

MONTHLY OPERATIONS REPORT

Tidewater Utilities

SITE: LEWES WWTF

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March

0:00

GENERAL INFORMATION					FINAL EFFLUENT OUTFALL OO1 Dup Samples 1 per week							
DATE	DAY	AIR deg F	Prec in,	WEATHER	EFF FLOW MGD	pH S.U.	p.H DUP	D.O., mg/l	TEMP. deg C	SAMPLE		TEST
										TIME	INITIALS	TIME
1	s	29	0.00	clear	0.7736	7.46		5.57	15.9	9:30	DBW	9:37
2	m	56	0.00	clear	0.7678	7.49	7.47	5.23	17.7	11:33	DBW	11:45
3	t	45	0.10	clear	0.7749	7.44		5.36	19.1	9:50	DBW	10:02
4	w	48	0.00	clear	0.7548	7.51		5.24	17.4	9:50	JR	10:02
5	t	45	0.00	p cloudy	0.7584	7.46		4.75	16.5	9:36	KB	9:45
6	f	46	0.03	rain	0.8355	7.53		5.21	18.4	8:28	DBW	8:42
7	s	46	0.77	clear	0.8782	7.43		5.25	16.0	14:35	RC	14:45
8	s	37	0.00	clear	0.7892	7.39		5.35	16.3	10:25	RC	10:36
9	m	47	0.00	clear	0.8045	7.60	7.53	4.09	17.5	10:15	DBW	10:22
10	t	45	0.00	cloudy	0.7986	7.57		4.63	18.5	8:02	JT	8:03
11	w	47	0.00	cloudy	0.8010	7.52		4.39	18.9	7:35	JT	7:41
12	t	42	0.00	cloudy	0.8072	7.52		4.70	17.8	7:48	JT	7:53
13	f	55	0.44	rain	0.8668	7.45		3.70	18.3	9:12	JT	9:26
14	s	46	0.00	clear	0.8599	7.40		4.28	16.9	8:55	LB	9:00
15	s	42	0.10	rain	0.8596	7.52		4.14	16.8	9:45	LB	9:55
16	m	28	0.00	clear	0.8160	7.50		3.77	17.0	7:15	JT	7:23
17	t	48	0.00	cloudy	0.7959	7.41	7.41	3.95	17.4	9:08	DBW	9:20
18	w	46	0.00	clear	0.7996	7.47		4.12	18.5	9:05	JT	9:11
19	t	56	0.49	rain	0.9277	7.40		4.01	18.1	8:35	DBW	8:37
20	f	65	0.00	p cloudy	0.8208	7.45		3.36	18.3	8:10	JT	8:20
21	s	53	0.29	cloudy	0.8366	7.49		2.59	17.5	18:50	RLG	18:59
22	s	47	0.00	p cloudy	0.8020	7.66		3.35	16.6	16:00	RLG	16:03
23	m	45	0.23	rain	0.8804	7.54	7.54	3.34	16.1	8:43	DBW	8:54
24	t	44	0.00	cloudy	0.8286	7.52		3.84	16.9	7:40	JT	7:48
25	w	46	0.26	rain	0.7293	7.56		4.46	17.3	7:40	JT	7:52
26	t	39	0.00	clear	0.8441	7.57		3.81	17.1	9:09	JT	8:55
27	f	52	2.34	cloudy	0.8463	7.51		3.18	17.6	10:15	JT	10:25
28	s	52	0.47	rain	0.8312	7.20		2.28	17.6	8:55	LB	9:07
29	s	52	t	lt rain	0.7138	7.60		2.82	17.1	10:05	LB	10:16
30	m	48	0.35	rain	0.6050	7.63		3.29	17.8	8:15	JT	8:28
31	t	43	t	cloudy	0.7719	7.53	7.65	4.39	17.3	8:40	JT	8:49

LEWES WWTF

NUTRIENT OFFSET REPORT

MONTH	Days	Average Monthly Flow	Monthly Average TN	Total Monthly TN Discharged	TN Based 11.8 lbs Manure Offset Required	Poultry Manure Relocated		Poultry Manure Offset Balance	Monthly Average TP	Total Monthly TP Discharged	TP Based 11.8 lbs Manure Offset Required
		MGD	mg/L	Lbs.	Lbs.	Tons	Lbs.	Lbs.	mg/L	Lbs.	Lbs.
Carry Over								3,195,312.26			
January	31	0.6789	7.74	1358.55	16030.85		-	3,179,281.41	0.15	26.33	310.68
February	29	0.8255	1.16	231.60	2732.88		-	3,176,548.53	0.06	11.58	136.64
March	31	0.8058	1.15	239.58	2827.06		-	3,173,721.47	0.07	14.58	172.08
April	30			0.00	0.00		-	3,173,721.47		0.00	0.00
May	31			0.00	0.00		-	3,173,721.47		0.00	0.00
June	30			0.00	0.00		-	3,173,721.47		0.00	0.00
July	31			0.00	0.00		-	3,173,721.47		0.00	0.00
August	31			0.00	0.00		-	3,173,721.47		0.00	0.00
September	30			0.00	0.00		-	3,173,721.47		0.00	0.00
October	31			0.00	0.00		-	3,173,721.47		0.00	0.00
November	30			0.00	0.00		-	3,173,721.47		0.00	0.00
December	31			0.00	0.00		-	3,173,721.47		0.00	0.00
Year Balance								3,173,721.47			

Comments:

Authorized Signatory

3/3/2020

DATE

LEWES WASTEWATER TREATMENT PLANT

Effluent Flow Report

Effluent Flow

Time	Flow
3/1/2020	773600
3/2/2020	767800
3/3/2020	774900
3/4/2020	754800
3/5/2020	758400
3/6/2020	835500
3/7/2020	878200
3/8/2020	789200
3/9/2020	804500
3/10/2020	798600
3/11/2020	801000
3/12/2020	807200
3/13/2020	866800
3/14/2020	859900
3/15/2020	859600
3/16/2020	816000
3/17/2020	795900
3/18/2020	799600
3/19/2020	927700
3/20/2020	820800
3/21/2020	836600
3/22/2020	802000
3/23/2020	880400
3/24/2020	828600
3/25/2020	729300
3/26/2020	844100
3/27/2020	846300
3/28/2020	831200
3/29/2020	713800
3/30/2020	605000
3/31/2020	771900
Total Flow :	24979200

LEWES WASTEWATER TREATMENT PLANT

Influent Flow Report

Influent Flow

Time	Flow
3/1/2020	775200
3/2/2020	771800
3/3/2020	782800
3/4/2020	758200
3/5/2020	763000
3/6/2020	859300
3/7/2020	869600
3/8/2020	804300
3/9/2020	808100
3/10/2020	785100
3/11/2020	776600
3/12/2020	837200
3/13/2020	874900
3/14/2020	862000
3/15/2020	858100
3/16/2020	824000
3/17/2020	804600
3/18/2020	801100
3/19/2020	938400
3/20/2020	824600
3/21/2020	836300
3/22/2020	814100
3/23/2020	899200
3/24/2020	836500
3/25/2020	859900
3/26/2020	854500
3/27/2020	852400
3/28/2020	805100
3/29/2020	551900
3/30/2020	727100
3/31/2020	853100
Total Flow :	25269000

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)



PERMITTEE NAME/ADDRESS (include Facility Name/Location if different):

DISCHARGE MONITORING REPORT (DMR)

** DRAFT COPY **

NAME: Howard Seymour Water Reclamation Plant
 ADDRESS: 116 American Legion Road, Lewes, DE 19958 US
 FACILITY: Howard Seymour Water Reclamation Plant
 LOCATION: 116 American Legion Road, Lewes, DE 19958 US

DE0021512 PERMIT NUMBER
 001 DISCHARGE NUMBER
 MONITORING PERIOD
 FROM 2020 03 01 TO 2020 03 31

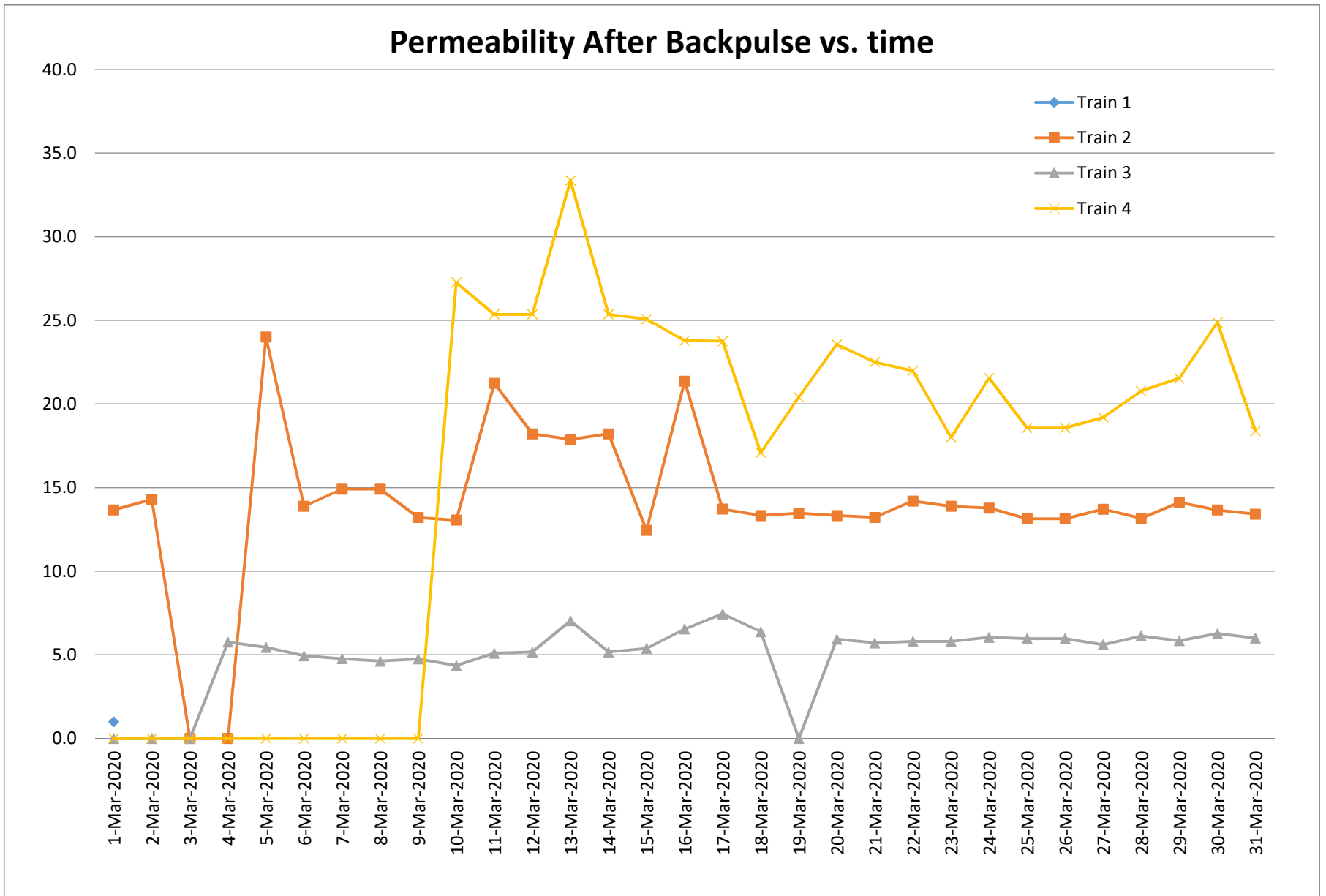
REPORT DESIGNATOR: A
 DATA ENTRY COMPLETE
 REPORT SUBMITTED BY
 STATUS OF SUBMISSION: Not Submitted

#	PARAMETER	NDI	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
			AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
1/1	Flow	SAMPLE MEASUREMENT	0.8058	0.9277	Mil Gal/Day				--	0	99/99	RCOTOT
	Gross Effluent (50050)	PERMIT REQUIREMENT	No Limit Monitoring Req'd	No Limit Monitoring Req'd	Mil Gal/Day	No Monitoring Required	No Monitoring Required	No Monitoring Required	--	--	99/99	RCOTOT
1/2	Dissolved oxygen (DO)	SAMPLE MEASUREMENT			--	2.3		5.6	mg/l	0	99/99	Imersion
	Gross Effluent (00300)	PERMIT REQUIREMENT	No Monitoring Required	No Monitoring Required	--	No Limit Monitoring Req'd	No Monitoring Required	No Limit Monitoring Req'd	mg/l	--	99/99	Imersion
1/3	pH	SAMPLE MEASUREMENT			--	7.2		7.7	Std pH Units	0	01/01	Grab
	Gross Effluent (00400)	PERMIT REQUIREMENT	No Monitoring Required	No Monitoring Required	--	6	No Monitoring Required	9	Std pH Units	--	01/01	Grab
1/4	Enterococcus	SAMPLE MEASUREMENT			--		<1	<1	CFU/100 ML	0	01/07	Grab
	Gross Effluent (31639)	PERMIT REQUIREMENT	No Monitoring Required	No Monitoring Required	--	No Monitoring Required	10	104	CFU/100 ML	--	01/07	Grab
1/5	BOD5	SAMPLE MEASUREMENT	<15.89	<16.59	lbs/Day		<2.4	<2.4	mg/l	0	01/07	Composite 24
	Gross Effluent (00310)	PERMIT REQUIREMENT	188	288	lbs/Day	No Monitoring Required	15	23	mg/l	--	01/07	Composite 24
1/6	BOD5	SAMPLE MEASUREMENT			--		193.8	260	mg/l	0	01/07	Composite 24
	Raw Sewage (00310)	PERMIT REQUIREMENT	No Monitoring Required	No Monitoring Required	--	No Monitoring Required	No Limit Monitoring Req'd	No Limit Monitoring Req'd	mg/l	--	01/30	Composite 24
1/7	TSS	SAMPLE MEASUREMENT	<7.99	<13.32	lbs/Day		<1.2	<2	mg/l	0	01/07	Composite 24
	Gross Effluent (00530)	PERMIT REQUIREMENT	188	288	lbs/Day	No Monitoring Required	15	23	mg/l	--	01/07	Composite 24

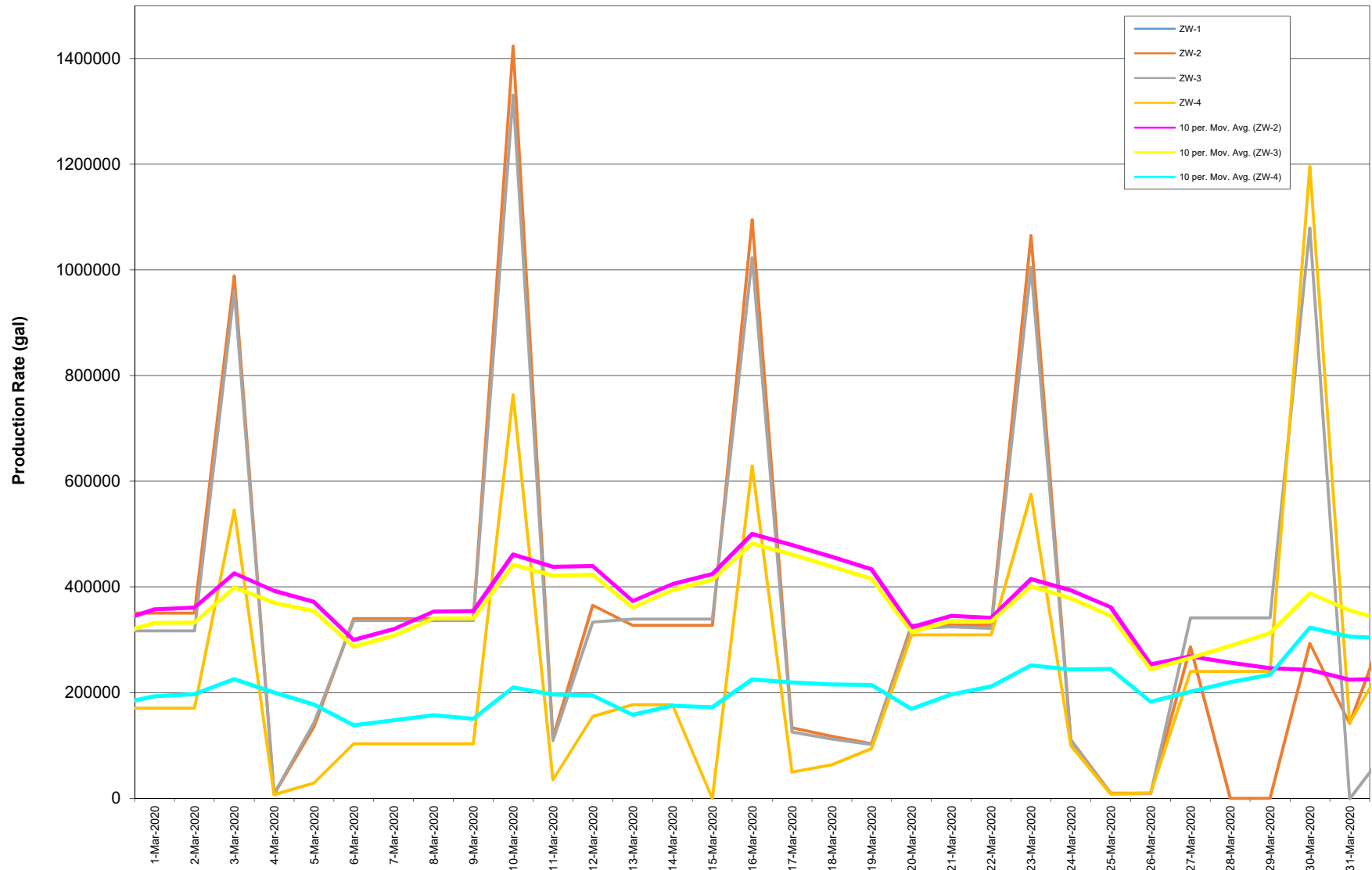
COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	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.	[ATTACH DIGITAL SIGNATURE RECEIPT FROM CROMERR]	TELEPHONE	DATE
			SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	YEAR

NDI (No Data Indicator) Reasons: 8 - No Sample (Other); 9 - No Sample (Monitoring Not Required this Monitoring Period); B - Not Detected; C - No Sample (No Discharge)



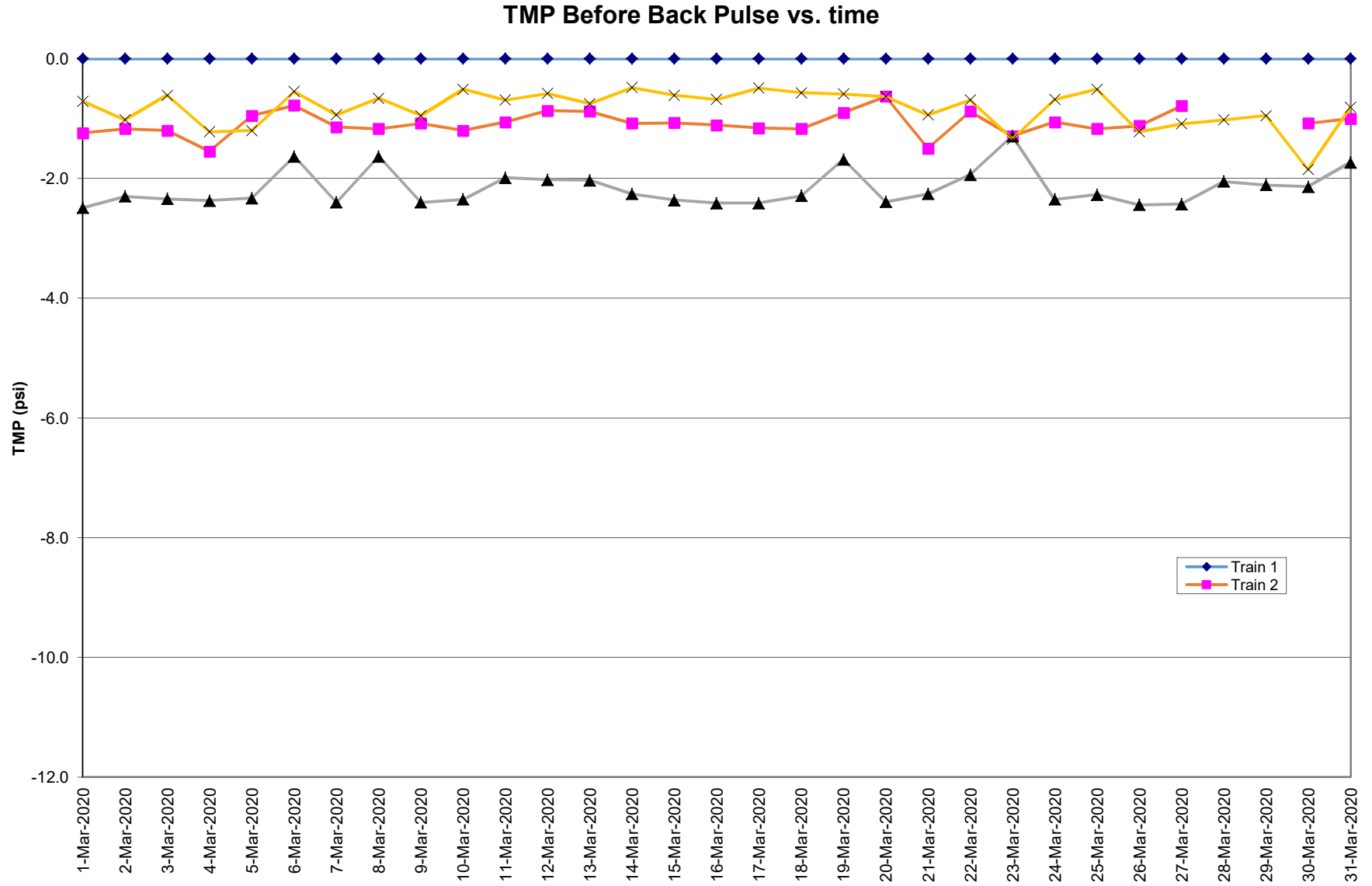
Production Rates



PUMP STATION 196

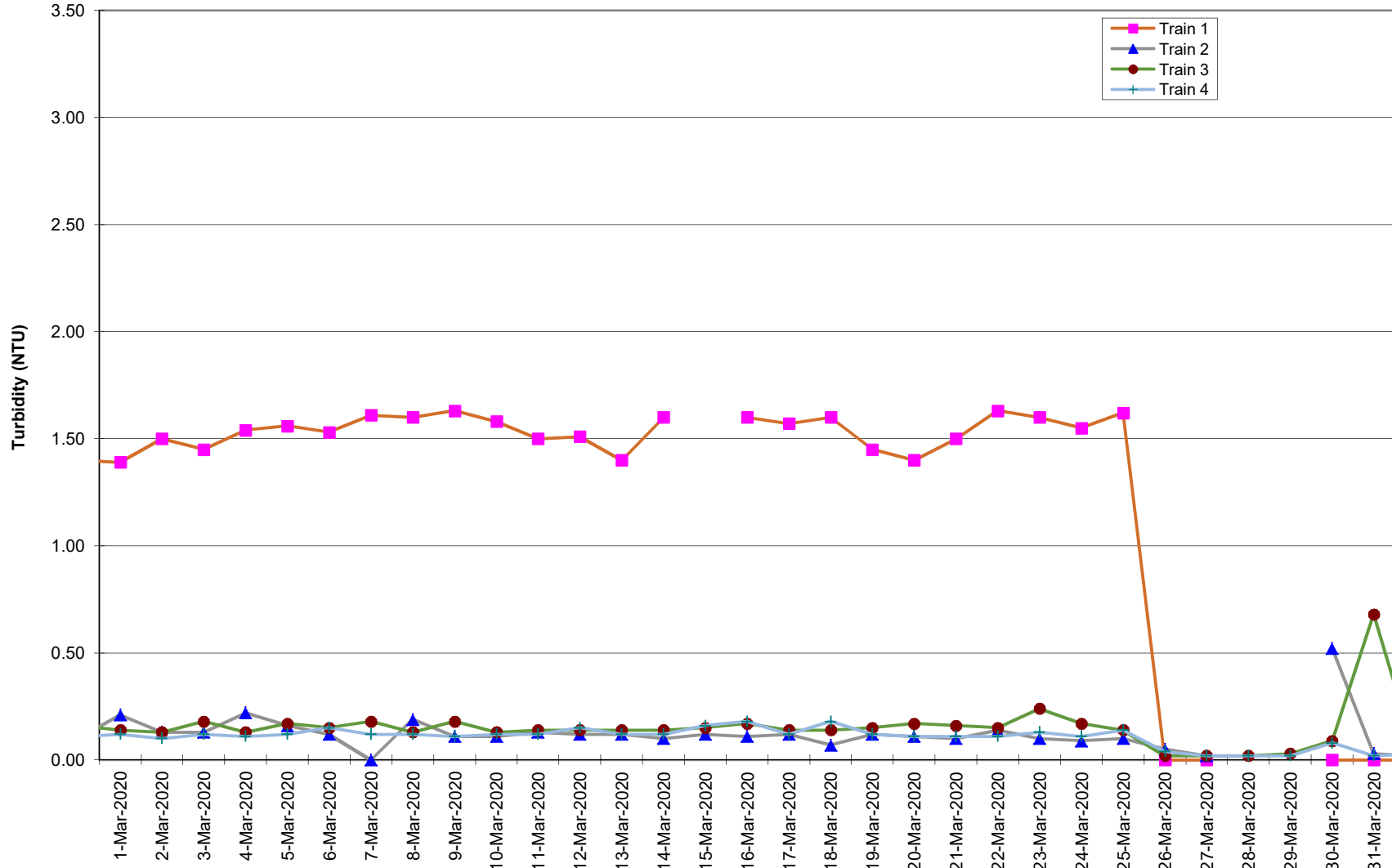
Mar-20		PS 196	
		METER READING	24 HOUR FLOW
SUN	1	28169570	0.313540
MON	2	28483110	0.304420
TUE	3	28787530	0.305730
WED	4	29093260	0.300570
THUR	5	29393830	0.300460
FRI	6	29694290	0.330360
SAT	7	30024650	0.335340
SUN	8	30359990	0.324290
MON	9	30684280	0.313980
TUE	10	30998260	0.310380
WED	11	31308640	0.310240
THUR	12	31618880	0.312230
FRI	13	31931110	0.331490
SAT	14	32262600	0.338070
SUN	15	32600670	0.345100
MON	16	32945770	0.327980
TUE	17	33273750	0.328090
WED	18	33601840	0.401560
THUR	19	34003400	0.358490
FRI	20	34361890	0.335360
SAT	21	34697250	0.341650
SUN	22	35038900	0.341720
MON	23	35380620	0.349340
TUE	24	35729960	0.328120
WED	25	36058080	0.335120
THUR	26	36393200	0.323610
FRI	27	36716810	0.324700
SAT	28	37041510	0.249940
SUN	29	37291450	0.116890
MON	30	37408340	0.230610
TUE	31	37638950	0.301340
TOTAL		37940290	9.770720
COUNT			31
AVERAGE			0.315185
MINIMUM			0.116890
MAXIMUM			0.401560

Lewes WWTP



Lewes WWTP

Turbidity Profile

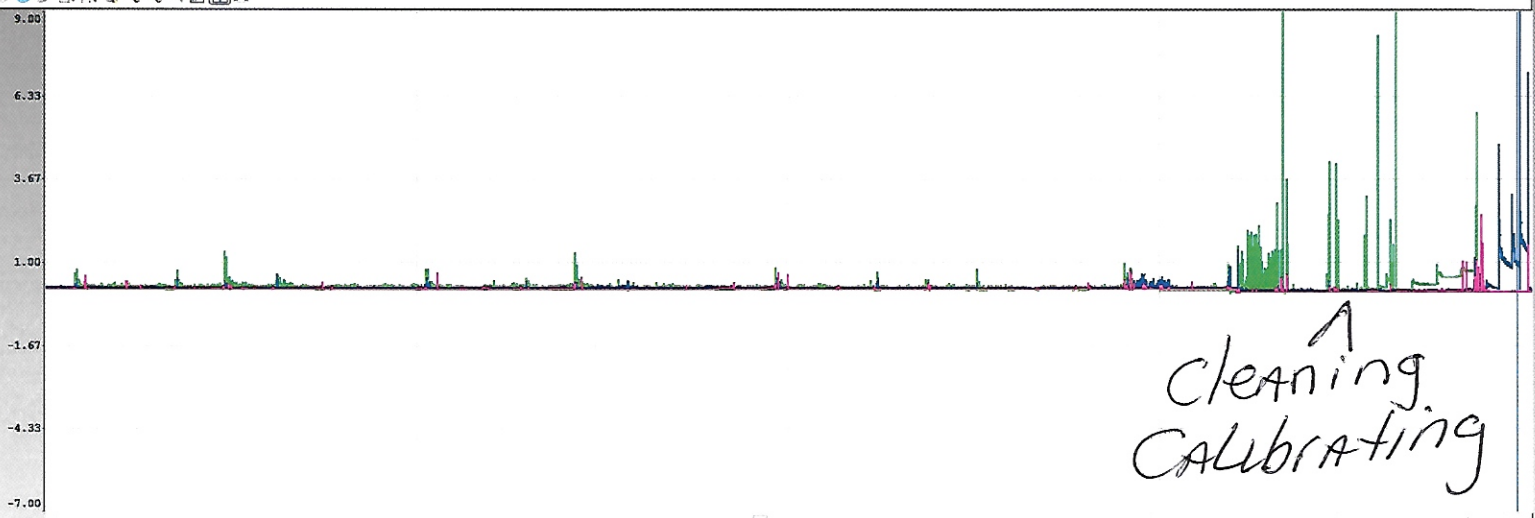




TRAIN TURBIDITY



Cursor Time : 03/31/2020 02:50:18.753



03/01/2020 18:07:03

Duration: 712.000000

03/31/2020 10:07:03

	Label	Current	Cursor
<input type="checkbox"/>	Train 1 Turbidity	0.00	0.00
<input checked="" type="checkbox"/>	Train 2 Turbidity	0.02	0.02
<input checked="" type="checkbox"/>	Train 3 Turbidity	0.03	1.00
<input checked="" type="checkbox"/>	Train 4 Turbidity	0.05	0.02

[Open Previous](#)
[Reset Zoom](#)

[Main Menu](#)
[Print Trend](#)

10:07:03
 Wednesday, April 8, 2020
 User : Guest
 Group : Guest
 006 Acknowledged Alarms
 001 Unacknowledged Alarms
 007 Total Alarms

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)



PERMITTEE NAME/ADDRESS (include Facility Name/Location if different):

NAME: Howard Seymour Water Reclamation Plant
 ADDRESS: 116 American Legion Road, Lewes, DE 19958 US
 FACILITY: Howard Seymour Water Reclamation Plant
 LOCATION: 116 American Legion Road, Lewes, DE 19958 US

DISCHARGE MONITORING REPORT (DMR)

** DRAFT COPY **

DE0021512 PERMIT NUMBER
 001 DISCHARGE NUMBER
 MONITORING PERIOD FROM 2020 03 01 TO 2020 03 31
 REPORT DESIGNATOR: A
 DATA ENTRY COMPLETE
 REPORT SUBMITTED BY
 STATUS OF SUBMISSION: Not Submitted

#	PARAMETER	MEASUREMENT	NDI	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
				AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				UNITS
2/1	TSS	SAMPLE MEASUREMENT				--		78.32	133	mg/l	0	01/07	Composite 24
	Raw Sewage (00530)	PERMIT REQUIREMENT	-	No Monitoring Required	No Monitoring Required	--	No Monitoring Required	No Limit Monitoring Req'd	No Limit Monitoring Req'd	mg/l	--	01/30	Composite 24
2/2	Total Nitrogen	SAMPLE MEASUREMENT		7.43	7.43	lbs/Day		1.15	1.15	mg/l	0	01/30	Composite 24
	Gross Effluent (00600)	PERMIT REQUIREMENT	-	100	No Limit Monitoring Req'd	lbs/Day	No Monitoring Required	8	No Limit Monitoring Req'd	mg/l	--	01/30	Composite 24
2/3	Phosphorus, Total	SAMPLE MEASUREMENT		0.45	0.45	lbs/Day		0.07	0.07	mg/l	0	01/30	Composite 24
	Gross Effluent (00665)	PERMIT REQUIREMENT	-	25	No Limit Monitoring Req'd	lbs/Day	No Monitoring Required	2	No Limit Monitoring Req'd	mg/l	--	01/30	Composite 24

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	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.	[ATTACH DIGITAL SIGNATURE RECEIPT FROM CROMERR]	TELEPHONE	DATE	
			SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	YEAR	MO

MONTHLY OPERATIONS REPORT

Tidewater Utilities

SITE: LEWES WWTF

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March 2020

		FINAL EFFLUENT OUTFALL OO1																	
DATE	DAY	BOD5		TSS		ENTEROC.		TOTAL P		TOTAL N		AMMONIA AS N		NITRATE+NITRITE AS N		TKN			
		mg/l	lbs/day	mg/l	lbs/day	Col/100 ml	Logarithm	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day		
1	s																		
2	m																		
3	t	< 2.40	< 15.51	< 0.50	< 3.23			0.07	0.45	1.15	7.43	< 0.05	< 0.32	0.60	3.88	0.55	3.55		
4	w					< 1													
5	t																		
6	f																		
7	s																		
8	s																		
9	m																		
10	t	< 2.40	< 15.98	< 2.00	< 13.32														
11	w					< 1													
12	t																		
13	f																		
14	s																		
15	s																		
16	m																		
17	t	< 2.40	15.93	< 2.00	13.28														
18	w					< 1													
19	t																		
20	f																		
21	s																		
22	s																		
23	m																		
24	t	< 2.40	< 16.59	< 1.00	< 6.91														
25	w					< 1													
26	t																		
27	f																		
28	s																		
29	s																		
30	m																		
31	t	< 2.40	< 15.45	< 0.50	< 3.22														
TOTAL																			
AVERAGE		< 2.40	< 15.89	< 1.20	< 7.99	< 1.0		0.07		1.15		0.05	0.32	0.60	3.88	0.55	3.55		
MAXIMUM		< 2.40	< 16.59	< 2.00	< 13.32	< 1.0		0.07	0.45	1.15	7.43	0.05	0.32	0.60	3.88	0.55	3.55		
MINIMUM		< 2.40	< 15.45	< 0.50	< 3.22	< 1.0		0.07	0.45	1.15	7.43	0.05	0.32	0.60	3.88	0.55	3.55		

MONTHLY OPERATIONS REPORT

Tidewater Utilities

SITE: LEW Page 1 of 2 March

		INFLUENT						
DATE	DAY	INF- FLOW MGD	BOD5		TSS			
			mg/l	lbs/day	mg/l		lbs/day	
1	s	0.7752						
2	m	0.7718						
3	t	0.7828	145.00		946.64	62.00	404.77	
4	w	0.7582						
5	t	0.7630						
6	f	0.8593						
7	s	0.8696						
8	s	0.8043						
9	m	0.8081						
10	t	0.7851	170.00		1113.11	90.60	593.22	
11	w	0.7766						
12	t	0.8372						
13	f	0.8749						
14	s	0.8620						
15	s	0.8581						
16	m	0.8240						
17	t	0.8046	260.00		1744.69	133.00	892.48	
18	w	0.8011						
19	t	0.9384						
20	f	0.8246						
21	s	0.8363						
22	s	0.8141						
23	m	0.8992						
24	t	0.8365	254.00		1772.01	60.00	418.58	
25	w	0.8599						
26	t	0.8545						
27	f	0.8524						
28	s	0.8051						
29	s	0.5519						
30	m	0.7271						
31	t	0.8531	140.00		996.08	46.00	327.28	
TOTAL		25.2690						
AVERAGE		0.8151	193.80					
MAXIMUM		0.9384	260.00					
MINIMUM		0.5519	140.00					

MONTHLY OPERATIONS REPORT

Tidewater Utilities

Address: Lewes Board of Public Works
107 Franklin Avenue
Lewes, DE 19958

DE0021512
Permit Number

001
Discharge Number

Facility: Lewes WRF
Location: 116 American Legion Road
Lewes, Delaware 19958

Monitoring Period		
2020 3 01	TO	2020 3 31

Parameter	x	Quantity of Loading			Quality or Concentration			No. Ex.	Frequency of Analysis	Sample Type	
		Average	Maximum	Units	Minimum	Average	Maximum				Units
Flow 50050	Sample Measurement	0.8058	0.9277	MGD				0	99/99	Rec/Tot.	
	Permit Requirement	1.5000		MGD					99/99	Rec/Tot.	
BOD5 00310	Sample Measurement	15.89	16.59	Lbs/Day		2.40	2.40	mg/L	0	1/7	COMP
	Permit Requirement	188	288	Lbs/Day		15	23	mg/L		1/7	COMP
Total Suspended Solids 00530	Sample Measurement	7.99	13.32	Lbs/Day		1.20	2.00	mg/L	0	1/7	COMP
	Permit Requirement	188	288	Lbs/Day		15	23	mg/L		1/7	COMP
pH 00400	Sample Measurement				7.2		7.7	SU	0	1/01	GRAB
	Permit Requirement				6.0		9.0	SU		1/01	GRAB
Dissolved Oxygen 00300	Sample Measurement				2.3		5.6	mg/L	0	99/99	Mem Probe
	Permit Requirement							mg/L		99/99	Mem Probe
Enterococcus 31639	Sample Measurement					1.000		Col/100mL	0	1/7	GRAB
	Permit Requirement					10		Col/100mL		1/7	GRAB
Total Nitrogen 00600	Sample Measurement	0.00	7.43	Lbs/Day		1.15	1.15	mg/L	0	1/30	COMP
	Permit Requirement	100.0		Lbs/Day		8.0		mg/L		1/30	COMP
Total Phosphorus 00665	Sample Measurement	0.00	0.45	Lbs/Day		0.07	0.07	mg/L	0	1/30	COMP
	Permit Requirement	25.0		Lbs/Day		2.0		mg/L		1/30	COMP