

OHA - Drinking Water Services - Surface Water Quality Data Form

County:

Clackamas

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

Month/Year:

25-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 ¹	Minimum Cl ₂ Residual at 1 st User (C) [mg/L] ²	Contact Time (T) [minutes]	Actual CT C X T	Temp	Required CT [from table next page]	Peak Hour Demand Flow [gpm]	Required CT Met? ² [Yes / No]
1	0.06		0.06	0.06	0.07	0.07	0.16	0.58	29	16.82	19.3	4	1300	YES
2	0.06		0.06	0.06	0.07	0.07	0.12	0.60	29	17.4	19.3	4	1300	YES
3		0.07	0.07		0.04	0.05	0.15	0.60	29	17.4	19.1	4	1300	YES
4	0.05		0.04		0.04	0.05	0.10	0.55	29	15.95	18.6	4	1300	YES
5	0.05		0.04	0.04	0.04	0.05	0.10	0.58	29	16.82	18.7	4	1300	YES
6		0.05	0.05	0.05	0.05	0.05	0.15	0.58	29	16.82	18.5	4	1300	YES
7	0.05	0.05	0.05		0.05		0.12	0.58	29	16.82	18.1	4	1300	YES
8	0.06	0.05	0.05	0.05	0.05	0.05	0.10	0.55	29	15.95	18.4	4	1300	YES
9	0.05		0.05	0.05		0.05	0.11	0.49	29	14.21	18.1	4	1300	YES
10		0.05	0.05	0.05	0.05	0.05	0.14	0.47	29	13.63	18.6	4	1300	YES
11	0.05		0.05	0.05	0.05		0.14	0.61	29	17.69	19.2	4	1300	YES
12	0.05		0.05	0.05		0.06	0.11	0.44	29	12.76	19.1	4	1300	YES
13	0.06		0.06	0.05	0.06	0.06	0.13	0.42	29	12.18	19.6	4	1300	YES
14		0.06	0.06	0.06	0.06		0.14	0.47	29	13.63	19.3	4	1300	YES
15	0.07	0.06	0.06		0.06	0.06	0.13	0.53	29	15.37	19.7	4	1300	YES
16		0.07	0.07	0.06		0.07	0.11	0.51	29	14.79	19.4	4	1300	YES
17		0.07	0.06			0.06	0.13	0.49	29	14.21	19.5	4	1300	YES
18		0.06	0.06	0.06		0.07	0.14	0.60	29	17.4	19.1	4	1300	YES
19	0.07		0.06	0.06		0.07	0.12	0.62	29	17.98	18.9	4	1300	YES
20	0.06	0.07	0.07	0.07	0.07	0.07	0.14	0.61	29	17.69	19.2	4	1300	YES
21	0.07		0.07	0.05	0.06	0.06	0.14	0.43	29	12.47	19.1	4	1300	YES
22	0.06		0.05	0.05	0.05	0.06	0.11	0.57	29	16.53	19	4	1300	YES
23	0.06		0.05	0.05		0.06	0.08	0.56	29	16.24	19.3	4	1300	YES
24		0.06	0.06	0.06	0.06	0.06	0.13	0.62	29	17.98	19.4	4	1300	YES
25	0.06		0.06	0.06	0.06	0.06	0.13	0.47	20	9.4	19.3	4	1800	YES
26	0.06		0.06	0.06	0.06	0.07	0.14	0.47	20	9.4	19	4	1800	YES
27	0.06	0.07	0.06	0.06		0.06	0.13	0.61	20	12.2	19.6	4	1800	YES
28	0.06	0.06	0.06	0.06		0.07	0.12	0.64	20	12.8	19	4	1800	YES
29		0.06	0.05	0.06	0.06	0.07	0.15	0.59	29	17.11	18.9	4	1300	YES
30	0.06	0.08	0.06	0.06		0.06	0.13	0.77	29	22.33	18.6	4	1300	YES
31			0.06	0.06		0.06	0.14	0.73	29	21.17	18.5	4	1300	YES

Conventional or Direct Filtration

95% of 4-hr turbidity readings $\leq$ 0.3 NTU? ☒ Yes / ☐ No
 All 4-hour turbidity readings < 1 NTU? ☒ Yes / ☐ No
 All turbidity readings < IFE triggers? ☒ Yes / ☐ No³

Virus CT's met everyday? ☒ Yes / ☐ No

All Cl₂ residual at entry point $\geq$ 0.2 mg/L? ☒ Yes / ☐ No

Monthly UV Summary (circle Yes or No)

Was the volume of off-spec water produced less than 5% for the month? ☒ Yes / ☐ No

503-572-6262

CERT #:

T-6933

DATE: 9-8-25

PRINTED NAME: Chris Lewis

SIGNATURE:

¹ 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.

² If CT not met or Cl₂ at entry point (1st user) < 0.2 mg/L, notify DWS within 24 hours.

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

OHA - Drinking Water Services - Surface Water Quality Data Form		County: <u>Clackamas</u>
Conventional Filtration with UV Disinfection of <i>Giardia/Crypto</i>.		Month/Year: <u>25-Aug</u>
System Name: <u>Estacada</u>	ID# 41- <u>00279</u>	WTP ID: <u>A</u>

Minimum UVT during month: 86.8 % Duty sensor variation from reference sensor %: 1.2
 Minimum Validated UVT: 69% Min. UV Dose achieved/intended this month: 3.9 / 2.1 $\frac{mJ}{cm^2}$

Date	Peak Hourly Demand Flow	Minimum Dosage	All Lamps On?	Daily Water Produced {A}	Water outside Validated Conditions {B}	Cumulative % Off-Spec Water Produced	Minimum Daily UVT
	[gpm/unit]	[mJ/cm ²]	[Y or N]	[gal] MGD	[gal]	(Mo. Sum {B}) ÷ (Mo. Sum {A}) * 100 [%]	UVT %
1	700	4.85	Y	1.376	0		94.3
2	700	5.07	Y	1.29	0		95.5
3	700	4.92	Y	1.035	0		93.6
4	700	4.97	Y	1.254	0		94.4
5	700	4.85	Y	1.33	0		93.3
6	700	4.84	Y	1.12	0		93
7	700	4.8	Y	1.018	0		93.3
8	700	4.83	Y	1.32	0		92.4
9	700	4.83	Y	1.335	0		92.9
10	700	4.79	Y	1.04	0		91.8
11	700	4.87	Y	1.364	0		93.2
12	700	4.86	Y	1.419	0		93.2
13	700	4.74	Y	1.377	0		92.6
14	700	4.67	Y	1.268	0		92.5
15	700	4.64	Y	1.127	0		91.2
16	700	4.36	Y	1.044	0		89.9
17	700	4.57	Y	1.026	0		91
18	700	4.54	Y	1.218	0		90.8
19	700	4.57	Y	1.335	0		90.9
20	700	4.44	Y	1.075	0		90.4
21	700	4.37	Y	1.268	0		90.1
22	700	4.62	Y	1.445	0		91.1
23	700	4.47	Y	1.349	0		90.8
24	700	4.27	Y	1.091	0		89.3
25	700	4.2	Y	1.33	0		89.4
26	700	3.99	Y	1.289	0		88.1
27	700	4.21	Y	1.211	0		89.5
28	700	3.98	Y	1.255	0		88
29	700	4.18	Y	1.462	0		88.8
30	700	3.9	Y	1.211	0		86.8
31	700	4.27	Y	1.205	0		89.5
Monthly Cumulative % Off-Spec Water Produced ⁴						0	86.8
						38.487	0

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

For previous page calculation - Required CT for viral inactivation (for pH range of 6.0 to 9.9)						
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	12	8	6	4	3	2