

Membrane Filter Monthly Operating Report

County: **Columbia**

System Name: **St. Helens**

Month/Year: **Dec-2023**

PWS ID#: 41 - **00724**

Minimum test pressure applied: **30** psi

Plant ID: WTP - **A**

Minimum test pressure req'd: **18.34** psi

(e.g., "A")

DIT = Direct Integrity Test on filter(s) [Yes, No, or "off" if all filters are offline] ⇔

PDR = Pressure Decay Rate

LRC = Log Removal Credit

PDR_{Max} [^{psi}/min]

LRC [log removal]

0.074

4.00

**DIT
Daily**

Day	CFE Daily Turbidity [NTU]	Highest CFE* [NTU]	Highest IFE [NTU]	Highest PDR of day [^{psi} /min]	Lowest LRV _{ambient} of day [log removal]	[Y/N] or "off"
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13	0.018	0.02	0.062	0.05	4.61	Y
14	0.018	0.02	0.073	0.04	4.61	Y
15	0.017	0.02	0.061	0.05	4.62	Y
16	0.016	0.02	0.063	0.04	4.62	Y
17	0.017	0.02	0.064	0.04	4.62	Y
18	0.017	0.02	0.060	0.04	4.58	Y
19	0.017	0.06	0.061	0.04	4.61	Y
20	0.018	0.02	0.054	0.05	4.59	Y
21	0.043	0.05	0.041	0.04	4.58	Y
22	0.018	0.02	0.048	0.05	4.54	Y
23	0.018	0.02	0.042	0.05	4.55	Y
24	0.018	0.03	0.047	0.04	4.63	Y
25	0.018	0.02	0.047	0.04	4.59	Y
26	0.017	0.02	0.050	0.04	4.63	Y
27	0.017	0.02	0.046	0.05	4.59	Y
28	0.017	0.02	0.047	0.04	4.64	Y
29	0.018	0.02	0.049	0.05	4.55	Y
30	0.018	0.02	0.043	0.05	4.64	Y
31	0.017	0.02	0.051	0.04	4.59	Y

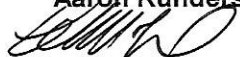
Compliance summary (operator to complete any blank fields)

95% of daily turbidity readings ≤ 1 NTU? [Y/N]	All turbidity readings ≤ 5 NTU? [Y/N]	All IFE turbidity readings ≤ 0.15 NTU? [Y/N]	Performance std met? [Y/N] (PDR ≤ PDR _{Max} , LRV ≥ LRC)	DIT Daily?
Yes	Yes	Yes	Yes	Yes
CT's met daily? (p. 2)	All Cl ₂ residual at EP ≥ 0.2 mg/L?	PDR ≤ PDR _{Max} ?	LRV _{ambient} ≥ LRC?	
		Yes	Yes	

PRINTED NAME:

Aaron Kunders

SIGNATURE:



Notes:

DATE: 1/3/24

WT CERT #: 684854

PHONE #: 503-397-2344

OHA - Drinking Water Program - Surface Water Quality Data Form

St Helens Oregon

PWS#4100724 WFP - A

Month:

December

Year:

2023

DAY	DATE	Time of Peak Flow	Minimum Chlorine Residual (mg/L) C [AIT-4705]	Contact Time T (min)	Actual Minimum C X T	Temp. (Deg. C) [TIT-4008]	pH [AIT-4713]	Required CT from tables (0.5-log)	CT Met? Yes/No	Peak Hourly Demand Flow (GPM)
1	12/01/23	0:59	0.68	116	79.0	14.3	7.5	22	Yes	2011
2	12/02/23	4:59	0.66	117	77.6	14.4	7.5	22	Yes	2001
3	12/03/23	14:59	0.67	116	78.1	14.3	7.6	26	Yes	2008
4	12/04/23	11:59	0.67	116	77.4	14.4	7.6	26	Yes	2020
5	12/05/23	22:59	0.66	115	75.9	14.5	7.6	26	Yes	2026
6	12/06/23	15:59	0.66	115	75.3	14.4	7.4	22	Yes	2042
7	12/07/23	0:59	0.65	115	74.5	14.4	7.5	22	Yes	2042
8	12/08/23	23:59	0.64	114	72.9	14.3	7.5	22	Yes	2044
9	12/09/23	14:59	0.64	115	74.0	14.2	7.4	22	Yes	2036
10	12/10/23	15:59	0.66	115	75.8	14.2	7.4	22	Yes	2028
11	12/11/23	8:59	0.66	114	75.8	14.3	7.4	22	Yes	2044
12	12/12/23	23:59	0.63	113	70.9	14.2	7.4	22	Yes	2068
13	12/13/23	13:59	0.62	115	71.2	14.2	7.4	22	Yes	2031
14	12/14/23	23:59	0.62	114	70.8	14.1	7.4	22	Yes	2048
15	12/15/23	0:59	0.64	115	73.5	14.1	7.4	22	Yes	2027
16	12/16/23	2:59	0.64	115	73.6	14.1	7.3	22	Yes	2031
17	12/17/23	18:59	0.65	115	74.5	14.0	7.4	22	Yes	2026
18	12/18/23	13:59	0.66	116	76.3	14.1	7.9	26	Yes	2023
19	12/19/23	2:59	0.73	116	84.8	14.0	7.7	26	Yes	2011
20	12/20/23	14:59	0.72	116	83.6	14.1	7.8	26	Yes	2024
21	12/21/23	23:59	0.73	115	83.5	14.0	7.3	22	Yes	2035
22	12/22/23	15:59	0.71	116	82.6	14.0	8.0	26	Yes	2020
23	12/23/23	15:59	0.72	115	83.1	14.0	7.5	22	Yes	2027
24	12/24/23	1:59	0.72	116	83.6	13.9	7.4	22	Yes	2021
25	12/25/23	13:59	0.73	116	84.6	14.0	7.4	22	Yes	2011
26	12/26/23	4:59	0.73	116	84.8	13.9	7.4	22	Yes	2008
27	12/27/23	1:59	0.72	116	83.3	14.0	7.4	22	Yes	2020
28	12/28/23	2:59	0.71	116	81.9	14.0	7.5	22	Yes	2017
29	12/29/23	5:59	0.73	115	84.0	14.0	7.4	22	Yes	2025
30	12/30/23	0:59	0.73	115	83.4	14.0	7.5	22	Yes	2034
31	12/31/23	13:59	0.72	115	83.0	14.0	7.4	22	Yes	2024

Notes:

Clearwell Baffling Factor = 0.541

Min Clearwell Level = 432206 gallons 1

1 25.2' Pause level multiplied by 17155 gal/foot

OHA - Drinking Water Program - Turbidity Monitoring Report Form Columbia County

Membrane Filtration

St. Helens PWS ID #4100724 WTP -: A


December

2023

DAY	DATE	12 AM (NTU) [AIT-4001]	4 AM (NTU) [AIT-4001]	8 AM (NTU) [AIT-4001]	12 PM (NTU) [AIT-4001]	4 PM (NTU) [AIT-4001]	8 PM (NTU) [AIT-4001]	Filter Effluent Max Turbidity (NTU) [AIT-4001]
1	12/01/23	0.020	no	no	0.020	0.019	no	0.020
2	12/02/23	no	0.019	no	no	0.018	no	0.019
3	12/03/23	0.017	no	no	0.017	0.017	no	0.017
4	12/04/23	0.017	no	no	0.017	no	no	0.017
5	12/05/23	0.017	no	no	0.017	no	0.016	0.017
6	12/06/23	0.016	no	no	0.016	no	no	0.016
7	12/07/23	0.016	no	no	0.016	no	no	0.016
8	12/08/23	0.015	no	no	0.015	no	no	0.015
9	12/09/23	0.016	no	no	0.015	no	no	0.016
10	12/10/23	0.015	no	no	0.016	0.016	no	0.016
11	12/11/23	no	0.016	0.015	0.016	no	0.015	0.016
12	12/12/23	0.016	no	no	0.016	no	no	0.016
13	12/13/23	0.018	no	no	0.018	0.018	no	0.018
14	12/14/23	0.019	no	no	0.018	no	no	0.019
15	12/15/23	0.018	no	no	0.018	no	no	0.018
16	12/16/23	0.018	no	no	0.018	0.018	no	0.018
17	12/17/23	no	no	0.018	no	0.018	no	0.018
18	12/18/23	no	0.018	no	0.018	no	no	0.018
19	12/19/23	0.018	no	no	0.018	0.018	no	0.018
20	12/20/23	no	0.018	no	0.017	0.018	no	0.018
21	12/21/23	0.018	no	no	0.018	no	no	0.018
22	12/22/23	0.018	no	no	0.018	0.018	no	0.018
23	12/23/23	no	no	no	0.018	0.018	no	0.018
24	12/24/23	0.018	no	no	0.018	no	no	0.018
25	12/25/23	0.017	no	no	0.018	0.017	no	0.018
26	12/26/23	no	0.018	no	0.017	0.018	no	0.018
27	12/27/23	0.018	no	no	0.018	no	no	0.018
28	12/28/23	0.018	no	no	0.018	0.018	no	0.018
29	12/29/23	no	0.018	no	0.018	0.018	no	0.018
30	12/30/23	0.018	no	no	0.018	0.018	no	0.018
31	12/31/23	0.017	no	no	0.017	0.018	no	0.018

Slow Sand/Membrane/DE Filtration/Unfiltered Monthly Summary (Answer Yes or No)

95% of daily turbidity readings \leq 1 NTU <input checked="" type="radio"/> Yes / <input type="radio"/> No	CT's met everyday? (see back) <input checked="" type="radio"/> Yes / <input type="radio"/> No	All CL2 residual at entry point > 0.2 mg/l? <input checked="" type="radio"/> Yes / <input type="radio"/> No
All turbidity readings < 5 NTU? <input checked="" type="radio"/> Yes / <input type="radio"/> No		

Notes	Printed Name: Aaron Kunders
	Signature:  Date: 1/3/24
	Phone #: (503) 397-1311 Opr. Cert. # 684854