

Units	Daily Flow			Aeration Tank 1				Aeration Tank 2				pH		Temp		Settable Solids		Turbidity		Waste Time		UV Transmitt		Fecal Coliform		Enterococ		D.O.		BOD (5-Day)		Surf
	Max	Min	Total	MLSS	SVI	Low D.O.	High D.O.	MLSS	SVI	Low D.O.	High D.O.	Influent	Effluent	Influent	Effluent	Effluent	Effluent	Effluent	Effluent	mins	%	#/100 ML	Effluent	#/100 ML	Effluent	#/100 ML	Effluent	MG/L	EFF.	%		
	MGD	MGD	MGD	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	S.U.	S.U.	FAHRENHEIT	FAHRENHEIT	ML/L	ML/L	MTU	MTU		Daily	Weekly	Weekly	Weekly	Weekly	Weekly	MG/L	MG/L	Weekly		
Testing	Daily			Work Day														Weekly														
Date	1	0.31104	0.0072	0.14339	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.95										
	2	0.03024	0.03456	0.13376	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0.95										
	3	0.31824	0.04032	0.13429	1448	350	2	2.2	1180	340	1.9	2.5	6.9	7.1	67	70	0	0	0.7	6	0.95	<2	<10	7.2	163	2	98.77301	166				
	4	0.32112	0.02592	0.13521	1104	320	2.6	2.8	1188	340	1.8	2.2	6.8	7	56	68	0	0	0.6	6	0.95											
	5	0.33695	0.03168	0.13481	1548	280	2.6	2.9	1188	240	2.4	2.6	6.5	7	66	71	0	0	0.6	3	0.96											
	6	0.33695	0.03168	0.13465	1564	320	1.4	1.9	1524	290	2.1	2.4	6.6	7	67	72	0	0	0.6	3	0.95											
	7	0.31536	0.04032	0.14064	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.96										
	8	0.3312	0.0432	0.13872	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.95										
	9	0.37594	0.04464	0.13771	1120	280	3	3.2	812	280	2.9	3.4	6.7	7	65	73	0	0	0.5	6	0.94											
	10	0.30816	0.01728	0.13008	1016	280	3	3.5	1000	300	2.8	2.9	6.9	6.9	67	72	0	0	0.5	3	0.94	<2	<10	7.5	77.8	2.4	96.91517	94				
	11	0.29952	0.04032	0.13061	1388	300	2.7	3.1	772	260	2.4	2.6	6.9	7	67	72	0	0	0.6	8	0.94											
	12	0.29808	0.04752	0.13696	1464	340	1.9	2.4	816	280	3.1	3.3	6.6	7	59	72	0	0	0.4	12	0.96											
	13	0.3024	0.04032	0.1296	1092	320	2.8	3	1472	340	2.3	2.6	6.7	7	59	72	0	0	0.5	22	0.95											
	14	0.31968	0.03744	0.13926	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.95										
	15	0.32256	0.03744	0.13165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0.94										
	16	0.37728	0.03168	0.14833	1804	300	2.5	2.7	2408	300	3.1	3.6	6.5	7	57	72	0	0	0.5	4	0.95											
	17	0.3816	0.04176	0.14256	1368	320	2.4	2.6	1092	320	2.6	2.9	6.7	7	65	71	0	0	1.2	0	0.95	<2	<10	6.5	126	2	98.4127	208				
	18	0.2868	0.04896	0.14256	1932	360	2.4	2.9	1364	340	1.8	2.7	7.1	6.9	67	70	0	0	0.6	6	0.95											
	19	0.31536	0.03888	0.13544	1516	360	1.9	2.2	1364	340	1.6	2.3	6.5	6.9	59	70	0	0	0.8	6	0.95											
	20	0.31248	0.04032	0.13237	1452	300	2.2	2.4	1452	300	2.1	2.5	6.7	6.9	58	70	0	0	0.5	6	0.95											
	21	0.33586	0.01152	0.12485	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0.95										
	22	0.30384	0.01008	0.13549	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0.94										
	23	0.33264	0.03888	0.13328	2288	360	2.4	2.6	2288	360	1.8	2.4	6.6	6.9	58	71	0	0	0.6	6	0.95											
	24	0.3528	0.0432	0.13092	1116	280	1.9	2.6	1116	320	2.6	2.9	7.1	6.9	62	70	0	0	0.8	6	0.96	<2	<10	6.9	127	2	98.4752	96				
	25	0.29952	0.0432	0.12988	1416	310	2.5	2.6	1416	320	2.7	3	6.7	7.1	56	71	0	0	0.8	4	0.94											
	26	0.33695	0.03456	0.13382	1136	300	2.7	2.9	1136	290	2.3	2.5	7	6.7	68	71	0	0	0.5	6	0.95											
	27	0.33568	0.036	0.13038	1108	290	2.3	2.7	1108	310	2.7	2.8	6.7	7.1	66	71	0	0	0.6	4	0.95											
	28	0.3456	0.03024	0.13471	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.94										
	29	0.36144	0.03888	0.13904	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.94										
	30	0.32112	0.0288	0.12565	1172	300	1.8	2.2	1172	280	2.4	2.6	6.9	6.9	68	70	0	0	0.8	3	0.95											

Suspended Solids EFF. % Removed 3/L	Ammonia		Nitrite		Nitrate		TKN		Total N		Total P		Ortho Phosphate		Alkalinity	
	INF.	EFF.	INF.	EFF.	INF.	EFF.	INF.	EFF.	INF.	EFF.	INF.	EFF.	INF.	EFF.	INF.	EFF.
Monthly																
Weekly	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
2	98.79518	28.7	ND	ND	0.16	0.49	37.6	0.72	37.8	1.21	1.35	0.23	0.17	20	<20	
0	100															
12	94.23077															
5	94.79167															

Sludge Disposal Location:
Mattabasset Sewer District

Please return forms to:
DEEP - Water Bureau
ATTN: Municipal Wastewater Monitoring Coordinator
Municipal Facilities
710 Elm Street
Hartford, CT 06106-5127

Statement of Acknowledgement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

Authorized Official:

Title:

John Ely

operator

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MADISON, CT 06443
Phone 203-245-0568
FAX 203-318-0830
Connecticut Certification PH-0535
www.eclinonline.com



ENVIRONMENTAL
CONSULTING LABORATORIES, INC.

Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample ID#: 127617
Sample Type: Wastewater
Sample Source: Weekly Bacteria Testing
Sampler: Client
Sample Date: 9/17/2019
Receipt Date: 9/17/2019
Report Date: 9/20/2019
Sample Site: Effluent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Biological						
Enterococcus Bacteria	<10	MPN/100mL	Enterolert	10	9/17/2019	JB
Fecal Coliform Bacteria	<2	col/100ml	SM9222D	2	9/17/2019	JB


DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

(203) 245-0568 Phone
(203) 318-0830 Fax

Fax:

W. J. G.

Influent/Effluent Testing

#D.1

signed by:

9/17/15
9500 Ave

1

0170

Were Samples received within holding time? Y/N
 Were Samples chilled upon receipt? Y/N
 Were Samples in appropriate containers? Y/N
 If No Explain:

Are containers broken/leaking? Y N
 Did Samples need to be split upon receipt? Y N
 Were Samples presented properly? Y N

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CONSULTING LABORATORIES, INC.

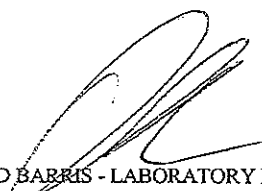
Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis

Sample ID#: 127438
Sample Type: Solid
Sample Source: Bi-Annual Sludge Testing
Sampler: Client

Sample Date: 9/10/2019
Receipt Date: 9/10/2019
Report Date: 9/19/2019
Sample Site: Sludge Press

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Total Fixed Solids	20.2	%	CALC	0	9/13/2019	JB
Total Solids	14.1	%	160.3	0	9/13/2019	JB
Total Volatile Solids	79.8	%	160.4	0	9/13/2019	JB
Metals						
Arsenic	ND	mg/kg	EPA 6010C	6.9	9/16/2019	CET
Beryllium	ND	mg/kg	EPA 6010C	6.9	9/16/2019	CET
Cadmium	ND	mg/kg	EPA 6010C	3.5	9/16/2019	CET
Chromium	19.0	mg/kg	EPA 6010C	14	9/16/2019	CET
Copper	610	mg/kg	EPA 6010C	14	9/16/2019	CET
Lead	28.0	mg/kg	EPA 6010C	14	9/16/2019	CET
Mercury	1.9	mg/kg	EPA 7471B	0.89	9/16/2019	CET
Nickel	52.0	mg/kg	EPA 6010C	14	9/16/2019	CET
Zinc	680	mg/kg	EPA 6010C	14	9/16/2019	CET
Polychlorinatedbiphenols						
PCBs - Total	ND	mg/kg	EPA8082A	0.71	9/16/2019	CET


DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

Comments CET - CT PH-0116.

CONSULTING LABORATORIES, INC.

(203) 245-0568 Phone
(203) 318-0830 Fax

Phone: _____
Fax: _____

5/11/20

All bacteria samples must have corresponding field chlorine residual recorded

Are contacters broken/leaking? Y(N)

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ENVIRONMENTAL
CONSULTING LABORATORIES, INC.

Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis

Sample ID#: 127615
Sample Type: Wastewater
Sample Source: Weekly
Sampler: Client

Sample Date: 9/17/2019
Receipt Date: 9/17/2019
Report Date: 9/24/2019
Sample Site: Influent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Biological Oxygen Demand	126	mg/L	SM5210B	2	9/18/2019	KC
Total Suspended Solids	208	mg/L	SM2540D	1	9/20/2019	JB

DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

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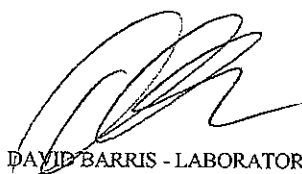
ENVIRONMENTAL
CONSULTING LABORATORIES, INC.

Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample Date: 9/17/2019
Receipt Date: 9/17/2019
Report Date: 9/24/2019
Sample Site: Effluent

Sample ID#: 127616
Sample Type: Wastewater
Sample Source: Weekly
Sampler: Client

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Biological Oxygen Demand	<2.00	mg/L	SM5210B	2	9/18/2019	KC
Total Suspended Solids	12.0	mg/L	SM2540D	1	9/20/2019	JB



DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis

Sample ID#: 127769
Sample Type: Wastewater
Sample Source: Weekly Bacteria Testing
Sampler: Client

Sample Date: 9/24/2019
Receipt Date: 9/24/2019
Report Date: 9/27/2019
Sample Site: Effluent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Biological						
Enterococcus Bacteria	<10	MPN/100mL	Enterolert	10	9/24/2019	JB
Fecal Coliform Bacteria	<2	col/100ml	SM9222D	2	9/24/2019	JB

DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

(203) 245-0568 Phone
(203) 318-0830 Fax

Fax:

Samplers Name: (Print)

John Ely

Project:

Weekly

Influent/Effluent Testing

Required Analysis

Fecal/Enterocci (May-Oct)

ECL Sample I.D.#	Time	Area	Height	Area%	Height%
1	1.000	1000000	1000000	100.000	100.000

[illegible]

Relinquished by:

Relinquished by:	<i>Tabuz F. N. J. M. F.</i>	Date:	<i>05/20/2011</i>
Acquired by:		Date:	

Received by:

Time

3/24/15

Relinquished by: Veronica

Date _____

Time

932

Were Samples received within holding time? ☒ Y ☐ N

Were Samples chilled upon receipt? ☒ Y ☐ N

Were Samples in appropriate containers? ☒ Y ☐ N

If No Explain _____

Are containers broken/leaking? Y/N
Did Samples need to be split upon receipt? Y /N
Were Samples presented properly? Y /N

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ENVIRONMENTAL
CONSULTING LABORATORIES, INC.

Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample Date: 9/24/2019
Receipt Date: 9/24/2019
Report Date: 10/2/2019
Sample Site: Influent

Sample ID#: 127767
Sample Type: Wastewater
Sample Source: Weekly
Sampler: Client

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Biological Oxygen Demand	127	mg/L	SM5210B	2	9/25/2019	KC
Total Suspended Solids	96.0	mg/L	SM2540D	1	9/27/2019	JB

DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

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ENVIRONMENTAL
CONSULTING LABORATORIES, INC.

Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis

Sample ID#: 127768
Sample Type: Wastewater
Sample Source: Weekly
Sampler: Client

Sample Date: 9/24/2019
Receipt Date: 9/24/2019
Report Date: 10/2/2019
Sample Site: Effluent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Biological Oxygen Demand	<2.00	mg/L	SM5210B	2	9/25/2019	KC
Total Suspended Solids	5.00	mg/L	SM2540D	1	9/27/2019	JB

DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

(203) 245-0568 Phone
(203) 318-0830 Fax

Phone: 860-526-6044

Influent/Effluent Testing

John Elly

Received by:

Are containers broken/leaking? Y/N
Did Samples need to be split upon receipt? Y/N
Were Samples presented properly? Y/N

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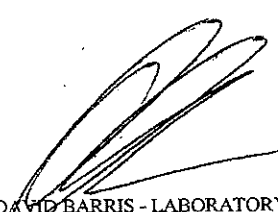
ENVIRONMENTAL
CONSULTING LABORATORIES, INC.

Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample Date: 9/3/2019
Receipt Date: 9/3/2019
Report Date: 9/12/2019
Sample Site: Influent

Sample ID#: 127230
Sample Type: Wastewater
Sample Source: Monthly
Sampler: Client

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Ammonia as N	28.7	mg/L	ASTM D6919-03	0.05	9/9/2019	KC
Nitrate as N	0.16	mg/L	EPA300.0	0.1	9/5/2019	JB
Nitrite as N	ND	mg/L	EPA300.0	0.01	9/5/2019	JB
Orthophosphate as P	3.32	mg/L	EPA300.0	0.02	9/5/2019	JB
Phosphorous -Total as P	4.56	mg/L	EPA 200.7	0.04	9/6/2019	JB
TKN as N	37.6	mg/L	4500NorgC	0.5	9/11/2019	KC
Total Nitrogen as N	37.8	mg/L	CALC	1	9/12/2019	KC


DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

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ENVIRONMENTAL
CONSULTING LABORATORIES, INC.

Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample ID#: 127231
Sample Type: Wastewater
Sample Source: Monthly
Sampler: Client
Sample Date: 9/3/2019
Receipt Date: 9/3/2019
Report Date: 9/12/2019
Sample Site: Effluent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Ammonia as N	ND	mg/L	ASTM D6919-03	0.05	9/9/2019	KC
Nitrate as N	0.49	mg/L	EPA300.0	0.1	9/5/2019	JB
Nitrite as N	ND	mg/L	EPA300.0	0.01	9/5/2019	JB
Orthophosphate as P	0.17	mg/L	EPA300.0	0.02	9/5/2019	JB
Phosphorous -Total as P	0.23	mg/L	EPA 200.7	0.04	9/6/2019	JB
TKN as N	0.72	mg/L	4500NorgC	0.5	9/11/2019	KC
Total Nitrogen as N	1.21	mg/L	CALC	1	9/12/2019	KC



DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

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ENVIRONMENTAL
CONSULTING LABORATORIES, INC.

Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis

Sample ID#: 127232
Sample Type: Wastewater
Sample Source: Monthly
Sampler: Client

Sample Date: 9/3/2019
Receipt Date: 9/3/2019
Report Date: 9/5/2019
Sample Site: Influent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical Alkalinity	133	mg/L	SM2320-B	20	9/4/2019	KC


DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

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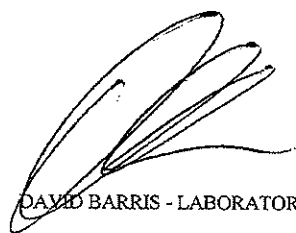


ENVIRONMENTAL
CONSULTING LABORATORIES, INC.

Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample ID#: 127233
Sample Type: Wastewater
Sample Source: Monthly
Sampler: Client
Sample Date: 9/3/2019
Receipt Date: 9/3/2019
Report Date: 9/5/2019
Sample Site: Effluent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical Alkalinity	<20.0	mg/L	SM2320-B	20	9/4/2019	KC



DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

ENVIRONMENTAL CONSULTING LABORATORIES, INC.

1005 Boston Post Road
Madison, CT 06443

(203) 245-0568 Phone
(203) 318-0830 Fax

Client: Town of Deep River-WPCF

Contact: Mr. Peter Lewis

Address: 99 Winter Ave, Deep River, CT 06417

Phone: 860-526-6044 Fax:

Samplers Name: (Print)

PWSID#:

System Type:

John Ely

Project:

Monthly + Weekly
Influent/Effluent Testing

Client I.D.	Sampling Location	Date	Time	Sample Type			Number of Containers	Required Analysis					Cl ₂ Res.	ECL Sample I.D.#
				Water	Solid	Comp	Grab	TN Series	Ortho & Total Phos	Alkalinity (grab sample)	BOD/TSS	Fecal/Enterococcus May-Oct		
	Influent (Monthly)	9/3/19	8:40	X		X		X	X			1 - 16oz		127230
	Effluent (Monthly)	↓	8:20	X		X		X	X			1 - 4oz (H2S04) 1 - 32oz 1 - 4oz (H2S04)		127231
	Influent (Monthly)	9/3/19	8:45	X			X		X			1 - 8oz		127282
	Effluent (Monthly)	↓	8:25	X			X		X			1 - 8oz		127283
	Influent (Weekly)		8:40	X		X					X	1 - 8oz		
	Effluent (Weekly)		8:20	X		X					X	1 - 16oz		
	Effluent (Weekly)		8:25	X			X					1 - Bact.		

Relinquished by:

Date

Time

Received by:

9/3/19

Relinquished by:

Date

Time

Received by:

937

Were Samples received within holding time? Y/N
Were Samples chilled upon receipt? Y/N
Were Samples in appropriate containers? Y/N
If No Explain
Are containers broken/leaking? Y/N
Did Samples need to be split upon receipt? Y/N
Were Samples preserved properly? Y/N

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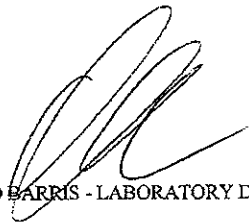
ENVIRONMENTAL
CONSULTING LABORATORIES, INC.

Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample Date: 9/3/2019
Receipt Date: 9/3/2019
Report Date: 9/11/2019
Sample Site: Influent

Sample ID#: 127234
Sample Type: Wastewater
Sample Source: Weekly
Sampler: Client

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Biological Oxygen Demand	163	mg/L	SM5210B	2	9/4/2019	KC
Total Suspended Solids	166	mg/L	SM2540D	1	9/6/2019	JB


DAVID HARRIS - LABORATORY DIRECTOR

ND = Not Detected

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CONSULTING LABORATORIES, INC.

Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample ID#: 127235
Sample Type: Wastewater
Sample Source: Weekly
Sampler: Client
Sample Date: 9/3/2019
Receipt Date: 9/3/2019
Report Date: 9/11/2019
Sample Site: Effluent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Biological Oxygen Demand	<2.00	mg/L	SM5210B	2	9/4/2019	KC
Total Suspended Solids	2.00	mg/L	SM2540D	1	9/6/2019	JB


DAVID BARRIS, LABORATORY DIRECTOR

ND = Not Detected

ENVIRONMENTAL CONSULTING LABORATORIES, INC.

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(203) 245-0568 Phone
(203) 318-0830 Fax

Client: Town of Deep River-WPCF

Contact: Mr. Peter Lewis

Address: 99 Winter Ave, Deep River, CT 06417

Phone: 860-526-6044 Fax:

Samplers Name: (Print)

John Ely

PWSID#:

System Type:

Project:				Required Analysis				Cl ₂ Res.	ECL Sample I.D.#
Monthly + Weekly Influent/Effluent Testing				Ortho & Total Phos	Alkalinity (grab sample)	BOD/TSS	Fecal/Enterococcus May-Oct		
Client I.D.	Sampling Location	Date	Time	Water	Solid	Comp	Grab	Number of Containers	
	Influent (Monthly)	8/14	8:40	X		X		2	1 - 16oz
	Effluent (Monthly)	8/20	8:20	X		X		2	1 - 4oz (H2S04) 1 - 32oz 1 - 4oz (H2S04)
	Influent (Monthly)	9/3/19	8:45	X			X	1	1 - 8oz
	Effluent (Monthly)	↓	8:25	X			X	1	1 - 8oz
	Influent (Weekly)	9/3/19	8:40	X		X		1	1 - 8oz
	Effluent (Weekly)	↓	8:20	X		X		1	1 - 16oz
	Effluent (Weekly)		8:25	X			X	1	1 - Bact.

Relinquished by:	Date	Time	Received by:	Date	Time	Were Samples received within holding time? ☒ Y ☐ N
						Were Samples chilled upon receipt? ☒ Y ☐ N
Relinquished by:	Date	Time	Received by:	Date	Time	Were Samples in appropriate containers? ☒ Y ☐ N
						If No Explain
						Are containers broken/leaking? ☒ Y ☐ N
						Did Samples need to be split upon receipt? ☒ Y ☐ N
						Were Samples presented properly? ☒ Y ☐ N

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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample ID#: 127236
Sample Type: Wastewater
Sample Source: Weekly Bacteria Testing
Sampler: Client
Sample Date: 9/3/2019
Receipt Date: 9/3/2019
Report Date: 9/5/2019
Sample Site: Effluent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Biological						
Enterococcus Bacteria	<10	MPN/100mL	Enterolert	10	9/3/2019	JB
Fecal Coliform Bacteria	<2	col/100ml	SM9222D	2	9/3/2019	JB


DAVID HARRIS - LABORATORY DIRECTOR

ND = Not Detected

CONSULTING LABORATORIES, INC.

1005 Boston Post Road
Madison, CT 06443

(203) 245-0568 Phone
(203) 318-0830 Fax

Client: Town of Deep River-WPCF						Project:		Required Analysis								
Contact: Mr. Peter Lewis						Monthly + Weekly										
Address: 99 Winter Ave, Deep River, CT 06417						Influent/Effluent Testing										
Phone: 860-526-6044 Fax:																
PWSID#:						Samplers Name: (Print)										
System Type:						John Ely										
Client I.D.	Sampling Location	Date	Time	Sample Type		Number of Containers	TN Series	Ortho & Total Phos	Alkalinity (grab sample)	BOD/TSS	Fecal/Enterococcus May-Oct		Cl ₂ Res.	ECL Sample I.D.#		
	Influent (Monthly)		8:40	X	X	2	X	X			1 - 16oz					
	Effluent (Monthly)		8:20	X	X	2	X	X			1 - 4oz (H2S04) 1 - 32oz 1 - 4oz (H2S04)					
	Influent (Monthly)		8:45	X		1			X		1 - 8oz					
	Effluent (Monthly)		8:25	X		1			X		1 - 8oz					
	Influent (Weekly)		8:40	X	X	1				X	1 - 8oz					
	Effluent (Weekly)		8:20	X	X	1				X	1 - 16oz					
	Effluent (Weekly)	9/3/19	8:25	X		1				X	1 - Bact.			27230		
Relinquished by:	[Signature]	Date	Time	Received by:		9/3/19	Were Samples received within holding time? Y/N									
Relinquished by:	[Signature]	Date	Time	Received by:		9:37	Were Samples chilled upon receipt? Y/N									
							Were Samples in appropriate containers? Y/N									
							If No Explain									
							Are containers broken/leaking? Y/N									
							Did Samples need to be split upon receipt? Y/N									
							Were Samples preserved properly? Y/N									

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ENVIRONMENTAL
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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample Date: 9/10/2019
Receipt Date: 9/10/2019
Report Date: 9/12/2019
Sample Site: Effluent

Sample ID#: 127436
Sample Type: Wastewater
Sample Source: Weekly Bacteria Testing
Sampler: Client

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Biological						
Enterococcus Bacteria	<10	MPN/100mL	Enterolert	10	9/10/2019	JB
Fecal Coliform Bacteria	<2	col/100ml	SM9222D	2	9/10/2019	JB

DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

11005 Boston Post Road
Madison, CT 06443

(203) 245-0568 Phone
(203) 318-0830 Fax

Client: Town of Deep River-WPCF

Contact: Mr. Peter Lewis

Address: 99 Winter Ave, Deep River, CT 06417

Phone: 860-526-6044

Samplers Name: (Print)

Project:

Weekly

Influent/Effluent Testing

[illegible]

Relinquished by:

Received by:

Time

Date _____

relinquished by:

Received by:

Time

Date _____

relinquished by:

Were Samples received within holding time? ☒ Y ☐ N
Were Samples chilled upon receipt? ☐ Y ☒ N
Were Samples in appropriate containers? ☒ Y ☐ N

Are containers broken/leaking? ☒ N ☐ Y

Did Samples need to be split upon receipt? ☐ Y ☒ N

Were Samples presented properly? ☒ Y ☐ N

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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample ID#: 127434
Sample Type: Wastewater
Sample Source: Weekly
Sampler: Client
Sample Date: 9/10/2019
Receipt Date: 9/10/2019
Report Date: 9/17/2019
Sample Site: Influent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Biological Oxygen Demand	77.8	mg/L	SM5210B	2	9/11/2019	KC
Total Suspended Solids	94.0	mg/L	SM2540D	1	9/13/2019	JB


DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample Date: 9/10/2019
Receipt Date: 9/10/2019
Report Date: 9/17/2019
Sample Site: Effluent

Sample ID#: 127435
Sample Type: Wastewater
Sample Source: Weekly
Sampler: Client

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Biological Oxygen Demand	2.40	mg/L	SM5210B	2	9/11/2019	KC
Total Suspended Solids	ND	mg/L	SM2540D	1	9/13/2019	JB

DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

(203) 245-0568 Phone
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Were Samples presented properly? ☒ Y ☐ N

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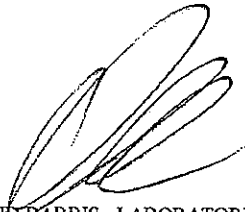
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CONSULTING LABORATORIES, INC.

Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample Date: 9/17/2019
Receipt Date: 9/17/2019
Report Date: 9/20/2019
Sample Site: Effluent

Sample ID#: 127617
Sample Type: Wastewater
Sample Source: Weekly Bacteria Testing
Sampler: Client

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Biological						
Enterococcus Bacteria	<10	MPN/100mL	Enterolert	10	9/17/2019	JB
Fecal Coliform Bacteria	<2	col/100ml	SM9222D	2	9/17/2019	JB


DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

7005 Boston Post Road
Madison, CT 06443

(203) 245-0568 Phone
(203) 318-0830 Fax

Project:

Weekly Influent/Effluent Testing

Phone: 860-526-6044 Fax:

Samplers Name: (Print)

W

[illegible]

Relinquished by:

Witnessed by: _____

Date _____ Time _____

Received by:

9/17/15 9:40 AM

~~Relinquished by:~~

Witnessed by:

Date	Time
------	------

Received by

01.1

Were Samples received within holding time? **Y** **N**
 Were Samples chilled upon receipt? **Y** **N**
 Were Samples in appropriate containers? **Y** **N**
 If No Explain

Are containers broken/leaking? Y/N
Did Samples need to be split upon receipt? Y/N
Were Samples presented properly? Y/N

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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis

Sample ID#: 127769
Sample Type: Wastewater
Sample Source: Weekly Bacteria Testing
Sampler: Client

Sample Date: 9/24/2019
Receipt Date: 9/24/2019
Report Date: 9/27/2019
Sample Site: Effluent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Biological						
Enterococcus Bacteria	<10	MPN/100mL	Enterolert	10	9/24/2019	JB
Fecal Coliform Bacteria	<2	col/100ml	SM9222D	2	9/24/2019	JB

DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

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(203) 318-0830 Fax

Are containers broken/leaking? Y/N
 Did Samples need to be split upon receipt? Y/N
 Were Samples preserved properly? Y/N

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ENVIRONMENTAL
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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample Date: 9/10/2019
Receipt Date: 9/10/2019
Report Date: 9/25/2019
Sample Site: Final Effluent

Sample ID#: 127437
Sample Type: Wastewater
Sample Source: Bi-Annual Toxicity Testing
Sampler: Client

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Biological						
Aquatic Toxicity	PASSED	%	AQ	0	9/10/2019	KC
Chemical						
Ammonia as N	ND	mg/L	ASTM D6919-03	0.05	9/18/2019	KC
Biological Oxygen Demand	2.28	mg/L	SM5210B	2	9/11/2019	KC
Cyanide-Amenable	ND	mg/L	EPA 335.4	0.01	9/19/2019	CET
Cyanide-Total	ND	mg/L	EPA 335.4	0.01	9/19/2019	CET
Nitrate as N	ND	mg/L	EPA300.0	0.1	9/10/2019	JB
Nitrite as N	ND	mg/L	EPA300.0	0.01	9/10/2019	JB
Phenols - Total	ND	mg/L	420.1	0.1	9/16/2019	CET
Phosphorous -Total as P	0.46	mg/L	EPA 200.7	0.04	9/16/2019	JB
Total Suspended Solids	ND	mg/L	SM2540D	1	9/13/2019	JB
Alkalinity(1 - Initial)	<20.0	mg/L	SM2320-B	20	9/17/2019	KC
Chlorine- Residual, Total(1 - Initial)	ND	mg/L	SM4500-Cl G	0.02	9/10/2019	JM
Hardness-Total(1 - Initial)	25.4	mg/L	EPA 200.7	1	9/13/2019	JB
Alkalinity(2 - Daph)	20.3	mg/L	SM2320-B	20	9/17/2019	KC
Chlorine- Residual, Total(2 - Daph)	ND	mg/L	SM4500-Cl G	0.02	9/12/2019	JM
Hardness-Total(2 - Daph)	34.4	mg/L	EPA 200.7	1	9/13/2019	JB
Alkalinity(3 - Fish)	<20.0	mg/L	SM2320-B	20	9/17/2019	KC
Chlorine- Residual, Total(3 - Fish)	ND	mg/L	SM4500-Cl G	0.02	9/12/2019	JM
Hardness-Total(3 - Fish)	29.5	mg/L	EPA 200.7	1	9/13/2019	JB
Metals						
Aluminum	ND	mg/L	EPA 200.7	0.1	9/18/2019	CET
Antimony	ND	mg/L	EPA 200.7	0.05	9/18/2019	CET
Arsenic	ND	mg/L	EPA 200.7	0.004	9/18/2019	CET
Beryllium	ND	mg/L	EPA 200.7	0.004	9/18/2019	CET

ND = Not Detected

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ENVIRONMENTAL
CONSULTING LABORATORIES, INC.

Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample Date: 9/10/2019
Receipt Date: 9/10/2019
Report Date: 9/25/2019
Sample Site: Final Effluent

Sample ID#: 127437
Sample Type: Wastewater
Sample Source: Bi-Annual Toxicity Testing
Sampler: Client

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Metals						
Cadmium	ND	mg/L	EPA 200.7	0.005	9/18/2019	CET
Chromium	ND	mg/L	EPA 200.7	0.05	9/18/2019	CET
Chromium(Hexavalent)	ND	mg/L	SM3500-CrD	0.01	9/10/2019	KC
Copper	ND	mg/L	EPA 200.7	0.04	9/18/2019	CET
Iron	ND	mg/L	EPA 200.7	0.1	9/18/2019	CET
Lead	ND	mg/L	EPA 200.7	0.013	9/18/2019	CET
Mercury	ND	mg/L	EPA245.2	0.0002	9/16/2019	CET
Nickel	ND	mg/L	EPA 200.7	0.05	9/18/2019	CET
Selenium	ND	mg/L	EPA 200.7	0.01	9/18/2019	CET
Silver	ND	mg/L	EPA 200.7	0.012	9/18/2019	CET
Thallium	ND	mg/L	EPA 200.7	0.05	9/18/2019	CET
Zinc	0.25	mg/L	EPA 200.7	0.02	9/18/2019	CET
Physical						
Conductivity(1 - Initial)	172	umhos/cm	SM2510B	1	9/10/2019	JM
Conductivity(2 - Daph)	237	umhos/cm	SM2510B	1	9/12/2019	JM
Conductivity(3 - Fish)	190	umhos/cm	SM2510B	1	9/12/2019	JM


DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

Comments CET - CT PH-0116.

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION

Bureau of Water Management: Aquatic Toxicity Monitoring Report - PART 1

Facility Name: <u>Deep River WPCF</u>	NPDES ID: <u>CT0101745</u>
Receiving Water: <u>Connecticut River</u>	Waterbody ID: <u>4000</u>
Sample Collection Date(s): _____	
Sample Collection Time: FROM: _____ (AM/PM) TO: _____ (AM/PM)	

TOXICITY TEST SUMMARY (PASS/FAIL)

CONTROL SAMPLE RESULTS (% Survival)

TEST SPECIES	REPLICATE 1	REPLICATE 2	REPLICATE 3
<i>Daphnia pulex</i>	100 %	100 %	100 %
<i>Pimephales promelas</i>	100 %	100 %	100 %

If less than 90% survival is recorded for one or more replicate controls, the test is invalid and an additional effluent sample must be collected and the test procedure repeated. The results for all samples must be submitted to the DEP.

EFFLUENT SAMPLE RESULTS

TEST SPECIES	MEAN % SURVIVAL
<i>Daphnia pulex</i>	100 %
<i>Pimephales promelas</i>	98 %

If the mean percent survival for either or both species is less than 90%, the effluent is determined toxic and an additional effluent sample must be collected and the test procedure repeated. The results for all samples must be submitted to the DEP.

STATEMENT OF ACKNOWLEDGEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Official: _____ Title: _____
 Signature: _____ Date: _____

AQUATIC TOXICITY MONITORING REPORT (ATMR) - PART 2

Facility Name: <u>Deep River WPCF</u>	NPDES ID: <u>CT0101745</u>
Dilution Water: <u>Synthetic Lab</u>	Hardness: <u>507.1 mg/L</u>
Sample Collected On: _____ (date)	Received On: <u>9/10/2019</u> (date)
Test Species: <u>Daphnia pulex</u>	Source: <u>EC</u> Age: <u>< 24 hr</u>
Test Duration: <u>48 hours</u> , Beginning: <u>3:30</u> (am/pm)	On: <u>9/10/2019</u> (date)

Effluent Dilution		Number of Organisms Surviving			Dissolved Oxygen (mg/L)			Temperature (°C)			pH (su)				
		(%)	Hour	00	24	48	00	24	48	00	24	48	00	24	48
100 A				10	10	10	8.0	7.8	8.5	21	21	21	6.5	6.5	7.0
100 B				10	10	10	8.0	7.8	8.5	21	21	21	6.5	6.5	7.0
100 C				10	10	10	8.0	7.8	8.5	21	21	21	6.5	6.5	7.0
100 D				10	10	10	8.0	7.8	8.5	21	21	21	6.5	6.5	7.0
100 E				10	10	10	8.0	7.8	8.5	21	21	21	6.5	6.5	7.0
CONTROL 1				10	10	10	8.5	8.1	8.5	20	20	20	7.4	7.3	7.2
CONTROL 2				10	10	10	8.5	8.4	8.6	20	20	20	7.4	7.3	7.2
CONTROL 3				10	10	10	8.5	8.3	8.7	20	20	20	7.4	7.3	7.2
MEAN SAMPLE SURVIVAL (%)													1	2	3
[(A+B+C+D+E) / 5] X 10 = 100													CONTROL SURVIVAL (%)	100	100

REFERENCE TOXICANT RESULTS				
SPECIES	DATE	REFERENCE TOXICANT	SOURCE	LC ₅₀
<i>Daphnia pulex</i>	<u>4/2/19</u>	<u>CuCl2</u>	<u>EC</u>	<u>0.85 ppb</u>

COMMENTS

STATEMENT OF ACKNOWLEDGEMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the testing protocol described in EPA 600/4-90/027F and Sections 22a-430-3 and 22a-430-4 of the Regulations of Connecticut State Agencies except as noted above. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Laboratory Official: [Signature] Title: Supervisor
 Signature: [Signature] Date: 9/15/2019

AQUATIC TOXICITY MONITORING REPORT (ATMR) - PART 2

Facility Name: Deep River WPCE NPDES ID: CT0101745
 Dilution Water: Synthetic Lab Hardness: 50+ mg/L
 Sample Collected On: _____ (date) Received On: 9/10/2019 (date)
 Test Species: Pimephales promelas Source: BCL Age: 24 days
 Test Duration: 96 hours, Beginning: 3:30 (am/pm) On: 9/10/2019 (date)

Effluent Dilution (%)	Hour	Number of Organisms Surviving			Dissolved Oxygen (mg/L)			Temperature (°C)			pH (su)		
		00	24	48	00	24	48	00	24	48	00	24	48
100 A		10	9	9	8.0	7.3	7.6	21	21	21	6.5	6.7	7.0
100 B		10	10	10	8.0	7.3	7.6	21	21	21	6.5	6.7	7.0
100 C		10	10	10	8.0	7.3	7.6	21	21	21	6.5	6.7	7.0
100 D		10	10	10	8.0	7.3	7.6	21	21	21	6.5	6.7	7.0
100 E		10	10	10	8.0	7.3	7.6	21	21	21	6.5	6.7	7.0
CONTROL 1		10	10	10	8.5	7.4	7.4	20	20	20	7.4	7.4	7.0
CONTROL 2		10	10	10	8.5	7.6	7.6	20	20	20	7.4	7.4	7.0
CONTROL 3		10	10	10	8.5	7.5	7.5	20	20	20	7.4	7.4	7.1
MEAN SAMPLE SURVIVAL (%)											1	2	3
[(A+B+C+D+E) / 5] X 10 = <u>98</u>								CONTROL SURVIVAL (%)			100	100	100

REFERENCE TOXICANT RESULTS				
SPECIES	DATE	REFERENCE TOXICANT	SOURCE	LC ₅₀
<u>Pimephales promelas</u>	<u>4/1/19</u>	<u>CWCZ</u>	<u>BCL</u>	<u>10.0 ppb</u>

COMMENTS

STATEMENT OF ACKNOWLEDGEMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the testing protocol described in EPA 600/4-90/027F and Sections 22a-430-3 and 22a-430-4 of the Regulations of Connecticut State Agencies except as noted above. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Laboratory Official: Kevin M. [Signature] Title: Supervisor
 Signature: [Signature] Date: 9/15/2019

Supplemental Chemistry (part 2s)

Facility Name: <u>Deep River WPCF</u>	NPDES ID: <u>CT0101745</u>
Receiving Water: <u>Connecticut River</u>	Waterbody ID: <u>4000</u>
Sample Collection Date(s): _____	
Sample Collection Time: FROM: _____ (AM/PM) TO: _____ (AM/PM)	

Effluent Sample

Parameter	Effluent Sample	
	Hours	Initial (00)
pH		6.5
Conductivity		172
Alkalinity		220.0
Hardness		25.4
TRC		<0.02

100% Test Sample

Parameter	Hours	<i>Daphnia pulex</i>		<i>Pimephales promelas</i>	
		Initial (00)	Final (48)	Initial (00)	Final (48)
Conductivity		172	237	172	190
Alkalinity		220.0	20.3	220.0	220.0
Hardness		25.4	34.4	25.4	29.5
TRC		<0.02		<0.02	

0% Test Sample (Control)

Parameter	Hours	<i>Daphnia pulex</i>		<i>Pimephales promelas</i>	
		Initial (00)	Final (48)	Initial (00)	Final (48)
Conductivity		183	245	183	221
Alkalinity		33.0	38.0	33.0	32.6
Hardness		41.9	51.3	41.9	44.6
TRC		<0.02		<0.02	

Laboratory Official: Kevin M. Clark Title: Supervisor

Signature: [Signature] Date: 9/25/2019

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Water Management: Aquatic Toxicity Monitoring Report - PART 3

NPDES Permit:	CT0101745	Exp:	9/13/06	Phone ¹ :	(860) 526-6044
Facility:	Deep River WPCF	Contact:	Peter Lewis	Phone ² :	
Address:	99 Winter Ave.	Town:	Deep River	Zip:	06417

STATEMENT OF ACKNOWLEDGEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Official: _____ Title: _____

Signature: _____ Date: _____

Sample Date: _____

Sample Day's Flow: _____

MAR SEP (Circle one)

REPEAT MONTH: _____

<u>FREQUENCY</u>	<u>MONLOC</u>	<u>UNITS</u>	<u>PARAMETER</u>	<u>MINIMUM LEVEL</u>	<u>RESULT</u>
Each Test	001 T	mg/L	BOD, 5 DAY		2.28
Each Test	001 T	mg/L	SUSPENDED SOLIDS, TOTAL		1.00
Each Test	001 T	mg/L	AMMONIA, Total		0.05
Each Test	001 T	mg/L	NITRITE, as N		0.01
Each Test	001 T	mg/L	NITRATE, as N		0.10
Each Test	001 T	mg/L	CYANIDE, Total		0.01
Each Test	001 T	mg/L	CYANIDE, Amenable		0.01
Each Test	001 T	mg/L	BERYLLIUM, Total		0.004
Each Test	001 T	mg/L	ARSENIC, Total	0.005 mg/L	0.005
Each Test	001 T	mg/L	CADMIUM, Total		0.005
Each Test	001 T	mg/L	CHROMIUM, Hexavalent		0.01

Aquatic Toxicity Monitoring Report - PART 3

<u>FREQUENCY</u>	<u>MON/LOC</u>	<u>UNITS</u>	<u>PARAMETER</u>	<u>MINIMUM LEVEL</u>	<u>RESULT</u>
Each Test	001 T	mg/L	CHROMIUM, Total		60.05
Each Test	001 T	mg/L	COPPER, Total		60.04
Each Test	001 T	mg/L	LEAD, Total		60.013
Each Test	001 T	mg/L	THALLIUM, Total		60.05
Each Test	001 T	mg/L	NICKEL, Total		60.05
Each Test	001 T	mg/L	SILVER, Total		60.012
Each Test	001 T	mg/L	ZINC, Total		0.25
Each Test	001 T	mg/L	ANTIMONY, Total		60.01
Each Test	001 T	mg/L	SELENIUM, Total		60.01
Each Test	001 T	mg/L	PHENOLS		60.10
Each Test	001 T	mg/L	MERCURY, Total	0.0002 mg/L	60.0002

Environmental Consulting Laboratories, Inc

Testing

Laboratory:

1005 Boston Post Road

Medford, MA 02155

Signature:

[Signature]
David C. Basso

Date:

9/26/19

FOR OFFICIAL USE ONLY:

AQUATIC TOXICITY: *Daphnia pulex*

TGA3D

AQUATIC TOXICITY: *Pimephales promelas*

TGA6C

Deep River WPCF

CONSULTING LABORATORIES, INC.

(203) 245-0568 Phone
(203) 318-0830 Fax

[illegible]

1005 BOSTON POST ROAD
MADISON, CT 06443
Phone 203-245-0568
FAX 203-318-0830
Connecticut Certification PH-0535
www.eclinconline.com



ENVIRONMENTAL
CONSULTING LABORATORIES, INC.

Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample Date: 9/10/2019
Receipt Date: 9/10/2019
Report Date: 9/25/2019
Sample Site: Final Effluent

Sample ID#: 127437
Sample Type: Wastewater
Sample Source: Bi-Annual Toxicity Testing
Sampler: Client

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Biological						
Aquatic Toxicity	PASSED	%	AQ	0	9/10/2019	KC
Chemical						
Ammonia as N	ND	mg/L	ASTM D6919-03	0.05	9/18/2019	KC
Biological Oxygen Demand	2.28	mg/L	SM5210B	2	9/11/2019	KC
Cyanide-Amenable	ND	mg/L	EPA 335.4	0.01	9/19/2019	CET
Cyanide-Total	ND	mg/L	EPA 335.4	0.01	9/19/2019	CET
Nitrate as N	ND	mg/L	EPA300.0	0.1	9/10/2019	JB
Nitrite as N	ND	mg/L	EPA300.0	0.01	9/10/2019	JB
Phenols - Total	ND	mg/L	420.1	0.1	9/16/2019	CET
Phosphorous -Total as P	0.46	mg/L	EPA 200.7	0.04	9/16/2019	JB
Total Suspended Solids	ND	mg/L	SM2540D	1	9/13/2019	JB
Alkalinity(1 - Initial)	<20.0	mg/L	SM2320-B	20	9/17/2019	KC
Chlorine- Residual, Total(1 - Initial)	ND	mg/L	SM4500-Cl G	0.02	9/10/2019	JM
Hardness-Total(1 - Initial)	25.4	mg/L	EPA 200.7	1	9/13/2019	JB
Alkalinity(2 - Daph)	20.3	mg/L	SM2320-B	20	9/17/2019	KC
Chlorine- Residual, Total(2 - Daph)	ND	mg/L	SM4500-Cl G	0.02	9/12/2019	JM
Hardness-Total(2 - Daph)	34.4	mg/L	EPA 200.7	1	9/13/2019	JB
Alkalinity(3 - Fish)	<20.0	mg/L	SM2320-B	20	9/17/2019	KC
Chlorine- Residual, Total(3 - Fish)	ND	mg/L	SM4500-Cl G	0.02	9/12/2019	JM
Hardness-Total(3 - Fish)	29.5	mg/L	EPA 200.7	1	9/13/2019	JB
Metals						
Aluminum	ND	mg/L	EPA 200.7	0.1	9/18/2019	CET
Antimony	ND	mg/L	EPA 200.7	0.05	9/18/2019	CET
Arsenic	ND	mg/L	EPA 200.7	0.004	9/18/2019	CET
Beryllium	ND	mg/L	EPA 200.7	0.004	9/18/2019	CET

ND = Not Detected

1005 BOSTON POST ROAD
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Connecticut Certification PH-0535
www.eclinonline.com



ENVIRONMENTAL
CONSULTING LABORATORIES, INC.

Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis

Sample ID#: 127437
Sample Type: Wastewater
Sample Source: Bi-Annual Toxicity Testing
Sampler: Client

Sample Date: 9/10/2019
Receipt Date: 9/10/2019
Report Date: 9/25/2019
Sample Site: Final Effluent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Metals						
Cadmium	ND	mg/L	EPA 200.7	0.005	9/18/2019	CET
Chromium	ND	mg/L	EPA 200.7	0.05	9/18/2019	CET
Chromium(Hexavalent)	ND	mg/L	SM3500-CrD	0.01	9/10/2019	KC
Copper	ND	mg/L	EPA 200.7	0.04	9/18/2019	CET
Iron	ND	mg/L	EPA 200.7	0.1	9/18/2019	CET
Lead	ND	mg/L	EPA 200.7	0.013	9/18/2019	CET
Mercury	ND	mg/L	EPA245.2	0.0002	9/16/2019	CET
Nickel	ND	mg/L	EPA 200.7	0.05	9/18/2019	CET
Selenium	ND	mg/L	EPA 200.7	0.01	9/18/2019	CET
Silver	ND	mg/L	EPA 200.7	0.012	9/18/2019	CET
Thallium	ND	mg/L	EPA 200.7	0.05	9/18/2019	CET
Zinc	0.25	mg/L	EPA 200.7	0.02	9/18/2019	CET
Physical						
Conductivity(1 - Initial)	172	umhos/cm	SM2510B	1	9/10/2019	JM
Conductivity(2 - Daph)	237	umhos/cm	SM2510B	1	9/12/2019	JM
Conductivity(3 - Fish)	190	umhos/cm	SM2510B	1	9/12/2019	JM


DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

Comments CET - CT PH-0116.

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION

Bureau of Water Management: Aquatic Toxicity Monitoring Report - PART 1

Facility Name: <u>Deep River WPCF</u>	NPDES ID: <u>CT0101745</u>
Receiving Water: <u>Connecticut River</u>	Waterbody ID: <u>4000</u>
Sample Collection Date(s): <u>9/9/19 - 9/10/19</u>	
Sample Collection Time: FROM: <u>7</u> (AM/PM) TO: (AM/PM) <u>8</u>	

TOXICITY TEST SUMMARY (PASS/FAIL)

CONTROL SAMPLE RESULTS (% Survival)

TEST SPECIES	REPLICATE 1	REPLICATE 2	REPLICATE 3
<i>Daphnia pulex</i>	100 %	100 %	100 %
<i>Pimephales promelas</i>	100 %	100 %	100 %

If less than 90% survival is recorded for one or more replicate controls, the test is invalid and an additional effluent sample must be collected and the test procedure repeated. The results for all samples must be submitted to the DEP.

EFFLUENT SAMPLE RESULTS

TEST SPECIES	MEAN % SURVIVAL
<i>Daphnia pulex</i>	100 %
<i>Pimephales promelas</i>	98 %

If the mean percent survival for either or both species is less than 90%, the effluent is determined toxic and an additional effluent sample must be collected and the test procedure repeated. The results for all samples must be submitted to the DEP.

STATEMENT OF ACKNOWLEDGEMENT

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Authorized Official: John Ely Title: operator
Signature: [Signature] Date: 9/10/19

AQUATIC TOXICITY MONITORING REPORT (ATMR) - PART 2

Facility Name: <u>Deep River WPCF</u>	NPDES ID: <u>CT0101745</u>
Dilution Water: <u>Synthetic Lab</u>	Hardness: <u>502.1 mg/L</u>
Sample Collected On: <u>9/9/19 - 9/10/19</u> (date)	Received On: <u>9/10/2019</u> (date)
Test Species: <u>Daphnia pulex</u>	Source: <u>PCC</u> Age: <u>< 24 hr</u>
Test Duration: <u>48 hours</u> , Beginning: <u>3:30</u> (am/pm) On: <u>9/10/2019</u> (date)	

Effluent Dilution		Number of Organisms Surviving			Dissolved Oxygen (mg/L)			Temperature (°C)			pH (su)		
(%)	Hour	00	24	48	00	24	48	00	24	48	00	24	48
100 A		10	10	10	8.0	7.8	8.5	21	21	21	6.5	6.5	7.0
100 B		10	10	10	8.0	7.8	8.5	21	21	21	6.5	6.5	7.0
100 C		10	10	10	8.0	7.8	8.5	21	21	21	6.5	6.5	7.0
100 D		10	10	10	8.0	7.8	8.5	21	21	21	6.5	6.5	7.0
100 E		10	10	10	8.0	7.8	8.5	21	21	21	6.5	6.5	7.0
CONTROL 1		10	10	10	8.5	8.1	8.5	20	20	20	7.4	7.3	7.2
CONTROL 2		10	10	10	8.5	8.4	8.6	20	20	20	7.4	7.3	7.2
CONTROL 3		10	10	10	8.5	8.3	8.7	20	20	20	7.4	7.3	7.2
MEAN SAMPLE SURVIVAL (%)								CONTROL SURVIVAL (%)			1	2	3
[(A+B+C+D+E) / 5] X 10 = 100											100	100	100

REFERENCE TOXICANT RESULTS				
SPECIES	DATE	REFERENCE TOXICANT	SOURCE	LC ₅₀
<i>Daphnia pulex</i>	<u>4/2/19</u>	<u>CuCl2</u>	<u>PCC</u>	<u>0.85 ppb</u>

COMMENTS

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Laboratory Official: [Signature] Title: Supervisor
 Signature: [Signature] Date: 9/15/2019

AQUATIC TOXICITY MONITORING REPORT (ATMR) - PART 2

Facility Name: <u>Deep River WPCF</u>	NPDES ID: <u>CT0101745</u>
Dilution Water: <u>Synthetic Lab</u>	Hardness: <u>50+ mg/L</u>
Sample Collected On: <u>9/9/19 - 9/10/19</u> (date)	Received On: <u>9/10/2019</u> (date)
Test Species: <u>Pimephales promelas</u>	Source: <u>ECL</u>
Test Duration: <u>48</u> hours, Beginning: <u>3:30</u> (am/pm)	On: <u>9/10/2019</u> (date)
	Age: <u>44 Days</u>

Effluent Dilution (%)	Hour	Number of Organisms Surviving			Dissolved Oxygen (mg/L)			Temperature (°C)			pH (su)		
		00	24	48	00	24	48	00	24	48	00	24	48
100 A		10	9	9	8.0	7.3	7.6	21	21	21	6.5	6.7	7.0
100 B		10	10	10	8.0	7.3	7.6	21	21	21	6.5	6.7	7.0
100 C		10	10	10	8.0	7.3	7.6	21	21	21	6.5	6.7	7.0
100 D		10	10	10	8.0	7.3	7.6	21	21	21	6.5	6.7	7.0
100 E		10	10	10	8.0	7.3	7.6	21	21	21	6.5	6.7	7.0
CONTROL 1		10	10	10	8.5	7.4	7.4	20	20	20	7.4	7.4	7.0
CONTROL 2		10	10	10	8.5	7.6	7.6	20	20	20	7.4	7.4	7.0
CONTROL 3		10	10	10	8.5	7.5	7.5	20	20	20	7.4	7.4	7.1
MEAN SAMPLE SURVIVAL (%)											1	2	3
[(A+B+C+D+E) / 5] X 10 = <u>98</u>								CONTROL SURVIVAL (%)			100	100	100

REFERENCE TOXICANT RESULTS				
SPECIES	DATE	REFERENCE TOXICANT	SOURCE	LC ₅₀
<i>Pimephales promelas</i>	<u>4/1/19</u>	<u>CWCG</u>	<u>ECL</u>	<u>10.0 ppb</u>

COMMENTS

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Laboratory Official: Kevin M. [Signature] Title: Supervisor
 Signature: [Signature] Date: 9/15/2019

Supplemental Chemistry (part 2s)

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Receiving Water: <u>Connecticut River</u>	Waterbody ID: <u>4000</u>
Sample Collection Date(s): <u>9/9/19 - 9/10/19</u>	
Sample Collection Time: FROM: <u>7 AM</u> (AM/PM) TO: <u>8 AM</u> (AM/PM)	

Effluent Sample

Parameter	Effluent Sample
Hours	Initial (00)
pH	6.5
Conductivity	172
Alkalinity	220.0
Hardness	25.4
TRC	<0.02

100% Test Sample

Parameter	Hours	Daphnia pulex		Pimephales promelas	
		Initial (00)	Final (48)	Initial (00)	Final (48)
Conductivity		172	237	172	190
Alkalinity		220.0	20.3	220.0	220.0
Hardness		25.4	34.4	25.4	29.5
TRC		<0.02		<0.02	

0% Test Sample (Control)

Parameter	Hours	Daphnia pulex		Pimephales promelas	
		Initial (00)	Final (48)	Initial (00)	Final (48)
Conductivity		183	245	183	221
Alkalinity		33.0	38.0	33.0	32.6
Hardness		41.9	51.3	41.9	44.6
TRC		<0.02		<0.02	

Laboratory Official: Kevin M. Clark Title: Supervisor

Signature: [Signature] Date: 9/25/2019

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Water Management: Aquatic Toxicity Monitoring Report - PART 3

NPDES Permit:	CT0101745	Exp:	9/13/06	Phone1:	(860) 526-6044
Facility:	Deep River WPCF	Contact:	Peter Lewis	Phone2:	
Address:	99 Winter Ave.	Town:	Deep River	Zip:	06417

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Authorized Official: John Ely Title: operator

Signature: [Signature] Date: 10/3/19

Sample Date: 9/9/19 Sample Day's Flow: .13 MAR ☒ SEP ☐ (Circle one)

REPEAT MONTH:

FREQUENCY	MON/LOC	UNITS	PARAMETER	MINIMUM LEVEL	RESULT
Each Test	001 T	mg/L	BOD, 5 DAY		<u>2.28</u>
Each Test	001 T	mg/L	SUSPENDED SOLIDS, TOTAL		<u>11.00</u>
Each Test	001 T	mg/L	AMMONIA, Total		<u>10.05</u>
Each Test	001 T	mg/L	NITRITE, as N		<u>10.01</u>
Each Test	001 T	mg/L	NITRATE, as N		<u>10.10</u>
Each Test	001 T	mg/L	CYANIDE, Total		<u>10.01</u>
Each Test	001 T	mg/L	CYANIDE, Amenable		<u>10.01</u>
Each Test	001 T	mg/L	BERYLLIUM, Total		<u>10.004</u>
Each Test	001 T	mg/L	ARSENIC, Total	0.005 mg/L	<u>10.005</u>
Each Test	001 T	mg/L	CADMIUM, Total		<u>10.005</u>
Each Test	001 T	mg/L	CHROMIUM, Hexavalent		<u>10.01</u>

Aquatic Toxicity Monitoring Report - PART 3

<u>FREQUENCY</u>	<u>MON/LOC</u>	<u>UNITS</u>	<u>PARAMETER</u>	<u>MINIMUM LEVEL</u>	<u>RESULT</u>
Each Test	001 T	mg/L	CHROMIUM, Total		60.05
Each Test	001 T	mg/L	COPPER, Total		60.04
Each Test	001 T	mg/L	LEAD, Total		60.013
Each Test	001 T	mg/L	THALLIUM, Total		60.05
Each Test	001 T	mg/L	NICKEL, Total		60.05
Each Test	001 T	mg/L	SILVER, Total		60.012
Each Test	001 T	mg/L	ZINC, Total		0.25
Each Test	001 T	mg/L	ANTIMONY, Total		60.01
Each Test	001 T	mg/L	SELENIUM, Total		60.01
Each Test	001 T	mg/L	PHENOLS		60.10
Each Test	001 T	mg/L	MERCURY, Total	0.0002 mg/L	60.0002

Environmental Consulting Laboratories, Inc.

Testing Laboratory:

1005 Boston Post Road

Madison, CT 06440

Signature: David C. Roberts

Date:

9/26/19

FOR OFFICIAL USE ONLY:

AQUATIC TOXICITY: *Daphnia pulex*

TGA3D

AQUATIC TOXICITY: *Pimephales promelas*

TGA6C

CONSULTING LABORATORIES, INC.

(203) 245-0568 Phone
(203) 318-0830 Fax

[illegible]

