

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

Reporting Period: [May] [2025]



CITY OF
BROKEN ARROW
Where opportunity lives

Operating Data Summary

Water Production (MG)

	Month	Average Day
Raw Water Treated	368.79	11.9
Finished Water	350.20	11.3

Monthly Chemical Usage (Non-Membrane Usage)

Chemical	Total lbs	lbs/Finished MG
Sodium Hypochlorite	27,556	1,124.1
Salt (for hypo generation)	82,668	3,372.3
Liquid Ammonium Sulfate	3,546	9.7
Sodium Permanganate	1,680	2.5
Aluminum Chlorohydrate	94,275	48.2
Sodium Hydroxide	11,129	12.2
Hydrofluosilicic 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	0.047	
No. Samples > 1 NTU	0	
No. Samples > 5 NTU	0	

Monthly Costs

	Total	\$/Finished MG	\$/1000 gal
Plant Electricity	\$72,532.94	\$207.12	\$0.2071
Total Chemical	\$111,464.73	\$318.29	\$0.3183
Total Labor	\$112,163.79	\$320.29	\$0.3203
Services	\$54,258.96	\$154.94	\$0.1549
Materials and Supplies	\$50,570.34	\$144.41	\$0.1444
Equipment Expenses	\$50,969.39	\$145.54	\$0.1455
Total	\$451,960.15	\$1,290.59	\$1.2906

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?

YES/NO

YES

NO

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

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

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.

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

Notes: Fluoride feed offline for repairs.

Signed:

Paul Ann Fisher

6/10/2025

Date

Title:

Water Plant Manager

Operator Certificate No.

25369

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

Month:
Year

May
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	0.00	9.97	10.28		0.76
2	0.00	9.53	9.29		0.66
3	0.11	10.50	9.82		0.63
4	11.19	9.61	10.29		0.60
5	21.16	11.23	10.80		0.56
6	20.85	10.14	9.84		0.57
7	19.29	10.14	9.45		0.57
8	10.62	9.80	10.11		0.57
9	10.64	9.84	9.95		0.55
10	10.66	11.33	10.97		0.55
11	10.67	11.39	11.16		0.54
12	10.69	13.23	13.00		0.56
13	10.72	13.06	12.88		0.57
14	10.70	14.43	14.22		0.68
15	10.90	14.71	14.06		1.00
16	10.70	15.08	13.63		0.72
17	10.70	21.77	13.23		0.71
18	11.10	12.99	10.82		0.70
19	10.90	11.73	11.47		0.72
20	10.80	10.65	10.71		0.66
21	10.90	12.09	11.85		0.62
22	10.80	12.87	13.02		0.61
23	10.80	12.98	12.63		0.61
24	10.90	12.49	10.95		0.68
25	10.60	10.16	9.72		1.02
26	10.30	10.76	10.67		0.86
27	10.30	11.69	10.91		0.56
28	10.50	10.70	10.38		0.54
29	10.50	11.34	11.27		0.64
30	10.20	11.01	10.55		0.94
31	10.50	11.60	12.27		0.72
TOTAL	328.72	368.79	350.20	0.00	20.66
AVG	10.60	11.90	11.30	#DIV/0!	0.67
MAX	21.16	21.77	14.22	0.00	1.02
MIN	0.00	9.53	9.29	0.00	0.54

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

Month: May
Year: 2025

TOTAL CHEMICAL COST:		\$111,465	
Cost Per MG Treated	\$302.24	Cost Per MG Delivered	\$318.29
Million Gallons Treated	368.79	Million Gallons Delivered	350.20

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	13,059	914.15	98.8	103.52	0.0	0.00	500	2794.49	136.4	355.38	0.0	0.00
2	11,276	789.34	86.5	90.60	0.0	0.00	435	2429.31	118.8	309.69	0.0	0.00
3	11,789	825.23	92.9	97.38	0.0	0.00	468	2616.60	127.6	332.54	0.0	0.00
4	11,802	826.14	95.2	99.76	35.3	68.40	478	2673.35	130.7	340.52	0.0	0.00
5	12,920	904.38	105.3	110.35	67.1	129.76	534	2983.86	144.3	376.18	0.0	0.00
6	11,199	783.91	88.9	93.13	66.2	128.14	448	2503.64	122.1	318.28	0.0	0.00
7	11,580	810.61	91.4	95.74	61.6	119.21	464	2591.68	125.5	326.97	0.0	0.00
8	11,700	819.00	92.3	96.77	33.7	65.28	467	2610.12	126.8	330.53	0.0	0.00
9	12,004	840.27	97.0	101.61	33.8	65.37	482	2693.11	130.9	341.09	0.0	0.00
10	12,761	893.24	105.2	110.29	33.9	65.52	514	2874.68	139.1	362.42	0.0	0.00
11	13,169	921.83	115.0	120.49	33.9	65.58	543	3032.05	146.0	380.40	0.0	0.00
12	13,894	972.57	130.0	136.22	34.0	65.72	631	3527.11	167.6	436.92	0.0	0.00
13	13,242	926.96	125.6	131.58	31.1	60.22	610	3407.31	163.1	425.07	0.0	0.00
14	15,194	1063.59	146.2	153.21	24.4	47.29	705	3942.09	187.3	488.17	0.0	0.00
15	15,437	1080.56	138.2	144.79	24.3	47.01	668	3732.27	177.2	461.70	0.0	0.00
16	15,879	1111.52	137.2	143.75	24.3	47.00	695	3883.56	180.1	469.39	0.0	0.00
17	14,651	1025.57	128.2	134.35	24.3	47.00	633	3538.52	168.5	439.07	0.0	0.00
18	11,823	827.64	105.0	110.07	24.3	47.00	519	2898.81	138.4	360.82	0.0	0.00
19	12,893	902.51	114.4	119.85	24.3	47.00	567	3170.71	150.5	392.19	0.0	0.00
20	11,369	795.80	101.3	106.13	24.3	47.01	497	2778.78	133.4	347.76	0.0	0.00
21	13,157	921.01	116.7	122.27	24.3	47.00	577	3226.34	153.3	399.52	0.0	0.00
22	14,501	1015.08	128.7	134.86	24.3	47.00	637	3559.08	168.8	439.97	0.0	0.00
23	13,258	928.06	121.5	127.36	24.3	47.00	600	3351.26	159.5	415.81	0.0	0.00
24	12,234	856.40	111.1	116.40	24.3	47.00	553	3088.09	142.5	371.41	0.0	0.00
25	10,518	736.27	93.0	97.52	24.3	47.00	463	2585.14	94.3	245.73	0.0	0.00
26	11,472	803.06	100.7	105.56	24.3	47.00	511	2854.56	103.1	268.78	0.0	0.00
27	11,815	827.08	102.5	107.46	24.3	47.00	526	2938.00	105.9	276.12	0.0	0.00
28	10,978	768.45	92.7	97.11	24.3	47.00	476	2661.01	95.9	250.00	0.0	0.00
29	12,620	883.37	107.4	112.60	24.3	47.00	559	3123.35	111.0	289.17	0.0	0.00
30	11,600	812.03	98.2	102.86	24.3	47.01	508	2836.49	101.6	264.67	0.0	0.00
31	13,864	970.46	116.4	121.97	24.3	47.00	603	3369.41	120.1	312.98	0.0	0.00
TOTAL	393,658	27,556	3,383	3,546	868	1,680	16,872	94,275	4,270	11,129	0	0
AVG	12,699	888.91	109	114.37	28	54.18	544	3041.12	138	359.01	0	0.00
MAX	15,879	1111.52	146	153.21	67	129.76	705	3942.09	187	488.17	0	0.00
MIN	10,518	736.27	86	90.60	0	0.00	435	2429.31	94	245.73	0	0.00
COST	\$8,928.17		\$6,127.23		\$12,395.08		\$74,665.60		\$9,348.58		\$0.05	
\$/MG	\$24.21		\$16.61		\$33.61		\$202.46		\$25.35		\$0.00	

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

Month: May
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	8.2	7.7	8.2	8.2	178.00	164.00	0.00	0.00	104.00	107.00	4.00
2	7.8	7.7	8.3	8.2	168.00	169.00	0.00	0.00	103.00	103.00	9.00
3	7.8	7.7	8.3	8.2	174.00	174.00	0.00	0.00	106.00	105.00	2.00
4	7.8	7.7	8.3	8.3	170.00	168.00	0.00	0.00	102.00	103.00	5.00
5	7.8	7.7	8.3	8.2	168.00	169.00	0.00	0.00	103.00	103.00	6.00
6	7.7	7.7	8.2	8.2	171.00	166.00	0.00	0.00	109.00	103.00	4.00
7	7.7	7.7	8.2	8.2	167.00	165.00	0.00	0.00	103.00	105.00	4.00
8	7.7	7.7	8.2	8.1	173.00	173.00	0.00	0.00	106.00	103.00	2.00
9	7.8	7.7	8.2	8.1	180.00	169.00	0.00	0.00	106.00	106.00	4.00
10	7.7	7.7	8.2	8.1	165.00	170.00	0.00	0.00	100.00	110.00	2.00
11	7.7	7.7	8.2	8.1	181.00	169.00	0.00	0.00	103.00	104.00	1.00
12	7.7	7.7	8.2	8.1	169.00	168.00	0.00	0.00	103.00	104.00	4.00
13	7.7	7.6	8.1	8.1	178.00	169.00	0.00	0.00	106.00	104.00	5.00
14	7.7	7.6	8.1	8.1	170.00	170.00	0.00	0.00	103.00	108.00	2.00
15	7.7	7.6	8.1	8.1	177.00	171.00	0.00	0.00	105.00	104.00	2.00
16	7.7	7.6	8.2	8.0	170.00	172.00	0.00	0.00	105.00	106.00	3.00
17	7.7	7.7	8.2	8.1	177.00	173.00	0.00	0.00	105.00	105.00	1.00
18	7.7	7.7	8.2	8.2	171.00	171.00	0.00	0.00	105.00	107.00	1.00
19	7.8	7.7	8.3	8.2	173.00	170.00	0.00	0.00	106.00	107.00	5.00
20	7.8	7.6	8.3	8.3	170.00	168.00	0.00	0.00	106.00	106.00	4.00
21	7.8	7.6	8.4	8.3	167.00	164.00	0.00	0.00	106.00	106.00	7.00
22	7.8	7.6	8.4	8.4	166.00	172.00	0.00	0.00	106.00	108.00	5.00
23	7.8	7.6	8.4	8.3	171.00	170.00	0.00	0.00	107.00	108.00	4.00
24	7.8	7.8	8.4	8.3	166.00	171.00	0.00	0.00	106.00	105.00	0.00
25	7.8	7.8	8.4	8.3	172.00	170.00	0.00	0.00	104.00	103.00	2.00
26	7.8	7.8	8.3	8.2	174.00	168.00	0.00	0.00	105.00	102.00	4.00
27	7.8	7.8	8.2	8.2	167.00	163.00	0.00	0.00	101.00	101.00	0.00
28	7.8	7.8	8.2	8.2	165.00	162.00	0.00	0.00	106.00	101.00	1.00
29	7.8	7.7	8.2	8.1	167.00	160.00	0.00	0.00	104.00	101.00	4.00
30	7.8	7.8	8.2	8.2	156.00	159.00	0.00	0.00	100.00	100.00	1.00
31	7.8	7.7	8.2	8.0	164.00	160.00	0.00	0.00	102.00	101.00	0.00
AVG					170	168	0	0	104	104	3
MAX	8.2	7.8	8.4	8.4	181	174	0	0	109	110	9
MIN	7.7	7.6	8.1	8.0	156	159	0	0	100	100	0

PWSID 1021508

SYSTEM

COBA WTP

MONTH May

*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	10,281	0	0.00	0.14	0.25	0.10	0.23
2	9,289	0	0.00	0.46	0.14	0.33	0.24
3	9,820	0	0.00	0.15	0.24	0.05	0.18
4	10,292	0	0.00	0.36	0.20	0.31	0.06
5	10,796	0	0.00	0.10	0.24	0.08	0.13
6	9,837	0	0.00	0.34	0.21	0.33	0.18
7	9,447	0	0.00	0.22	0.19	0.36	0.16
8	10,106	0	0.00	0.24	0.29	0.24	0.38
9	9,954	0	0.00	0.22	0.28	0.14	0.29
10	10,966	0	0.00	0.40	0.53	0.33	0.49
11	11,164	0	0.00	0.21	0.26	0.17	0.25
12	13,004	0	0.00	0.26	0.28	0.28	0.36
13	12,878	0	0.00	0.34	0.27	0.32	0.22
14	14,225	0	0.00	0.50	0.26	0.17	0.22
15	14,061	0	0.00	0.13	0.25	0.10	0.30
16	13,629	0	0.00	0.43	0.26	0.30	0.15
17	13,233	0	0.00	0.07	0.51	0.11	0.35
18	10,822	0	0.00	0.24	0.30	0.18	0.25
19	11,473	0	0.00	0.25	0.30	0.21	0.26
20	10,708	0	0.00	0.28	0.31	0.19	0.24
21	11,846	0	0.00	0.28	0.28	0.25	0.32
22	13,015	0	0.00	0.27	0.34	0.33	0.24
23	12,626	0	0.00	0.14	0.31	0.06	0.27
24	10,948	0	0.00	0.52	0.27	0.42	0.28
25	9,722	0	0.00	0.34	0.31	0.25	0.26
26	10,674	0	0.00	0.26	0.23	0.24	0.22
27	10,910	0	0.00	0.29	0.26	0.29	0.46
28	10,380	0	0.00	0.20	0.46	0.24	0.30
29	11,270	0	0.00	0.26	0.11	0.22	0.23
30	10,549	0	0.00	0.48	0.28	0.30	0.22
31	12,271	0	0.00	0.33	0.23	0.34	0.33
Total	350,197	0					
Avg.	11,297	0	0.00	0.28	0.28	0.23	0.26

*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 Lou Ann Fisher

Title: Water Plant Manager

City Broken Arrow

ODH Form No. 561 / DEQ Form 631-001

Notes: Fluoride injection sphere under repair

Public Water System Name: COBA Water Treatment Plant

Month: May

PWS ID No.:

OK 1021508

Year: 2025

Date	Distribution Total Chlorine mg/L A.M. Sample				Distribution Total Chlorine mg/L P.M. Sample			
	Time	Location	mg/L	Sampler	Time	Location	mg/L	Sampler
1	9:09	13725 S. 124th E. Ave	2.80	ML	1:12	601 N. Palm St.	2.90	ML
2	08:23	3706 S. Orange Cir.	2.50	M.L.	13:11	2909 E Montpelier St.	3.00	M.L.
3	11:50	6057 S. 353rd E. Ave.	3.70	T.R.	16:48	36500 E. 66th St. S.	3.80	T.R.
4	11:55	1903 W. Rockport Pl.	3.40	R.M.	12:27	2909 E. Montpelier St.	3.30	R.M.
5	8:30	1137 N. Hickory Pl.	3.10	ML	12:14	601 W. Los Angeles	3.40	ML
6	9:34	1301 N. 53rd St	3.30	ML	1:47	2405 W Washington	3.20	ML
7	8:11	1116 W. Granger St.	3.00	ML	12:35	4001 S. Chestnut Ave.	3.20	ML
8	09:21	2101 W. Gary St.	3.10	M.L.	12:38	1200 E. Dover St.	3.40	M.L.
9	11:42	322 W. Detroit St.	3.00	M.L.	15:16	1903 W. Rockport Pl.	2.40	M.L.
10	11:45	36500 E. 66th St. S.	3.50	T.R.	17:32	6057 S. 353rd E. Ave.	3.60	T.R.
11	11:45	36500 E. 66th St. S.	3.70	R.M.	14:40	5005 S. Lions Ave.	3.10	J.B.
12	10:33	1817 S. Willow Ave	2.60	ML	12:34	2909 E. Montpellier St.	2.60	ML
13	8:27	13725 S. 124th E. Ave	2.50	ML	12:11	4121 E. Omaha St.	2.30	ML
14	8:34	1817 S. Date Ave.	3.20	ML	12:49	5102 E. Dallas Pl.	2.10	ML
15	8:31	713 W. Norman St.	3.30	ML	12:37	6617 S. 22nd Ct.	3.30	ML
16	09:26	2213 E. Wichita St.	3.00	M.L.	12:31	524 W. Ithica St.	3.40	M.L.
17	11:29	1301 N 53rd St.	3.80	ME	12:01	4121 E Omaha St.	3.00	ME
18	11:55	6575 369th E. Ave.	3.90	R.M.	12:20	7900 E. Norman	3.80	R.M.
19	9:53	4608 W. Eagle Pass St.	3.20	ML	1:58	3217 N 8th St.	3.50	ML
20	8:43	1817 S. Willow Ave	3.20	ML	12:42	8017 S. Peach Ave	3.30	ML
21	10:41	804 N 1st St.	3.10	ML	1:02	1301 N 53rd St	3.60	ML
22	8:52	4001 S. Chestnut Ave.	3.50	ML	12:51	1903 W. Rockport Pl.	3.20	ML
23	10:42	4808 S. Ash Ave.	3.40	M.L.	13:38	400 S. Forest Ridge Blvd.	3.80	M.L.
24	11:28	2700 N. 7th St.	3.20	T.R.	12:39	1121 W. Durham St.	3.50	T.R.
25	11:20	6575 369th E. Ave.	3.80	J.B.	14:20	2513 E. Dallas St.	3.20	J.B.
26	11:53	2909 E. Montpelier St.	3.40	R.M.	12:28	608 E. Pensacola St.	2.90	R.M.
27	11:11	2909 E. Montpelier St.	3.10	M.L.	12:52	322 W. Detroit St.	3.10	M.L.
28	9:41	1817 S. Willow Ave.	3.00	ML	12:35	1116 W. Granger St.	2.90	ML
29	9:08	12314 E. 126th Pl.	2.90	ML	12:29	605 S. Elder Ave.	2.70	ML
30	10:40	4803 E. Galveston Pl.	2.00	ML	12:46	2829 W. Vandalia St.	3.10	ML
31	11:46	322 W Detroit St.	3.40	ME	12:20	605 S Elder Ave.	3.10	ME

Average 3.18

Min. 2.00

Max. 3.90

Average 3.15

Min. 2.10

Max. 3.80