12	KK
Copper	0.015	0.0050	mg/L	EPA 200.7	4/25/2023	12:12	KK
Sodium	99	0.25	mg/L	EPA 200.7	4/25/2023	15:37	KK
ICP Digestion				EPA 200.7	4/22/2023	11:30	GSW

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2304-06264

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 003
Sample Description: WELL 6S QUARTERLY
Sample Type : GRAB
Sample Date / Time : 4/19/2023 @ 09:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Alkalinity (as CaCO ₃)	12	1.0	mg/L	SM2320B 18-21ed	4/20/2023	20:57	JMF
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	4/19/2023	23:54	JW
Total Phosphorus (as P)	<0.010	0.010	mg/L	SM4500P-B,E-2011	4/26/2023	10:00	ZAC
Hydrolyzable Phosphorus	0.096	0.050	mg/L	SM 4500 P B,E-2011	5/1/2023	9:00	KLS
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	4/20/2023	13:32	JW
Nitrate (as N)	2.2	0.050	mg/L	EPA 300.0	4/20/2023	13:32	JW
Chloride	29	1.0	mg/L	EPA 300.0	4/20/2023	13:32	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500NOrg-D 18-21ed	4/26/2023	9:30	JCH
Volatile Organic Compounds							
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Chloroform	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	4/22/2023	6:01	GCL
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Bromoform	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Benzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Toluene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2304-06264

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 003
Sample Description: WELL 6S QUARTERLY
Sample Type : GRAB
Sample Date / Time : 4/19/2023 @ 09:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Acetone	<10	10	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Acrolein	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Styrene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	6:01	GCL
Surrogates			RANGE	EPA 624.1	4/22/2023	6:01	GCL
Dibromofluoromethane	104		60-140%	EPA 624.1	4/22/2023	6:01	GCL
Toluene-D8	99		60-140%	EPA 624.1	4/22/2023	6:01	GCL
4-Bromofluorobenzene	101		60-140%	EPA 624.1	4/22/2023	6:01	GCL
Total Metals							
Boron	0.014	0.010	mg/L	EPA 200.7	4/25/2023	12:14	KK
Copper	0.012	0.0050	mg/L	EPA 200.7	4/25/2023	12:14	KK
Sodium	25	0.050	mg/L	EPA 200.7	4/25/2023	14:42	KK
ICP Digestion				EPA 200.7	4/22/2023	11:30	GSW

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

EPA.624.1- Acrolein above QC acceptance criteria in LCS/LCSD. Samples 1 thru 3 were nondetect for this specific target analyte therefore, high bias can be reported.

CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

**131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580**

[illegible]

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant -----WWTP-----
Address:	131 Camelot Drive	P.O. Number:	Project Number:
City / State / Zip:	Plymouth MA 02360	Report To:	Sean d
Main Telephone:	508-830-4159 x207	Cell:	774-608-1213
Contract Person:	Sean d	Sampled by:	Email addresses
		Quote No:	
			Phone: 508-830-4159

Relinquished By Signatures		Date	Time	Received By Signatures		Date	Time
<i>[Signature]</i>		4/19/23	1230	<i>[Signature]</i>		4/19/23	1530
<i>[Signature]</i>		4/14/23	1400	<i>[Signature]</i>		4-19-23	1800

Reporting Options		Project Comments	Lab Use Only
MCP Standard			Sample Pick Up Only
MWRA eSMART		Email results to ifreeman@woodardcurran.com ; sdriscoll@woodardcurran.com .	RIAL sampled; attach field hours
State Report & Upload			Received on Ice ☐ No Ice ☒

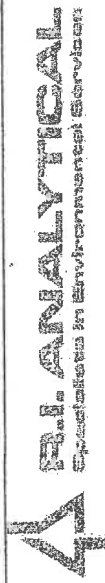
Workorder No:

SH=NaOH, T=Na₂S₂O₃, Z=ZnOAc

Page 1 of 3

Combinants. P=Fully, G=Glass, AG=Alibi Glass, V=Vari, G=Strong, L=Low, H=High, A=Air, B=Bulk/Solid, WP=Wipe, O=Oven.
Matrix Codes: GIN=Groundwater SW=Surface Water WWW=Wastewater DW=Drinking Water S=Soil SL=Sludge A=Air B=Bulk/Solid WP=Wipe, O=Oven

[illegible]



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date Collected		Time Collected		Field Sample Identification																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										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Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant -----WWTP-----
Address:	131 Camelot Drive	P.O. Number:	
City / State / Zip:	Plymouth MA 02360	Report To:	Sean d
Main Telephone:	508-830-4159 x207	Cell:	774-608-1213
Contact Person:	Sean d	Sampled by:	
		Quote No:	
		Email addresses:	

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time
<i>[Signature]</i>	4/19/23	1530	<i>[Signature]</i>	4/19/23	1530
<i>[Signature]</i>	4/19/23	1800	<i>[Signature]</i>	4/19/23	1800

Reporting Options		Project Comments	
MCP Standard		<i>[Handwritten notes]</i>	
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State Report & Upload			

Email results to ifreeman@woodardcurran.com; sdiscoll@woodardcurran.com.

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, DI=DI-H2O, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SH=NaOH, T=Na2S2O3, Z=ZnOAc
Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=

CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

[illegible]

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant -----WWTP-----
Address:	131 Camelot Drive	P.O. Number:	Project Number:
City / State / Zip:	Plymouth MA 02360	Report To:	Sean d
Main Telephone:	508-830-4159 x207	Cell:	774-608-1213
Contact Person:	Sean d	Sampled by:	Email addresses
		Quote No:	

Relinquished By Signatures		Date	Time	Received By Signatures		Date	Time
[Signature]		4/19/23	1530	[Signature]		4/19/23	1530
[Signature]		4/19/23	1500	[Signature]		4/19/23	1800

Turn Around Time	
Normal	☒ X
5-7 Business days	☒ X

Rush - Date Due: ____/____/____

Reporting Options		Project Comments
MCP Standard		freeman@woodardcurran.com; sdriscoll@woodardcurran.com. 0V 440
MWRA eSMART		
State Report & Upload		

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH₄=NH₄Cl, Cl=DI-H₂O, H=HCl, M=MeOH, N=HNO₃, NP=None, S=H₂SO₄, SH=NaOH, T=Na₂S₂O₃, Z=ZnOAc

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=_____

Page 3 of 3

LABORATORY REPORT

Woodard & Curran, Inc.
Attn: Sean Driscoll
131 Camelot Drive
Plymouth, MA 02360

Date Received: 4/19/2023
Date Reported: 5/2/2023
P.O. Number

Work Order #: 2304-06270

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

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 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:



Brent Plant
Data Reporting

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2304-06270

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 001
Sample Description: A16 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 4/19/2023 @ 10:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	120	1.0	mg/L	SM2320B 18-21ed	4/20/2023 20:57	JMF
Orthophosphate	0.048	0.020	mg/L	SM 4500 P E-2011	4/19/2023 23:54	JW
Total Phosphorus (as P)	0.060	0.010	mg/L	SM4500P-B,E-2011	4/26/2023 10:00	ZAC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	4/20/2023 15:07	JW
Nitrate (as N)	3.6	0.050	mg/L	EPA 300.0	4/20/2023 15:07	JW
Chloride	720	1.0	mg/L	EPA 300.0	4/20/2023 15:07	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	4/26/2023 9:30	JCH
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 12:35	GCL
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
Chloroform	7.3	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
Bromodichloromethane	4.6	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 12:35	GCL
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 12:35	GCL
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
Dibromochloromethane	8.3	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
Bromoform	5.2	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
Benzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
Toluene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 12:35	GCL

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2304-06270

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 001
Sample Description: A16 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 4/19/2023 @ 10:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:35	GCL
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:35	GCL
Acetone	<10	10	ug/L	EPA 624.1	4/22/2023	12:35	GCL
Acrolein	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:35	GCL
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:35	GCL
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:35	GCL
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:35	GCL
Styrene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:35	GCL
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:35	GCL
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:35	GCL
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:35	GCL
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:35	GCL
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:35	GCL
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:35	GCL
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:35	GCL
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	12:35	GCL
Surrogates			RANGE	EPA 624.1	4/22/2023	12:35	GCL
Dibromofluoromethane	109		60-140%	EPA 624.1	4/22/2023	12:35	GCL
Toluene-D8	101		60-140%	EPA 624.1	4/22/2023	12:35	GCL
4-Bromofluorobenzene	98		60-140%	EPA 624.1	4/22/2023	12:35	GCL
Total Metals							
Boron	0.26	0.010	mg/L	EPA 200.7	4/25/2023	12:37	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	4/25/2023	12:37	KK
Sodium	450	1.0	mg/L	EPA 200.7	4/25/2023	15:28	KK
ICP Digestion				EPA 200.7	4/22/2023	11:30	GSW

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2304-06270

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 002
Sample Description: A8 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 4/19/2023 @ 10:34

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	140	1.0	mg/L	SM2320B 18-21ed	4/20/2023 20:57	JMF
Orthophosphate	3.1	0.020	mg/L	SM 4500 P E-2011	4/19/2023 23:54	JW
Total Phosphorus (as P)	3.3	0.010	mg/L	SM4500P-B,E-2011	4/26/2023 10:00	ZAC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	4/20/2023 15:23	JW
Nitrate (as N)	3.6	0.050	mg/L	EPA 300.0	4/20/2023 15:23	JW
Chloride	610	1.0	mg/L	EPA 300.0	4/20/2023 15:23	JW
TKN (as N)	0.50	0.50	mg/L	SM4500N Org-D 18-21ed	4/26/2023 9:30	JCH
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Chloroform	9.8	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Bromodichloromethane	2.6	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 13:03	GCL
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Bromoform	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Benzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Toluene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2304-06270

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 002
Sample Description: A8 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 4/19/2023 @ 10:34

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Acetone	<10	10	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Acrolein	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Styrene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:03	GCL
Surrogates			RANGE	EPA 624.1	4/22/2023 13:03	GCL
Dibromofluoromethane	108		60-140%	EPA 624.1	4/22/2023 13:03	GCL
Toluene-D8	101		60-140%	EPA 624.1	4/22/2023 13:03	GCL
4-Bromofluorobenzene	100		60-140%	EPA 624.1	4/22/2023 13:03	GCL
Total Metals						
Boron	0.20	0.010	mg/L	EPA 200.7	4/25/2023 12:39	KK
Copper	0.0070	0.0050	mg/L	EPA 200.7	4/25/2023 12:39	KK
Sodium	380	1.0	mg/L	EPA 200.7	4/25/2023 15:29	KK
ICP Digestion				EPA 200.7	4/22/2023 11:30	GSW

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2304-06270

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 003
Sample Description: IS WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 4/19/2023 @ 11:38

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	2.8	1.0	mg/L	SM2320B 18-21ed	4/20/2023 20:57	JMF
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	4/19/2023 23:54	JW
Total Phosphorus (as P)	<0.010	0.010	mg/L	SM4500P-B,E-2011	4/27/2023 13:00	ZAC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	4/20/2023 14:03	JW
Nitrate (as N)	0.74	0.050	mg/L	EPA 300.0	4/20/2023 14:03	JW
Chloride	15	1.0	mg/L	EPA 300.0	4/20/2023 14:03	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500NOrg-D 18-21ed	4/26/2023 9:30	JCH
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 13:32	GCL
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
Chloroform	1.1	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 13:32	GCL
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	4/22/2023 13:32	GCL
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
Bromoform	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
Benzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
Toluene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023 13:32	GCL

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2304-06270

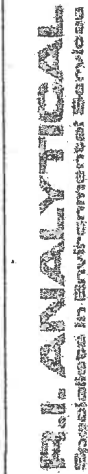
Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 003
Sample Description: IS WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 4/19/2023 @ 11:38

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	13:32	GCL
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	13:32	GCL
Acetone	<10	10	ug/L	EPA 624.1	4/22/2023	13:32	GCL
Acrolein	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	13:32	GCL
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	13:32	GCL
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	13:32	GCL
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	13:32	GCL
Styrene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	13:32	GCL
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	13:32	GCL
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	13:32	GCL
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	13:32	GCL
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	13:32	GCL
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	13:32	GCL
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	13:32	GCL
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	13:32	GCL
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	4/22/2023	13:32	GCL
Surrogates			RANGE	EPA 624.1	4/22/2023	13:32	GCL
Dibromofluoromethane	110		60-140%	EPA 624.1	4/22/2023	13:32	GCL
Toluene-D8	102		60-140%	EPA 624.1	4/22/2023	13:32	GCL
4-Bromofluorobenzene	99		60-140%	EPA 624.1	4/22/2023	13:32	GCL
Total Metals							
Boron	<0.010	0.010	mg/L	EPA 200.7	4/25/2023	12:46	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	4/25/2023	12:46	KK
Sodium	9.3	0.050	mg/L	EPA 200.7	4/25/2023	12:46	KK
ICP Digestion				EPA 200.7	4/22/2023	11:30	GSW

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

EPA.624.1- Acrolein above QC acceptance criteria in LCS/LCSD. Samples 1 thru 3 were nondetect for this specific target analyte therefore, high bias can be reported.



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

**131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580**

Date Collected	Time Collected	Field Sample Identification	G	1P	S	GW	X	X	X	X	X
4/19/23	1005	A16 WELL quarterly 250 mL sulfuric	G	1P	S	GW	X	X			
		WELL quarterly 250mL nitric	G	1P	N	GW			X	X	X
		WELL quarterly VOC 40 mL thio	G	2V	T	GW					X
		WELL quarterly 250 mL	G	1P	NP	GW	X	X			
		WELL quarterly 250 mL	G	1P	NP	GW			X		
		WELL quarterly 250 mL	G	1P	NP	GW			X		
		WELL quarterly 250 mL	G	1P	NP	GW			X		

Client Information:		Project Information	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant -----WWTP-----
Address:	131 Camelot Drive	P.O. Number:	Project Number:
City / State / Zip:	Plymouth MA 02360	Report To:	Sean d Cell: 774-608-1213 Phone: 508-830-4159
Main Telephone:	508-830-4159 x207	Sampled by:	Email addresses
Contact Person:	Sean d	Quote No:	

Relinquished By Signatures		Date	Time	Received By Signatures		Date	Time
8		4/19/23	1:30	R. [Signature]		4/19/23	1:50
D. [Signature]		4/19/23	1:00	R. [Signature]		4/19/23	1:00

Reporting Options		Project Comments
MCP Standard		
MWRA eSMART		
State Report & Upload		
Email results to freeman@woodardcurran.com ; sdriscoll@woodardcurran.com .		

Email results to ifreeman@woodardcurran.com; sdriscoll@woodardcurran.com.

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, S=Sterile Preservatives: A=Ascorbic Acid, NH₄=NH₄Cl, DI=DI-H₂O, H=HCl, M=MeOH, N=HNO₃, NP=None, S=H₂SO₄, SH=NaOH, I=Na₂S₂O₃, Z=ZnOAc

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, WP=Wipe, O=_____

Page of _____

Workorder No: 2344-06270

CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date	Time	Field Sample Identification
------	------	-----------------------------

[illegible]

Client Information

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant ---WWTP---
Address:	131 Camelot Drive	P.O. Number:	Project Number:
City / State / Zip:	Plymouth MA 02360	Report To:	Cell: 774-608-1213 Phone: 508-830-4159
Main Telephone:	508-830-4159 x207	Sampled by:	Email addresses
Contact Person:	Sean d	Quote No:	

Relinquished By Signatures

Relinquished By Signatures	Date	Time
	4/19/73	1530
	4/19/73	1800

Received By Signatures

Received By	Signatures	Date	Time
	<i>[Signature]</i>	4/19/13	1:30
	<i>[Signature]</i>	4-19-13	1:00

Time

Turn Around Time		
X	Normal	X EMAIL Report
X	5-7 Business days	
	Rush -- Date Due: ____/____/____	

Reporting Options

Reporting Options	
MCP Standard _____	
MWRA eSMART	
State Report & Upload	

Email results to: ifreeman@woodardcurran.com; sdriscoll@woodardcurran.com.

Project Comments

Lab Use Only			
Sample Pick Up Only			
R/L sampled; attach field hours			
Received on Ice		No Ice	
Workorder No:	3327-10		

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH₄=NH₄Cl, D=DI+H₂O, H=HCl, M=MeOH, N=HNO₃, NF=None, S=H₂SO₄, SH=NaOH, I=Na₂O₂, Z=ZnOAc

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=

THESE THESE THESE

CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

**131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580**

Date Collected	Time Collected	Field Sample Identification	G	1P	S	GW	X	X	X	X	X
4/19/23	1138	IS WELL quarterly 250 mL sulfuric	G	1P	S	GW	X				
		WELL quarterly 250mL nitric	G	1P	N	GW					
		WELL quarterly VOC 40 mL thio	G	2V	T	GW					
		WELL quarterly 250 mL	G	1P	NP	GW	X	X			
		WELL quarterly 250 mL	G	1P	NP	GW			X		
		WELL quarterly 250 mL	G	1P	NP	GW				X	
		WELL quarterly 250 mL	G	1P	NP	GW				X	

(905116)

Client Information:		Project Information:	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant -----WWTP-----
Address:	131 Camelot Drive	P.O. Number:	Project Number:
City / State / Zip:	Plymouth MA 02360	Report To:	Sean d
Main Telephone:	508-830-4159 x207	Cell:	774-808-1213
Contact Person:	Sean d	Sampled by:	Email addresses
		Quote No:	
			Phone: 508-830-4159

Relinquished By Signatures		Date	Time	Received By Signatures		Date	Time
J. J. J.		4/19/23	1530	M. J. J.		4/19/23	1530
J. J. J.		4/19/23	1800	M. J. J.		4/19/23	1800

Reporting Options		Project Comments	
MCP Standard		Email results to ifreeman@woodardcurran.com; sdriscoll@woodardcurran.com. <i>WJ</i> <i>244 or</i> <i>2307-00</i>	
MWRA eSMART			
State Report & Upload			

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH₄=NH₄Cl, DI=DI-H₂O, H=HCl, M=MeOH, N=HNO₃, NP=None, S=H₂SO₄, SH=None, T=Na₂S₂O₃, Z=ZnOAc

Matrix Codes: GW=Groundwater, SW=Surface Water, WM=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=_____

Page of _____

LABORATORY REPORT

Woodard & Curran, Inc.
Attn: Sean Driscoll
131 Camelot Drive
Plymouth, MA 02360

Date Received: 5/24/2023
Date Reported: 6/1/2023
P.O. Number

Work Order #: 2305-08269

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

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 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:



Kristin Phelan
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2305-08269

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 001
Sample Description: WELL A8
Sample Type : GRAB
Sample Date / Time : 5/23/2023 @ 10:11

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	4.1	0.020	mg/L	SM 4500 P E-2011	5/25/2023 0:34	JW
Total Phosphorus (as P)	6.6	0.010	mg/L	SM4500P-B,E-2011	5/25/2023 9:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 002
Sample Description: WELL A9
Sample Type : GRAB
Sample Date / Time : 5/23/2023 @ 09:23

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	5/25/2023 0:34	JW
Total Phosphorus (as P)	0.026	0.010	mg/L	SM4500P-B,E-2011	5/25/2023 9:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 003
Sample Description: WELL A10
Sample Type : GRAB
Sample Date / Time : 5/23/2023 @ 10:17

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	5/25/2023 0:34	JW
Total Phosphorus (as P)	0.016	0.010	mg/L	SM4500P-B,E-2011	5/25/2023 9:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2305-08269

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 004
Sample Description: WELL A11
Sample Type : GRAB
Sample Date / Time : 5/23/2023 @ 11:34

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	5/25/2023 0:34	JW
Total Phosphorus (as P)	0.015	0.010	mg/L	SM4500P-B,E-2011	5/25/2023 9:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 005
Sample Description: WELL A16
Sample Type : GRAB
Sample Date / Time : 5/23/2023 @ 10:43

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	0.047	0.020	mg/L	SM 4500 P E-2011	5/25/2023 0:34	JW
Total Phosphorus (as P)	0.066	0.010	mg/L	SM4500P-B,E-2011	5/25/2023 9:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 006
Sample Description: WELL IS
Sample Type : GRAB
Sample Date / Time : 5/23/2023 @ 09:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	5/25/2023 0:34	JW
Total Phosphorus (as P)	0.016	0.010	mg/L	SM4500P-B,E-2011	5/25/2023 9:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2305-08269

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 007
Sample Description: WELL 475
Sample Type : GRAB
Sample Date / Time : 5/23/2023 @ 07:58

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	5/25/2023 0:34	JW
Total Phosphorus (as P)	0.022	0.010	mg/L	SM4500P-B,E-2011	5/25/2023 9:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 008
Sample Description: WELL 6D
Sample Type : GRAB
Sample Date / Time : 5/23/2023 @ 08:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	5/25/2023 0:34	JW
Total Phosphorus (as P)	0.020	0.010	mg/L	SM4500P-B,E-2011	5/25/2023 9:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 009
Sample Description: WELL 6S
Sample Type : GRAB
Sample Date / Time : 5/23/2023 @ 08:48

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	5/25/2023 0:34	JW
Total Phosphorus (as P)	0.017	0.010	mg/L	SM4500P-B,E-2011	5/25/2023 9:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date Collected		Time Collected		Field Sample Identification		Grab	# of	Pres	Matr	Total	Ortho P														
												G	1P	NP	GW		X								
5/23/23		1511		Well (250 mL) A8		G	1P	NP	GW		X														
		1511		Well (250 mL) A8		G	1P	S	GW	X															
		0923		Well (250 mL) A9		G	1P	NP	GW		X														
		0923		Well (250 mL) A9		G	1P	S	GW	X															
		1017		Well (250 mL) A10		G	1P	NP	GW		X														
		1017		Well (250 mL) A10		G	1P	S	GW	X															
		1134		Well (250 mL) A11		G	1P	NP	GW		X														
		1134		Well (250 mL) A11		G	1P	S	GW	X															
		1043		Well (250 mL) A16		G	1P	NP	GW		X														
		1043		Well (250 mL) A16		G	1P	S	GW	X															

Client Information				Project Information			
Company Name:	Woodard & Curran	Project Name:	Monthly Wells - Main Plant WWTP	Project Number:		Cell:	401.578.9976
Address:	131 Camelot Drive	P.O. Number:		Report To:	Sean Driscoll	Phone:	
City / State / Zip:	Plymouth, MA 02360	Sampled by:		Email addresses:	EMcNeil@woodardcurran.com rscott@woodardcurran.com		
Main Telephone:	508-830-4159	Quote No:					
Contact Person:	Sean Driscoll						

Relinquished By Signatures		Date	Time	Received By Signatures		Date	Time
		5/24/23	1500			5/24/23	1500
		5/24/23	1745			5/24/23	1745

Reporting Options				Project Comments			
MCP Standard		Email results to	sdriscoll@woodardcurran.com; jfreemant@woodardcurran.com; kfontaine@woodardcurran.com; &	WV 5.5°C			
MWRA eSMART		rscott@woodardcurran.com					
State Report & Upload							
				Project Comments			
				Lab Use Only			
				Sample Pick Up Only			
				RIAL sampled; attach field hours			
				Received on Ice			
				No Ice			
				Workorder No: 2305-08269			
				Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, DI=DI-H2O, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SH=NaOH, T=Na2S2O3, Z=ZnOAc			
				Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=			
				Page of			

LABORATORY REPORT

Woodard & Curran, Inc.
Attn: Sean Driscoll
131 Camelot Drive
Plymouth, MA 02360

Date Received: 6/14/2023
Date Reported: 6/23/2023
P.O. Number

Work Order #: 2306-09483

Project Name: MONTHLY - WELLS MAIN PLANT - WWTP

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 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:



Kristin Phelan
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2306-09483

Project Name: MONTHLY - WELLS MAIN PLANT - WWTP

Sample Number: 001
Sample Description: WELL 475
Sample Type : GRAB
Sample Date / Time : 6/14/2023 @ 08:17

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	6/15/2023 0:45	JW
Total Phosphorus (as P)	0.27	0.010	mg/L	SM4500P-B,E-2011	6/15/2023 11:45	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 002
Sample Description: WELL 6D
Sample Type : GRAB
Sample Date / Time : 6/14/2023 @ 08:46

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	6/15/2023 0:45	JW
Total Phosphorus (as P)	0.18	0.010	mg/L	SM4500P-B,E-2011	6/15/2023 11:45	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 003
Sample Description: WELL 6S
Sample Type : GRAB
Sample Date / Time : 6/14/2023 @ 09:03

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	6/15/2023 0:45	JW
Total Phosphorus (as P)	0.028	0.010	mg/L	SM4500P-B,E-2011	6/15/2023 11:45	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2306-09483

Project Name: MONTHLY - WELLS MAIN PLANT - WWTP

Sample Number: 004
Sample Description: WELL 1S
Sample Type : GRAB
Sample Date / Time : 6/14/2023 @ 09:27

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	6/15/2023 0:45	JW
Total Phosphorus (as P)	0.017	0.010	mg/L	SM4500P-B,E-2011	6/15/2023 11:45	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 005
Sample Description: WELL A10
Sample Type : GRAB
Sample Date / Time : 6/14/2023 @ 09:56

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	6/15/2023 0:45	JW
Total Phosphorus (as P)	0.013	0.010	mg/L	SM4500P-B,E-2011	6/15/2023 11:45	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 006
Sample Description: WELL A9
Sample Type : GRAB
Sample Date / Time : 6/14/2023 @ 10:26

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	6/15/2023 0:45	JW
Total Phosphorus (as P)	0.034	0.010	mg/L	SM4500P-B,E-2011	6/15/2023 11:45	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2306-09483

Project Name: MONTHLY - WELLS MAIN PLANT - WWTP

Sample Number: 007
Sample Description: WELL A16
Sample Type : GRAB
Sample Date / Time : 6/14/2023 @ 10:55

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	0.040	0.020	mg/L	SM 4500 P E-2011	6/15/2023 0:45	JW
Total Phosphorus (as P)	0.069	0.010	mg/L	SM4500P-B,E-2011	6/15/2023 11:45	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 008
Sample Description: WELL A8
Sample Type : GRAB
Sample Date / Time : 6/14/2023 @ 11:21

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	3.7	0.020	mg/L	SM 4500 P E-2011	6/15/2023 0:45	JW
Total Phosphorus (as P)	3.7	0.010	mg/L	SM4500P-B,E-2011	6/16/2023 12:00	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 009
Sample Description: WELL A11
Sample Type : GRAB
Sample Date / Time : 6/14/2023 @ 11:44

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	6/15/2023 0:45	JW
Total Phosphorus (as P)	0.021	0.010	mg/L	SM4500P-B,E-2011	6/16/2023 12:00	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

**131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580**

[illegible]

Client Information

Company Name: Woodward & Curran
Address: 131 Camelot Drive
City / State / Zip: Plymouth MA 02360
Main Telephone: 508-830-4159 x207
Contact Person: driscoll

Company Name:	Woodard & Curran
Address:	131 Camelot Drive
City / State / Zip:	Plymouth MA 02360
Main Telephone:	508-830-4159 x207
Contact Person:	driscoll

Company Name: Woodward & Curran
Address: 131 Camelot Drive
City / State / Zip: Plymouth MA 02360
Main Telephone: 508-830-4159 x207
Contact Person: driscoll

Company Name: Woodward & Curran
Address: 131 Camelot Drive
City / State / Zip: Plymouth MA 02360
Main Telephone: 508-830-4159 x207
Contact Person: driscoll

Project Information

Project Name: Monthly-----wells main plant ---WWTP

P.O. Number: _____

Send To: driscoll
Cell: 774-608-1213 Phone: 508-830-4159

Report No.	Title	Date	Author
	Miscellaneous		

Sampled by:	Email addresses
	sdriscoll@woodardcurran.com ,

Quote No:	addresses

Turn Around Time		
X	Normal	X EMAIL Report
X	5-7 Business days	
Rush -- Date Due: / /		

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time
Shawn Mooney	6/14/23	1420	R. Oll	6/14/23	1420
R. Oll	6/14/23	1715	R. Oll	6/14/23	1715

Reporting Options

MCP Standard

MWRA eSMART

State Report & Upload

Project Comments

Temp. Upon Receipt 51°C

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH₄=NH₄Cl, DI=DI-H₂O, H=HCl, M=MeOH, N=HNO₃, NP=None, S=H₂SO₄, SH=NaOH, T=Na₂S₂O₃, Z=ZnOAc
WUJ00001 NO. 2306-07483 Page 1 of 2

Containers: P=Poly, G=Glass, AG=Amber Glass,
V=Val, S=Sterile Preservatives: A=Ascorbic Acid, NF4-NF4Cl, D1-DH12C, D1-DH12C, N=NaOH, W=Water
S=Surf S1 =Surfline A=Air B=Bulk/Solid WP=Wipe Q=

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking water, J=Junk, OL=Other, P=Plastic, S=Solid, L=Liquid, G=Gas, F=Fiber, C=Cloth, M=Metal, E=Electronics, O=Organic, I=Inorganic, R=Residue, A=Asphalt, B=Brick, C=Cement, D=Dirt, G=Glass, H=Hazardous, L=Lumber, M=Metal, P=Plastic, S=Soil, T=Textile, V=Vehicle, W=Water, X=Xenotransplant, Y=Yard Waste, Z=Zero Waste.



A.I. ANALYTICAL
Specialists in Environmental Services

CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date Collected	Time Collected	Field Sample Identification		Grab or Composite	# of Containers & Type ^C	Preservation Code ^P	Matrix Code ^M	TP - TOTAL PHOS	ORTHO - ORTHO PHOS										
6/14	10:26	WELL 250 mL	A9	G	1P	NP	GW		X										
6/14	10:26	WELL 250 mL	A9	G	1P	S	GW	X											
6/14	10:55	WELL 250 mL	A16	G	1P	NP	GW		X										
6/14	10:55	WELL 250 mL	A16	G	1P	S	GW	X											
6/14	11:21	WELL 250 mL	A8	G	1P	NP	GW		X										
6/14	11:21	WELL 250 mL	A8	G	1P	S	GW	X											
6/14	11:44	WELL 250 mL	A11	G	1P	NP	GW		X										
6/14	11:44	WELL 250 mL	A11	G	1P	S	GW	X											
6/14		WELL 250 mL		G	1P	NP	GW		X										
6/14		WELL 250 mL		G	1P	S	GW	X											

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Monthly---- wells main plant --- WWTP
Address:	131 Camelot Drive	P.O. Number:	Project Number:
City / State / Zip:	Plymouth MA 02360	Report To:	Cell: 774-608-1213 Phone: 508-830-4159
Main Telephone:	508-830-4159 x207	Sampled by:	Workorder No: 2306-09483
Contact Person:	driscoll	Quote No:	sdriscoll@woodardcurran.com,

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time
<i>Shawn Rooney</i>	6/14/23	6:14:20	<i>RL</i>	6/14/23	14:20
<i>RL</i>	6/14/23	17:15	<i>Chlorine Jones</i>	6/14/23	17:15

Reporting Options		Project Comments	
MCP Standard		<i>NI</i> Temp. Upon Receipt 5, 1 °C	
MWRA eSMART			
State Report & Upload			

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, DI=DI-H2O, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SH=NaOH, T=Na2S2O8, Z=ZnOAc
Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=

Turn Around Time	
Normal	X
5-7 Business days	X
Rush - Date Due:	/ /

Lab Use Only	
Sample Pick Up Only	
R1AL sampled; attach field hours	
Received on Ice	
No Ice	
Workorder No:	2306-09483



LABORATORY REPORT

Woodard & Curran, Inc.
Attn: Sean Driscoll
131 Camelot Drive
Plymouth, MA 02360

Date Received: 7/12/2023
Date Reported: 7/24/2023
P.O. Number

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

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 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:

Kristin Phelan
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

Report Qualifiers & Abbreviations

These qualifiers/abbreviations may or may not be present in this report.

Qualifier	Descriptions
*	Recovery outside of acceptance limits
B	Analyte detected in method blank at a level about the detection limit
D	Surrogate diluted out to reach a parameter result within the instrument calibration curve
E	Parameter result exceeds calibration curve
J	Estimated result based on MDL
Abbreviation	Definition
BLK	Method Blank
CFU	Colony Forming Unit
DF	Dilution Factor
DL	Detection Limit
LCS(D)	Laboratory Control Standard (Duplicate)
MCL	Maximum Contaminant Level
MDL	Method Detection Limit
MPN	Most Probably Number
MS(D)	Matrix Spike (Duplicate)
QC	Quality Control
RPD	Relative Percent Difference
TIC	Tentatively Identified Compound
TNTC	Too Numerous to Count
*CS	Field data provided by the client

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 001
Sample Description: A8 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 13:02

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Alkalinity (as CaCO ₃)	140	1.0	mg/L	SM2320B 18-21ed	7/12/2023	20:03	JMF
Orthophosphate	3.9	0.020	mg/L	SM 4500 P E-2011	7/12/2023	23:12	JW
Total Phosphorus (as P)	3.6	0.010	mg/L	SM4500P-B,E-2011	7/14/2023	10:30	VC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	7/12/2023	21:35	JW
Nitrate (as N)	2.9	0.050	mg/L	EPA 300.0	7/12/2023	21:35	JW
Chloride	620	10	mg/L	EPA 300.0	7/15/2023	7:12	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	7/18/2023	10:00	AH
Volatile Organic Compounds							
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Chloroform	7.6	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	7/14/2023	16:22	GCL
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Bromoform	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Benzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Toluene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 001
Sample Description: A8 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 13:02

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Acetone	<10	10	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Acrolein	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Styrene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:22	GCL
Surrogates			RANGE	EPA 624.1	7/14/2023	16:22	GCL
Dibromofluoromethane	99		60-140%	EPA 624.1	7/14/2023	16:22	GCL
Toluene-D8	99		60-140%	EPA 624.1	7/14/2023	16:22	GCL
4-Bromofluorobenzene	100		60-140%	EPA 624.1	7/14/2023	16:22	GCL
Total Metals							
Boron	0.50	0.010	mg/L	EPA 200.7	7/20/2023	13:35	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	7/19/2023	12:54	KK
Sodium	460	2.5	mg/L	EPA 200.7	7/19/2023	15:02	KK
ICP Digestion				EPA 200.7	7/18/2023	13:00	RMS

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Orthophosphate - Result is greater than Total Phosphorus (as P), however results are within duplicate criteria of each other.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 002
Sample Description: A9 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 11:49

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	54	1.0	mg/L	SM2320B 18-21ed	7/12/2023 20:03	JMF
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	7/12/2023 23:37	JW
Total Phosphorus (as P)	0.031	0.010	mg/L	SM4500P-B,E-2011	7/14/2023 10:30	VC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	7/12/2023 22:22	JW
Nitrate (as N)	4.7	0.050	mg/L	EPA 300.0	7/12/2023 22:22	JW
Chloride	550	10	mg/L	EPA 300.0	7/15/2023 7:28	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500NOrg-D 18-21ed	7/18/2023 10:00	AH
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 16:51	GCL
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
Chloroform	7.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 16:51	GCL
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 16:51	GCL
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
Bromoform	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
Benzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
Toluene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 16:51	GCL

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 002
Sample Description: A9 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 11:49

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:51	GCL
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:51	GCL
Acetone	<10	10	ug/L	EPA 624.1	7/14/2023	16:51	GCL
Acrolein	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:51	GCL
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:51	GCL
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:51	GCL
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:51	GCL
Styrene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:51	GCL
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:51	GCL
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:51	GCL
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:51	GCL
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:51	GCL
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:51	GCL
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:51	GCL
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:51	GCL
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	16:51	GCL
Surrogates			RANGE	EPA 624.1	7/14/2023	16:51	GCL
Dibromofluoromethane	98		60-140%	EPA 624.1	7/14/2023	16:51	GCL
Toluene-D8	102		60-140%	EPA 624.1	7/14/2023	16:51	GCL
4-Bromofluorobenzene	102		60-140%	EPA 624.1	7/14/2023	16:51	GCL
Total Metals							
Boron	0.16	0.010	mg/L	EPA 200.7	7/20/2023	14:07	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	7/19/2023	13:01	KK
Sodium	400	2.5	mg/L	EPA 200.7	7/19/2023	15:15	KK
ICP Digestion				EPA 200.7	7/18/2023	13:00	RMS

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 003
Sample Description: A10 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 11:08

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	32	1.0	mg/L	SM2320B 18-21ed	7/12/2023 20:03	JMF
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	7/12/2023 23:37	JW
Total Phosphorus (as P)	0.023	0.010	mg/L	SM4500P-B,E-2011	7/14/2023 10:30	VC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	7/12/2023 22:38	JW
Nitrate (as N)	2.7	0.050	mg/L	EPA 300.0	7/12/2023 22:38	JW
Chloride	590	10	mg/L	EPA 300.0	7/15/2023 7:44	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500NOrg-D 18-21ed	7/17/2023 10:30	AH
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Chloroform	2.4	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 17:20	GCL
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Bromoform	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Benzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Toluene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 003
Sample Description: A10 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 11:08

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Acetone	<10	10	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Acrolein	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Styrene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:20	GCL
Surrogates			RANGE	EPA 624.1	7/14/2023 17:20	GCL
Dibromofluoromethane	100		60-140%	EPA 624.1	7/14/2023 17:20	GCL
Toluene-D8	99		60-140%	EPA 624.1	7/14/2023 17:20	GCL
4-Bromofluorobenzene	101		60-140%	EPA 624.1	7/14/2023 17:20	GCL
Total Metals						
Boron	0.13	0.010	mg/L	EPA 200.7	7/20/2023 14:09	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	7/19/2023 13:03	KK
Sodium	400	2.5	mg/L	EPA 200.7	7/19/2023 15:16	KK
ICP Digestion				EPA 200.7	7/18/2023 13:00	RMS

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 004
Sample Description: A11 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 13:33

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO3)	16	1.0	mg/L	SM2320B 18-21ed	7/12/2023 20:03	JMF
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	7/12/2023 23:37	JW
Total Phosphorus (as P)	0.018	0.010	mg/L	SM4500P-B,E-2011	7/14/2023 10:30	VC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	7/12/2023 22:54	JW
Nitrate (as N)	3.6	0.050	mg/L	EPA 300.0	7/12/2023 22:54	JW
Chloride	600	10	mg/L	EPA 300.0	7/15/2023 7:59	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	7/18/2023 10:00	AH
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Chloroform	7.8	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 17:49	GCL
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Bromoform	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Benzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Toluene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 004
Sample Description: A11 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 13:33

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Acetone	<10	10	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Acrolein	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Styrene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 17:49	GCL
Surrogates			RANGE	EPA 624.1	7/14/2023 17:49	GCL
Dibromofluoromethane	98		60-140%	EPA 624.1	7/14/2023 17:49	GCL
Toluene-D8	98		60-140%	EPA 624.1	7/14/2023 17:49	GCL
4-Bromofluorobenzene	101		60-140%	EPA 624.1	7/14/2023 17:49	GCL
Total Metals						
Boron	0.17	0.010	mg/L	EPA 200.7	7/20/2023 14:10	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	7/19/2023 13:04	KK
Sodium	430	2.5	mg/L	EPA 200.7	7/19/2023 15:18	KK
ICP Digestion				EPA 200.7	7/18/2023 13:00	RMS

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 005
Sample Description: A16 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 12:24

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	140	1.0	mg/L	SM2320B 18-21ed	7/12/2023 20:03	JMF
Orthophosphate	0.14	0.020	mg/L	SM 4500 P E-2011	7/12/2023 23:37	JW
Total Phosphorus (as P)	0.093	0.010	mg/L	SM4500P-B,E-2011	7/14/2023 10:30	VC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	7/12/2023 23:10	JW
Nitrate (as N)	2.2	0.050	mg/L	EPA 300.0	7/12/2023 23:10	JW
Chloride	470	10	mg/L	EPA 300.0	7/15/2023 8:15	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500NOrg-D 18-21ed	7/18/2023 10:00	AH
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 18:18	GCL
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
Chloroform	15	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 18:18	GCL
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 18:18	GCL
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
Bromoform	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
Benzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
Toluene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:18	GCL

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 005
Sample Description: A16 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 12:24

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:18	GCL
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:18	GCL
Acetone	<10	10	ug/L	EPA 624.1	7/14/2023	18:18	GCL
Acrolein	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:18	GCL
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:18	GCL
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:18	GCL
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:18	GCL
Styrene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:18	GCL
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:18	GCL
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:18	GCL
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:18	GCL
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:18	GCL
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:18	GCL
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:18	GCL
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:18	GCL
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:18	GCL
Surrogates			RANGE	EPA 624.1	7/14/2023	18:18	GCL
Dibromofluoromethane	99		60-140%	EPA 624.1	7/14/2023	18:18	GCL
Toluene-D8	98		60-140%	EPA 624.1	7/14/2023	18:18	GCL
4-Bromofluorobenzene	101		60-140%	EPA 624.1	7/14/2023	18:18	GCL
Total Metals							
Boron	0.22	0.010	mg/L	EPA 200.7	7/20/2023	14:12	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	7/19/2023	13:06	KK
Sodium	380	2.5	mg/L	EPA 200.7	7/19/2023	15:19	KK
ICP Digestion				EPA 200.7	7/18/2023	13:00	RMS

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Orthophosphate - Result is greater than Total Phosphorus (as P), however results confirmed through reanalysis.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 006
Sample Description: 6D WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 09:21

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	7.0	1.0	mg/L	SM2320B 18-21ed	7/12/2023 20:03	JMF
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	7/12/2023 23:37	JW
Total Phosphorus (as P)	0.028	0.010	mg/L	SM4500P-B,E-2011	7/14/2023 10:30	VC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	7/12/2023 23:25	JW
Nitrate (as N)	3.3	0.050	mg/L	EPA 300.0	7/12/2023 23:25	JW
Chloride	200	1.0	mg/L	EPA 300.0	7/12/2023 23:25	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	7/17/2023 10:30	AH
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 18:47	GCL
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
Chloroform	2.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 18:47	GCL
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 18:47	GCL
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
Bromoform	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
Benzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
Toluene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 18:47	GCL

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 006
Sample Description: 6D WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 09:21

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:47	GCL
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:47	GCL
Acetone	<10	10	ug/L	EPA 624.1	7/14/2023	18:47	GCL
Acrolein	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:47	GCL
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:47	GCL
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:47	GCL
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:47	GCL
Styrene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:47	GCL
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:47	GCL
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:47	GCL
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:47	GCL
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:47	GCL
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:47	GCL
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:47	GCL
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:47	GCL
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	18:47	GCL
Surrogates			RANGE	EPA 624.1	7/14/2023	18:47	GCL
Dibromofluoromethane	100		60-140%	EPA 624.1	7/14/2023	18:47	GCL
Toluene-D8	98		60-140%	EPA 624.1	7/14/2023	18:47	GCL
4-Bromofluorobenzene	102		60-140%	EPA 624.1	7/14/2023	18:47	GCL
Total Metals							
Boron	0.051	0.010	mg/L	EPA 200.7	7/20/2023	14:14	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	7/19/2023	13:24	KK
Sodium	130	0.050	mg/L	EPA 200.7	7/19/2023	13:24	KK
ICP Digestion				EPA 200.7	7/18/2023	13:00	RMS

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 007
Sample Description: 6S WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 08:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Alkalinity (as CaCO ₃)	20	1.0	mg/L	SM2320B 18-21ed	7/12/2023	20:03	JMF
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	7/12/2023	23:37	JW
Total Phosphorus (as P)	0.024	0.010	mg/L	SM4500P-B,E-2011	7/14/2023	10:30	VC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	7/12/2023	23:41	JW
Nitrate (as N)	1.5	0.050	mg/L	EPA 300.0	7/12/2023	23:41	JW
Chloride	50	1.0	mg/L	EPA 300.0	7/12/2023	23:41	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500NOrg-D 18-21ed	7/17/2023	10:30	AH
Volatile Organic Compounds							
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Chloroform	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	7/14/2023	19:16	GCL
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Bromoform	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Benzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Toluene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 007
Sample Description: 6S WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 08:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Acetone	<10	10	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Acrolein	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Styrene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	19:16	GCL
Surrogates			RANGE	EPA 624.1	7/14/2023	19:16	GCL
Dibromofluoromethane	98		60-140%	EPA 624.1	7/14/2023	19:16	GCL
Toluene-D8	99		60-140%	EPA 624.1	7/14/2023	19:16	GCL
4-Bromofluorobenzene	102		60-140%	EPA 624.1	7/14/2023	19:16	GCL
Total Metals							
Boron	0.014	0.010	mg/L	EPA 200.7	7/20/2023	14:15	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	7/19/2023	13:26	KK
Sodium	30	0.050	mg/L	EPA 200.7	7/19/2023	13:26	KK
ICP Digestion				EPA 200.7	7/18/2023	13:00	RMS

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 008
Sample Description: IS WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 10:28

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	5.0	1.0	mg/L	SM2320B 18-21ed	7/12/2023 20:03	JMF
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	7/12/2023 23:37	JW
Total Phosphorus (as P)	0.010	0.010	mg/L	SM4500P-B,E-2011	7/14/2023 10:30	VC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	7/12/2023 23:57	JW
Nitrate (as N)	0.53	0.050	mg/L	EPA 300.0	7/12/2023 23:57	JW
Chloride	16	1.0	mg/L	EPA 300.0	7/12/2023 23:57	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	7/17/2023 10:30	AH
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Chloroform	1.2	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 19:45	GCL
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Bromoform	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Benzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Toluene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 008
Sample Description: IS WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 10:28

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Acetone	<10	10	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Acrolein	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Styrene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 19:45	GCL
Surrogates			RANGE	EPA 624.1	7/14/2023 19:45	GCL
Dibromofluoromethane	98		60-140%	EPA 624.1	7/14/2023 19:45	GCL
Toluene-D8	97		60-140%	EPA 624.1	7/14/2023 19:45	GCL
4-Bromofluorobenzene	101		60-140%	EPA 624.1	7/14/2023 19:45	GCL
Total Metals						
Boron	0.010	0.010	mg/L	EPA 200.7	7/20/2023 14:17	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	7/19/2023 13:27	KK
Sodium	9.5	0.050	mg/L	EPA 200.7	7/19/2023 13:27	KK
ICP Digestion				EPA 200.7	7/18/2023 13:00	RMS

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 009
Sample Description: 475 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 09:57

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	5.0	1.0	mg/L	SM2320B 18-21ed	7/12/2023 20:03	JMF
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	7/12/2023 23:37	JW
Total Phosphorus (as P)	0.018	0.010	mg/L	SM4500P-B,E-2011	7/14/2023 10:30	VC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	7/13/2023 0:13	JW
Nitrate (as N)	4.0	0.050	mg/L	EPA 300.0	7/13/2023 0:13	JW
Chloride	290	10	mg/L	EPA 300.0	7/15/2023 8:30	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	7/17/2023 10:30	AH
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 20:14	GCL
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
Chloroform	4.1	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 20:14	GCL
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	7/14/2023 20:14	GCL
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
Bromoform	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
Benzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
Toluene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023 20:14	GCL

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2307-11509

Project Name: WELL QUARTERLY MAIN PLANT - WWTP

Sample Number: 009
Sample Description: 475 WELL QUARTERLY
Sample Type : GRAB
Sample Date / Time : 7/11/2023 @ 09:57

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	20:14	GCL
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	20:14	GCL
Acetone	<10	10	ug/L	EPA 624.1	7/14/2023	20:14	GCL
Acrolein	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	20:14	GCL
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	20:14	GCL
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	20:14	GCL
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	20:14	GCL
Styrene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	20:14	GCL
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	20:14	GCL
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	20:14	GCL
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	20:14	GCL
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	20:14	GCL
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	20:14	GCL
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	20:14	GCL
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	20:14	GCL
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	7/14/2023	20:14	GCL
Surrogates			RANGE	EPA 624.1	7/14/2023	20:14	GCL
Dibromofluoromethane	100		60-140%	EPA 624.1	7/14/2023	20:14	GCL
Toluene-D8	98		60-140%	EPA 624.1	7/14/2023	20:14	GCL
4-Bromofluorobenzene	101		60-140%	EPA 624.1	7/14/2023	20:14	GCL
Total Metals							
Boron	0.046	0.010	mg/L	EPA 200.7	7/20/2023	14:18	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	7/19/2023	13:29	KK
Sodium	170	0.050	mg/L	EPA 200.7	7/19/2023	13:29	KK
ICP Digestion				EPA 200.7	7/18/2023	13:00	RMS

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date Collected		Time Collected	Field Sample Identification		Grab or Composite	# of Containers & Type C	Preservation Code P	Matrix Code M	TKN	TOTAL PHOS	NITRITE NO2	NITRATE NO3	ORTHO PHOS	ALKALINITY	CHLORIDE	COPPER	BORON	SODIUM	EPA 624 VOC
7/11/23		11:49	A9 WELL	quarterly	250 mL	sulfuric	G	1P	S	GW	X								
			A9 WELL	quarterly	250mL	nitric	G	1P	N	GW						X	X	X	
			A9 WELL	quarterly	VOC	40 mL	thio	G	2V	T	GW								X
			A9 WELL	quarterly	250 mL		G	1P	NP	GW		X							
			A9 WELL	quarterly	250 mL		G	1P	NP	GW			X						
			A9 WELL	quarterly	250 mL		G	1P	NP	GW				X					
			A9 WELL	quarterly	250 mL		G	1P	NP	GW					X				
J1 7/12/23																			
Per Sample bottle																			

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant - WWTP
Address:	131 Camelot Drive	P.O. Number:	
City / State / Zip:	Plymouth MA 02360	Report To:	Sean d
Main Telephone:	508-830-4159 x207	Cell:	774-608-1213
Contact Person:	Sean d	Sampled by:	
		Quote No:	
		Email addresses:	sdriscoll@woodardcurran.com,

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time
<i>Robert Quinn</i>	7/12/23	1505	<i>MS</i>	7/12/23	1505
<i>RSK</i>	7/12/23	1745	<i>guy</i>	7/12/23	1745

Reporting Options		Project Comments	
MCP Standard		Temp. Upon Receipt 4.8 °C	
MWRA eSMART			
State Report & Upload			
Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, SI=Sterile		Preservatives: A=Ascorbic Acid, NH4=NH4Cl, DI=DI-H2O, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SH=NaOH, T=Na2S2O3, Z=ZnOAC	
Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=		Workorder No: 2307-11509	

Lab Use Only	
Sample Pick Up Only	
RIAL sampled; attach field hours	
Received on Ice	No Ice
Turn Around Time	
Normal	X
5-7 Business days	X
Rush - Date Due:	/ /



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date		Time		Field Sample Identification		Grab or Composite	# of Containers & Type C	Preservation Code P	Matrix Code M	TKN	TOTAL PHOS	NITRITE NO2	NITRATE NO3	ORTHO PHOS	ALKALINITY	CHLORIDE	COPPER	BORON	SODIUM	EPA 624 VOC
Collected		Collected																		
7/1/23		11:08		A10 WELL quarterly	250 mL sulfuric	G	1P	S	GW	X										
				A10 WELL quarterly	250mL nitric	G	1P	N	GW								X	X		
				A10 WELL quarterly	VOC 40 mL thio	G	2V	T	GW											X
				A10 WELL quarterly	250 mL	G	1P	NP	GW			X	X							
				A10 WELL quarterly	250 mL	G	1P	NP	GW					X						
				A10 WELL quarterly	250 mL	G	1P	NP	GW						X					
				A10 WELL quarterly	250 mL	G	1P	NP	GW							X				
DI 7/12/23																				
per sample																				
bottle																				

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant -----WWTP
Address:	131 Camelot Drive	P.O. Number:	
City / State / Zip:	Plymouth MA 02360	Report To:	Sean d
Main Telephone:	508-830-4159 x207	Cell:	774-608-1213
Contact Person:	Sean d	Sampled by:	
		Quote No:	
		Email addresses:	sciriscoll@woodardcurran.com,

Relinquished By Signatures		Date	Time	Received By Signatures		Date	Time
<i>David Jean</i>		7/12	1505	<i>AW</i>		7/12	1505
<i>RC</i>		7/12	1745	<i>guy</i>		7/12/23	1745

Reporting Options		Project Comments	
MCP Standard		<i>4.8 °C</i> Temp. Upon Receipt	
MWRA eSMART			
State Report & Upload			

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, DI=DI-H2O, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SH=NaOH, T=Na2S2O3, Z=ZnOAC
Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=

Lab Use Only	
Sample Pick Up Only	
RIAL sampled; attach field hours	
Received on Ice	No Ice
Workorder No:	2307-11509

CHAIN OF CUSTODY RECORD

41 Illinois Avenue Warwick, RI 02888-3007 Tel: 800-937-2580	131 Coolidge St., Suite 105 Hudson, MA 01749-1331 Tel: 800-937-2580
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**131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580**

[illegible]

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant -----WWTP
Address:	131 Camelot Drive	P.O. Number:	
City / State / Zip:	Plymouth MA 02360	Report To:	Sean d
Main Telephone:	508-830-4159 x207	Cell:	774-608-1213
Contact Person:	Sean d	Sampled by:	
		Quote No:	
		Email addresses	sdhiscoll@woodardcurran.com,
		Phone:	508-830-4159

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time
<i>[Signature]</i>	7/12	1505	<i>[Signature]</i>	7/12	1505
<i>[Signature]</i>	7/12	1745	<i>[Signature]</i>	7/12/23	1745

Turn Around Time		
X	Normal	X EMAIL Report
X	5-7 Business days	
	Revised Date Due:	/ /

Reporting Options		Project Comments
	MCP Standard	
	MWRA eSMART	
	State Report & Upload	

Temp. Upon Receipt 9-8 °C

Lab Use Only

Sample Pick Up Only

RIA sampled; attach field hours

Received on Ice	No Ice
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Workorder No: 2307-1150.9

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=_____

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, SI=Sterile Preservatives: A=Ascorbic Acid, NH4=NH₄Cl, DI=DI-H₂O, H=HCl, M=MeOH, N=HNO₃, NP=None, S=H₂SO₄, SH=NaOH, T=Na₂S₂O₃, Z=ZnOAc

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CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Field Sample Identification

[illegible]

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant -----WWTP
Address:	131 Camelot Drive	P.O. Number:	
City / State / Zip:	Plymouth MA 02360	Report To:	Sean d
Main Telephone:	508-830-4159 x207	Cell:	774-808-1213
Contact Person:	Sean d	Sampled by:	
		Quote No:	
		Email addresses	sdiscoll@woodardcurran.com,

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time
<i>[Signature]</i>	7/12	1505	<i>[Signature]</i>	7/12	1505
<i>[Signature]</i>	7/12	1745	<i>[Signature]</i>	7/23	1745

Turn Around Time	
X	Normal X EMAIL Report
X	5-7 Business days
Rush – Date Due: / /	

Reporting Options		Project Comments
	MCP Standard	
	MWRA eSMART	
	State Report & Upload	

NZ

Temp. Upon Receipt 4.8 °C

Lab Use Only			
Sample Pick Up Only			
RT/L sampled; attach field hours			
Received on Ice		No Ice	
Workorder No:	2307-11509		

i, SH=NaOH, T=Na₂S₂O₃, Z=ZnOAc
 Page 7 of 9

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH₄Cl, DI=DI-H₂O, H=HCl, M=MeOH, N=HNO₃, NP=None, S=H₂O
Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=

CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

**131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580**

[illegible]

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Well Quarterly main plant WWTP
Address:	131 Camelot Drive	P.O. Number:	
City / State / Zip:	Plymouth MA 02360	Report To:	Sean d
Main Telephone:	508-830-4159 x207	Cell:	774-608-1213
Contact Person:	Sean d	Sampled by:	
		Quote No:	
		Email addresses	sdriscoll@woodardcurran.com
		Phone:	508-830-4159

Relinquished By Signatures		Date	Time	Received By Signatures		Date	Time
[Signature]		7/12	1505	[Signature]		7/12	1505
[Signature]		7/12	1745	[Signature]		7/12/23	1745

Turn Around Time		
X	Normal	X EMAIL Report
X	5-7 Business days	

Rush - Date Due: / /

Reporting Options		Project Comments	
☐	MCP Standard		
☐	MWRA eSMART		
☐	State Report & Upload		

Lab Use Only	
☒	Sample Pick Up Only
☐	RIAL sampled; attach field hours
☒	Received on Ice
☐	No Ice

Temp. Upon Receipt **4.8** °C
 Workorder No: **2307-1509**



LABORATORY REPORT

Woodard & Curran, Inc.
Attn: Sean Driscoll
131 Camelot Drive
Plymouth, MA 02360

Date Received: 8/16/2023
Date Reported: 8/23/2023
P.O. Number

Work Order #: 2308-13860

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

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 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:

Katie Amaral, Ph.D., CMQ/OE
Laboratory Director

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

Report Qualifiers & Abbreviations

These qualifiers/abbreviations may or may not be present in this report.

Qualifier	Descriptions
*	Recovery outside of acceptance limits
B	Analyte detected in method blank at a level about the detection limit
D	Surrogate diluted out to reach a parameter result within the instrument calibration curve
E	Parameter result exceeds calibration curve
J	Estimated result based on MDL

Abbreviation	Definition
BLK	Method Blank
CFU	Colony Forming Unit
DF	Dilution Factor
DL	Detection Limit
LCS(D)	Laboratory Control Standard (Duplicate)
MCL	Maximum Contaminant Level
MDL	Method Detection Limit
MPN	Most Probably Number
MS(D)	Matrix Spike (Duplicate)
QC	Quality Control
RPD	Relative Percent Difference
TIC	Tentatively Identified Compound
TNTC	Too Numerous to Count
*CS	Field data provided by the client

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2308-13860

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 001
Sample Description: WELL A8
Sample Type : GRAB
Sample Date / Time : 8/16/2023 @ 08:32

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	3.6	0.020	mg/L	SM 4500 P E-2011	8/17/2023 0:57	JW
Total Phosphorus (as P)	3.7	0.010	mg/L	SM4500P-B,E-2011	8/17/2023 10:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 002
Sample Description: WELL A9
Sample Type : GRAB
Sample Date / Time : 8/16/2023 @ 09:41

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	8/17/2023 0:57	JW
Total Phosphorus (as P)	0.025	0.010	mg/L	SM4500P-B,E-2011	8/17/2023 10:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 003
Sample Description: WELL A10
Sample Type : GRAB
Sample Date / Time : 8/16/2023 @ 10:24

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	8/17/2023 0:57	JW
Total Phosphorus (as P)	<0.010	0.010	mg/L	SM4500P-B,E-2011	8/17/2023 10:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2308-13860

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 004
Sample Description: WELL A11
Sample Type : GRAB
Sample Date / Time : 8/16/2023 @ 13:31

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	8/17/2023 0:57	JW
Total Phosphorus (as P)	0.018	0.010	mg/L	SM4500P-B,E-2011	8/18/2023 13:13	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 005
Sample Description: WELL A16
Sample Type : GRAB
Sample Date / Time : 8/16/2023 @ 09:06

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	0.039	0.020	mg/L	SM 4500 P E-2011	8/17/2023 0:57	JW
Total Phosphorus (as P)	0.095	0.010	mg/L	SM4500P-B,E-2011	8/17/2023 10:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 006
Sample Description: WELL IS
Sample Type : GRAB
Sample Date / Time : 8/16/2023 @ 11:11

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	8/17/2023 0:57	JW
Total Phosphorus (as P)	0.011	0.010	mg/L	SM4500P-B,E-2011	8/17/2023 10:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2308-13860

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 007
Sample Description: WELL 6D
Sample Type : GRAB
Sample Date / Time : 8/16/2023 @ 12:34

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	8/17/2023 0:57	JW
Total Phosphorus (as P)	0.014	0.010	mg/L	SM4500P-B,E-2011	8/18/2023 13:13	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 008
Sample Description: WELL 47S
Sample Type : GRAB
Sample Date / Time : 8/16/2023 @ 11:53

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Total Phosphorus (as P)	0.018	0.010	mg/L	SM4500P-B,E-2011	8/18/2023 13:13	VC

Orthophosphate - Sample collected in a sulfuric preserved bottle; could not be analyzed due to improper preservative.

Sample Number: 009
Sample Description: WELL 6S
Sample Type : GRAB
Sample Date / Time : 8/16/2023 @ 13:01

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM 4500 P E-2011	8/17/2023 0:57	JW
Total Phosphorus (as P)	0.040	0.010	mg/L	SM4500P-B,E-2011	8/18/2023 13:13	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.



CHAIN OF CUSTODY RECORD

41 Illinois Avenue Warwick, RI 02888-3007 Tel: 800-937-2580	131 Coolidge St., Suite 105 Hudson, MA 01749-1331 Tel: 800-937-2580
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Date Collected	Time Collected	Field Sample Identification	Grab	# of	Preser	Matr	Total	Ortho
8/16/23	08:32	Well (250 mL) A8	G	1P	NP	GW	X	
8/16/23	08:32	Well (250 mL) A8	G	1P	S	GW	X	
8/16/23	09:41	Well (250 mL) A9	G	1P	NP	GW	X	
8/16/23	09:41	Well (250 mL) A9	G	1P	S	GW	X	
8/16/23	10:24	Well (250 mL) A10	G	1P	NP	GW	X	
8/16/23	10:24	Well (250 mL) A10	G	1P	S	GW	X	
8/16/23	13:31	Well (250 mL) A11	G	1P	NP	GW	X	
8/16/23	13:31	Well (250 mL) A11	G	1P	S	GW	X	
8/16/23	09:06	Well (250 mL) A16	G	1P	NP	GW	X	
8/16/23	09:06	Well (250 mL) A16	G	1P	S	GW	X	

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Monthly Wells – Main Plant WWTP
Address:	131 Camelot Drive	P.O. Number:	Project Number:
City / State / Zip:	Plymouth, MA 02360	Report To:	Cell: 401.578.9976 Phone:
Main Telephone:	508-830-4159	Sampled by:	Email addresses
Contact Person:	Sean Driscoll	Quote No:	EMcNeil@woodardcurran.com rscott@woodardcurran.com

Relinquished By Signatures		Date	Time	Received By Signatures		Date	Time	Turn Around Time		
		8/16/23	14:43			8/16/23	1520	X	Normal	X EMAIL Report
		8/16/23	1815			8/16/23	1815	X	5-7 Business days	
									2 Business Days	

Reporting Options		Project Comments	
MCP Standard	_____	Email results to sdniscoll@woodardcurran.com ; jfreemand@woodardcurran.com ; kfontaine@woodardcurran.com ; & rscoff@woodardcurran.com nl 55°C	
MWRA eSMART			
State Report & Upload			

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives, A=Ascorbic Acid, NH₄=NH₄Cl, DI=DI-H₂O, H=HCl, M=MeOH, T=Na₂S₂O₃, Z=ZnOAc
Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=



LABORATORY REPORT

Woodard & Curran, Inc.
Attn: Sean Driscoll
131 Camelot Drive
Plymouth, MA 02360

Date Received: 8/23/2023
Date Reported: 8/28/2023
P.O. Number

Work Order #: 2308-14320

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

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 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:

Katie Amaral, Ph.D., CMQ/OE
Laboratory Director

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

Report Qualifiers & Abbreviations

These qualifiers/abbreviations may or may not be present in this report.

Qualifier	Descriptions
*	Recovery outside of acceptance limits
B	Analyte detected in method blank at a level about the detection limit
D	Surrogate diluted out to reach a parameter result within the instrument calibration curve
E	Parameter result exceeds calibration curve
J	Estimated result based on MDL

Abbreviation	Definition
BLK	Method Blank
CFU	Colony Forming Unit
DF	Dilution Factor
DL	Detection Limit
LCS(D)	Laboratory Control Standard (Duplicate)
MCL	Maximum Contaminant Level
MDL	Method Detection Limit
MPN	Most Probably Number
MS(D)	Matrix Spike (Duplicate)
QC	Quality Control
RPD	Relative Percent Difference
TIC	Tentatively Identified Compound
TNTC	Too Numerous to Count
*CS	Field data provided by the client

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

Woodard & Curran, Inc.

Work Order #: 2308-14320

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 001
Sample Description: WELL (250ML) 475 WELL
Sample Type : GRAB
Sample Date / Time : 8/23/2023 @ 08:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	8/23/2023 22:07	JW

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.



LABORATORY REPORT

Woodard & Curran, Inc.
Attn: Sean Driscoll
131 Camelot Drive
Plymouth, MA 02360

Date Received: 9/20/2023
Date Reported: 9/29/2023
P.O. Number

Work Order #: 2309-16063

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

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 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:

Katie Amaral, Ph.D., CMQ/OE
Laboratory Director

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

Report Qualifiers & Abbreviations

These qualifiers/abbreviations may or may not be present in this report.

Qualifier

*

B

D

E

J

Descriptions

Recovery outside of acceptance limits

Analyte detected in method blank at a level about the detection limit

Surrogate diluted out to reach a parameter result within the instrument calibration curve

Parameter result exceeds calibration curve

Estimated result based on MDL

Abbreviation

BLK

CFU

DF

DL

LCS(D)

MCL

MCLG

MDL

MPN

MS(D)

QC

RPD

TIC

TNTC

*CS

Definition

Method Blank

Colony Forming Unit

Dilution Factor

Detection Limit

Laboratory Control Standard (Duplicate)

Maximum Contaminant Level

Maximum Contaminant Level Goal

Method Detection Limit

Most Probable Number

Matrix Spike (Duplicate)

Quality Control

Relative Percent Difference

Tentatively Identified Compound

Too Numerous to Count

Field data provided by the client

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2309-16063

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 001
Sample Description: WELL 475
Sample Type : GRAB
Sample Date / Time : 9/19/2023 @ 08:38

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	9/20/2023 23:54	JW
Total Phosphorus (as P)	0.017	0.010	mg/L	SM4500 P-B,E-2011	9/25/2023 14:00	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 002
Sample Description: WELL 6S
Sample Type : GRAB
Sample Date / Time : 9/19/2023 @ 09:22

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	9/20/2023 23:54	JW
Total Phosphorus (as P)	0.026	0.010	mg/L	SM4500 P-B,E-2011	9/25/2023 14:00	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 003
Sample Description: WELL 6D
Sample Type : GRAB
Sample Date / Time : 9/19/2023 @ 09:06

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	9/20/2023 23:54	JW
Total Phosphorus (as P)	0.013	0.010	mg/L	SM4500 P-B,E-2011	9/25/2023 14:00	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2309-16063

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 004
Sample Description: WELL 1S
Sample Type : GRAB
Sample Date / Time : 9/19/2023 @ 09:49

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	9/20/2023 23:54	JW
Total Phosphorus (as P)	<0.010	0.010	mg/L	SM4500 P-B,E-2011	9/25/2023 14:00	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 005
Sample Description: WELL A16
Sample Type : GRAB
Sample Date / Time : 9/19/2023 @ 11:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	0.050	0.020	mg/L	SM4500 P E-2011	9/20/2023 23:54	JW
Total Phosphorus (as P)	0.10	0.010	mg/L	SM4500 P-B,E-2011	9/28/2023 9:00	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 006
Sample Description: WELL A10
Sample Type : GRAB
Sample Date / Time : 9/19/2023 @ 10:19

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	9/20/2023 23:54	JW
Total Phosphorus (as P)	<0.010	0.010	mg/L	SM4500 P-B,E-2011	9/25/2023 14:00	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2309-16063

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 007
Sample Description: WELL A9
Sample Type : GRAB
Sample Date / Time : 9/19/2023 @ 10:53

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	9/20/2023 23:54	JW
Total Phosphorus (as P)	0.027	0.010	mg/L	SM4500 P-B,E-2011	9/28/2023 9:00	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 008
Sample Description: WELL A8
Sample Type : GRAB
Sample Date / Time : 9/19/2023 @ 11:54

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	4.0	0.020	mg/L	SM4500 P E-2011	9/20/2023 23:54	JW
Total Phosphorus (as P)	3.8	0.010	mg/L	SM4500 P-B,E-2011	9/28/2023 9:00	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Orthophosphate - Result is greater than Total Phosphorus (as P), however results are within duplicate criteria of each other.

Sample Number: 009
Sample Description: WELL A11
Sample Type : GRAB
Sample Date / Time : 9/19/2023 @ 12:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	9/21/2023 0:19	JW
Total Phosphorus (as P)	0.016	0.010	mg/L	SM4500 P-B,E-2011	9/28/2023 9:00	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date		Time		Field Sample Identification		Grab or Composite	# of Containers & Type	Preservation Code P	Matrix Code M	Total Phosphorus	Ortho Phosphate										
Collected		Collected																			
9/19		838		Well (250 mL) 475		G	1P	NP	GW		X										
		838		Well (250 mL) 475		G	1P	S	GW	X											
		772		Well (250 mL) 6S		G	1P	NP	GW		X										
		932		Well (250 mL) 6S		G	1P	S	GW	X											
		906		Well (250 mL) 6D		G	1P	NP	GW		X										
		906		Well (250 mL) 6D		G	1P	S	GW	X											
		949		Well (250 mL) 1S		G	1P	NP	GW		X										
		949		Well (250 mL) 1S		G	1P	S	GW	X											
		1125		Well (250 mL) A16		G	1P	NP	GW		X										
		1125		Well (250 mL) A16		G	1P	S	GW	X											

Client Information				Project Information			
Company Name:	Woodard & Curran			Project Name:	Monthly Wells -- Main Plant WWTP		
Address:	131 Camelot Drive			P.O. Number:	Project Number:		
City / State / Zip:	Plymouth, MA 02360			Report To:	Sean Driscoll	Cell:	401.578.9976
Main Telephone:	508-830-4159			Sampled by:		Email addresses:	sdriscoll@woodardcurran.com
Contact Person:	Sean Driscoll			Quote No:			rscott@woodardcurran.com

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time	Turn Around Time	
	9/19/23	1800		9/20/23	1457	X	Normal
	9/20/23	1800		9/20/23	1713	X	5-7 Business days
	9/20/23	1715					2 Business Days

Reporting Options		Project Comments	
MCP Standard		Email results to sdriscoll@woodardcurran.com; ifreemand@woodardcurran.com; kfontaine@woodardcurran.com; & rscott@woodardcurran.com smoooney@woodardcurran.com	
MWRA eSMART			
State Report & Upload			
		4.1.0	



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date Collected		Time Collected	Field Sample Identification		Grab	# of	Pres	Matr	Total	Ortho																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		</
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Client Information			Project Information		
Company Name:	Woodard & Curran	Project Name:	Monthly Wells - Main Plant WWTP		
Address:	131 Camelot Drive	P.O. Number:	Project Number:		
City / State / Zip:	Plymouth, MA 02360	Report To:	Sean Driscoll	Cell:	401.578.9976
Main Telephone:	508-830-4159	Sampled by:	Email addresses		
Contact Person:	Sean Driscoll	Quote No:	sdriscoll@woodardcurran.com		
		Phone:			

Relinquished By Signatures		Date	Time	Received By Signatures	Date	Time	Turn Around Time	
		9/19/23	1300		9/20/23	1457	X	Normal
		9/20/23	1500		9/20/23	1715	X	5-7 Business days
		9/20/23	1715		9/20/23	1715		2 Business Days

Reporting Options		Project Comments	
MCP Standard		Email results to sdriscoll@woodardcurran.com; ifreemant@woodardcurran.com; kfontaine@woodardcurran.com; & rscott@woodardcurran.com smooney@woodardcurran.com	
MWRA eSMART			
State Report & Upload			
		Lab Use Only	
		Sample Pick Up Only	
		KIAL sampled; attach field hours	
		Received on Ice	
		No Ice	
		Workorder No: 2309-16063	



LABORATORY REPORT

Woodard & Curran, Inc.
Attn: Sean Driscoll
131 Camelot Drive
Plymouth, MA 02360

Date Received: 10/18/2023
Date Reported: 10/27/2023
P.O. Number

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

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 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:

Katie Amaral, Ph.D., CMQ/OE
Laboratory Director

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

Report Qualifiers & Abbreviations

These qualifiers/abbreviations may or may not be present in this report.

Qualifier

*

B

D

E

J

Descriptions

Recovery outside of acceptance limits

Analyte detected in method blank at a level about the detection limit

Surrogate diluted out to reach a parameter result within the instrument calibration curve

Parameter result exceeds calibration curve

Estimated result based on MDL

Abbreviation

BLK

CFU

DF

DL

LCS(D)

MCL

MCLG

MDL

MPN

MS(D)

QC

RPD

TIC

TNTC

*CS

Definition

Method Blank

Colony Forming Unit

Dilution Factor

Detection Limit

Laboratory Control Standard (Duplicate)

Maximum Contaminant Level

Maximum Contaminant Level Goal

Method Detection Limit

Most Probable Number

Matrix Spike (Duplicate)

Quality Control

Relative Percent Difference

Tentatively Identified Compound

Too Numerous to Count

Field data provided by the client

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

Sample Number: 001
Sample Description: QUARTERLY WELL (A8)
Sample Type : GRAB
Sample Date / Time : 10/17/2023 @ 12:49

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	180	1.0	mg/L	SM2320B 18-21ed	10/18/2023 21:37	RPK
Orthophosphate	4.1	0.020	mg/L	SM4500 P E-2011	10/18/2023 23:32	JW
Chloride	650	1.0	mg/L	EPA 300.0	10/24/2023 17:08	JW
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	10/18/2023 21:45	JW
Nitrate (as N)	5.6	0.050	mg/L	EPA 300.0	10/18/2023 21:45	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	10/25/2023 7:05	KLS
Total Phosphorus (as P)	3.7	0.010	mg/L	SM4500 P-B,E-2011	10/24/2023 8:15	VC
Total Metals						
Boron	0.25	0.010	mg/L	EPA 200.7	10/24/2023 17:05	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	10/24/2023 17:05	KK
Sodium	440	1.0	mg/L	EPA 200.7	10/24/2023 17:47	KK
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Chloroform	8.1	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	10/19/2023 21:59	SGM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Bromoform	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

Sample Number: 001
Sample Description: QUARTERLY WELL (A8)
Sample Type : GRAB
Sample Date / Time : 10/17/2023 @ 12:49

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Benzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Toluene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Acetone	<10	10	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Acrolein	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Styrene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 21:59	SGM
Surrogates			RANGE	EPA 624.1	10/19/2023 21:59	SGM
Dibromofluoromethane	99		60-140%	EPA 624.1	10/19/2023 21:59	SGM
Toluene-D8	99		60-140%	EPA 624.1	10/19/2023 21:59	SGM
4-Bromofluorobenzene	94		60-140%	EPA 624.1	10/19/2023 21:59	SGM
ICP Digestion				EPA 200.7	10/20/2023 11:05	BRB

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Orthophosphate - Result is greater than Total Phosphorus (as P), however results are within duplicate criteria of each other.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

Sample Number: 002
Sample Description: QUARTERLY WELL (A9)
Sample Type : GRAB
Sample Date / Time : 10/17/2023 @ 11:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	83	1.0	mg/L	SM2320B 18-21ed	10/18/2023 21:37	RPK
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	10/18/2023 23:32	JW
Chloride	680	1.0	mg/L	EPA 300.0	10/24/2023 17:24	JW
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	10/18/2023 22:00	JW
Nitrate (as N)	3.9	0.050	mg/L	EPA 300.0	10/18/2023 22:00	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	10/25/2023 7:05	KLS
Total Phosphorus (as P)	0.024	0.010	mg/L	SM4500 P-B,E-2011	10/24/2023 8:15	VC
Total Metals						
Boron	0.15	0.010	mg/L	EPA 200.7	10/20/2023 14:26	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	10/20/2023 14:26	KK
Sodium	410	1.0	mg/L	EPA 200.7	10/20/2023 16:06	KK
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Chloroform	5.53	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	10/19/2023 22:27	SGM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Bromoform	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

Sample Number: 002
Sample Description: QUARTERLY WELL (A9)
Sample Type : GRAB
Sample Date / Time : 10/17/2023 @ 11:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Benzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Toluene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Acetone	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Acrolein	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Styrene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:27	SGM
Surrogates			RANGE	EPA 624.1	10/19/2023 22:27	SGM
Dibromofluoromethane	98		60-140%	EPA 624.1	10/19/2023 22:27	SGM
Toluene-D8	99		60-140%	EPA 624.1	10/19/2023 22:27	SGM
4-Bromofluorobenzene	95		60-140%	EPA 624.1	10/19/2023 22:27	SGM
ICP Digestion				EPA 200.7	10/19/2023 8:30	BRB

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

Sample Number: 003
Sample Description: QUARTERLY WELL (A10)
Sample Type : GRAB
Sample Date / Time : 10/17/2023 @ 11:13

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	47	1.0	mg/L	SM2320B 18-21ed	10/18/2023 21:37	RPK
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	10/18/2023 23:32	JW
Chloride	610	1.0	mg/L	EPA 300.0	10/24/2023 17:40	JW
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	10/18/2023 22:16	JW
Nitrate (as N)	3.2	0.050	mg/L	EPA 300.0	10/18/2023 22:16	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	10/25/2023 7:05	KLS
Total Phosphorus (as P)	0.043	0.010	mg/L	SM4500 P-B,E-2011	10/24/2023 8:15	VC
Total Metals						
Boron	0.15	0.010	mg/L	EPA 200.7	10/20/2023 14:27	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	10/20/2023 14:27	KK
Sodium	370	1.0	mg/L	EPA 200.7	10/20/2023 16:07	KK
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Chloroform	4.9	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	10/19/2023 22:56	SGM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Bromoform	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

Sample Number: 003
Sample Description: QUARTERLY WELL (A10)
Sample Type : GRAB
Sample Date / Time : 10/17/2023 @ 11:13

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Benzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Toluene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Acetone	<10	10	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Acrolein	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Styrene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 22:56	SGM
Surrogates			RANGE	EPA 624.1	10/19/2023 22:56	SGM
Dibromofluoromethane	99		60-140%	EPA 624.1	10/19/2023 22:56	SGM
Toluene-D8	100		60-140%	EPA 624.1	10/19/2023 22:56	SGM
4-Bromofluorobenzene	94		60-140%	EPA 624.1	10/19/2023 22:56	SGM
ICP Digestion				EPA 200.7	10/19/2023 8:30	BRB

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

Sample Number: 004
Sample Description: QUARTERLY WELL (A11)
Sample Type : GRAB
Sample Date / Time : 10/17/2023 @ 14:34

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	12	1.0	mg/L	SM2320B 18-21ed	10/18/2023 21:37	RPK
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	10/18/2023 23:32	JW
Chloride	230	1.0	mg/L	EPA 300.0	10/18/2023 22:32	JW
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	10/18/2023 22:32	JW
Nitrate (as N)	2.0	0.050	mg/L	EPA 300.0	10/18/2023 22:32	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	10/25/2023 7:05	KLS
Total Phosphorus (as P)	0.022	0.010	mg/L	SM4500 P-B,E-2011	10/24/2023 8:15	VC
Total Metals						
Boron	0.052	0.010	mg/L	EPA 200.7	10/20/2023 14:34	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	10/20/2023 14:34	KK
Sodium	130	0.050	mg/L	EPA 200.7	10/20/2023 14:34	KK
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Chloroform	2.2	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	10/19/2023 23:24	SGM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Bromoform	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

Sample Number: 004
Sample Description: QUARTERLY WELL (A11)
Sample Type : GRAB
Sample Date / Time : 10/17/2023 @ 14:34

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Benzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Toluene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Acetone	<10	10	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Acrolein	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Styrene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:24	SGM
Surrogates			RANGE	EPA 624.1	10/19/2023 23:24	SGM
Dibromofluoromethane	100		60-140%	EPA 624.1	10/19/2023 23:24	SGM
Toluene-D8	100		60-140%	EPA 624.1	10/19/2023 23:24	SGM
4-Bromofluorobenzene	94		60-140%	EPA 624.1	10/19/2023 23:24	SGM
ICP Digestion				EPA 200.7	10/19/2023 8:30	BRB

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

Sample Number: 005
Sample Description: QUARTERLY WELL (A16)
Sample Type : GRAB
Sample Date / Time : 10/17/2023 @ 14:04

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	160	1.0	mg/L	SM2320B 18-21ed	10/18/2023 21:37	RPK
Orthophosphate	0.052	0.020	mg/L	SM4500 P E-2011	10/18/2023 23:32	JW
Chloride	710	1.0	mg/L	EPA 300.0	10/24/2023 17:56	JW
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	10/18/2023 22:48	JW
Nitrate (as N)	2.8	0.050	mg/L	EPA 300.0	10/18/2023 22:48	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	10/25/2023 7:05	KLS
Total Phosphorus (as P)	0.11	0.010	mg/L	SM4500 P-B,E-2011	10/24/2023 8:15	VC
Total Metals						
Boron	0.22	0.010	mg/L	EPA 200.7	10/20/2023 14:36	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	10/20/2023 14:36	KK
Sodium	460	1.0	mg/L	EPA 200.7	10/20/2023 16:26	KK
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Chloroform	8.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	10/19/2023 23:53	SGM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Bromoform	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

Sample Number: 005
Sample Description: QUARTERLY WELL (A16)
Sample Type : GRAB
Sample Date / Time : 10/17/2023 @ 14:04

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Benzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Toluene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Acetone	<10	10	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Acrolein	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Styrene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	10/19/2023 23:53	SGM
Surrogates			RANGE	EPA 624.1	10/19/2023 23:53	SGM
Dibromofluoromethane	100		60-140%	EPA 624.1	10/19/2023 23:53	SGM
Toluene-D8	100		60-140%	EPA 624.1	10/19/2023 23:53	SGM
4-Bromofluorobenzene	94		60-140%	EPA 624.1	10/19/2023 23:53	SGM
ICP Digestion				EPA 200.7	10/19/2023 8:30	BRB

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

Sample Number: 006
Sample Description: QUARTERLY WELL (1S)
Sample Type : GRAB
Sample Date / Time : 10/17/2023 @ 10:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	14	1.0	mg/L	SM2320B 18-21ed	10/18/2023 21:37	RPK
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	10/18/2023 23:32	JW
Chloride	15	1.0	mg/L	EPA 300.0	10/18/2023 23:04	JW
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	10/18/2023 23:04	JW
Nitrate (as N)	0.11	0.050	mg/L	EPA 300.0	10/18/2023 23:04	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	10/25/2023 7:05	KLS
Total Phosphorus (as P)	0.017	0.010	mg/L	SM4500 P-B,E-2011	10/24/2023 8:15	VC
Total Metals						
Boron	0.012	0.010	mg/L	EPA 200.7	10/20/2023 14:37	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	10/20/2023 14:37	KK
Sodium	8.6	0.050	mg/L	EPA 200.7	10/20/2023 14:37	KK
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Chloroform	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	10/20/2023 0:22	SGM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Bromoform	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

Sample Number: 006
Sample Description: QUARTERLY WELL (1S)
Sample Type : GRAB
Sample Date / Time : 10/17/2023 @ 10:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Benzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Toluene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Acetone	<10	10	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Acrolein	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Styrene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
1,2-Dibromomethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:22	SGM
Surrogates			RANGE	EPA 624.1	10/20/2023 0:22	SGM
Dibromofluoromethane	99		60-140%	EPA 624.1	10/20/2023 0:22	SGM
Toluene-D8	100		60-140%	EPA 624.1	10/20/2023 0:22	SGM
4-Bromofluorobenzene	95		60-140%	EPA 624.1	10/20/2023 0:22	SGM
ICP Digestion				EPA 200.7	10/19/2023 8:30	BRB

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

Sample Number: 007
Sample Description: QUARTERLY WELL (475)
Sample Type : GRAB
Sample Date / Time : 10/17/2023 @ 10:11

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	13	1.0	mg/L	SM2320B 18-21ed	10/18/2023 21:37	RPK
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	10/18/2023 23:32	JW
Chloride	370	1.0	mg/L	EPA 300.0	10/24/2023 18:12	JW
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	10/18/2023 23:19	JW
Nitrate (as N)	4.3	0.050	mg/L	EPA 300.0	10/18/2023 23:19	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	10/25/2023 7:05	KLS
Total Phosphorus (as P)	0.023	0.010	mg/L	SM4500 P-B,E-2011	10/24/2023 8:15	VC
Total Metals						
Boron	0.063	0.010	mg/L	EPA 200.7	10/20/2023 14:47	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	10/20/2023 14:47	KK
Sodium	200	0.050	mg/L	EPA 200.7	10/20/2023 14:47	KK
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Chloroform	5.5	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	10/20/2023 0:50	SGM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Bromoform	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

Sample Number: 007
Sample Description: QUARTERLY WELL (475)
Sample Type : GRAB
Sample Date / Time : 10/17/2023 @ 10:11

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Benzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Toluene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Acetone	<10	10	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Acrolein	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Styrene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 0:50	SGM
Surrogates			RANGE	EPA 624.1	10/20/2023 0:50	SGM
Dibromofluoromethane	100		60-140%	EPA 624.1	10/20/2023 0:50	SGM
Toluene-D8	99		60-140%	EPA 624.1	10/20/2023 0:50	SGM
4-Bromofluorobenzene	93		60-140%	EPA 624.1	10/20/2023 0:50	SGM
ICP Digestion				EPA 200.7	10/19/2023 8:30	BRB

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

Sample Number: 008
Sample Description: QUARTERLY WELL (6D)
Sample Type : GRAB
Sample Date / Time : 10/17/2023 @ 09:23

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	13	1.0	mg/L	SM2320B 18-21ed	10/18/2023 21:37	RPK
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	10/19/2023 0:01	JW
Chloride	200	1.0	mg/L	EPA 300.0	10/18/2023 23:35	JW
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	10/18/2023 23:35	JW
Nitrate (as N)	3.1	0.050	mg/L	EPA 300.0	10/18/2023 23:35	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	10/25/2023 7:05	KLS
Total Phosphorus (as P)	0.028	0.010	mg/L	SM4500 P-B,E-2011	10/23/2023 9:00	VC
Total Metals						
Boron	0.060	0.010	mg/L	EPA 200.7	10/20/2023 14:49	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	10/20/2023 14:49	KK
Sodium	130	0.050	mg/L	EPA 200.7	10/20/2023 14:49	KK
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Chloroform	1.8	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	10/20/2023 1:19	SGM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Bromoform	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

Sample Number: 008
Sample Description: QUARTERLY WELL (6D)
Sample Type : GRAB
Sample Date / Time : 10/17/2023 @ 09:23

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Benzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Toluene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Acetone	<10	10	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Acrolein	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Styrene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:19	SGM
Surrogates			RANGE	EPA 624.1	10/20/2023 1:19	SGM
Dibromofluoromethane	100		60-140%	EPA 624.1	10/20/2023 1:19	SGM
Toluene-D8	99		60-140%	EPA 624.1	10/20/2023 1:19	SGM
4-Bromofluorobenzene	93		60-140%	EPA 624.1	10/20/2023 1:19	SGM
ICP Digestion				EPA 200.7	10/19/2023 8:30	BRB

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

Sample Number: 009
Sample Description: QUARTERLY WELL (6S)
Sample Type : GRAB
Sample Date / Time : 10/17/2023 @ 09:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Alkalinity (as CaCO ₃)	14	1.0	mg/L	SM2320B 18-21ed	10/18/2023 21:37	RPK
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	10/19/2023 0:01	JW
Chloride	68	1.0	mg/L	EPA 300.0	10/18/2023 23:51	JW
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	10/18/2023 23:51	JW
Nitrate (as N)	1.6	0.050	mg/L	EPA 300.0	10/18/2023 23:51	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500N Org-D 18-21ed	10/25/2023 7:05	KLS
Total Phosphorus (as P)	0.037	0.010	mg/L	SM4500 P-B,E-2011	10/24/2023 8:15	VC
Total Metals						
Boron	0.013	0.010	mg/L	EPA 200.7	10/20/2023 14:51	KK
Copper	<0.0050	0.0050	mg/L	EPA 200.7	10/20/2023 14:51	KK
Sodium	39	0.050	mg/L	EPA 200.7	10/20/2023 14:51	KK
Volatile Organic Compounds						
Chloromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Bromomethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Vinyl Chloride	<0.40	0.40	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Chloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Methylene Chloride	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Trichlorofluoromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
1,1-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
1,1-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Chloroform	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
1,2-Dichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Carbon Tetrachloride	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Bromodichloromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
1,2-Dichloropropane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
cis-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Trichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
trans-1,3-Dichloropropylene	<0.40	0.40	ug/L	EPA 624.1	10/20/2023 1:47	SGM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Dibromochloromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Bromoform	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Tetrachloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Chlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
2-Chloroethyl vinyl ether	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2310-17852

Project Name: GROUNDWATER MONITORING

Sample Number: 009
Sample Description: QUARTERLY WELL (6S)
Sample Type : GRAB
Sample Date / Time : 10/17/2023 @ 09:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
1,4-Dichlorobenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Dichlorobenzenes	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Benzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Toluene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Ethylbenzene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
o-Xylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
m,p-Xylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Acetone	<10	10	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Acrolein	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Acrylonitrile	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Methyl Tertiary Butyl Ether (MTBE)	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Carbon Disulfide	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Styrene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Vinyl Acetate	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
4-methyl-2-pentanone(MIBK)	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
2-Hexanone	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
2-Butanone(MEK)	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
1,2-Dibromoethane(EDB)	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Dibromomethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Bromochloromethane	<1.0	1.0	ug/L	EPA 624.1	10/20/2023 1:47	SGM
Surrogates			RANGE	EPA 624.1	10/20/2023 1:47	SGM
Dibromofluoromethane	99		60-140%	EPA 624.1	10/20/2023 1:47	SGM
Toluene-D8	100		60-140%	EPA 624.1	10/20/2023 1:47	SGM
4-Bromofluorobenzene	95		60-140%	EPA 624.1	10/20/2023 1:47	SGM
ICP Digestion				EPA 200.7	10/19/2023 8:30	BRB

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date Collected	Time Collected	Field Sample Identification		Grab	# of	Pres	Matr	Nitri	Nitra	Orth	Alka	Chlo	TKN	Total	Cop	Boro	Sodi	EPA	
10/17/23	12:49	Quarterly Well (A8) 1000ml	G	1P	NP			X	X	X	X	X		X					
		Quarterly Well (A8) 250ml	G	1P	S									X					
		Quarterly Well (A8) 250ml	G	1P	N											X	X	X	
		Quarterly Well (A8) 40ml	G	2V	T													X	
	11:50	Quarterly Well (A9) 1000ml	G	1P	NP			X	X	X	X	X							
		Quarterly Well (A9) 250ml	G	1P	S									X	X				
		Quarterly Well (A9) 250ml	G	1P	N											X	X	X	
		Quarterly Well (A9) 40ml	G	2V	T													X	
	11:13	Quarterly Well (A10) 1000ml	G	1P	NP			X	X	X	X	X							
		Quarterly Well (A10) 250ml	G	1P	S									X	X				
		Quarterly Well (A10) 250ml	G	1P	N											X	X	X	
		Quarterly Well (A10) 40ml	G	2V	T													X	

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	
Address:	131 Camelot Drive	P.O. Number:	
City / State / Zip:	Plymouth, MA 02360	Report To:	Sean Driscoll
Main Telephone:	508-830-4159	Cell:	401-578-9976
Contact Person:	Sean Driscoll	Sampled by:	Sdriscoll@woodardcurran.com
		Quote No:	rsccott@woodardcurran.com

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time	Turn Around Time		
<i>[Signature]</i>	10/18/23	1450	<i>[Signature]</i>	10/18/23	1400	X	Normal	X
<i>[Signature]</i>	10/18/23	1730	<i>[Signature]</i>	10/18/20	1730	X	5-7 Business days	
							2 Business Days	

Reporting Options		Project Comments	
MCP Standard		<i>[Handwritten notes]</i>	
MWRA eSMART			
State Report & Upload			
		Temp. Upon Receipt <i>52°C</i>	

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, DI=DI-H2O, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SH=NaOH, T=Na2S2O3, Z=ZnOAC

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=

Workorder No: 2310-17852

Page 1 of 3

CS 10/18/23



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date Collected		Time Collected	Field Sample Identification		Grab or Composite	# of Containers & Type	Preservation Code ^P	Matrix Code ^M												
10-14-20																				
10/17/23		14:34	Quarterly Well (A11)	1000ml	G	1P	NP		X	X	X	X								
			Quarterly Well (A11)	250ml	G	1P	S				X									
			Quarterly Well (A11)	250ml	G	1P	N					X	X	X						
			Quarterly Well (A11)	40ml	G	2V	T											X		
10:04			Quarterly Well (A16)	1000ml	G	1P	NP		X	X	X	X								
			Quarterly Well (A16)	250ml	G	1P	S					X								
			Quarterly Well (A16)	250ml	G	1P	N						X	X	X					
			Quarterly Well (A16)	40ml	G	2V	T											X		
10:40			Quarterly Well (1S)	1000ml	G	1P	NP		X	X	X	X								
			Quarterly Well (1S)	250ml	G	1P	S						X							
			Quarterly Well (1S)	250ml	G	1P	N							X	X	X				
			Quarterly Well (1S)	40ml	G	2V	T												X	

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	
Address:	131 Camelot Drive	P.O. Number:	
City / State / Zip:	Plymouth, MA 02360	Report To:	Sean Driscoll
Main Telephone:	508-830-4159	Cell:	401-578-9976
Contact Person:	Sean Driscoll	Sampled by:	Sdriscoll@woodardcurran.com
		Quote No:	rscott@woodardcurran.com

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time	Turn Around Time	
<i>[Signature]</i>	10/18/23	1450	<i>[Signature]</i>	10/18/23	1450	Normal	X
<i>[Signature]</i>	10/18/23	1730	<i>[Signature]</i>	10/18/23	1730	5-7 Business days	X
						2 Business Days	

Reporting Options		Project Comments	
MCP Standard		<i>[Handwritten Notes]</i>	
MWRA eSMART			
State Report & Upload			
		Temp. Upon Receipt 52.2°C	
		Workorder No: 2310-17852	



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date Collected	Time Collected	Field Sample Identification
10/17/23	10:11	Quarterly Well (475) 1000ml
		Quarterly Well (475) 250ml
		Quarterly Well (475) 250ml
		Quarterly Well (475) 40ml
	9:23	Quarterly Well (6D) 1000ml
		Quarterly Well (6D) 250ml
		Quarterly Well (6D) 250ml
		Quarterly Well (6D) 40ml
	9:40	Quarterly Well (6S) 1000ml
		Quarterly Well (6S) 250ml
		Quarterly Well (6S) 250ml
		Quarterly Well (6S) 40ml

Grab or Composite		# of Containers & Type		Preservation Code ^P		Matrix Code ^M															
10-14-20		C		P		M															
G		1P		NP				X	X	X	X	X									
G		1P		S							X										
G		1R		N									X	X	X						
G		2V		T																X	
G		1P		NP				X	X	X	X	X									
G		1P		S							X										
G		1P		N									X	X	X						
G		2V		T																X	
G		1P		NP				X	X	X	X	X									
G		1P		S								X									
G		1P		N									X	X	X						
G		2V		T																	X

Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	
Address:	131 Camelot Drive	P.O. Number:	
City / State / Zip:	Plymouth, MA 02360	Report To:	Sean Driscoll
Main Telephone:	508-830-4159	Cell:	401-578-9976
Contact Person:	Sean Driscoll	Sampled by:	Sdriscoll@woodardcurran.com
		Quote No:	rscott@woodardcurran.com

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time	Turn Around Time	
<i>[Signature]</i>	10/18/23	1450	<i>[Signature]</i>	10/18/23	1450	Normal	X
<i>[Signature]</i>	10/18/23	1730	<i>[Signature]</i>	10/18/23	1730	5-7 Business days	X
						2 Business Days	

Reporting Options		Project Comments	
MCP Standard		<i>[Handwritten notes]</i>	
MWRA eSMART			
State Report & Upload			
		Temp. Upon Receipt 52 °C	



LABORATORY REPORT

Woodard & Curran, Inc.
Attn: Sean Driscoll
131 Camelot Drive
Plymouth, MA 02360

Date Received: 11/15/2023
Date Reported: 11/22/2023
P.O. Number

Work Order #: 2311-19444

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

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 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 concentration of an analyte that can be reliably detected under routine laboratory conditions. The Reporting Limit is the minimum concentration that can be reliably quantified under 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:

Brent Plant
Data Reporting

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

Report Qualifiers & Abbreviations

These qualifiers/abbreviations may or may not be present in this report.

Qualifier	Descriptions
*	Recovery outside of acceptance limits
B	Analyte detected in method blank at a level about the detection limit
D	Surrogate diluted out to reach a parameter result within the instrument calibration curve
E	Parameter result exceeds calibration curve
J	Estimated result based on MDL

Abbreviation	Definition
BLK	Method Blank
CFU	Colony Forming Unit
DF	Dilution Factor
DL	Detection Limit
LCS(D)	Laboratory Control Standard (Duplicate)
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MDL	Method Detection Limit
MPN	Most Probable Number
MS(D)	Matrix Spike (Duplicate)
QC	Quality Control
RPD	Relative Percent Difference
TIC	Tentatively Identified Compound
TNTC	Too Numerous to Count
*CS	Field data provided by the client

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2311-19444

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 001
Sample Description: WELL A8
Sample Type : GRAB
Sample Date / Time : 11/14/2023 @ 14:30

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	4.1	0.020	mg/L	SM4500 P E-2011	11/15/2023 23:25	JW
Total Phosphorus (as P)	4.3	0.010	mg/L	SM4500 P-B,E-2011	11/17/2023 16:30	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 002
Sample Description: WELL A9
Sample Type : GRAB
Sample Date / Time : 11/14/2023 @ 13:00

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	11/15/2023 23:25	JW
Total Phosphorus (as P)	0.025	0.010	mg/L	SM4500 P-B,E-2011	11/17/2023 16:30	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 003
Sample Description: WELLA10
Sample Type : GRAB
Sample Date / Time : 11/14/2023 @ 13:30

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	11/15/2023 23:25	JW
Total Phosphorus (as P)	<0.010	0.010	mg/L	SM4500 P-B,E-2011	11/17/2023 16:30	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2311-19444

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 004
Sample Description: WELL A11
Sample Type : GRAB
Sample Date / Time : 11/14/2023 @ 10:00

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	11/15/2023 23:25	JW
Total Phosphorus (as P)	0.014	0.010	mg/L	SM4500 P-B,E-2011	11/17/2023 16:30	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 005
Sample Description: WELL A16
Sample Type : GRAB
Sample Date / Time : 11/14/2023 @ 14:00

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	0.061	0.020	mg/L	SM4500 P E-2011	11/15/2023 23:25	JW
Total Phosphorus (as P)	0.092	0.010	mg/L	SM4500 P-B,E-2011	11/17/2023 16:30	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 006
Sample Description: WELL 1S
Sample Type : GRAB
Sample Date / Time : 11/14/2023 @ 12:30

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	11/15/2023 23:25	JW
Total Phosphorus (as P)	0.022	0.010	mg/L	SM4500 P-B,E-2011	11/17/2023 16:30	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2311-19444

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 007
Sample Description: WELL 475
Sample Type : GRAB
Sample Date / Time : 11/14/2023 @ 10:30

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	11/15/2023 23:25	JW
Total Phosphorus (as P)	0.017	0.010	mg/L	SM4500 P-B,E-2011	11/17/2023 16:30	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 008
Sample Description: WELL 6D
Sample Type : GRAB
Sample Date / Time : 11/14/2023 @ 11:00

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	11/15/2023 23:25	JW
Total Phosphorus (as P)	0.016	0.010	mg/L	SM4500 P-B,E-2011	11/17/2023 16:30	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 009
Sample Description: WELL 6S
Sample Type : GRAB
Sample Date / Time : 11/14/2023 @ 11:30

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	11/15/2023 23:25	JW
Total Phosphorus (as P)	0.020	0.010	mg/L	SM4500 P-B,E-2011	11/17/2023 16:30	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date Collected		Time Collected	Field Sample Identification			Grab	# of	Pres	Matr	Total	Ortho																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		</
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Client Information			Project Information		
Company Name:	Woodard & Curran	Project Name:	Monthly Wells -- Main Plant WWTP		
Address:	131 Camelot Drive	P.O. Number:			
City / State / Zip:	Plymouth, MA 02360	Report To:	Sean Driscoll	Cell:	401.578.9976
Main Telephone:	508-830-4159	Sampled by:		Email addresses:	sdriscoll@woodardcurran.com
Contact Person:	Sean Driscoll	Quote No:			

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time
	11-14-23	1600	RKX	11/15/23	1445
	11-15-23	1500	Sean Driscoll	11/15/23	1740
2W	11/15/23	1740			

Reporting Options		Project Comments	
MCP Standard			
MWRA eSMART			
State Report & Upload			
		Temp. Upon Receipt 53.3°C	

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, DI=DI-H2O, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SH=NaOH, T=Na2S2O3, Z=ZnOAc
Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date		Time		Field Sample Identification		Grab or Composite	# of Containers & Type		Preservation Code	Matrix Code	Total Phosphorus	Ortho Phosphate												
Collected		Collected																						
11-14-23	12:30	12:30		Well (250 mL)	1 S	G	1P	NP	GW	GW	X	X												
	12:30	12:30		Well (250 mL)	1 S	G	1P	S	GW	GW	X													
	10:30	10:30		Well (250 mL)	475	G	1P	NP	GW	GW	X													
	10:30	10:30		Well (250 mL)	475	G	1P	S	GW	GW	X													
	11:00	11:00		Well (250 mL)	60	G	1P	NP	GW	GW	X													
	11:00	11:00		Well (250 mL)	60	G	1P	S	GW	GW	X													
	11:30	11:30		Well (250 mL)	65	G	1P	NP	GW	GW	X													
	11:30	11:30		Well (250 mL)	65	G	1P	S	GW	GW	X													
				Well (250 mL)		G	1P	NP	GW	GW	X													
				Well (250 mL)		G	1P	S	GW	GW	X													
11-14-23				Well (250 mL)		G	1P	NP	GW	GW	X													
				Well (250 mL)		G	1P	S	GW	GW	X													

Client Information			Project Information		
Company Name:	Woodard & Curran	Project Name:	Monthly Wells - Main Plant WWTP		
Address:	131 Camelot Drive	P.O. Number:			
City / State / Zip:	Plymouth, MA 02360	Report To:	Sean Driscoll	Cell:	401.578.9976
Main Telephone:	508-830-4159	Sampled by:			
Contact Person:	Sean Driscoll	Quote No:			
		Email addresses:	sdriscoll@woodardcurran.com		

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time
	11-14-23	1600			
	11-15-23	1500			
	11-15-23	1740			

Reporting Options		Project Comments	
MCP Standard			
MWRA eSMART			
State Report & Upload			
		Temp. Upon Receipt 5.3 °C	

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, DI=DI-H2O, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SH=NaOH, T=Na2S2O3, Z=ZnOAc
Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=

Workorder No: 2311-19446

Page 2 of 2

JT 11/15/23



LABORATORY REPORT

Woodard & Curran, Inc.
Attn: Sean Driscoll
131 Camelot Drive
Plymouth, MA 02360

Date Received: 12/13/2023
Date Reported: 12/22/2023
P.O. Number

Work Order #: 2312-21038

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

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 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 concentration of an analyte that can be reliably detected under routine laboratory conditions. The Reporting Limit is the minimum concentration that can be reliably quantified under 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:

Kristin Phelan
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

Report Qualifiers & Abbreviations

These qualifiers/abbreviations may or may not be present in this report.

Qualifier	Descriptions
*	Recovery outside of acceptance limits
B	Analyte detected in method blank at a level about the detection limit
D	Surrogate diluted out to reach a parameter result within the instrument calibration curve
E	Parameter result exceeds calibration curve
J	Estimated result based on MDL

Abbreviation	Definition
BLK	Method Blank
CFU	Colony Forming Unit
DF	Dilution Factor
DL	Detection Limit
LCS(D)	Laboratory Control Standard (Duplicate)
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MDL	Method Detection Limit
MPN	Most Probable Number
MS(D)	Matrix Spike (Duplicate)
QC	Quality Control
RPD	Relative Percent Difference
TIC	Tentatively Identified Compound
TNTC	Too Numerous to Count
*CS	Field data provided by the client

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2312-21038

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 001
Sample Description: WELL 1S
Sample Type : GRAB
Sample Date / Time : 12/12/2023 @ 10:48

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	12/13/2023 23:15	JW
Total Phosphorus (as P)	0.043	0.010	mg/L	SM4500 P-B,E-2011	12/19/2023 7:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 002
Sample Description: WELL 475
Sample Type : GRAB
Sample Date / Time : 12/12/2023 @ 09:15

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	12/13/2023 23:15	JW
Total Phosphorus (as P)	0.033	0.010	mg/L	SM4500 P-B,E-2011	12/19/2023 7:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 003
Sample Description: WELL 6D
Sample Type : GRAB
Sample Date / Time : 12/12/2023 @ 10:17

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	12/13/2023 23:15	JW
Total Phosphorus (as P)	0.015	0.010	mg/L	SM4500 P-B,E-2011	12/19/2023 7:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2312-21038

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 004
Sample Description: WELL 6S
Sample Type : GRAB
Sample Date / Time : 12/12/2023 @ 09:45

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	12/13/2023 23:15	JW
Total Phosphorus (as P)	0.020	0.010	mg/L	SM4500 P-B,E-2011	12/19/2023 7:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 005
Sample Description: WELL A8
Sample Type : GRAB
Sample Date / Time : 12/12/2023 @ 12:18

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	3.6	0.020	mg/L	SM4500 P E-2011	12/13/2023 23:15	JW
Total Phosphorus (as P)	3.7	0.010	mg/L	SM4500 P-B,E-2011	12/19/2023 7:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 006
Sample Description: WELL A9
Sample Type : GRAB
Sample Date / Time : 12/12/2023 @ 11:52

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	12/13/2023 23:15	JW
Total Phosphorus (as P)	0.025	0.010	mg/L	SM4500 P-B,E-2011	12/19/2023 7:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Woodard & Curran, Inc.

Work Order #: 2312-21038

Project Name: MONTHLY WELLS - MAIN PLANT WWTP

Sample Number: 007
Sample Description: WELL A10
Sample Type : GRAB
Sample Date / Time : 12/12/2023 @ 12:06

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	12/13/2023 23:15	JW
Total Phosphorus (as P)	<0.010	0.010	mg/L	SM4500 P-B,E-2011	12/19/2023 7:30	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 008
Sample Description: WELL A11
Sample Type : GRAB
Sample Date / Time : 12/12/2023 @ 13:23

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	12/13/2023 23:15	JW
Total Phosphorus (as P)	0.017	0.010	mg/L	SM4500 P-B,E-2011	12/22/2023 7:00	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 009
Sample Description: WELL A16
Sample Type : GRAB
Sample Date / Time : 12/12/2023 @ 12:49

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	0.082	0.020	mg/L	SM4500 P E-2011	12/13/2023 23:15	JW
Total Phosphorus (as P)	0.10	0.010	mg/L	SM4500 P-B,E-2011	12/22/2023 7:00	VC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Field Sample Identification					Grab	# of	Pres	Matr	Total	Ortho																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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Client Information			Project Information		
Company Name:	Woodard & Curran		Project Name:	Monthly Wells - Main Plant WWTP	
Address:	131 Camelot Drive		P.O. Number:	Project Number:	
City / State / Zip:	Plymouth, MA 02360		Report To:	Sean Driscoll	Cell: 401.578.9976
Main Telephone:	508-830-4159		Sampled by:	EMcNeil@woodardcurran.com	Phone:
Contact Person:	Sean Driscoll		Quote No:	rscott@woodardcurran.com	

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time	Turn Around Time	
<i>[Signature]</i>	12-13-23	14:52	<i>[Signature]</i>	12-13-23	16:30	Normal	X
<i>[Signature]</i>	12-13-23	17:00	<i>[Signature]</i>	12-13-23	19:00	5-7 Business days	X
						2 Business Days	

Reporting Options		Project Comments	
MCP Standard		<i>[Handwritten: 11.5°C]</i>	
MWRA eSMART			
State Report & Upload			
Email results to sdriscoll@woodardcurran.com ; jfreemant@woodardcurran.com ; kfontaine@woodardcurran.com ; & rscott@woodardcurran.com		Lab Use Only	
		Sample Pick Up Only	
		RIAL sampled: attach field hours	
		Received on Ice	
		No Ice	
		Workorder No: 2312-21038	



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580

Date Collected		Time Collected		Field Sample Identification		Grab	# of	Pres	Mat	Total	Ortho																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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Client Information		Project Information	
Company Name:	Woodard & Curran	Project Name:	Monthly Wells - Main Plant WWTP
Address:	131 Camelot Drive	P.O. Number:	Project Number:
City / State / Zip:	Plymouth, MA 02360	Report To:	Sean Driscoll
Main Telephone:	508-830-4159	Cell:	401.578.9976
Contact Person:	Sean Driscoll	Sampled by:	EMcNeil@woodardcurran.com
		Quote No:	rscott@woodardcurran.com

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time
<i>[Signature]</i>	12/13/23	14:52	<i>[Signature]</i>	12/13/23	1630*
<i>[Signature]</i>	12/13/23	1700	<i>[Signature]</i>	12/13/23	1900

Reporting Options		Project Comments	
MCP Standard		Email results to sdriscoll@woodardcurran.com ; kfontaine@woodardcurran.com ; ifreemant@woodardcurran.com ; rscott@woodardcurran.com	
MWRA eSMART			
State Report & Upload			

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, DI=DI-H2O, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SH=NaOH, T=Na2S2O3, Z=ZnOAc

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=

Workorder No: 231221038

Page 2 of 2

CS 12/13/23