PUM	<u> </u>	ATION	196
Sep-	22	PS 196	
		METER	24 HOUR
		READING	FLOW
THU	1	42423760	0.137500
FRI	2	42561260	0.157840
SAT	3	42719100	0.173430
SUN	4	42892530	0.175000
MON	5	43067530	0.166330
TUE	6	43233860	0.282000
WED	7	43515860	0.279860
THU	8	43795720	0.268240
FRI	9	44063960	0.357320
SAT	10	44421280	0.387760
SUN	11	44809040	0.395060
MON	12	45204100	0.380270
TUE	13	45584370	0.415020
WED	14	45999390	0.376540
ТНИ	15	46375930	0.396420
FRI	16	46772350	0.379450
SAT	17	47151800	0.381110
SUN	18	47532910	0.382800
MON	19	47915710	0.387110
TUE	20	48302820	0.387260
WED	21	48690080	0.358940
ТНО	22	49049020	0.318370
FRI	23	49367390	0.365350
SAT	24	49732740	0.338930
SUN	25	50071670	0.384930
MON	26	50456600	0.382520
TUE	27	50839120	0.428090
WED	28	51267210	0.468520
THU	29	51735730	0.392120
FRI	30	52127850	0.296270
		52424120	
тоти	AL		10.000360
COUN	1		30
AVERA			0.333345
MINIM	UM		0.137500
MAXIN	UM		0.468520

## Submission Receipt

### Copy of Record: 80248 Confirmation ID: r202292880248

Site: Howard Seymour Water Reclamation Site ID: DE0021512
Plant

Submission: Discharge Monitoring Report for DE0021512 Howard Seymour Water Reclamation Plant Outfall: 001, August, 2022

File Name: 20228-4538-60749445

File Type: .pdf

Report: DMR

Status: Signed

Hash of Data Document: b29f3b8c459b2e43fc8f09b1e7c957fd200e199b3abf81df1a82e7b2a58dc0e8

Data Entry Completed: 9/28/2022By: Richard Plack (richardplack)5:37 PMEMail of Submittor: Richard.Plack@Inframark.comFrom: 172.31.25.193Signed: 9/28/2022 5:38 PMBy: Richard Plack (richardplack)EMail of Signator: Richard.Plack@Inframark.comFrom: 172.31.25.193

Token Used When Signed: uk0CfSiRH2G4jn2j6oLH6T4atDBJOTnhQulombkrFvE=

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<b>VT DISCHARGE ELIMINATION</b>	
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							NATIONA	AL POLLUTANT	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)	MINATION SYSTI	EM (NPDE	(S)		Ware En
PEF	RMITTEE NAME	ADDRESS (inclu	PERMITTEE NAME/ADDRESS (include Facility Name/Location if different):	Loca	tion if different):			DISCHAR	DISCHARGE MONITORING REPORT (DMR)	REPORT (DMR)				ron Value
NAME	1	rd Seymour Water	Howard Seymour Water Reclamation Plant			DE0(	DE0021512		001	REPORT DESIGNATOR	R		A	mennen 101ef
ADL	ADDRESS 116 A	merican Legion Ro	116 American Legion Road, Lewes, DE 19958 US	1958 L	SL	PERMIT	PERMIT NUMBER	DISCH	DISCHARGE NUMBER	DATA ENTRY COMPLETE	ETE	9/28	9/28/2022	al Navi
FAC	FACILITY	Howard Seymo	Howard Seymour Water Reclamation Plant	tion P	lant		MONITOF	MONITORING PERIOD		REPORT SUBMITTED BY		richardplack		
LOC	LOCATION	116 American L	116 American Legion Road, Lewes, DE 19958 US	s, DE	: 19958 US	FROM	2022 08 01	0 <sup>1</sup>	2022 08 31	STATUS OF SUBMISSION		nitted f	Submitted for Signature	
	PAR	PARAMETER		IQN	QUANTITY	<b>FITY OR LOADING</b>			QUALITY OR CONCENTRATION	ENTRATION		NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
#					AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
1/1	Flow		SAMPLE MEASUREMENT		0.775	0.865	Mil Gal/Day				1	0	66/66	RCOTOT
	Gros	Gross Effluent (50050)		1	No Limit   Monitoring Reqd	No Limit   Monitoring Reqd	Mil Gal/Day	No Monitoring Required	No Monitoring Required	No Monitoring Required	-1	1	66/66	RCOTOT
1/2	Dissolved oxygen (DO)	jen (DO)	SAMPLE MEASUREMENT				I	4.21		5.42	l/gm	0	66/66	Imersion
	Gros	Gross Effluent (00300)	)) PERMIT REQUIREMENT		No Monitoring Required	No Monitoring Required	1	No Limit   Monitoring Reqd	No Monitoring Required	No Limit   Monitoring Reqd	l/gm	1	66/66	Imersion
1/3	Hd		SAMPLE MEASUREMENT				1	7.2		7.5	Std pH Units	•	01/01	Grab
	Gros	Gross Effluent (00400) PERMIT REQUIREMENT	) PERMIT REQUIREMENT	1	No Monitoring Required	No Monitoring Required	1	g	No Monitoring Required	6	Std pH Units	1	01/01	Grab
1/4	Enterococcus		SAMPLE MEASUREMENT				1		4	4	CFU/100 ML	•	01/07	Grab
		Gross Effluent (31639) PERMIT REQUIREMENT	) PERMIT REQUIREMENT	•	No Monitoring Required	No Monitoring Required	1	No Monitoring Required	10	104	CFU/100 ML	ł	01/07	Grab
1/5	BOD5		SAMPLE MEASUREMENT		<14	<15	lbs/Day		<2.4	<2.4	mg/l	0	01/07	Composite 24
	Gros	Gross Effluent (00310)	) PERMIT REQUIREMENT	1	188	288	lbs/Day	No Monitoring Required	15	23	l/gm	I	01/07	Composite 24
1/6	BOD5		SAMPLE MEASUREMENT				1		189	189	l/gm	0	01/30	Composite 24
	Ran	Raw Sewage (00310)	) PERMIT REQUIREMENT		No Monitoring Required	No Monitoring Required	1	No Monitoring Required	No Limit   Monitoring Reqd	No Limit   Monitoring Reqd	l/ɓm	I	01/30	Composite 24
1/7	TSS		SAMPLE MEASUREMENT		<4	8	lbs/Day		<0.7	1.2	mg/l	0	01/07	Composite 24
	Gros	Gross Effluent (00530) PERMIT REQUIREMENT	) PERMIT REQUIREMENT		188	288	lbs/Day	No Monitoring Required	15	23	l/ɓm	I	01/07	Composite 24
CON	MENTS AND E	XPLANATION OF	ANY VIOLATION	S (Re	COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments	ents here)								

MO DAY DATE YEAR TELEPHONE SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT [ATTACH DIGITAL SIGNATURE RECEIPT FROM CROMERR] I CERTIFY UNDER FEMALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DRECTION ON SUPERVISION MACCORRANCE MIN A SYSTEME RESORDED TACHWENTS WERE PREPARED UNDER MY BROFENT, ON STHERFAND SULUTE THE INFORMATION SUBMITTED BASED ON ANY INQUERY OF THE FERSONNEL PRESONS WHO MAKAGE THE SYSTEM, OR THOSE PRESONS DIARSELFOR ANY INDURY OF THE FERSONNEL PRESONS WHO MAKAGE THE SYSTEM, OR THOSE PRESONS DIARSELFOR AND ELLER FTRUE. ACCUMATE INFORMATION THE INFORMATION SUBMITTED S, THE FERSON SUBMITION FALSE INFORMATION, WARDED THE ALL SOURCE AND ELLER FTRUE ACCUMATE. AND COMPLETE J AM MARE THE THE RE SUBMICANT PRESONS WHO MAY TO ANY. AND COMPLETE J AM MARE THE THE RE SUBMICANT PRESONS ON ANY INTER FOR SUBMITING FALSE INFORMATION, INCOMPLETE J AM MARE THE FAR SOURCEMENT PRESONS ON ANY TO ANY ADDIA AND COMPLETE J AM MARE THE FAR SOURCEMENT PRESONS ON ANY TO ANY ADDIA AND COMPLETE J AM MARE THE FAR SOURCEMENT PRESONS ON ANY TO ANY ADDIA AND COMPLETE J AM MARE THE FAR SOURCEMENT PRESONS ON ANY TO ANY ADDIA AND COMPLETE J AM MARE THE FAR SOURCEMENT PRESONS ON ANY TO ANY ADDIA AND COMPLETE J AM MARE THE FAR SOURCEMENT PRESONS ON ANY TO ANY ADDIA AND COMPLETE J AM MARE THE FAR SOURCEMENT PRESONS ON ANY TO ANY ADDIA AND COMPLETE J AM MARE THE FAR SOURCEMENT PRESONS ON ANY TO ANY ADDIA AND COMPLETE J AM MARE THE FAR SOURCEMENT PRESONS ON ANY TO ANY ADDIA AND COMPLETE J AM MARE THE FAR SOURCEMENT PRESONS ON ANY TO ANY ADDIA AND COMPLETE J AM MARE THE FAR SOURCEMENT PRESONS ON ANY TO ANY ADDIA AND COMPLETE J AM ANA ADDIA AND COMPLETE J AM AND ADDIA AND COMPLETE AND ADDIA AND COMPLETE AND ADDIA AND COMPLETE J AM AND ADDIA AND COMPLETE J AM AND ADDIA AND COMPLETE J AM AND ADDIA AND COMPLETE AND ADDIA AND COMPLETE J AM AND ADDIA AND COMPLETE J AM AND ADDIA AND COMPLETE AND ADDIA AND COMPLETE AM AND ADDIA AND COMPLETE AM AND ADDIA AND COMPLETE AM ADDIA AND COMPLETE AM AND ADDIA AND COMPLETE AM ADDIA AND COMPLET NAME/TITLE PRINCIPAL EXECUTIVE OFFICER TYPED OR PRINTED

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) DNREC DISCHARGE MONITORING REPORT - DMR1 [EPA FORM 3320-1 (Rev. 10-96) USED AS TEMPLATE], 2016.

PAGE 1 OF 2 9/28/2022 5:37 PM

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MATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (I         MATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (I         MATIONAL Coation if different:         DISCHARGE MONITORING REPORT (DMR)         RES       Floward Seymour Water Reclamation Plant       DE0021512       DISCHARGE MONITORING REPORT (DMR)         RENT       Howard Seymour Water Reclamation Plant       DE0021512       DISCHARGE MONITORING REPORT (DMR)         RENT       Howard Seymour Water Reclamation Plant       DE0021512       DISCHARGE MONITORING REPORT (DMR)         Alton       Howard Seymour Water Reclamation Plant       DE0021512       DISCHARGE MONITORING REPORT (DMR)         Alton       Howard Seymour Water Reclamation Plant       DE0021612       DISCHARGE MONITORING REPORT COMPLETE         Alton       Howard Seymour Water Reclamation Plant       DE0021612       DISCHARGE MONITORING REPORT SUBMITED BY         Alton       Howard Seymour Water Reclamation Plant       DON       DISCHARGE MONITORING REPORT SUBMITED BY         Alton       Howard Seymour Water Reclamation Plant       MONITORING REPORT       REPORT SUBMITED BY         Alton       Alton       Alton       Alton       Alton       Alton       Alton       Alton         Alton       Alton       Alton       MONITORING RERO       Alton       MONITORING RERO <th>DES)</th> <th>A</th> <th>9/28/2022</th> <th>richardplack</th> <th>Submitted for Signature</th> <th>NO. FREQUENCY SAMPLE TYPE EX. OF ANALYSIS</th> <th>Г</th> <th>0 01/30 Composite 24</th> <th> 01/30 Composite 24</th> <th>0 01/30 Composite 24</th> <th> 01/30 Composite 24</th> <th>0 01/30 Composite 24</th> <th> 01/30 Composite 24</th> <th></th>	DES)	A	9/28/2022	richardplack	Submitted for Signature	NO. FREQUENCY SAMPLE TYPE EX. OF ANALYSIS	Г	0 01/30 Composite 24	01/30 Composite 24	0 01/30 Composite 24	01/30 Composite 24	0 01/30 Composite 24	01/30 Composite 24	
RMITTEE NAME/ADDRESS (include Facility Name/Location if different):         DEC0021         DEC0021         ME       Howard Seymour Water Reclamation Plant       DE0021         DRS       116 American Legion Road, Lewes, DE 19958 US       FROM       20         RILITY       Howard Seymour Water Reclamation Plant       DE0021       20         CATION       116 American Legion Road, Lewes, DE 19958 US       FROM       20         ATION       American Legion Road, Lewes, DE 19958 US       FROM       20         ATION       American Legion Road, Lewes, DE 19958 US       FROM       20         ATION       American Legion Road, Lewes, DE 19958 US       FROM       20         Attended       No       American Legion Road, Lewes, DE 19958 US       FROM       20         Attended       No       American Legion Road, Lewes, DE 19958 US       FROM       20         Attended       No       American Legion Road, Lewes, DE 19958 US       20       20         Attended       Required       Required       20       20       20         Total Nitrogen       Required       Required       26.4       26.4       2         Phosphorus, Total       Requirent       0.000010100100100000000000000000000000	AINATION SYSTEM (NPI REPORT (DMR)	REPORT DESIGNATOR	DATA ENTRY COMPLETE			INTRATION	MAXIMUM UNITS			-		_		
RMITTEE NAME/ADDRESS (include Facility Name/Location if different):         DEC0021         DEC0021         ME       Howard Seymour Water Reclamation Plant       DE0021         DRS       116 American Legion Road, Lewes, DE 19958 US       FROM       20         RILITY       Howard Seymour Water Reclamation Plant       DE0021       20         CATION       116 American Legion Road, Lewes, DE 19958 US       FROM       20         ATION       American Legion Road, Lewes, DE 19958 US       FROM       20         ATION       American Legion Road, Lewes, DE 19958 US       FROM       20         ATION       American Legion Road, Lewes, DE 19958 US       FROM       20         Attended       No       American Legion Road, Lewes, DE 19958 US       FROM       20         Attended       No       American Legion Road, Lewes, DE 19958 US       FROM       20         Attended       No       American Legion Road, Lewes, DE 19958 US       20       20         Attended       Required       Required       20       20       20         Total Nitrogen       Required       Required       26.4       26.4       2         Phosphorus, Total       Requirent       0.000010100100100000000000000000000000	NT DISCHARGE ELIN	001			_	QUALITY OR CONCE	AVERAGE	75		4.24	œ	0.54	7	
RMITTEE NAME/ADDRESS (include Facility Name/Location if different):         DEC0021         DEC0021         ME       Howard Seymour Water Reclamation Plant       DE0021         DRS       116 American Legion Road, Lewes, DE 19958 US       FROM       20         RILITY       Howard Seymour Water Reclamation Plant       DE0021       20         CATION       116 American Legion Road, Lewes, DE 19958 US       FROM       20         ATION       American Legion Road, Lewes, DE 19958 US       FROM       20         ATION       American Legion Road, Lewes, DE 19958 US       FROM       20         ATION       American Legion Road, Lewes, DE 19958 US       FROM       20         Attended       No       American Legion Road, Lewes, DE 19958 US       FROM       20         Attended       No       American Legion Road, Lewes, DE 19958 US       FROM       20         Attended       No       American Legion Road, Lewes, DE 19958 US       20       20         Attended       Required       Required       20       20       20         Total Nitrogen       Required       Required       26.4       26.4       2         Phosphorus, Total       Requirent       0.000010100100100000000000000000000000	AL POLLUTAN DISCHAI			<b>DRING PERIOD</b>			MINIMUM		No Monitoring Required		No Monitoring Required		No Monitoring .Required	
RMITTEE NAME/ADRESS (include Facility Name/Location if different):         WE       Howard Seymour Water Reclamation Plant         DRESS       Include Facility Name/Location if different):         DRESS       Inclust         DRES       Inclust         Anneller       Not Monitoring       No Monitoring         Parameter       Inclust       Inclust         Anneller       Not Monitoring       No Monitoring         Parameter       Inclust       Inclust       Inclust       Inclust         Total Nitrogen       SAMPLE       Inclust	NATION	21512	NUMBER	MONITC	2022 08 0		UNITS	1	1	lbs/Day	lbs/Day	lbs/Day	lbs/Day	
RMITTEE NAME/ADDRESS (include Facility Name/Location if differented         Name/Location if differented         NE       Howard Seymour Water Reclamation Plant         DRESS       116 American Legion Road, Lewes, DE 19958 US         CLITY       Howard Seymour Water Reclamation Plant         DRESS       116 American Legion Road, Lewes, DE 19958 US         CLITY       Howard Seymour Water Reclamation Plant         DRES       American Legion Road, Lewes, DE 19958 US         Catlon       American Legion Road, Lewes, DE 19958 US         Catlon       Howard Seymour Water Reclamation Plant         Annol       Howard Seymour Water Reclamation Plant         Catlon       American Legion Road, Lewes, DE 19958 US         Catlon       American Legion Road, Lewes, DE 19958 US         Require       Reclament         Raw Sewage (00530)       ReAUREMENT       No Monito         Raw Sewage (00530)       REAMPLE       SAMPLE       SAMPLE         Total Nitrogen       SAMPLE       SAMPLE       SAMPLE         Phosphorus, Total       SAMPLE       SAMPLE       SAMPLE         Phosphorus, Total       SAMPLE       SAMPLE       SAMPLE         Mannents AND Explanation (00665)       REAUIREMENT       SAMPLE       SAMPLE		DEOC	PERMIT		FROM	ITY OR LOADING	MAXIMUM		No Monitoring Required	26.4	No Limit   Monitoring Reqd	3.4	No Limit   Monitoring Reqd	ents here)
ERMITTEE NAME/ADDRESS (include Facility Name/Local AME       AME     Howard Seymour Water Reclamation Plant       DDRESS     116 American Legion Road, Lewes, DE 19958 L       ACILITY     Howard Seymour Water Reclamation P       CATION     116 American Legion Road, Lewes, DE       CATION     Anerican Legion Road, Lewes, DE       CATION     Resourcement       CATION     PARAMETER       I     Total Nitrogen       Phosphorus, Total     Masurement       Phosphorus, Total     SAMPLE       MAENSUREMENT     SAMPLE       Recoursement     SAMPLE	tion if different):		SI	lant	19958 US	QUANT			No Monitoring Required	26.4	100	3.4	25	eference all attachme
ERMITTEE NAME/ADDRESS (include Facility Nam       AME     Howard Seymour Water Reclamation Pl       DDRESS     Howard Seymour Water Reclamation Pl       DDRESS     116 American Legion Road, Lewes, DE       ACILITY     Howard Seymour Water Reclamation Pl       DCATION     Howard Seymour Water Reclamation Pl       Constrained     Howard Seymour Water Reclamation Pl       DCATION     Howard Seymour Water Reclamation Pl       Constrained     Howard Seymour Water Reclamation Pl       DCATION     Howard Seymour Water Reclamation Pl       DCATION     Howard Seymour Water Reclamation Pl       DCATION     Anterican Legion Road, Lewes, DE       DCATION     Parameter       DCATION     Reclamation Reclamation Pl       Drain Nitrogen     Reclament       Drain Nitrogen     Reclament       Drain Nitrogen     Reclament       Brosphorus, Total     SamPLE       MMENTS AND EXPLANATION OF ANY VIOLATIC	ie/Locai	ant	19958 L	nation P	ves, DE	IQN		F			•	-	-	<b>DNS (Re</b>
ERMITTEE NAME/ADDRESS (inclu       AME     Howard Seymour Water       DDRESS     116 American Legion Ro       CALITY     Howard Seymour       DCATION     116 American L       DCATION     T6 American L       CALITY     Howard Seymour       DCATION     116 American L       DCATION     T6 American L       DCATION     T6 American L       DCATION     T6 American L       DCATION     T0 C       Phosphorus, Total     Cross Effluent (00600)       Phosphorus, T0 cal     Cross Effluent (00600)       MMENTS AND EXPLANATION OF     MMENTS AND EXPLANATION OF	le Facility Nam	Reclamation Pl	ad, Lewes, DE	ır Water Reclan	egion Road, Lev			SAMPLE MEASUREMENT	PERMIT REQUIREMENT	SAMPLE MEASUREMENT	PERMIT REQUIREMENT	SAMPLE MEASUREMENT	PERMIT REQUIREMENT	ANY VIOLATIC
DDRES DDRES ACILIT TSS Tota Tota Pho	TEE NAME/ADDRESS (includ	Howard Seymour Water	-			PARAMETER		6	Raw Sewage (00530)	al Nitrogen	Gross Effluent (00600)	sphorus, Total	Gross Effluent (00665)	ITS AND EXPLANATION OF
	ERMITI	NAME	DDRES	FACILITY	OCATIC			2/1 TSS		2/2 Tota		2/3 Pho		OMMEN

MO DAY DATE YEAR TELEPHONE SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT ATTACH DIGITAL SIGNATURE RECEIPT FROM CROMERRJ LCERTIFY UNDER FEMALTY OF LUM THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DRECTION OF SUPERVISION MACCORRANCE MIN A SYSTEME SOLED OF ASSURE THAT CURFLED FREEDWILE REVERSI, STIFFER AND EXULATE THE INFOMMTION SUBMITTED BASED ON MINIOURY OF THE PERSON OR RESCISS WHO MANGES THE STSTEN OF THOSE PRESONS DIAR SUBJECT AND ASSURE FOR GALANTER PRESON RECORDS WHO MANGES THE STSTEN OF THOSE PRESONS DIAR SUBJECT RESCISSION ASSURE FOR GALANTER PRESONS WICH AND THE PRESONS SUBMITTED S, TO THE BEST OF MINIOURY OF THE PERSON OR WICH AND THE PRESONS SUBMITTED S, TO THE BEST OF MINIOURY OF THE PERSON OF WICH AND THE PRESONS SUBMITTED S, TO THE BEST OF MINIOURY OF THE PERSON OF WICH AND THE PRESONS SUBMITTED S, TO THE BEST OF MINIOUS OF THE PERSON OF WICH AND THE PRESONS SUBMITTED S, TO THE BEST OF MINIOUS OF MINIOUS THAT THE PARE SUBJECT REPORTED AND BELIEF THUE ACUMATION. WICH AND THE PRESONS SUBMITTED S, TO THE BEST OF MINIOUS OF MINIOUS THAT THE PARE SUBJECT AND THE PARE SUBJECT NAME/TITLE PRINCIPAL EXECUTIVE OFFICER TYPED OR PRINTED

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) DNREC DISCHARGE MONITORING REPORT - DMR1 [EPA FORM 3320-1 (Rev. 10-96) USED AS TEMPLATE], 2016.

9/28/2022 5:37 PM PAGE 2 OF 2

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LEWES WWTF NUTRIENT OFFSET REPORT

2022

Days	rs Average Monthly Flow	Monthly Average TN	Total Monthly TN Discharged	16.9 lbs Manure Offset Required	Average TP	Total Aonthly TP Discharged	TP Based 285 lbs Manure Offset Required	Max Manure Equivalent	Poultry Manure Relocated	Poultry Manure Offset Balance
	MGD	mg/L	sql	Tons	mg/L	sdi	Tons	Tons	Tons	Tons
										449 94
31	0.7753	4.24	849.89	6.88	0.54	108.24	14.78	14.78		435 16
30	0.8664	3.79	821.57	1	0.12	26.01	1			435.16
31	•	1		1	1		1			2
30	,	1		t			1			
31	•	1		1			1			
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28		Ľ		1			1			
31	ï	1		1	1		1		,	
30	•	1		1	1		1		,	
31	ĩ				1		1		,	1
30	i	1		1			1			
31		1		1	1				,	
										449.94

Authorized Signatory

Jedd Date 140/0

	TSS	lbs		460																															460	460	460
	TS	mg/L	,	75.0																															75	75	75
	0	lbs		1160																															1,160	1,160	1,160
INFLUENT	BOD	mg/L		189.0																															189	189	189
-	Flow	MGD	0.739	-	+	0 769	0 777 U	0.700	0.100	0./81	0./39	0.700	201.0	1++/-0	2000	0000	09/10	0.700	00/10	0.750	0769	0.757	0.759	0.698	0.714	0.666	0.669	0.701	0.717	0.681	0.639	0.626	0.605	22.6360	0.73	0.81	0.61
	~~~	UAY	Mon.	-	-	-	-	-	-	-	MON.	-			+	+	-	T	-	-	-	-	-	-	-		-	-	+		-	-			В	MU	W
	U ATT	DAIE	-	2			. <i>ч</i>	n u			σ				4 <del>6</del>	2 7		-	-		-	200	+				+	+	+	+	-	30		TOTAL	AVERAGE	MAXIMUM	MINIMUM
		lbs		4																														No.	3.61	3.61	3.61
	TKN	mg/L		0.6						-		-			+							-													0.58 3.	0.58 3.	0.58 3.
	rate	lbs n		23										-	-	+			-																22.80 0.	22.80 0.	22.80 0.
	Nitrite + Nitrate	mg/L		3.7										-		-																			3.66 22	3.66 22	3.66 22
+		lbs m		0							-	-				+			+																		
	Ammonia as N	mg/L 1		0.1							-	-																							0.37	0.37	0.37
-	A	lbs m		26.42 0																		-													42 0.06	42 0.06	42 0.06
5	Total N			.2 26													-					-													4 26.42	4 26.42	4 26.42
		mg/L		4												-			_		-														4.24	4.24	4.24
	Total P	- Ibs		3.36																															3.36	3.36	3.36
		nl mg/L		0.5				_									-																		0.54	0.54	0.54
	Enteroc.	col/100ml			<1.0							<1.0							<1.0							<1.0							<1.0		1.0	<1.00	<1.00
	TSS	lbs		80							ů							e							ŝ							4		El solo solo solo solo solo solo solo so	<4.10	7.50	<3.00
,	F	mg/L		1.2							<0.5							0.5							<0.5							0.7		and a second	<0.68	1.20	<0.50
		lbs		<15							<15							<15							<15							<13			<14.46	<15.40	<12.80
0	BOD	mg/L		<2.4							<2.4							<2.4							<2.4							<2.4					<2.40
IL	FIOW	MGD	0.800	0.787	0.786	0.838	0.829	0.831	0.837	0.798	0.791	0.798	0.793	0.865	0.857	0.838	0.806	0.820	0.802	0.816	0.842	0.800	0.710	0.724	0.732	0.702	0.686	0.823	0.745	0.624	0.672	0.640	0.643	24.0339	-	-	0.6244
	DAY		Mon.			Thu.	Fri.	Sat.	Sun.		-	Wed.	Thu.	Fri.	Sat. (	Sun. (	Mon.	-	Wed.	-	Fri. (	Sat. 0	Sun. 0	Mon.	Tue. 0		-	Fri. 0	Sat. C	Sun. 0		-	/ed.			_	
- Constant	DATE	1	-	N	3	4	5	9	7	8	б	10 1	÷	12	13	14	15 A		17 V	18	19	20	21	22 N	23		-	26	-	-			31 V	TOTAL	AVERAGE	MAXIMUM	MINIMUM

Monthly Operations Report: August 2022

Site: LEWES WWTP



## Lewes BPW WWTP Biweekly InSight Report

Date: 9/21/2022

From: Erin Horocholyn - Suez Water Technologies & Solutions To: Austin Calaman BPW, Inframark cc: Matt Stapleford - Suez Water Technologies & Solutions

### System Equipment

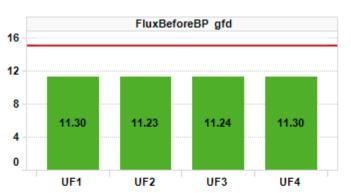
4 × ZW trains, each train consists of 4 - 500D cassettes, 120 modules x 370 sq. ft. per train (surface area 44,400 sq. ft. per train)

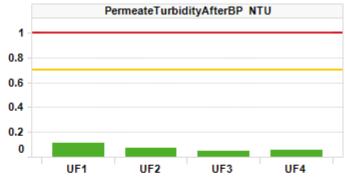
Replacement membranes installed Q1 2020 on trains UF3 and UF4

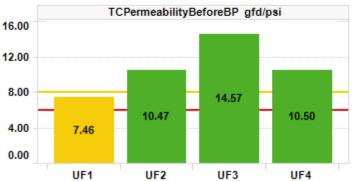
### Cleaning Strategy

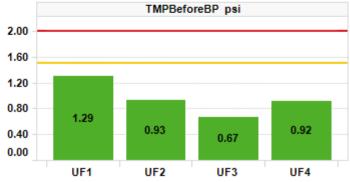
Recovery cleaning - 2 NaOCI @ 2000 ppm dose/1000 ppm soak per year, 1 Citric acid @ 2000 ppm per year Maintenance cleaning - 1 NaOCI per week @ 200 ppm, 1 Citric acid per week @ 2000 ppm

### KPI Dashboard – Avg values through reporting period









Action Required Caution No Limits Normal Water Technologies & Solutions – Performance Report

### **Plant Summary**

Trains are operating well with steady performance.

- Daily permeate production averaged 0.91 MGD. Permeate temperature averaged 81°F (-2°F). All trains are in Backpulse with constant LEAP Hi aeration. Flux averaged 11 gfd
- Permeate turbidity ABP averages ranged from 0.05 0.11 NTU with stable trends
- TMP BBP was excellent and <1.0 psi on UF2,3,4. UF1's TMP averaged 1.3 psi
- TC permeability BBP was excellent and ≥8 gfd/psi on UF2,3,4, and was highest on UF3. UF1's TCP averaged 7.5 gfd/psi

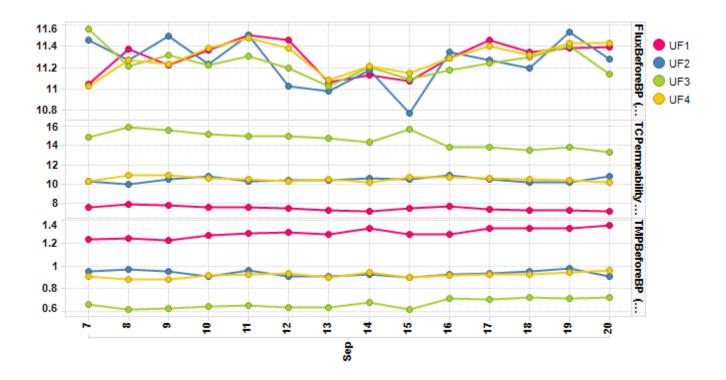
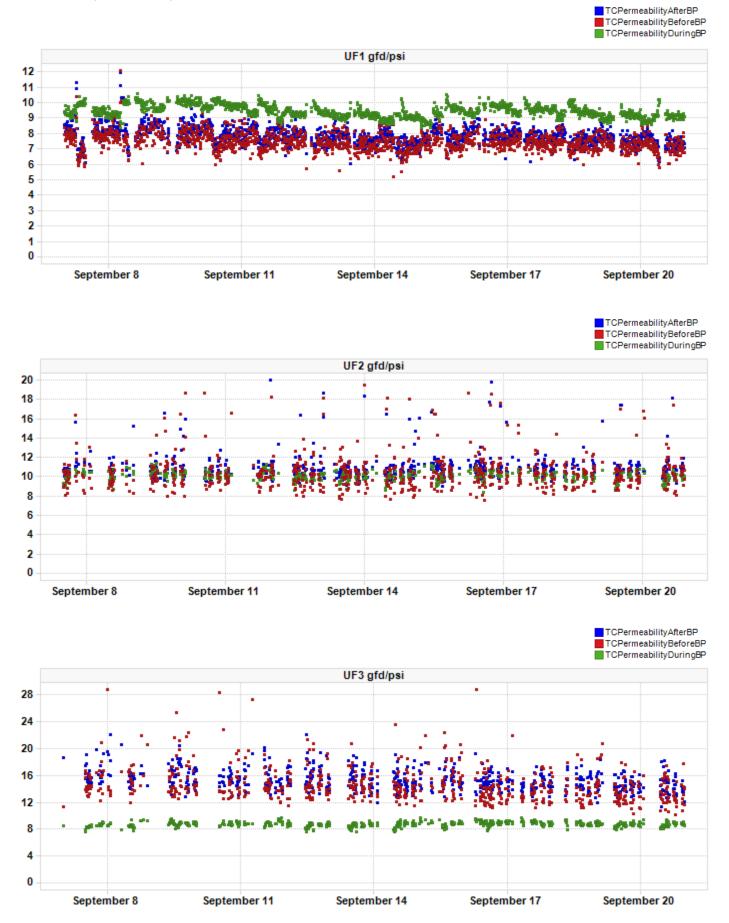


Table 1. Record of maintenance cleans (MCs) run.

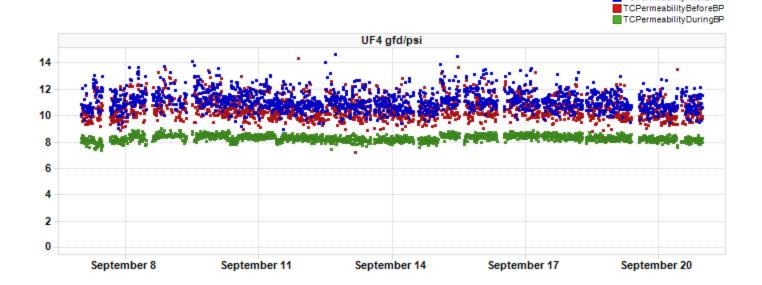
Train	UF1	UF2	UF3	UF4
# of Hypochlorite MCs	2	2	1	2
# of Citric Acid MCs	2	2	1	2

Water Technologies & Solutions – Performance Report

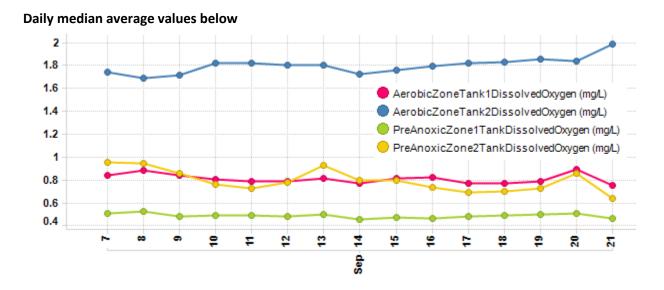
### TC Permeability Trends By Train







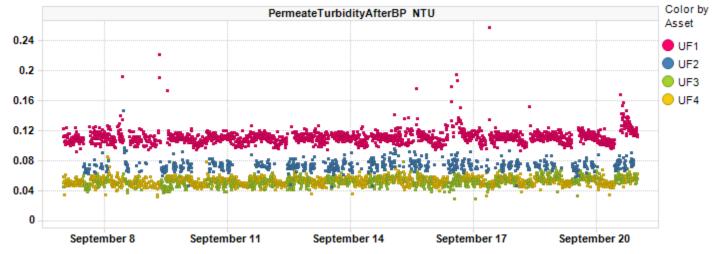
**Bioreactor Dissolved Oxygen** 8 7 6 🛑 AerobicZoneTank1DissolvedOxygen (mg/L) AerobicZoneTank2DissolvedOxygen (mg/L) 5 🛑 PreAnoxicZone1TankDissolvedOxygen (mg/L) • 4 PreAnoxicZone2TankDissolvedOxygen (mg/L) 3 2 1 Sep-13 Sep-19 Sep-7 Sep-10 Sep-16

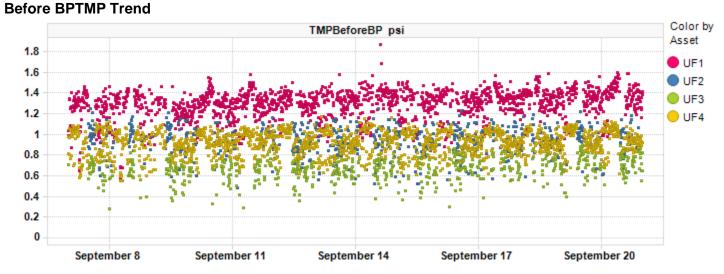


TCPermeabilityAfterBP



### Permeate Turbidity Trend





#### Color by FluxBeforeBP gfd Asset 14 UF1 12 UF2 10 UF3 UF4 8 6 4 2 0 September 8 September 11 September 14 September 17 September 20

### **Before BP Flux Trend**





### **Daily Permeate Flow**

Average Daily permeate flow from 9/7/2022 to 9/20/2022 is 905.7k gal with a maximum daily flow of 949.4k gal.

### **Asset Summary**

KPI Parameters	Value/Ch	UF1	UF2	UF3	UF4
FluxBeforeBP gfd	Value	11.30	11.23	11.24	11.30
	Change	0.86%	1.47%	1.90%	0.18%
FluxDuringBP gfd	Value	18.75	18.25	18.43	18.75
	Change	0.04%	-0.38%	0.77%	-0.02%
PermeateTurbidityAfterBP	Value	0.11	0.07	0.05	0.05
NTU	Change	1.56%	4.05%	3.11%	6.99%
TCPermeabilityBeforeBP	Value	7.46	10.47	14.57	10.50
gfd/psi	Change	-1.36%	-1.18%	-12.2	-3.48%
TMPBeforeBP psi	Value	1.29	0.93	0.67	0.92
	Change	4.16%	4.79%	13.35%	5.94%
TotalPermeateFlowDaily gal	Value	318.1	135.0	135.4	317.0
	Change	12.15%	36.62%	37.88%	19.01%

### **Plant Summary**

KPI Parameters	Value/Change	UF Plant
PermeateTemperature °F	Value	80.54
	Change	-3.11%
TotalPermeateFlowDaily gal	Value	997.91k
	Change	21.76%



#### Contract Expiry Date : 08/11/2022

For InSight technical assistance please email insight.src@suez.com or please call technical support at 1 866 271 5425 or 905 469 7723 and follow the prompts, if you require after hours assistance please contact the 24/7 Emergency number provided in your plant documentation. This email is a summary of issues identified during a manual review of InSight data from the time period above. This review is an analysis of data that is logged by InSight and identifies key plant performance issues determined from this data. This data review was not focused on minor data issues but on identifying possible existing and/or upcoming critical operational issues.

This review was prepared by SUEZ Water Technologies & Solutions solely to assist water treatment plant owners and/or operators in analyzing and optimizing plant performance and is not intended to be used or relied upon for regulatory compliance or any other purpose. The content of this review is based in whole or in part on operation data obtained from the plant using InSight software. SUEZ Water Technologies & Solutions makes no representations or warranties as to the accuracy of the plant data utilized in the preparation of this review. SUEZ Water Technologies & Solutions accepts no liability for consequences or actions taken in whole or in part by any person on the basis of this review or its contents

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# Lewes BPW WWTP Biweekly InSight Report

Date: 10/5/2022

From: Erin Horocholyn - Suez Water Technologies & Solutions To: Austin Calaman BPW, Inframark cc: Matt Stapleford - Suez Water Technologies & Solutions

### System Equipment

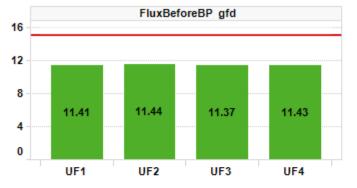
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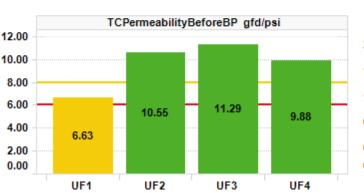
Replacement membranes installed Q1 2020 on trains UF3 and UF4

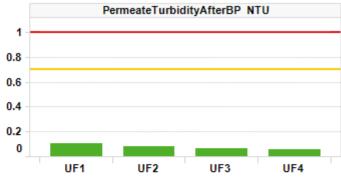
### Cleaning Strategy

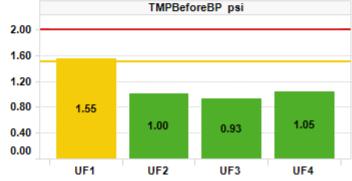
Recovery cleaning - 2 NaOCI @ 2000 ppm dose/1000 ppm soak per year, 1 Citric acid @ 2000 ppm per year Maintenance cleaning - 1 NaOCI per week @ 200 ppm, 1 Citric acid per week @ 2000 ppm

### KPI Dashboard – Avg values through reporting period







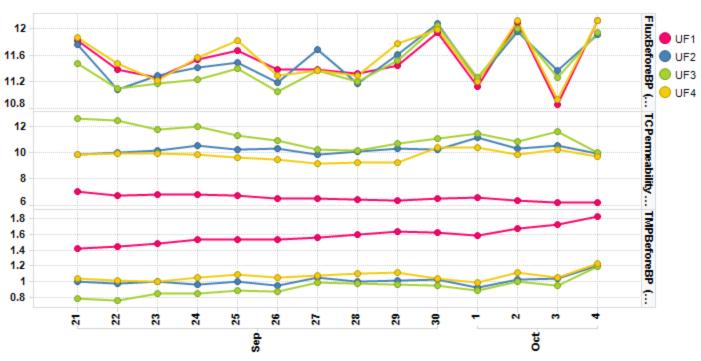




### **Plant Summary**

Trains are operating well, though UF1's permeability decreased and TMP rose over this repot period. The last recovery clean run on UF1 as indicated by the data was in March 2021. Additionally, the last RCs in the data were in May 2021 for UF2 and in October 2021 for UF4. No RCs are indicated in UF3's data. If these are the accurate last dates of recovery cleans, all trains are due for RCs, starting with UF1. The soaks should be at least 12 hours per chemical per train, though can last as long as 24 hours depending on production downtime available and plant demand. Running RCs will also help prepare the membranes for winter operations as temperatures have begun to fall, and support a long membrane lifespan.

- TMP BBP was excellent and <1.0 psi on UF3. TMP averaged 1.6, 1.0, and 1.1 psi on UF1,2,4
- TC permeability BBP was excellent and ≥8 gfd/psi on UF2,3,4, and was highest on UF3 at 11 gfd/psi. UF1's TCP averaged 6.6 gfd/psi (-0.9 gfd/psi from the last report)



• Permeate turbidity ABP averages ranged from 0.05 – 0.10 NTU

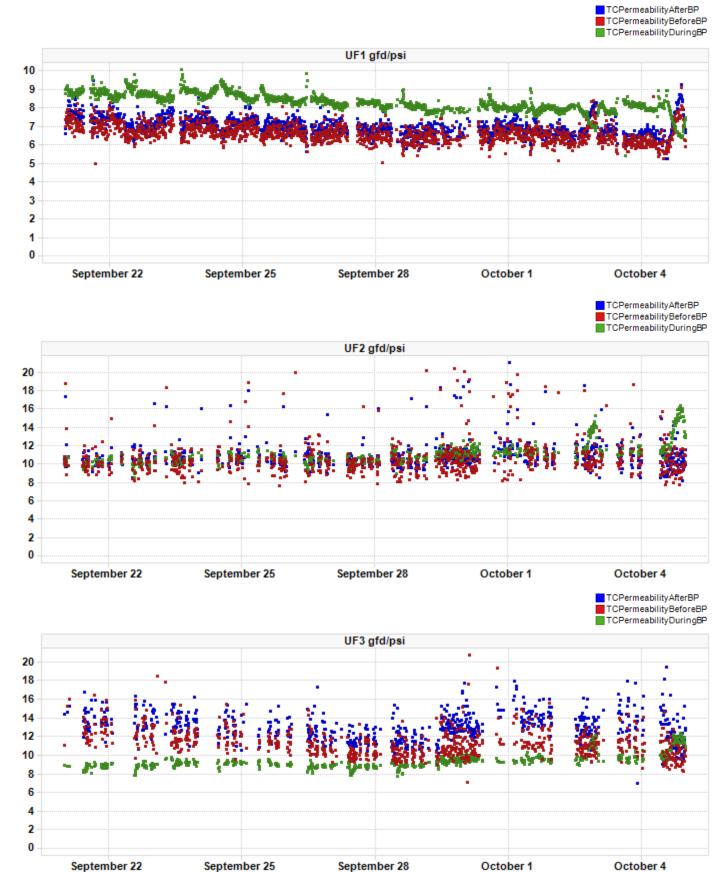
• Daily permeate production averaged 0.94 MGD. Permeate temperature averaged 76°F (-5°F). All trains are in Backpulse with LEAP Hi aeration. Flux averaged 11.4 gfd

Train	UF1	UF2	UF3	UF4
# of Hypochlorite MCs	2	1	1	2
# of Citric Acid MCs	1	2	1	2

Table 1. Record of maintenance cleans (MCs) run.

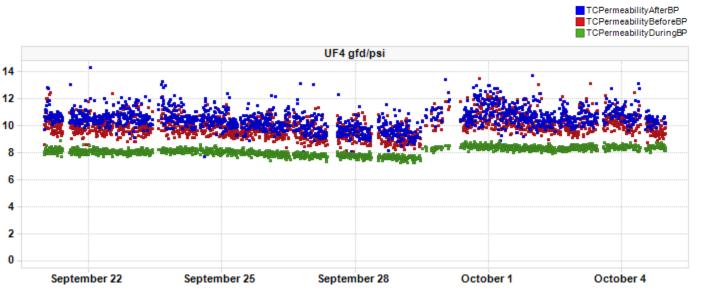


### TC Permeability Trends By Train

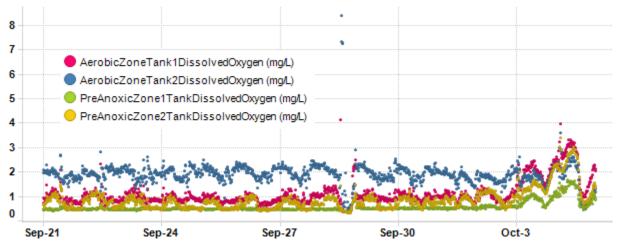


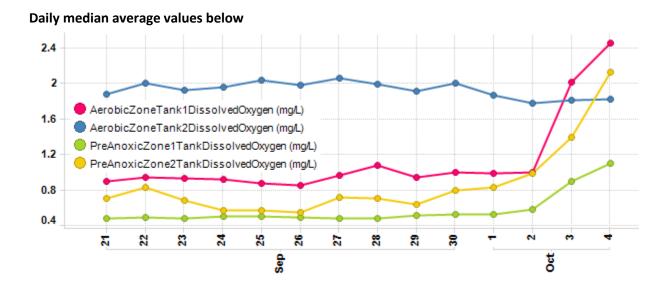
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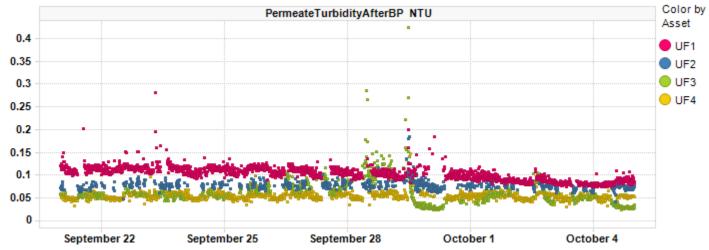
### **Bioreactor Dissolved Oxygen**



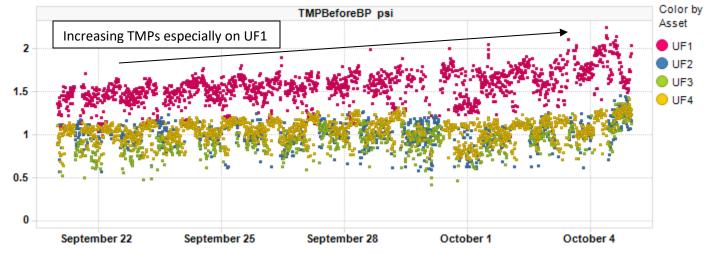


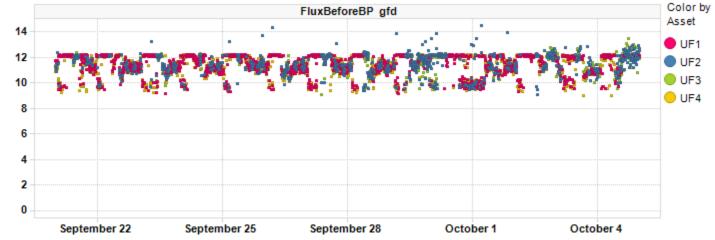


### **Permeate Turbidity Trend**



### **Before BPTMP Trend**





### **Before BP Flux Trend**



### **Daily Permeate Flow**



Average Daily permeate flow from 9/21/2022 to 10/4/2022 is 938.2k gal with a maximum daily flow of 1.2M gal.

### **Asset Summary**

<b>KPI</b> Parameters	Value/Ch	UF1	UF2	UF3	UF4
FluxBeforeBP gfd	Value	11.41	11.44	11.37	11.43
	Change	0.96%	1.83%	1.13%	1.11%
FluxDuringBP gfd	Value	18.66	18.37	18.42	18.74
	Change	-0.46%	0.66%	-0.09%	-0.09%
PermeateTurbidityAfterBP	Value	0.10	0.08	0.06	0.05
NTU	Change	-7.30%	5.70%	17.77%	2.36%
TCPermeabilityBeforeBP	Value	6.63	10.55	11.29	9.88
gfd/psi	Change	-12.5	0.78%	-29.0	-6.27%
TMPBeforeBP psi	Value	1.55	1.00	0.93	1.05
	Change	16.69%	6.71%	27.33%	11.89%
TotalPermeateFlowDaily gal	Value	315.8	158.9	156.1	307.1
	Change	-0.71%	15.05%	13.24%	-3.22%

### **Plant Summary**

KPI Parameters	Value/Change	UF Plant
PermeateTemperature °F	Value	76.16
	Change	-5.76%
TotalPermeateFlowDaily gal	Value	1.02M
	Change	2.38%



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