

The City of Durant encourages participation from all its citizens. If participation at any public meeting is not possible due to a disability, notification to the City Clerk at least 48 hours prior to the scheduled meeting is encouraged in order to make the necessary accommodations. The City of Durant may waive the 48-hour rule if interpreters for the deaf (signing) or translation services for limited English proficient (LEP) individuals are not the necessary accommodation.

DURANT CITY UTILITIES AUTHORITY

6:00 PM

**Roscoe J. Hatfield
Council Chambers
300 West Evergreen
Durant, Oklahoma**

April 12, 2022

AGENDA

CALL TO ORDER

ROLL CALL

ORDER OF BUSINESS

1. Consent Items

To help streamline meetings and allow the focus to be on other items requiring strategic thought, the "Consent Items" portion of the agenda groups the routine, procedural, and self-explanatory non-controversial items together. These items are voted on in a single motion (one vote). However, any Council member requesting further information on a specific item thus removes it from the "Consent Items" section for individual attention and separate vote.

- a. Consider Approval of Regular Meeting Minutes of March 8, 2022

2. Consider Items Removed from Consent

3. Information Items

- a. Solid Waste Department (Collection) Monthly Report - March 2022
- b. Solid Waste Department (Disposal) Monthly Report - March 2022
- c. Utility Billing Monthly Report - March 2022
- d. Waste Water Treatment Plant Monthly Reports - March 2022
- e. Water and Sewer Line Maintenance Monthly Report - March 2022
- f. Water Treatment Plant Monthly Report - March 2022

4. Administration

5. New Business

ADJOURNMENT

CERTIFICATE:

This is to certify that in conformity with the Oklahoma Open Meeting Act, public notice of the date, time and place of this meeting was filed with the City Clerk of Durant on the 9th day of November, 2021 and that an agenda of said meeting was posted at the place of such meeting at 3:15 p.m. on the 7th day of April, 2022.

A handwritten signature in cursive script, reading "Cynthia J. Price".

Cynthia J. Price, City of Durant



The City of Durant

Memorandum

Date: 4/12/2022
To: Mayor and City Council
From: Cynthia Price, City Clerk
Re: Consider Approval of Regular Meeting Minutes of March 8, 2022

Council Information / Action Requested

Approval of Regular Meeting Minutes of March 8, 2022

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

1. Durant City Utilities Authority Minutes 03082022 cjp

This is to certify that in conformity with the Oklahoma Open Meeting Act, public notice of the date, time and place of this meeting was filed with the City Clerk of Durant on the 9th day of November, 2021 and that an agenda of said meeting was posted at the place of such meeting at 4:50 p.m. on the 4th day of March, 2022.



Cynthia J. Price, City of Durant

**MINUTES OF THE MEETING OF DURANT CITY UTILITIES AUTHORITY
March 8, 2022 AT 6:00 PM, Roscoe J. Hatfield
Council Chambers,
300 West Evergreen,
Durant, Oklahoma**

CALL TO ORDER

Chairman Grube called the meeting to order at 7:32 p.m.

ROLL CALL

Present:

Trustee Steve Brittingham
Trustee Humphrey Miller
Trustee Curtis Morris
Vice Chairman Danny Sherrer
Chairman Oden Grube
City Attorney Tom Marcum
City Manager John Dean
City Clerk Cynthia J. Price

Absent:

None

ORDER OF BUSINESS

1. Consent Items

To help streamline meetings and allow the focus to be on other items requiring strategic thought, the "Consent Items" portion of the agenda groups the routine, procedural, and self-explanatory non-controversial items together. These items are voted on in a single motion (one vote). However, any Council member requesting further information on a specific item thus removes it from the "Consent Items" section for individual attention and separate vote.

- a. Consider Approval of Regular Meeting Minutes of February 8, 2022

Motion To: Approve Consent Item as Presented

Motion By: Steve Brittingham

Seconded By: Humphrey Miller

Ayes: Brittingham, Miller, Morris, Sherrer, Grube

Nays: None

Abstain: None

2. Consider Items Removed from Consent

3. Information Items

- a. Line Maintenance Monthly Report - February 2022
- b. Solid Waste Collection Monthly Report - February 2022
- c. Solid Waste Disposal Monthly Report-February 2022
- d. Utility Department Monthly Report - February 2022
- e. Wastewater Treatment Plant and Lab Monthly Reports - February 2022
- f. Water Treatment Plant Monthly Report - February 2022

4. Administration

- a. Discussion, Consideration and Possible Action on Applications to the Oklahoma Department of Environment Quality for Permit to Construct Water Pollution Control or Public Water Supply Facilities and/or Supply Potable Water to Serve Remington Hills Phase 6.

Motion To: Approve Applications to the Oklahoma Department of Environmental Quality for Permit to Construct Water Pollution Control or Public Water Supply Facilities and/or Supply Potable Water to Serve Remington Hills Phase 6

Motion By: Steve Brittingham

Seconded By: Danny Sherrer

Ayes: Brittingham, Miller, Morris, Sherrer, Grube

Nays: None

Abstain: None

5. New Business

There was no new business.

ADJOURNMENT

Motion To: Adjourn Meeting

Motion By: Humphrey Miller

Seconded By: Steve Brittingham

Ayes: Brittingham, Miller, Morris, Sherrer, Grube

Nays: None

Abstain: None



The City of Durant

Memorandum

Date: 4/12/2022
To: Mayor and City Council
From: Jared Dillingham, Superintendent
Re: Solid Waste Department (Collection) Monthly Report - March 2022

Solid Waste Monthly Report - March 2022

Council Information / Action Requested

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

1. Monthly Report March 22



THE CITY OF DURANT

Office of the Solid Waste Superintendent

SOLID WASTE PROJECTS

March 2022

A. Work Completed:

1. Hauled 12.03tons of extra hauling
2. Hauled 7 loads of extra hauling
3. Picked up and delivered 8 sharps
4. No abatement this month
5. Cleaned Sunny Side rd. 1 times
6. Replaced 6 dumpsters with new
7. Cleaned dead ends of Cemetery rd. 0 time

B. Work Planned For April 2022

1. Replace dumpsters
2. Pick up trash

C. Work Planned For January 1, 2022 – December 31, 2022

1. Pick up trash
2. Replace dumpsters

D. Projects Planned And Requested For Authorization:

None



The City of Durant

Memorandum

Date: 4/12/2022
To: Mayor and City Council
From: Kenny Cooper, Supervisor
Re: Solid Waste Department (Disposal) Monthly Report - March 2022

Solid Waste Disposal- March 2022

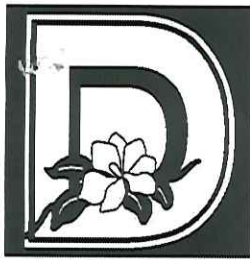
Council Information / Action Requested

Information only.

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

1. Project schedule April 2022
2. DEQ Report March 2022



THE CITY OF DURANT

Office of the Solid Waste Superintendent

SOLID WASTE DISPOSAL PROJECTS SCHEDULE ***March 2022***

A. Work Completed for March:

1. Covered C & D Site
2. Hauled MSW To SORD
3. Number of rolloff containers in service end of month 125
4. Number of rolloff containers added to service during month 24
5. Number of rolloff containers removed from service during month 17
6. Number of loaded rolloff containers emptied during month 361

B. Work Planned For April:

1. Continue Covering C&D site
2. Haul MSW To SORD
3. Continue Picking up, Delivering

C. Work Planned For Jan. '22 – Dec. '22:

Approx. Start – Finish Date:

- | | |
|--------------------------|---------------------|
| 1. Haul trash to Ardmore | 1-2022 thru 12-2022 |
|--------------------------|---------------------|

D. Projects Planned And Requested For Authorization:

1. None.



MONTHLY REPORT FOR SOLID WASTE DISPOSAL FACILITIES

(Please see instructions prior to completing this form)

Due by the 10th of the month following the reporting month

Administrative Services
Accounts Receivable
P. O. Box 2036
Oklahoma City, OK 73101-2036

Report month/year: MARCH 2022

Facility Name: CITY OF DURANT C/D LANDFILL
Mailing Address: PO BOX 578
DURANT, OK 74702-0578

Permit Number: 3507001

Phone Number: 580-931-6606

Total # of Days open: 19

COMPLETE SECTIONS 5-10 ONLY IF SCALES GO DOWN

D A Y	(1) Total weight accepted (tons)	(2) Weight which is reused or recycled in accordance with facility permit (tons)	(3) Weight accepted from a DEQ approved emergency or special event (tons)	(4) Weight accepted from large industrial waste generators with DEQ exemption certificate (tons)	(5) Time scales placed out of service	(6) Time scales placed into service	(7) Total volume accepted (yd3)	(8) Volume which is reused or recycled in accordance with facility permit (yd3)	(9) Volume accepted from a DEQ approved emergency or special event (yd3)	(10) Volume accepted from large industrial waste generators with DEQ exemption certificate (yd3)
1	8.45									
2	10.51									
3										
4	5.71									
5	5.78									
6										
7	0									
8	3.68									
9	10.65									
10	18.51									
11										
12										
13										
14										
15	0									
16	19.51									
17	18.66									
18	24.58									
19	0.35									
20										
21	0.34									
22										
23	1.74									
24	1.59									
25	1.38									
26	3.43									
27										
28	2.93									
29	9.67									
30										
31	2.67									
Total	150.14	0	0	0	0	0	0	0	0	0

I hereby certify that the information reported above is accurate and correct to the best of my knowledge and includes all solid waste received at this facility.

Signature of authorized agent: Genny Cooper

Phone #: 580-924-8358

Date: 4-5-22



The City of Durant

Memorandum

Date: 4/12/2022
To: Mayor and City Council
From: Stephanie Barfield, Supervisor
Re: Utility Billing Monthly Report - March 2022

Council Information / Action Requested

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

1. UTILITY MONTHLY REPORT MARCH 2022 (2)



Monthly Utility Billing,
Cash Collection,
And Consumption Summary

MARCH 2022

	WATER		SANITARY SEWER		SANITATION	
	Month	YTD	Month	YTD	Month	YTD
Number of Bills - Active Accounts	7181		7110		6257	
Total Revenue Billed	\$279,299.66	\$3,214,066.02	\$181,982.04	\$1,657,224.69	\$364,451.03	\$3,364,037.83
Adjustments in Dollar	(\$8,388.58)	(\$720,410.79)	(\$24,440.95)	(\$1,499,683.60)	(\$14,735.20)	(\$101,587.54)
TOTAL CASH RECEIPTS	\$217,797.40	\$2,254,163.64	\$110,486.01	\$887,169.25	\$241,902.40	\$1,791,512.65

CONSUMPTION IN GALLONS	74,916,000
------------------------	------------

NEW SERVICE APPLICATIONS	114
NUMBER OF WALK IN/PHONE PAYMENTS	1,277
MAIL PAYMENTS	1,179
CREDIT CARD PAYMENTS	1,751
WEB PAYMENTS	1,708
DROP BOX PAYMENTS	423
BANK DRAFT PAYMENTS	986
CREDIT CARD DRAFT PAYMENTS	505
KIOSK	1,558
OTHERS	



The City of Durant

Memorandum

Date: 4/12/2022
To: Mayor and City Council
From: Ray Anthony, Superintendent
Re: Waste Water Treatment Plant Monthly Reports - March 2022

Council Information / Action Requested

Information only.

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

1. Waste Water Treatment Plant Lab Report
2. Waste Water Treatment Plant Work Done
3. Waste Water Treatment Plant Work Planned



THE CITY OF DURANT

Office of the Wastewater Treatment Plant

Lab Report

3/1/22 to 3/31/22

Tests Processed

<u>81</u> Bac-T's	<u>42</u> React's
<u>90</u> BOD's	<u>25</u> COD
<u>25</u> TSS's	<u>84</u> MLSS
<u>12</u> NH3's	<u>84</u> Volatile Analysis
<u>62</u> DO's	<u>62</u> pH's
<u>0</u> Ecoli's	<u>0</u> FOG's
<u>20</u> cBOD's	<u>0</u> Total Solids
<u>15</u> Settleable Solids	<u>41</u> Settleometer Test
<u>0</u> Pretreatment Inspections	

Work Projects

- Data entry
- Reports (water test results), Make copies and envelope
- Purchase Orders, copy, file
- Equipment calibrations and maintenance
- Sampling and process readings
- Quality Assurance, Quality Control tests
- Laboratory Testing
- Filing
- Daily/Weekly laboratory and WWTP building cleaning
- Monthly, Quarterly, Bi-annual, Yearly reports
- Ordering Lab chemicals and supplies
- Water Billing
- Storm water monitoring
- Storm water Report
- Pre-Treatment



The City of Durant

Office of the Wastewater Treatment Plant

PROJECTS SCHEDULE

WORK DONE FOR MARCH 2022

- 1: MONITORING OF SBR SE VALVES TO DETERMINE FURTHER FAILURES (Daily)
- 2: CLEAN CLARIFIER WEIRS (Monthly)
- 3: VEHICLE INSPECTION (Monthly)
- 4: HEADWORKS STEP SCREEN POWER ISSUE RESOLVED (Ongoing)
- 5: 2in WATER PIPE LEAK FIXED AT HEADWORKS (Ongoing)
- 6: CHECK CLARIFIER OIL (Weekly)
- 7: CK TORQUE & OVERLOAD & GREASE CHAIN ON CLARIFIER (Weekly)
- 8: FIX CHOCTAW SCREEN PRESS PUMP (Ongoing)
- 9: BRIDGE FILTER REPAIR (Ongoing)
- 10: WALK-THRU INSPECTION (Monthly)
- 11: WASH DOWN HEADWORKS STEP SCREEN (Daily)
- 12: CLEAN UV TROUGHS, FLUME, AND MANUALLY CHECK U.V. BULBS (Weekly)
- 13: CHECK ELECTRIC MANHOLES (Monthly)
- 14: CLEAN OUT BUILDINGS (Monthly)
- 15: VALVE TO LAGOONS FIXED AT HEADWORKS (Ongoing)
- 16: WASH DOWN CASINO STEPSCREEN (Daily)
- 17: CHECK ALL AUTOMATIC VALVES (Daily)
- 18: SCUM PUMP STATION PUT ON FLOATS (Ongoing)
- 19: INSTALL NEW LEVEL CONTROL AT HEADWORKS (Ongoing)
- 20: GRIT PUMPS AT HEADWORKS REPAIRED (Ongoing)
- 21: CONVERT SAMPLER TO WORK WITH WONDERWARE (Ongoing)
- 22: GETTING LAGOON AERATOR'S AT HEADWORKS FIXED (Ongoing)
- 23: 2 WATER LEAKS FIXED AT 2 DIFFERENT WATER & BAC-T SAMPLING SITES



The City of Durant

Office of the Wastewater Treatment Plant

PROJECTS SCHEDULE

WORK PLANNED FOR APRIL 2022

- 1: MONITORING OF SBR SE VALVES TO DETERMINE FURTHER FAILURES (Daily)
- 2: CLEAN CLARIFIER WEIRS (Monthly)
- 3: VEHICLE INSPECTION (Weekly)
- 4: HEADWORKS STEP SCREEN POWER ISSUE RESOLVED (Ongoing)
- 5: 2in WATER PIPE LEAK FIXED AT HEADWORKS (Ongoing)
- 6: CHECK CLARIFIER OIL (Weekly)
- 7: CK TORQUE & OVERLOAD & GREASE CHAIN ON CLARIFIER (Weekly)
- 8: FIX CHOCTAW SCREEN PRESS PUMP (Ongoing)
- 9: BRIDGE FILTER REPAIR (Ongoing)
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- 17: CHECK ALL AUTOMATIC VALVES (Daily)
- 18: SCUM PUMP STATION PUT ON FLOATS (Ongoing)
- 19: INSTALL NEW LEVEL CONTROL AT HEADWORKS (Ongoing)
- 20: GRIT PUMPS AT HEADWORKS REPAIRED (Ongoing)
- 21: CONVERT SAMPLER TO WORK WITH WONDERWARE (Ongoing)
- 22: GETTING LAGOON AERATOR'S AT HEADWORKS FIXED (Ongoing)



The City of Durant

Memorandum

Date: 4/12/2022
To: Mayor and City Council
From: Randy Cantrell, Crew Leader
Re: Water and Sewer Line Maintenance Monthly Report - March 2022

Council Information / Action Requested

Information only.

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

1. WATER AND SEWER LINE MAINTENANCE MONTHLY REPORT - MARCH 2022

M & O MONTHLY REPORT

MARCH 2022

WATER LEAKS	38
WATER TAPS	1
SEWER TAPS	3

CUTOFFS MARCH 24TH (63) AND MARCH 29TH (91)

DISCONNECTS MARCH 3RD, MARCH 6TH AND MARCH 31ST

WITH CUTOFFS AND REGULAR WORK ORDERS FROM THE
UTILITY OFFICE, WE HAD 787 orders

BIG METER PROJECT IS COMING TO THE FINAL COMPLETION,
WE HAVE NOW RECEIVED THE REMAINING ANTENNAS AND
MATERIALS TO COMPLETE THE PROJECT.



The City of Durant

Memorandum

Date: 4/12/2022
To: Mayor and City Council
From: Anthony Smallwood, Water Treatment Plant Manager
Re: Water Treatment Plant Monthly Report - March 2022

Council Information / Action Requested

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

1. OK1010601 ClO2 MOR March2022
2. OK1010601 Fluoride MOR March2022
3. OK1010601 LT2 MOR March2022
4. OK1010601 Monthly Report March2022
5. OK1010601 MOR March2022 Page 1
6. OK1010601 MOR March2022 Page 2

CHLORINE DIOXIDE AND CHLORITE MOR

Section 1: Data Entry

Date	ClO2 Used?	ClO2 POE	ClO2 Dist.			Chlorite POE	Chlorite Dist.			
			1st	2nd	3rd		1st	2nd	3rd	Avg
1	yes	0.4				0.6				####
2	yes	0.4				0.7				####
3	yes	0.3				0.9				####
4	yes	0.3				0.8				####
5	yes	0.1				0.9				####
6	yes	0.2				0.9				####
7	yes	0.2				0.8				####
8	yes	0.2				0.7				####
9	yes	0.3				0.9				####
10	yes	0.2				0.8				####
11	yes	0.3				0.7				####
12	yes	0.2				0.8				####
13	yes	0.3				0.9				####
14	yes	0.3				0.8				####
15	yes	0.3				0.8				####
16	yes	0.2				0.8				####
17	yes	0.3				0.5				####
18	yes	0.3				0.7				####
19	yes	0.3				0.6				####
20	yes	0.2				0.9				####
21	yes	0.3				0.9				####
22	yes	0.3				0.8				####
23	yes	0.5				0.7				####
24	yes	0.3				0.6				####
25	yes	0.1				0.6				####
26	yes	0.3				0.7				####
27	yes	0.3				0.7				####
28	yes	0.6				0.9				####
29	yes	0.5				0.5				####
30	yes	0.3				0.7				####
31	yes	0.1				0.8				####

Month March Year 2022
PWS Name Durant Water Treatment Plant

PWSID 1010601
Plant Name WTP
Total 31

Section 2: Summary of Chlorine Dioxide Daily Monitoring

a. Number of Samples Collected 31.0
b. Number of Point of Entry Samples Exceeded MRDL of 0.8 mg/L 0.0

*For every day the MRDL is exceeded, three chlorine dioxide samples must be taken the next day in the distribution system. Notify your PWS Engineer. Samples results need to be recorded in ClO2 Dist. columns.*Refer to CHLORINE DIOXIDE MONITORING AND COMPLIANCE FACT SHEET for further instructions.*

c. Number of Distribution Samples Exceeding MRDL of 0.8 mg/L 0.0

****VERY IMPORTANT. THIS IS A TIER 1 VIOLATION. THIS VIOLATION MUST BE IMMEDIATELY REPORTED TO DEQ AND TO ALL PERSON SERVED BY THE SYSTEM WITHIN 24 HOURS.****

Section 3: Summary of Chlorite Daily Monitoring

a. Number of Samples Collected 31.0
b. Number of Point of Entry Samples Exceeded MCL of 1.0 mg/L 0.0

*For every day the MCL exceeded, three chlorite samples must be taken the next day in the distribution system. Enter sample results in Chlorite Dist. columns and then average. *Refer to CHLORITE MONITORING AND COMPLIANCE FACT SHEET for further instructions.*

c. Number of Distribution Average exceeding MCL of 1.0 mg/L 0.0

Phillip Hightower
Signature of owner or operator
Phillip Hightower
Printed name

4/1/2022
Date
B 90404
Operator License #

Send Form by 10th of Following Month to:
Water Quality Division Attn DBP Coord.
P.O. Box 1677 Oklahoma City, Oklahoma 73101-1677



Oklahoma State Department of Health / Oklahoma Department of Environmental Quality
MONTHLY OPERATION REPORT
RECORD OF FLUORIDE APPLICATION

PWSID 1010601 SYSTEM Durant Ok (SW) MONTH March
Type of Material Applied* Hydrofluorosilicic Acid Year 2022

Date	Water Treated (1000s of Gallons)	Applied		Residual Fluoride (F), ppm			
		lbs.	PPM of F	Raw		Distribution	
				(1)	(2)	(1)	(2)
1	4740	65	0.3	0.23	0.36	0.44	0.90
2	5005	69	0.3	0.22	0.30	0.63	0.52
3	4900	67	0.3	0.12	0.47	0.60	0.78
4	4855	67	0.3	0.05	0.49	0.54	0.87
5	4866	67	0.3	0.16	0.00	0.64	0.81
6	4695	64	0.3	0.05	0.00	0.56	0.52
7	4422	61	0.3	0.28	0.00	0.56	0.66
8	4283	59	0.3	0.15	0.47	0.97	0.73
9	4228	58	0.3	0.34	0.35	0.54	1.06
10	4022	55	0.3	0.13	0.00	0.51	0.77
11	3850	53	0.3	0.40	0.29	0.71	0.58
12	3737	51	0.3	0.57	0.29	1.09	0.53
13	3533	49	0.3	0.10	0.55	0.49	0.65
14	4795	66	0.3	0.16	0.24	0.60	0.55
15	4799	66	0.3	0.09	0.44	0.70	0.97
16	4715	65	0.3	0.00	0.08	0.49	0.91
17	4611	63	0.3	0.29	0.09	0.31	0.59
18	4099	56	0.3	0.00	0.00	0.59	0.11
19	4045	56	0.3	0.16	0.11	0.75	0.66
20	3849	53	0.3	0.05	0.05	0.50	0.41
21	4680	64	0.3	0.02	0.49	0.49	0.60
22	4815	66	0.3	0.00	0.00	0.66	0.61
23	4885	67	0.3	0.00	0.00	0.34	0.63
24	4916	68	0.3	0.00	0.00	0.46	0.14
25	4333	60	0.3	0.14	0.00	0.94	0.56
26	4323	59	0.3	0.00	0.03	0.47	0.54
27	4323	59	0.3	0.02	0.03	0.37	0.48
28	4272	59	0.3	0.00	0.17	0.85	0.45
29	4311	59	0.3	0.00	0.07	0.85	0.70
30	4858	67	0.3	0.27	0.18	0.95	0.68
31	4690	64	0.3	0.14	0.27	0.43	0.46
Total	138455	1902	9.3	4.14	5.82	19.03	19.43
Average	4466	61	0.30	0.13	0.19	0.61	0.63

* Example: Sodium Fluoride, Sodium Fluorosilicate (Sodium Silicofluoride), and Fluorosilicic Acid (Hydrofluorosilicic Acid).

It is required that this report be received by the 10th of the following month.

Send to: OSDH – Dental Health Services
1000 NE 10TH ST
OKLAHOMA CITY, OK 73117-1299

AND

Oklahoma Department of Environmental Quality
PO BOX 1677
OKLAHOMA CITY, OK 73101-1677

I hereby certify the above to be correct to the best of my knowledge.

Signed Phillip Hightower
Title Public Works Director
City Durant

Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR)
Monthly Operating Report Addendum
INSTRUCTIONS

Instructions: Answer all of the following questions for each individual filter at both plants. **If any IFE measurement is above 0.15 NTU complete and attach the Turbidity Trigger Evaluation form.** Do **not** report IFE turbidities less than 15 minutes after a filter backwash or if the filter is not contributing to the CFE (i.e. filter not operating, filter to waste or recycling, etc.).

Log Requirements

Your system is required to achieve a 2.0-log *Cryptosporidium* credit to be in compliance with the LT2ESWTR. This includes a minimum log credit of 1.0 through the addition of chlorine dioxide, a 0.5-log credit for combined filter performance and a 0.5-log credit for individual filter performance.

- To obtain a 0.5-log *Cryptosporidium* removal credit for IFE turbidity you must meet **both** of the following requirements:
 - IFE turbidity must be less than 0.15 NTU in at least 95 percent of values recorded at **each** filter.
 - No individual filter may have a measured turbidity greater than 0.3 NTU in two consecutive measurements taken 15 minutes apart.
- To obtain a 0.5-log *Cryptosporidium* removal credit for the CFE turbidity the measurements taken for the month at each plant must be equal to or less than 0.15 NTU in at least 95 percent of the measurements.
- The amount of *Cryptosporidium* inactivation log credit your system may receive is determined by the CT provided in the treatment process. The LT2ESWTR requires CT to be calculated at least once per day with both C (chlorine dioxide concentration) and T (contact time) measured during peak hourly flow. Log credit for chlorine dioxide as a function of CT and water temperature is determined using the chlorine dioxide CT table (see reverse) for *Cryptosporidium* inactivation.
 - Log credit should be calculated separately for each section of the raw water line. Total log credit for the raw water line is the sum of the log credit for each section of the raw water line.
 - Log credit should be calculated separately for each clarifier, taking into account the volume of water through each clarifier. Total log credit for the clarifiers should only include the lower of the two clarifier log credits.
 - Total daily log credit is the sum of the log credits for each section of the raw water line and the lower log credit of the two clarifiers.

Note: The LT2ESWTR requires all systems utilizing chlorine dioxide for disinfection to adhere to the Disinfectant Byproducts Rule (DBPR) regarding chlorine dioxide and chlorite monitoring. This requirement also includes the completion and submission of the *Chlorine Dioxide and Chlorite Monitoring and Reporting Form*.

CT Values (mg-min/L) for *Cryptosporidium* Inactivation by chlorine Dioxide¹

Log credit	Water Temperature, °C										
	≤ 0.5	1	2	3	5	7	10	15	20	25	30
0.25	159	153	140	128	107	90	69	45	29	19	12
0.50	319	305	279	256	214	180	138	89	58	38	24
1.00	637	610	558	511	429	360	277	179	116	75	49
1.50	956	915	838	767	643	539	415	268	174	113	73
2.00	1275	1220	1117	1023	858	719	553	357	232	150	98
2.50	1594	1525	1396	1278	1072	899	691	447	289	188	122
3.00	1912	1830	1675	1534	1289	1079	830	536	347	226	147

¹Systems may use this equation to determine log credit between the indicated values:

$$\text{Log credit} = (0.001506 \times (1.09116)^{\text{Temp}}) \times \text{CT}$$



Oklahoma DEQ
Water Quality Division
P.O. Box 1677
Oklahoma City, OK 73101
(405) 702-8100 Fax (405) 702-8101

Durant WTP
OK1010601
Water Treatment Plant—TP001
Month/Year: Month Year

Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR)

Monthly Operating Report Addendum

1) INDIVIDUAL FILTER EFFLUENTS (IFE)s

New Water Treatment Plant
Filter #1
1. Was turbidity measured every 15 minutes? Yes ☒ No ☐
2. Total number of turbidity samples: 2976
3. Number of turbidity samples greater than 0.15 NTU: 0
4. Percent of turbidity samples greater than 0.15 NTU: 0
5. Were there 2 consecutive 15 minute measurements greater than 0.3 NTU? Yes ☐ No ☒
Filter #2
1. Was turbidity measured every 15 minutes? Yes ☒ No ☐
2. Total number of turbidity samples: 2976
3. Number of turbidity samples greater than 0.15 NTU: 0
4. Percent of turbidity samples greater than 0.15 NTU: 0
5. Were there 2 consecutive 15 minute measurements greater than 0.3 NTU? Yes ☐ No ☒
Filter #3
1. Was turbidity measured every 15 minutes? Yes ☒ No ☐
2. Total number of turbidity samples: 2976
3. Number of turbidity samples greater than 0.15 NTU: 0
4. Percent of turbidity samples greater than 0.15 NTU: 0
5. Were there 2 consecutive 15 minute measurements greater than 0.3 NTU? Yes ☐ No ☒
Filter #4
1. Was turbidity measured every 15 minutes? Yes ☒ No ☐
2. Total number of turbidity samples: 2976
3. Number of turbidity samples greater than 0.15 NTU: 0
4. Percent of turbidity samples greater than 0.15 NTU: 0
5. Were there 2 consecutive 15 minute measurements greater than 0.3 NTU? Yes ☐ No ☒
Old Water Treatment Plant
Filter #1
1. Was turbidity measured every 15 minutes? Yes ☐ No ☒
2. Total number of turbidity samples: 0
3. Number of turbidity samples greater than 0.15 NTU: 0
4. Percent of turbidity samples greater than 0.15 NTU: 0
5. Were there 2 consecutive 15 minute measurements greater than 0.3 NTU? Yes ☐ No ☒
Filter #2
1. Was turbidity measured every 15 minutes? Yes ☒ No ☐
2. Total number of turbidity samples: 2976
3. Number of turbidity samples greater than 0.15 NTU: 0
4. Percent of turbidity samples greater than 0.15 NTU: 0
5. Were there 2 consecutive 15 minute measurements greater than 0.3 NTU? Yes ☐ No ☒
Filter #3
1. Was turbidity measured every 15 minutes? Yes ☒ No ☐
2. Total number of turbidity samples: 2976
3. Number of turbidity samples greater than 0.15 NTU: 0
4. Percent of turbidity samples greater than 0.15 NTU: 0
5. Were there 2 consecutive 15 minute measurements greater than 0.3 NTU? Yes ☐ No ☒
Filter #4
1. Was turbidity measured every 15 minutes? Yes ☒ No ☐
2. Total number of turbidity samples: 2976
3. Number of turbidity samples greater than 0.15 NTU: 0
4. Percent of turbidity samples greater than 0.15 NTU: 0
5. Were there 2 consecutive 15 minute measurements greater than 0.3 NTU? Yes ☐ No ☒

2) COMBINED FILTER EFFLUENTS (CFEs)

New Water Treatment Plant
1. Was turbidity measured every 4 hours? Yes ☒ No ☐
2. Total number of turbidity samples: 186
3. Number of turbidity samples greater than 0.15 NTU: 0
4. Percent of turbidity samples greater than 0.15 NTU: 0
Old Water Treatment Plant
1. Was turbidity measured every 4 hours? Yes ☒ No ☐
2. Total number of turbidity samples: 186
3. Number of turbidity samples greater than 0.15 NTU: 0
4. Percent of turbidity samples greater than 0.15 NTU: 0

3) CHLORINE DIOXIDE

Raw Water Line
1. Was the concentration of chlorine dioxide present in each section of the raw water line measured at least once daily during the peak hourly flow? Yes ☒ No ☐
2. Was the contact time for each section of the raw water line calculated at least once per day during peak hourly flow? Yes ☒ No ☐
3. Was the minimum water temperature determined every day? Yes ☒ No ☐
4. Was the log credit for each section of the raw water line calculated daily? Yes ☒ No ☐
Clarifiers
1. Was the concentration of chlorine dioxide present in each clarifier measured at least once daily during the peak hourly flow? Yes ☒ No ☐
2. Was the contact time for each clarifier calculated at least once per day during peak hourly flow? Yes ☒ No ☐
3. Was the minimum water temperature determined every day? Yes ☒ No ☐
4. Was the log credit for each clarifier calculated daily? Yes ☒ No ☐

4) LOG INACTIVATION CREDIT

IFE Credit
1. For the individual filters, were at least 95% of each filter’s turbidity measurements less than or equal to 0.15 NTU? Yes ☒ (answer question 2) No ☐ (log credit 0.0)
2. Did any individual filter have a measured turbidity greater than 0.3 NTU in two consecutive measurements taken 15 minutes apart? Yes ☐ (log credit 0.0) No ☒ (log credit 0.5)
CFE Credit
1. For the combined filters, were at least 95% of each filter’s turbidity measurements less than or equal to 0.15 NTUs? Yes ☒ (log credit 0.5) No ☐ (log credit 0.0)
Chlorine Dioxide Credit
1. Was the required minimum log credit of 1 achieved each day? Yes ☒ (log credit 1.0) No ☐ (log credit 0.0)
Total Log Credit: #

Comments:

#1 Old Plant filter is still down a new under drain has been ordered for it, so when it is delivered it will be installed.

I hereby certify the above to be correct to the best of my knowledge.

Printed Name: Phillip Hightower Signature: Phillip Hightower Date: 4/1/2014

Title: Public Works Director Op. Cert. No.: B90404

* The Department of Environmental Quality may at any time request additional information or perform an audit.



THE CITY OF DURANT

Office of the Water Treatment Plant

Water Treatment Plant Projects Schedule March 2022 Monthly Report

A. Work Completed

1. Calibrate lab instruments daily
2. Maintained Water Plant
3. Cleaned all buildings weekly
4. Backwashed filters as needed
5. Backwashed raw pumps weekly
6. Hooked up chlorine tanks and checked for leaks
7. Unload chemicals as they arrived
8. Pulled sludge as needed
9. Run daily chlorine dioxide samples on raw line
10. Flushed alum pumps
11. Inspected fire extinguishers
12. Pulled required water samples and send to ODEQ
13. Clean turbidity meters as needed
14. Cleaned screens on CLO2 generator as needed
15. Mowed and weedeated Plant grounds when needed
16. Replaced site C Sample Station and lines
17. Repaired communications from all towers to the Plant
18. Repaired communications at Boss Tower (1st and Arkansas)
19. Continue training Stephen Mills, Jacob Eppler and Frank Enea and Lance Canoy and Tyler Weaver
20. Replaced sample station and line to site C
21. Treated 138,467,000 gallons of water
22. Repaired Welder
23. Exercise welder, diesel pump, and generator
24. Work started on repairing #1 Filter
25. Repaired #59 transmission, replaced battery, and had recall service performed
26. Fixed #2 Pump at Big Lots Pump Station

B. Work Planned for April-May

1. Repair #1 raw Pump
2. Repair #3 raw Pump
3. Have towers inspected and cleaned
4. Replace underdrains in Old Plant Filters
5. Install pad for generator at Chlorites

Approx Start/Finish Date

Time permitting
Time permitting
Time permitting
As parts arrive
As parts arrive

C. Projects Planned and Requested for Authorization

None at this Time



OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY OPERATIONAL REPORT (MOR)- LT2 ADDENDUM NEEDED
CONVENTIONAL OR DIRECT FILTRATION (Free Chlorine)

Plant: **DWT**

PWSID: **1010601**

County: **Bryan**

Month/Year: **March 2022**

Durant Utilities Authority
System

P.O. Box 578
Address

Durant, OK
City

74702
Zip

Instructions:

If there are no combined filter turbidity readings or free chlorine residual sample results at the entry point to the distribution system due to the plant not running, write **OFF** in the box.

Two (2) distribution chlorine residuals **must be taken daily**, even if the plant is not running.

Mail the original by the 10th of the following month to:
Oklahoma DEQ, Water Quality Division, P.O. Box 1677, Oklahoma City, OK 73101

Combined Filter Turbidity	
Total number of turbidity readings required	186
Total number of turbidity readings	186
Number of turbidity readings above 1 NTU	0
HIGHEST turbidity reading	0.14
Number of turbidity readings above 0.15 NTU	0
Percent of turbidity readings above 0.15 NTU	0.00%
Free Chlorine-Entry Point to Distribution	
Total number of chlorine residual samples	186
Number of samples below 1.0 mg/L	0
Free Chlorine-Distribution	
Total number of chlorine residual samples	62
Number of samples below 0.2 mg/L	0

Individual Filter Turbidity - Complete Entire Checklist
1. Was Each Filter Monitored continuously while the plant was running? ☐ No ☒ Yes
2. Was each filter monitored every 15 minutes while the plant was running? ☐ No ☒ Yes
3. Was there a failure of the continuous monitoring equipment? ☒ No ☐ Yes
4. Did the same filter exceed 1.0 NTU in two consecutive 15 minute readings? ☒ No ☐ Yes*
5. Was individual filter level greater than 0.5 NTU in two consecutive measurements after being on line for more than four hours? ☒ No ☐ Yes*
6. Did the same filter exceed 1.0 NTU in two consecutive 15 minute readings for three months in a row? ☒ No ☐ Yes* (Submit a Self-Assessment of the filter(s) within 14 days of the exceedance)
7. Did the same filter exceed 2.0 NTU in two consecutive 15 minute readings for two months in a row? ☒ No ☐ Yes* (Contact DEQ to schedule a Comprehensive Performance Evaluation)

				# of Readings***	COMBINED FILTER TURBIDITY						FREE CHLORINE RESIDUAL								COMMENTS
DAY	RAW	SET	SET		2400-0400	0400-0800	0800-1200	1200-1600	1600-2000	2000-2400	ENTRY POINT TO DISTRIBUTION						DISTRIBUTION SYSTEM		
											12am	4am	8am	12pm	4pm	8pm			
1	4.24	3.25	2.62	6	0.13	0.04	0.08	0.05	0.08	0.11	2.6	2.5	2.9	3.0	2.8	1.9	2.2	2.2	
2	4.14	2.80	2.67	6	0.04	0.04	0.05	0.05	0.04	0.05	2.7	2.3	2.0	2.0	2.0	2.0	1.9	2.2	
3	3.97	3.57	3.58	6	0.06	0.14	0.04	0.03	0.03	0.05	1.8	1.8	2.2	2.0	2.0	2.0	1.8	1.7	
4	6.73	3.30	5.99	6	0.14	0.07	0.05	0.04	0.04	0.04	2.0	2.1	2.2	2.0	1.9	1.9	1.5	1.8	
5	9.08	3.20	3.40	6	0.04	0.08	0.06	0.05	0.05	0.05	1.9	1.9	2.1	2.0	1.9	1.9	1.4	1.5	
6	8.90	3.80	4.70	6	0.06	0.06	0.06	0.06	0.06	0.06	1.8	1.8	2.2	2.2	2.0	1.8	1.6	1.5	
7	7.21	3.02	3.64	6	0.12	0.05	0.05	0.05	0.05	0.05	1.9	1.8	2.0	2.0	2.1	2.2	1.4	1.2	
8	4.09	2.78	2.89	6	0.09	0.07	0.06	0.05	0.05	0.05	1.8	1.9	2.3	2.3	2.3	2.3	1.6	1.2	
9	2.89	2.01	3.10	6	0.08	0.05	0.04	0.04	0.04	0.04	2.3	2.4	2.5	2.3	2.3	2.2	1.8	1.3	
10	2.82	2.40	2.86	6	0.11	0.10	0.06	0.10	0.03	0.03	2.2	2.2	2.3	2.3	2.3	2.4	1.8	1.9	
11	2.30	2.24	2.74	6	0.03	0.03	0.04	0.06	0.08	0.06	2.3	2.5	2.4	2.5	2.5	2.5	2.0	1.3	
12	2.47	1.82	2.10	6	0.08	0.07	0.07	0.06	0.07	0.11	2.5	2.5	2.6	2.5	2.4	2.4	1.9	1.7	
13	2.53	2.60	4.30	6	0.05	0.04	0.04	0.04	0.05	0.04	2.5	2.5	2.4	2.4	2.4	2.4	2.3	1.6	
14	2.08	2.10	2.80	6	0.05	0.13	0.03	0.14	0.09	0.06	2.3	2.3	2.6	2.2	2.1	2.1	1.8	1.1	
15	2.68	3.30	4.50	6	0.04	0.05	0.08	0.11	0.12	0.07	1.8	1.9	2.0	2.1	2.1	2.2	1.8	1.8	
16	3.71	2.50	3.40	6	0.05	0.07	0.11	0.12	0.05	0.11	2.2	2.2	2.1	2.8	2.8	2.5	1.9	1.5	
17	2.99	2.80	4.89	6	0.11	0.06	0.05	0.05	0.05	0.06	2.6	2.6	2.6	2.4	2.3	2.2	1.7	1.5	
18	7.79	6.18	6.57	6	0.08	0.07	0.13	0.13	0.05	0.05	2.2	2.5	2.7	2.9	3.1	3.1	2.0	2.1	
19	7.56	2.60	3.74	6	0.14	0.08	0.06	0.06	0.05	0.05	2.9	2.8	3.0	3.2	3.2	2.5	2.2	2.3	
20	7.94	3.20	3.00	6	0.05	0.05	0.04	0.12	0.08	0.05	2.2	2.2	2.2	2.2	2.2	2.3	1.2	2.1	
21	7.94	2.34	2.74	6	0.06	0.13	0.05	0.11	0.04	0.04	2.2	2.2	1.7	2.1	2.3	2.1	1.9	1.9	
22	12.70	15.80	25.80	6	0.10	0.11	0.12	0.10	0.11	0.07	1.9	1.9	2.6	1.7	1.7	1.5	1.3	1.0	
23	282.00	8.06	13.20	6	0.07	0.07	0.07	0.07	0.08	0.08	1.5	1.8	1.9	1.9	1.7	2.1	1.2	1.0	
24	38.07	3.72	3.63	6	0.08	0.08	0.08	0.05	0.04	0.05	2.2	2.8	2.8	3.0	2.9	2.6	0.9	1.4	
25	28.86	2.68	3.00	6	0.04	0.04	0.05	0.12	0.04	0.05	3.0	3.4	3.3	3.3	3.0	2.5	0.9	1.2	
26	22.00	3.12	5.46	6	0.05	0.05	0.05	0.04	0.05	0.04	2.2	2.4	2.4	2.5	2.4	2.2	1.9	0.8	
27	20.09	3.10	4.60	6	0.05	0.04	0.05	0.04	0.04	0.04	2.1	2.3	2.4	2.4	2.4	2.1	1.3	1.9	
28	17.90	2.80	4.00	6	0.04	0.04	0.04	0.06	0.04	0.06	2.1	2.3	2.4	2.5	2.4	2.2	1.5	1.2	
29	17.10	1.92	3.50	6	0.09	0.08	0.08	0.06	0.07	0.08	2.0	2.4	2.3	2.3	2.2	2.0	2.1	1.6	
30	16.00	4.50	3.60	6	0.09	0.08	0.08	0.08	0.08	0.06	2.2	2.4	2.4	1.2	1.6	1.7	1.7	1.4	
31	20.70	2.56	3.49	6	0.06	0.05	0.05	0.05	0.06	0.07	1.9	2.1	2.1	2.2	2.1	2.1	1.3	0.9	

*** Number of Readings: You are required to sample the combined effluent for every four hours that the filters are in operation. You must fill out Filter Operation on the 'Chemical and Process Control tab.'

* If you answered Yes to questions 4, 5 (>10,000 population only), 6, or 7, you must complete the Turbidity Trigger Form, follow instruction on the form, and attach it to this MOR.

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY OPERATIONAL REPORT (MOR)
CONVENTIONAL OR DIRECT FILTRATION (Free Chlorine)

Plant: DWT
PWSID: 1010601
County: Bryan
Month: March 2022

Durant Utilities Authority										P.O. Box 578										Durant, OK										74702									
System										Address										City										ZIP									
D a y	WATER TREATED (in 1,000 gal)	FILTER OPERATION								WASH WATER IN 1000 GALS.	CHEMICALS USED-LBS.								ALKALINITY - RAW				ALKALINITY - FILTERED				pH			CaCO3 STABILITY Method:	HARDNESS (ppm)		Special Test Fe, Mn or Other		REMARKS				
		FILTERS USED-HOURS									ALUM	POLYM ER	Caustic	Fluoride	Chlorite	OTHER	CHLORINE		AM	PM	P"	P"	AM	PM															
		1	2	3	4	5	6	7	8								PRE	POST							P"	P"	TOTAL	TOTAL	P"		P"	TOTAL	TOTAL	RAW		FILT	FILT	RAW	FILT
1	4740.0	0	23	23	23	23	24	24	23	125.0	1000.0	40.0	0.0	65.0	240.0	0.0	OFF	300.0	0.0	0.0	256.0	254.0	0.0	0.0	200.0	210.0	8.1	7.0	6.8	204.0	256.00	250.00							
2	5005.0	0	24	24	24	24	24	24	24	0.0	900.0	40.0	0.0	69.0	240.0	0.0	OFF	180.0	0.0	0.0	236.0	260.0	0.0	0.0	212.0	232.0	7.7	7.3	7.0	240.0	252.00	240.00							
3	4900.0	0	23	24	23	24	24	24	24	51.0	1000.0	40.0	0.0	67.0	240.0	0.0	OFF	20.0	0.0	0.0	252.0	250.0	0.0	0.0	240.0	244.0	7.9	7.4	7.2	226.0	260.00	266.00							
4	4855.0	0	24	24	24	24	23	23	24	68.0	1400.0	40.0	0.0	67.0	240.0	0.0	OFF	20.0	0.0	0.0	252.0	252.0	0.0	0.0	238.0	240.0	7.8	7.4	7.4	236.0	248.00	250.00							
5	4866.0	0	24	24	24	24	23	24	23	60.0	1400.0	40.0	0.0	67.0	240.0	0.0	OFF	120.0	0.0	0.0	248.0	250.0	0.0	0.0	238.0	240.0	7.8	7.0	7.1	238.0	258.00	270.00							
6	4695.0	0	24	23	24	24	24	24	24	30.0	1300.0	40.0	0.0	64.0	240.0	0.0	OFF	200.0	0.0	0.0	256.0	260.0	0.0	0.0	238.0	242.0	7.6	7.0	7.0	254.0	256.00	264.00							
7	4422.0	0	23	24	23	24	24	24	24	57.0	1200.0	40.0	0.0	61.0	240.0	0.0	OFF	140.0	0.0	0.0	244.0	250.0	0.0	0.0	240.0	244.0	7.5	7.0	7.1	246.0	262.00	260.00							
8	4283.0	0	24	24	24	24	23	23	24	48.0	1200.0	40.0	0.0	59.0	240.0	0.0	OFF	140.0	0.0	0.0	250.0	262.0	0.0	0.0	238.0	236.0	7.9	7.6	7.3	238.0	268.00	264.00							
9	4228.0	0	24	24	24	23	24	24	23	55.0	1600.0	40.0	0.0	58.0	240.0	0.0	OFF	20.0	0.0	0.0	260.0	264.0	0.0	0.0	236.0	238.0	8.0	7.2	7.1	234.0	262.00	268.00							
10	4022.0	0	23	23	23	24	24	24	24	67.0	1000.0	40.0	0.0	55.0	240.0	0.0	OFF	140.0	0.0	0.0	250.0	250.0	0.0	0.0	238.0	242.0	7.7	7.2	7.1	238.0	256.00	250.00							
11	3850.0	0	24	24	24	24	23	24	24	24.0	1400.0	40.0	0.0	53.0	240.0	0.0	OFF	200.0	0.0	0.0	252.0	256.0	0.0	0.0	234.0	242.0	7.7	7.3	7.2	234.0	260.00	260.00							
12	3737.0	0	24	24	24	23	24	23	23	72.0	1400.0	40.0	0.0	51.0	240.0	0.0	OFF	100.0	0.0	0.0	256.0	256.0	0.0	0.0	234.0	238.0	7.9	7.3	7.3	234.0	256.00	252.00							
13	3533.0	0	24	23	23	24	24	24	24	57.0	700.0	40.0	0.0	49.0	240.0	0.0	OFF	100.0	0.0	0.0	260.0	260.0	0.0	0.0	240.0	228.0	8.0	7.5	7.6	240.0	270.00	268.00							
14	4795.0	0	23	24	24	24	23	24	24	48.0	1200.0	40.0	0.0	66.0	240.0	0.0	OFF	80.0	0.0	0.0	268.0	262.0	0.0	0.0	248.0	222.0	7.8	7.3	7.3	236.0	274.00	284.00							
15	4799.0	0	24	24	24	24	24	23	23	74.0	1200.0	40.0	0.0	66.0	240.0	0.0	40.0	100.0	0.0	0.0	260.0	254.0	0.0	0.0	252.0	240.0	8.1	7.2	7.3	260.0	264.00	290.00							
16	4715.0	0	24	23	23	23	24	24	24	94.0	1300.0	40.0	0.0	65.0	240.0	0.0	OFF	20.0	0.0	0.0	260.0	258.0	0.0	0.0	250.0	286.0	7.8	7.4	7.3	244.0	276.00	268.00							
17	4611.0	0	24	24	24	24	23	24	24	26.0	1300.0	40.0	0.0	63.0	240.0	0.0	110.0	130.0	0.0	0.0	264.0	272.0	0.0	0.0	250.0	260.0	7.7	7.3	7.4	244.0	280.00	278.00							
18	4099.0	0	23	23	23	24	24	24	24	60.0	1200.0	40.0	0.0	56.0	240.0	0.0	OFF	160.0	0.0	0.0	236.0	244.0	0.0	0.0	244.0	258.0	7.7	7.2	7.2	258.0	264.00	260.00							
19	4045.0	0	24	24	24	24	24	23	23	56.0	1200.0	40.0	0.0	56.0	240.0	0.0	OFF	100.0	0.0	0.0	256.0	250.0	0.0	0.0	240.0	244.0	7.9	7.3	7.1	244.0	250.00	252.00							
20	3849.0	0	24	24	24	24	24	24	24	0.0	1000.0	40.0	0.0	53.0	240.0	0.0	OFF	120.0	0.0	0.0	260.0	252.0	0.0	0.0	240.0	238.0	8.2	7.2	7.2	240.0	264.00	270.00							
21	4680.0	0	23	23	23	24	24	23	24	144.0	2000.0	40.0	0.0	64.0	240.0	0.0	50.0	50.0	0.0	0.0	268.0	272.0	0.0	0.0	250.0	256.0	8.3	7.2	7.3	248.0	274.00	280.00							
22	4815.0	0	24	24	24	23	23	24	24	48.0	5300.0	40.0	0.0	66.0	240.0	0.0	240.0	140.0	0.0	0.0	112.0	114.0	0.0	0.0	240.0	150.0	7.5	7.2	7.0	248.0	130.00	270.00							
23	4885.0	0	24	24	24	24	24	24	24	0.0	5400.0	40.0	0.0	67.0	240.0	0.0	240.0	160.0	0.0	0.0	160.0	170.0	0.0	0.0	150.0	80.0	7.4	6.4	6.3	228.0	150.00	160.00							
24	4916.0	0	23	23	23	23	23	23	23	217.0	3800.0	40.0	0.0	68.0	240.0	0.0	140.0	100.0	0.0	0.0	188.0	192.0	0.0	0.0	100.0	104.0	7.4	6.4	6.4	130.0	186.00	180.00							
25	4333.0	0	24	24	24	24	24	24	24	0.0	3400.0	40.0	0.0	60.0	240.0	0.0	140.0	100.0	0.0	0.0	210.0	206.0	0.0	0.0	140.0	144.0	7.5	6.6	6.5	136.0	210.00	182.00							
26	4335.0	0	24	24	24	24	24	24	24	0.0	2400.0	40.0	0.0	60.0	240.0	0.0	50.0	50.0	0.0	0.0	214.0	220.0	0.0	0.0	162.0	174.0	7.6	6.9	6.9	176.0	242.00	204.00							
27	4323.0	0	24	24	24	24	24	24	24	0.0	2400.0	40.0	0.0	59.0	240.0	0.0	120.0	100.0	0.0	0.0	234.0	238.0	0.0	0.0	180.0	186.0	7.6	6.7	6.8	190.0	238.00	236.00							
28	4272.0	0	23	23	23	24	24	24	24	108.0	2200.0	40.0	0.0	59.0	240.0	0.0	65.0	55.0	0.0	0.0	230.0	238.0	0.0	0.0	190.0	194.0	7.8	6.8	6.9	200.0	240.00	230.00							
29	4311.0	0	24	24	24	24	23	23	23	56.0	2200.0	40.0	0.0	59.0	240.0	0.0	110.0	90.0	0.0	0.0	226.0	234.0	0.0	0.0	198.0	196.0	7.7	7.0	7.1	202.0	240.00	240.00							
30	4858.0	0	24	24	24	23	23	24	24	60.0	3800.0	40.0	0.0	67.0	240.0	0.0	150.0	110.0	0.0	0.0	220.0	216.0	0.0	0.0	196.0	198.0	7.7	7.1	7.0	210.0	244.00	218.00							
31	4690.0	0	24	24	24	24	23	24	24	24.0	2400.0	40.0	0.0	64.0	240.0	0.0	140.0	100.0	0.0	0.0	222.0	212.0	0.0	0.0	172.0	176.0	8.1	6.7	7.0	208.0	206.00	222.00							
Tot	138467.0		735.0	735.0	734.0	736.0	735.0	736.0	736.0	1729.0	59200.0	1240.0		1903.0	7440.0		1595.0	3445.0																					
Avg	4466.7		23.7	23.7	23.7	23.7	23.7	23.7	23.7	55.8	1909.7	40.0		61.4	240.0		122.7	111.1			237.4	239.6			217.0	215.5	7.8	7.1	7.1	224.6	245.0	247.9							
Power Costs	\$20,424.58																																						
Labor Costs	\$49,250.80																																						
Chemicals	\$22,029.39																																						
Supplies	\$4,955.32																																						
Repairs	\$6,675.42																																						
Testing Cost	\$944.94																																						
TOTAL	\$104,280.45																																						
Cost per thousand gallons	\$0.75																																						
Ave Rate of Wash (Vert. in/min)																																							
Ave Wash Period (Minutes)																																							
% Wash Water Used															1.25%																								
Ave. Head Loss for Washing																																							
I hereby certify the above to be correct to the best of my knowledge.																																							
Signed															<u>Phillip Hightower</u>																								
Print															Phillip Hightower																								
Title															<u>Public Works Director</u>																								
DEQ Form # 630-577 Revised 5/21/2018																																							
Oper. Cert. No.															B90404																								