

OHA - Drinking Water Program
Turbidity Monitoring Report Form

County: **Clackamas**

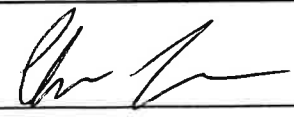
System Name: **City of Estacada** PWS ID #: **4100279A** WTP: **WTP-A** Month/Year: **Jan-23**

DAY	12 AM (NTU)	4 AM (NTU)	8 AM (NTU)	NOON (NTU)	4 PM (NTU)	8 PM (NTU)	Highest Reading (NTU)	
1	0.03	0.03	OFF	0.03	0.03	0.04	12:27 PM	0.05
2	0.03	0.04	OFF	0.04	0.03	0.03	3:11 AM	0.05
3	0.03	0.03	OFF	0.03	0.04	0.03	3:27 PM	0.05
4	0.04	0.03	OFF	0.04	0.03	0.03	8:44 PM	0.05
5	0.03	OFF	0.03	0.03	0.03	OFF	12:09 PM	0.05
6	OFF	0.03	0.03	0.03	OFF	0.03	3:08 AM	0.05
7	0.04	OFF	OFF	0.03	0.04	0.03	3:23 AM	0.05
8	0.03	0.04	OFF	0.03	0.03	0.03	3:53 PM	0.05
9	0.03	0.03	OFF	0.03	0.03	0.03	1:29 AM	0.05
10	0.03	OFF	0.03	0.03	0.04	OFF	2:20 PM	0.05
11	OFF	0.03	0.04	OFF	0.03	0.04	7:45 PM	0.05
12	OFF	0.03	0.03	OFF	0.03	0.03	9:21 AM	0.06
13	OFF	OFF	OFF	0.03	0.04	0.04	5:59 PM	0.06
14	0.03	0.03	OFF	0.03	0.03	0.03	8:12 PM	0.05
15	0.03	OFF	OFF	0.03	0.03	0.04	2:04 PM	0.05
16	0.03	OFF	OFF	0.03	0.03	0.03	6:24 PM	0.05
17	0.03	OFF	OFF	0.03	0.04	OFF	2:52 PM	0.09
18	OFF	0.04	0.04	0.04	0.04	0.03	4:48 PM	0.05
19	0.03	OFF	0.03	0.03	0.03	0.04	9:06 AM	0.05
20	0.04	OFF	0.04	0.04	0.04	0.04	2:56 PM	0.05
21	OFF	0.04	0.04	OFF	0.04	0.04	1:56 PM	0.05
22	OFF	0.04	OFF	OFF	0.03	0.03	2:07 AM	0.05
23	0.03	OFF	OFF	0.03	0.03	0.03	10:40 AM	0.05
24	0.03	OFF	OFF	0.03	0.03	0.03	1:17 PM	0.05
25	0.03	OFF	OFF	0.03	0.10	0.07	8:47 AM	0.15
26	0.05	OFF	OFF	0.04	0.04	0.04	6:59 AM	0.13
27	OFF	0.04	0.04	0.03	0.03	0.03	6:57 AM	0.06
28	0.03	OFF	OFF	0.03	0.03	0.03	6:59 AM	0.05
29	0.03	0.03	OFF	0.03	0.03	0.03	2:46 AM	0.04
30	0.03	0.03	OFF	0.03	0.03	OFF	1:16 PM	0.05
31	0.04	0.03	OFF	0.03	0.03	0.03	5:54 PM	0.05

Conventional or Direct Filtration <input type="checkbox"/>		Monthly Summary	
95% of Turbidity readings < MCL YES	CT's met every day YES	CI Residual at entry point always greater than or equal to .2 mg/l YES	CI measured in 95% of distribution samples YES
All Turbidity readings < 5 NTU YES	(see back of sheet)		
All Turbidity readings < IFE trigger YES			

MCL:

0.5 = Conventional and direct filtration
1 = Slow sand and diatomaceous earth filters

Signature: 

Print Name: **Chris Lewis**

Date: 2-1-2023

Cert. #: **T-6933**

Surface Water Quality Data

Month/Year: **Jan-23**

Required Log Inactivation

Date Time	Min. Cl2 residual At 1st User (C) ppm or mg/l	Contact Time (T) minutes	Actual CT C x T	Temp C	pH	Required CT Tables	CT Met Yes/No
1/ 3:00 PM	1.23	75	92	8.2	7.3	55	YES
2/ 12:30 PM	1.22	75	92	8.2	7.4	49	YES
3/ 2:20 PM	1.23	75	92	7.1	7.3	53	YES
4/ 2:43 PM	1.29	75	97	6.5	6.9	54	YES
5/ 2:39 PM	1.06	75	80	7.2	6.8	48	YES
6/ 2:18 PM	1.26	75	95	7.7	6.9	48	YES
7/ 2:33 PM	1.18	75	89	7.0	6.9	48	YES
8/ 2:57 PM	1.18	75	89	6.6	7.2	49	YES
9/ 2:55 PM	1.29	75	97	7.6	6.9	49	YES
10/ 3:30 PM	1.27	75	95	7.8	7.0	44	YES
11/ 3:02 PM	1.16	75	87	8.5	7.3	46	YES
12/ 1:46 PM	1.25	75	94	7.7	6.9	49	YES
13/ 12:00 PM	1.15	75	86	7.7	6.9	49	YES
14/ 3:05 PM	1.33	75	100	9.3	7.3	44	YES
15/ 2:44 PM	1.29	75	97	8.3	6.9	42	YES
16/ 3:20 PM	1.30	75	98	8.5	7.1	47	YES
17/ 2:47 PM	UV Start up	New Viral CT	Requirements	On new		report	
18/ 4:00 PM							
19/ 2:15 PM							
20/ 2:43 PM							
21/ 2:39 PM							
22/ 3:10 PM							
23/ 3:00 PM							
24/ 9:50 AM							
25/ 2:19 PM							
26/ 2:59 PM							
27/ 3:30 PM							
28/ 2:13 PM							
29/ 2:38 PM							
30/ 2:25 PM							
31/ 12:00 AM							

OHA - Drinking Water Services - Surface Water Quality Data Form

County: Clackamas

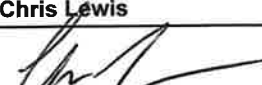
Filtration with Disinfection: UV for *Giardia/Crypto.* & Chlorination for Viruses

Month/Year: Jan-23

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	0.03	0.03		0.03	0.03	0.04	0.05							YES
2	0.03	0.04		0.04	0.03	0.03	0.05							YES
3	0.03	0.03		0.03	0.04	0.03	0.05							YES
4	0.04	0.03		0.04	0.03	0.03	0.05							YES
5	0.03		0.03	0.03	0.03		0.05							YES
6		0.03	0.03	0.03		0.03	0.05							YES
7	0.04			0.03	0.04	0.03	0.05							YES
8	0.03	0.04		0.03	0.03	0.03	0.05							YES
9	0.03	0.03		0.03	0.03	0.03	0.05							YES
10	0.03		0.03	0.03	0.04		0.05							YES
11		0.03	0.04		0.03	0.04	0.05							YES
12		0.03	0.03		0.03	0.03	0.06							YES
13				0.03	0.04	0.04	0.06							YES
14	0.03	0.03		0.03	0.03	0.03	0.05							YES
15	0.03			0.03	0.03	0.04	0.05							YES
16	0.03			0.03	0.03	0.03	0.05							YES
17	0.03			0.03	0.04		0.09	1.11	75	83	8.1	8	700	YES
18		0.04	0.04	0.04	0.04	0.03	0.05	1.10	75	83	7.5	8	700	YES
19	0.03		0.03	0.03	0.03	0.04	0.05	0.61	75	46	7.8	8	700	YES
20	0.04		0.04	0.04	0.04	0.04	0.05	0.64	75	48	7	8	700	YES
21		0.04	0.04		0.04	0.04	0.05	0.66	75	50	6.6	8	700	YES
22		0.04			0.03	0.03	0.05	0.70	75	53	6.6	8	700	YES
23	0.03			0.03	0.03	0.03	0.05	0.71	75	53	6.6	8	700	YES
24	0.03			0.03	0.03	0.03	0.05	0.71	75	53	6	8	700	YES
25	0.03			0.03	0.10	0.07	0.15	0.72	75	54	6.4	8	700	YES
26	0.05	0.04	0.04	0.04	0.04	0.04	0.13	0.66	75	50	6.5	8	700	YES
27		0.04	0.04	0.03	0.03	0.03	0.06	0.68	75	51	7.5	8	700	YES
28	0.03			0.03	0.03	0.03	0.05	0.63	75	47	6.8	8	700	YES
29	0.03	0.03		0.03	0.03	0.03	0.04	0.56	75	42	7.4	8	700	YES
30	0.03	0.03		0.03	0.03		0.05	0.58	75	44	6.1	8	700	YES
31	0.04	0.03		0.03	0.03	0.03	0.05	0.63	75	47	5.7	8	700	YES

Conventional or Direct Filtration 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 ³		Monthly Summary (circle Yes or No) Virus CT's met every day? <input checked="" type="radio"/> Yes / <input type="radio"/> No All Cl ₂ residual at entry point ≥ 0.2 mg/L? <input checked="" type="radio"/> Yes / <input type="radio"/> No	
Monthly UV Summary (circle Yes or No) Was the volume of off-spec water produced less than 5% for the month? <input checked="" type="radio"/> Yes / <input type="radio"/> No		PHONE#: (503) 572-6262 DATE: 2-1 2023 PRINTED NAME: Chris Lewis SIGNATURE: 	CERT #: T-6933

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:	Clackamas
Conventional Filtration with UV Disinfection of <i>Giardia/Crypto</i>.	Month/Year:	Jan-23
System Name: <u>Estacada</u>	ID# 41- <u>00279</u>	WTP ID: <u>A</u>

Minimum UVT during month: 87.9 % Duty sensor variation from reference sensor %: 0.01
 Minimum Validated UVT: 69% Min. UV Dose achieved/intended this month: 4.71 / 2.1 ^{mJ}/cm²

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/cm2]	[Y or N]	[gal]	[gal]	(Mo. Sum {B}) ÷ (Mo. Sum {A}) * 100 [%]
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17	700	4.78	Y	685,000	0	
18	700	4.73	Y	584,000	0	
19	700	4.71	Y	594,000	0	
20	700	4.71	Y	681,000	0	
21	700	4.71	Y	535,000	0	
22	700	4.71	Y	632,000	0	
23	700	4.71	Y	651,000	0	
24	700	4.71	Y	606,000	0	
25	700	4.76	Y	643,000	0	
26	700	4.79	Y	655,000	0	
27	700	4.71	Y	590,000	0	
28	700	4.79	Y	537,000	0	
29	700	4.71	Y	586,000	0	
30	700	4.71	Y	569,000	0	
31	700	4.71	Y	678,000	0	
Monthly Cumulative % Off-Spec Water Produced ⁴						0
4.71 9226000 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

Return by 10th 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