

OHA - Drinking Water Services - Turbidity Monitoring Report Form

County: Multnomah

Slow Sand, Membrane, Diatomaceous Earth Filtration, or Unfiltered Systems

Portland Water Bureau

ID #: OR 4100657

WTP-A

Month/Year: 01/2021

DAY	12 AM (NTU)	4 AM (NTU)	8 AM (NTU)	NOON (NTU)	4 PM (NTU)	8 PM (NTU)	Highest Reading (NTU)
1	1.45	1.47	1.47	1.48	1.43	1.43	1.48
2	1.33	1.31	1.30	1.22	1.19	1.18	1.33
3	1.17	1.15	1.08	1.10	1.06	1.08	1.17
4	1.07	1.09	1.07	1.00	0.98	0.97	1.09
5	0.97	0.93	0.95	0.98	0.98	0.91	0.98
6	0.89	0.80	0.79	0.80	0.80	0.79	0.89
7	0.80	0.80	0.82	0.82	0.76	0.72	0.82
8	0.74	0.74	0.74	0.74	0.74	0.74	0.74
9	0.74	0.72	0.71	0.71	0.71	0.70	0.74
10	0.69	0.68	0.67	0.66	0.67	0.66	0.69
11	0.66	0.66	0.65	0.65	0.65	0.64	0.66
12	0.63	0.63	0.61	0.61	0.61	0.61	0.63
13	0.63	0.73	0.81	0.71	0.87	1.03	1.03
14	0.95	0.87	0.82	0.81	0.90	1.08	1.08
15	1.13	1.14	1.18	1.13	1.14	1.07	1.18
16	1.18	1.47	1.64	1.74	1.41	1.24	1.74
17	1.47	1.44	1.40	1.43	1.39	1.49	1.49
18	1.47	1.52	1.53	1.54	1.53	1.44	1.54
19	1.58	1.57	1.66	1.66	1.57	1.58	1.66
20	1.61	1.57	1.57	1.58	1.49	1.50	1.61
21	1.53	1.49	1.46	1.42	1.44	1.59	1.59
22	1.60	1.59	1.58	1.54	1.54	1.53	1.60
23	1.52	1.49	1.48	1.47	1.48	1.49	1.52
24	1.47	1.45	1.43	1.43	1.40	1.38	1.47
25	1.36	1.33	1.33	1.31	1.29	1.28	1.36
26	1.27	1.25	1.25	1.25	1.29	1.28	1.29
27	1.23	1.23	1.21	1.20	1.20	1.18	1.23
28	1.18	1.17	1.16	1.17	1.16	1.16	1.18
29	1.16	1.13	1.13	1.13	1.12	1.08	1.16
30	1.07	1.05	1.05	1.06	1.06	1.04	1.07
31	1.02	1.02	1.01	1.00	1.00	0.98	1.02

Slow Sand/Membrane/DE Filtration/Unfiltered		Monthly summary	
95% of daily turbidity readings ≤ 1 NTU? ¹	N/A	CT's met everyday?	Chlorine residual at entry point always ≥ 0.2 mg/L?
All daily turbidity readings ≤ 5 NTU?	Yes	Yes	Chlorine residual measured in 95% of distribution samples?
			Yes

¹Filtered systems only

Signature: Anna Vosa
Anna Vosa, P.E.

Date: 2/9/21

OHA - Drinking Water Services

Surface Water Quality Data Conduit 2

Portland Water Bureau

ID#: OR 4100657

WTP-A

Month/Year: 01/2021

Date / Time	Peak Hourly Flow	Minimum Hourly Average Free Chlorine (C)	Contact Time (T)	Actual CT	Temp	pH	Req'd CT	CT Met?	Min. Hourly Average Total Chlorine at First User
	MGD	ppm or mg/L	min.	C x T	°C		Tables	Y/N	ppm or mg/L
1 / 21	28.16	2.23	319.8	712.0	5.7	6.41	133.5	Y	2.16
2 / 09	28.16	2.25	320.1	721.5	5.6	6.42	134.6	Y	2.16
3 / 17	28.18	2.25	320.2	721.4	5.7	6.43	134.4	Y	2.16
4 / 10	28.12	2.23	320.3	713.4	5.7	6.43	132.6	Y	2.12
5 / 11	28.19	2.22	319.7	709.8	5.7	6.45	134.0	Y	2.15
6 / 21	28.16	2.19	319.9	701.0	5.8	6.45	132.9	Y	2.12
7 / 06	28.17	2.21	319.8	706.1	5.8	6.44	133.9	Y	2.15
8 / 06	28.14	2.21	320.0	706.4	5.8	6.46	131.2	Y	2.12
9 / 09	27.54	2.22	322.9	718.4	5.8	6.41	132.6	Y	2.15
10 / 09	27.11	2.23	331.5	738.1	5.8	6.42	132.3	Y	2.12
11 / 17	27.59	2.17	326.6	708.9	5.8	6.43	131.2	Y	2.08
12 / 07	27.59	2.18	326.8	712.9	5.9	6.40	128.3	Y	2.10
13 / 15	27.32	2.16	331.2	715.6	6.2	6.43	129.9	Y	2.11
14 / 06	27.31	2.19	330.9	724.9	6.1	6.41	131.0	Y	2.14
15 / 21	27.29	2.18	331.0	721.8	6.2	6.39	126.4	Y	2.11
16 / 12	27.31	2.17	330.0	715.9	6.4	6.37	124.9	Y	2.14
17 / 20	27.30	2.22	329.6	730.9	6.4	6.37	123.6	Y	2.16
18 / 08	27.34	2.18	329.8	720.3	6.4	6.38	124.2	Y	2.15
19 / 14	27.69	2.18	325.7	709.1	6.4	6.37	122.5	Y	2.15
20 / 19	26.69	2.19	335.6	734.9	6.3	6.34	124.2	Y	2.17
21 / 14	26.76	2.14	337.1	721.2	6.4	6.35	124.6	Y	2.13
22 / 18	27.03	2.13	333.8	709.4	6.4	6.34	123.0	Y	2.10
23 / 06	26.50	2.17	335.6	728.6	6.2	6.34	126.0	Y	2.13
24 / 07	26.08	2.19	344.5	754.8	6.2	6.36	127.2	Y	2.13
25 / 18	37.08	2.19	243.3	532.7	5.9	6.40	129.3	Y	2.05
26 / 19	42.27	2.20	213.3	469.0	5.9	6.39	129.5	Y	2.18
27 / 06	41.94	2.08	214.7	446.5	5.8	6.41	132.8	Y	1.98
28 / 07	39.80	2.12	286.2	607.7	5.8	6.40	127.2	Y	2.07
29 / 10	39.78	2.20	286.5	629.0	5.8	6.41	133.6	Y	2.18
30 / 13	39.77	2.18	286.3	623.2	5.8	6.44	132.9	Y	2.13
31 / 20	40.59	2.16	280.6	607.4	5.8	6.50	132.9	Y	1.71

Notes for Conduit 2 (C2):

January 1 to 27, 2021: Conduit 2 out of service from Headworks to Hudsons Intertie; Conduit 3 feeding Conduit 2 at Hudsons Intertie, Conduit 2 in service from Hudsons through Lusted and on to town.

January 27 to 31, 2021: Conduit 2 out of service from Headworks to Hudsons Intertie; Conduit 4 feeding Conduit 2 at Hudsons Intertie, Conduit 2 in service from Hudsons through Lusted and on to town.

Signature: Anna Vosa
 Anna Vosa, P.E., Water Quality Engineer

Date: 2/9/21

OHA - Drinking Water Services

Surface Water Quality Data Conduit 3

Portland Water Bureau

ID#: OR 4100657

WTP-A

Month/Year: 01/2021

Date / Time	Peak Hourly Flow	Minimum Hourly Average Free Chlorine (C)	Contact Time (T)	Actual CT	Temp	pH	Req'd CT	CT Met?	Min. Hourly Average Total Chlorine at First User
	MGD	ppm or mg/L	min.	C x T	°C		Tables	Y/N	ppm or mg/L
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12	Conduit 3 Out of Service from Hudsons Intertie through Lusted and on to Town								
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27 / 15	42.76	1.07	230.7	247.0	5.8	6.00	101.6	Y	0.75
28 / 06	42.74	2.16	230.7	497.6	5.8	6.00	112.6	Y	2.09
29 / 23	37.47	2.23	263.2	586.5	5.7	6.57	136.6	Y	2.20
30 / 11	37.51	2.19	263.1	576.6	5.7	6.65	144.7	Y	2.19
31 / 21	38.35	2.18	257.7	560.8	5.8	6.53	137.8	Y	1.85

Notes for Conduit 3 (C3):

January 1 to 27, 2021: Conduit 3 out of service from Hudsons Intertie through Lusted and on to town; Conduit 3 feeding Conduit 2 at Hudsons Intertie.

January 27 to 31, 2021: Conduit 3 in service from Headworks through Lusted and on to town.

Signature: Anna Vosa
 Anna Vosa, P.E., Water Quality Engineer

Date: 2/9/21

OHA - Drinking Water Services

Surface Water Quality Data Conduit 4

Portland Water Bureau

ID#: OR 4100657

WTP-A

Month/Year: 01/2021

Date / Time	Peak Hourly Flow	Minimum Hourly Average Free Chlorine (C)	Contact Time (T)	Actual CT	Temp	pH	Req'd CT	CT Met?	Min. Hourly Average Total Chlorine at First User
	MGD	ppm or mg/L	min.	C x T	°C		Tables	Y/N	ppm or mg/L
1 / 16	48.87	2.20	260.1	572.1	5.7	6.43	132.0	Y	2.15
2 / 16	48.90	2.22	260.1	577.1	5.6	6.45	134.0	Y	2.17
3 / 17	48.96	2.24	260.0	582.0	5.7	6.46	133.3	Y	2.19
4 / 03	48.88	2.21	260.2	576.3	5.7	6.47	132.2	Y	2.15
5 / 11	48.96	2.23	259.8	578.3	5.7	6.48	133.7	Y	2.18
6 / 05	48.94	2.18	260.0	568.2	5.8	6.49	131.8	Y	2.15
7 / 15	48.93	2.23	260.0	580.1	5.8	6.48	132.3	Y	2.18
8 / 03	48.92	2.23	260.1	580.7	5.8	6.50	131.8	Y	2.19
9 / 00	48.59	2.21	261.6	577.9	5.8	6.43	133.7	Y	2.14
10 / 03	47.01	2.22	270.1	598.5	5.8	6.46	131.9	Y	2.15
11 / 19	56.69	2.20	223.9	491.7	5.8	6.47	132.1	Y	2.15
12 / 05	56.74	2.24	223.9	500.5	5.9	6.44	134.5	Y	2.19
13 / 08	56.18	2.20	226.7	498.2	6.1	6.43	130.1	Y	2.17
14 / 01	49.82	2.19	256.0	560.4	6.1	6.46	131.3	Y	2.15
15 / 08	49.76	2.18	256.1	559.0	6.2	6.44	130.0	Y	2.14
16 / 10	48.05	2.15	264.6	569.5	6.4	6.42	127.3	Y	2.09
17 / 22	52.49	2.24	242.0	541.1	6.4	6.42	129.1	Y	2.17
18 / 19	52.62	2.21	241.6	533.2	6.4	6.40	128.6	Y	2.18
19 / 13	53.32	2.20	238.4	525.2	6.4	6.41	127.7	Y	2.16
20 / 00	51.69	2.18	246.0	536.0	6.4	6.36	124.5	Y	2.16
21 / 17	51.33	2.16	247.5	533.8	6.4	6.38	122.3	Y	2.14
22 / 17	51.87	2.16	245.0	528.7	6.4	6.38	125.9	Y	2.14
23 / 01	51.85	2.19	245.2	535.8	6.3	6.38	125.9	Y	2.14
24 / 23	46.60	2.19	272.2	595.5	6.0	6.42	131.6	Y	2.14
25 / 03	49.97	2.22	254.6	566.3	6.0	6.44	131.8	Y	2.15
26 / 19	39.99	2.15	318.8	684.5	5.9	6.42	131.8	Y	2.11
27 / 01	41.94	2.14	320.6	687.0	5.8	6.42	131.0	Y	2.12
Conduit 4 Out of Service from Hudsons Intertie through Lusted and on to Town									

Notes for Conduit 4 (C4):

January 1 to 27, 2021: Conduit 4 in service from Headworks through Lusted and on to town.

January 27 to 31, 2021: Conduit 4 out of service from Hudsons Intertie through Lusted and on to town;
Conduit 4 feeding Conduit 2 at Hudsons Intertie.

Signature: Anna Vosa
Anna Vosa, P.E., Water Quality Engineer

Date: 2/9/21

OHA Drinking Water Services - Raw Coliform Data (Unfiltered)

Portland Water Bureau

ID#: OR 4100657

Month/Year: 01/2021

Date	Fecal Coliform (CFU/100mL)	Comments
1/1/2021	1	
1/2/2021	1	
1/3/2021	1	
1/4/2021	1	
1/5/2021	2	
1/6/2021	1	
1/7/2021	2	
1/8/2021	<1	
1/9/2021	<1	
1/10/2021	1	
1/11/2021	1	
1/12/2021	<1	
1/13/2021	1	
1/14/2021	<1	
1/15/2021	1	
1/16/2021	1	
1/17/2021	1	
1/18/2021	1	
1/19/2021	1	
1/20/2021	1	
1/21/2021	2	
1/22/2021	<1	
1/23/2021	<1	
1/24/2021	<1	
1/25/2021	<1	
1/26/2021	<1	
1/27/2021	1	
1/28/2021	1	
1/29/2021	<1	
1/30/2021	<1	
1/31/2021	<1	

Note: Fecal Coliform sampled at active Headworks Raw Water Intake (either 2P or 2PIS)

Six Month Summary:

# of Samples For Fecal Coliform:	184
# of Samples > 20 CFU/100mL:	0
Percent:	0.0%