BARNHARDT
MANUFACTURING COMPANY

247 Main Road
P.O. Box 3
Colrain, MA 01340
Tel: 413-624-3471
Fax: 413-624-3031

July 15, 2018

U.S. Environmental Protection Agency
Water Enforcement
OPES4-SMR
5 Post Office Square, Suite 100
Boston, MA 02109-3912

Re: Federal Permit No. MA 0003697
State Permit No. 125

Subject: Barnhardt Manufacturing Company – Griswoldville Facility
Discharge Monitoring Report

In accordance with the above-referenced permit, we have attached the **Discharge Monitoring Report** for the monthly reporting period June **1, 2018 through June 30 , 2018** and the quarterly reporting period **April 1, 2018 through June 30, 2018**. As shown in the report, this facility was in compliance with the permit limitations.

Also attached is the monthly calculation worksheet, the daily production report, the monthly WWTP report and copies of the analytical reports.

If there are any questions, please call me at 413-624-3471 x 3720.

Sincerely,

Mark Thibodeau
Operations Manager
Barnhardt Manufacturing Company
Griswoldville Plant

cc: Department of Environmental Protection
436 Dwight Street
Springfield, MA 01103

MA DEP-Attn: Kathleen Keohane
Division of Watershed Management
Surface Water Discharge Permit Program
8 New Bond Street
Worcester, MA 01606

File: 830

Goal
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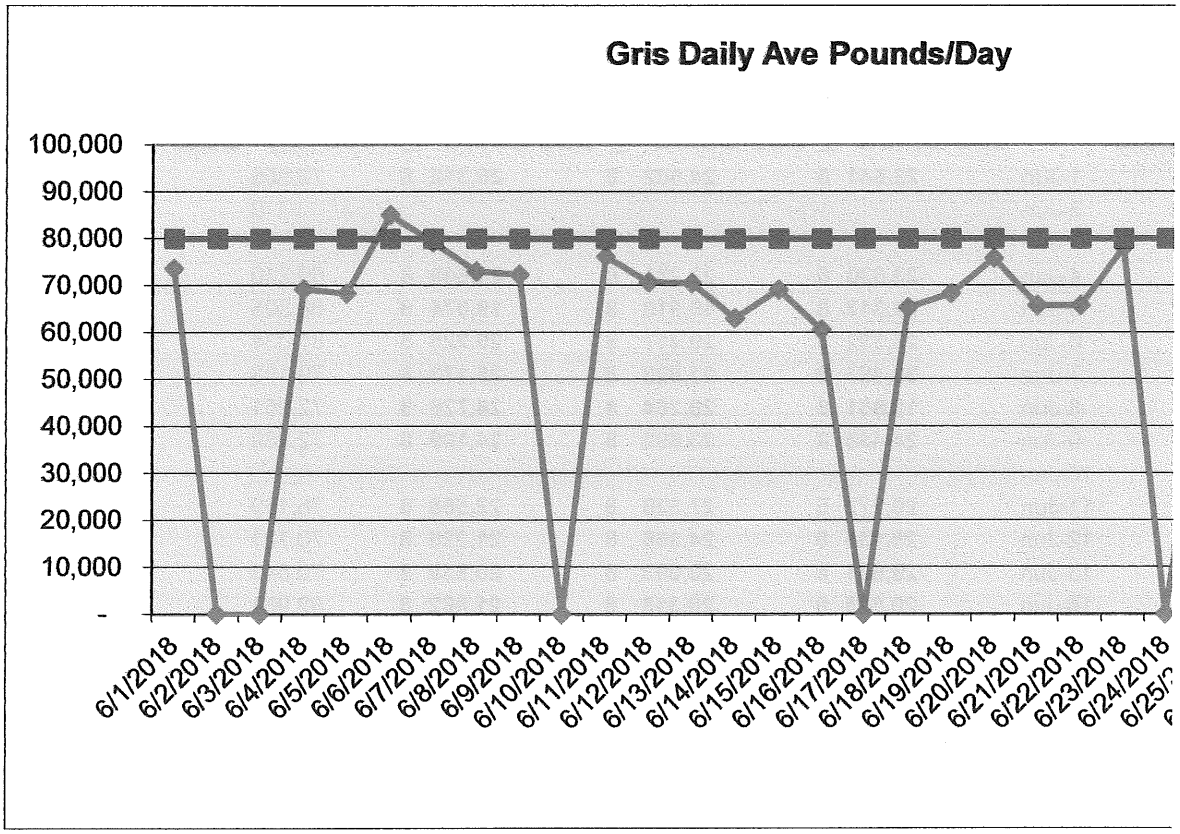

10,525	Actual Lowest production shift this month	2,870	lb.s per production hou
31,678	Actual Highest production shift this month	4.8	700 lb. cakes per hour
		32.8	cakes per shift
75	total shifts		
11	Total Shifts above target		
15%	Shifts above target (1/3 of 80,000 lb/day)		

Total 69,358 Average Per Day

ave lbs. per shift

Gris Daily Production

Jun-2018

Date	SHIFT C Lbs Baled	Hours	SHIFT A Lbs Baled	Hours	SHIFT B Lbs Baled	Hours	Actual lbs Per Prod day	Date	Ave lbs Per 24 hours
1-Jun	22,641	8	24,602	8	26,312	8	73,555	1-Jun	73,555
2-Jun							0	2-Jun	
3-Jun								3-Jun	
4-Jun	23,330	8	22,231	8	23,649	8	69,210	4-Jun	69,210
5-Jun	29,312	8	19,919	8	19,074	8	68,305	5-Jun	68,305
6-Jun	26,392	8	29,417	8	29,225	8	85,034	6-Jun	85,034
7-Jun	30,487	8	23,523	8	25,173	8	79,183	7-Jun	79,183
8-Jun	18,951	8	29,284	8	24,726	8	72,961	8-Jun	72,961
9-Jun	24,468	8	23,692	8	24,109	8	72,269	9-Jun	72,269
10-Jun								10-Jun	
11-Jun	26,273	8	27,328	8	22,568	8	76,169	11-Jun	76,169
12-Jun	25,135	8	24,366	8	21,220	8	70,721	12-Jun	70,721
13-Jun	29,631	8	20,093	8	20,819	8	70,543	13-Jun	70,543
14-Jun	20,803	8	20,316	8	21,862	8	62,981	14-Jun	62,981
15-Jun	19,635	8	25,245	8	24,213	8	69,093	15-Jun	69,093
16-Jun	20,446	8	18,853	8	21,261	8	60,560	16-Jun	60,560
17-Jun								17-Jun	
18-Jun	21,541	8	26,252	8	17,488	8	65,281	18-Jun	65,281
19-Jun	21,988	8	22,190	8	24,079	8	68,257	19-Jun	68,257
20-Jun	22,255	8	26,987	8	26,542	8	75,784	20-Jun	75,784
21-Jun	18,348	8	26,425	8	20,979	8	65,752	21-Jun	65,752
22-Jun	23,454	8	23,329	8	18,932	8	65,715	22-Jun	65,715
23-Jun	21,690	8	22,273	6	21,122	6	65,085	23-Jun	78,102
24-Jun								24-Jun	
25-Jun	14,934	8	23,870	8	21,938	8	60,742	25-Jun	60,742
26-Jun	21,991	8	23,640	8	28,377	8	74,008	26-Jun	74,008
27-Jun	20,814	8	10,525	8	23,432	8	54,771	27-Jun	54,771
28-Jun	20,561	8	20,205	8	24,514	8	65,280	28-Jun	65,280
29-Jun	31,678	8	17,001	8	20,260	8	68,939	29-Jun	68,939
30-Jun	27,982	8	16,346	8	17,685		62,013	30-Jun	62,013
Avg/ Shift	23,390		22,946		23,022				1,722,211
									22,963
Total Hours	588								

MONTHLY CALCULATED PARAMETER WORKSHEET - June - 2018

Parameter Code	Parameter Description & Data Source		Raw Data		Calculated Value	
00011	Temperature, Effluent °F					
	From Monthly Status Reports	Week 1 Average:	87	°F		
		Week 2 Average:	86	°F		
		Week 3 Average:	87	°F	87.800	°F (= average of raw data)
		Week 4 Average:	91	°F	91.000	°F Monthly Max (from Monthly Status Reports)
		Week 5 Average:	88	°F		
00145	BOD_5					
	Results from Lab analysis	BOD_5	< 4	mg/L	14.64 ~~0.000~~	lb/d (= concentration(mg/L) x flow(MGD) x 8.34)
	Flow results from Parameter Code 50500 (Avg)			MGD		
	Results from Lab analysis	BOD_5	< 0004	mg/L	19.682	lb/d (= concentration(mg/L) x max flow(MGD) x 8.34)
	Flow results from Parameter Code 50500 (Max Daily)		0.59	MGD		
00400	pH					
	From Monthly Status Reports	Minimum	7.6	SU		
		Maximum	8.4	SU		

MONTHLY CALCULATED PARAMETER WORKSHEET - June - 2018

Parameter Code	Parameter Description & Data Source		Raw Data		Calculated Value	
00530	Total Suspended Solids					
	Results from Lab analysis	TSS	11	mg/L	40.241	lb/d (= concentration(mg/L) x flow(MGD) x 8.34)
	Flow results from Parameter Code 50500 (Avg)		0.4386376	MGD		
	Results from Lab analysis	TSS	11	mg/L	54.127	lb/d (= concentration(mg/L) x max flow(MGD) x 8.34)
	Flow results from Parameter Code 50500 (Max Daily)		0.59	MGD		
00600	Total Nitrogen					
	Results from Lab analysis - Sample #1	N	30.1	mg/L	100.236	lb/d (= average concentration(mg/L) x flow(MGD) x 8.34)
	Results from Lab analysis - Sample #2		24.7	mg/L		
	Flow results from Parameter Code 50500		0.4386376	MGD		
	Results from Lab analysis - Sample #1	N	30.1	mg/L	148.110	lb/d (= max concentration(mg/L) x max flow(MGD) x 8.34)
	Results from Lab analysis - Sample #2		24.7	mg/L		
	Flow results from Parameter Code 50500 (Max Daily)		0.59	MGD		

MONTHLY CALCULATED PARAMETER WORKSHEET - June - 2018

Parameter Code	Parameter Description & Data Source		Raw Data		Calculated Value	
00610	Ammonia (as N)	NODI	9			
	Results from Lab analysis - Sample #1	Ammonia		mg/L		
	Results from Lab analysis - Sample #2			mg/L	0.000	lb/d (= average concentration(mg/L) x flow(MGD) x 8.34)
	Flow results from Parameter Code 50500		0.4386376	MGD		
	Results from Lab analysis - Sample #1	Ammonia		mg/L		
	Results from Lab analysis - Sample #2			mg/L	#VALUE!	lb/d (= concentration(mg/L) x max flow(MGD) x 8.34)
	Flow results from Parameter Code 50500 (Max Daily)		0.59	MGD		
00625	Total Kendal Nitrogen (TKN)					
	Results from Lab analysis - Sample #1	TKN	5.84	mg/L	6.950	mg/L (average samples 1 & 2)
	Results from Lab analysis - Sample #2		6.95	mg/L	23.394	lb/d (= average concentration(mg/L) x flow(MGD) x 8.34)
	Flow results from Parameter Code 50500		0.4386376	MGD		
	Results from Lab analysis - Sample #1	TKN	5.8	mg/L	6.950	mg/L (maximum of samples 1 & 2)
	Results from Lab analysis - Sample #2		0007	mg/L	34.198	lb/d (= max concentration(mg/L) x max flow(MGD) x 8.34)
	Flow results from Parameter Code 50500 (Max Daily)		0.59	MGD		

MONTHLY CALCULATED PARAMETER WORKSHEET - June - 2018

Parameter Code	Parameter Description & Data Source		Raw Data		Calculated Value	
00630	Nitrite plus Nitrate					
	Results from Lab analysis Sample #1	Nitrite	0.014	(a) mg/L	20.986	mg/L (= $(a_1+a_2)/2+(b_1+b_2)/2$)
	Results from Lab analysis Sample #2		0.057	(a) mg/L		
	Results from Lab analysis Sample #1	Nitrate	24.2	(b) mg/L	76.770	lb/d (= average concentration(mg/L) x flow(MGD) x 8.34)
	Results from Lab analysis Sample #2		17.7	(b) mg/L		
	Flow results from Parameter Code 50500		0.439	MGD		
00630	Nitrite plus Nitrate (continued)					
	Results from Lab analysis Sample #1	Nitrite	0.01	(a) mg/L	20.986	mg/L (= $(a_1+a_2)/2+(b_1+b_2)/2$)
	Results from Lab analysis Sample #2		0.06	(a) mg/L		
	Results from Lab analysis Sample #1	Nitrate	24.20	(b) mg/L	119.359	lb/d (= max total concentration(mg/L) x max flow(MGD) x 8.34)
	Results from Lab analysis Sample #2		17.70	(b) mg/L		
	Flow results from Parameter Code 50500 (Max Daily)		0.59	MGD		
00745	Sulfide, total	NODI	9			
	Results from Lab analysis	Sulfide		mg/L	0.000	lb/d (= concentration(mg/L) x flow(MGD) x 8.34)
	Flow results from Parameter Code 50500 (Avg)		0.4386376	MGD		
	Results from Lab analysis	Sulfide		mg/L	#VALUE!	lb/d (= concentration(mg/L) x max flow(MGD) x 8.34)
	Flow results from Parameter Code 50500 (Max Daily)		0.59	MGD		

MONTHLY CALCULATED PARAMETER WORKSHEET - June - 2018

Parameter Code	Parameter Description & Data Source		Raw Data		Calculated Value	
01034	Chromium, total	NODI	9			
	Results from Lab analysis	Chromium		mg/L	0.000	lb/d (= concentration(mg/L) x flow(MGD) x 8.34)
	Flow results from Parameter Code 50500 (Avg)		0.4386376	MGD		
	Results from Lab analysis	Chromium		mg/L	#VALUE!	lb/d (= concentration(mg/L) x max flow(MGD) x 8.34)
	Flow results from Parameter Code 50500 (Max Daily)		0.59	MGD		
01034	Phenols	NODI	9			
	Results from Lab analysis	Phenolics		mg/L	0.000	lb/d (= concentration(mg/L) x flow(MGD) x 8.34)
	Flow results from Parameter Code 50500 (Avg)		0.4386376	MGD		
	Results from Lab analysis	Phenolics		mg/L	#VALUE!	lb/d (= concentration(mg/L) x max flow(MGD) x 8.34)
	Flow results from Parameter Code 50500 (Max Daily)		0.59	MGD		
50050	Flow					
	From Monthly Status Reports	Week 1 Average:	417208	gal/d		
		Week 2 Average:	471586	gal/d		
		Week 3 Average:	490396	gal/d	0.439	MGD (= average of raw data/1,000,000)
		Week 4 Average:	365415	gal/d	0.590	MGD Monthly Max (from Monthly Status Reports)
		Week 5 Average:	448583	gal/d		

MONTHLY CALCULATED PARAMETER WORKSHEET - June - 2018

Parameter Code	Parameter Description & Data Source		Raw Data		Calculated Value	
51040	e-Coli (April - Oct)	NODI				
	Results from Lab analysis	Week 1 Result:	< 10	CFU/100mL		
		Week 2 Result:	< 10	CFU/100mL		
		Week 3 Result:	< 10	CFU/100mL	10.000	CFU/100mL (= average of raw data/1,000,000)
		Week 4 Result:	< 10	CFU/100mL		CFU/100mL (= daily maximum of raw data/1,000,000)
		Week 5 Result:	< 10	CFU/100mL		
81017	Chemical Oxygen Demand	NODI	9			
	Results from Lab analysis	COD		mg/L	0.000	lb/d (= concentration(mg/L) x flow(MGD) x 8.34)
	Flow results from Parameter Code 50500 (Avg)		0.4386376	MGD		
	Results from Lab analysis	COD		mg/L	#VALUE!	lb/d (= concentration(mg/L) x max flow(MGD) x 8.34)
	Flow results from Parameter Code 50500 (Max Daily)		0.59	MGD		

Monthly WWTP Report
Barnhardt Manufacturing Company
247 Main Road
Colrain,Ma. 01340

Griswoldville WWTP Monthly State Report

month : June 2018

DAY	Monday	Tuesday	Wed	Thursday	Friday	Saturday	Sunday	Average	Total
DATE					06/01/18	06/02/18	06/03/18		
FLOW									
Effluent Flow (gal/day)					459,405	389,404	402,815	417,208	1,251,624
Return Sludge Flow (gal/day)					346,103	337,704	331,301	338,369	
Belt Press Feed (gal/day)								#DIV/0!	0
Water From River (gal/day)					525,532	446,651	597,221	523,135	1,569,404
Water To Bleachery (gal/day)					246,671	9,847	85,970	114,163	342,488
Effluent - River (gal/day)	0	0	0	0	(66,127)	(57,247)	(194,406)	(45,397)	(317,780)
COD									
Influent COD (mg/L)									
Effluent COD (mg/L)									
Effluent COD (lb)									
% COD Reduction									
	LBS = mg/L*MGD*8.34								
BOD5									
Final Effluent (mg/L)									
Final Effluent (lb)									
	LBS = mg/L*MGD*8.34								
SUSPENDED SOLIDS									
MLSS, North Lagoon (mg/L)					1,320			1,320	
MLVSS, North Lagoon (mg/L)								#DIV/0!	
MLSS, South Lagoon (mg/L)					1,610			1,610	
MLVSS, South Lagoon (mg/L)								#DIV/0!	
MLSS, Return Sludge (mg/L)					4,320			4,320	
MLVSS, Return Sludge (mg/L)								#DIV/0!	
Influent TSS (mg/L)								#DIV/0!	
Effluent TSS (mg/L)								#DIV/0!	
Effluent TSS (lb)								#DIV/0!	
% TSS Reduction								#DIV/0!	
	LBS = mg/L*MGD*8.34								
SETTLEABILITY									
North Lagoon (mL/L)					170			170	
South Lagoon (mL/L)					180			180	
SLUDGE BLANKET									
North Clarifier (ft)					5.0			5.0	
South Clarifier (ft)					1.0			1.0	
SULFIDE									
Effluent Sulfide (mg/L)									
Effluent Sulfide (lb/day)									
	LBS = mg/L*MGD*8.34								
WEATHER									
Rainfall (inches)					0.00	0.10	0.00		0.10
Air Temperature (deg F)					70	72	60	67	

Maximum Effluent Daily Flow: 459,405 gal. Maximum Effluent Temperature: 87

Per 314 CMR Chapter 12.07 (2)

Send to:

Department of Environmental Protection

Attention: Industrial Wastewater Compliance

436 Dwight Street

Springfield, Ma. 01103

DAY	Monday	Tuesday	Wed	Thursday	Friday	Saturday	Sunday	Average	Total
DATE					06/01/18	06/02/18	06/03/18		
WATER TEMPERATURE									
Raw Influent (deg. F)					109			109	
North Lagoon (deg. F)					88			88	
South Lagoon (deg. F)					87			87	
Effluent Temp(deg F)					87			87	
N. River Downstream (deg.F)								#DIV/0!	
DISSOLVED OXYGEN									
North Lagoon (mg/L)					4.27	5.87	6.34	5.49	
South Lagoon (mg/L)					4.87	6.64	7.05	6.19	
PH									
Raw Influent					11.63			11.6	
North Lagoon					8.22			8.22	
South Lagoon					8.19	7.96	8.02	8.06	
Final Effluent					8.01	7.93	7.87	7.94	
NITROGEN,COPPER, PHOS									
Effluent Total Phoshorus (mg/L)									
Effluent Total Copper (mg/L)									
Effluent Nitrite - N (mg/L)									
Effluent Nitrate - N (mg/L)									
Effluent Nitrogen Tot Kjeldahl (mg/L)									
Effluent Ammonia (mg/L -N)									
Effluent Ammonia (lb)									
BELT PRESS									
Hours Run								#DIV/0!	0.0
Polymer Used (lb)								#DIV/0!	0.0
Total Solids, % Cake								#DIV/0!	
Cubic Yards of Sludge Wasted								#DIV/0!	0.0
Dry Tons								#DIV/0!	0.0
	DRY TONS = Cubic yds sludge * 1120 lbs/yd * % Solids/2000								
E. COLIFORM (#/100 mL)									
cfu/100 ml									
MICROSCOPIC EVALUATION									
Floc Size (S/M/L)					s				
Filamentous Extending (Y/N)					y				
Filamentous Bridging (Y/N)					y				
Higher Life (Y/N)					y				
Pin Floc (Y/N)					y				

Average weekly effluent: 417,208 PH Max: 8.0 PH Min: 7.9

I certify that this information is true and accurate to the best of my knowledge: Name:Keith Gammell Operator Grade: 5 C FULL

Signature: Date: Per 314 CMR Chapter 12.07 (2)

Monthly WWTP Report

Barnhardt Manufacturing Company

247 Main Road

Colrain,Ma. 01340

Griswoldville WWTP Monthly State Report

month : June 2018

DAY	Monday	Tuesday	Wed	Thursday	Friday	Saturday	Sunday	Average	Total
DATE	06/04/18	06/05/18	06/06/18	06/07/18	06/08/18	06/09/18	06/10/18		
FLOW									
Effluent Flow (gal/day)	494,599	494,862	465,710	466,247	464,541	449,838	465,307	471,586	3,301,104
Return Sludge Flow (gal/day)	339,228	335,270	404,638	404,462	417,761	401,027	403,153	386,506	
Belt Press Feed (gal/day)								#DIV/0!	0
Water From River (gal/day)	527,489	516,334	501,170	501,662	506,677	506,180	505,271	509,255	3,564,783
Water To Bleachery (gal/day)	280,331	390,770	284,308	380,662	310,467	208,133	111,473	280,878	1,966,144
Effluent - River (gal/day)	(32,890)	(21,472)	(35,460)	(35,415)	(42,136)	(56,342)	(39,964)	(37,668)	(263,679)
COD									
Influent COD (mg/L)									
Effluent COD (mg/L)									
Effluent COD (lb)									
% COD Reduction									
	LBS = mg/L*MGD*8.34								
BOD5									
Final Effluent (mg/L)									
Final Effluent (lb)									
	LBS = mg/L*MGD*8.34								
SUSPENDED SOLIDS									
MLSS, North Lagoon (mg/L)	1,360	1,380	1,200	1,220	1,460			1,324	
MLVSS, North Lagoon (mg/L)			1,125					1,125	
MLSS, South Lagoon (mg/L)	1,540	1,610	1,380	1,370	1,650			1,510	
MLVSS, South Lagoon (mg/L)			1,180					1,180	
MLSS, Return Sludge (mg/L)	4,540	4,620	3,980	4,120	3,860			4,224	
MLVSS, Return Sludge (mg/L)			3,370					3,370	
Influent TSS (mg/L)		12						12	
Effluent TSS (mg/L)		8						8	
Effluent TSS (lb)		33						33	
% TSS Reduction		33						33	
	LBS = mg/L*MGD*8.34								
SETTLEABILITY									
North Lagoon (mL/L)	180	180	200	200	200			192	
South Lagoon (mL/L)	200	190	200	200	200			198	
SLUDGE BLANKET									
North Clarifier (ft)	4	5	5.0	5.0	4.0			4.6	
South Clarifier (ft)	1	1	1.0	1.0	1.0			1.0	
SULFIDE									
Effluent Sulfide (mg/L)									
Effluent Sulfide (lb/day)									
	LBS = mg/L*MGD*8.34								
WEATHER									
Rainfall (inches)	0.51	0.21	0.00	0.00	0.00	0.00	0.00		0.72
Air Temperature (deg F)	50	55	54	61	58	59	56	56	

Maximum Effluent Daily Flow: 494,862 gal.

Maximum Effluent Temperature: 86

Per 314 CMR Chapter 12.07 (2)

Send to:

Department of Environmental Protection

Attention: Industrial Wastewater Compliance

436 Dwight Street

Springfield, Ma. 01103

DAY	Monday	Tuesday	Wed	Thursday	Friday	Saturday	Sunday	Average	Total
DATE	06/04/18	06/05/18	06/06/18	06/07/18	06/08/18	06/09/18	06/10/18		
WATER TEMPERATURE									
Raw Influent (deg. F)	103	96	97	106	112			103	
North Lagoon (deg. F)	82	84	85	87	88			85	
South Lagoon (deg. F)	82	83	86	88	87			85	
Effluent Temp(deg F)	82	83	83	86	86			84	
N. River Downstream (deg.F)								#DIV/0!	
DISSOLVED OXYGEN									
North Lagoon (mg/L)	15.56	8.44	9.45	7.15	7.18	5.30	5.70	8.40	
South Lagoon (mg/L)	14.53	8.56	10.07	6.87	7.17	6.23	6.55	8.57	
PH									
Raw Influent	11.22	11.29	11.19	11.62	11.59			11.4	
North Lagoon	8.52	8.31	8.46	7.91	8.23			8.29	
South Lagoon	8.42	8.33	8.40	7.96	8.19	7.67	7.71	8.10	
Final Effluent	8.06	8.05	8.33	7.89	8.09	7.70	7.57	7.96	
NITROGEN,COPPER, PHOS									
Effluent Total Phoshorus (mg/L)									
Effluent Total Copper (mg/L)									
Effluent Nitrite - N (mg/L)									
Effluent Nitrate - N (mg/L)									
Effluent Nitrogen Tot Kjeldahl (mg/L)									
Effluent Ammonia (mg/L -N)									
Effluent Ammonia (lb)									
BELT PRESS									
Hours Run								#DIV/0!	0.0
Polymer Used (lb)								#DIV/0!	0.0
Total Solids, % Cake								#DIV/0!	
Cubic Yards of Sludge Wasted								#DIV/0!	0.0
Dry Tons								#DIV/0!	0.0
	DRY TONS = Cubic yds sludge * 1120 lbs/yd * % Solids/2000								
E. COLIFORM (#/100 mL)									
cfu/100 ml			<10						
MICROSCOPIC EVALUATION									
Floc Size (S/M/L)	s	s	ss	s	s				
Filamentous Extending (Y/N)	y	y	y	y	y				
Filamentous Bridging (Y/N)	y	y	y	y	y				
Higher Life (Y/N)	y	y	y	y	y				
Pin Floc (Y/N)	y	y	y	y	y				

Average weekly effluent: 471,586 PH Max: 8.3 PH Min: 7.6

I certify that this information is true and accurate to the best of my knowledge: Name:Keith Gammell Operator Grade: 5 C FULL

Signature: Date: Per 314 CMR Chapter 12.07 (2)

Monthly WWTP Report
Barnhardt Manufacturing Company
247 Main Road
Colrain,Ma. 01340

Griswoldville WWTP Monthly State Report

month : June 2018

DAY	Monday	Tuesday	Wed	Thursday	Friday	Saturday	Sunday	Average	Total
DATE	06/11/18	06/12/18	06/13/18	06/14/18	06/15/18	06/16/18	06/17/18		
FLOW									
Effluent Flow (gal/day)	588,360	590,208	487,769	560,910	483,883	457,762	263,878	490,396	3,432,770
Return Sludge Flow (gal/day)	400,992	431,758	343,413	366,006	358,358	424,979	392,502	388,287	
Belt Press Feed (gal/day)					107,487			107,487	107,487
Water From River (gal/day)	598,670	577,045	669,704	643,864	595,450	561,290	357,770	571,970	4,003,793
Water To Bleachery (gal/day)	319,513	301,103	295,169	306,500	268,854	191,006	98,147	254,327	1,780,292
Effluent - River (gal/day)	(10,310)	13,163	(181,935)	(82,954)	(111,567)	(103,528)	(93,892)	(81,575)	(571,023)
COD									
Influent COD (mg/L)									
Effluent COD (mg/L)									
Effluent COD (lb)									
% COD Reduction									
	LBS = mg/L*MGD*8.34								
BOD5									
Final Effluent (mg/L)									
Final Effluent (lb)									
	LBS = mg/L*MGD*8.34								
SUSPENDED SOLIDS									
MLSS, North Lagoon (mg/L)	1,190	1,220	1,210	1,330	1,320			1,254	
MLVSS, North Lagoon (mg/L)			1,030					1,030	
MLSS, South Lagoon (mg/L)	1,360	1,380	1,310	1,400	1,340			1,358	
MLVSS, South Lagoon (mg/L)			1,100					1,100	
MLSS, Return Sludge (mg/L)	4,100	4,220	4,270	6,610	5,020			4,844	
MLVSS, Return Sludge (mg/L)			3,850					3,850	
Influent TSS (mg/L)		18						18	
Effluent TSS (mg/L)		6						6	
Effluent TSS (lb)		30						30	
% TSS Reduction		67						67	
	LBS = mg/L*MGD*8.34								
SETTLEABILITY									
North Lagoon (mL/L)	140	150	150	150	150			148	
South Lagoon (mL/L)	130	150	160	160	160			152	
SLUDGE BLANKET									
North Clarifier (ft)	5	1	1.0	3.0	4.0			2.8	
South Clarifier (ft)	2	2	1.5	1.0	1.0			1.4	
SULFIDE									
Effluent Sulfide (mg/L)									
Effluent Sulfide (lb/day)									
	LBS = mg/L*MGD*8.34								
WEATHER									
Rainfall (inches)	0.00	0.00	0.00	0.02	0.03	0.00	0.00		0.05
Air Temperature (deg F)	53	52	60	66	62	53	60	58	

Maximum Effluent Daily Flow: 590,208 gal.

Maximum Effluent Temperature: 87

Per 314 CMR Chapter 12.07 (2)

Send to:

Department of Environmental Protection

Attention: Industrial Wastewater Compliance

436 Dwight Street

Springfield, Ma. 01103

DAY	Monday	Tuesday	Wed	Thursday	Friday	Saturday	Sunday	Average	Total
DATE	06/11/18	06/12/18	06/13/18	06/14/18	06/15/18	06/16/18	06/17/18		
WATER TEMPERATURE									
Raw Influent (deg. F)	108	102	118	108	106			108	
North Lagoon (deg. F)	84	85	88	87	86			86	
South Lagoon (deg. F)	85	86	87	87	85			86	
Effluent Temp(deg F)	85	85	87	86	85			86	
N. River Downstream (deg.F)								#DIV/0!	
DISSOLVED OXYGEN									
North Lagoon (mg/L)	9.20	7.85	5.77	8.90	13.28	5.20	5.96	8.02	
South Lagoon (mg/L)	8.41	7.66	5.83	9.66	10.06	6.14	6.72	7.78	
PH									
Raw Influent	11.51	11.47	11.48	11.47	11.31			11.4	
North Lagoon	8.20	8.11	7.98	8.18	8.20			8.13	
South Lagoon	8.12	8.16	8.02	8.08	8.12	7.90	7.69	8.01	
Final Effluent	7.97	7.95	7.81	8.14	8.02	7.70	7.56	7.88	
NITROGEN,COPPER, PHOS									
Effluent Total Phoshorus (mg/L)									
Effluent Total Copper (mg/L)									
Effluent Nitrite - N (mg/L)									
Effluent Nitrate - N (mg/L)									
Effluent Nitrogen Tot Kjeldahl (mg/L)									
Effluent Ammonia (mg/L -N)									
Effluent Ammonia (lb)									
BELT PRESS									
Hours Run					32.0			32.0	32.0
Polymer Used (lb)					250.0			250.0	250.0
Total Solids, % Cake					11.0			11.0	
Cubic Yards of Sludge Wasted					20.0			20.0	20.0
Dry Tons					1.4			1.4	1.4
	DRY TONS = Cubic yds sludge * 1120 lbs/yd * % Solids/2000								
E. COLIFORM (#/100 mL)									
cfu/100 ml			<10						
MICROSCOPIC EVALUATION									
Floc Size (S/M/L)	s	s	ss	s	s				
Filamentous Extending (Y/N)	y	y	y	y	y				
Filamentous Bridging (Y/N)	y	y	y	y	y				
Higher Life (Y/N)	y	y	y	y	y				
Pin Floc (Y/N)	y	y	y	y	y				

Average weekly effluent: 490,396 PH Max: 8.1 PH Min: 7.6

I certify that this information is true and accurate to the best of my knowledge: Name:Keith Gammell Operator Grade: 5 C FULL

Signature: Date: Per 314 CMR Chapter 12.07 (2)

Monthly WWTP Report

Barnhardt Manufacturing Company

247 Main Road

Colrain,Ma. 01340

Griswoldville WWTP Monthly State Report

month : June 2018

DAY	Monday	Tuesday	Wed	Thursday	Friday	Saturday	Sunday	Average	Total
DATE	06/18/18	06/19/18	06/20/18	06/21/18	06/22/18	06/23/18	06/24/18		
FLOW									
Effluent Flow (gal/day)	487,873	489,079	433,565	410,604	360,042	302,824	73,915	365,415	2,557,902
Return Sludge Flow (gal/day)	296,883	359,629	358,724	368,203	373,124	355,640	356,649	352,693	
Belt Press Feed (gal/day)			91,906					91,906	91,906
Water From River (gal/day)	603,470	589,988	548,736	512,990	465,651	265,580	240,440	460,979	3,226,855
Water To Bleachery (gal/day)	314,060	373,597	308,089	280,760	374,175	144,057	75,360	267,157	1,870,098
Effluent - River (gal/day)	(115,597)	(100,909)	(115,171)	(102,386)	(105,609)	37,244	(166,525)	(95,565)	(668,953)
COD									
Influent COD (mg/L)									
Effluent COD (mg/L)									
Effluent COD (lb)									
% COD Reduction									
	LBS = mg/L*MGD*8.34								
BOD5									
Final Effluent (mg/L)									
Final Effluent (lb)									
	LBS = mg/L*MGD*8.34								
SUSPENDED SOLIDS									
MLSS, North Lagoon (mg/L)	1,270	1,310	1,410	1,460	1,187			1,327	
MLVSS, North Lagoon (mg/L)			1,285					1,285	
MLSS, South Lagoon (mg/L)	1,530	1,520	1,550	1,390	1,574			1,513	
MLVSS, South Lagoon (mg/L)			1,410					1,410	
MLSS, Return Sludge (mg/L)	7,580	6,730	6,815	3,820	4,257			5,840	
MLVSS, Return Sludge (mg/L)			6,320					6,320	
Influent TSS (mg/L)		37						37	
Effluent TSS (mg/L)		32						32	
Effluent TSS (lb)		131						131	
% TSS Reduction		14						14	
	LBS = mg/L*MGD*8.34								
SETTLEABILITY									
North Lagoon (mL/L)	150	160	160	180	170			164	
South Lagoon (mL/L)	160	160	160	170	170			164	
SLUDGE BLANKET									
North Clarifier (ft)	3	5	4.0	4.0	4.0			4.0	
South Clarifier (ft)	0	1	1.0	1.0	1.0			0.8	
SULFIDE									
Effluent Sulfide (mg/L)									
Effluent Sulfide (lb/day)									
	LBS = mg/L*MGD*8.34								
WEATHER									
Rainfall (inches)	0.00	0.70	0.00	0.00	0.00	0.00	0.10		0.80
Air Temperature (deg F)	65	70	58	64	53	67	64	63	

Maximum Effluent Daily Flow: 489,079 gal.

Maximum Effluent Temperature: 91

Per 314 CMR Chapter 12.07 (2)

Send to:

Department of Environmental Protection

Attention: Industrial Wastewater Compliance

436 Dwight Street

Springfield, Ma. 01103

DAY	Monday	Tuesday	Wed	Thursday	Friday	Saturday	Sunday	Average	Total
DATE	06/18/18	06/19/18	06/20/18	06/21/18	06/22/18	06/23/18	06/24/18		
WATER TEMPERATURE									
Raw Influent (deg. F)	106	118	126	128	122			120	
North Lagoon (deg. F)	87	88	92	92	91			90	
South Lagoon (deg. F)	87	88	92	92	90			90	
Effluent Temp(deg F)	85	87	91	91	88			88	
N. River Downstream (deg.F)								#DIV/0!	
DISSOLVED OXYGEN									
North Lagoon (mg/L)	5.41	4.68	4.65	5.17	4.80	5.07	5.96	5.11	
South Lagoon (mg/L)	6.11	5.70	5.65	5.81	8.86	6.10	6.70	6.42	
PH									
Raw Influent	11.47	11.42	11.56	11.51	11.49			11.5	
North Lagoon	8.23	8.12	8.24	8.03	8.35			8.19	
South Lagoon	8.22	8.13	8.20	8.09	8.35	8.20	8.13	8.19	
Final Effluent	8.00	8.29	8.10	7.98	8.17	8.19	8.20	8.13	
NITROGEN,COPPER, PHOS									
Effluent Total Phoshorus (mg/L)									
Effluent Total Copper (mg/L)									
Effluent Nitrite - N (mg/L)									
Effluent Nitrate - N (mg/L)									
Effluent Nitrogen Tot Kjeldahl (mg/L)									
Effluent Ammonia (mg/L -N)									
Effluent Ammonia (lb)									
BELT PRESS									
Hours Run		21.0						21.0	21.0
Polymer Used (lb)		210.0						210.0	210.0
Total Solids, % Cake		20.0						20.0	
Cubic Yards of Sludge Wasted		1.4						1.4	1.4
Dry Tons								#DIV/0!	0.0
	DRY TONS = Cubic yds sludge * 1120 lbs/yd * % Solids/2000								
E. COLIFORM (#/100 mL)									
cfu/100 ml			<10						
MICROSCOPIC EVALUATION									
Floc Size (S/M/L)	s	s	ss	s	s				
Filamentous Extending (Y/N)	y	y	y	y	y				
Filamentous Bridging (Y/N)	y	y	y	y	y				
Higher Life (Y/N)	y	y	y	y	y				
Pin Floc (Y/N)	y	y	y	y	y				

Average weekly effluent: 365,415 PH Max: 8.3 PH Min: 8.0

I certify that this information is true and accurate to the best of my knowledge: Name:Keith Gammell Operator Grade: 5 C FULL

Signature: Date: Per 314 CMR Chapter 12.07 (2)

Monthly WWTP Report

Barnhardt Manufacturing Company

247 Main Road

Colrain,Ma. 01340

Griswoldville WWTP Monthly State Report

month : June 2018

DAY	Monday	Tuesday	Wed	Thursday	Friday	Saturday	Sunday	Average	Total
DATE	06/25/18	06/26/18	06/27/18	06/28/18	06/29/18	06/30/18			
FLOW									
Effluent Flow (gal/day)	410,002	468,105	498,558	536,008	417,398	361,427		448,583	2,691,498
Return Sludge Flow (gal/day)	355,400	361,738	365,477	431,650	442,897	448,377		400,923	
Belt Press Feed (gal/day)			115,393					115,393	115,393
Water From River (gal/day)	597,980	598,970	616,480	590,508	489,278	414,990		551,368	3,308,206
Water To Bleachery (gal/day)	256,987	310,434	332,517	328,485	270,956	48,729		258,018	1,548,108
Effluent - River (gal/day)	(187,978)	(130,865)	(117,922)	(54,500)	(71,880)	(53,563)	0	(88,101)	(616,708)
COD									
Influent COD (mg/L)									
Effluent COD (mg/L)									
Effluent COD (lb)									
% COD Reduction									
	LBS = mg/L*MGD*8.34								
BOD5									
Final Effluent (mg/L)									
Final Effluent (lb)									
	LBS = mg/L*MGD*8.34								
SUSPENDED SOLIDS									
MLSS, North Lagoon (mg/L)	1,370	1,405	1,360	1,420	1,435			1,398	
MLVSS, North Lagoon (mg/L)			1,200					1,200	
MLSS, South Lagoon (mg/L)	1,590	1,550	1,510	1,490	1,490			1,526	
MLVSS, South Lagoon (mg/L)			1,295					1,295	
MLSS, Return Sludge (mg/L)	4,260	4,610	4,550	4,710	4,620			4,550	
MLVSS, Return Sludge (mg/L)			4,230					4,230	
Influent TSS (mg/L)		41						41	
Effluent TSS (mg/L)		33						33	
Effluent TSS (lb)		113						113	
% TSS Reduction		20						20	
	LBS = mg/L*MGD*8.34								
SETTLEABILITY									
North Lagoon (mL/L)	180	180	190	180	190			184	
South Lagoon (mL/L)	180	190	190	180	190			186	
SLUDGE BLANKET									
North Clarifier (ft)	2	4	4.0	4.0	3.0			3.4	
South Clarifier (ft)	1	1	1.0	1.0	1.0			1.0	
SULFIDE									
Effluent Sulfide (mg/L)									
Effluent Sulfide (lb/day)									
	LBS = mg/L*MGD*8.34								
WEATHER									
Rainfall (inches)	0.58	0.00	0.00	1.26	0.47	0.00			2.31
Air Temperature (deg F)	63	50	58	66	67	69		62	

Maximum Effluent Daily Flow: 536,008 gal.

Maximum Effluent Temperature: 88

Per 314 CMR Chapter 12.07 (2)

Send to:

Department of Environmental Protection

Attention: Industrial Wastewater Compliance

436 Dwight Street

Springfield, Ma. 01103

DAY	Monday	Tuesday	Wed	Thursday	Friday	Saturday	Sunday	Average	Total
DATE	06/25/18	06/26/18	06/27/18	06/28/18	06/29/18	06/30/18			
WATER TEMPERATURE									
Raw Influent (deg. F)	109	103	118	116	131			115	
North Lagoon (deg. F)	89	89	89	88	90			89	
South Lagoon (deg. F)	88	89	89	88	90			89	
Effluent Temp(deg F)	86	88	86	86	88			87	
N. River Downstream (deg.F)								#DIV/0!	
DISSOLVED OXYGEN									
North Lagoon (mg/L)	5.60	5.72	6.85	6.85	4.97	4.66		5.78	
South Lagoon (mg/L)	5.60	5.77	7.17	6.07	5.87	5.71		6.03	
PH									
Raw Influent	11.56	11.49	11.49	11.39	11.29			11.4	
North Lagoon	8.44	8.41	8.28	8.46	8.38			8.39	
South Lagoon	8.38	8.44	8.25	8.42	8.34	8.15		8.33	
Final Effluent	8.23	8.40	8.32	8.38	8.30	8.10		8.29	
NITROGEN,COPPER, PHOS									
Effluent Total Phoshorus (mg/L)									
Effluent Total Copper (mg/L)									
Effluent Nitrite - N (mg/L)									
Effluent Nitrate - N (mg/L)									
Effluent Nitrogen Tot Kjeldahl (mg/L)									
Effluent Ammonia (mg/L -N)									
Effluent Ammonia (lb)									
BELT PRESS									
Hours Run			27.0					27.0	27.0
Polymer Used (lb)			260.0					260.0	260.0
Total Solids, % Cake			11.0					11.0	
Cubic Yards of Sludge Wasted			20.0					20.0	20.0
Dry Tons			1.4					1.4	1.4
	DRY TONS = Cubic yds sludge * 1120 lbs/yd * % Solids/2000								
E. COLIFORM (#/100 mL)									
cfu/100 ml			<10						
MICROSCOPIC EVALUATION									
Floc Size (S/M/L)	s	s	ss	s	s				
Filamentous Extending (Y/N)	y	y	y	y	y				
Filamentous Bridging (Y/N)	y	y	y	y	y				
Higher Life (Y/N)	y	y	y	y	y				
Pin Floc (Y/N)	y	y	y	y	y				

Average weekly effluent: 448,583 PH Max: 8.4 PH Min: 8.1

I certify that this information is true and accurate to the best of my knowledge: Name:Keith Gammell Operator Grade:5 C FULL

Signature: Date: Per 314 CMR Chapter 12.07 (2)

PHOENIX
Environmental Laboratories, Inc.

Tuesday, June 12, 2018

Attn: Mr. Keith Gammell
Barnhardt Mfg. Co.
247 Main Rd
P.O. Box 3
Colrain, MA 01340

Project ID: NPDES JUNE 2018
Sample ID#s: CA64918

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 12, 2018

FOR: Attn: Mr. Keith Gammell
Barnhardt Mfg. Co.
247 Main Rd
P.O. Box 3
Colrain, MA 01340

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:		06/06/18	7:00
Location Code:	BARNHARD	Received by:	LB	06/06/18	16:13
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	G9811				

Laboratory Data

SDG ID: GCA64918
Phoenix ID: CA64918

Project ID: NPDES JUNE 2018
Client ID: EFFLUENT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Copper	0.016	0.003	mg/L	1	06/08/18	MA	E200.7
B.O.D./5 day	< 4.0	4.0	mg/L	2	06/06/18 20:35	MI/RM	SM5210B-11
Nitrite-N	0.014	0.010	mg/L	1	06/07/18 16:51	MC	E353.2
Nitrate-N	24.2	0.40	mg/L	20	06/07/18 16:59	MC	E353.2
Nitrogen Tot Kjeldahl	5.84	0.20	mg/L	2	06/08/18	WHM	E351.1
Total Nitrogen	30.1	0.10	mg/L	1	06/08/18	WHM	SM4500NH3/E300.0-97
Phosphorus, as P	3.00	0.050	mg/L	5	06/08/18	JR	SM4500PE-11
Total Suspended Solids	11	5.0	mg/L	1	06/08/18	KH	SM2540D-11
Total Metals Digestion	Completed				06/07/18	AG	

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If there are any questions regarding this data, please call Phoenix Client Services.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller

Phyllis Shiller, Laboratory Director
June 12, 2018
Reviewed and Released by: Deb Lawrie, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

June 12, 2018

QA/QC Data

SDG I.D.: GCA64918

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 433598 (mg/L), QC Sample No: CA64884 (CA64918)													
ICP Metals - Aqueous													
Copper	BRL	0.0025	0.292	0.290	0.70	97.0			98.5			75 - 125	20

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

June 12, 2018

QA/QC Data

SDG I.D.: GCA64918

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 433615 (mg/L), QC Sample No: CA64757 (CA64918)													
Nitrogen Tot Kjeldahl	BRL	0.10	178	170	4.60	96.1			90.0			85 - 115	20
Comment:													
TKN is reported as Organic Nitrogen in the Blank, LCS, DUP and MS.													
QA/QC Batch 433702 (mg/L), QC Sample No: CA64779 (CA64918)													
Phosphorus, as P	BRL	0.01	18.6	17.9	3.80	103			NC			85 - 115	20
Comment:													
Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.													
QA/QC Batch 433479 (mg/L), QC Sample No: CA64851 (CA64918)													
B.O.D./5 day	BRL	2.0	<4.0	<4.0	NC	84.5			104			70 - 130	20
B.O.D./5 day GGA BOD						91.4						84 - 115	20
QA/QC Batch 433721 (mg/L), QC Sample No: CA64872 (CA64918)													
Total Suspended Solids	BRL	5.0	<5.0	<5.0	NC	95.0						85 - 115	
QA/QC Batch 433625 (mg/L), QC Sample No: CA65696 (CA64918)													
Nitrate-N	BRL	0.02	0.05	0.05	NC	99.4			96.7			90 - 110	20
Nitrite as Nitrogen	BRL	0.01	0.08	<0.01	NC	102			96.7			90 - 110	20

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
June 12, 2018

Tuesday, June 12, 2018

Criteria: None

State: MA

Sample Criteria Exceedances Report

GCA64918 - BARNHARD

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

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PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac
NY # 11301

Analysis Comments

June 12, 2018 SDG I.D.: GCA64918

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

Cooler: Yes [X] No [ ]
Coolant: IPK [X] ICE [ ] No [ ]

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 3.3 C Pg of

Data Delivery:
[ ] Fax #:
[X] Email: Keith.gammell@bamhardt.net

Customer: Bamhardt
Address: PO Box 3 247 Main Rd
Colrain MASS 01340

Project: NPDES June 2018
Report to: Keith Gammell
Invoice to: Bamhardt
Phone #: 413-624-3471 x3722
Fax #:

Project P.O: 6-9811

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: KG Date: 6-6-18

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe
OIL=Oil B=Bulk L=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	TKN + Total Nitrogen	Total Phosphorus	Nitrite + Nitrate as (N)	BOD's	TSS	Total copper	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [X] 1250ml [ ] 1500ml [ ] 1000ml	PL H2SO4 [X] 1250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria (as is)	Bacteria (w/thio)
64918	Effluent	WW	6-6-18	7am	1										1					
	Effluent	WW	6-6-18	7am		1									1					
	Effluent	WW	6-6-18	7am			1							1						
	Effluent	WW	6-6-18	7am				1						1						
	Effluent	WW	6-6-18	7am					1					1						
	Effluent	WW	6-6-18	7am						1						1				

Relinquished by:	Accepted by:	Date:	Time:
KG	[signature]	6-6-18	1335
GHITF	TFOUM	6/6/18	1613

Comments, Special Requirements or Regulations:

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[X] Standard
[ ] Other
* SURCHARGE APPLIES

RI
[ ] Direct Exposure (Residential)
[ ] GW
[ ] Other

CT
[ ] RCP Cert
[ ] GW Protection
[ ] SW Protection
[ ] GA Mobility
[ ] GB Mobility
[ ] Residential DEC
[ ] I/C DEC
[ ] Other

MA
[ ] MCP Certification
[ ] GW-1
[ ] GW-2
[ ] GW-3
[ ] S-1
[ ] S-2
[ ] S-3
[ ] MWRA eSMART
[ ] Other

State where samples were collected: MA

Data Format
[ ] Excel
[X] PDF
[ ] GIS/Key
[ ] EQuIS
[ ] Other

Data Package
[ ] Tier II Checklist
[ ] Full Data Package*
[ ] Phoenix Std Report
[ ] Other
* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Friday, June 22, 2018

Attn: Mr. Keith Gammell
Barnhardt Mfg. Co.
247 Main Rd
P.O. Box 3
Colrain, MA 01340

Project ID: NPDES BI-MONTHLY
Sample ID#s: CA74687

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 22, 2018

FOR: Attn: Mr. Keith Gammell
Barnhardt Mfg. Co.
247 Main Rd
P.O. Box 3
Colrain, MA 01340

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		06/20/18	7:00
Location Code:	BARNHARD	Received by:	LB	06/20/18	16:30
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	G9811				

Laboratory Data

SDG ID: GCA74687
Phoenix ID: CA74687

Project ID: NPDES BI-MONTHLY
Client ID: EFFLUENT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Nitrite-N	0.057	0.010	mg/L	1	06/21/18 16:50	MC	E353.2
Nitrate-N	17.7	0.20	mg/L	10	06/21/18 16:53	MC	E353.2
Nitrogen Tot Kjeldahl	6.95	0.50	mg/L	5	06/21/18	WHM	E351.1
Total Nitrogen	24.7	0.10	mg/L	1	06/21/18	WHM	SM4500NH3/E300.0-97

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If there are any questions regarding this data, please call Phoenix Client Services.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller

Phyllis Shiller, Laboratory Director
June 22, 2018
Reviewed and Released by: Deb Lawrie, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

June 22, 2018

QA/QC Data

SDG I.D.: GCA74687

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 435470 (mg/L), QC Sample No: CA74477 (CA74687)													
Nitrogen Tot Kjeldahl	BRL	0.10	0.85	0.87	2.30	101			93.3			85 - 115	20
Comment:													
TKN is reported as Organic Nitrogen in the Blank, LCS, DUP and MS.													
QA/QC Batch 435650 (mg/L), QC Sample No: CA74718 (CA74687)													
Nitrate-N	BRL	0.02	0.21	0.22	4.70	105			108			90 - 110	20
Nitrite-N	BRL	0.01	<0.010	<0.01	NC	105			106			90 - 110	20

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
June 22, 2018

Friday, June 22, 2018

Criteria: None

State: MA

Sample Criteria Exceedances Report

GCA74687 - BARNHARD

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

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PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac
NY # 11301

Analysis Comments

June 22, 2018

SDG I.D.: GCA74687

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

Cooler: Yes [X] No [ ]
Coolant: IPK [X] ICE [ ] No [ ]
Temp 3.4 C Pg of

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Data Delivery:
[ ] Fax #:
[X] Email: keith.gammell@bamhardt.net

Customer: Bamhardt
Address: PO Box 3 247 Main Rd
Colrain Mass 01340

Project: NPDES Bimonthly
Report to: Keith Gammell
Invoice to: Bamhardt
Phone #: 413-624-3471 x3722
Fax #:

Project P.O: G-9811

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 6-20-18

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe
OIL=Oil B=Bulk L=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	TKN + Total Nitrogen	Nitrite + Nitrate (as N)	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [X] 250ml [ ] As is [ ] 1000ml	PL H2SO4 [X] 1500ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria (as is)	Bacteria (w/thio)
74687	Effluent	WW	6-20-18	7AM	1						1					
	Effluent	WW	6-20-18	7AM		1				1						

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	6-20-18	1325
[signature]	[signature]	6-20-18	16:30

Comments, Special Requirements or Regulations:

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[X] Standard
[ ] Other
* SURCHARGE APPLIES

RI
[ ] Direct Exposure (Residential)
[ ] GW
[ ] Other

CT
[ ] RCP Cert
[ ] GW Protection
[ ] SW Protection
[ ] GA Mobility
[ ] GB Mobility
[ ] Residential DEC
[ ] I/C DEC
[ ] Other

MA
[ ] MCP Certification
[ ] GW-1
[ ] GW-2
[ ] GW-3
[ ] S-1
[ ] S-2
[ ] S-3
[ ] MWRA eSMART
[ ] Other

State where samples were collected: MA

Data Format
[ ] Excel
[X] PDF
[ ] GIS/Key
[ ] EQuIS
[ ] Other

Data Package
[ ] Tier II Checklist
[ ] Full Data Package*
[ ] Phoenix Std Report
[ ] Other
* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Friday, June 08, 2018

Attn: Mr. Keith Gammell
Barnhardt Mfg. Co.
247 Main Rd
P.O. Box 3
Colrain, MA 01340

Project ID: E-COLI WEEK 10
Sample ID#s: CA64916

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

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Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2018

FOR: Attn: Mr. Keith Gammell
Barnhardt Mfg. Co.
247 Main Rd
P.O. Box 3
Colrain, MA 01340

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:		06/06/18	11:00
Location Code:	BARNHARD	Received by:	LB	06/06/18	16:13
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	G9811				

Laboratory Data

SDG ID: GCA64916
Phoenix ID: CA64916

Project ID: E-COLI WEEK 10
Client ID: EFFLUENT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Escherichia Coli	<10	10	MPN/100 mls	10	06/06/18 17:23	AJ/RVM	SM9223B-04
Total Coliforms	5170	10	MPN/100 mls	10	06/06/18 17:23	AJ/RVM	SW9223B-06

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

Bacteria Analysis Comment: This sample was treated for chlorine at time of sample collection with sodium thiosulfate.

If there are any questions regarding this data, please call Phoenix Client Services.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller

Phyllis Shiller, Laboratory Director
June 08, 2018
Reviewed and Released by: Deb Lawrie, Project Manager

Friday, June 08, 2018

Criteria: None

State: MA

Sample Criteria Exceedances Report

GCA64916 - BARNHARD

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

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PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac
NY # 11301

Analysis Comments

June 08, 2018

SDG I.D.: GCA64916

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

Cooler: Yes [X] No [ ]
Coolant: IPK [X] ICE [ ] No [ ]

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 3.3° C Pg of

Data Delivery:
[ ] Fax #:
[X] Email: Keith.Gammell@barnhardt.net

Customer: Barnhardt
Address: PO Box 3 247 Main Rd
Colrain Mass 01340

Project: E-Coli week 10
Report to: Keith Gammell
Invoice to: Barnhardt
Phone #: 413-624-3471 x3722
Fax #:

Project P.O: G9811

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 6-6-18

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe
OIL=Oil B=Bulk L=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	E Coli	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria (as is)	Bacteria (w/thio)
64916	Effluent	WW	6-6-18	11AM	1									X	

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	6-6-18	1330
[signature]	TFOWM	6-6-18	1613

Comments, Special Requirements or Regulations:

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[X] Standard
[ ] Other
* SURCHARGE APPLIES

RI
[ ] Direct Exposure (Residential)
[ ] GW
[ ] Other

CT
[ ] RCP Cert
[ ] GW Protection
[ ] SW Protection
[ ] GA Mobility
[ ] GB Mobility
[ ] Residential DEC
[ ] I/C DEC
[ ] Other

MA
[ ] MCP Certification
[ ] GW-1
[ ] GW-2
[ ] GW-3
[ ] S-1
[ ] S-2
[ ] S-3
[ ] MWRA eSMART
[ ] Other

State where samples were collected: MA

Data Format
[ ] Excel
[X] PDF
[ ] GIS/Key
[ ] EQuIS
[ ] Other

Data Package
[ ] Tier II Checklist
[ ] Full Data Package*
[ ] Phoenix Std Report
[ ] Other
* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Friday, June 15, 2018

Attn: Mr. Keith Gammell
Barnhardt Mfg. Co.
247 Main Rd
P.O. Box 3
Colrain, MA 01340

Project ID: E COLI WEEK 10
Sample ID#s: CA70050

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

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If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 15, 2018

FOR: Attn: Mr. Keith Gammell
Barnhardt Mfg. Co.
247 Main Rd
P.O. Box 3
Colrain, MA 01340

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:		06/13/18	11:30
Location Code:	BARNHARD	Received by:	SW	06/13/18	16:49
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	G9811				

Laboratory Data

SDG ID: GCA70050
Phoenix ID: CA70050

Project ID: E COLI WEEK 10
Client ID: EFFLUENT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Escherichia Coli	<10	10	MPN/100 mls	10	06/13/18 18:35	RM/KDB	SM9223B-04
Total Coliforms	8660	10	MPN/100 mls	10	06/13/18 18:35	RM/KDB	SW9223B-06

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If there are any questions regarding this data, please call Phoenix Client Services.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller

Phyllis Shiller, Laboratory Director
June 15, 2018
Reviewed and Released by: Deb Lawrie, Project Manager

Friday, June 15, 2018

Criteria: None

State: MA

Sample Criteria Exceedances Report

GCA70050 - BARNHARD

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

PHOENIX
Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac
NY # 11301

Analysis Comments

June 15, 2018

SDG I.D.: GCA70050

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

Cooler: Yes [X] No [ ]
Coolant: IPK [X] ICE [ ] No [ ]

CHAIN OF CUSTODY RECORD

Temp 3.8 C Pg of

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Data Delivery:
[ ] Fax #:
[X] Email: Keith.gammell@bamhardt.net

Customer: Bamhardt
Address: PO Box 3 247 Main Rd
Colrain Mass 01340

Project: E Coli week 10
Report to: Keith Gammell
Invoice to: Bamhardt
Phone #: 413-624-3471 x3722
Fax #:

Project P.O: G9811

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 6-13-18

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe
OIL=Oil B=Bulk L=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	E-Coli	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria (as is)	Bacteria (w/thio)
70050	Effluent	RW	6-13-18	11:30	X									X	

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	6-13-18	1400
[signature]	Charadive	6-13-18	1649

Comments, Special Requirements or Regulations:

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[X] Standard
[ ] Other
* SURCHARGE APPLIES

RI
[ ] Direct Exposure (Residential)
[ ] GW
[ ] Other

CT
[ ] RCP Cert
[ ] GW Protection
[ ] SW Protection
[ ] GA Mobility
[ ] GB Mobility
[ ] Residential DEC
[ ] I/C DEC
[ ] Other

MA
[ ] MCP Certification
[ ] GW-1
[ ] GW-2
[ ] GW-3
[ ] S-1
[ ] S-2
[ ] S-3
[ ] MWRA eSMART
[ ] Other

State where samples were collected: MA

Data Format
[ ] Excel
[X] PDF
[ ] GIS/Key
[ ] EQuIS
[ ] Other

Data Package
[ ] Tier II Checklist
[ ] Full Data Package*
[ ] Phoenix Std Report
[ ] Other
* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Friday, June 22, 2018

Attn: Mr. Keith Gammell
Barnhardt Mfg. Co.
247 Main Rd
P.O. Box 3
Colrain, MA 01340

Project ID: E-COLI WEEK 12
Sample ID#s: CA74681

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

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If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 22, 2018

FOR: Attn: Mr. Keith Gammell
Barnhardt Mfg. Co.
247 Main Rd
P.O. Box 3
Colrain, MA 01340

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:		06/20/18	12:00
Location Code:	BARNHARD	Received by:	LB	06/20/18	16:30
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	G9811				

Laboratory Data

SDG ID: GCA74681
Phoenix ID: CA74681

Project ID: E-COLI WEEK 11
Client ID: EFFLUENT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Escherichia Coli	<10	10	MPN/100 mls	10	06/20/18 19:00	AJ/AJ	SM9223B-04
Total Coliforms	>24200	10	MPN/100 mls	10	06/20/18 19:00	AJ/AJ	SW9223B-06

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

Bacteria Analysis Comment: This sample was treated for chlorine at time of sample collection with sodium thiosulfate.

If there are any questions regarding this data, please call Phoenix Client Services.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller

Phyllis Shiller, Laboratory Director
June 22, 2018
Reviewed and Released by: Deb Lawrie, Project Manager

Friday, June 22, 2018

Criteria: None

State: MA

Sample Criteria Exceedances Report

GCA74681 - BARNHARD

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac
NY # 11301

Analysis Comments

June 22, 2018

SDG I.D.: GCA74681

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

Cooler: Yes [x] No [ ]
Coolant: IPK [x] ICE [ ] No [ ]
Temp 3.4 °C Pg of

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Data Delivery:
[ ] Fax #:
[x] Email: keith.gammell@bamhardt.net

Customer: Bamhardt
Address: PO Box 3 247 Main Rd
Colrain MASS 01340

Project: E-Coli Week 11
Report to: Keith Gammell
Invoice to: Bamhardt
Phone #: 413-624-3471 x3722
Fax #:

Project P.O: G9811

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 6-20-18

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe
OIL=Oil B=Bulk L=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	E-Coli	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria (as is)	Bacteria (w/thio)
746081	Effluent	WW	6-20-18	12:00	1									X	

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	6-20-18	1326
[signature]	[signature]	6/20/18	16:30

Comments, Special Requirements or Regulations:

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[x] Standard
[ ] Other
* SURCHARGE APPLIES

RI
[ ] Direct Exposure (Residential)
[ ] GW
[ ] Other

CT
[ ] RCP Cert
[ ] GW Protection
[ ] SW Protection
[ ] GA Mobility
[ ] GB Mobility
[ ] Residential DEC
[ ] I/C DEC
[ ] Other

MA
[ ] MCP Certification
[ ] GW-1
[ ] GW-2
[ ] GW-3
[ ] S-1
[ ] S-2
[ ] S-3
[ ] MWRA eSMART
[ ] Other

Data Format
[ ] Excel
[x] PDF
[ ] GIS/Key
[ ] EQuIS
[ ] Other

Data Package
[ ] Tier II Checklist
[ ] Full Data Package*
[ ] Phoenix Std Report
[ ] Other
* SURCHARGE APPLIES

State where samples were collected: MA

PHOENIX
Environmental Laboratories, Inc.

Friday, June 29, 2018

Attn: Mr. Keith Gammell
Barnhardt Mfg. Co.
247 Main Rd
P.O. Box 3
Colrain, MA 01340

Project ID: ECOLI WEEK 13
Sample ID#s: CA79732

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
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PHOENIX

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Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 29, 2018

FOR: Attn: Mr. Keith Gammell
Barnhardt Mfg. Co.
247 Main Rd
P.O. Box 3
Colrain, MA 01340

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:		06/27/18	11:30
Location Code:	BARNHARD	Received by:	CP	06/27/18	16:35
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	G9811				

Laboratory Data

SDG ID: GCA79732
Phoenix ID: CA79732

Project ID: ECOLI WEEK 13
Client ID: EFFLUENT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Escherichia Coli	<10	10	MPN/100 mls	10	06/27/18 18:00	AJ/KDB	SM9223B-04
Total Coliforms	14100	10	MPN/100 mls	10	06/27/18 18:00	AJ/KDB	SW9223B-06

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller

Phyllis Shiller, Laboratory Director
June 29, 2018
Reviewed and Released by: Deb Lawrie, Project Manager

Friday, June 29, 2018

Criteria: None

State: MA

Sample Criteria Exceedances Report

GCA79732 - BARNHARD

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

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PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac
NY # 11301

Analysis Comments

June 29, 2018

SDG I.D.: GCA79732

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

Cooler: Yes [X] No [ ]
Coolant: IPK [X] ICE [ ] No [ ]
Temp 4.5 °C Pg of

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Data Delivery:
[ ] Fax #:
[X] Email: Keith.gammell@bernhardt.net

Customer: Bernhardt
Address: PO Box 3 247 Main Rd
Colrain Mass 01340

Project: E-Coli WEX-13
Report to: Keith Gammell
Invoice to: Bernhardt
Phone #: 413-624-3471 x3722
Fax #:

Project P.O. 5-984

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 6-27-18

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe
OIL=Oil B=Bulk L=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	E coli	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria (as is)	Bacteria (w/thio)
79732	Effluent	WW	6-27-18	11:30am	1									X	

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	6-27-18	1440
[signature]	Courier	6-27-18	1635

Comments, Special Requirements or Regulations:

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[X] Standard
[ ] Other
* SURCHARGE APPLIES

RI
[ ] Direct Exposure (Residential)
[ ] GW
[ ] Other

CT
[ ] RCP Cert
[ ] GW Protection
[ ] SW Protection
[ ] GA Mobility
[ ] GB Mobility
[ ] Residential DEC
[ ] I/C DEC
[ ] Other

MA
[ ] MCP Certification
[ ] GW-1
[ ] GW-2
[ ] GW-3
[ ] S-1
[ ] S-2
[ ] S-3
[ ] MWRA eSMART
[ ] Other

Data Format
[ ] Excel
[X] PDF
[ ] GIS/Key
[ ] EQuIS
[ ] Other

Data Package
[ ] Tier II Checklist
[ ] Full Data Package*
[ ] Phoenix Std Report
[ ] Other
* SURCHARGE APPLIES

State where samples were collected: MA