

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

Membrane Filtration

St. Helens PWS ID #4100724 WTP -: A

October

2023

| DAY | DATE     | 12 AM<br>(NTU)<br>[AIT-4001] | 4 AM<br>(NTU)<br>[AIT-4001] | 8 AM<br>(NTU)<br>[AIT-4001] | 12 PM<br>(NTU)<br>[AIT-4001] | 4 PM<br>(NTU)<br>[AIT-4001] | 8 PM<br>(NTU)<br>[AIT-4001] | Filter Effluent<br>Max Turbidity<br>(NTU)<br>[AIT-4001] |
|-----|----------|------------------------------|-----------------------------|-----------------------------|------------------------------|-----------------------------|-----------------------------|---|
| 1   | 10/01/23 | no                           | 0.019                       | no                          | 0.019                        | 0.019                       | no                          | 0.019   |
| 2   | 10/02/23 | 0.019                        | no                          | no                          | 0.019                        | no                          | no                          | 0.019   |
| 3   | 10/03/23 | 0.019                        | no                          | 0.019                       | 0.019                        | no                          | no                          | 0.019   |
| 4   | 10/04/23 | 0.019                        | no                          | no                          | 0.019                        | no                          | 0.019                       | 0.019   |
| 5   | 10/05/23 | 0.019                        | no                          | no                          | 0.019                        | no                          | no                          | 0.019   |
| 6   | 10/06/23 | 0.019                        | no                          | 0.018                       | 0.019                        | no                          | 0.020                       | 0.020   |
| 7   | 10/07/23 | no                           | no                          | no                          | 0.019                        | 0.020                       | no                          | 0.020   |
| 8   | 10/08/23 | no                           | no                          | 0.019                       | no                           | 0.019                       | 0.019                       | 0.019   |
| 9   | 10/09/23 | no                           | no                          | 0.019                       | no                           | no                          | 0.019                       | 0.019   |
| 10  | 10/10/23 | no                           | no                          | 0.019                       | 0.019                        | no                          | no                          | 0.019   |
| 11  | 10/11/23 | 0.018                        | no                          | no                          | 0.019                        | no                          | 0.019                       | 0.019   |
| 12  | 10/12/23 | 0.019                        | no                          | no                          | 0.019                        | no                          | no                          | 0.019   |
| 13  | 10/13/23 | 0.019                        | no                          | no                          | 0.018                        | 0.019                       | no                          | 0.019   |
| 14  | 10/14/23 | no                           | no                          | no                          | 0.019                        | 0.019                       | no                          | 0.019   |
| 15  | 10/15/23 | 0.019                        | no                          | no                          | 0.019                        | 0.019                       | no                          | 0.019   |
| 16  | 10/16/23 | 0.019                        | no                          | no                          | 0.019                        | no                          | no                          | 0.019   |
| 17  | 10/17/23 | 0.019                        | no                          | no                          | 0.019                        | no                          | 0.019                       | 0.019   |
| 18  | 10/18/23 | 0.019                        | no                          | no                          | 0.019                        | no                          | no                          | 0.019   |
| 19  | 10/19/23 | 0.019                        | no                          | no                          | 0.019                        | 0.019                       | no                          | 0.019   |
| 20  | 10/20/23 | 0.019                        | no                          | no                          | 0.019                        | no                          | no                          | 0.019   |
| 21  | 10/21/23 | 0.019                        | no                          | no                          | 0.019                        | no                          | no                          | 0.019   |
| 22  | 10/22/23 | 0.018                        | no                          | no                          | 0.019                        | 0.019                       | no                          | 0.019   |
| 23  | 10/23/23 | no                           | 0.019                       | 0.018                       | no                           | 0.019                       | 0.018                       | 0.019   |
| 24  | 10/24/23 | no                           | no                          | 0.019                       | 0.018                        | no                          | 0.020                       | 0.020   |
| 25  | 10/25/23 | no                           | no                          | 0.018                       | 0.019                        | no                          | no                          | 0.019   |
| 26  | 10/26/23 | 0.020                        | no                          | no                          | 0.019                        | no                          | no                          | 0.020   |
| 27  | 10/27/23 | 0.019                        | no                          | no                          | 0.019                        | no                          | no                          | 0.019   |
| 28  | 10/28/23 | 0.022                        | no                          | no                          | 0.022                        | 0.021                       | no                          | 0.022   |
| 29  | 10/29/23 | no                           | no                          | 0.022                       | no                           | 0.022                       | 0.021                       | 0.022   |
| 30  | 10/30/23 | no                           | no                          | 0.022                       | 0.021                        | no                          | 0.022                       | 0.022   |
| 31  | 10/31/23 | no                           | no                          | 0.021                       | 0.021                        | 0.022                       | no                          | 0.022   |

Slow Sand/Membrane/DE Filtration/Unfiltered

Monthly Summary (Answer Yes or No)

95% of daily turbidity readings  $\leq$  1 NTU  Yes /  No


CT's met everyday?  
(see back)  
 Yes /  No

All CL2 residual at entry point >  
0.2 mg/l?  Yes /  No

All turbidity readings < 5 NTU?  Yes /  No

Notes

Printed Name: Aaron Kunders

Signature: 

Date: 11/2/23

Phone #: (503) 397-1311

Opr. Cert. # 684854

**OHA - Drinking Water Program - Surface Water Quality Data Form**

**St Helens Oregon**

**PWS#4100724 WFP - A**

**Month:**

**October**

**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   | 10/01/23 | 16:59             | 0.68  | 118                  | 80.3                 | 14.4                      | 7.6           | 18                                | Yes            | 1983                          |
| 2   | 10/02/23 | 13:59             | 0.69  | 118                  | 81.2                 | 14.4                      | 7.6           | 18                                | Yes            | 1988                          |
| 3   | 10/03/23 | 2:59              | 0.68  | 118                  | 80.5                 | 14.4                      | 7.5           | 15                                | Yes            | 1978                          |
| 4   | 10/04/23 | 15:59             | 0.70  | 118                  | 82.9                 | 14.4                      | 7.5           | 15                                | Yes            | 1974                          |
| 5   | 10/05/23 | 23:59             | 0.70  | 118                  | 82.5                 | 14.4                      | 7.5           | 15                                | Yes            | 1983                          |
| 6   | 10/06/23 | 9:59              | 0.70  | 119                  | 83.5                 | 14.4                      | 7.4           | 15                                | Yes            | 1972                          |
| 7   | 10/07/23 | 12:59             | 0.70  | 119                  | 82.5                 | 14.4                      | 7.4           | 15                                | Yes            | 1971                          |
| 8   | 10/08/23 | 21:59             | 0.69  | 119                  | 82.1                 | 14.4                      | 7.4           | 15                                | Yes            | 1973                          |
| 9   | 10/09/23 | 20:59             | 0.69  | 117                  | 80.8                 | 14.5                      | 7.6           | 18                                | Yes            | 1991                          |
| 10  | 10/10/23 | 11:59             | 0.68  | 119                  | 80.9                 | 14.5                      | 7.4           | 15                                | Yes            | 1961                          |
| 11  | 10/11/23 | 12:59             | 0.68  | 118                  | 79.8                 | 14.5                      | 7.4           | 15                                | Yes            | 1981                          |
| 12  | 10/12/23 | 13:59             | 0.68  | 118                  | 81.0                 | 14.5                      | 7.5           | 15                                | Yes            | 1974                          |
| 13  | 10/13/23 | 12:59             | 0.68  | 118                  | 80.6                 | 14.5                      | 7.5           | 15                                | Yes            | 1975                          |
| 14  | 10/14/23 | 14:59             | 0.67  | 119                  | 79.7                 | 14.5                      | 7.5           | 15                                | Yes            | 1972                          |
| 15  | 10/15/23 | 13:59             | 0.68  | 117                  | 79.3                 | 14.5                      | 7.5           | 15                                | Yes            | 2002                          |
| 16  | 10/16/23 | 3:59              | 0.67  | 118                  | 78.7                 | 14.6                      | 7.4           | 15                                | Yes            | 1979                          |
| 17  | 10/17/23 | 0:59              | 0.65  | 117                  | 76.3                 | 14.6                      | 7.4           | 15                                | Yes            | 2002                          |
| 18  | 10/18/23 | 15:59             | 0.66  | 118                  | 77.9                 | 14.5                      | 7.4           | 15                                | Yes            | 1977                          |
| 19  | 10/19/23 | 11:59             | 0.66  | 117                  | 77.8                 | 14.6                      | 7.4           | 15                                | Yes            | 1991                          |
| 20  | 10/20/23 | 3:59              | 0.65  | 118                  | 76.5                 | 14.6                      | 7.4           | 15                                | Yes            | 1989                          |
| 21  | 10/21/23 | 12:59             | 0.65  | 117                  | 76.2                 | 14.6                      | 7.4           | 15                                | Yes            | 1998                          |
| 22  | 10/22/23 | 1:59              | 0.65  | 117                  | 75.9                 | 14.6                      | 7.5           | 15                                | Yes            | 2006                          |
| 23  | 10/23/23 | 17:59             | 0.65  | 117                  | 76.6                 | 14.6                      | 7.5           | 15                                | Yes            | 1996                          |
| 24  | 10/24/23 | 21:59             | 0.65  | 119                  | 77.3                 | 14.5                      | 7.5           | 15                                | Yes            | 1971                          |
| 25  | 10/25/23 | 11:59             | 0.64  | 117                  | 75.4                 | 14.4                      | 7.5           | 15                                | Yes            | 1997                          |
| 26  | 10/26/23 | 16:59             | 0.64  | 118                  | 75.9                 | 14.5                      | 7.5           | 15                                | Yes            | 1984                          |
| 27  | 10/27/23 | 0:59              | 0.64  | 118                  | 75.7                 | 14.5                      | 7.5           | 15                                | Yes            | 1989                          |
| 28  | 10/28/23 | 2:59              | 0.64  | 117                  | 74.7                 | 14.5                      | 7.5           | 15                                | Yes            | 1995                          |
| 29  | 10/29/23 | 9:59              | 0.64  | 119                  | 75.5                 | 14.4                      | 7.4           | 15                                | Yes            | 1972                          |
| 30  | 10/30/23 | 23:59             | 0.65  | 118                  | 76.9                 | 14.3                      | 7.4           | 15                                | Yes            | 1978                          |
| 31  | 10/31/23 | 11:59             | 0.64  | 116                  | 74.7                 | 14.4                      | 7.5           | 15                                | Yes            | 2013                          |

Notes:

Clearwell Baffling Factor = 0.541

Min Clearwell Level = 432206 gallons 1

1 25.2' Pause level multiplied by 17155 gal/foot