

City of Broken Arrow WTP Monthly Operational Report Summary
Water Treatment Plant PWSID# OK 1021508

Reporting Period: [August] [2025]



CITY OF
BROKEN ARROW

Where opportunity lives

Operating Data Summary

Water Production (MG)

	Month	Average Day
Raw Water Treated	497.53	16.0
Finished Water	474.64	15.3

Monthly Chemical Usage (Non-Membrane Usage)

Chemical	Total lbs	lbs/Finished MG
Sodium Hypochlorite	33,166	998.2
Salt (for hypo generation)	99,497	2,994.7
Liquid Ammonium Sulfate	4,842	9.7
Sodium Permanganate	2,060	2.2
Aluminum Chlorohydrate	128,839	48.6
Sodium Hydroxide	10,207	8.3
Hydrofluorosilicic Acid	0	0.0

Total Chlorine Residual:

	No. Samples
Total Chlorine Residual <2.0 mg/L Leaving Plant	0

Finished Water Turbidity:

	No. Samples	% of Total Samples
Greater than 0.5 NTU	0	0.00
Greater than 0.3 NTU	0	0.00
Greater than 0.1 NTU	0	0.00
Total No. of Turbidity Samples	186	
Highest Turbidity Reading	0.051	
No. Samples > 1 NTU	0	
No. Samples > 5 NTU	0	

Monthly Costs

	Total	\$/Finished MG	\$/1000 gal
Plant Electricity	\$41,438.02	\$87.30	\$0.0873
Total Chemical	\$141,018.32	\$297.11	\$0.2971
Total Labor	\$163,139.44	\$343.71	\$0.3437
Services	\$59,205.54	\$124.74	\$0.1247
Materials and Supplies	\$12,172.75	\$25.65	\$0.0256
Equipment Expenses	\$15,776.77	\$33.24	\$0.0332
Total	\$432,750.84	\$911.75	\$0.9117

Individual Membrane Unit Turbidity Checklist

1. IS TURBIDITY FROM EACH INDIVIDUAL MEMBRANE UNIT RECORDED EVERY 15 MINUTES?
2. DID ANY SINGLE MEMBRANE UNIT EXCEED 2.0 NTU IN TWO CONSECUTIVE 15 MINUTE PERIODS?

No, Go to Question 3.

Yes, What date was the membrane profile completed? _____

DID THIS SAME MEMBRANE UNIT EXCEED 2.0 NTU IN 2 CONSECUTIVE 15-MIN PERIODS DURING THE LAST MONTH?

No, Go to Question 3.

Yes, Schedule Comprehensive Performance Evaluation (CPE) with DEQ.

3. DID ANY SINGLE MEMBRANE UNIT EXCEED 1.0 NTU IN TWO CONSECUTIVE 15 MINUTE PERIODS?

No, Go to Question 4.

Yes, What date was the filter profile completed? _____

DID THIS SAME MEMBRANE UNIT FILTER EXCEED 1.0 NTU IN 2 CONSECUTIVE 15-MIN PERIODS DURING THE LAST 2 MONTHS?

No, Go to Question 4.

Yes, What date was the membrane self-assessment completed? _____

4. DID ANY SINGLE MEMBRANE UNIT EXCEED 0.5 NTU IN 2 CONSECUTIVE 15-MIN PERIODS AT THE END OF 4 HRS OF OPERATION?

No, You are finished with the checklist.

Yes, What date was the membrane profile completed? _____

* IF ANY OF QUESTIONS 2 THROUGH 4 ARE CHECKED "YES", YOU MUST

COMPLETE THE TURBIDITY TRIGGER EVALUATION FORM AND ATTACH TO THIS MOR.

YES/NO

YES

NO

NO

NO

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

Signed:

Lou Ann Fisher

9/9/2025

Date

Title:

Water Plant Manager

Operator Certificate No.

25369

Notes: 1: Hand entered all available data from the 19th through the 31st due to SCADA data logging issue.
2: Fluoride feed offline for repairs.

Public Water System Name: COBA Water Treatment Plant
PWS ID No.: OK 1021508

Month:
Year

August
2025

Date	Water Production and Recycle Flows				
	Raw Water Pumped to Pre-Sed Basins (MG)	Raw Water Treated (MG)	Finished Water Delivered (MG)	Reverse Filtration Water Used (MG)	Lagoon Decant Water Pumped (MG)
1	16.68	17.09	14.56		0.84
2	10.61	14.05	12.43		0.79
3	10.68	13.80	14.10		0.75
4	10.70	14.67	15.71		0.67
5	10.74	17.68	16.02		0.42
6	10.78	16.91	17.06		0.73
7	18.73	20.19	18.36		0.97
8	20.58	18.43	17.42		0.71
9	20.53	17.95	17.00		0.69
10	20.54	16.95	16.48		0.62
11	20.54	18.11	17.03		0.63
12	20.50	14.29	12.21		0.67
13	20.43	15.15	15.47		0.83
14	13.42	15.49	13.99		0.83
15	10.76	17.04	17.19		0.61
16	10.81	15.95	15.90		0.62
17	10.84	17.37	16.83		0.63
18	11.03	18.31	17.78		0.72
19	20.40	17.70	16.50		0.45
20	20.90	17.30	16.80		0.38
21	20.90	18.90	18.30		0.36
22	20.70	19.10	18.00		0.37
23	20.40	17.90	17.20		0.36
24	20.60	15.70	15.40		0.36
25	8.90	15.30	14.20		0.35
26	0.00	12.10	11.90		0.34
27	0.00	14.50	13.50		0.33
28	10.80	12.40	11.90		0.38
29	20.00	12.70	12.20		0.38
30	20.70	12.50	11.70		
31	20.50	12.00	11.50		
TOTAL	473.71	497.53	474.64	0.00	16.79
AVG	15.28	16.05	15.31	#DIV/0!	0.58
MAX	20.90	20.19	18.36	0.00	0.97
MIN	0.00	12.00	11.50	0.00	0.33

Public Water System Name: COBA Water Treatment Plant
PWS ID No.: OK 1021508

Month: August
Year: 2025

TOTAL CHEMICAL COST:		\$141,018	
Cost Per MG Treated	\$283.44	Cost Per MG Delivered	\$297.11
Million Gallons Treated	497.53	Million Gallons Delivered	474.64

Non-Membrane System Chemical Usage

Date	Sodium Hypochlorite (CL) NaClO		Liquid Ammonium Sulfate (LAS)		Sodium Permanganate (SP)		Aluminum Chlorohydrate (ACH)		Sodium Hydroxide (SH)		Hydrofluosilicic Acid (HFS)	
	gal/day	lb/day	gal/day	lb/day	gal/day	lb/day	gal/day	lb/day	gal/day	lb/day	gal/day	lb/day
1	15,803	1106.21	148.5	155.58	38.2	73.97	708	3955.32	71.6	186.50	0.0	0.00
2	14,619	1023.36	128.4	134.57	24.1	46.57	611	3414.24	61.2	159.55	0.0	0.00
3	15,777	1104.42	141.8	148.57	24.2	46.87	671	3749.00	79.5	207.32	0.0	0.00
4	16,850	1179.52	160.3	167.96	24.3	46.99	770	4303.04	102.3	266.69	0.0	0.00
5	16,916	1184.11	166.8	174.80	24.4	47.12	802	4480.75	106.9	278.72	0.0	0.00
6	18,726	1310.84	171.3	179.49	24.5	47.31	829	4633.35	109.5	285.44	0.0	0.00
7	21,857	1530.01	188.9	197.94	42.2	81.74	912	5094.40	120.7	314.49	0.0	0.00
8	18,663	1306.38	173.3	181.67	46.7	90.32	838	4682.59	111.5	290.55	0.0	0.01
9	18,154	1270.78	174.4	182.82	46.6	90.12	848	4740.12	112.7	293.67	0.0	0.01
10	16,920	1184.39	165.4	173.32	46.6	90.15	804	4493.00	107.0	278.78	0.0	0.00
11	17,462	1222.31	170.6	178.83	46.6	90.17	833	4654.79	110.7	288.54	0.0	0.00
12	12,692	888.46	117.5	123.16	46.5	90.02	578	3232.05	78.3	203.95	0.0	0.00
13	17,052	1193.64	161.2	168.93	46.4	89.69	796	4448.15	144.9	377.61	0.0	0.00
14	15,635	1094.43	139.1	145.79	30.7	59.38	690	3854.12	155.2	404.37	0.0	0.00
15	18,643	1305.00	177.4	185.88	24.4	47.24	868	4850.68	196.8	512.90	0.0	0.01
16	16,780	1174.60	158.4	166.05	24.5	47.46	778	4348.67	176.0	458.74	0.0	0.00
17	18,366	1285.63	174.5	182.86	24.6	47.57	854	4770.37	193.3	503.74	0.0	0.00
18	18,076	1265.35	181.0	189.72	24.8	47.94	866	4838.30	196.3	511.50	0.0	0.00
19	15,811	1106.77	158.0	165.58	45.3	87.65	807	4509.35	187.6	488.93	0.0	0.00
20	15,291	1070.37	154.1	161.50	46.5	89.97	787	4397.60	182.5	475.64	0.0	0.00
21	16,086	1126.02	165.5	173.44	46.2	89.39	850	4749.63	198.0	516.04	0.0	0.00
22	15,784	1104.88	164.9	172.82	45.7	88.42	948	5297.23	201.4	524.90	0.0	0.00
23	14,553	1018.71	157.4	164.96	45.7	88.42	730	4079.09	191.2	498.32	0.0	0.00
24	12,074	845.18	135.3	141.79	45.4	87.84	715	3995.28	135.3	352.63	0.0	0.00
25	11,933	835.31	132.3	138.65	21.1	40.83	704	3933.81	127.9	333.34	0.0	0.00
26	9,801	686.07	103.1	108.05	0.0	0.00	545	3045.35	77.7	202.51	0.0	0.00
27	11,819	827.33	125.5	131.52	0.0	0.00	666	3721.47	86.7	225.96	0.0	0.00
28	10,260	718.20	106.2	111.30	23.2	44.89	561	3134.76	73.5	191.56	0.0	0.00
29	10,791	755.37	109.6	114.86	44.2	85.52	584	3263.28	75.7	197.29	0.0	0.00
30	10,481	733.67	106.4	111.51	46.1	89.20	565	3157.11	73.4	191.30	0.0	0.00
31	10,121	708.47	102.8	107.73	45.2	87.46	539	3011.82	71.0	185.04	0.0	0.00
TOTAL	473,797	33,166	4,620	4,842	1,065	2,060	23,057	128,839	3,916	10,207	0	0
AVG	15,284	1069.86	149	156.18	34	66.46	744	4156.09	126	329.24	0	0.00
MAX	21,857	1530.01	189	197.94	47	90.32	948	5297.23	201	524.90	0	0.01
MIN	9,801	686.07	103	107.73	0	0.00	539	3011.82	61	159.55	0	0.00
COST	\$18,686.10		\$8,367.12		\$15,204.40		\$90,187.14		\$8,573.48		\$0.09	
\$/MG	\$37.56		\$16.82		\$30.56		\$181.27		\$17.23		\$0.00	

Public Water System Name: COBA Water Treatment Plant
PWS ID No.: OK 1021508

Month: August
Year: 2025

Date	pH (by Continuous Reading Analyzers)				Hardness and Alkalinity - Finished Water Grab Samples						
	Membrane Filtrate		Finished Water		Hardness (ppm)		Alkalinity (ppm as CaCO ₃)				CaCO ₃ Stability
	Daily Max	Daily Min	Daily Max	Daily Min	AM	PM	Phenol AM	Phenol PM	Total AM	Total PM	
1	8.0	8.0	8.3	8.1	148.00	142.00	0.00	0.00	100.00	101.00	8.00
2	8.1	7.8	8.1	8.1	143.00	146.00	0.00	0.00	104.00	107.00	1.00
3	8.1	7.8	8.2	8.1	145.00	143.00	0.00	0.00	101.00	101.00	4.00
4	8.2	7.8	8.3	8.2	144.00	143.00	0.00	0.00	101.00	102.00	0.00
5	8.1	8.0	8.3	8.2	144.00	146.00	0.00	0.00	101.00	101.00	4.00
6	8.1	8.0	8.3	8.2	148.00	149.00	0.00	0.00	100.00	103.00	1.00
7	8.1	8.1	8.3	8.3	149.00	152.00	0.00	0.00	104.00	104.00	7.00
8	8.1	8.1	8.3	8.3	151.00	150.00	0.00	0.00	110.00	104.00	2.00
9	8.1	8.1	8.3	8.3	154.00	150.00	0.00	0.00	106.00	104.00	6.00
10	8.1	8.1	8.3	8.3	151.00	149.00	0.00	0.00	103.00	104.00	3.00
11	8.2	8.1	8.4	8.3	152.00	152.00	0.00	0.00	104.00	104.00	4.00
12	8.9	4.0	8.3	7.1	154.00	153.00	0.00	0.00	102.00	104.00	5.00
13	7.5	7.4	7.8	7.7	147.00	154.00	0.00	0.00	103.00	103.00	4.00
14	7.4	7.4	7.8	7.8	153.00	157.00	0.00	0.00	106.00	102.00	2.00
15	7.4	7.3	7.8	7.7	159.00	160.00	0.00	0.00	109.00	106.00	6.00
16	7.4	7.3	7.7	7.7	164.00	157.00	0.00	0.00	109.00	110.00	0.00
17	7.4	7.3	7.7	7.7	155.00	157.00	0.00	0.00	109.00	107.00	3.00
18	7.4	7.3	7.8	7.7	154.00	159.00	0.00	0.00	104.00	103.00	3.00
19	7.4	7.3	8.0	7.9	157.00	158.00	0.00	0.00	107.00	107.00	3.00
20	7.4	7.4	8.0	7.7	158.00	160.00	0.00	0.00	109.00	107.00	7.00
21	7.5	7.4	8.1	8.0	166.00	162.00	0.00	0.00	111.00	109.00	4.00
22	7.5	7.4	8.1	8.1	159.00	154.00	0.00	0.00	106.00	100.00	3.00
23	7.6	7.5	8.2	8.1	160.00	160.00	0.00	0.00	110.00	109.00	6.00
24	7.6	7.5	8.3	8.1	163.00	158.00	0.00	0.00	111.00	109.00	6.00
25	7.6	7.6	8.2	8.0	160.00	158.00	0.00	0.00	111.00	109.00	7.00
26	7.6	7.5	8.2	8.0	158.00	158.00	0.00	0.00	110.00	107.00	7.00
27	7.6	7.6	8.1	7.8	156.00	161.00	0.00	0.00	108.00	108.00	8.00
28	7.6	7.6	8.1	7.9	158.00	152.00	0.00	0.00	107.00	106.00	9.00
29	7.6	7.5	8.0	8.0	159.00	156.00	0.00	0.00	107.00	104.00	4.00
30			8.0	7.9	155.00	152.00	0.00	0.00	106.00	107.00	5.00
31			8.1	7.9	150.00	150.00	0.00	0.00	108.00	104.00	8.00
AVG					154	153	0	0	106	105	5
MAX	8.9	8.1	8.4	8.3	166	162	0	0	111	110	9
MIN	7.4	4.0	7.7	7.1	143	142	0	0	100	100	0

Public Water System Name: COBA Water Treatment Plant
PWS ID No.: OK 1021508

Month: August
Year: 2025

Date	Turbidity (NTU) Continuous Reading Analyzers						Chlorine Residual (Total or Free as Noted, mg/L) Continuous Reading Analyzers					
	Finished Water (Highest Reading in 4-hour Period)						Finished Water Total Chlorine (Min. in 4 Hour Period)					
	12:00 AM	4:00 AM	8:00 AM	12:00 PM	4:00 PM	8:00 PM	12:00 AM	4:00 AM	8:00 AM	12:00 PM	4:00 PM	8:00 PM
1	0.02	0.02	0.02	0.02	0.02	0.02	3.67	3.84	3.83	3.87	3.84	3.78
2	0.02	0.02	0.02	0.02	0.02	0.02	3.66	3.62	3.63	3.61	3.61	3.62
3	0.02	0.02	0.02	0.02	0.02	0.02	3.93	3.66	3.69	3.55	3.69	3.89
4	0.02	0.02	0.02	0.02	0.02	0.02	3.97	3.95	3.96	3.97	3.99	3.97
5	0.02	0.02	0.02	0.02	0.02	0.02	3.94	4.03	4.00	3.97	3.95	3.95
6	0.02	0.02	0.02	0.02	0.02	0.02	3.77	3.91	3.89	3.90	3.77	3.79
7	0.02	0.02	0.02	0.02	0.02	0.02	4.03	3.82	3.95	3.94	4.01	4.06
8	0.02	0.02	0.02	0.02	0.02	0.02	3.91	4.01	4.01	4.06	4.04	3.96
9	0.02	0.02	0.02	0.02	0.02	0.02	3.95	3.90	3.91	3.94	3.97	3.94
10	0.02	0.02	0.02	0.02	0.02	0.02	3.89	3.92	3.88	3.89	3.90	3.89
11	0.02	0.02	0.02	0.02	0.02	0.02	3.88	3.89	3.91	3.97	4.02	3.97
12	0.02	0.02	0.02	0.02	0.03	0.03	3.72	3.80	3.76	3.76	3.74	3.61
13	0.02	0.02	0.02	0.02	0.02	0.02	3.79	3.85	3.95	3.95	3.93	3.83
14	0.02	0.02	0.04	0.02	0.02	0.02	3.73	3.74	3.73	3.72	3.70	3.72
15	0.02	0.02	0.02	0.03	0.02	0.02	3.89	3.70	3.54	3.63	3.85	3.95
16	0.02	0.02	0.02	0.02	0.02	0.02	3.92	3.88	3.83	3.82	3.82	3.85
17	0.02	0.02	0.02	0.02	0.02	0.02	3.95	3.93	3.92	3.95	3.96	3.99
18	0.02	0.02	0.02	0.02	0.02	0.02	3.97	3.96	3.99	3.97	3.91	4.00
19	0.02	0.02	0.02	0.02	0.02	0.02	3.92	3.87	3.85	3.89	3.93	3.96
20	0.02	0.02	0.02	0.02	0.02	0.02	3.93	3.92	3.93	4.05	4.05	4.05
21	0.02	0.02	0.02	0.02	0.02	0.02	4.06	4.07	4.12	4.12	4.05	3.96
22	0.02	0.02	0.02	0.02	0.02	0.02	3.94	3.94	3.96	3.66	4.07	4.10
23	0.02	0.02	0.02	0.02	0.02	0.02	4.05	4.02	4.02	4.01	3.98	3.95
24	0.02	0.03	0.02	0.02	0.05	0.02	3.93	3.91	3.89	3.86	3.84	3.84
25	0.02	0.02	0.02	0.02	0.02	0.02	3.85	3.84	3.86	3.84	3.83	3.84
26	0.02	0.02	0.02	0.02	0.02	0.02	3.85	3.82	3.80	3.80	3.78	3.81
27	0.02	0.02	0.02	0.02	0.02	0.02	3.89	3.94	3.97	3.97	3.92	3.88
28	0.02	0.02	0.02	0.02	0.02	0.02	3.83	3.79	3.79	3.78	3.82	3.85
29	0.02	0.02	0.02	0.02	0.02	0.02	3.84	3.85	3.86	3.90	3.92	3.91
30	0.02	0.02	0.03	0.04	0.03	0.03	3.87	3.85	4.00	4.00	4.10	4.10
31	0.03	0.03	0.03	0.03	0.04	0.03	4.00	4.00	4.00	4.00	3.80	3.90
AVG	0.02	0.02	0.02	0.02	0.02	0.02	3.9	3.9	3.9	3.9	3.9	3.9
MAX	0.03	0.03	0.04	0.04	0.05	0.03	4.1	4.1	4.1	4.1	4.1	4.1
MIN	0.02	0.02	0.02	0.02	0.02	0.02	3.7	3.6	3.5	3.6	3.6	3.6

Finished Water Turbidity Summary and Statistics

	No. of Samples	Percent of Total Samples
Turbidity Greater Than 0.5 NTU	0	0
Turbidity Greater Than 0.3 NTU	0	0
Turbidity Greater Than 0.1 NTU	0	0

Total Number of Turbidity Samples	186
-----------------------------------	-----

PWSID 1021508

SYSTEM

COBA WTP

MONTH August

*Type of Material Applied

Hydrofluosilicic Acid

YEAR 2025

Date	Water Treated 1,000s of Gallons	APPLIED		RESIDUAL F, ppm (RAW)		RESIDUAL F, ppm (FINISHED WATER)	
		LBS/DAY	PPM of F	AM	PM	AM	PM
1	14,565	0	0.00	0.11	0.24	0.07	0.04
2	12,434	0	0.00	0.22	0.40	0.24	0.20
3	14,095	0	0.00	0.19	0.15	0.09	0.12
4	15,709	0	0.00	0.34	0.21	0.10	0.07
5	16,018	0	0.00	0.11	0.19	0.04	0.07
6	17,061	0	0.00	0.38	0.20	0.17	0.05
7	18,363	0	0.00	0.24	0.14	0.39	0.05
8	17,421	0	0.00	0.21	0.37	0.07	0.20
9	16,996	0	0.00	0.31	0.26	0.10	0.17
10	16,484	0	0.00	0.21	0.23	0.04	0.07
11	17,029	0	0.00	0.19	0.20	0.10	0.05
12	12,211	0	0.00	0.26	0.18	0.00	0.07
13	15,466	0	0.00	0.26	0.18	0.05	0.19
14	13,986	0	0.00	0.30	0.30	0.04	0.17
15	17,191	0	0.00	0.18	0.38	0.05	0.21
16	15,902	0	0.00	0.22	0.40	0.06	0.31
17	16,829	0	0.00	0.21	0.27	0.04	0.15
18	17,779	0	0.00	0.42	0.17	0.19	0.06
19	16,500	0	0.00	0.15	0.15	0.00	0.05
20	16,800	0	0.00	0.21	0.28	0.00	0.09
21	18,300	0	0.00	0.00	0.23	0.00	0.03
22	18,000	0	0.00	0.19	0.40	0.04	0.24
23	17,200	0	0.00	0.18	0.15	0.02	0.05
24	15,400	0	0.00	0.23	0.17	0.09	0.14
25	14,200	0	0.00	0.23	0.29	0.22	0.09
26	11,900	0	0.00	0.21	0.28	0.06	0.20
27	13,500	0	0.00	0.44	0.17	0.43	0.04
28	11,900	0	0.00	0.05	0.37	0.00	0.23
29	12,200	0	0.00	0.22	0.20	0.07	0.15
30	11,700	0	0.00	0.22	0.45	0.13	0.31
31	11,500	0	0.00	0.19	0.31	0.10	0.01
Total	474,639	0					
Avg.	15,311	0	0.00	0.22	0.26	0.10	0.13

*Example: Sodium Fluoride, Sodium Fluorosilicate (Sodium Silicofluoride), and

Fluorosilicic Acid (Hydrofluosilicic Acid)

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

SEND TO: OSDH-Dental Health Services AND

Dept of Environmental Quality

1000 N.E. Tenth Street

PO Box 1677

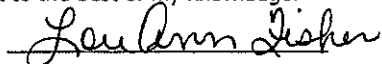
Oklahoma City, OK 73117-1299

Oklahoma City, OK 73101-1677

I hereby certify the above to be

correct to the best of my knowledge.

Signed



Title: Water Plant Manager

City Broken Arrow

ODH Form No. 561 / DEQ Form 631-001

Notes: