



4 October 2023

Mr. Scott Sokolowski
Remedial Project Manager
Naval Facilities Engineering Systems Command, Mid-Atlantic
9324 Virginia Avenue, Building Z-144
Norfolk, VA 23511-3095

**Subject: September 2023 Monthly Operating Report
Full Scale Liquid-Phase Granular Activated Carbon Treatment System
Liberty New York Water, Seamans Neck Road Water Plant
NWIRP Bethpage, New York
Contract No. N40085-16-D-2288, Task Order N4008518F5125**

Dear Mr. Sokolowski,

The Full Scale Liquid-Phase Granulated Activated Carbon (GAC) Treatment System is located at the Liberty New York Water (LNYW) Seamans Neck Road Water Plant in Levittown, NY. The GAC System was installed at the effluent of the potable water plant and consists of six GAC vessels operating in parallel to remove low levels of trichloroethene (TCE) from Well No. 3S and Well No. 4S. After processing through the GAC units, the water is treated with sodium hypochlorite and sodium tripolyphosphate before distribution. Startup of the GAC Treatment System occurred on 8 January 2015. KOMAN Government Solutions, LLC (KGS) began operation and maintenance (O&M) activities in March 2015.

In May 2018, production Well No. 3S was decommissioned and has been replaced with a new production well designated as Well No. 3A. Well No. 4S is normally in operation during the entire month, while well No. 3A is operated infrequently, typically during the periods of higher water demand.

On 30 January 2023, the plant was taken off-line by Liberty Utilities to support rehabilitation of the iron filtration plant. The plant remained off-line until 4 May 2023, at which time the plant resumed normal operation.

This report documents the routine operation and maintenance of the GAC System performed during the month of September 2023. **Attachment 1** presents the field logs detailing system operating data as recorded during the month. These readings include flow rate and total flows of the overall GAC System and each GAC unit, pressures across the GAC System, effluent chlorine residual and pH values, chemical usage levels of sodium hypochlorite and sodium tripolyphosphate for each chemical tank, and chemical metering pump settings and pressures.

A summary of the system operating data recorded in September 2023 is presented below in **Table 1**.

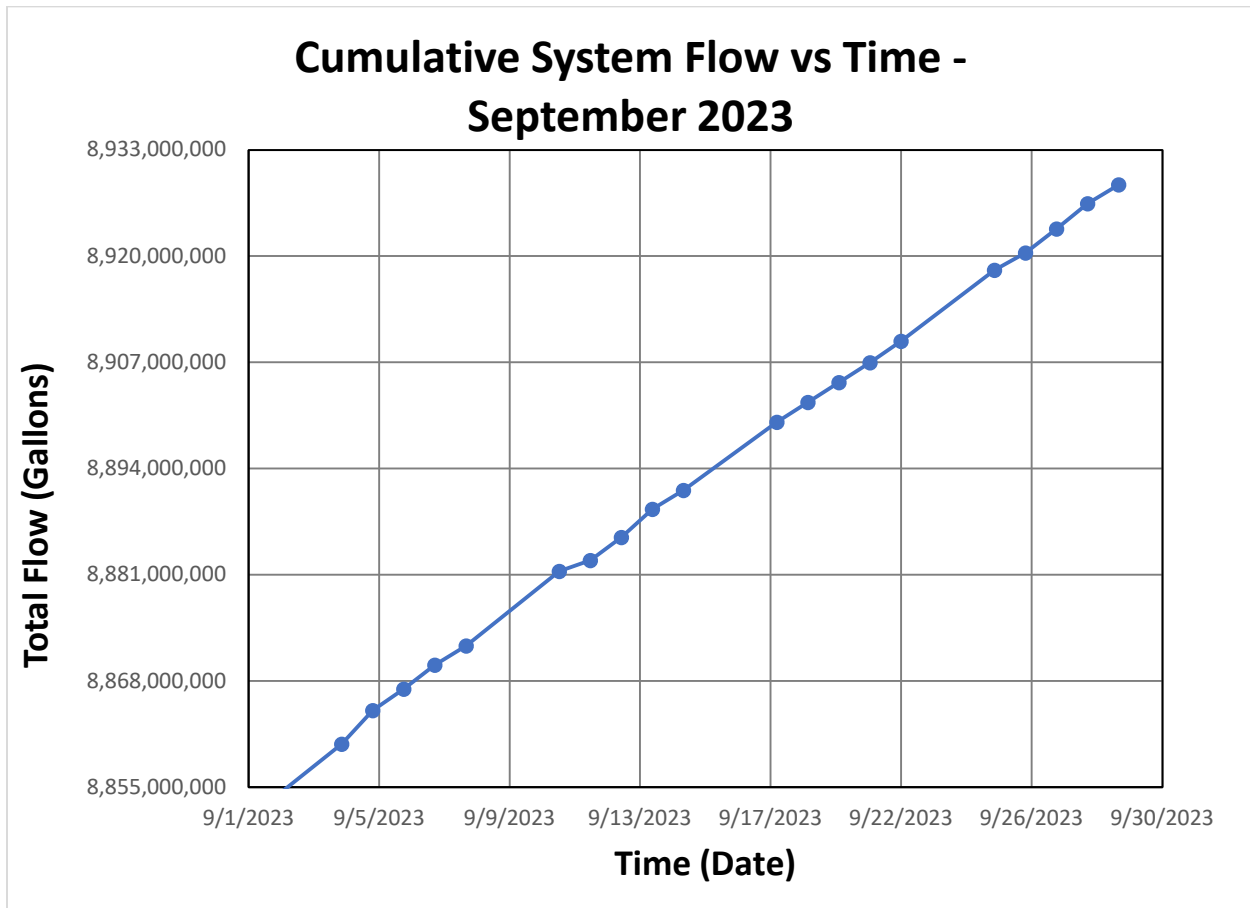
Table 1 - System Operating Data for September 2023

Date	Total Flow	Flow Rate	Influent Pressure	Effluent Pressure	Differential Pressure	Effluent Chlorine Residual	Effluent pH
	(Gallons)	(GPM)	(PSI)	(PSI)	(PSI)	(mg/L) ⁽¹⁾	(SU) ⁽¹⁾
9/1/2023	8,851,172,000	3,250	89	79	9.8	1.98 read 1.99 manual	7.07 read
9/4/2023	8,860,266,000	3,300	88	78	10.2	1.91 read 1.93 manual	7.09 read
9/5/2023	8,864,366,000	1,700	78	74	3.9	1.81 read 1.80 manual	7.14 read
9/6/2023	8,866,992,000	3,250	85	74	10.4	1.94 read 1.93 manual	7.14 read
9/7/2023	8,869,927,000	1,650	58	53	4.3	1.82 read 1.84 manual	7.15 read
9/8/2023	8,872,312,000	3,300	60	49	11.0	1.91 read 1.89 manual	7.13 read
9/11/2023	8,881,439,000	1,650	82	78	4.2	1.87 read 1.85 manual	7.14 read
9/12/2023	8,882,738,000	2,800	95	87	8.4	1.90 read 1.92 manual	7.01 read
9/13/2023	8,885,562,000	1,500	68	65	3.3	1.89 read 1.91 manual	7.06 read
9/14/2023	8,889,038,000	--	--	--	--	-- --	--
9/15/2023	8,891,329,000	--	---	--	--	-- --	--
9/18/2023	8,899,669,000	1,600	65	62	3.8	1.71 read 1.73 manual	7.01 read
9/19/2023	8,902,122,000	1,600	64	56	6.4	1.73 read 1.74 manual	6.89 read
9/20/2023	8,904,550,000	--	--	--	--	1.69 read 1.67 manual	6.76 read
9/21/2023	8,906,978,000	3,250	58	49	9.3	1.91 read 1.93 manual	6.87 read
9/22/2023	8,909,595,000	3,350	60	52	8.7	1.87 read 1.88 manual	6.98 read
9/25/2023	8,918,273,000	1,650	71	64	8.0	1.98 read 1.96 manual	6.98 read
9/26/2023	8,920,413,000	1,600	53	50	3.1	1.87 read 1.85 manual	6.93 read
9/27/2023	8,923,333,000	2,000	71	66	5.5	1.69 read 1.71 manual	6.66 read
9/28/2023	8,926,436,000	1,700	80	78	2.7	1.67 read 1.65 manual	6.58 read
9/29/2023	8,928,758,000	1,650	63	61	2.8	1.66 read 1.68 manual	6.82 read

(1) Effluent pH and chlorine residual readings are recorded by the in-line pH meter and chlorine analyzer. Chlorine is also checked with a manual chlorine residual meter for comparison, while manual pH is only checked occasionally. Both in-line and manual readings are presented, if collected, as noted above.

Figure 1 illustrates the volume of water treated by the GAC System since system startup, with the increment for the month of September 2023. Over 80.2 million gallons of water were treated in September 2023, bringing the total cumulative volume of water treated since startup to over 8.92 billion gallons.

Figure 1 - Volume of Water Treated through Full Scale GAC System (September 2023)



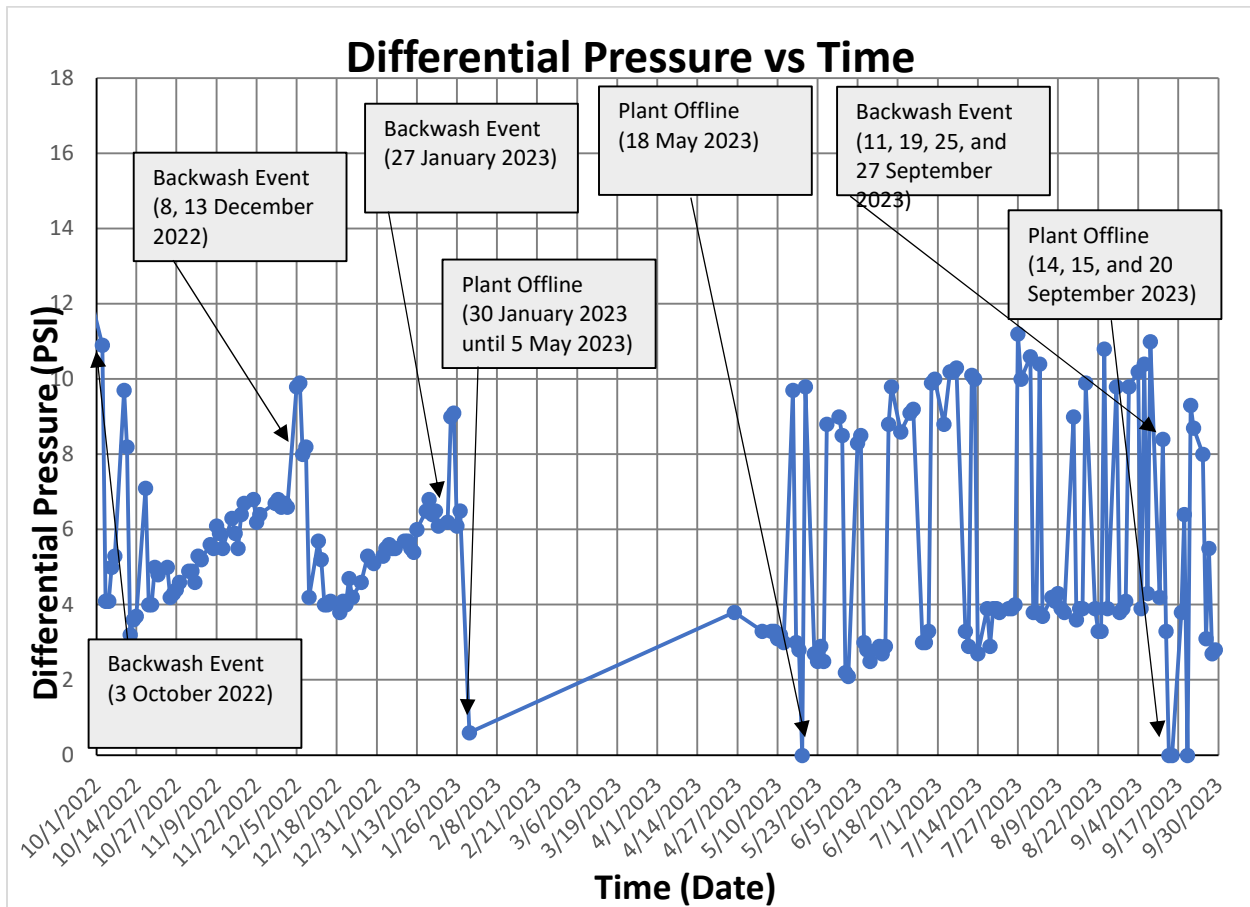
In general, differential pressure increases as the system continues to operate, and decreases after a backwashing event. The increasing trend then continues until the next backwashing event is performed. Also, lower differential pressures are observed during times of low water demand (e.g., typically over the winter months). **Figure 2**, below, depicts the pressure loss across the GAC System and subsequent backwashing dates, from October 2022 through the current reporting period.

Backwashing events during the summer and fall are performed more often because of the higher demand during that time of year. The exchange of carbon in each of the six GAC vessels with virgin coconut shell carbon was most recently completed in August 2020 and the Seamans Neck Road plant is able to operate at full capacity.

Previously identified high iron loading in the GAC vessels has been alleviated by the completed (May 2023) rehabilitation of the Liberty Utilities iron filtration plant at the Seamans Neck Road plant.

The facility is operating at full design capacity and pressure loss across the overall GAC System is monitored regularly, and it is expected that backwashing events will occur on a periodic basis as needed. In addition, it is expected that backwashing of each vessel will be conducted following each quarterly bacteria sampling event to address potential colored water issues and to ensure the timely return to service for each vessel.

Figure 2 - System Differential Pressure vs. Time



System Maintenance

Routine maintenance of the GAC System during this reporting period consisted of:

- General monitoring of the system flow rates, totalized flows, influent and effluent pressures, differential pressure, chlorine residual, and pH readings.
- Changing paper for the chlorine/pH chart recorder and flow/differential pressure chart recorder on a weekly basis.
- Calibration of the pH meter on a weekly basis.

- Periodic operation of Well 3A in place of or concurrently with Well 4S occurs on an irregular schedule; Well 3A operated concurrently with Well 4S on 1 September, 4 September, 6 September, 8 September, 12 September, 21-22 September, and 27 September.

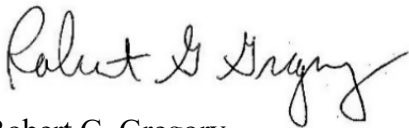
In addition, the following non-routine activities or operation issues occurred during the September 2023 reporting period:

- On 4 September, the smoke alarm in the treatment room activated. No apparent issue; alarm was reset.
- On 11 September, GACs #100 and #200 were backwashed following the 2023 Q3 MIC sampling event. The sample hold times were exceeded by the laboratory; resampling required. The plant was temporarily shut down for AOP system related electrical work.
- On 14 September, the plant was temporarily shut down for AOP system related electrical work.
- On 15 September, the plant was temporarily shut down to test the AOP system booster pumps.
- On 19 September, GACs #500 and #600 were backwashed following the 2023 Q3 MIC sampling event.
- On 20 September, the plant was temporarily shut down to test the AOP system booster pumps.
- On 25 September, GACs #300 and #400 were backwashed following the 2023 Q3 MIC sampling event.
- On 27 September, GACs #100 and #200 were backwashed following the 2023 Q3 MIC re-sampling event.

Please contact me at 610-400-0636 or rgregory@komangs.com with any questions or concerns regarding this report.

Sincerely,

KOMAN Government Solutions, LLC



Robert G. Gregory

Project Manager

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ATTACHMENT 1
O&M LOGS – SEPTEMBER 2023

Daily Readings
Granular Activated Carbon Treatment System

Description	Date	8-28-2023	8-29-2023	8-30-2023	8-31-2023	9-1-2023	9-4-2023
System Flow Rate	GPM	3200	1650	1750	1650	3250	3300
Total System Flow	Gallons	8923353	8926257	8929221	8934928	8935044	8944138
Well 3 Status	ON OR OFF	ON	OFF	OFF	OFF	ON	ON
Well 4 Status	ON OR OFF	ON	ON	ON	ON	ON	ON
Tank 100 Flow Rate	GPM	500	250	250	250	500	500
Tank 200 Flow Rate	GPM	500	250	250	250	450	500
Tank 300 Flow Rate	GPM	550	250	250	250	500	500
Tank 400 Flow Rate	GPM	500	250	300	250	500	550
Tank 500 Flow Rate	GPM	550	300	300	300	550	500
Tank 600 Flow Rate	GPM	450	300	200	200	450	450
Tank 100 Total Flow	Gallons	20975,000	21289,000	21884,000	32440,000	22905,000	24405,000
Tank 200 Total Flow	Gallons	73558,000	73910,000	74391,000	74911,000	75360,000	76791,000
Tank 300 Total Flow	Gallons	78791,000	78175,000	79708,000	80248,000	80750,000	82315,000
Tank 400 Total Flow	Gallons	16371,000	16743,000	17185,000	17787,000	18270,000	19707,000
Tank 500 Total Flow	Gallons	27939,000	28482,000	28878,000	29360,000	29830,000	31289,000
Tank 600 Total Flow	Gallons	32600,000	32929,000	33260,000	33744,000	34120,000	35285,000
System Influent Pressure	PSI	85	78	53	79	89	88
System Effluent Pressure	PSI	75	74	49	75	79	78
System Differential Pressure	PSI	9.8	3.8	3.9	4.1	9.8	10.2
Chlorine Analyzer: Free Chlorine Residual - Inline	PPM	1.95	1.87	1.94	1.62	1.98	1.91
Effluent Water pH - Inline	Units	7.02	7.05	7.07	7.05	7.07	7.09
Manual Chlorine Reading (see Note 10)	PPM	1.93	1.85	1.92	1.63	1.99	1.93
Manual pH check (see Note 1)	Units	—	—	—	—	—	—

**Daily Readings
Granular Activated Carbon Treatment System**

Description	Date	8/28/2023	8/29/2023	8/30/2023	8/31/2023	9/1/2023	9/4/2023
Yeast 00A Hypochlorite Level	Gallons	28	152	97	156	160	96
Yeast 00B Hypochlorite Level	Gallons	143	155	155	155	162	140
Yeast 00C Hypochlorite Level	Gallons	153	153	153	153	80	80
Yeast 00A Polysulfate Level	Gallons	131	103	145	124	109	61
Yeast 00B Polysulfate Level	Gallons	36	36	160	160	154	144
Motoring Pump 00A: Hypochlorite Output Pressure	PSI						
Motoring Pump 00B: Hypochlorite Output Pressure	PSI						
Motoring Pump 00A: Polysulfate Output Pressure	PSI						
Motoring Pump 00B: Polysulfate Output Pressure	PSI						
Motoring Pump 00A: Stratified	Units						
Motoring Pump 00B: Stratified	Units						
Motoring Pump 00A: Stratified	Units						
Motoring Pump 00B: Stratified	Units						
Generator Operating Hours	Hours	o/c	o/c	o/c	o/c	o/c	o/c
Main Facility Electric Meter Reading							
Comments (additional tests performed, maintenance needed, construction on site, etc.)		Cl Delu.	Phos. Delu.	Cl Delu.	Monthly Sampling	Alarm	

Daily Readings
Granular Activated Carbon Treatment System

Description	Date	9.5.2023	9.6.2023	9.7.2023	9.8.2023	9.11.2023	9.12.2023
System Flow Rate	GPM	1700	3250	1650	3300	1650	2800
Total System Flow	Gallons	8948238	8950864	8953999	8956184	8965311	8966610
Well 3 Status	ON OR OFF	OFF	ON	OFF	ON	OFF	ON
Well 4 Status	ON OR OFF	ON	ON	ON	ON	ON	ON
Tank 100 Flow Rate	GPM	250	500	250	500	250	500
Tank 200 Flow Rate	GPM	250	500	250	500	250	500
Tank 300 Flow Rate	GPM	250	500	250	600	250	500
Tank 400 Flow Rate	GPM	250	500	250	600	250	450
Tank 500 Flow Rate	GPM	300	550	250	550	250	500
Tank 600 Flow Rate	GPM	250	450	225	500	225	400
Tank 100 Total Flow	Gallons	24,781,000	25,481,000	25,921,000	26,418,000	27,851,000	27,979,000
Tank 200 Total Flow	Gallons	27,128,000	27,771,000	28,231,000	28,583,000	29,442,000	30,059,000
Tank 300 Total Flow	Gallons	22,709,000	23,311,000	23,968,000	24,366,000	25,909,000	26,145,000
Tank 400 Total Flow	Gallons	20,210,000	20,671,000	21,187,000	21,615,000	22,060,000	23,271,000
Tank 500 Total Flow	Gallons	11,501,000	12,117,000	12,776,000	13,220,000	14,703,000	14,930,000
Tank 600 Total Flow	Gallons	25,511,000	26,089,000	26,363,000	26,527,000	28,019,000	28,199,000
System Influent Pressure	PSI	78	85	58	60	82	95
System Effluent Pressure	PSI	74	74	53	49	78	87
System Differential Pressure	PSI	3.9	10.4	4.3	11.0	4.2	8.4
Chlorine Analyzer: Free Chlorine Residual - Inline	PPM	1.81	1.94	1.82	1.91	1.87	1.90
Effluent Water pH - Inline	Units	7.14	7.14	7.15	7.13	7.14	7.01
Manual Chlorine Reading (acc. Hach KD)	PPM	1.80	1.93	1.84	1.89	1.85	1.92
Manual pH check (acc. Hach)	Units						

**Daily Readings
Granular Activated Carbon Treatment System**

Description	Date	9-5-2023	9-6-2023	9-7-2023	9-8-2023	9-11-2023	9-12-2023
Tank 001A Height/Inch Level	Gallons	153	113	100	151	121	150
Tank 001B Height/Inch Level	Gallons	155	141	87	153	107	154
Tank 002A Height/Inch Level	Gallons	158	158	153	153	141	156
Tank 002B Height/Inch Level	Gallons	45	41	157	143	93	87
Tank 003A Height/Inch Level	Gallons	192	131	154	154	154	139
Motoring Pump 001A: Height/Inch Outlet Pressure	PSI						
Motoring Pump 001B: Height/Inch Outlet Pressure	PSI						
Motoring Pump 002A: Phosphate Outlet Pressure	PSI						
Motoring Pump 002B: Phosphate Outlet Pressure	PSI						
Motoring Pump 003A: Strain/Inch	Units						
Motoring Pump 003B: Strain/Inch	Units						
Motoring Pump 004A: Strain/Inch	Units						
Motoring Pump 004B: Strain/Inch	Units						
Generator Operating Hours	Hours	OK	OK	OK	OK	OK	OK
Main Facility Electric Meter Reading							
Comments (additional tests performed, maintenance needed, construction on site, etc.)		CL Delv.		Phos. Delv.	CL Delv.	Ready Bact. Sample GAC #1, 2 Well 3 #Rousso Did #1, 2 LGAC'S	Sampled LGAC'S 1-2 wells 3+4 9-11-2023

Wells 3+4
Elect Work
Had building
Shot Down (10pm)

Daily Readings
Granular Activated Carbon Treatment System

Description	Date	9.13.2023	9.14.2023	9.15.2023	9.18.2023	9.19.2023	9.20.2023
System Flow Rate	GPM	1550	off	off	1600	1600	0/c
Total System Flow	Gallons	89694341	8972916	8975201	89835411	89856941	
Well 3 Status	ON OR OFF	OFF	OFF	OFF	OFF	OFF	OFF
Well 4 Status	ON OR OFF	ON	OFF	OFF	OFF	OFF	OFF
Tank 100 Flow Rate	GPM	250	—	—	0.0	0.0	OFF
Tank 200 Flow Rate	GPM	250	—	—	250	450	0/c
Tank 300 Flow Rate	GPM	250	—	—	250	400	0/c
Tank 400 Flow Rate	GPM	250	—	—	250	400	0/c
Tank 500 Flow Rate	GPM	225	—	—	250	400	0/c
Tank 600 Flow Rate	GPM	225	—	—	250	0/c	0/c
Tank 100 Total Flow	Gallons	28,271,000	29,124,000	29,518,000	31,029,000	31,404,000	32,069,000
Tank 200 Total Flow	Gallons	80,343,000	80,863,000	81,513,000	82,942,000	83,303,000	83,914,000
Tank 300 Total Flow	Gallons	86,441,000	86,843,000	87,492,000	88,800,000	89,119,000	89,699,000
Tank 400 Total Flow	Gallons	23,559,000	23,918,000	24,510,000	25,785,000	26,063,000	26,592,000
Tank 500 Total Flow	Gallons	15,297,000	15,886,000	16,234,000	17,477,000	17,754,000	18,083,000
Tank 600 Total Flow	Gallons	38,507,000	38,971,000	39,215,000	40,258,000	40,482,000	40,715,000
System Inlet Pressure	PSI	68	—	—	65	64	—
System Effluent Pressure	PSI	65	—	—	62	56	—
System Differential Pressure	PSI	3.3	—	—	3.8	6.4	6
Chlorine Analyzer Free Chlorine Residual - Inline	PPM	1.89	—	—	1.71	1.73	1.69
Effluent Water pH - Inline	Units	7.06	—	—	7.01	6.89	6.76
Manual Chlorine Reading (cc: Hach DR)	PPM	1.91	—	—	1.73	1.74	1.67
Manual pH check (cc: Hanna)	Units	—	—	—	—	—	—

Daily Readings Granular Activated Carbon Treatment System

Description	Units	9.13.2023	9.14.2023	9.15.2023	9.18.2023	9.19.2023	9.20.23
Tank #20A Hingschichte Level	Gallons	112	152	123	118	153	130
Tank #20B Hingschichte Level	Gallons	111	153	115	130	152	141
Tank #20C Hingschichte Level	Gallons	156	156	156	61	155	155
Tank #20D Fehlschichte Level	Gallons	157	144	131	81	73	60
Tank #20E Fehlschichte Level	Gallons	160	151	130	118	118	115
Mixing Pump #20A: Hingschichte Output Pressure	PSI						
Mixing Pump #20B: Hingschichte Output Pressure	PSI						
Mixing Pump #20C: Fehlschichte Output Pressure	PSI						
Mixing Pump #20D: Fehlschichte Output Pressure	PSI						
Mixing Pump #20E: Fehlschichte Output Pressure	PSI						
Mixing Pump #20A: Spray/Speed	Units						
Mixing Pump #20B: Spray/Speed	Units						
Mixing Pump #20C: Spray/Speed	Units						
Mixing Pump #20D: Spray/Speed	Units						
Mixing Pump #20E: Spray/Speed	Units						
Generator Operating Hours	Hours	OK	OK	OK	OK	OK	OK
Main Facility Electric Meter Reading		—					—
Comments (additional tests performed, maintenance needed, corrections on site, etc.)		Phos. Delv.	CL Delv. Plant shut down — Electric work	Plant off line — Due to testing booster pumps	Plant off	Shot off GAC 576 for sampling Took GAC 576 samples Backwashed GAC 506	Plant shut down for testing of booster pumps Will be back on @ 1500 hrs

Daily Readings
Granular Activated Carbon Treatment System

Description	Date	9-21-23	9-22-23	9-25-23	9-26-2023	9-27-2023	9-28-2023
System Flow Rate	GPM	3250	3350	1650	1600	2000	1700
Total System Flow	Gallons	8990850	8993467	9002145	9004285	9007205	9010308
Well 3 Status	ON OR OFF	ON	ON	OFF	OFF	ON	OFF
Well 4 Status	ON OR OFF	ON	ON	ON	ON	OFF	ON
Tank 100 Flow Rate	GPM	450	500	350	250	0/L	250
Tank 200 Flow Rate	GPM	400	500	350	250	0/L	250
Tank 300 Flow Rate	GPM	400	550	0/L	250	550	250
Tank 400 Flow Rate	GPM	400	500	0/L	250	500	250
Tank 500 Flow Rate	GPM	400	550	400	250	550	250
Tank 600 Flow Rate	GPM	350	500	350	200	450	250
Tank 100 Total Flow	Gallons	32,393,000	32,783,000	34,188,000	34,568,000	34,900,000	35,150,000
Tank 200 Total Flow	Gallons	84,282,000	84,622,000	85,990,000	86,358,000	86,703,000	86,948,000
Tank 300 Total Flow	Gallons	90,009,000	90,382,000	91,372,000	91,543,000	92,068,000	92,720,000
Tank 400 Total Flow	Gallons	26,892,000	27,267,000	28,266,000	28,417,000	28,934,000	29,545,000
Tank 500 Total Flow	Gallons	18,349,000	18,910,000	20,959,000	21,047,000	21,564,000	22,219,000
Tank 600 Total Flow	Gallons	41,037,000	41,431,000	42,825,000	43,202,000	43,638,000	44,178,000
System Influent Pressure	PSI	58	60	71	53	71	80
System Effluent Pressure	PSI	49	52	64	50	66	78
System Differential Pressure	PSI	9.3	8.7	8.0	3.1	5.5	2.7
Chlorine Analyzer: Free Chlorine Residual - Inline	PPM	1.91	1.87	1.98	1.87	1.69	1.67
Effluent Water pH - Inline	Units	6.87	6.98	6.98	6.93	6.66	6.58
Manual Chlorine Reading (cc: Hanna HI)	PPM	1.93	1.88	1.96	1.85	1.71	1.65
Manual pH check (cc: Hanna)	Units	—	—	—	—	—	—

Daily Readings
Granular Activated Carbon Treatment System

Description	Date	9-21-23	9-22-23	9-25-2023	9-26-2023	9-27-2023	9-28-2023
Tank 000A Height/Inch Level Tank 000A	Gallons	151	146	153	153	153	153
Tank 000B Height/Inch Level Tank 000B	Gallons	153	116	153	117	155	155
Tank 000C Height/Inch Level Tank 000C	Gallons	155	155	155	147	65	156
Tank 000D Height/Inch Level Tank 000D	Gallons	109	93	162	162	162	151
Tank 000E Height/Inch Level Tank 000E	Gallons	115	113	162	162	151	144
Motor Pump 000A: Height/Inch Control Pressure	PSI						
Motor Pump 000B: Height/Inch Control Pressure	PSI						
Motor Pump 000C: Height/Inch Control Pressure	PSI						
Motor Pump 000D: Height/Inch Control Pressure	PSI						
Motor Pump 000E: Height/Inch Control Pressure	PSI						
Motor Pump 000A: Strain/Speed	Units						
Motor Pump 000B: Strain/Speed	Units						
Motor Pump 000C: Strain/Speed	Units						
Motor Pump 000D: Strain/Speed	Units						
Motor Pump 000E: Strain/Speed	Units						
Generator Operating Hours	Hours	OK	OK	OK	OK	OK	OK
Main Facility Electric Meter Reading							
Comments (additional tanks performed, maintenance needed, contractors on site, etc.)		CL Delu. Phos Delu.		Sampled Well 3 CGAC-304 (Re-sample) CL Delu. Phos Delu. Backwashing CGAC 304	GAC 304 back insert 10pm 9/25/2023	GAC's #2 Well 4 OK for Sampling Re-sample	CL Delu.

Daily Readings
Granular Activated Carbon Treatment System

Description	Date					
		9/29/2023				
System Flow Rate	GPM	1650				
Total System Flow	Gallons	9012630				
Well 3 Status	ON OR OFF	OFF				
Well 4 Status	ON OR OFF	ON				
Tank 100 Flow Rate	GPM	250				
Tank 200 Flow Rate	GPM	250				
Tank 300 Flow Rate	GPM	250				
Tank 400 Flow Rate	GPM	250				
Tank 500 Flow Rate	GPM	250				
Tank 600 Flow Rate	GPM	250				
Tank 100 Total Flow	Gallons	35465,000				
Tank 200 Total Flow	Gallons	27255,000				
Tank 300 Total Flow	Gallons	93098,000				
Tank 400 Total Flow	Gallons	29931,000				
Tank 500 Total Flow	Gallons	22594,000				
Tank 600 Total Flow	Gallons	44492,000				
System Influent Pressure	PSI	63				
System Effluent Pressure	PSI	61				
System Differential Pressure	PSI	2.5				
Chlorine Analyzer: Free Chlorine Residual - Inline	PPM	1.66				
Effluent Water pH - Inline	Units	6.82				
Manual Chlorine Reading (ex: Natch 100)	PPM	1.68				
Manual pH check (ex: Hanna)	Units	—				

Daily Readings
Granular Activated Carbon Treatment System

Description	Date					
		9/29/2023				
Tank #20A Humidity Level	Gallons	121				
Tank #20B Humidity Level	Gallons	150				
Tank #20C Humidity Level	Gallons	156				
Tank #20A Fahrenheit Level	Gallons	136				
Tank #20B Fahrenheit Level	Gallons	141				
Motoring Pump #20A: Humidity Output Pressure	PSI					
Motoring Pump #20B: Humidity Output Pressure	PSI					
Motoring Pump #20A: Humidity Output Pressure	PSI					
Motoring Pump #20B: Humidity Output Pressure	PSI					
Motoring Pump #20A: Strain/Speed	Units					
Motoring Pump #20B: Strain/Speed	Units					
Motoring Pump #20A: Strain/Speed	Units					
Motoring Pump #20B: Strain/Speed	Units					
Generator Operating Hours	Hours	0/2				
Main Facility Electric Meter Reading						
Comments (additional tanks performed, maintenance needed, contractors on site, etc.)	chang -> flow / PH charts					