

OHA - Drinking Water Services - Surface Water Quality Data Form

County:

Clackamas

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

Month/Year:

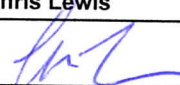
24-Aug

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	0.04		0.03	0.03	0.04	0.04	0.09	0.67	20	13.4	18.8	4	1800	YES
2	0.04		0.04	0.04	0.04		0.10	0.66	20	13.2	18.9	4	1800	YES
3	0.04		0.04	0.04	0.04	0.05	0.16	0.66	20	13.2	19.2	4	1800	YES
4	0.04		0.04	0.04	0.04	0.04	0.11	0.68	20	13.6	19.4	4	1800	YES
5	0.04		0.04	0.04	0.04		0.14	0.64	20	12.8	19.3	4	1800	YES
6	0.04		0.04	0.04	0.05		0.11	0.65	20	13	19.5	4	1800	YES
7	0.05		0.04	0.04	0.04	0.04	0.15	0.63	20	12.6	19.2	4	1800	YES
8	0.05		0.05	0.05	0.05		0.10	0.65	20	13	19.4	4	1800	YES
9	0.04		0.04	0.05	0.05		0.20	0.67	20	13.4	19.2	4	1800	YES
10	0.06	0.06	0.06	0.05	0.05	0.06	0.13	0.62	20	12.4	19.5	4	1800	YES
11	0.06		0.05	0.05	0.06	0.09	0.13	0.58	20	11.6	19.5	4	1800	YES
12	0.05		0.05	0.05	0.05	0.06	0.11	0.60	20	12	18.9	4	1800	YES
13	0.05		0.05	0.05		0.06	0.12	0.62	20	12.4	18.5	4	1800	YES
14	0.05		0.05	0.05	0.06		0.12	0.59	20	11.8	18.5	4	1800	YES
15	0.06		0.06	0.06	0.06		0.12	0.60	20	12	18.5	4	1800	YES
16			0.06	0.06	0.06		0.11	0.62	29	17.98	18.4	4	1300	YES
17	0.07		0.07	0.07	0.04		0.09	0.60	29	17.4	18.2	4	1300	YES
18	0.04		0.04	0.04	0.04		0.11	0.60	29	17.4	18.2	4	1300	YES
19	0.04		0.04	0.04	0.04		0.09	0.60	29	17.4	17.8	4	1300	YES
20	0.04		0.04	0.04		0.09	0.10	0.60	29	17.4	18.2	4	1300	YES
21	0.04		0.04	0.04	0.04		0.11	0.58	29	16.82	18.9	4	1300	YES
22	0.04		0.04	0.04		0.05	0.12	0.60	29	17.4	17.8	4	1300	YES
23	0.05		0.05	0.05		0.04	0.10	0.50	29	14.5	17.3	4	1300	YES
24	0.05		0.04	0.05		0.05	0.10	0.52	29	15.08	17.8	4	1300	YES
25	0.04	0.05	0.04	0.05	0.04	0.04	0.10	0.60	29	17.4	18.2	4	1300	YES
26			0.04	0.04		0.05	0.10	0.59	29	17.11	16.5	4	1300	YES
27	0.05		0.04	0.04	0.04	0.05	0.11	0.57	29	16.53	16.5	4	1300	YES
28	0.04	0.05	0.04	0.04		0.05	0.10	0.59	29	17.11	16.8	4	1300	YES
29	0.05		0.05	0.04		0.05	0.09	0.71	29	20.59	17.0	4	1300	YES
30	0.04	0.04	0.05			0.05	0.09	0.61	29	17.69	16.8	4	1300	YES
31			0.05	0.05		0.05	0.09	0.59	29	17.11	16.8	4	1300	YES

<b>Conventional or Direct Filtration</b> 95% of 4-hr turbidity readings ≤ 0.3 NTU? <b>Yes / No</b> All 4-hour turbidity readings < 1 NTU? <b>Yes / No</b> All turbidity readings < IFE triggers? <b>Yes / No</b> <sup>3</sup>		<b>Monthly Summary (circle Yes or No)</b> Virus CT's met everyday? <b>Yes / No</b> All Cl <sub>2</sub> residual at entry point ≥ 0.2 mg/L? <b>Yes / No</b>	
<b>Monthly UV Summary (circle Yes or No)</b> Was the volume of off-spec water produced less than 5% for the month? <b>Yes / No</b>		503-572-6262 DATE: 9-9-2024 PRINTED NAME: Chris Lewis SIGNATURE: 	CERT #: T-6933

<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))

**OHA - Drinking Water Services - Surface Water Quality Data Form**  
**Conventional Filtration with UV Disinfection of *Giardia/Crypto*.**

County: **Clackamas**

Month/Year: **24-Aug**

System Name: **Estacada**

ID# 41- **00279**

WTP ID: **A**

Minimum UVT during month: 83.1 %

Duty sensor variation from reference sensor %: 1.2

Minimum Validated UVT: 69%

Min. UV Dose achieved/intended this month: 3.5 / 2.1 <sup>mJ</sup>/<sub>cm<sup>2</sup></sub>

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]	[ <sup>mJ</sup> /cm <sup>2</sup> ]	[ Y or N ]	[gal] MGD	[gal] MGD	(Mo. Sum {B}) ÷ (Mo. Sum {A}) * 100 [%]
1	900	4.71	Y	1.452	0	
2	900	4.78	Y	1.334	0	
3	900	4.71	Y	1.521	0	
4	900	4.71	Y	1.104	0	
5	900	4.71	Y	1.39	0	
6	900	4.71	Y	1.289	0	
7	900	3.5	Y	1.365	0.000508	
8	900	3.96	Y	1.403	0	
9	900	4.62	Y	1.36	0	
10	900	3.64	Y	1.254	0	
11	900	3.64	Y	1.333	0	
12	900	3.62	Y	1.24	0	
13	900	4.64	Y	1.238	0	
14	900	4.41	Y	1.267	0	
15	900	4.71	Y	1.262	0	
16	650	4.71	Y	1.314	0	
17	650	4.71	Y	1.132	0	
18	650	4.61	Y	1.053	0	
19	650	4.71	Y	1.232	0	
20	650	4.74	Y	1.198	0	
21	650	4.25	Y	1.335	0	
22	650	4.9	Y	1.037	0	
23	650	5.07	Y	1.139	0	
24	650	4.92	Y	1.035	0	
25	650	4.83	Y	1.052	0	
26	650	5.02	Y	1.113	0	
27	650	4.96	Y	1.153	0	
28	650	4.93	Y	1.03	0	
29	650	5.05	Y	1.291	0	
30	650	4.89	Y	1.231	0	
31	650	5	Y	1.23	0	
Monthly Cumulative % Off-Spec Water Produced <sup>4</sup>						0.001323365
						3.5                      38.387                      0.000508

<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
<b>Required CT</b>	<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