

OHA - Drinking Water Services - Surface Water Quality Data Form

County: **Clackamas**

Filtration with Disinfection: UV for *Giardia/Crypto.* & Chlorination for Viruses


Month/Year: **23-Oct**

System Name: **Estacada**

WS ID#: 41- **00279**

WTP ID: **A**

Day	Turbidity							Viral CT's						
	12 AM [NTU]	4 AM [NTU]	8 AM [NTU]	NOON [NTU]	4 PM [NTU]	8 PM [NTU]	Highest NTU of the day <sup>1</sup>	Minimum Cl <sub>2</sub> Residual at 1 <sup>st</sup> User (C) [mg/L] <sup>2</sup>	Contact Time (T) [minutes]	Actual CT C X T	Temp	Required CT [from table next page]	Peak Hour Demand Flow [gpm]	Required CT Met? <sup>2</sup> [Yes / No]
1	0.09			0.06	0.09		0.14	0.53	29	15.37	13.9	6	1300	YES
2	0.09		0.04		0.04	0.04	0.07	0.47	29	13.63	13.4	6	1300	YES
3	0.04	0.04	0.04	0.04	0.04	0.04	0.08	0.39	53	20.67	13.7	6	700	YES
4	0.04	0.04	0.04	0.04	0.04	0.04	0.06	0.42	53	22.26	13.2	6	700	YES
5	0.04	0.04	0.04	0.04	0.04		0.08	0.58	29	16.82	13.0	6	1300	YES
6	0.04			0.04			0.09	0.80	29	23.2	13.7	6	1300	YES
7	0.04			0.04		0.04	0.12	0.73	29	21.17	14.0	6	1300	YES
8	0.05		0.06	0.04			0.09	0.66	29	19.14	14.1	6	1300	YES
9	0.04		0.04	0.04		0.04	0.10	0.76	29	22.04	14.0	6	1300	YES
10	0.04		0.04	0.04	0.04	0.04	0.10	0.62	53	32.86	13.9	6	700	YES
11	0.04	0.04	0.04	0.04	0.04		0.09	0.55	53	29.15	13.8	6	700	YES
12	0.04	0.04		0.04	0.04	0.04	0.11	0.66	53	34.98	13.5	6	700	YES
13	0.03		0.05	0.05	0.05	0.05	0.10	0.53	53	28.09	13.7	6	700	YES
14	0.05			0.05	0.11	0.08	0.11	0.64	53	33.92	13.4	6	700	YES
15	0.09		0.11	0.05	0.04	0.05	0.25	0.56	53	29.68	13.7	6	700	YES
16	0.04	0.04		0.05	0.05	0.05	0.09	0.61	53	32.33	13.5	6	700	YES
17	0.04		0.05	0.04	0.05	0.05	0.09	0.89	53	47.17	13.1	6	700	YES
18	0.05	0.05	0.04	0.04	0.06	0.04	0.10	0.40	53	21.2	13.3	6	700	YES
19	0.04		0.04	0.06	0.04	0.04	0.10	0.58	53	30.74	13.1	6	700	YES
20	0.04		0.04	0.05	0.05	0.05	0.08	0.69	53	36.57	12.8	6	700	YES
21		0.05	0.05	0.05	0.05	0.05	0.09	0.91	53	48.23	12.6	6	700	YES
22		0.05		0.05	0.04	0.05	0.09	0.86	53	45.58	12.7	6	700	YES
23	0.05				0.05	0.05	0.08	0.62	53	32.86	13.0	6	700	YES
24	0.05	0.05	0.05	0.04	0.05	0.04	0.07	0.95	53	50.35	12.1	6	700	YES
25	0.05	0.05	0.04	0.04	0.04	0.04	0.08	0.88	53	46.64	11.9	6	700	YES
26			0.05		0.05		0.09	0.89	29	25.81	11.7	6	1300	YES
27			0.05		0.05		0.08	0.84	29	24.36	10.9	6	1300	YES
28		0.06	0.06		0.05	0.05	0.08	0.77	29	22.33	10.6	6	1300	YES
29					0.05	0.05	0.11	0.71	29	20.59	10.1	6	1300	YES
30				0.06	0.06		0.09	0.74	29	21.46	10.1	6	1300	YES
31			0.07	0.06	0.06		0.08	0.76	29	22.04	9.2	8	1300	YES

<b>Conventional or Direct Filtration</b> 95% of 4-hr turbidity readings ≤ 0.3 NTU? <input checked="" type="radio"/> Yes / <input type="radio"/> No All 4-hour turbidity readings < 1 NTU? <input checked="" type="radio"/> Yes / <input type="radio"/> No All turbidity readings < IFE triggers? <input checked="" type="radio"/> Yes / <input type="radio"/> No <sup>3</sup>		<b>Monthly Summary (circle Yes or No)</b> Virus CT's met everyday? <input checked="" type="radio"/> Yes / <input type="radio"/> No All Cl <sub>2</sub> residual at entry point ≥ 0.2 mg/L? <input checked="" type="radio"/> Yes / <input type="radio"/> No	
<b>Monthly UV Summary (circle Yes or No)</b> Was the volume of off-spec water produced less than 5% for the month? <input checked="" type="radio"/> Yes / <input type="radio"/> No		503-572-6262 DATE: <i>11-3-2023</i> PRINTED NAME: <b>Chris Lewis</b> SIGNATURE: 	CERT #: <b>T-6933</b>

<sup>1</sup> If one NTU value per day measured, value same as Compliance Turbidity. Intended for multiple readings per day. Used for optimization efforts only. Highest NTU of the day is for optimization, not compliance. Highest is only for state-wide tracking of performance among all treatment systems.

<sup>2</sup> If CT not met or Cl<sub>2</sub> at entry point (1st user) < 0.2 mg/L, notify DWS within 24 hours.

<sup>3</sup> IFE= Individual Filter Effluent (OAR 333-061-0040(1)(e)(B&C))

<b>OHA - Drinking Water Services - Surface Water Quality Data Form</b>	<b>County:</b> Clackamas
<b>Conventional Filtration with UV Disinfection of <i>Giardia/Crypto</i>.</b>	<b>Month/Year:</b> 23-Oct
<b>System Name:</b> <u>Estacada</u>	<b>WTP ID:</b> <u>A</u>
<b>ID# 41- 00279</b>	

Minimum UVT during month: 86.2 %      Duty sensor variation from reference sensor %: 1.14  
 Minimum Validated UVT: 69%      Min. UV Dose achieved/intended this month: 4.71 / 2.1 <sup>mj</sup>/cm<sup>2</sup>

Date	Peak Hourly Demand Flow	Minimum Dosage	All Lamps On?	Daily Water Produced {A}	Water outside Validated Conditions {B}	Cumulative % Off-Spec Water Produced
	[gpm/unit]	[mj/cm <sup>2</sup> ]	[ Y or N ]	[gal] MGD	[gal]	(Mo. Sum {B}) ÷ (Mo. Sum {A}) * 100 [%]
1	650	5.04	Y	0.766	0	
2	650	4.76	Y	0.808	0	
3	350	4.71	Y	0.682	0	
4	350	4.71	Y	1.07	0	
5	650	4.71	Y	0.454	0	
6	650	4.71	Y	0.713	0	
7	650	4.78	Y	0.693	0	
8	650	4.73	Y	0.761	0	
9	650	4.74	Y	0.72	0	
10	350	4.71	Y	0.789	0	
11	350	4.72	Y	0.716	0	
12	350	4.72	Y	0.658	0	
13	350	4.82	Y	0.72	0	
14	350	4.84	Y	0.646	0	
15	350	5.45	Y	0.719	0	
16	350	5	Y	0.643	0	
17	350	4.97	Y	0.751	0	
18	350	5	Y	0.706	0	
19	350	5.1	Y	0.722	0	
20	350	5.2	Y	0.697	0	
21	350	5.1	Y	0.677	0	
22	350	5.12	Y	0.677	0	
23	350	5.05	Y	0.557	0	
24	350	4.78	Y	0.857	0	
25	350	4.8	Y	0.634	0	
26	350	4.71	Y	0.55	0	
27	650	4.71	Y	0.903	0	
28	650	4.95	Y	0.488	0	
29	650	4.93	Y	0.642	0	
30	650	4.71	Y	0.624	0	
31	650	4.95	Y	0.868	0	
<b>Monthly Cumulative % Off-Spec Water Produced <sup>4</sup></b>						<b>0</b>

21.911      0

<sup>4</sup> If ≥ 5% of total water produced is off-spec., notify DWS within 24 hours.

<b>For previous page calculation - Required CT for viral inactivation (for pH range of 6.0 to 9.9)</b>						
Temp (C°)	0 - 4.9	5.0 - 9.9	10.0 - 14.9	15.0 - 19.9	20 - 24.9	≥ 25.0 C
Required CT	<b>12</b>	<b>8</b>	<b>6</b>	<b>4</b>	<b>3</b>	<b>2</b>

**Return by 10<sup>th</sup> of following month by email, fax or mail to:**  
 dwp.dmce@dhsosha.state.or.us; 971-673-0694; or Drinking Water Services, POB 14350, Portland, OR 97293-0350