

**TOWN OF BERRYVILLE, VIRGINIA  
REQUEST FOR PROPOSAL  
PROFESSIONAL ENGINEERING SERVICES – WATER TREATMENT PLANT  
RFP # 2022-03**

**Addendum 1  
Issued September 13, 2022**

**A. Questions submitted by engineering firms and answers provided by the Town.**

The Town received questions from two firms prior to the submission deadline.

Questions from Firm 1 (in black) and Town's responses (in red)

1. Can record drawings be made available and posted online?

The Town's water treatment plant has been deemed to be critical infrastructure. Accordingly, the Town will not publish the as-built plans for the plant. The firm with which the Town contracts to complete the enumerated work will be provided with a complete set of as-built drawings.

2. Can Monthly Operation Reports (including flow and water quality information, chemicals used, etc.) be made available and posted online?

Attached to and made a part of this addendum are the majority of VDH MOR's for 2017 to August 2022.

3. Can you please describe the problems with the electrical system at the raw water pumping station?

We know of no electrical problems at the raw water pumping station.

Questions from Firm 2 (in black) and Town's responses (in red)

1. Will the Town consider any exceptions to the terms and conditions attached to the RFP and if so, should we include them with our proposal submittal?

Any question or concern about offering terms should have been specifically identified during this inquiry process. That would have allowed the Town to respond to the question or concern in a manner that could be reviewed by all potential bidders.

Bids must be made based on the RFP and official addenda. No conditional responses will be considered.

Once a firm has been selected the Town is willing to review terms with the firm. Exceptions to or alterations in the terms would be made at the sole discretion of the Town.

B. Firms that attended the water plant tour on September 6, 2022

Representatives from three engineering firms toured the water treatment plant on September 6, 2022. Those firms were:

GHD

Pennoni

Whitman, Requardt & Associates, LLP

Addendum issued by Town of Berryville

Authorized by \_\_\_\_\_

Town Manager

Date: 9/13/22

Addendum Acknowledgement

Firm Name: \_\_\_\_\_

By: \_\_\_\_\_

Date: \_\_\_\_\_

VDH MOR's  
January 2017 to August 2022

## Reports not available:

2017: October and November

2018: May, June, August, October

2019: May, June

2020: February, June, July

2021: April, May, July, August, October,  
November

2022: January, February, April, May

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals					Finished Water Chemicals						
					Alum	Carbon	Chlorine	Fluoride	Polymer	KMnO4	Soda Ash	Chlorine	Corr Inhibitor			
	Lbs per Day	Lbs per Day	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.197		0.184	6.0	10	6.1	1	0.6								
2	0.207		0.187	6.0	15	8.8	2	0.9								
3	0.509		0.458	14.8	41	9.6	4	1.0								
4	0.522		0.471	15.3	46	10.5	6	1.3								
5	0.517		0.475	15.0	46	10.6	5	1.2								
6	0.515		0.463	15.0	41	9.4	5	1.1								
7	0.246		0.225	7.0	30	14.8	2	1.0								
8	0.219		0.204	7.0	15	8.3	2	1.1								
9	0.502		0.458	15.0	41	9.7	5	1.1								
10	0.523		0.480	15.5	41	9.3	3	0.7								
11	0.317		0.290	10.5	25	9.6	2	0.9								
12	0.349		0.318	10.0	25	8.6	4	1.4								
13	0.201		0.175	6.0	20	12.1	2	1.0								
14	0.222		0.209	6.5	20	11.0	2	1.1								
15																
16	0.206		0.176	6.0	15	8.9	1	0.8								
17	0.484		0.445	13.3	46	11.3	5	1.2								
18	0.489		0.438	14.5	35	8.7	5	1.3								
19	0.478		0.437	14.0	41	10.2	5	1.3								
20	0.482		0.441	14.3	41	10.1	5	1.2								
21	0.211		0.193	6.0	20	11.5	2	1.1								
22																
23	0.541		0.492	15.5	46	10.1	4	0.9								
24	0.316		0.286	11.5	30	11.5	2	0.8								
25	0.389		0.281	12.5	76	23.4	5	1.6								
26	0.303		0.220	10.0	66	26.1	3	1.3								
27																
28	0.244		0.166	7.5	51	24.9	1	0.6								
29	0.125		0.102	3.0	2	1.9	0	0.0								
30	0.484		0.380	11.5	51	12.6	2	0.6								
31	0.452		0.385	11.0	35	9.4	2	0.6								
Total	10.250	0.000	9.039	300.0	970	319.0	88	27.7	0.0	0.00	105.6	34.8	1.29	0.418	35	10.1
Maximum	0.541	0.000	0.492	15.5	76	26.1	6	1.6	0.0	0.00	6.9	2.0	0.08	0.019	8	3.0
Minimum	0.125	0.000	0.102	3.0	2	1.9	0	0.0	0.0	0.00	0.1	0.1	0.00	0.000	0	0.0
Average	0.366	0.000	0.323	10.7	35	11.4	3	1.0	#####	####	3.8	1.2	0.05	0.015	1	0.4

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE) \_\_\_\_\_ RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME: David A Tyrrell  
 TITLE: OPERATOR CLASSIFICATION: Class 1  
 DPOR CERTIFICATION NO.: 1955002813

Shenandoah River - Entire Month

Fluoride Analyses Results - Finished Water

Date	# of Test	lbs. of Fluoride Used	Water Treated MGD	Analysis #1	Analysis #2	Analysis #3	MAXIMUM	MINIMUM	AVERAGE	RAW TEMP	REMARKS
1	3	7	0.461	0.82	1.08	1.01	1.08	0.82	0.97	41	
2	3	4	0.393	0.95	0.83	0.96	0.96	0.83	0.91	39	
3	3	7	0.505	0.92	0.78	0.82	0.92	0.78	0.84	41	
4	3	3	0.255	0.83	0.82	0.93	0.93	0.82	0.86	39	
5	3	4	0.178	0.93	0.95	0.92	0.95	0.92	0.93	39	
6	3	3	0.332	0.89	0.94	0.99	0.99	0.89	0.94	39	
7	3	3	0.491	1.02	0.80	0.87	1.02	0.80	0.90	41	
8	3	7	0.402	1.10	0.85	0.91	1.10	0.85	0.95	45	
9	3	4	0.456	0.88	0.81	0.89	0.89	0.81	0.86	45	
10	3	7	0.507	0.81	0.75	0.78	0.81	0.75	0.78	43	
11											
12	3	3	0.267	0.90	0.93	0.81	0.93	0.81	0.88	43	
13	3	4	0.524	0.75	0.76	0.78	0.78	0.75	0.76	43	
14	3	7	0.515	0.82	0.57	0.92	0.92	0.57	0.77	41	
15	3	4	0.510	0.82	0.90	1.06	1.06	0.82	0.93	41	
16	3	7	0.518	0.86	0.80	0.86	0.86	0.80	0.84	41	
17	3	7	0.517	0.80	0.81	0.90	0.90	0.80	0.84	39	
18	3	0	0.104	0.75	0.75	0.65	0.75	0.65	0.72	39	
19											
20	3	3	0.217	0.98	0.97	0.93	0.98	0.93	0.96	41	
21	3	3	0.460	0.83	0.90	0.85	0.90	0.83	0.86	45	
22	3	7	0.456	0.85	0.79	0.81	0.85	0.79	0.82	46	
23	3	3	0.361	0.45	0.68	0.76	0.76	0.45	0.63	48	
24	3	3	0.325	0.78	0.68	0.73	0.78	0.68	0.73	52	
25	3	4	0.218	0.77	0.81	0.80	0.81	0.77	0.79	55	
26											
27	3	3	0.516	0.83	0.83	0.83	0.83	0.83	0.83	45	
28	3	7	0.423	0.84	0.83	0.84	0.84	0.83	0.84	48	
29											
30											
31											
Total	75.000	111.689	9.912	21.180	20.620	21.610	22.600	19.580	21.137	1079.000	
Maximum	3.000	6.940	0.524	1.100	1.080	1.060	1.100	0.930	0.970	55.000	
Minimum	3.000	0.068	0.104	0.450	0.570	0.650	0.750	0.450	0.630	39.000	
Average	3.000	4.468	0.396	0.847	0.825	0.864	0.904	0.783	0.845	43.160	

METHOD FOR DETERMINING FLUORIDE RESIDUALS

Colorimeter	CHEMICAL USED: Sodium Fluoride
OPERATOR: David A Jyrrell	
POPULATION SERVED: 4185	
NO. OF CONNECTIONS: 1596	CLASS: 1
	SIGNED: _____
	DATE: _____

FLOWS AND CHEMICAL DOSAGES

March 2017

No. Connections Served: 1650  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals									
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor			
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L		
1	0.455		0.404	13.0	35	9.4	3	0.7			3.2	0.84	0.070	0.018	1	0.2			12.5	3.3				
2	0.459		0.424	13.5	36	9.3	2	0.6			3.5	0.91	0.070	0.018	0.8	0.2			12.9	3.4				
3	0.473		0.428	13.5	36	9.0	3	0.7			6.6	1.67	0.070	0.018	1.2	0.3			13.0	3.3				
4	0.179		0.167	5.3	10	6.8	1	0.5			0.2	0.11	0.026	0.017	0.5	0.3			5.0	3.4				
5	0.206		0.185	5.8	15	8.9	1	0.5			3.3	1.92	0.030	0.017	0.5	0.3			5.5	3.2				
6	0.45		0.414	13.5	35	9.5	3	0.7			3.5	0.94	0.070	0.019	1.2	0.3			12.9	3.4				
7	0.433		0.388	12.3	25	7.0	2	0.6			6.8	1.88	0.060	0.017	1.1	0.3			11.7	3.2				
8	0.408		0.388	12.0	30	8.9	2	0.5			9.3	2.73	0.062	0.018	1.3	0.4			11.5	3.4				
9	0.273		0.235	7.5	20	8.9	2	0.7			10.1	4.44	0.031	0.014	0.5	0.2			7.2	3.2				
10	0.143		0.119	4.0	15	12.8	1	0.7			0.1	0.11	0.031	0.026	0.2	0.2			3.8	3.2				
11																								
12	0.224		0.209	6.5	15	8.1	1	0.6			3.3	1.77	0.053	0.028	0.8	0.4			6.2	3.3				
13	0.558		0.503	16.5	41	8.7	3	0.7			6.7	1.45	0.043	0.009	2.0	0.4			15.8	3.4				
14	0.324		0.292	9.5	25	9.4	2	0.7			3.4	1.26	0.051	0.019	1.7	0.6			9.1	3.4				
15	0.477		0.443	14.0	35	8.9	3	0.7			3.6	0.90	0.072	0.018	1.7	0.4			13.4	3.4				
16	0.429		0.386	12.5	30	8.5	2	0.7			6.6	1.84	0.065	0.018	1.5	0.4			12.0	3.3				
17	0.427		0.394	12.3	35	10.0	3	0.7			3.5	0.98	0.063	0.018	1.5	0.4			11.7	3.3				
18																								
19																								
20	0.483		0.440	14.3	35	8.8	2	0.5			3.5	0.87	0.074	0.018	1.8	0.4			13.7	3.4				
21	0.431		0.379	12.5	30	8.5	2	0.7			6.6	1.84	0.062	0.017	1.5	0.4			12.0	3.3				
22	0.4455		0.406	13.3	41	10.9	3	0.8			3.5	0.95	0.066	0.018	1.6	0.4			12.7	3.4				
23	0.4223		0.389	12.5	30	8.6	3	0.8			3.5	0.99	0.057	0.016	1.5	0.4			12.0	3.4				
24	0.4287		0.387	12.5	25	7.1	2	0.6			6.6	1.84	0.062	0.017	1.5	0.4			12.0	3.4				
25																								
26																								
27	0.523		0.480	14.5	35	8.1	3	0.7			3.6	0.83	0.039	0.009	1.8	0.4			13.9	3.2				
28	0.419		0.385	12.5	35	10.2	2	0.6			6.6	1.88	0.024	0.007	1.5	0.4			12.0	3.4				
29	0.476		0.431	13.3	35	8.9	3	0.7			3.6	0.90	0.035	0.009	1.6	0.4			12.8	3.2				
30	0.427		0.393	11.8	25	7.1	2	0.6			3.5	0.98	0.031	0.009	1.5	0.4			11.3	3.2				
31	0.37		0.342	10.5	30	9.9	2	0.8			6.8	2.22	0.025	0.008	1.3	0.4			10.1	3.3				
Total	10.344	0.000	9.411	299.1	766	232.1	57	17.1			0.0	0.00	121.6	37.1	1.34	0.421	33	9.8	0.0	286.6	86.22	0.0	0.00	
Maximum	0.558	0.000	0.503	16.5	41	12.8	3	0.8			0.0	0.00	10.1	4.4	0.07	0.028	2	0.6	0.0	15.8	3.44	0.0	0.00	
Minimum	0.143	0.000	0.119	4.0	10	6.8	1	0.5			0.0	0.00	0.1	0.1	0.02	0.007	0	0.2	0.0	0.00	3.8	3.16	0.0	0.00
Average	0.398	0.000	0.362	11.5	29	8.9	2	0.7			#####	####	4.7	1.4	0.05	0.016	1	0.4	#####	#DIV/0!	11.0	3.32	#####	#####

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE) RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME: David A Tyrrell  
 TITLE: OPERATOR CLASSIFICATION: Class 1  
 DPOR CERTIFICATION NO.: 1955002813  
 RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES): Shenandoah River - Entire Month



No. Connections Served: 1660  
Population Served: 4185

FLOWS AND CHEMICAL DOSAGES

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals									
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor			
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L		
1	0.546		0.505	13.0	66	14.5	2	0.4			3.6	0.80	0.047	0.010	4	0.9			12.5	2.7				
2	0.343		0.315	10.3	41	14.2	0	0.0			10.2	3.56	0.029	0.010	3.2	1.1			9.8	3.4				
3	0.686		0.625	20.5	41	7.1	5	0.8			6.9	1.20	0.101	0.018	6.4	1.1			19.7	3.4				
4	0.185		0.165	5.5	15	9.9	0	0.3			0.2	0.13	0.031	0.020	1.7	1.1			5.3	3.4				
5	0.209		0.169	6.0	25	14.5	1	0.7			3.3	1.88	0.026	0.015	1.9	1.1			5.8	3.3				
6																								
7																								
8																								
9	0.374		0.346	11.0	51	16.3	1	0.4			6.8	2.17	0.029	0.009	3.4	1.1			10.5	3.4				
10	0.712		0.651	20.8	112	18.8	2	0.4			7.0	1.18	0.290	0.049	6.5	1.1			19.9	3.3				
11	0.788		0.719	23.3	61	9.3	4	0.6			6.6	1.00	0.110	0.017	7.2	1.1			22.3	3.4				
12	0.757		0.676	21.5	86	13.7	1	0.2			6.9	1.09	0.110	0.017	6.7	1.1			20.6	3.3				
13																								
14																								
15	0.517		0.473	15.0	51	11.8	2	0.6			6.7	1.55	0.070	0.016	4.7	1.1			14.4	3.3				
16	0.539		0.492	15.5	56	12.4	2	0.5			3.6	0.80	0.070	0.016	4.8	1.1			14.9	3.3				
17	0.54		0.489	16.0	96	21.4	2	0.4			6.7	1.49	0.071	0.016	5.0	1.1			15.3	3.4				
18	0.528		0.479	15.8	61	13.8	3	0.7			6.7	1.52	0.159	0.036	4.9	1.1			15.1	3.4				
19	0.494		0.458	15.0	41	9.9	4	0.9			7.0	1.70	0.079	0.019	4.7	1.1			14.4	3.5				
20																								
21																								
22	0.516		0.464	14.5	61	14.1	2	0.5			3.3	0.76	0.077	0.018	12.6	2.9			13.9	3.2				
23	0.475		0.428	14.0	56	14.1	4	1.0			6.7	1.68	0.034	0.009	4.4	1.1			13.4	3.4				
24	0.496		0.455	15.0	66	15.9	2	0.5			3.6	0.86	0.075	0.018	4.7	1.1			14.4	3.5				
25	0.594		0.541	17.0	61	12.3	2	0.4			6.7	1.36	0.092	0.019	14.8	3.0			16.3	3.3				
26	0.628		0.580	18.3	76	14.5	1	0.3			6.7	1.29	0.098	0.019	15.9	3.0			17.5	3.3				
27	0.239		0.215	7.0	35	17.8	1	0.3			3.3	1.67	0.042	0.021	1.2	0.6			6.7	3.4				
28																								
29																								
30	0.523		0.467	16.0	76	17.4	2	0.6			3.6	0.83	0.079	0.018	13.9	3.2			15.3	3.5				
31	0.478		0.435	14.5	66	16.5	2	0.5			6.6	1.65	0.097	0.024	12.6	3.2			13.9	3.5				
Total	11.167	0.000	10.147	325.3	1298	310.1	47	10.9			0.0	0.00	122.6	30.2	1.82	0.414	145	33.3	0.0	0.00	311.8	73.76	0.0	0.00
Maximum	0.788	0.000	0.719	23.3	112	21.4	5	1.0			0.0	0.00	10.2	3.6	0.29	0.049	16	3.2	0.0	0.00	22.3	3.51	0.0	0.00
Minimum	0.185	0.000	0.165	5.5	15	7.1	0	0.0			0.0	0.00	0.2	0.1	0.03	0.009	1	0.5	0.0	0.00	5.3	2.74	0.0	0.00
Average	0.508	0.000	0.461	14.8	59	14.1	2	0.5			#####	#####	5.6	1.4	0.08	0.019	7	1.5	#####	#DIV/0!	14.2	3.35	#####	#####

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE) \_\_\_\_\_ RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME: David A Tyrrell  
TITLE: OPERATOR CLASSIFICATION: Class 1  
DPOR CERTIFICATION NO.: 1955002813

Shenandoah River - Entire Month

No. Connections Served: 1670  
Population Served: >4200

FLOWS AND CHEMICAL DOSAGES

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals							
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor	
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.522		0.481	15.5	71	16.3	1	0.3														
2	0.453		0.404	15.0	86	22.8	1	0.2														
3																						
4																						
5	0.562		0.520	15.5	41	8.7	2	0.3														
6	0.587		0.537	17.0	66	13.5	1	0.2														
7	0.523		0.472	14.5	66	15.1	1	0.2														
8	0.559		0.506	16.0	61	13.1	0	0.1														
9	0.499		0.454	14.8	76	18.3	1	0.2														
10																						
11																						
12	0.487		0.442	14.0	56	13.7	1	0.2														
13	0.555		0.498	16.0	51	11.0	2	0.3														
14	0.525		0.477	15.5	51	11.6	2	0.4														
15	0.536		0.480	15.5	51	11.3	2	0.4														
16	0.527		0.472	15.3	61	13.8	1	0.3														
17																						
18																						
19	0.612		0.564	17.5	61	11.9	2	0.3														
20	0.604		0.540	18.0	71	14.1	1	0.2														
21	0.5		0.448	14.5	51	12.2	1	0.3														
22	0.526		0.476	15.5	56	12.7	1	0.3														
23	0.508		0.457	15.0	46	10.8	4	0.9														
24																						
25																						
26	0.514		0.464	15.3	56	13.0	1	0.1														
27	0.512		0.443	15.3	66	15.4	3	0.7														
28	0.542		0.490	16.3	61	13.5	4	0.9														
29	0.53		0.476	15.5	56	12.6	2	0.5														
30	0.514		0.466	15.5	51	11.8	4	0.8														
31																						
Total	11.697	0.000	10.567	342.8	1308	297.1	36	8.2	0.0	0.00	138.4	37.0	1.66	0.376	118	26.8	0.0	0.00	337.4	76.24	0.0	0.00
Maximum	0.612	0.000	0.564	18.0	86	22.8	4	0.9	0.0	0.00	13.9	6.7	0.10	0.021	7	1.6	0.0	0.00	19.6	4.59	0.0	0.00
Minimum	0.453	0.000	0.404	14.0	41	8.7	0	0.1	0.0	0.00	3.2	0.7	0.04	0.009	2	0.5	0.0	0.00	13.4	3.17	0.0	0.00
Average	0.532	0.000	0.480	15.6	59	13.5	2	0.4	#####	#####	6.3	1.7	0.08	0.017	5	1.2	#####	#DIV/0!	15.3	3.47	#####	#####

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE) \_\_\_\_\_ RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME

David A Tyrrell

Shenandoah River - Entire Month

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

Class 1  
1955002813

FLOWS AND CHEMICAL DOSAGES

JULY 2017

No. Connections Served: 1660  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals												
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor						
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L			
1	0.277		0.248	8.8	30	13.2	2	0.9				3.4	1.47	0.042	0.018	4	1.5			8.8	3.8						
2	0.259		0.229	7.5	25	11.7	2	0.9				3.4	1.57	0.042	0.019		0.0			8.1	3.8						
3	0.251		0.217	7.8	30	14.5	2	0.8				3.4	1.62	0.040	0.019	3.4	1.6			8.4	4.0						
4	0.206		0.187	5.5	15	8.9	1	0.7				3.7	2.14	0.026	0.015	2.4	1.4			6.0	3.5						
5	0.513		0.463	15.0	56	13.0	4	0.9				3.4	0.79	0.101	0.024	6.6	1.5			16.3	3.8						
6	0.58		0.520	17.5	51	10.5	4	0.8				6.6	1.36	0.093	0.019	7.6	1.6			19.0	3.9						
7	0.651		0.594	19.5	71	13.1	5	1.0				6.8	1.25	0.097	0.018	5.5	1.0			21.1	3.9						
8	0.246		0.225	7.0	25	12.4	2	1.0				3.3	1.61	0.031	0.015	3.1	1.5			7.6	3.7						
9	0.163		0.147	5.0	20	14.9	1	0.6				0.2	0.13	0.031	0.023	2.2	1.6			5.4	4.0						
10	0.558		0.504	16.5	56	12.0	5	1.0				6.7	1.45	0.039	0.008	7.2	1.5			17.9	3.8						
11	0.56		0.504	16.5	61	13.0	4	0.9				6.7	1.44	0.039	0.008	7.2	1.5			18.6	4.0						
12	0.533		0.482	15.5	51	11.4	3	0.7				6.7	1.52	0.042	0.009	6.8	1.5			17.4	3.9						
13	0.558		0.500	16.0	56	12.0	4	0.9				7.1	1.52	0.040	0.009	7.0	1.5			18.0	3.9						
14	0.511		0.463	15.0	51	11.9	3	0.8				3.3	0.77	0.041	0.010	6.6	1.5			16.9	4.0						
15	0.137		0.127	4.0	15	13.3	1	0.7				3.2	2.80	0.020	0.018	1.7	1.5			4.7	4.1						
16																											
17	0.493		0.447	14.3	51	12.3	2	0.6				3.6	0.88	0.070	0.017	6.2	1.5			16.6	4.0						
18	0.503		0.455	14.8	51	12.1	3	0.8				6.7	1.60	0.070	0.017	6.4	1.5			17.2	4.1						
19	0.531		0.474	14.8	51	11.4	3	0.7				6.7	1.51	0.080	0.018	6.4	1.4			17.2	3.9						
20	0.529		0.477	15.0	51	11.5	3	0.7				3.7	0.84	0.090	0.020	6.6	1.5			17.5	4.0						
21	0.55		0.494	16.5	56	12.2	3	0.7				6.7	1.46	0.090	0.020	7.2	1.6			19.3	4.2						
22	0.254		0.233	7.3	25	12.0	2	0.8				3.3	1.56	0.200	0.094	3.2	1.5			8.5	4.0						
23																											
24	0.516		0.470	15.1	56	13.0	1	0.2				6.7	1.56	0.041	0.009	6.6	1.5			17.6	4.1						
25	0.528		0.477	15.5	56	12.7	2	0.5				7.0	1.60	0.044	0.010	6.8	1.5			18.1	4.1						
26	0.525		0.479	15.5	51	11.6	3	0.6				3.3	0.76	0.082	0.019	6.8	1.5			18.1	4.1						
27	0.52		0.475	15.0	52	35.1	4	0.9				6.7	1.54	0.099	0.023	6.6	1.5			17.5	4.0						
28	0.536		0.482	15.5	56	12.5	3	0.6				6.7	1.50	0.085	0.019	19.0	4.2			18.1	4.0						
29	0.189		0.173	5.5	5	3.2	0	0.0				0.2	0.13	0.030	0.019	0.3	0.2			6.4	4.1						
30																											
31	0.431		0.373	12.0	66	18.3	3	0.8				6.9	1.91	0.064	0.018	14.7	4.1			14.0	3.9						
Total	12.108	0.000	10.919	353.6	1339	363.6	76	20.5				0.0	0.00	0.00	0.00	136.1	38.3	1.77	0.535	167	44.6	0.0	0.00	400.1	###	0.0	0.00
Maximum	0.651	0.000	0.594	19.5	152	35.1	5	1.0				0.0	0.00	0.00	0.00	7.1	2.8	0.20	0.094	19	4.2	0.0	0.00	21.1	4.20	0.0	0.00
Minimum	0.137	0.000	0.127	4.0	5	3.2	0	0.0				0.0	0.00	0.00	0.00	0.2	0.1	0.02	0.008	0	0.0	0.0	0.00	4.7	3.47	0.0	0.00
Average	0.432	0.000	0.390	12.6	48	13.0	3	0.7				###	###	###	###	4.9	1.4	0.06	0.019	6	1.6	###	#DIV/0!	14.3	3.95	###	###

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME

David A Tyrrell

Shenandoah River - Entire Month

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

Class 1  
1955002813

FLOWS AND CHEMICAL DOSAGES

August 2017

No. Connections Served: 1660  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals											
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor					
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L				
1	0.511		0.463	15.3	46	10.7	4	0.9				3.3	0.77	0.084	0.020	19	4.4			17.8	4.2					
2	0.53		0.485	15.3	51	11.5	3	0.6				6.8	1.54	0.084	0.019	19.3	4.4			18.4	4.2					
3	0.527		0.474	15.5	46	10.4	4	0.9				6.8	1.54	0.080	0.018	19.0	4.3			18.1	4.1					
4	0.49		0.442	14.3	46	11.2	4	0.9				6.7	1.64	0.076	0.019	17.4	4.3			16.6	4.1					
5																										
6																										
7	0.5085		0.461	15.0	51	12.0	3	0.6				6.8	1.60	0.082	0.019	6.6	1.5			17.5	4.1					
8	0.402		0.367	12.0	35	10.6	3	1.0				3.5	1.05	0.066	0.020	5.2	1.6			14.0	4.2					
9	0.0997		0.085	2.5	15	18.3	0	0.5				3.6	4.29	0.013	0.016	0.0	0.0			2.9	3.5					
10	0.4163		0.366	12.5	35	10.2	3	0.9				3.2	0.92	0.071	0.020	5.5	1.6			14.6	4.2					
11	0.669		0.612	20.0	66	11.8	6	1.1				7.0	1.25	0.110	0.020	8.7	1.6			23.3	4.2					
12	0.1848		0.165	5.5	10	6.6	1	0.5				3.3	2.12	0.031	0.020	0.0	0.0			6.4	4.2					
13																										
14	0.481		0.430	13.8	76	19.0	4	0.9				6.7	1.67	0.070	0.017	6.0	1.5			16.0	4.0					
15	0.525		0.482	15.7	51	11.6	4	0.9				6.8	1.55	0.090	0.021	6.9	1.6			18.3	4.2					
16	0.534		0.484	15.8	46	10.2	4	0.9				3.7	0.83	0.090	0.020	6.9	1.5			18.4	4.1					
17	0.528		0.482	15.6	41	9.2	4	0.9				6.8	1.54	0.090	0.020	6.8	1.5			18.2	4.1					
18	0.5478		0.442	15.0	46	10.0	1	0.2				6.7	1.47	0.082	0.018	6.6	1.4			17.5	3.8					
19																										
20																										
21	0.49		0.445	14.5	46	11.2	4	0.9				6.7	1.65	0.040	0.010	6.3	1.6			16.9	4.1					
22	0.515		0.468	15.0	46	10.6	2	0.5				6.8	1.58	0.060	0.014	6.6	1.5			17.5	4.1					
23	0.526		0.472	15.5	51	11.6	5	1.1				6.8	1.54	0.041	0.009	6.8	1.5			18.1	4.1					
24	0.207		0.166	6.7	30	17.6	2	1.2				3.3	1.93	0.021	0.012	2.9	1.7			7.8	4.5					
25	0.507		0.463	15.0	51	12.0	3	0.7				7.1	1.68	0.039	0.009	6.6	1.6			14.4	3.4					
26	0.244		0.220	7.0	20	10.0	1	0.4				0.2	0.12	0.019	0.009	3.1	1.5			8.2	4.0					
27	0.131		0.119	4.0	10	9.2	1	1.1				3.2	2.92	0.030	0.027	1.8	1.6			4.7	4.3					
28	0.498		0.449	14.8	41	9.8	4	0.9				3.6	0.87	0.067	0.016	6.5	1.6			17.2	4.1					
29	0.466		0.422	13.8	46	11.7	4	0.9				6.7	1.72	0.072	0.019	6.0	1.5			16.0	4.1					
30	0.521		0.472	15.5	35	8.2	4	0.9				6.3	1.46	0.078	0.018	5.8	1.3			17.4	4.0					
31	0.599		0.531	17.0	76	15.2	4	0.9				6.8	1.36	0.093	0.019	6.3	1.3			19.1	3.8					
Total	11.658	0.000	10.467	342.8	1110	300.2	81	21.3				0.0	0.00	139.1	40.6	1.88	0.449	192	47.8	0.0	0.00	395.4	105.76	0.0	0.00	
Maximum	0.669	0.000	0.612	20.0	76	19.0	6	1.2				0.0	0.00	7.1	4.3	0.11	0.027	19	4.4	0.0	0.00	23.3	4.53	0.0	0.00	
Minimum	0.100	0.000	0.085	2.5	10	6.6	0	0.2				0.0	0.00	0.2	0.1	0.01	0.009	0	0.0	0.0	0.00	2.9	3.40	0.0	0.00	
Average	0.448	0.000	0.403	13.2	43	11.5	3	0.8				###	###	###	###	5.4	1.6	0.06	0.017	7	1.8	#####	#DIV/0!	15.2	4.07	#####

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME

David A Tyrrell

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

Class 1  
\_1955002813

Shenandoah River - Entire Month



No. Connections Served: 1670  
Population Served: 4185

FLOWS AND CHEMICAL DOSAGES

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals								
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor		
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	
1	0.4876		0.437	15.0	41	10.0	4	1.1				3.4	0.83	0.071	0.017	4	1.0			16.9	4.2		
2	0.2562		0.230	7.5	15	7.1	1	0.6				3.9	1.83	0.031	0.014	0.0	0.0			8.4	3.9		
3																							
4	0.509		0.457	15.3	41	9.6	4	0.9				6.8	1.60	0.070	0.016	4.3	1.0			17.2	4.1		
5	0.507		0.457	15.3	41	9.6	2	0.6				6.7	1.58	0.070	0.017	4.3	1.0			17.0	4.0		
6	0.45		0.404	13.3	35	9.5	2	0.6				7.0	1.87	0.075	0.020	3.4	0.9			14.6	3.9		
7	0.341		0.300	10.0	30	10.7	1	0.3				3.1	1.09	0.050	0.018	1.9	0.7			10.8	3.8		
8	0.336		0.303	10.2	25	9.0	2	0.9				3.5	1.25	0.050	0.018	1.9	0.7			11.5	4.1		
9	0.232		0.207	6.5	20	10.5	1	0.6				3.3	1.72	0.030	0.016	1.2	0.6			7.2	3.7		
10																							
11	0.536		0.490	15.8	35	7.9	2	0.5				3.6	0.81	0.077	0.017	3.0	0.7			17.1	3.8		
12	0.512		0.442	14.5	41	9.5	4	1.0				6.7	1.57	0.073	0.017	2.7	0.6			15.7	3.7		
13	0.504		0.456	15.3	41	9.6	4	1.0				6.9	1.65	0.071	0.017	2.9	0.7			15.3	3.6		
14	0.504		0.450	15.1	30	7.2	4	1.0				3.3	0.79	0.079	0.019	2.8	0.7			14.5	3.4		
15	0.516		0.472	15.2	56	13.0	5	1.1				6.7	1.56	0.075	0.017	2.9	0.7			14.6	3.4		
16																							
17																							
18	0.435		0.391	12.8	30	8.4	4	1.0				3.6	0.99	0.062	0.017	2.4	0.7			12.2	3.4		
19	0.525		0.472	15.3	36	8.2	4	0.9				6.7	1.53	0.075	0.017	2.9	0.7			14.6	3.3		
20	0.34		0.485	15.5	30	6.8	3	0.6				6.6	1.47	0.079	0.018	2.9	0.6			14.9	3.3		
21	0.536		0.484	15.5	61	13.6	4	0.8				6.8	1.52	0.075	0.017	2.9	0.6			14.9	3.3		
22	0.392		0.355	11.5	25	7.8	4	1.1				3.5	1.06	0.057	0.017	2.2	0.7			11.0	3.4		
23																							
24	0.233		0.209	6.8	10	5.2	3	1.4				3.3	1.71	0.040	0.021	1.3	0.7			6.5	3.3		
25	0.219		0.197	6.5	20	11.1	2	1.1				0.2	0.13	0.030	0.016	1.0	0.5			6.2	3.4		
26	0.159		0.143	5.0	10	7.6	1	0.6				3.2	2.44	0.022	0.017	0.8	0.6			4.8	3.6		
27	0.497		0.424	14.8	46	11.0	4	0.9				7.0	1.70	0.071	0.017	2.3	0.6			14.1	3.4		
28	0.521		0.467	15.0	41	9.3	5	1.1				3.3	0.76	0.075	0.017	2.8	0.6			14.4	3.3		
29	0.527		0.474	15.3	41	9.2	4	1.0				6.7	1.52	0.071	0.016	2.9	0.7			14.6	3.3		
30	0.152		0.137	4.3	10	8.0	2	1.3				0.2	0.13	0.022	0.017	0.8	0.7			4.1	3.2		
31																							
Total	10.427	0.000	9.343	307.0	812	229.5	76	22.0	0.0	0.00	116.2	33.1	1.50	0.431	61	16.9	0.0	0.00	313.0	89.94	0.0	0.00	
Maximum	0.540	0.000	0.490	15.8	61	13.6	5	1.4	0.0	0.00	7.0	2.4	0.08	0.021	4	1.0	0.0	0.00	17.2	4.16	0.0	0.00	
Minimum	0.152	0.000	0.137	4.3	10	5.2	1	0.3	0.0	0.00	0.2	0.1	0.02	0.014	0	0.0	0.0	0.00	4.1	3.21	0.0	0.00	
Average	0.417	0.000	0.374	12.3	32	9.2	3	0.9	#####	#####	4.6	1.3	0.06	0.017	2	0.7	#####	#DIV/0!	12.5	3.60	#####	#####	

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME

David A Tyrrell

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

Class 1

1955002813

Shenandoah River - Entire Month

DATE	Temperature		Alkalinity		Hardness		Chlorine Residual (Free)						LOG INACTIVATION GIARDIA (DISINFECTION ONLY)			
	Raw °F	Raw mg/L	Applied (Post-Flash Mix) mg/L	Finished mg/L	Raw mg/L	Finished mg/L	Settled mg/L			Finished / Entry Point mg/L			Prior To Clearwell	Clearwell Only		
							Ave	Max	Min	Ave	Max	Min			Mark if <0.2	VDH Notified
1	37	184	186	180	196	212				2.85	3.11	1.94	N		1.3	N
2	37	180	190	182	200	208				3.02	4.05	2.43	N		1.4	N
3	36	182	190	180	200	200				3.11	4.24	2.59	N		1.3	N
4	36	180	188	186	208	206				3.08	3.65	2.64	N		1.3	N
5	36	184	190	186	198	200				3.21	3.95	2.52	N		1.4	N
6	36	180	194	182	206	200				3.31	4.34	2.79	N		1.4	N
7													SWTR VIOL			VIOL
8	36	196	204	204	222	236				2.91	3.95	2.46	N		1.1	N
9	36	210	214	204	230	248				2.83	3.29	2.28	N		1.1	N
10	36	204	210	204	224	244				2.74	3.34	1.85	N		1	N
11	36	206	210	208	214	234				2.85	3.46	2.57	N		1.1	N
12	37	196	196	194	214	222				2.74	2.93	2.57	N		1.1	N
13	37	180	188	180	200	214				2.73	3.08	2.34	N		1.1	N
14	37	176	176	170	190	202				2.73	3.11	2.19	N		1.1	N
15	37	180	172	160	220	212				2.69	3.30	2.23	N		1.2	N
16	39	182	188	174	216	210				2.77	3.39	2.34	N		1.3	N
17	37	148	148	140	164	176				2.90	3.68	2.51	N		1.3	N
18	37	174	180	176	206	200				2.88	3.28	2.63	N		1.2	N
19	37	180	188	168	222	204				2.78	3.20	2.54	N		1.2	N
20	37	184	186	180	220	216				2.75	3.18	2.36	N		1.2	N
21													N			N
22	39	172	172	168	216	204				2.93	3.48	2.10	N		1.3	N
23	41	160	158	154	184	182				2.87	3.75	2.42	N		1.5	N
24	43	154	150	154	168	178				2.84	3.39	2.38	N		1.5	N
25	41	152	154	152	162	170				2.94	3.43	2.56	N		1.5	N
26	41	158	146	148	170	166				2.96	3.54	2.54	N		1.5	N
27													SWTR VIOL			VIOL
28	43	150	142	144	172	166				2.73	3.01	2.21	N		1.5	N
29	45	170	150	146	240	240				2.73	3.04	2.30	N		1.6	N
30	43	160	150	140	240	240				2.83	3.31	2.39	N		1.6	N
31	43	160	140	148	182	180				2.68	3.09	2.30	N		1.5	N
Total	1076.0	4942	4960	4812	5504	5770	0.0	0.0	0.0	80.4	96.6	67.0		0.0	36.6	0.0
Maximum	45.0	210	214	208	240	248	0.0	0.0	0.0	3.3	4.3	2.8		0.0	1.6	0.0
Minimum	36.0	148	140	140	20	166	0.0	0.0	0.0	2.7	2.9	1.9		0.0	1.0	0.0
Average	38.4	177	177	172	197	206	#DIV/0!	#DIV/0!	#DIV/0!	2.9	3.4	2.4		#DIV/0!	1.3	#DIV/0!

FLOWS AND CHEMICAL DOSAGES

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals									
					Alum	Carbon	Chlorine	Fluoride	Polymer	KMnO4	Soda Ash	Chlorine	Corr Inhibitor	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L					
1	0.125		0.105	3.5	15	14.6	1	0.8			0.4	0.38	0.018	0.017	1	0.5			3.4	3.2				
2	0.436		0.410	12.5	35	9.8	4	1.1			3.6	0.98	0.062	0.017	2.0	0.5			12.0	3.3				
3	0.226		0.186	6.5	56	29.6	2	1.1			3.3	1.75	0.033	0.018	1.0	0.5			6.2	3.3				
4																								
5	0.515		0.457	15.0	10	2.4	4	1.0			3.7	0.86	0.075	0.017	2.4	0.6			14.4	3.3				
6	0.4001		0.363	11.5	35	10.6	3	1.0			3.5	1.05	0.035	0.011	0.0	0.0			11.0	3.3				
7	0.5288		0.480	15.0	46	10.3	4	0.9			6.7	1.53	0.071	0.016	2.4	0.5			13.8	3.1				
8	0.4953		0.441	14.0	41	9.8	5	1.2			6.7	1.62	0.071	0.017	2.2	0.5			12.8	3.1				
9	0.3765		0.342	11.0	30	9.7	3	0.9			3.5	1.11	0.062	0.020	0.0	0.0			10.0	3.2				
10																								
11	0.144		0.127	4.3	15	12.7	1	0.7			0.2	0.14	0.010	0.008	0.7	0.6			3.9	3.2				
12	0.393		0.355	11.0	36	10.8	2	0.6			6.6	2.01	0.050	0.015	1.7	0.5			10.0	3.1				
13	0.374		0.333	10.3	30	9.8	3	1.0			3.5	1.12	0.050	0.016	1.6	0.5			9.4	3.0				
14	0.422		0.382	12.0	36	10.1	4	1.1			3.5	0.99	0.060	0.017	1.9	0.5			11.0	3.1				
15	0.492		0.447	14.3	41	9.9	4	0.9			6.7	1.63	0.070	0.017	2.2	0.5			13.1	3.2				
16	0.465		0.418	12.8	41	10.5	4	1.1			3.5	0.90	0.070	0.018	2.0	0.5			12.2	3.1				
17																								
18	0.17		0.159	5.0	15	10.7	1	0.8			3.3	2.33	0.030	0.021	0.8	0.6			4.8	3.4				
19	0.152		0.134	4.3	10	8.0	2	1.3			3.3	2.60	0.020	0.016	0.7	0.6			4.1	3.2				
20	0.543		0.492	15.3	46	10.1	4	1.0			3.6	0.79	0.080	0.018	2.4	0.5			14.6	3.2				
21	0.525		0.478	15.1	41	9.3	4	0.8			6.7	1.54	0.075	0.017	2.4	0.5			14.5	3.3				
22	0.519		0.474	15.0	46	10.5	5	1.1			6.7	1.56	0.084	0.019	2.4	0.5			14.4	3.3				
23	0.379		0.347	11.0	35	11.2	3	0.9			3.5	1.10	0.029	0.009	1.7	0.5			10.5	3.3				
24																								
25	0.177		0.163	5.1	15	10.3	1	0.8			3.3	2.21	0.013	0.009	0.8	0.5			4.9	3.3				
26	0.152		0.135	4.5	5	4.0	0	0.3			0.2	0.13	0.012	0.010	0.7	0.6			4.3	3.4				
27	0.324		0.295	9.2	25	9.4	2	0.9			3.4	1.27	0.030	0.011	1.7	0.6			8.8	3.3				
28	0.523		0.443	14.0	46	10.5	4	0.9			6.7	1.54	0.075	0.017	2.2	0.5			13.4	3.1				
29																								
30																								
31																								
Total	8.857	0.000	7.966	251.9	751	254.5	71	22.2			0.0	0.00	96.1	31.2	1.18	0.371			0.0	0.00	237.4	77.50	0.0	0.00
Maximum	0.543	0.000	0.492	15.3	56	29.6	5	1.3			0.0	0.00	6.7	2.6	0.08	0.021			0.0	0.00	14.6	3.40	0.0	0.00
Minimum	0.125	0.000	0.105	3.5	5	2.4	0	0.3			0.0	0.00	0.2	0.1	0.01	0.008			0.0	0.00	3.4	3.01	0.0	0.00
Average	0.369	0.000	0.332	10.5	31	10.6	3	0.9			####	####	4.0	1.3	0.05	0.015			####	#DIV/0!	9.9	3.23	####	####

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

David A Tyrnell  
Shenandoah River - Entire Month

Class 1  
1955002813

PRINTED NAME

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.



Flows and Chemical Dosages

March 2018

No. Connections Served: 1690  
Population Served: >4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals							
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr. Inhibitor	
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.412		0.365	12.0	30	8.9	4	1.0				3.6	1.05	0.062	0.018	9	2.6			20.3	5.9	
2	0.384		0.357	11.5	30	9.5	3	1.0				3.4	1.06	-0.079	-0.025	8.6	2.7			15.6	4.9	
3	0.551		0.491	16.5	30	6.6	0	0.1				0.00	0.088	0.019	12.3	2.7			15.6	3.4		
4	0.44		0.401	13.0	30	8.3	3	0.9				6.7	1.83	0.053	0.014	9.7	2.6			23.4	6.4	
5	0.422		0.381	12.0	20	5.8	3	0.9				3.5	0.99	0.053	0.015	9.0	2.6			15.6	4.4	
6	0.383		0.342	11.3	25	7.9	3	1.1				6.6	2.06	0.059	0.018	8.4	2.6			15.6	4.9	
7	0.42		0.378	12.5	41	11.6	4	1.0				3.5	1.01	0.063	0.018	9.4	2.7			29.7	9.0	
8	0.397		0.358	12.0	30	9.2	2	0.7				7.0	2.11	0.063	0.019	9.0	2.7			15.6	4.7	
9	0.397		0.358	16.5	41	12.3	3	1.0				3.2	0.97	0.066	0.020	12.3	3.7			23.4	7.0	
10	0.404		0.356	12.5	35	10.5	4	1.1				3.5	1.04	0.057	0.017	9.4	2.8			15.6	4.0	
11	0.474		0.436	14.5	46	11.5	4	1.0				6.7	1.69	0.071	0.018	10.9	2.7			15.6	4.0	
12	0.302		0.265	9.0	30	12.1	2	1.0				3.4	1.35	0.044	0.018	6.7	2.7			1.2	0.5	
13	0.54		0.495	16.5	51	11.3	4	1.0				6.8	1.50	0.082	0.018	12.3	2.7			7.8	1.7	
14	0.41		0.349	11.8	30	8.9	3	1.0				10.2	2.99	0.068	0.020	8.8	2.6			17.2	5.0	
15	0.412		0.373	12.0	35	10.3	4	1.2				6.7	1.95	0.066	0.019	11.2	3.3			14.1	4.1	
16	0.431		0.398	12.5	35	9.9	4	1.1				7.1	1.97	0.066	0.018	9.4	2.6			15.6	4.3	
17	0.281		0.248	8.5	25	10.8	2	1.0				3.1	1.34	0.044	0.019	6.4	2.7			15.6	6.7	
18	0.392		0.355	11.5	35	10.9	4	1.1				3.6	1.10	0.035	0.011	8.6	2.6			15.6	4.8	
19	0.53		0.482	15.0	41	9.2	4	0.8				10.3	2.33	0.084	0.019	11.2	2.5			15.6	3.5	
20	0.347		0.313	10.0	25	8.8	2	0.7				3.2	1.11	0.057	0.020	7.5	2.6			15.6	5.4	
21	0.321		0.284	8.5	30	11.4	4	1.5				3.5	1.31	0.049	0.018	6.4	2.4			15.6	5.8	
22	0.478		0.436	14.5	35	8.9	4	0.9				6.8	1.71	0.075	0.019	10.8	2.7			15.6	3.9	
23	0.402		0.353	12.0	41	12.1	4	1.1				6.6	1.97	0.066	0.020	9.0	2.7			39.1	11.7	
24	0.349		0.322	9.5	25	8.7	2	0.8				3.6	1.24	0.053	0.018	7.1	2.4			7.8	2.7	
25	0.405		0.361	11.5	30	9.0	3	0.9				6.7	1.98	0.062	0.018	8.6	2.5			23.4	6.9	
26	0.367		0.325	11.0	30	9.9	4	1.3				3.6	1.18	0.057	0.019	8.2	2.7			7.8	2.6	
27	0.412		0.378	12.3	51	14.8	4	1.0				6.7	1.95	0.062	0.018	9.2	2.7			20.3	5.9	
28	0.345		0.377	10.0	35	12.3	4	1.3				3.6	1.24	0.057	0.020	7.5	2.6			17.2	6.0	
29	0.338		0.300	10.5	30	10.8	3	1.0				6.6	2.34	0.057	0.020	7.9	2.8			17.2	6.1	
30	0.426		0.388	12.5	46	12.8	3	0.9				6.8	1.91	0.062	0.017	9.4	2.6			15.6	4.4	
31	0.369		0.333	12.0	35	11.5	4	1.2				0.3	0.09	0.062	0.020	9.0	2.9			15.6	5.1	
Total	12.541	0.000	11.358	375.3	1060	316.4	101	30.5	0.0	0.00	156.8	46.4	1.76	0.521	283	83.8	0.0	0.00	513.7	###	0.0	0.00
Maximum	0.551	0.000	0.495	16.5	51	14.8	4	1.5	0.0	0.00	10.3	3.0	0.09	0.020	12	3.7	0.0	0.00	39.1	11.55	0.0	0.00
Minimum	0.281	0.000	0.248	8.5	20	5.8	0	0.1	0.0	0.00	0.3	0.0	-0.08	-0.025	6	2.4	0.0	0.00	1.2	0.48	0.0	0.00
Average	0.405	0.000	0.366	12.1	34	10.2	3	1.0	###	###	5.2	1.5	0.06	0.017	9	2.7	#####	#DIV/0!	16.6	4.98	#####	#####

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE) RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME

David A. Tvrrell

Shenandoah River - Entire Month

TITLE: OPERATOR CLASSIFICATION

Class 1

DPOR CERTIFICATION NO. 1955002813

No. Connections Served: 1690  
Population Served: 4185

Flows and Chemical Dosages

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals						
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day
1	0.409		0.364	10.2	30	8.9	3	0.9			6.7	1.96	0.060	0.018	5	1.5			10.9	3.2	
2	0.351		0.300	11.0	20	6.9	2	0.8			3.6	1.22	0.053	0.018	5.5	1.9			20.3	6.9	
3	0.384		0.347	11.5	20	6.3	4	1.1			6.7	2.08	0.062	0.019	5.7	1.8			23.4	7.3	
4	0.4		0.356	11.5	25	3.2	3	1.0			3.6	1.08	0.066	0.020	5.7	1.7			15.6	4.7	
5	0.384		0.346	11.5	30	9.5	2	0.6			6.6	2.06	0.062	0.018	5.7	1.8			15.6	4.9	
6	0.415		0.369	12.5	30	8.8	4	1.0			7.1	2.05	0.062	0.018	6.2	1.8			15.0	4.3	
7	0.355		0.316	9.0	41	13.7	2	0.8			3.2	1.08	0.041	0.014	6.7	2.3			10.9	3.7	
8	0.38		0.337	11.5	46	14.4	3	1.0			7.0	2.21	0.061	0.019	8.6	2.7			6.3	2.0	
9	0.314		0.279	9.0	15	5.8	2	0.9			3.2	1.21	0.044	0.017	6.7	2.6			21.9	8.4	
10	0.391		0.355	12.0	51	15.5	3	1.0			3.6	1.10	0.040	0.012	9.0	2.8			23.4	7.2	
11	0.2		0.275	9.0	76	45.6	2	1.0			6.5	3.90	0.044	0.026	6.7	4.0			7.8	4.7	
12	0.457		0.413	13.5	66	17.3	3	0.8			3.7	0.96	0.071	0.019	10.1	2.6			23.4	6.1	
13	0.28		0.253	8.5	41	17.4	2	0.9			6.5	2.78	0.040	0.017	6.4	2.7			15.6	6.7	
14	0.42		0.374	12.5	51	14.5	0	0.0			3.6	1.03	0.066	0.019	9.4	2.7			15.6	4.5	
15	0.399		0.351	12.3	46	13.7	3	0.8			6.7	2.01	0.066	0.020	9.2	2.8			23.4	7.0	
16	0.264		0.229	8.0	30	13.8	1	0.4			3.4	1.54	0.040	0.018	6.0	2.7			23.0	10.4	
17	0.443		0.393	13.0	46	12.4	2	0.6			6.7	1.82	0.062	0.017	9.7	2.6			23.4	6.3	
18	0.336		0.295	10.0	35	12.7	3	1.1			3.5	1.25	0.049	0.017	7.5	2.7			15.6	5.6	
19	0.439		0.382	13.5	76	20.8	3	0.9			6.8	1.85	0.071	0.019	10.1	2.8			23.4	6.4	
20	0.348		0.277	10.5	51	17.5	2	0.8			3.6	1.24	0.073	0.019	7.9	2.7			15.6	5.4	
21	0.487		0.410	15.0	51	12.5	2	0.5			6.8	1.67	0.071	0.017	11.2	2.8			23.4	5.8	
22	0.391		0.340	10.0	10	3.1	5	1.5			6.7	2.07	0.062	0.019	7.5	2.3			20.3	6.2	
23	0.389		0.344	10.5	46	14.1	4	1.1			6.6	2.03	0.062	0.019	7.9	2.4			10.9	3.4	
24	0.372		0.334	10.5	35	11.4	2	0.6			3.6	1.15	0.057	0.018	7.9	2.5			15.6	5.0	
25	0.384		0.300	12.0	86	26.9	2	0.6			6.6	2.07	0.062	0.019	9.0	2.8			15.6	4.9	
26	0.443		0.385	14.0	46	12.4	2	0.5			3.6	0.97	0.062	0.017	10.5	2.8			23.4	6.3	
27	0.331		0.288	10.5	35	12.9	2	0.6			6.7	2.42	0.057	0.021	7.9	2.8			4.7	1.7	
28	0.404		0.358	11.3	46	13.5	2	0.5			3.5	1.05	0.057	0.017	8.4	2.5			20.3	6.0	
29	0.431		0.335	13.3	71	19.7	2	0.4			6.7	1.86	0.057	0.016	9.9	2.8			6.3	1.7	
30	0.463		0.366	14.0	142	36.8	2	0.5			6.9	1.78	0.075	0.019	10.5	2.7			4.7	1.2	
31																					
Total	11.464	0.000	10.071	341.5	1394	441.9	74	23.5	0.0	0.00	159.9	51.5	12.64	4.137	238	75.6	0.0	0.00	495.7	###	0.0
Maximum	0.487	0.000	0.413	15.0	142	45.6	5	1.5	0.0	0.00	7.1	3.9	5.73	1.975	11	4.0	0.0	0.00	23.4	10.45	0.0
Minimum	0.200	0.000	0.229	8.0	10	3.1	0	0.0	0.0	0.00	3.2	1.0	0.04	0.012	5	1.5	0.0	0.00	4.7	1.21	0.0
Average	0.382	0.000	0.336	11.4	46	14.7	2	0.8	###	###	5.3	1.7	0.42	0.138	8	2.5	###	#DIV/0!	16.5	5.27	###

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE) \_\_\_\_\_ RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME

David A. Tyrrell

Shenandoah River - Entire Month

TITLE: OPERATOR CLASSIFICATION

Class 1

DPOR CERTIFICATION NO.

1955002813

FLOWS AND CHEMICAL DOSAGES

November 2018

No. Connectors Served: 1604  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals					Finished Water Chemicals								
					Alum	Carbon	Chlorine	Fluoride	Polymer	KMnO4	Soda Ash	Chlorine	Chlorine	Corr. Inhibitor				
	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.538		0.448	16.0	41	9.0	1	0.2	10.3	2.30	0.079	0.018	8	1.8	22.1	4.9		
2	0.704		0.618	21.8	51	8.6	1	0.1	6.6	1.12	0.094	0.016	10.9	1.8	23.2	3.9		
3																		
4	0.243		0.217	7.0	15	7.5	0	0.1	10.2	5.04	0.017	0.008	3.5	1.7	12.4	6.1		
5	0.49		0.440	14.5	35	8.7	4	0.9	6.8	1.67	0.075	0.018	7.2	1.8	18.3	4.5		
6	0.484		0.432	14.5	51	12.6	3	0.8	6.8	1.69	0.064	0.016	14.0	3.5	17.5	4.3		
7	0.49		0.435	14.5	41	9.9	3	0.7	6.8	1.66	0.072	0.018	7.2	1.8	17.3	4.2		
8	0.475		0.422	14.0	41	10.2	3	0.8	3.3	0.84	0.061	0.015	7.0	1.8	16.7	4.2		
9	0.492		0.439	14.0	46	11.1	4	1.1	6.8	1.66	0.070	0.017	6.9	1.7	17.3	4.2		
10	0.108		0.103	3.5	10	11.3	1	0.9	4.5	4.96	0.013	0.014	1.7	1.9	4.1	4.6		
11	0.15		0.170	5.0	15	12.2	1	1.0	0.2	0.19	0.022	0.018	2.5	2.0	5.7	4.5		
12	0.253		0.221	7.0	20	9.6	2	0.9	3.4	1.61	0.040	0.019	3.5	1.7	7.6	3.6		
13	0.531		0.467	15.0	46	10.3	4	1.0	6.8	1.54	0.070	0.016	7.5	1.7	18.7	4.2		
14	0.53		0.466	14.8	20	4.6	4	0.8	6.8	1.54	0.030	0.007	11.8	2.7	20.4	4.6		
15	0.411		0.326	10.5	51	14.8	3	0.8	6.6	1.93	0.060	0.018	5.2	1.5	14.9	4.4		
16	0.118		0.102	3.3	10	10.3	2	1.6	0.2	0.17	0.010	0.010	1.6	1.6	2.6	2.6		
17	0.221		0.187	5.9	20	11.0	2	1.1	3.4	1.84	0.030	0.016	2.9	1.6	13.4	7.3		
18																		
19	0.5408		0.471	16.0	41	9.0	4	0.9	10.1	2.23	0.079	0.018	8.0	1.8	16.8	3.7		
20	0.469		0.533	15.0	61	15.6	4	0.9	7.0	1.79	0.071	0.018	7.5	1.9	18.6	4.8		
21	0.531		0.419	15.0	56	12.6	2	0.5	10.1	2.28	0.066	0.015	9.3	2.1	21.6	4.9		
22																		
23	0.267		0.245	8.0	30	13.7	1	0.5	3.5	1.57	0.035	0.016	5.0	2.2		0.0		
24																		
25																		
26	0.408		0.340	12.0	46	13.4	4	1.1	6.0	1.76	0.055	0.016	7.5	2.2	12.4	3.6		
27	0.341		0.266	10.0	81	28.5	1	0.5	4.0	1.41	0.049	0.017	6.2	2.2	18.3	6.4		
28	0.537		0.476	15.8	51	11.3	6	1.3	17.3	3.85	0.074	0.017	9.8	2.2	12.7	2.8		
29	0.411		0.341	12.5	25	7.4	2	0.6	3.1	0.91	0.056	0.016	7.8	2.3	25.5	7.4		
30	0.512		0.413	15.5	35	8.3	3	0.7	3.6	0.85	0.071	0.017	9.7	2.3	17.5	4.1		
31																		
Total	10.255	0.000	8.997	301.0	938	281.5	65	19.9	0.0	0.00	154.2	46.4	1.36	0.393	172	49.6	0.0	0.00
Maximum	0.704	0.000	0.618	21.8	81	28.5	6	1.6	0.0	0.00	17.3	5.0	0.09	0.019	14	3.5	0.0	0.00
Minimum	0.108	0.000	0.102	3.3	10	4.6	0	0.1	0.0	0.00	0.2	0.2	0.01	0.007	2	1.5	0.0	0.00
Average	0.410	0.000	0.360	12.0	38	11.3	3	0.8	#DIV/0!	#DIV/0!	6.2	1.9	0.05	0.016	7	2.0	#DIV/0!	#DIV/0!

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME

David A Tyrrell

Shenandoah River - Entire Month

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

Class 1  
1955002813

No. Connections Served: 1604  
Population Served: 4185

Flows and Chemical Dosages

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals							
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor	
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.198		0.149	6.0	51	30.7	1	0.5														
2	0.125		0.048	3.8	15	14.6	2	1.9														
3	0.495		0.367	11.0	30	7.4	4	0.9														
4	0.526		0.473	15.0	5	1.2	2	0.5														
5	0.538		0.480	15.0	20	4.5	4	0.8														
6	0.531		0.481	15.5	46	10.3	2	0.5														
7	0.593		0.521	16.0	5	1.0	2	0.4														
8	0.213		0.198	6.5	10	5.7	1	0.7														
9	0.228		0.190	6.1	20	10.7	1	0.6														
10	0.487		0.429	12.0	10	2.5	2	0.6														
11	0.515		0.462	14.8	15	3.5	3	0.7														
12	0.461		0.407	13.1	20	5.3	2	0.6														
13	0.416		0.370	11.8	15	4.4	2	0.7														
14	0.351		0.305	10.1	15	5.2	2	0.8														
15																						
16																						
17	0.53		0.475	16.0	101	22.9	6	1.4														
18	0.434		0.335	14.0	46	12.6	3	0.8														
19	0.505		0.372	16.5	46	10.8	2	0.6														
20	0.537		0.476	16.5	41	9.1	4	0.9														
21	0.51		0.437	15.5	71		3	0.8														
22	0.203		0.192	6.0	5	3.0	2	0.9														
23	0.285		0.229	7.5	41	17.1	1	0.5														
24																						
25																						
26	0.47		0.389	14.0	91	23.3	2	0.5														
27	0.492		0.394	14.8	35	8.6	3	0.7														
28	0.532		0.476	14.3	35	8.0		4.0														
29	0.243		0.212	6.6	15	7.5	2	1.2														
30	0.123		0.110	3.5	10	9.9	1	0.8														
31	0.183		0.158	5.0	15	10.0	1	0.8														
Total	10.724	0.000	9.135	306.7	831	249.7	62	24.1	0.0	0.00	186.7	60.8	11.49	3.071	120	36.6	0.0	0.00	321.7	94.54	0.0	0.00
Maximum	0.593	0.000	0.521	16.5	101	30.7	6	4.0	0.0	0.00	10.4	5.6	7.06	1.949	10	2.4	0.0	0.00	18.8	4.38	0.0	0.00
Minimum	0.123	0.000	0.048	3.5	5	1.0	1	0.4	0.0	0.00	3.3	0.8	0.02	0.007	0	0.0	0.0	0.00	2.3	2.26	0.0	0.00
Average	0.397	0.000	0.338	11.4	31	9.6	2	0.9	#####	####	6.9	2.3	0.43	0.114	4	1.4	#####	#DIV/0!	11.9	3.50	####	#####

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME

David A Tyrell

Shenandoah River - Entire Month

TITLE: OPERATOR CLASSIFICATION

Class 1

DPOR CERTIFICATION NO.

1955002813



FLOWS AND CHEMICAL DOSAGES

February 2019

No. Connections Served: 1604  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals							
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor	
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.427		0.361	12.0	61	17.1	2	0.6			6.9	1.94	0.060	0.017	2	0.6			8.5	2.4		
2																						
3	0.175		0.156	5.1	0	0.0	0	0.0			3.3	2.26	0.020	0.014	1.0	0.7			5.4	3.7		
4	0.506		0.448	14.2	61	14.4	2	0.6			6.9	1.64	0.070	0.017	2.5	0.6			12.1	2.9		
5	0.535		0.477	15.3	30	6.8	2	0.5			7.0	1.57	0.080	0.018	2.7	0.6			20.9	4.7		
6	0.491		0.419	13.3	30	7.4	3	0.8			10.0	2.43	0.070	0.017	2.3	0.6			9.8	2.4		
7	0.511		0.449	14.4	25	5.9	2	0.6			6.9	1.62	0.070	0.016	2.5	0.6			18.0	4.2		
8	0.36		0.320	10.3	25	8.4	2	0.7			6.7	2.23	0.050	0.017	1.4	0.5			12.8	4.3		
9																						
10																						
11	0.518		0.469	15.5	76	17.6	2	0.6			6.9	1.60	0.071	0.016	5.8	1.3			14.3	3.3		
12	0.545		0.481	15.5	20	4.5	3	0.6			10.1	2.22	0.075	0.016	5.8	1.3			17.5	3.9		
13	0.514		0.456	15.0	56	13.0	4	0.8			6.9	1.61	0.075	0.017	5.6	1.3			15.7	3.7		
14	0.478		0.407	14.0	61	15.3	2	0.5			6.8	1.71	0.075	0.019	5.2	1.3			14.9	3.7		
15	0.349		0.312	10.0	35	12.2	4	1.2			6.6	2.27	0.044	0.015	3.7	1.3						
16	0.281		0.239	8.0	35	15.1	0	0.2			3.5	1.49	0.040	0.017	3.0	1.3			4.6	2.0		
17	0.226		0.189	6.5	25	13.4	2	1.3			3.4	1.80	0.039	0.021	0.9	0.5						
18	0.192		0.045	5.8	25	15.8	2	1.0			3.3	2.06	0.046	0.029	0.8	0.5			114.7	71.6		
19	0.547		0.490	16.0	46	10.0	11	2.3			6.9	1.52	0.082	0.018	2.8	0.6			21.4	4.7		
20	0.412		0.368	12.3	30	8.9	0	0.0			6.8	1.97	0.060	0.017	2.1	0.6			12.9	3.7		
21	0.363		0.319	11.0	25	8.4	3	1.1			6.7	2.21	0.055	0.018	1.9	0.6			58.8	19.4		
22	0.257		0.228	7.5	20	9.5	2	0.9			3.5	1.62	0.039	0.018	1.3	0.6			4.6	2.1		
23																						
24																						
25	0.489		0.368	15.0	35	8.7	4	1.0			6.7	1.64	0.132	0.032	2.5	0.6			18.6	4.5		
26	0.498		0.410	17.0	66	15.9	3	0.8			6.9	1.67	0.070	0.017	3.9	0.9			12.1	2.9		
27	0.489		0.415	15.0	56	13.7	4	0.9			6.8	1.66	0.066	0.016	2.8	0.7			15.2	3.7		
28	0.563		0.499	17.5	56	11.9	4	0.9			6.7	1.43	0.083	0.018	8.7	1.9			17.8	3.8		
29																						
30																						
31																						
Total	9.726	0.000	8.325	286.0	902	253.9	64	17.6			0.0	0.00	146.1	42.2	1.47	0.421			430.5	157.64	0.0	0.00
Maximum	0.563	0.000	0.499	17.5	76	17.6	11	2.3			0.0	0.00	10.1	2.4	0.13	0.032			114.7	71.60	0.0	0.00
Minimum	0.175	0.000	0.045	5.1	0	0.0	0	0.0			0.0	0.00	3.3	1.4	0.02	0.014			4.6	0.00	0.0	0.00
Average	0.423	0.000	0.362	12.4	39	11.0	3	0.8			###	###	6.4	1.8	0.06	0.018			20.5	6.85	###	###

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

David A Tyrrell  
Class 1  
1955002813

Shenandoah River - Entire Month

PRINTED NAME

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals									
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor			
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L		
1	0.466		0.401	14.0	46	11.7	40	10.3			6.8	1.75	0.083	0.021	2	0.6			13.4	3.4				
2																								
3																								
4	0.534		0.461	14.4	35	8.0	5	1.1			6.9	1.55	0.080	0.018	3.4	0.8			19.8	4.5				
5	0.517		0.465	14.8	51	11.8	4	1.0			10.0	2.31	0.070	0.016	5.8	1.3			18.6	4.3				
6	0.548		0.492	15.5	61	13.3	4	1.0			7.0	1.53	0.090	0.020	3.6	0.8			16.7	3.7				
7	0.530		0.471	14.7	56	12.6	4	0.9			10.3	2.33	0.070	0.016	3.4	0.8			16.8	3.8				
8	0.507		0.437	13.3	51	12.0	4	0.9			6.6	1.55	0.070	0.017	3.1	0.7			17.5	4.1				
9	0.242		0.220	6.8	20	10.0	2	1.0			3.4	1.68	0.035	0.017	1.6	0.8			8.8	4.3				
10																								
11	0.477		0.425	14.0	41	10.2	4	1.0			6.9	1.73	0.071	0.018	3.3	0.8			12.1	3.0				
12	0.505		0.439	15.0	46	10.8	4	0.9			6.9	1.64	0.071	0.017	1.8	0.4			19.8	4.7				
13	0.523		0.465	15.0	30	7.0	4	0.9			10.3	2.36	0.071	0.016	1.8	0.4			17.0	3.9				
14	0.461		0.409	13.0	15	4.0	4	1.1			6.8	1.77	0.066	0.017	1.5	0.4			16.0	4.2				
15	0.395		0.354	12.5	41	12.3	2	0.7			0.3	0.10	0.040	0.012	1.5	0.4			13.9	4.2				
16																								
17																								
18	0.515		0.459	15.3	35	8.3	5	1.2			6.8	1.59	0.051	0.012	1.8	0.4			21.1	4.9				
19	0.523		0.467	15.2	35	8.1	6	1.3			10.0	2.29	0.076	0.017	1.8	0.4			20.6	4.7				
20	0.488		0.419	14.5	30	7.5	5	1.2			6.9	1.69	0.072	0.018	2.5	0.6			10.8	2.7				
21	0.550		0.483	16.5	46	9.9	4	1.0			6.9	1.51	0.075	0.016	2.9	0.6			22.1	4.8				
22	0.326		0.295	9.5	46	16.8	3	1.1			6.6	2.43	0.049	0.018	1.7	0.6			11.6	4.3				
23																								
24																								
25	0.441		0.412	14.5	76	20.7	4	1.1			6.9	1.87	0.070	0.019	2.5	0.7			17.0	4.6				
26	0.484		0.423	14.5	56	13.8	2	0.4			6.8	1.69	0.064	0.016	2.5	0.6			17.0	4.2				
27	0.477		0.420	14.0	51	12.7	4	1.0			6.9	1.73	0.072	0.018	2.5	0.6			16.0	4.0				
28	0.506		0.444	15.0	46	10.8	5	1.2			10.0	2.37	0.079	0.019	2.7	0.6			17.5	4.1				
29	0.504		0.450	15.0	35	8.4	2	0.4			7.1	1.68	0.070	0.017	2.6	0.6			17.5	4.2				
30																								
31																								
Total	10.519	0.000	9.311	306.8	948	240.8	122	30.7			0.0	0.00	157.1	39.2	1.49	0.375	57	14.2	0.0	0.00	361.6	90.72	0.0	0.00
Maximum	0.550	0.000	0.492	16.5	76	20.7	40	10.3			0.0	0.00	10.3	2.4	0.09	0.021	6	1.3	0.0	0.00	22.1	4.92	0.0	0.00
Minimum	0.242	0.000	0.220	6.8	15	4.0	2	0.4			0.0	0.00	0.3	0.1	0.04	0.012	1	0.4	0.0	0.00	8.8	2.66	0.0	0.00
Average	0.478	0.000	0.423	13.9	43	10.9	6	1.4			#DIV/0!	#DIV/0!	7.1	1.8	0.07	0.017	3	0.6	#DIV/0!	#DIV/0!	16.4	4.12	#DIV/0!	#DIV/0!

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

David A Tyrrell

Shenandoah River - Entire Month

PRINTED NAME

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

Class 1  
1955002813

No. Connections Served: 1690  
Population Served: 4185

Flows and Chemical Dosages

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals					Finished Water Chemicals						
					Alum	Carbon	Chlorine	Fluoride	Polymer	KMnO4	Soda Ash	Chlorine	Corr Inhibitor			
	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.435		0.376	12.0	35	9.8	4	1.0	3.3	0.91	0.060	0.017	2	0.6	13.2	3.6
2	0.539		0.477	15.2	51	11.3	4	1.0	10.3	2.29	0.080	0.018	2.7	0.6	13.6	3.0
3	0.541		0.479	15.3	46	10.1	4	1.0	6.6	1.46	0.080	0.018	2.7	0.6	14.2	3.1
4	0.530		0.473	15.1	46	10.3	7	1.5	6.9	1.56	0.080	0.018	2.6	0.6	13.1	3.0
5	0.496		0.442	14.1	46	11.0	4	0.9	6.9	1.67	0.070	0.017	2.5	0.6	13.7	3.3
6																
7																
8	0.535		0.477	15.5	46	10.2	4	0.8	9.9	2.22	0.084	0.019	2.7	0.6	15.7	3.5
9	0.496		0.434	14.5	10	2.5	7	1.6	6.9	1.67	0.071	0.017	2.5	0.6	12.7	3.1
10	0.537		0.472	15.5	41	9.1	5	1.2	6.9	1.54	0.088	0.020	2.7	0.6	13.4	3.0
11	0.539		0.480	15.5	46	10.2	3	0.6	10.0	2.23	0.079	0.018	2.7	0.6	13.9	3.1
12	0.260		0.243	7.5	51	23.3	2	0.7	3.4	1.57	0.040	0.018	1.3	0.6	7.5	3.4
13																
14																
15	0.526		0.466	15.5	15	3.5	5	1.0	6.9	1.57	0.083	0.019	3.6	0.8	13.4	3.0
16	0.410		0.344	12.8	86	25.2	3	1.0	6.8	1.98	0.063	0.018	3.0	0.9	7.5	2.2
17	0.517		0.464	15.5	41	9.4	4	1.0	6.9	1.61	0.079	0.018	3.6	0.8	19.1	4.4
18	0.520		0.436	15.3	41	9.3	4	1.0	10.0	2.31	0.077	0.018	3.6	0.8	29.4	6.8
19	0.469		0.418	14.0	10	2.6	4	1.0	6.9	1.76	0.069	0.018	3.3	0.8	17.5	4.5
20																
21																
22	0.450		0.400	13.5	51	13.5	5	1.3	6.9	1.83	0.105	0.028	3.2	0.8	18.9	5.0
23	0.460		0.421	14.0	35	9.3	6	1.7	6.8	1.77	0.052	0.014	3.3	0.9	9.3	2.4
24	0.465		0.401	13.5	51	13.1	6	1.5	6.9	1.77	0.079	0.020	3.2	0.8	20.1	5.2
25	0.463		0.407	13.5	41	10.5	4	0.9	6.8	1.77	0.074	0.019	3.2	0.8	15.7	4.1
26	0.477		0.430	14.0	41	10.2	4	1.1	6.7	1.69	0.061	0.015	3.3	0.8	15.7	4.0
27	0.194		0.162	6.0	15	9.4	1	0.7	3.5	2.14	0.039	0.024	1.1	0.7	4.4	2.7
28	0.136		0.128	4.5	15	13.4	1	1.1	3.4	3.02	0.052	0.046	1.1	0.9	6.7	5.9
29																
30	0.383		0.336	10.7	61	19.0	4	1.1	3.2	1.00	0.060	0.019	2.5	0.8	8.0	2.5
31																
Total	10.378	0.000	9.166	302.9	918	256.2	94	24.7	0.0	0.00	152.8	41.3	1.62	0.455	62	16.8
Maximum	0.541	0.000	0.480	15.5	86	25.2	7	1.7	0.0	0.00	10.3	3.0	0.11	0.046	4	0.9
Minimum	0.136	0.000	0.128	4.5	10	2.5	1	0.6	0.0	0.00	3.2	0.9	0.04	0.014	1	0.6
Average	0.451	0.000	0.399	13.2	40	11.1	4	1.1	#DIV/0!	#DIV/0!	6.6	1.8	0.07	0.020	3	0.7

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE) RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME: David A Tyrrell  
TITLE: OPERATOR CLASSIFICATION: Class 1  
DPOR CERTIFICATION NO.: 1955002813

Shenandoah River - Entire Month

Flows and Chemical Dosages

July 2019.000

No. Connections Served: 1690  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals									
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor			
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L		
1	0.540		0.494	16.0	81	18.0	4	0.8			6.6	1.47	0.075	0.017	5	1.0			17.3	3.8				
2	0.537		0.479	15.5	46	10.2	4	0.9			3.6	0.80	0.097	0.022	4.5	1.0			25.5	5.7				
3	0.529		0.479	15.5	66	14.9	5	1.1			6.6	1.50	0.079	0.018	4.5	1.0			23.4	5.3				
4																								
5																								
6	0.297		0.263	8.5	81	32.8	1	0.5			1.0	0.40	0.044	0.018	2.5	1.0			10.9	4.4				
7	0.240		0.201	8.5	30	15.0	8	3.8			3.3	1.65	0.013	0.007	1.9	1.0			10.6	5.3				
8	0.484		0.464	15.0	41	10.1	4	1.0			3.5	0.78	0.075	0.019	4.4	1.1			23.5	5.8				
9	0.439		0.386	12.5	20	5.5	4	1.0			6.5	1.78	0.039	0.011	3.7	1.0			17.8	4.9				
10	0.518		0.464	15.0	66	15.3	4	1.0			3.5	0.80	0.077	0.018	4.4	1.0			22.7	5.3				
11	0.510		0.433	14.0	61	14.3	4	0.9			3.5	0.83	0.077	0.018	4.1	1.0			24.2	5.7				
12	0.540		0.487	15.8	81	18.0	4	1.0			6.6	1.47	0.077	0.017	4.6	1.0			23.4	5.2				
13	0.342		0.324	10.5	41	14.2	3	0.9			3.4	1.19	0.055	0.019	3.1	1.1			10.3	3.6				
14	0.353		0.301	9.8	46	15.5	3	1.1			3.4	1.15	0.060	0.020	2.9	1.0			19.8	6.7				
15	0.340		0.281	9.1	56	19.7	3	1.1			3.4	1.20	0.050	0.018	2.7	1.0			16.2	5.7				
16	0.509		0.463	15.0	46	10.7	4	0.9			3.5	0.83	0.035	0.008	4.4	1.0			22.9	5.4				
17	0.519		0.463	15.0	56	12.9	4	0.8			3.5	0.81	0.074	0.017	1.5	0.3			23.7	5.5				
18	0.411		0.432	14.5	51	14.8	3	0.9			6.8	1.98	0.074	0.022	4.2	1.2			20.6	6.0				
19	0.515		0.448	14.5	56	13.0	6	1.5			3.1	0.71	0.070	0.016	3.5	0.8			21.2	4.9				
20	0.216		0.216	7.0	35	19.7	3	1.6			3.6	2.02	0.030	0.017	1.7	0.9			12.1	6.7				
21	0.162		0.160	5.2	5	3.8	0	0.3			1.0	0.74	0.020	0.015	1.2	0.9			11.3	8.4				
22	0.993		0.556	18.0	71	14.4	6	1.1			3.5	0.72	0.090	0.018	5.3	1.1			31.5	6.4				
23	0.793		0.718	23.3	132	19.9	6	0.8			10.0	1.52	0.120	0.018	6.8	1.0			34.9	5.3				
24	0.586		0.409	13.3	81	16.6	5	1.0			10.2	2.09	0.090	0.018	3.9	0.8			20.7	4.2				
25	0.575		0.538	17.4	76	15.9	4	0.9			7.0	1.46	0.080	0.017	5.1	1.1			27.0	5.6				
26	0.300		0.273	8.8	35	14.2	3	1.1			1.0	0.40	0.020	0.008	2.6	1.0			13.8	5.5				
27	0.272		0.194	6.3	30	13.4	2	0.9			3.4	1.50	0.040	0.018	1.8	0.8			10.6	4.7				
28																								
29	0.592		0.541	17.5	71	14.4	4	0.9			6.7	1.36	0.097	0.020	5.1	1.0			27.0	5.5				
30	0.607		0.556	18.0	61	12.0	4	0.8			6.7	1.33	0.086	0.017	5.3	1.0			31.5	6.2				
31	0.429		0.402	13.0	46	12.7	3	0.8			3.5	0.99	0.064	0.018	3.8	1.1			17.5	4.9				
Total	12.748	0.000	11.424	370.3	1566	411.8	107	29.5			0.0	0.00	128.7	33.6	1.81	0.466	104	27.3	0.0	0.00	571.7	152.56	0.0	0.00
Maximum	0.793	0.000	0.718	23.3	132	32.8	8	3.8			0.0	0.00	10.2	2.1	0.12	0.022	7	1.2	0.0	0.00	34.9	8.39	0.0	0.00
Minimum	0.162	0.000	0.160	5.2	5	3.8	0	0.3			0.0	0.00	1.0	0.4	0.01	0.007	1	0.3	0.0	0.00	10.3	3.61	0.0	0.00
Average	0.455	0.000	0.408	13.2	56	14.7	4	1.1			#DIV/0!	#DIV/0!	4.6	1.2	0.06	0.017	4	1.0	#DIV/0!	#DIV/0!	20.4	5.45	#DIV/0!	#DIV/0!

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE) RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME: David A Tyrrell  
 TITLE: OPERATOR CLASSIFICATION: Class 1  
 DPOR CERTIFICATION NO.: 1955002813

Shenandoah River - Entire Month

Flows and Chemical Dosages

August 2019.000

No. Connections Served: 1690  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals					Finished Water Chemicals												
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor	
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.520		0.494	16.0	66	15.2	3	0.7	6.7	1.54	0.079	0.018	4	0.9	2.6	0.6						
2	0.532		0.479	15.5	51	11.4	3	0.7	3.6	0.81	0.126	0.028	3.6	0.8	20.2	4.6						
3																						
4																						
5	0.527		0.479	15.5	56	12.7	4	1.0	6.6	1.49	0.082	0.019	3.6	0.8	22.7	5.2						
6	0.372		0.332	10.8	35	11.4	3	1.0	3.4	1.11	0.044	0.014	2.8	0.9	23.0	7.4						
7	0.534		0.515	16.0	46	10.2	4	1.0	7.0	1.57	0.084	0.019	4.2	0.9	13.8	3.1						
8	0.383		0.355	11.5	46	14.3	2	0.6	3.4	1.08	0.053	0.017	3.0	1.0	12.9	4.0						
9	0.692		0.664	21.5	71	12.3	6	1.0	6.5	1.13	0.166	0.029	5.7	1.0	29.6	5.1						
10	0.373		0.340	11.0	35	11.4	3	0.9	3.4	1.11	0.054	0.017	2.9	0.9	12.0	3.9						
11	0.291		0.216	7.0	25	10.5	4	1.6	3.7	1.52	0.035	0.014	1.8	0.8	7.0	2.9						
12	0.473		0.340	11.0	61	15.4	4	1.0	3.3	0.83	0.075	0.019	2.9	0.7	12.0	3.0						
13	0.554		0.494	16.0	56	12.1	4	1.0	6.7	1.44	0.079	0.017	4.2	0.9	14.0	3.0						
14	0.552		0.494	16.0	61	13.2	5	1.1	3.6	0.78	0.080	0.017	4.2	0.9	14.0	3.0						
15	0.546		0.487	15.5	51	11.1	3	0.7	6.7	1.47	0.079	0.017	4.1	0.9	13.5	3.0						
16	0.552		0.494	16.0	56	12.1	4	0.9	6.7	1.45	0.040	0.009	4.2	0.9	14.0	3.0						
17	0.232		0.201	6.5	30	15.7	2	0.9	0.2	0.11	0.033	0.017	1.7	0.9	7.0	3.6						
18																						
19	0.500		0.432	14.0	46	10.9	3	0.8	6.9	1.65	0.077	0.018	3.7	0.9	14.0	3.4						
20	0.499		0.494	16.0	51	12.2	4	1.0	3.2	0.77	0.070	0.017	4.2	1.0	14.0	3.4						
21	0.509		0.448	14.5	46	10.7	3	0.7	7.0	1.65	0.079	0.019	3.8	0.9	14.0	3.3						
22	0.502		0.432	14.0	56	13.3	4	1.0	3.2	0.76	0.074	0.018	3.7	0.9	14.0	3.3						
23	0.453		0.432	14.0	41	10.7	4	1.0	3.5	0.92	0.061	0.016	3.7	1.0	14.0	3.7						
24																						
25																						
26	0.489		0.430	13.9	51	12.5	4	1.0	6.6	1.62	0.068	0.017	3.7	0.9	20.1	4.9						
27	0.537		0.464	15.0	56	12.5	4	0.9	3.6	0.81	0.073	0.016	4.0	0.9	20.1	4.5						
28	0.549		0.461	14.9	46	10.0	4	1.0	6.7	1.46	0.040	0.009	3.9	0.9	20.2	4.4						
29	0.546		0.482	15.6	51	11.1	5	1.1	3.5	0.78	0.060	0.018	4.1	0.9	18.0	4.0						
30	0.405		0.355	11.5	46	13.5	4	1.2	6.5	1.93	0.060	0.018	3.0	0.9	17.9	5.3						
31																						
Total	12.122	0.000	10.815	349.1	1232	306.6	94	23.5	0.0	0.00	122.3	29.8	1.79	0.437	91	22.4	0.0	0.00	384.8	95.67	0.0	0.00
Maximum	0.692	0.000	0.664	21.5	71	15.7	6	1.6	0.0	0.00	7.0	1.9	0.17	0.029	6	1.0	0.0	0.00	29.6	7.42	0.0	0.00
Minimum	0.232	0.000	0.201	6.5	25	10.0	2	0.6	0.0	0.00	0.2	0.1	0.03	0.009	2	0.7	0.0	0.00	2.6	0.61	0.0	0.00
Average	0.485	0.000	0.433	14.0	49	12.3	4	0.9	#DIV/0!	#DIV/0!	4.9	1.2	0.07	0.017	4	0.9	#DIV/0!	#DIV/0!	15.4	3.83	#DIV/0!	#DIV/0!

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE) RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

David A Tyrrell  
Shenandoah River - Entire Month

David A Tyrrell  
Class 1  
1955002813

PRINTED NAME  
TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

FLOWS AND CHEMICAL DOSAGES

September 2019

No. Connectors Served: 1690  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals					Finished Water Chemicals						
					Alum	Carbon	Chlorine	Fluoride	Polymer	KMnO4	Soda Ash	Chlorine	Corr Inhibitor			
	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.101		0.093	3.0	10	12.0	1	0.9	0.1	0.12	0.013	0.015	1	0.9	11.2	13.3
2																
3	0.543		0.479	15.5	51	11.2	4	1.0	7.0	1.55	0.079	0.018	4.1	0.9	2.1	0.5
4	0.551		0.494	16.0	51	11.0	4	0.9	3.3	0.71	0.079	0.017	4.2	0.9	24.7	5.4
5	0.555		0.494	16.0	51	11.0	2	0.4	6.7	1.45	0.079	0.017	4.2	0.9	22.4	4.8
6	0.561		0.494	16.0	46	9.8	3	0.6	3.6	0.77	0.084	0.018	4.2	0.9	22.4	4.8
7																
8																
9	0.546		0.480	15.5	46	10.0	2	0.4	6.7	1.47	0.079	0.017	4.1	0.9	4.5	1.0
10	0.469		0.409	13.3	41	10.4	2	0.6	6.9	1.77	0.071	0.018	3.5	0.9	13.5	3.4
11	0.566		0.494	0.2	46	9.7	3	0.7	3.2	0.68	0.079	0.017	4.2	0.9	24.7	5.2
12	0.518		0.443	14.3	41	9.4	4	0.9	6.7	1.54	0.080	0.019	3.8	0.9	17.9	4.2
13	0.517		0.479	15.5	41	9.4	4	0.8	3.6	0.83	0.074	0.017	4.1	0.9	15.0	3.5
14	0.248		0.216	7.0	25	12.3	3	1.3	3.3	1.60	0.036	0.017	1.9	0.9	13.4	6.5
15																
16	0.555		0.494	16.0	46	9.9	3	0.7	7.0	1.52	0.077	0.017	4.2	0.9	49.3	10.6
17	0.407		0.371	12.0	25	7.5	3	0.9	3.1	0.92	0.064	0.019	3.2	0.9	15.7	4.6
18	0.363		0.325	10.5	30	10.0	4	1.3	3.4	1.14	0.051	0.017	2.8	0.9	15.7	5.2
19	0.542		0.494	16.0	41	9.0	4	0.8	3.6	0.79	0.079	0.018	4.2	0.9	17.9	4.0
20	0.538		0.494	16.0	46	10.2	4	0.9	6.6	1.48	0.075	0.017	4.2	0.9	33.6	7.5
21																
22																
23	0.538		0.494	16.0	46	10.2	4	0.8	10.6	2.36	0.123	0.027	3.6	0.8	29.1	6.5
24	0.518		0.494	16.0	46	10.6	5	1.1	6.7	1.55	0.092	0.021	4.2	1.0	17.9	4.2
25	0.523		0.494	16.0	41	9.3	8	1.8	6.7	1.54	0.074	0.017	4.2	1.0	26.9	6.2
26	0.525		0.494	16.0	30	6.9	8	1.7	3.5	0.81	0.088	0.020	4.2	1.0	26.9	6.1
27	0.529		0.494	16.0	56	12.6	2	0.5	19.7	4.47	0.066	0.015	4.2	1.0	26.9	6.1
28	0.223		0.216	7.0	15	8.2	1	0.6	9.6	5.16	0.044	0.024	1.8	1.0	12.2	6.6
29	0.184		0.185	6.0	10	6.6	4	2.3	0.1	0.07	0.026	0.017	1.6	1.0	12.2	8.0
30																
31																
Total	10.620	0.000	9.625	295.7	877	227.0	81	22.3	0.0	0.00	131.8	34.3	1.61	0.418	82	21.3
Maximum	0.566	0.000	0.494	16.0	56	12.6	8	2.3	0.0	0.00	19.7	5.2	0.12	0.027	4	1.0
Minimum	0.101	0.000	0.093	0.2	10	6.6	1	0.4	0.0	0.00	0.1	0.1	0.01	0.015	1	0.8
Average	0.462	0.000	0.418	12.9	38	9.9	4	1.0	#DIV/0!	#DIV/0!	5.7	1.5	0.07	0.018	4	0.9

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE) \_\_\_\_\_ (SOURCE/DATES)

PRINTED NAME  
David A Tyrrell  
Class 1  
1955002813

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)  
Shenandoah River - Entire Month

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

FLOWS AND CHEMICAL DOSAGES

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals										
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor				
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L			
1																									
2	0.642		0.397	12.8	35	6.6	6	1.0				3.5	0.65	0.070	0.013	3.4	0.6			19.4	3.6				
3	0.569		0.489	15.8	46	9.6	0	0.1				6.7	1.41	0.090	0.019	4.2	0.9			22.6	4.8				
4	0.525		0.505	16.3	35	8.1	1	0.2				3.6	0.82	0.070	0.016	3.8	0.9			19.4	4.4				
5	0.236		0.206	6.7	20	10.3	1	0.6				3.3	1.68	0.040	0.020	1.6	0.8			11.8	6.0				
6	0.184		0.155	5.0	15	9.9	1	0.8				3.2	2.11	0.026	0.017	1.2	0.8			8.6	5.6				
7	0.523		0.479	15.5	35	8.1	3	0.7				3.6	0.83	0.075	0.017	3.6	0.8			5.4	1.2				
8	0.132		0.124	4.0	10	9.2	1	1.1				3.5	3.19	0.018	0.016	0.9	0.9			19.4	17.6				
9	0.557		0.510	16.5	41	8.7	3	0.6				3.3	0.71	0.079	0.017	3.9	0.8			20.4	4.4				
10	0.541		0.525	17.0	41	9.0	36	8.0				6.7	1.48	0.079	0.018	4.0	0.9			25.8	5.7				
11	0.355		0.310	16.5	41	8.8	4	0.8				7.0	1.52	0.075	0.016	3.9	0.8			18.3	4.0				
12	0.292		0.263	8.5	25	10.4	2	1.0				0.3	0.13	0.040	0.016	2.0	0.8			37.7	15.5				
13	0.234		0.216	7.0	15	7.8	2	0.8				3.3	1.67	0.031	0.016	0.6	0.3			12.0	6.1				
14																									
15	0.529		0.494	16.0	41	9.2	4	0.8				7.0	1.58	0.071	0.016	3.7	0.8			30.0	6.8				
16	0.537		0.479	15.5	41	9.1	4	0.8				3.3	0.73	0.075	0.017	3.6	0.8			21.0	4.7				
17	0.539		0.479	15.5	35	7.9	4	0.8				6.7	1.48	0.074	0.016	3.6	0.8			21.0	4.7				
18	0.535		0.479	15.5	35	8.0	4	0.9				3.6	0.80	0.071	0.016	3.6	0.8			20.0	4.5				
19	0.308		0.278	9.0	25	9.9	2	0.8				3.4	1.31	0.039	0.015	2.1	0.8			11.0	4.3				
20																									
21	0.502		0.464	15.0	35	8.5	4	1.0				6.9	1.66	0.066	0.016	3.5	0.8			32.7	7.8				
22	0.455		0.464	15.0	35	9.4	4	0.9				9.4	2.48	0.070	0.018	3.3	0.9			11.8	3.1				
23	0.445		0.433	14.0	35	9.6	3	0.8				3.6	0.96	0.070	0.019	3.3	0.9			10.8	2.9				
24	0.459		0.479	15.5	30	7.9	3	0.8				6.6	1.72	0.057	0.015	3.4	0.9			4.3	1.1				
25	0.354		0.340	12.0	25	8.6	4	1.2				6.8	2.29	0.039	0.013	2.8	0.9			18.3	6.2				
26																									
27																									
28	0.479		0.408	13.2	41	10.2	4	1.0				3.5	0.89	0.070	0.018	3.1	0.8			18.1	4.5				
29	0.512		0.445	14.4	35	8.3	4	0.9				6.6	1.55	0.070	0.016	3.4	0.8			19.4	4.5				
30	0.491		0.440	12.3	35	8.7	3	0.7				3.5	0.85	0.070	0.017	2.9	0.7			18.3	4.5				
31	0.489		0.434	13.7	35	8.7	3	0.7				3.5	0.86	0.070	0.017	3.2	0.8			17.2	4.2				
Total	11.624	0.000	10.494	338.2	847	230.3	108	27.9				0.0	0.00	122.2	35.3	1.60	0.431	79	20.9	0.0	0.00	474.7	142.79	0.0	0.00
Maximum	0.642	0.000	0.525	17.0	46	10.4	36	8.0				0.0	0.00	9.4	3.2	0.09	0.020	4	0.9	0.0	0.00	37.7	17.62	0.0	0.00
Minimum	0.132	0.000	0.124	4.0	10	6.6	0	0.1				0.0	0.00	0.3	0.1	0.02	0.013	1	0.3	0.0	0.00	4.3	1.12	0.0	0.00
Average	0.447	0.000	0.404	13.0	33	8.9	4	1.1				#DIV/0!	#DIV/0!	4.7	1.4	0.06	0.017	3	0.8	#DIV/0!	#DIV/0!	18.3	5.49	#DIV/0!	#DIV/0!

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME

David A Tyrrell

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

Class 1  
1955002813

Shenandoah River - Entire Month



Flows and Chemical Dosages

December 2019

No. Connections Served: 1690  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals					Finished Water Chemicals													
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor		
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	
2	0.516		0.440	15.5	41	9.4	3	0.7				6.6	1.54	4.851	1.127	4.1	1.0			17.2	4.0		
3	0.601		0.531	17.5	41	8.1	3	0.6				7.0	1.40	0.071	0.014	4.6	0.9			16.1	3.2		
4	0.626		0.539	18.5	41	7.8	3	0.5				3.3	0.63	0.079	0.015	4.9	0.9			20.4	3.9		
5	0.559		0.482	17.5	41	8.7	3	0.7				3.3	0.70	0.088	0.019	4.6	1.0			18.3	3.9		
6	0.374		0.519	12.0	41	13.0	7	2.2				7.0	2.23	0.071	0.023	3.2	1.0			15.1	4.8		
7	0.277		0.235	8.0	15	6.6	2	0.7				3.3	1.44	0.035	0.015	0.9	0.4			8.6	3.7		
9	0.460		0.399	11.0	35	9.2	3	0.7				3.4	0.89	0.062	0.016	1.3	0.3			14.0	3.6		
10	0.558		0.484	16.0	41	8.7	4	0.8				6.6	1.43	0.071	0.015	1.9	0.4			15.1	3.2		
11	0.541		0.472	15.0	41	9.0	4	0.8				3.6	0.79	0.071	0.016	1.8	0.4			14.0	3.1		
12	0.540		0.474	15.0	41	9.1	5	1.1				6.9	1.54	0.034	0.008	1.8	0.4			15.1	3.3		
13	0.540		0.468	15.0	35	7.9	4	0.8				3.2	0.71	0.066	0.015	1.8	0.4			17.2	3.8		
14																							
15	0.238		0.207	6.5	20	10.2	1	0.7				3.6	1.81	0.028	0.014	0.8	0.4			6.5	3.2		
16	0.448		0.361	13.3	35	9.5	2	0.6				3.1	0.84	0.055	0.015	1.6	0.4			9.7	2.6		
17	0.396		0.348	13.0	25	7.7	2	0.7				3.4	1.03	0.048	0.015	1.5	0.5			11.8	3.6		
18	0.477		0.415	14.0	35	8.9	3	0.8				3.5	0.87	0.061	0.015	1.6	0.4			11.8	3.0		
19	0.535		0.467	14.0	30	6.8	4	0.8				3.6	0.80	0.061	0.014	1.6	0.4			10.8	2.4		
20	0.201		0.296	13.0	25	15.1	3	1.7				3.4	2.00	0.070	0.042	1.5	0.9			10.8	6.4		
21	0.169		0.149	5.0	15	10.8	1	0.9				3.3	2.31	0.035	0.025	0.6	0.4			7.5	5.3		
23	0.498		0.427	13.3	35	8.5	4	0.9				3.5	0.84	0.060	0.014	1.6	0.4			15.0	3.6		
24																							
25																							
26	0.513		0.461	14.4	35	8.3	3	0.8				6.6	1.54	0.060	0.014	1.7	0.4			16.1	3.8		
27	0.542		0.482	15.2	46	10.1	3	0.8				3.5	0.77	0.070	0.015	1.8	0.4			15.0	3.3		
28	0.224		0.196	6.1	10	5.4	2	0.9				3.3	1.77	0.030	0.016	0.7	0.4			6.5	3.5		
29	0.148		0.128	4.0	10	8.2	2	1.3				0.1	0.11	0.015	0.013	0.5	0.4			4.3	3.5		
30	0.470		0.415	15.0	35	9.0	2	0.6				3.5	0.88	0.057	0.015	1.6	0.4			14.0	3.6		
31	0.531		0.467	15.5	41	9.2	3	0.7				6.6	1.49	0.071	0.016	1.8	0.4			14.0	3.2		
Total	10.983	0.000	9.860	323.2	812	225.3	75	21.7	0.0	0.00	105.2	30.4	6.22	1.524	50	13.2	0.0	0.00	324.8	91.70	0.0	0.00	
Maximum	0.626	0.000	0.539	18.5	46	15.1	7	2.2	0.0	0.00	7.0	2.3	4.85	1.127	5	1.0	0.0	0.00	20.4	6.41	0.0	0.00	
Minimum	0.148	0.000	0.128	4.0	10	5.4	1	0.5	0.0	0.00	0.1	0.1	0.02	0.008	0	0.3	0.0	0.00	4.3	2.41	0.0	0.00	
Average	0.439	0.000	0.394	12.9	32	9.0	3	0.9	#DIV/0!	#DIV/0!	4.2	1.2	0.25	0.051	2	0.5	#DIV/0!	#DIV/0!	13.0	3.67	#DIV/0!	#DIV/0!	

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE) RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME: David A Tyrell

TITLE: OPERATOR CLASSIFICATION: Class 1

DPOR CERTIFICATION NO.: 1955002813

Shenandoah River - Entire Month

Flows and Chemical Dosages

January 2020.000

No. Connections Served: 1690  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals					Finished Water Chemicals													
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor		
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	
1																							
2	0.541		0.480	16.0	41	9.0	2	0.4															
3	0.543		0.480	15.5	41	9.0	4	0.8															
4	0.311		0.279	9.0	20	7.8	0	0.2															
5	0.196		0.165	5.0	15	9.3	1	0.7															
6	0.512		0.456	15.0	35	8.3	3	0.7															
7	0.535		0.473	15.0	41	9.1	4	0.8															
8	0.542		0.482	15.0	41	9.1	3	0.7															
9	0.530		0.477	15.0	35	8.0	4	0.9															
10	0.265		0.236	7.5	15	6.9	2	0.7															
11																							
12																							
13	0.500		0.423	14.8	46	10.9	3	0.7															
14	0.490		0.470	15.3	35	8.7	4	1.1															
15	0.523		0.467	15.8	41	9.3	3	0.6															
16	0.513		0.463	15.0	46	10.7	5	1.1															
17																							
18	0.179		0.156	6.0	10	6.8	0	0.3															
19	0.153		0.135	4.5	15	11.9	1	0.5															
20																							
21	0.510		0.449	15.0	35	8.3	3	0.8															
22	0.516		0.458	15.5	41	9.4	3	0.7															
23	0.528		0.461	15.5	35	8.1	3	0.6															
24	0.515		0.449	14.0	35	8.3	3	0.7															
25	0.326		0.286	9.0	25	9.3	2	0.7															
26																							
27	0.501		0.440	15.5	46	10.9	3	0.8															
28	0.499		0.411	15.5	71	17.1	3	0.8															
29	0.514		0.463	16.0	66	15.4	4	0.9															
30	0.495		0.442	16.0	51	12.3	3	0.7															
31	0.516		0.459	16.0	46	10.6	2	0.6															
Total	11.254	0.000	9.961	332.3	928	244.4	68	17.5	0.0	0.00	105.6	27.1	1.38	0.363	45	13.6	0.0	0.00	298.0	78.18	0.0	0.00	
Maximum	0.543	0.000	0.482	16.0	71	17.1	5	1.1	0.0	0.00	9.4	2.1	0.07	0.017	6	3.4	0.0	0.00	16.1	3.91	0.0	0.00	
Minimum	0.153	0.000	0.135	4.5	10	6.8	0	0.2	0.0	0.00	0.0	0.0	0.0	0.02	0.009	1	0.4	0.0	0.00	2.2	1.68	0.0	0.00
Average	0.450	0.000	0.398	13.3	37	9.8	3	0.7	#DIV/0!	#DIV/0!	4.2	1.1	0.06	0.015	2	0.5	#DIV/0!	#DIV/0!	11.9	3.13	#DIV/0!	#DIV/0!	

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE) \_\_\_\_\_ RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES) \_\_\_\_\_

PRINTED NAME: David A Tyrell  
 TITLE: OPERATOR CLASSIFICATION: Class 1  
 DPOR CERTIFICATION NO.: 1955002813  
 \_\_\_\_\_  
 Shenandoah River - Entire Month

Flows and Chemical Dosages

march 2018.000

*mark 2020*

No. Connections Served: 1690  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals					Finished Water Chemicals												
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor	
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.417		0.342	12.0	30	8.8	2	0.5	3.6	1.03	0.046	0.013	2	0.7			9.7	2.8				
2	0.517		0.449	15.0	30	7.1	2	0.5	4.8	1.10	0.055	0.013	2.9	0.7			11.8	2.7				
3	0.520		0.453	15.0	35	8.2	4	0.8	4.6	1.07	0.029	0.007	2.9	0.7			11.8	2.7				
4	0.269		0.229	8.0	20	9.0	1	0.4	2.4	1.06	0.022	0.010	1.5	0.7			7.5	3.3				
5	0.245		0.212	7.0	20	9.9	1	0.6	2.1	1.05	0.026	0.013	1.3	0.7			4.3	2.1				
6	0.504		0.430	15.0	35	8.4	2	0.6	4.6	1.10	0.055	0.013	2.9	0.7			11.8	2.8				
7	0.479		0.408	14.0	30	7.6	2	0.6	3.6	1.10	0.055	0.013	2.7	0.7			10.8	2.7				
8	0.521		0.449	15.0	30	7.0	3	0.7	4.8	1.10	0.073	0.017	3.3	0.8			12.9	2.9				
9	0.382		0.339	11.0	20	6.4	2	0.7	3.6	1.12	0.053	0.017	2.4	0.8			8.6	2.7				
10	0.468		0.406	13.0	25	6.5	2	0.6	7.7	1.96	0.062	0.016	2.9	0.7			11.8	3.0				
11	0.210		0.183	6.3	15	8.7	1	0.6	1.5	0.86	0.026	0.015	1.4	0.8			4.3	2.5				
12	0.205		0.181	6.0	15	8.9	1	0.7	1.3	0.76	0.030	0.018	1.3	0.8			5.4	3.1				
13	0.496		0.429	14.0	25	6.1	1	0.3	4.5	1.08	0.055	0.013	3.1	0.7			11.8	2.9				
14	0.526		0.458	15.0	35	8.1	3	0.7	4.8	1.10	0.073	0.017	3.3	0.8			12.9	2.9				
15	0.505		0.440	14.0	30	7.2	4	1.0	4.4	1.04	0.033	0.008	3.1	0.7			14.0	3.3				
16	0.393		0.173	5.0	35	10.8	2	0.5	3.8	1.16	0.053	0.016	1.1	0.3			6.5	2.0				
17	0.515		0.433	14.0	0	0.0	2	0.6	4.5	1.06	0.066	0.015	3.4	0.8			15.1	3.5				
18	0.180		0.141	5.5	0	0.0	1	0.5	5.0	3.34	0.026	0.018	1.4	0.9			4.3	2.9				
19	0.221		0.193	6.5	0	0.0	2	0.9	1.8	0.98	0.026	0.014	1.6	0.9			7.5	4.1				
20	0.494		0.345	11.0	41	9.8	3	0.7	8.1	1.97	0.062	0.015	3.2	0.8			11.8	2.9				
21	0.526		0.451	15.0	46	10.4	3	0.6	1.2	0.26	0.034	0.008	4.4	1.0			12.9	2.9				
22	0.518		0.438	14.0	51	11.7	3	0.7	4.7	1.08	0.068	0.016	4.1	0.9			14.0	3.2				
23	0.447		0.383	12.0	41	10.9	2	0.6	3.9	1.03	0.031	0.008	3.3	0.9			10.8	2.9				
24	0.292		0.248	9.0	25	10.4	2	0.8	2.6	1.06	0.035	0.014	2.4	1.0			7.5	3.1				
25	0.120		0.106	4.2	10	10.1	1	0.8	1.1	1.08	0.008	0.008	1.1	1.1			2.2	2.2				
26	0.228		0.197	6.5	20	10.7	2	0.8	2.0	1.05	0.039	0.021	1.7	0.9			5.4	2.8				
27	0.502		0.431	15.3	45	10.8	2	0.6	4.9	1.17	0.066	0.016	4.0	1.0			13.0	3.1				
28	0.298		0.257	9.0	25	10.2	2	0.8	0.7	0.27	0.040	0.016	2.4	1.0			7.5	3.0				
29	0.574		0.485	17.5	51	10.6	4	0.8	9.8	2.05	0.075	0.016	4.6	1.0			18.8	3.9				
30																						
31																						
Total	11.571	0.000	9.690	324.5	790	234.4	63	19.1	0.0	0.00	112.2	33.9	1.29	0.394	76	23.0	0.0	0.00	285.6	84.87		
Maximum	0.574	0.000	0.485	17.5	51	11.7	4	1.0	0.0	0.00	9.8	3.3	0.08	0.021	5	1.1	0.0	0.00	18.8	4.07		
Minimum	0.120	0.000	0.106	4.2	0	0.0	1	0.3	0.0	0.00	0.7	0.3	0.01	0.007	1	0.3	0.0	0.00	2.2	1.97		
Average	0.399	0.000	0.334	11.2	27	8.1	2	0.7	#DIV/0!	#DIV/0!	3.9	1.2	0.04	0.014	3	0.8	#DIV/0!	#DIV/0!	9.8	2.93		

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME  
David A Tyrrell

Shenandoah River - Entire Month

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.  
Class 1  
1955002813



FLOWS AND CHEMICAL DOSAGES

march 2018.000

*May 2020*

No. Connections Served: 1690  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals											
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor					
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L				
1	0.560		0.494	17.0	51	10.9	4	0.9					9.5	2.04	0.079	0.017	4	1.0			20.4	4.4				
2	0.560		0.486	16.5	56	11.9	5	1.0					2.1	0.45	0.057	0.012	4.4	0.9			15.1	3.2				
3	0.559		0.489	16.5	56	12.0	5	1.0					5.5	1.18	0.079	0.017	4.4	0.9			16.1	3.5				
4	0.556		0.478	16.5	56	12.0	5	1.2					5.6	1.22	0.075	0.016	4.4	0.9			12.9	2.8				
5	0.562		0.494	17.0	51	10.8	4	0.8					5.5	1.18	0.075	0.016	4.5	1.0			16.1	3.4				
6	0.346		0.298	9.0	25	8.8	3	0.9					8.3	2.88	0.044	0.015	2.4	0.8			8.6	3.0				
7	0.223		0.215	5.5	10	5.5	1	0.6					1.3	0.71	0.013	0.007	1.5	0.8			3.2	1.7				
8	0.484		0.395	16.0	71	17.6	4	1.0					4.9	1.21	0.066	0.016	4.2	1.0			20.4	5.1				
9	0.551		0.466	17.0	81	17.7	5	1.0					5.9	1.27	0.075	0.016	4.5	1.0			22.6	4.9				
10	0.548		0.489	17.0	71	15.5	4	0.9					5.7	1.25	0.093	0.020	4.5	1.0			18.3	4.0				
11	0.548		0.448	17.0	61	13.3	4	0.8					5.8	1.27	0.073	0.016	4.5	1.0			8.6	1.9				
12	0.478		0.396	15.0	56	14.0	5	1.2					5.2	1.31	0.071	0.018	4.0	1.0			12.9	3.2				
13	0.237		0.208	8.0	25	12.8	2	0.8					2.4	1.20	0.030	0.015	2.1	1.1			14.0	7.1				
14	0.235		0.188	7.8	25	12.9	2	1.0					2.7	1.35	0.040	0.020	2.1	1.0			7.5	3.8				
15	0.534		0.467	18.0	61	13.7	4	0.9					5.0	1.13	0.036	0.008	4.8	1.1			16.1	3.6				
16	0.570		0.494	17.0	61	12.8	5	1.0					5.9	1.28	0.077	0.016	4.5	0.9			10.8	2.3				
17	0.534		0.475	17.0	61	13.7	4	0.9					5.7	1.23	0.084	0.019	4.5	1.0			15.1	3.4				
18	0.517		0.445	15.5	81	18.8	4	1.0					5.4	1.25	0.068	0.016	4.1	0.9			15.1	3.5				
19	0.571		0.503	17.0	61	12.8	4	0.9					5.7	1.20	0.077	0.016	4.5	0.9			17.2	3.6				
20	0.247		0.208	6.0	30	14.8	3	1.6					3.0	1.45	0.039	0.019	1.6	0.8			7.5	3.7				
21	0.148		0.112	4.8	10	8.2	0	0.3					1.1	0.91	0.015	0.012	1.3	1.0			4.3	3.5				
22	0.490		0.416	15.0	56	13.7	4	0.9					7.8	1.90	0.073	0.018	4.0	1.0			14.0	3.4				
23	0.491		0.398	15.5	51	12.4	4	1.0					1.7	0.41	0.066	0.016	4.1	1.0			14.0	3.4				
24	0.502		0.437	15.5	56	13.3	4	1.0					8.7	2.07	0.066	0.016	4.1	1.0			16.1	3.9				
25	0.486		0.419	14.5	51	12.5	3	0.8					1.6	0.39	0.062	0.016	3.8	0.9			14.0	3.4				
26	0.470		0.397	0.2	56	14.2	6	1.4					8.5	2.16	0.062	0.016	4.0	1.0			15.1	3.8				
27	0.196		0.159	5.1	15	9.3	2	1.0					0.5	0.33	0.030	0.018	1.3	0.8			5.4	3.3				
28	0.154		0.123	4.0	20	15.8	1	0.6					3.5	2.73	0.022	0.017	1.1	0.8			5.4	4.2				
29	0.507		0.443	15.0	56	13.2	6	1.3					4.9	1.16	0.071	0.017	4.0	0.9			18.3	4.3				
30	0.500		0.432	15.1	56	13.4	4	1.1					5.2	1.26	0.070	0.017	4.0	1.0			16.1	3.9				
31																										
Total	13.365	0.000	11.471	390.8	1475	388.1	110	28.8					144.7	39.4	1.79	0.480	107	28.5			0.0	0.00	401.3	109.20	0.0	0.00
Maximum	0.571	0.000	0.503	18.0	81	18.8	6	1.6					9.5	2.9	0.09	0.020	5	1.1			0.0	0.00	22.6	7.07	0.0	0.00
Minimum	0.148	0.000	0.112	0.2	10	5.5	0	0.3					0.0	0.00	0.01	0.007	1	0.8			0.0	0.00	3.2	1.73	0.0	0.00
Average	0.445	0.000	0.382	13.0	49	12.9	4	1.0					4.8	1.3	0.06	0.016	4	1.0			#DIV/0!	#DIV/0!	13.4	3.64	#DIV/0!	#DIV/0!

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

Shenandoah River - Entire Month

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

David A. Tyneil

Class 1

1955002813

PRINTED NAME

TITLE: OPERATOR CLASSIFICATION

DPOR CERTIFICATION NO.

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals					Finished Water Chemicals												
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor	
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.169		0.159	5.0	15	10.8	1	0.9														
2	0.228		0.197	6.9	25	13.3	2	1.1														
3	0.592		0.516	17.5	61	12.3	3	0.6														
4	0.629		0.477	15.8	51	9.7	4	0.8														
5	0.270		0.240	8.2	30	13.5	3	1.2														
6	0.430		0.378	12.5	46	12.7	4	1.0														
7	0.506		0.439	15.5	51	12.0	4	0.9														
8	0.258		0.244	7.6	25	11.8	2	0.9														
9	0.241		0.203	7.3	20	10.1	2	1.2														
10	0.493		0.418	12.0	51	12.3	4	1.0														
11	0.506		0.459	14.0	61	14.4	4	0.9														
12	0.494		0.419	13.0	56	13.5	3	0.8														
13	0.492		0.444	13.0	51	12.4	4	1.1														
14	0.492		0.445	14.5	61	14.8	0	0.1														
15																						
16																						
17	0.490		0.421	14.0	51	12.4	3	0.8														
18	0.517		0.465	14.5	51	11.8	4	0.8														
19	0.504		0.438	14.0	51	12.1	4	1.0														
20	0.507		0.461	14.5	61	14.4	5	1.1														
21	0.477		0.434	15.0	56	14.0	4	0.9														
22	0.267		0.228	7.0	30	13.6	2	0.7														
23	0.221		0.188	6.0	20	11.0	1	0.7														
24	0.514		0.456	14.5	66	15.4	3	0.7														
25	0.422		0.362	11.0	41	11.5	2	0.7														
26	0.517		0.442	13.5	61	14.1	2	0.6														
27	0.600		0.531	17.8	66	13.2	3	0.6														
28	0.353		0.299	10.8	41	13.8	2	0.7														
29	0.250		0.209	6.5	30	14.6	2	0.8														
30	0.180		0.154	5.0	10	6.8	1	0.7														
31	0.528		0.480	15.0	56	12.7	3	0.7														
Total	12.146	0.000	10.606	341.7	1293	365.0	82	23.8	0.0	0.00	123.5	35.3	1.60	0.461	122	35.0	0.0	0.00	495.8	142.26	0.0	0.00
Maximum	0.629	0.000	0.531	17.8	66	15.4	5	1.2	0.0	0.00	8.9	2.9	0.08	0.019	6	1.3	0.0	0.00	30.1	7.68	0.0	0.00
Minimum	0.169	0.000	0.154	5.0	10	6.8	0	0.1	0.0	0.00	0.6	0.3	0.02	0.007	2	1.0	0.0	0.00	6.5	3.42	0.0	0.00
Average	0.419	0.000	0.366	11.8	45	12.6	3	0.8	#DIV/0!	#DIV/0!	4.3	1.2	0.06	0.016	4	1.2	#DIV/0!	#DIV/0!	17.1	4.91	#DIV/0!	#DIV/0!

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME  
David A Tyrrell  
Class 1  
1955002813

Shenandoah River - Entire Month

Flows and Chemical Dosages

September 2020

No. Connections Served: 1738  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals							
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor	
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.517		0.449	14.5	56	12.9	4	0.9														
2	0.486		0.435	14.5	51	12.5	4	1.0														
3	0.525		0.458	15.3	51	11.6	4	0.9														
4	0.475		0.423	14.0	51	12.8	3	0.8														
5	0.066		0.060	2.0	10	18.6	1	1.1														
6	0.227		0.197	7.0	20	10.7	2	0.8														
7																						
8	0.513		0.458	14.5	61	14.2	2	0.6														
9	0.486		0.420	13.3	56	13.7	4	1.1														
10	0.199		0.182	5.5	15	9.2	2	1.0														
11	0.471		0.424	14.0	51	12.9	3	0.7														
12	0.248		0.211	6.5	41	19.6	2	1.0														
13	0.198		0.169	5.5	20	12.3	1	0.7														
14	0.520		0.466	14.8	66	15.2	3	0.7														
15	0.479		0.437	14.0	56	14.0	4	0.9														
16	0.502		0.437	14.0	61	14.5	4	1.0														
17	0.502		0.450	15.0	41	9.7	4	0.9														
18	0.468		0.404	14.0	41	10.4	4	1.1														
19																						
20																						
21	0.523		0.472	15.0	46	10.5	5	1.2														
22	0.507		0.444	15.0	51	12.0	5	1.1														
23	0.517		0.450	15.0	41	9.4	5	1.1														
24	0.497		0.432	14.5	35	8.6	4	1.0														
25	0.509		0.567	16.0	56	13.1	4	1.0														
26																						
27																						
28	0.525		0.458	15.0	41	9.3	4	0.9														
29	0.485		0.431	14.5	35	8.8	4	0.9														
30	0.498		0.440	14.5	30	7.3	5	1.2														
31																						
Total	10.941	0.000	9.875	317.7	1080	303.8	86	23.6	0.0	0.00	107.2	29.4	1.39	0.384	105	29.1	0.0	0.00	413.1	114.09	0.0	0.00
Maximum	0.525	0.000	0.667	16.0	66	19.6	5	1.2	0.0	0.00	5.7	1.4	0.07	0.018	5	1.3	0.0	0.00	21.5	5.91	0.0	0.00
Minimum	0.066	0.000	0.060	2.0	10	7.3	1	0.6	0.0	0.00	0.6	0.6	0.01	0.008	1	0.9	0.0	0.00	3.2	3.24	0.0	0.00
Average	0.438	0.000	0.395	12.7	43	12.2	3	0.9	#DIV/0!	#DIV/0!	4.3	1.2	0.06	0.015	4	1.2	#DIV/0!	#DIV/0!	16.5	4.56	#DIV/0!	#DIV/0!

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME

David A Tyrrell

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

Class 1  
1955002813

Shenandoah River - Entire Month

October 2020

No. Connections Served: 1738  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals						
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day
1	0.505		0.435	15.0	41	9.6	4	0.9			5.0	1.19	0.066	0.016	4	0.9			17.2	4.1	
2	0.445		0.495	15.0	41	10.9	4	1.2			4.8	1.28	0.061	0.016	4.0	1.1			15.1	4.1	
3	0.153		0.124	4.5	10	8.0	1	0.6			4.6	3.61	0.022	0.017	1.2	0.9			4.3	3.4	
4																					
5	0.516		0.461	15.0	35	8.2	4	0.9			5.0	1.16	0.066	0.015	4.0	0.9			14.0	3.2	
6	0.504		0.440	15.2	41	9.7	4	1.0			5.1	1.21	0.070	0.017	4.0	1.0			15.1	3.6	
7	0.514		0.458	15.0	41	9.5	4	0.9			5.1	1.18	0.070	0.016	4.0	0.9			15.1	3.5	
8	0.301		0.360	8.8	20	8.1	2	0.6			2.9	1.15	0.038	0.015	2.3	0.9			8.6	3.4	
9	0.471		0.460	15.0	41	10.3	4	0.9			4.9	1.24	0.068	0.017	5.1	1.3			14.0	3.6	
10	0.259		0.225	7.8	20	9.4	2	1.1			2.5	1.16	0.035	0.016	2.1	1.0			7.5	3.5	
11	0.211		0.176	6.3	15	8.6	2	0.9			5.5	3.13	0.026	0.015	1.7	1.0			6.5	3.7	
12	0.206		0.189	5.8	15	8.7	1	0.7			1.8	1.05	0.026	0.015	1.5	0.9			4.3	2.5	
13	0.512		0.443	15.0	35	8.3	4	0.8			8.5	1.99	0.061	0.014	4.0	0.9			15.1	3.5	
14	0.511		0.438	14.0	41	9.5	4	1.0			1.5	0.36	0.066	0.015	3.7	0.9			14.0	3.3	
15	0.466		0.437	14.5	35	9.1	4	1.1			8.5	2.18	0.066	0.017	3.9	1.0			15.1	3.9	
16	0.514		0.459	14.0	35	8.3	4	0.8			1.6	0.37	0.066	0.015	3.7	0.9			14.0	3.3	
17	0.229		0.194	6.0	20	10.6	3	1.5			2.9	1.51	0.030	0.016	1.6	0.8			6.5	3.4	
18	0.229		0.213	7.0	15	8.0	1	0.6			1.6	0.85	0.022	0.012	1.9	1.0			6.5	3.4	
19	0.543		0.472	16.0	46	10.1	5	1.1			3.8	0.83	0.072	0.016	4.3	0.9			17.2	3.8	
20	0.547		0.491	15.0	41	8.9	3	0.7			5.0	1.10	0.077	0.017	4.0	0.9			18.3	4.0	
21	0.478		0.407	12.5	35	8.9	3	0.8			4.7	1.17	0.062	0.016	3.3	0.8			12.9	3.2	
22	0.778		0.693	21.5	56	8.6	5	0.8			7.3	1.13	0.101	0.016	5.7	0.9			23.7	3.6	
23	0.547		0.475	15.0	41	8.9	0	0.0			5.2	1.13	0.073	0.016	4.0	0.9			17.2	3.8	
24	0.316		0.276	8.0	15	5.8	4	1.4			3.0	1.12	0.044	0.017	2.1	0.8			4.3	1.6	
25	0.103		0.094	3.0	5	5.9	1	0.9			0.9	1.02	0.013	0.015	0.8	0.9			3.2	3.7	
26	0.564		0.495	15.0	46	9.7	4	0.9			5.5	1.18	0.074	0.016	4.0	0.9			19.4	4.1	
27	0.531		0.477	15.0	41	9.2	4	0.9			5.0	1.13	0.068	0.015	4.0	0.9			16.1	3.6	
28	0.579		0.408	16.0	41	8.4	4	0.9			5.6	1.17	0.074	0.015	4.3	0.9			19.4	4.0	
29	0.580		0.509	16.3	30	6.3	4	0.7			9.1	1.88	0.077	0.016	4.3	0.9			16.1	3.3	
30	0.442		0.391	12.0	30	8.3	3	0.9			0.8	0.21	0.042	0.011	3.2	0.9			14.0	3.8	
31	0.160		0.173	5.0	15	11.4	2	1.2			1.8	1.32	0.013	0.010	1.3	1.0			5.4	4.0	
Total	12.714	0.000	11.366	364.0	943	265.1	94	27.0	0.0	0.00	129.3	39.0	1.65	0.461	98	27.9	0.0	0.00	379.7	106.01	0.0
Maximum	0.778	0.000	0.693	21.5	56	11.4	5	1.5	0.0	0.00	9.1	3.6	0.10	0.017	6	1.3	0.0	0.00	23.7	4.12	0.0
Minimum	0.103	0.000	0.094	3.0	5	5.8	0	0.0	0.0	0.00	0.8	0.2	0.01	0.010	1	0.8	0.0	0.00	3.2	1.63	0.0
Average	0.424	0.000	0.379	12.1	31	8.8	3	0.9	#DIV/0!	#DIV/0!	4.3	1.3	0.05	0.015	3	0.9	#DIV/0!	#DIV/0!	12.7	3.53	#DIV/0!

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

David A. Tyrrell

Shenandoah River - Entire Month

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

Class 1  
1955002813

Flows and Chemical Dosages

march 2018-000 November 2018

No. Connections Served: 1738  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals					Finished Water Chemicals												
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor	
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.181		0.150	5.0	15	10.1	2	1.1														
2	0.486		0.414	14.5	46	11.3	3	0.8														
3																						
4	0.535		0.427	12.5	66	14.8	5	1.1														
5	0.547		0.483	0.2	66	14.5	4	0.9														
6	0.552		0.499	15.5	66	14.3	4	0.9														
7	0.197		0.171	6.0	20	12.3	2	1.0														
8																						
9	0.510		0.467	15.5	61	14.3	5	1.1														
10	0.530		0.466	14.8	61	13.8	4	0.9														
11																						
12	0.482		0.436	13.5	51	12.6	3	0.6														
13	0.500		0.441	14.0	56	13.4	3	0.8														
14																						
15	0.169		0.158	5.0	15	10.8	2	1.1														
16	0.470		0.412	14.0	71	18.1	4	1.0														
17	0.508		0.465	14.8	66	15.6	4	0.8														
18	0.498		0.435	13.5	61	14.6	4	1.0														
19	0.392		0.348	11.5	46	14.0	3	1.0														
20	0.388		0.344	11.0	34	10.7	3	1.0														
21																						
22	0.176		0.164	5.5	15	10.4	1	0.8														
23	0.487		0.420	15.0	46	11.2	4	1.0														
24	0.490		0.443	15.5	51	12.4	4	1.1														
25	0.502		0.450	15.0	20	4.8	4	1.1														
26																						
27	0.129		0.105	4.5	20	18.9	1	1.1														
28	0.128		0.112	5.0	20	19.0	2	1.5														
29	0.168		0.143	4.5	35	25.4	1	0.6														
30	0.443		0.403	13.0	35	9.6	4	1.0														
31																						
Total	9.468	0.000	8.356	259.2	1044	326.7	74	23.1	0.0	0.00	115.2	36.1	1.38	0.430	72	22.2	0.0	0.00	294.8	87.70	0.0	0.00
Maximum	0.552	0.000	0.499	15.5	71	25.4	5	1.5	0.0	0.00	8.8	3.2	0.09	0.028	4	1.2	0.0	0.00	23.7	6.04	0.0	0.00
Minimum	0.128	0.000	0.105	0.2	15	4.8	1	0.6	0.0	0.00	1.4	0.4	0.02	0.011	1	0.7	0.0	0.00	1.1	0.65	0.0	0.00
Average	0.394	0.000	0.348	10.8	43	13.6	3	1.0	#DIV/0!	#DIV/0!	4.8	1.5	0.06	0.018	3	0.9	#DIV/0!	#DIV/0!	12.3	3.65	#DIV/0!	#DIV/0!

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

David A Tyrell

Shenandoah River - Entire Month

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

Class 1  
1955002813

Flows and Chemical Dosages

*Dec 2020*

march 2016-2020

No. Connections Served: 1738  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals							
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor	
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.434		0.368	11.5	41	11.2	3	0.9				4.5	1.25	0.017	2	0.7			11.8	3.3		
2	0.517		0.469	14.5	46	10.6	5	1.2				5.2	1.20	0.068	3.0	0.7			16.1	3.7		
3	0.529		0.466	14.0	51	11.5	4	1.0				5.4	1.23	0.073	2.9	0.7			15.1	3.4		
4	0.534		0.482	15.0	41	9.1	4	1.0				5.4	1.21	0.066	3.1	0.7			15.1	3.4		
5																						
6																						
7	0.462		0.414	13.8	46	11.8	3	0.8				8.2	2.13	0.060	2.8	0.7			12.9	3.3		
8	0.497		0.419	15.3	51	12.2	4	1.1				5.2	1.25	0.071	3.2	0.8			14.0	3.4		
9	0.477		0.432	13.5	46	11.5	4	1.1				8.3	2.09	0.064	2.8	0.7			14.0	3.5		
10	0.492		0.421	13.0	35	8.6	3	0.7				0.9	0.21	0.066	2.7	0.7			15.1	3.7		
11	0.489		0.441	13.8	46	11.2	3	0.8				4.9	1.21	0.066	2.9	0.7			12.9	3.2		
12																						
13																						
14	0.508		0.440	14.0	46	10.8	3	0.8				5.1	1.21	0.071	2.9	0.7			14.0	3.3		
15	0.524		0.431	13.8	41	9.3	4	0.9				5.2	1.20	0.079	2.9	0.7			10.8	2.5		
16	0.438		0.389	12.5	46	12.5	2	0.5				4.4	1.19	0.062	2.6	0.7			8.6	2.4		
17	0.443		0.367	13.6	35	9.6	2	0.6				4.4	1.19	0.060	2.6	0.8			11.8	3.2		
18	0.447		0.400	13.6	41	10.9	3	0.7				4.5	1.21	0.060	2.8	0.8			11.8	3.2		
19	0.120		0.116	3.7	15	15.2	1	0.8				4.6	4.60	0.020	0.8	0.8			11.8	3.2		
20	0.180		0.140	4.5	15	10.1	1	0.5				1.6	1.09	0.026	0.9	0.6			4.3	4.3		
21	0.435		0.384	13.5	46	12.6	3	0.8				4.4	1.20	0.057	0.7	0.2			4.3	2.9		
22	0.476		0.399	12.5	46	11.5	3	0.8				4.5	1.13	0.066	2.6	0.6			11.8	3.0		
23	0.545		0.491	16.0	46	10.0	4	0.8				5.2	1.15	0.072	3.3	0.7			14.0	3.1		
24	0.160		0.132	5.5	15	11.4	1	0.9				1.7	1.24	0.070	1.1	0.8			3.2	2.4		
25																						
26	0.160		0.132	5.5	15	11.4	1	0.9				1.7	1.24	0.070	1.1	0.8			3.2	2.4		
27	0.143		0.147	4.0	15	12.8	1	0.7				1.5	1.29	0.022	0.8	0.7			5.4	4.5		
28	0.368		0.275	9.0	41	13.2	3	1.0				3.8	1.24	0.049	1.9	0.6			10.8	3.5		
29	0.581		0.414	17.5	71	14.6	4	0.7				6.0	1.24	0.066	17.3	3.6			12.9	2.7		
30	0.611		0.509	15.8	61	11.9	4	0.8				6.3	1.23	0.043	2.8	0.5			18.3	3.6		
31	0.580		0.487	15.0	56	11.5	3	0.7				6.0	1.23	0.077	2.6	0.5			16.1	3.3		
Total	11.149	0.000	9.565	314.1	1049	297.2	78	21.5				118.9	35.7	1.57	0.492	76	20.4		300.1	84.30		
Maximum	0.611	0.000	0.509	17.5	71	15.2	5	1.2				8.3	4.6	0.08	0.052	17	3.6		18.3	4.52		
Minimum	0.120	0.000	0.116	3.7	15	8.6	1	0.5				0.9	0.2	0.02	0.008	1	0.2		0.0	0.00		
Average	0.429	0.000	0.368	12.1	40	11.4	3	0.8				4.6	1.4	0.06	0.019	3	0.8		11.5	3.24		

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

David A Tyrrrell

Shenandoah River - Entire Month

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

Class 1

1955002813

FLOWS AND CHEMICAL DOSAGES

January 2021

No. Connections Served: 1690  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals					Finished Water Chemicals																	
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor						
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L					
1	0.234		0.193	7.0	41	20.8	1	0.6					2.3	1.20	0.018	0.009	1	0.6					6.5	3.3			
2																											
3																											
4	0.553		0.463	16.8	35	7.7	3	0.7					5.7	1.24	0.080	0.017	3.0	0.6					16.1	3.5			
5	0.588		0.493	18.4	61	12.4	4	0.8					6.3	1.28	0.084	0.017	3.3	0.7					17.2	3.5			
6	0.502		0.381	15.8	51	12.1	3	0.7					9.1	2.17	0.070	0.017	2.8	0.7					17.2	4.1			
7	0.629		0.541	18.5	51	9.7	3	0.6					6.7	1.28	0.086	0.016	3.3	0.6					18.3	3.5			
8	0.532		0.483	16.3	35	8.0	3	0.7					1.6	0.36	0.075	0.017	2.9	0.7					16.1	3.6			
9	0.181		0.148	5.9	15	10.1	1	0.7					5.4	3.58	0.024	0.016	1.1	0.7					4.3	2.8			
10	0.209		0.197	6.3	15	8.7	1	0.5					1.4	0.82	0.029	0.017	1.1	0.6					6.5	3.7			
11	0.379		0.263	8.3	30	9.6	2	0.6					3.9	1.22	0.028	0.009	1.5	0.5					9.7	3.1			
12	0.540		0.459	14.0	30	6.7	4	0.9					5.4	1.20	0.071	0.016	2.5	0.6					15.1	3.3			
13	0.512		0.432	13.5	35	8.3	4	0.9					5.1	1.19	0.071	0.017	2.1	0.5					14.0	3.3			
14	0.518		0.433	13.3	30	7.0	2	0.5					5.1	1.18	0.066	0.015	2.0	0.5					14.0	3.2			
15	0.524		0.439	13.5	41	9.3	2	0.5					5.2	1.19	0.062	0.014	2.0	0.5					14.0	3.2			
16	0.180		0.145	4.5	5	3.4	1	0.5					1.8	1.20	0.026	0.017	0.7	0.4					6.5	4.3			
17	0.214		0.206	6.3	10	5.7	1	0.7					5.3	2.99	0.026	0.015	0.9	0.5					3.2	1.8			
18																											
19	0.579		0.497	17.5	30	6.3	3	0.7					2.5	0.52	0.075	0.016	2.6	0.5					8.6	1.8			
20	0.639		0.563	19.5	35	6.7	4	0.8					6.6	1.25	0.090	0.017	1.4	0.3					16.1	3.0			
21	0.636		0.558	18.0	35	6.7	4	0.8					6.9	1.30	0.090	0.017	1.5	0.3					19.4	3.7			
22	0.628		0.548	19.0	35	6.8	4	0.7					6.7	1.28	0.080	0.015	2.8	0.5					18.3	3.5			
23	0.339		0.301	10.5	15	5.4	2	0.8					0.3	0.12	0.049	0.017	0.8	0.3					7.5	2.7			
24																											
25	0.473		0.424	14.3	25	6.4	3	0.7					7.3	1.84	0.066	0.017	1.7	0.4					9.7	2.5			
26	0.504		0.436	15.3	25	6.0	3	0.6					1.6	0.39	0.068	0.016	2.3	0.5					14.0	3.3			
27	0.439		0.389	12.0	25	6.9	2	0.5					4.2	1.15	0.057	0.016	0.7	0.2					11.8	3.2			
28	0.578		0.508	15.8	30	6.3	3	0.7					6.7	1.39	0.079	0.016	0.9	0.2					11.8	2.5			
29	0.593		0.517	16.0	30	6.2	3	0.5					5.8	1.18	0.077	0.016	1.4	0.3					12.9	2.6			
30	0.350		0.307	9.5	20	7.0	2	0.8					3.4	1.16	0.046	0.016	0.8	0.3					8.6	3.0			
31																											
Total	12.052	0.000	10.324	343.4	796	210.1	68	17.3					122.5	33.7	1.59	0.407	47	12.5					317.3	81.98	0.0	0.00	
Maximum	0.639	0.000	0.563	19.5	61	20.8	4	0.9					9.1	3.6	0.09	0.017	3	0.7					19.4	4.32	0.0	0.00	
Minimum	0.180	0.000	0.145	4.5	5	3.4	1	0.5					0.3	0.1	0.02	0.009	1	0.2					3.2	1.78	0.0	0.00	
Average	0.464	0.000	0.397	13.2	31	8.1	3	0.7					4.7	1.3	0.06	0.016	2	0.5					12.2	3.15	#DIV/0!	#DIV/0!	

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE) RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME

David A Tyrrell

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

Class 1

1955002813

Shenandoah River - Entire Month

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals							
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor	
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.467		0.440	13.5	25	6.5	2	0.6														
2	0.489		0.445	14.5	20	5.0	3	0.8														
3	0.499		0.423	14.8	25	6.0	3	0.7														
4	0.492		0.450	14.5	30	7.4	3	0.8														
5	0.510		0.443	15.8	25	6.0	3	0.8														
6	0.229		0.196	7.0	10	5.3	2	0.8														
7																						
8	0.494		0.442	13.8	30	7.4	4	1.1														
9	0.529		0.436	13.3	40	9.1	2	0.5														
10	0.456		0.384	13.3	25	6.6	4	1.1														
11	0.477		0.433	13.3	30	7.5	2	0.5														
12	0.499		0.454	14.0	30	7.3	2	0.6														
13																						
14																						
15																						
16	0.585		0.507	17.8	35	7.3	3	0.6														
17	0.775		0.674	23.5	45	7.0	2	0.3														
18	0.513		0.460	14.5	35	8.2	2	0.5														
19	0.544		0.475	16.8	56	12.3	2	0.4														
20	0.216		0.201	6.0	20	11.2	1	0.7														
21																						
22	0.518		0.445	13.5	56	12.9	1	0.3														
23	0.512		0.436	13.5	46	10.7	2	0.5														
24	0.523		0.465	14.5	46	10.5	2	0.6														
25	0.512		0.434	13.8	51	11.9	2	0.5														
26	0.529		0.469	14.8	56	12.7	2	0.5														
27	0.246		0.204	7.5	30	14.8	1	0.6														
28																						
29																						
30																						
31																						
Total	10.614	0.000	9.316	303.6	768	193.4	53	13.5	0.0	0.00	65.4	16.2	1.38	0.341	53	13.3	0.0	0.00	281.6	70.06	0.0	0.00
Maximum	0.775	0.000	0.674	23.5	56	14.8	4	1.1	0.0	0.00	4.9	0.9	0.11	0.019	13	3.2	0.0	0.00	22.6	3.73	0.0	0.00
Minimum	0.216	0.000	0.196	6.0	10	5.0	1	0.3	0.0	0.00	1.3	0.6	0.03	0.013	1	0.3	0.0	0.00	5.4	2.52	0.0	0.00
Average	0.482	0.000	0.423	13.8	35	8.8	2	0.6	#DIV/0!	#DIV/0!	3.0	0.7	0.06	0.015	2	0.6	#DIV/0!	#DIV/0!	12.8	3.18	#DIV/0!	#DIV/0!

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE) \_\_\_\_\_ RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME: David A Tyrrell

TITLE: OPERATOR CLASSIFICATION: Class 1

DPOR CERTIFICATION NO.: 1955002813

Shenandoah River - Entire Month

FLOWS AND CHEMICAL DOSAGES

March 2021

No. Connections Served: 1738  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals						
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day
1	0.496		0.414	15.1	61	14.7	2	0.6			4.3	1.04	0.060	0.015	2	0.4			12.9	3.1	
2	0.495		0.418	15.2	61	14.7	2	0.5			2.8	0.68	0.062	0.015	1.8	0.4			14.0	3.4	
3	0.446		0.372	13.8	61	16.4	2	0.6			3.7	1.00	0.057	0.015	1.6	0.4			15.1	4.1	
4	0.497		0.443	15.3	61	14.7	2	0.4			5.3	1.28	0.070	0.017	1.8	0.4			15.1	3.6	
5	0.487		0.415	15.0	56	13.7	2	0.4			5.1	1.26	0.060	0.015	1.8	0.4			12.8	3.2	
6	0.239		0.226	7.0	25	12.7	1	0.5			2.5	1.26	0.030	0.015	0.8	0.4			6.5	3.3	
7																					
8	0.504		0.429	14.5	46	10.9	1	0.3			6.4	0.03	0.026	0.006	1.7	0.4			15.0	3.6	
9	0.522		0.467	13.8	40	9.2	2	0.5			5.8	1.33	0.016	0.004	1.6	0.4			10.8	2.5	
10	0.516		0.440	13.0	40	9.3	2	0.5			5.1	1.19	0.030	0.007	1.5	0.3			15.0	3.5	
11	0.550		0.494	15.3	45	9.8	2	0.4			8.8	1.92	0.034	0.007	1.8	0.4			16.0	3.5	
12	0.522		0.454	14.5	40	9.2	2	0.5			1.9	0.44	0.066	0.015	1.7	0.4			13.0	3.0	
13																					
14																					
15	0.519		0.463	15.3	35	8.2	2	0.6			8.4	1.93	0.068	0.016	1.8	0.4			15.1	3.5	
16	0.508		0.442	15.5	35	8.4	2	0.4			4.0	0.46	0.061	0.014	1.8	0.4			15.1	3.6	
17	0.449		0.360	15.0	25	6.8	2	0.5			2.4	0.17	0.061	0.016	1.7	0.5			10.8	2.9	
18	0.518		0.461	14.5	40	9.3	2	0.4			5.2	1.20	0.063	0.015	1.7	0.4			16.1	3.7	
19	0.350		0.309	10.5	25	8.7	1	0.4			3.3	1.13	0.046	0.016	1.2	0.4			10.8	3.7	
20																					
21																					
22	0.514		0.467	14.3	41	9.5	2	0.4			4.4	1.02	0.075	0.017	2.0	0.5			16.1	3.8	
23	0.460		0.401	12.5	30	7.9	2	0.4			8.0	2.09	0.057	0.015	1.9	0.5			12.9	3.4	
24	0.517		0.470	14.8	35	8.2	2	0.4			1.9	0.44	0.071	0.016	2.2	0.5			12.9	3.0	
25	0.550		0.485	15.0	41	8.8	5	1.0			5.4	1.19	0.068	0.015	2.2	0.5			16.1	3.5	
26	0.536		0.489	14.8	41	9.1	2	0.4			5.4	1.20	0.035	0.008	2.2	0.5			17.2	3.9	
27																					
28																					
29	0.522		0.459	14.3	51	11.7	2	0.4			5.2	1.20	0.066	0.015	2.1	0.5			14.0	3.2	
30	0.551		0.510	15.5	50	10.9	3	0.6			5.7	1.24	0.078	0.017	2.7	0.6			16.0	3.5	
31	0.513		0.453	13.5	45	10.5	2	0.4			4.3	1.01	0.077	0.018	2.4	0.6			16.1	3.8	
Total	11.779	0.000	10.341	337.5	1031	253.3	46	11.3	0.0	0.00	115.3	26.7	1.34	0.329	44	10.7	0.0	0.00	335.3	81.90	0.0
Maximum	0.551	0.000	0.510	15.5	61	16.4	5	1.0	0.0	0.00	8.8	2.1	0.08	0.018	3	0.6	0.0	0.00	17.2	4.05	0.0
Minimum	0.239	0.000	0.226	7.0	25	6.8	1	0.3	0.0	0.00	1.9	0.0	0.02	0.004	1	0.3	0.0	0.00	6.5	2.47	0.0
Average	0.491	0.000	0.431	14.1	43	10.6	2	0.5	#DIV/0!	#DIV/0!	4.8	1.1	0.06	0.014	2	0.4	#DIV/0!	#DIV/0!	14.0	3.41	#DIV/0!

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME

Shenandoah River - Entire Month

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

David A Tyrell  
Class 1  
1955002813

No. Connections Served: 1738  
Population Served: 4185

FLOWS AND CHEMICAL DOSAGES

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals					Finished Water Chemicals						
					Alum	Carbon	Chlorine	Fluoride	Polymer	KMnO4	Soda Ash	Chlorine	Corr Inhibitor			
	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.531		0.487	15.3	45	10.2	2	0.4	11.0	2.48	0.070	0.016	3	0.6	15.0	3.4
2	0.504		0.444	14.0	45	10.7	3	0.7	5.0	1.19	0.030	0.007	2.8	0.7	16.0	3.8
3																
4																
5	0.517		0.472	15.5	46	10.6	2	0.4	5.1	1.18	0.070	0.016	3.2	0.7	16.1	3.7
6	0.326		0.290	9.8	30	11.2	1	0.4	3.3	1.21	0.040	0.015	2.0	0.7	9.7	3.6
7	0.499		0.444	15.3	46	11.0	2	0.5	5.2	1.25	0.066	0.016	3.2	0.8	16.1	3.9
8	0.519		0.467	15.3	46	10.5	2	0.5	4.4	1.01	0.068	0.016	3.2	0.7	16.1	3.7
9	0.546		0.486	16.5	46	10.0	2	0.4	5.4	1.19	0.073	0.016	3.4	0.7	17.2	3.8
10	0.258		0.245	7.5	20	9.4	1	0.4	2.4	1.12	0.030	0.014	1.6	0.7	7.5	3.5
11																
12	0.531		0.464	16.0	61	13.7	2	0.5	1.9	0.44	0.071	0.016	3.8	0.9	17.2	3.9
13	0.564		0.498	17.0	71	15.1	2	0.4	5.6	1.18	0.075	0.016	4.5	0.9	22.6	4.8
14	0.542		0.487	15.0	81	18.0	2	0.4	5.5	1.21	0.075	0.017	4.0	0.9	19.4	4.3
15	0.553		0.483	15.0	66	14.3	2	0.4	5.5	1.19	0.066	0.014	4.0	0.9	18.3	4.0
16	0.517		0.468	14.0	61	14.1	2	0.4	5.0	1.16	0.071	0.016	3.7	0.9	12.9	3.0
17																
18																
19	0.508		0.444	15.5	56	13.2	3	0.8	7.7	1.82	0.072	0.017	4.1	1.0	10.8	2.5
20	0.502		0.461	15.6	61	14.5	1	0.3	0.2	0.05	0.066	0.016	4.2	1.0	17.2	4.1
21	0.511		0.425	15.5	51	11.9	2	0.4	9.9	2.31	0.128	0.030	4.1	1.0	16.1	3.8
22	0.529		0.477	15.5	56	12.6	3	0.7	5.4	1.22	0.068	0.015	4.1	0.9	17.2	3.9
23	0.495		0.435	15.0	46	11.1	2	0.4	5.2	1.27	0.066	0.016	4.0	1.0	16.1	3.9
24																
25																
26	0.529		0.476	15.5	51	11.5	2	0.5	5.5	1.26	0.071	0.016	4.1	0.9	16.1	3.7
27	0.453		0.385	12.0	41	10.7	2	0.4	4.7	1.24	0.049	0.013	3.2	0.8	15.1	4.0
28	0.527		0.476	15.0	51	11.5	2	0.5	5.6	1.28	0.080	0.018	4.0	0.9	16.1	3.7
29	0.554		0.489	15.5	56	12.1	2	0.5	10.7	2.31	0.079	0.017	4.1	0.9	17.2	3.7
30																
31																
Total	11.016	0.000	9.802	321.2	1129	267.9	43	10.3	0.0	0.00	120.2	28.6	1.48	0.353	78	18.6
Maximum	0.564	0.000	0.498	17.0	81	18.0	3	0.8	0.0	0.00	11.0	2.5	0.13	0.030	4	1.0
Minimum	0.258	0.000	0.245	7.5	20	9.4	1	0.3	0.0	0.00	0.2	0.0	0.03	0.007	2	0.6
Average	0.501	0.000	0.446	14.6	51	12.2	2	0.5	#DIV/0!	#DIV/0!	5.5	1.3	0.07	0.016	4	0.8

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

David A Tyrrell

Shenandoah River - Entire Month

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

Class 1  
1955002813

FLOWS AND CHEMICAL DOSAGES

June 2021

No. Connections Served: 1738  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals								
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor		
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	
1	0.447		0.403	12.8	45	12.1	2	0.5			4.3	1.15	0.060	0.016	4	1.1	15.1	4.1					
2	0.477		0.416	12.8	45	11.3	2	0.5			5.5	1.38	0.030	0.008	4.0	1.0	17.2	4.3					
3	0.510		0.460	14.8	50	11.8	2	0.4			9.0	2.12	0.034	0.034	4.8	1.1	16.1	3.8					
4	0.494		0.427	13.5	46	11.1	2	0.4			2.2	0.53	0.066	0.016	4.4	1.1	17.2	4.2					
5	0.314		0.294	9.0	25	9.7	2	0.6			3.3	1.26	0.049	0.019	2.9	1.1	11.8	4.5					
6																							
7	0.610		0.536	16.8	55	10.8	4	0.8			20.0	3.93	0.022	0.004	5.4	1.1	22.6	4.4					
8	0.624		0.535	17.5	66	12.7	2	0.5			6.5	1.25	0.025	0.005	5.7	1.1	22.6	4.3					
9	0.625		0.586	16.5	78	14.6	5	1.0			6.9	1.32	0.090	0.017	5.3	1.0	21.5	4.1					
10	0.598		0.496	15.3	76	15.2	2	0.5			6.8	1.36	0.060	0.012	4.9	1.0	21.5	4.3					
11	0.544		0.493	15.0	66	14.5	4	0.9			6.0	1.32	0.031	0.007	4.9	1.1	19.4	4.3					
12	0.185		0.150	5.0	20	13.0	1	0.5			5.4	3.50	0.014	0.009	1.4	0.9	5.8	3.8					
13																							
14	0.601		0.554	18.5	86	17.2	2	0.5			2.8	0.56	0.080	0.016	6.0	1.2	25.8	5.1					
15	0.589		0.496	15.8	60	12.2	3	0.6			9.4	1.91	0.070	0.014	5.1	1.0	23.7	4.8					
16	0.543		0.487	16.5	51	11.2	2	0.5			5.9	1.30	0.070	0.015	5.4	1.2	23.7	5.2					
17	0.532		0.466	16.2	61	13.7	2	0.5			5.9	1.33	0.075	0.017	5.3	1.2	20.4	4.6					
18																							
19	0.242		0.224	7.0	20	10.0	1	0.5			6.1	3.00	0.033	0.016	2.3	1.1	11.8	5.9					
20	0.239		0.207	7.5	25	12.7	1	0.6			6.5	3.26	0.040	0.020	2.5	1.3	9.7	4.9					
21	0.562		0.475	17.0	56	11.9	2	0.5			6.6	1.41	0.080	0.017	5.5	1.2	23.7	5.1					
22	0.586		0.521	17.8	51	10.4	2	0.4			6.2	1.27	0.080	0.016	5.8	1.2	23.7	4.8					
23	0.585		0.530	17.8	56	11.4	2	0.4			7.3	1.50	0.080	0.016	5.8	1.2	21.8	4.5					
24	0.587		0.512	17.7	61	12.4	2	0.5			11.4	2.33	0.080	0.016	5.8	1.2	19.5	4.0					
25	0.597		0.525	17.8	66	13.2	2	0.3			4.7	0.94	0.084	0.017	5.8	1.2	11.2	2.3					
26																							
27	0.067		0.062	2.0	5	9.1	1	1.1			0.9	1.61	0.009	0.016	0.7	1.3	3.2	5.8					
28	0.594		0.520	18.0	61	12.3	3	0.5			11.4	2.31	0.080	0.016	5.9	1.2	20.4	4.1					
29	0.641		0.557	17.9	61	11.4	3	0.5			4.6	0.85	0.087	0.016	5.8	1.1	23.7	4.4					
30	0.633		0.551	19.0	61	11.5	3	0.6			8.5	1.61	0.100	0.019	6.2	1.2	23.7	4.5					
31																							
Total	13.025	0.000	11.462	375.1	1350	317.4	59	14.5			0.0	0.00	174.0	44.3	1.53	0.396	0.0	0.00	476.9	116.08	0.0	0.00	
Maximum	0.641	0.000	0.566	19.0	86	17.2	5	1.1			0.0	0.00	20.0	3.9	0.10	0.034	0.0	0.00	25.8	5.86	0.0	0.00	
Minimum	0.067	0.000	0.062	2.0	5	9.1	1	0.3			0.9	0.5	0.01	0.004	1	0.9	0.0	0.00	3.2	2.25	0.0	0.00	
Average	0.501	0.000	0.441	14.4	52	12.2	2	0.6			#DIV/0!	#DIV/0!	6.7	1.7	0.06	0.015	5	1.1	#DIV/0!	18.3	4.46	#DIV/0!	#DIV/0!

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME

David A Tyrrrell

Shenandoah River - Entire Month

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

Class 1  
1955002813

Flows and Chemical Dosages

No. Connections Served: 1738  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals						Finished Water Chemicals											
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor	
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.437		0.379	12.0	56	15.3	2	0.7			2.1	0.58	0.057	0.016	5	1.3			17.2	4.7		
2																						
3	0.527		0.478	15.5	81	18.5	3	0.6			6.9	1.56	0.075	0.017	6.2	1.4			28.0	6.4		
4	0.231		0.167	5.5	35	18.4	2	0.8			3.0	1.57	0.031	0.016	2.2	1.1			6.5	3.4		
5	0.215		0.184	5.8	35	19.8	1	0.7			2.9	1.61	0.029	0.016	2.3	1.3			9.7	5.4		
6	0.220		0.199	6.5	30	16.6	1	0.7			5.8	3.15	0.029	0.016	2.6	1.4			12.9	7.0		
7	0.544		0.471	17.0	91	20.1	4	0.9			6.6	1.46	0.070	0.015	6.8	1.5			25.8	5.7		
8	0.536		0.486	16.0	71	15.9	4	0.9			3.2	0.72	0.075	0.017	6.4	1.4			26.9	6.0		
9	0.516		0.443	15.5	76	17.7	4	0.8			6.7	1.55	0.070	0.016	6.2	1.4			23.7	5.5		
10	0.512		0.439	15.8	61	14.2	4	0.9			6.4	1.51	0.070	0.016	6.3	1.5			19.4	4.5		
11	0.225		0.209	6.8	46	24.3	1	0.6			2.8	1.46	0.026	0.014	2.7	1.4			9.7	5.2		
12	0.248		0.208	7.0	35	17.2	3	1.5			3.1	1.48	0.031	0.015	2.8	1.4			11.8	5.7		
13	0.562		0.471	15.0	71	15.1	3	0.6			6.9	1.47	0.075	0.016	6.0	1.3			23.7	5.0		
14	0.407		0.312	10.0	56	16.4	3	0.8			8.4	2.47	0.057	0.017	4.0	1.2			16.1	4.8		
15	0.542		0.484	15.0	66	14.6	5	1.1			6.9	1.54	0.075	0.017	6.0	1.3			22.6	5.0		
16	0.552		0.479	15.0	71	15.4	6	1.2			3.9	0.84	0.071	0.015	6.0	1.3			22.6	4.9		
17	0.498		0.440	14.0	61	14.7	6	1.4			5.7	1.37	0.066	0.016	5.6	1.3			20.4	4.9		
18	0.195		0.165	5.5	30	18.7	3	2.0			2.4	1.44	0.022	0.014	2.2	1.4			9.7	4.2		
19	0.277		0.258	8.0	35	15.2	1	0.5			3.3	1.44	0.039	0.017	3.2	1.4			9.6	4.2		
20	0.485		0.420	13.0	35	8.7	4	0.9			6.9	1.71	0.024	0.006	5.2	1.3			19.3	4.8		
21	0.307		0.270	8.3	35	13.7	5	2.0			3.8	1.48	0.040	0.016	3.1	1.2			12.9	5.0		
22	0.418		0.370	11.5	50	14.3	3	0.8			16.1	4.62	0.026	0.007	3.5	1.0			16.1	4.6		
23	0.366		0.326	10.0	41	13.3	3	0.9			1.2	0.39	0.051	0.017	3.9	1.3			16.1	5.3		
24	0.450		0.413	12.8	76	20.3	8	2.1			4.9	1.31	0.027	0.007	4.9	1.3			18.2	4.8		
25	0.241		0.151	4.8	50	24.9	2	1.0			8.9	4.43	0.003	0.001	1.8	0.9			5.3	2.6		
26																						
27	0.526		0.469	15.3	70	16.0	2	0.5			6.3	1.44	0.070	0.016	5.8	1.3			7.5	1.7		
28	0.509		0.438	13.8	66	15.5	4	0.8			6.1	1.44	0.060	0.014	5.3	1.2			7.6	1.8		
29	0.543		0.490	15.9	66	14.6	3	0.6			6.4	1.41	0.070	0.015	5.6	1.2			19.4	4.3		
30	0.523		0.456	15.7	66	15.1	3	0.7			6.3	1.44	0.070	0.016	5.6	1.3			21.5	4.9		
31																						
Total	11.612	0.000	10.073	326.6	1563	464.3	92	27.2	0.0	0.00	153.8	46.9	1.41	0.402	127	36.4	0.0	0.00	460.1	134.14	0.0	0.00
Maximum	0.562	0.000	0.490	17.0	91	24.9	8	2.1	0.0	0.00	16.1	4.6	0.08	0.017	7	1.5	0.0	0.00	28.0	7.04	0.0	0.00
Minimum	0.195	0.000	0.151	4.8	30	8.7	1	0.5	0.0	0.00	1.2	0.4	0.00	0.001	2	0.9	0.0	0.00	5.3	1.71	0.0	0.00
Average	0.415	0.000	0.360	11.7	56	16.6	3	1.0	#DIV/0!	#DIV/0!	5.5	1.7	0.05	0.014	5	1.3	#DIV/0!	#DIV/0!	16.4	4.79	#DIV/0!	#DIV/0!

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE) RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME: David A Tyrell

Shenandoah River - Entire Month

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO. Class 1  
1955002813

Flows and Chemical Dosages

December 2021

No. Connections Served: 1738  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals							
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor	
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.515		0.442	14.0	30	7.0	2	0.5	6.3	1.47	0.040	0.009	3	0.7	16.0	3.7						
2	0.531		0.482	15.0	35	7.9	2	0.5	6.3	1.42	0.060	0.014	2.6	0.6	17.2	3.9						
3	0.521		0.457	13.3	30	6.9	4	0.9	6.2	1.43	0.068	0.016	2.3	0.5	15.0	3.5						
4	0.238		0.222	7.0	15	7.7	2	1.0	2.5	1.26	0.014	0.007	1.2	0.6	5.3	2.7						
5																						
6	0.502		0.438	15.3	30	7.3	2	0.5	5.9	1.41	0.060	0.014	2.3	0.5	14.0	3.3						
7	0.520		0.477	15.4	35	8.2	2	0.5	6.1	1.41	0.060	0.014	2.3	0.5	16.1	3.7						
8	0.525		0.463	15.8	35	8.1	2	0.5	6.9	1.58	0.060	0.014	2.3	0.5	16.1	3.7						
9	0.522		0.478	15.5	30	7.0	2	0.5	7.0	1.61	0.070	0.016	2.3	0.5	16.1	3.7						
10	0.525		0.462	15.8	30	6.9	2	0.5	6.5	1.48	0.060	0.014	2.3	0.5	17.2	3.9						
11	0.237		0.208	7.2	15	7.7	1	0.6	3.1	1.57	0.030	0.015	1.1	0.6	6.5	3.3						
12																						
13	0.521		0.473	14.8	30	7.0	2	0.6	6.2	1.42	0.066	0.015	2.2	0.5	15.1	3.5						
14	0.485		0.442	13.5	30	7.5	2	0.4	9.1	2.25	0.062	0.015	2.0	0.5	16.1	4.0						
15	0.502		0.434	13.5	30	7.3	2	0.6	2.6	0.62	0.062	0.015	2.0	0.5	14.0	3.3						
16	0.470		0.424	13.5	30	7.8	3	0.7	5.5	1.41	0.057	0.015	2.2	0.6	13.9	3.6						
17	0.459		0.416	13.0	25	6.6	2	0.4	8.7	2.29	0.057	0.015	2.1	0.6	12.9	3.4						
18																						
19	0.360		0.221	7.0	20	6.8	1	0.3	2.1	0.70	0.031	0.010	1.1	0.4	6.5	2.2						
20	0.498		0.443	16.0	35	8.5	2	0.6	6.4	1.54	0.066	0.016	2.6	0.6	11.8	2.8						
21	0.538		0.482	15.5	35	7.9	2	0.4	6.5	1.45	0.061	0.014	2.5	0.6	16.1	3.6						
22	0.515		0.454	14.0	30	7.1	2	0.6	5.9	1.37	0.057	0.013	2.3	0.5	15.1	3.5						
23																						
24																						
25																						
26	0.243		0.210	7.3	20	10.0	1	0.4	2.8	1.39	0.035	0.017	1.2	0.6	7.5	3.7						
27	0.510		0.458	15.0	35	8.3	2	0.6	6.0	1.40	0.062	0.015	2.5	0.6	15.1	3.5						
28	0.508		0.449	13.8	30	7.2	3	0.7	6.0	1.42	0.060	0.014	2.2	0.5	16.1	3.8						
29	0.508		0.460	14.5	30	7.2	2	0.6	5.9	1.39	0.062	0.015	2.4	0.6	15.1	3.6						
30	0.516		0.457	14.5	35	8.2	3	0.7	6.3	1.45	0.062	0.014	2.4	0.5	14.0	3.2						
31																						
Total	11.268	0.000	9.952	319.9	709	182.1	52	13.3	0.0	0.00	136.7	34.7	1.32	0.335	51	13.1	0.0	0.00	328.8	83.10	0.0	0.00
Maximum	0.538	0.000	0.482	16.0	35	10.0	4	1.0	0.0	0.00	9.1	2.3	0.07	0.017	3	0.7	0.0	0.00	17.2	3.99	0.0	0.00
Minimum	0.237	0.000	0.208	7.0	15	6.6	1	0.3	2.1	0.6	0.00	2.1	0.6	0.01	1	0.4	0.0	0.00	5.3	2.15	0.0	0.00
Average	0.469	0.000	0.415	13.3	30	7.6	2	0.6	#DIV/0!	#DIV/0!	5.7	1.4	0.06	0.014	2	0.5	#DIV/0!	#DIV/0!	13.7	3.46	#DIV/0!	#DIV/0!

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME

David A Tyrrell

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

Class 1  
1955002813

Shenandoah River - Entire Month

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals					Finished Water Chemicals											
					Alum		Carbon	Chlorine		Fluoride	Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor		
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	
1																					
2	0.500		0.433	14.0	51	12.2	2	0.6													
3	0.525		0.485	15.0	51	11.6	2	0.5													
4	0.549		0.459	16.5	56	12.2	2	0.5													
5	0.579		0.442	15.8	86	17.9	2	0.4													
6	0.518		0.450	15.8	76	17.6	2	0.6													
7	0.223		0.211	6.5	35	19.1	2	1.3													
8	0.224		0.190	6.8	76	40.6	1	0.5													
9	0.482		0.402	15.0	81	20.2	2	0.5													
10	0.520		0.465	16.0	86	19.9	3	0.6													
11	0.500		0.441	16.0	81	19.5	2	0.5													
12	0.500		0.448	14.8	71	17.0	2	0.4													
13	0.457		0.414	14.0	66	17.3	1	0.3													
14																					
15																					
16	0.600		0.518	16.5	81	16.2	3	0.6													
17	0.552		0.486	15.5	76	16.5	2	0.5													
18	0.525		0.477	15.0	76	17.4	2	0.5													
19	0.512		0.445	15.0	76	17.8	2	0.5													
20	0.519		0.466	15.0	76	17.6	2	0.6													
21	0.364		0.322	10.5	51	16.7	1	0.5													
22	0.318		0.277	14.4	45	17.0	2	0.8													
23	0.496		0.450	14.0	60	14.5	2	0.4													
24	0.501		0.433	15.5	65	15.6	2	0.5													
25	0.488		0.418	14.3	70	17.2	3	0.7													
26	0.496		0.447	15.0	55	13.3	2	0.5													
27	0.450		0.381	13.8	66	17.6	2	0.5													
28																					
29																					
30	0.223		0.183	6.8	35	19.1	1	0.5													
31	0.512		0.463	15.5	86	20.2	2	0.5													
Total	12.133	0.000	10.604	362.7	1735	481.5	54	14.3													
Maximum	0.600	0.000	0.518	16.5	86	40.6	3	1.3													
Minimum	0.223	0.000	0.183	6.5	35	11.6	1	0.3													
Average	0.467	0.000	0.408	14.0	67	17.7	2	0.5	#DIV/0!	#DIV/0!	6.5	1.8	0.06	0.015	4	0.9	#DIV/0!	16.1	4.12	#DIV/0!	0.0

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME  
David A Tyrrell  
Class 1  
1955002813

Shenandoah River - Entire Month

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals						
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day
1	0.522		0.454	15.9	81	18.6	2	0.6	3.8	0.87	0.071	0.016	4	1.0	19.6	4.5					
2	0.514		0.465	15.6	81	18.9	2	0.6	7.0	1.63	0.073	0.017	4.2	1.0	19.6	4.6					
3	0.581		0.516	18.0	91	18.8	3	0.7	7.6	1.57	0.080	0.017	4.8	1.0	21.2	4.4					
4	0.368		0.335	11.3	61	19.8	1	0.3	8.3	2.70	0.050	0.016	3.0	1.0	14.7	4.8					
5	0.289		0.258	9.0	46	18.9	1	0.5	6.0	2.49	0.037	0.015	2.4	1.0	13.0	5.4					
6	0.574		0.503	17.5	81	16.9	3	0.5	7.3	1.52	0.075	0.016	4.7	1.0	22.8	4.8					
7	0.614		0.557	18.5	76	14.9	4	0.8	8.5	1.66	0.080	0.016	6.0	1.2	24.4	4.8					
8	0.730		0.663	22.0	91	15.0	4	0.7	10.0	1.65	0.088	0.014	6.5	1.1	29.3	4.8					
9	0.573		0.518	17.0	66	13.8	2	0.4	4.2	0.88	0.075	0.016	5.0	1.1	22.8	4.8					
10	0.562		0.514	17.0	76	16.2	3	0.7	11.7	2.51	0.075	0.016	5.0	1.1	21.2	4.5					
11	0.272		0.259	8.0	30	13.4	1	0.6	3.7	1.63	0.031	0.014	2.4	1.0	6.5	2.9					
12																					
13	0.726		0.657	21.8	91	15.1	2	0.4	9.8	1.62	0.093	0.015	6.4	1.1	29.3	4.8					
14	0.677		0.606	20.0	86	15.3	3	0.5	8.9	1.38	0.088	0.016	5.9	1.0	27.7	4.9					
15	0.709		0.640	20.5	86	14.6	4	0.6	9.3	1.57	0.095	0.016	6.7	1.1	27.7	4.7					
16	0.545		0.490	16.0	66	14.5	2	0.5	10.7	2.35	0.070	0.015	5.2	1.1	22.8	5.0					
17	0.513		0.455	15.8	61	14.2	3	0.7	3.1	0.73	0.070	0.016	5.1	1.2	19.6	4.6					
18	0.264		0.249	7.5	30	13.8	2	0.7	3.5	1.59	0.035	0.016	2.4	1.1	9.8	4.4					
19	0.258		0.223	7.0	30	14.2	1	0.6	3.4	1.58	0.031	0.014	2.3	1.1	11.4	5.3					
20	0.351		0.317	9.5	41	13.9	2	0.7	4.5	1.54	0.044	0.015	3.0	1.0	13.0	4.4					
21	0.590		0.526	16.0	66	13.4	3	0.6	7.7	1.56	0.075	0.015	5.2	1.1	26.0	5.3					
22	0.643		0.569	16.0	66	12.3	3	0.6	12.0	2.24	0.066	0.012	5.2	1.0	22.8	4.2					
23	0.650		0.584	18.5	51	9.3	3	0.6	5.1	0.94	0.088	0.016	6.0	1.1	27.6	5.1					
24	0.639		0.573	18.0	81	15.2	3	0.6	11.9	2.23	0.055	0.010	5.8	1.1	19.6	3.7					
25	0.380		0.332	9.5	51	16.0	2	0.7	4.2	1.32	0.046	0.015	3.1	1.0	11.2	3.5					
26	0.362		0.322	10.5	45	14.9	1	0.4	5.1	1.69	0.052	0.017	3.4	1.1	16.2	5.4					
27	0.635		0.568	19.3	76	14.4	2	0.4	8.6	1.62	0.055	0.010	6.2	1.2	29.3	5.5					
28	0.552		0.499	16.5	70	15.2	3	0.6	7.1	1.54	0.070	0.015	5.8	1.3	26.0	5.6					
29	0.604		0.536	18.5	76	15.1	3	0.6	7.3	1.45	0.070	0.014	6.5	1.3	29.3	5.8					
30	0.556		0.458	16.0	40	8.6	2	0.4	7.6	1.64	0.072	0.016	5.6	1.2	20.0	4.3					
31																					
Total	15.253	0.000	13.647	446.5	1894	435.3	72	16.5	0.0	0.00	47.9	1.91	0.438	138	31.3	604.5	136.90	0.0	0.00		
Maximum	0.730	0.000	0.663	22.0	91	19.8	4	0.8	0.0	0.00	12.0	2.7	0.10	0.017	7	1.3	0.0	0.00	0.0	0.00	
Minimum	0.258	0.000	0.223	7.0	30	8.6	1	0.3	0.0	0.00	3.1	0.7	0.03	0.010	2	1.0	0.0	0.00	0.0	0.00	
Average	0.526	0.000	0.471	15.4	65	15.0	2	0.6	#DIV/0!	#DIV/0!	7.2	1.7	0.07	0.015	5	1.1	#DIV/0!	20.8	4.72	#DIV/0!	

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

Ernest D Bussert  
Class 1  
1955004356

Shenandoah River - Entire Month

PRINTED NAME

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

Flows and Chemical Dosages

July 2022

No. Connections Served: 1738  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals							
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor	
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.565		0.500	17.3	76	16.1	3	0.6			7.6	1.61	0.072	0.015	61	13.0			19.5	4.1		
2	0.218		0.202	6.5	30	16.5	1	0.6			3.1	1.71	0.013	0.007	2.3	1.3			11.4	6.3		
3	0.345		0.308	10.0	35	12.3	2	0.6			4.2	1.44	0.068	0.024	3.6	1.2			13.0	4.5		
4	0.248		0.218	7.3	41	19.6	1	0.7			3.3	1.60	0.033	0.016	2.5	1.2			9.7	4.7		
5	0.515		0.448	15.8	76	17.7	2	0.6			6.9	1.62	0.068	0.016	5.6	1.3			13.0	3.0		
6	0.404		0.281	14.0	30	9.0	3	0.8			9.6	2.85	0.060	0.018	9.6	2.8			14.7	4.4		
7	0.510		0.439	15.8	61	14.3	3	0.8			6.4	1.50	0.060	0.014	6.1	1.4			17.9	4.2		
8	0.577		0.508	17.8	66	13.7	4	0.8			4.6	0.95	0.080	0.017	9.4	2.0			22.8	4.7		
9	0.236		0.227	7.1	25	12.9	1	0.7			3.1	1.55	0.030	0.015	3.8	1.9			8.2	4.1		
10	0.257		0.194	8.5	30	14.2	2	0.8			3.6	1.70	0.033	0.015	4.5	2.1			11.4	5.3		
11	0.552		0.475	17.0	56	12.1	3	0.7			7.4	1.61	0.073	0.016	7.6	1.6			24.4	5.3		
12	0.550		0.489	16.8	66	14.4	3	0.6			7.5	1.62	0.073	0.016	7.4	1.6			24.4	5.3		
13	0.542		0.498	15.5	66	14.6	4	0.8			10.5	2.33	0.066	0.015	6.9	1.5			24.4	5.4		
14	0.522		0.467	16.0	56	12.8	3	0.7			3.6	0.83	0.066	0.015	7.1	1.6			24.4	5.6		
15	0.531		0.488	15.5	61	13.7	2	0.5			7.1	1.60	0.075	0.017	6.5	1.5			24.4	5.5		
16	0.242		0.220	6.8	25	12.5	1	0.6			3.3	1.65	0.031	0.015	2.8	1.4			9.8	4.8		
17	0.225		0.212	6.6	25	13.5	1	0.7			8.6	4.59	0.029	0.015	2.7	1.5			9.8	5.2		
18	0.523		0.454	16.0	66	15.1	3	0.7			6.3	1.44	0.068	0.016	6.6	1.5			26.1	6.0		
19	0.451		0.400	14.0	61	16.2	2	0.5			6.0	1.60	0.060	0.016	5.8	1.5			24.4	6.5		
20	0.506		0.431	15.8	71	16.8	3	0.8			6.8	1.61	0.068	0.016	6.5	1.5			24.4	5.8		
21	0.518		0.463	15.8	81	18.8	3	0.6			7.1	1.64	0.083	0.019	6.5	1.5			24.4	5.6		
22	0.501		0.454	15.5	76	18.2	2	0.5			6.8	1.63	0.068	0.016	6.4	1.5			24.4	5.8		
23	0.249		0.224	7.5	46	22.0	1	0.5			3.4	1.64	0.033	0.016	3.1	1.5			14.7	7.1		
24	0.250		0.220	7.0	35	16.8	2	0.9			3.4	1.61	0.035	0.017	2.9	1.4			11.4	5.5		
25	0.592		0.535	16.5	76	15.4	4	0.8			7.8	1.57	0.075	0.015	6.8	1.4			27.7	5.6		
26	0.588		0.520	16.0	76	15.5	3	0.6			7.7	1.57	0.075	0.015	6.6	1.3			35.8	7.3		
27	0.638		0.572	17.5	91	17.1	4	0.7			8.5	1.60	0.088	0.017	7.2	1.4			30.9	5.8		
28	0.615		0.510	16.0	91	17.7	4	0.7			7.8	1.51	0.079	0.015	6.6	1.3			31.0	6.0		
29	0.585		0.534	16.5	96	19.7	3	0.6			11.0	2.25	0.077	0.016	6.8	1.4			24.4	5.0		
30	0.263		0.234	7.0	41	18.5	2	0.8			3.5	1.60	0.033	0.015	2.9	1.3			11.4	5.2		
31	0.243		0.216	7.0	35	17.3	1	0.7			3.5	1.73	0.028	0.014	2.9	1.4			8.1	4.0		
Total	13.558	0.000	11.938	402.0	1767	485.2	76	20.9			189.7	53.7	1.80	0.489	227	59.1			602.3	163.91	0.0	0.00
Maximum	0.638	0.000	0.572	17.8	96	22.0	4	0.9			11.0	4.6	0.09	0.024	61	13.0			0.0	7.30	0.0	0.00
Minimum	0.218	0.000	0.194	6.5	25	9.0	1	0.5			3.1	0.8	0.01	0.007	2	1.2			0.0	3.03	0.0	0.00
Average	0.437	0.000	0.385	13.0	57	15.7	2	0.7			6.1	1.7	0.06	0.016	7	1.9			19.4	5.29	#DIV/0!	#DIV/0!

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE) \_\_\_\_\_ RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES) \_\_\_\_\_

PRINTED NAME: David A. Tyrrell  
Shenandoah River - Entire Month

TITLE: OPERATOR CLASSIFICATION: Class 1  
DPOR CERTIFICATION NO.: 1955002813

FLOWS AND CHEMICAL DOSAGES

August 2022

No. Connections Served: 1738  
Population Served: 4185

DATE	Raw Water Treated MGD	Finished Water Produced MGD	Finished Water Delivered MGD	Hours in Service	Raw Water Chemicals										Finished Water Chemicals							
					Alum		Carbon		Chlorine		Fluoride		Polymer		KMnO4		Soda Ash		Chlorine		Corr Inhibitor	
					Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L	Lbs per Day	mg/L
1	0.520		0.476	15.5	76	17.5	6	1.5					3.3	0.76	0.070	0.016	6	1.5			22.8	5.3
2	0.513		0.455	15.8	81	18.9	6	1.4					7.0	1.64	0.075	0.018	6.5	1.5			19.5	4.6
3	0.520		0.496	15.5	70	16.1	3	0.6					6.9	1.59	0.066	0.015	6.4	1.5			21.1	4.9
4	0.520		0.467	15.8	70	16.1	4	0.9					7.1	1.64	0.068	0.016	6.5	1.5			19.5	4.5
5	0.502		0.453	15.3	70	16.7	2	0.6					6.0	1.43	0.068	0.016	6.3	1.5			21.1	5.0
6	0.186		0.165	5.5	20	12.9	2	1.0					2.5	1.61	0.035	0.023	2.2	1.4			6.5	4.2
7	0.154		0.141	4.5	25	19.7	0	0.3					2.0	1.55	0.013	0.010	1.9	1.5			8.2	5.1
8	0.200		0.152	6.1	30	18.2	1	0.6					8.1	4.86	0.030	0.018	2.5	1.5			8.2	4.9
9	0.466		0.439	14.2	66	17.0	3	0.7					9.8	2.51	0.060	0.015	5.9	1.5			19.6	5.0
10	0.526		0.470	16.0	71	16.2	3	0.7					7.0	1.60	0.070	0.016	6.6	1.5			21.2	4.8
11	0.531		0.485	16.0	76	17.2	3	0.8					3.7	0.84	0.070	0.016	6.6	1.5			26.0	5.9
12	0.558		0.500	16.2	71	15.3	3	0.6					7.5	1.61	0.075	0.016	6.7	1.4			31.0	6.7
13	0.264		0.237	8.0	30	13.8	1	0.6					3.5	1.58	0.030	0.014	3.3	1.5			9.8	4.5
14	0.259		0.241	7.5	41	18.8	2	0.7					3.3	1.54	0.033	0.015	3.1	1.4			11.4	5.3
15	0.639		0.550	18.7	76	14.3	4	0.7					8.4	1.58	0.080	0.015	7.8	1.5			32.6	6.1
16	0.630		0.517	19.8	86	16.4	3	0.5					7.9	1.50	0.080	0.015	8.2	1.6			31.0	5.9
17	0.671		0.593	18.5	96	17.2	4	0.7					9.0	1.60	0.084	0.015	7.7	1.4			34.2	6.1
18	0.523		0.474	15.0	86	19.8	3	0.7					6.8	1.57	0.057	0.013	6.2	1.4			22.8	5.2
19	0.519		0.452	15.8	76	17.6	3	0.6					6.8	1.58	0.066	0.015	6.5	1.5			17.9	4.1
20	0.233		0.219	6.8	25	13.1	1	0.4					3.1	1.60	0.029	0.015	2.8	1.4			8.2	4.2
21	0.221		0.188	6.0	30	16.5	2	0.9					3.1	1.67	0.029	0.015	2.5	1.3			6.5	3.5
22	0.612		0.541	18.5	86	16.9	2	0.4					6.5	1.27	0.074	0.014	7.9	1.5			24.4	4.8
23	0.641		0.573	19.0	86	16.1	2	0.4					8.3	1.55	0.083	0.016	7.6	1.4			24.4	4.6
24	0.636		0.569	18.5	86	16.2	4	0.8					2.5	0.47	0.088	0.017	7.6	1.4			24.4	4.6
25	0.633		0.568	18.0	81	15.4	3	0.6					5.7	1.08	0.079	0.015	7.5	1.4			22.8	4.3
26	0.651		0.583	19.8	86	15.9	4	0.8					5.8	1.07	0.079	0.015	8.2	1.5			24.4	4.5
27	0.335		0.305	12.0	35	12.7	2	0.7					5.0	1.78	0.044	0.016	5.0	1.8			11.4	4.1
28	0.240		0.222	7.0	46	22.8	2	0.8					1.6	0.80	0.031	0.015	2.9	1.5			8.9	4.4
29	0.571		0.491	15.5	71	14.9	3	0.7					6.8	1.44	0.075	0.016	6.4	1.4			21.2	4.4
30	0.534		0.472	14.5	61	13.7	2	0.5					4.7	0.17	0.068	0.015	6.0	1.4			19.6	4.4
31	0.546		0.494	15.5	71	15.6	3	0.7					4.7	1.04	0.073	0.016	6.4	1.4			24.4	5.4
Total	14.553	0.000	12.988	430.5	1984	509.3	86	22.0	0.0	0.00	170.5	46.5	1.88	0.482	178	45.6	0.0	0.00	603.3	151.24	0.0	0.00
Maximum	0.671	0.000	0.593	19.8	96	22.8	6	1.5	0.0	0.00	9.8	4.9	0.09	0.023	8	1.8	0.0	0.00	34.2	6.66	0.0	0.00
Minimum	0.154	0.000	0.141	4.5	20	12.7	0	0.3	0.0	0.00	0.7	0.2	0.01	0.010	2	1.3	0.0	0.00	6.5	3.53	0.0	0.00
Average	0.469	0.000	0.419	13.9	64	16.4	3	0.7	#DIV/0!	#DIV/0!	5.5	1.5	0.06	0.016	6	1.5	#DIV/0!	#DIV/0!	19.5	4.88	#DIV/0!	#DIV/0!

SIGNED: (OPERATOR IN RESPONSIBLE CHARGE)

RAW WATER SOURCE(S) USED DURING MONTH: (SOURCE/DATES)

PRINTED NAME

Ernest D Bussert

Shenandoah River - Entire Month

TITLE: OPERATOR CLASSIFICATION  
DPOR CERTIFICATION NO.

Class 1  
1955004356