

City of Broken Arrow WTP Monthly Operational Report Summary

Water Treatment Plant PWSID# OK 1021508

Reporting Period: [July] [2023]



CITY OF
BROKEN ARROW
Where opportunity lives

Operating Data Summary

Water Production (MG)

	Month	Average Day
Raw Water Treated	526.75	17.0
Finished Water	517.59	16.7

Monthly Chemical Usage (Non-Membrane Usage)

Chemical	Total lbs	lbs/Finished MG
Sodium Hypochlorite	38,859	1,072.5
Salt (for hypo generation)	116,576	3,217.6
Liquid Ammonium Sulfate	5,338	9.8
Sodium Permanganate	292	0.3
Aluminum Chlorohydrate	108,043	37.4
Sodium Hydroxide	821	0.6
Hydrofluosilicic Acid	1,332	1.4

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	\$343.94	\$0.66	\$0.0007
Total Chemical	\$95,474.61	\$184.46	\$0.1845
Total Labor	\$50,094.60	\$96.79	\$0.0968
Services	\$362.29	\$0.70	\$0.0007
Materials and Supplies	\$8,301.17	\$16.04	\$0.0160
Equipment Expenses	\$2,381.67	\$4.60	\$0.0046
Total	\$156,958.28	\$303.25	\$0.3033

Individual Membrane Unit Turbidity Checklist

1. IS TURBIDITY FROM EACH INDIVIDUAL MEMBRANE UNIT RECORDED EVERY 15 MINUTES?
Yes, What date was the membrane profile completed? _____
2. DID ANY SINGLE MEMBRANE UNIT EXCEED 2.0 NTU IN TWO CONSECUTIVE 15 MINUTE PERIODS?
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? _____
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? _____

YES/NO

YES

NO

NO

NO

* 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: Sodium Hydroxide system back online on the 18th.

Signed:

8/10/2023

Date

Title:

Assistant Water Plant Manager

Operator Certificate No.

97672

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

Month:
Year

July
2023

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	17.85	17.93	16.26		0.69
2	17.85	18.82	18.47		0.67
3	17.71	18.67	19.52		0.77
4	17.75	15.86	14.62		0.65
5	18.66	16.07	15.42		0.66
6	19.52	13.87	12.22		0.68
7	19.40	13.50	13.63		0.65
8	17.13	13.23	12.64		0.68
9	9.98	12.20	12.91		0.67
10	10.08	14.39	14.68		0.65
11	10.02	15.36	14.24		0.66
12	10.00	16.90	17.20		0.67
13	10.08	16.30	16.18		0.66
14	10.10	16.25	15.83		0.85
15	10.06	13.78	12.40		0.64
16	10.15	15.11	15.84		0.67
17	19.18	16.97	17.14		0.68
18	19.04	15.98	16.34		0.64
19	23.00	19.71	19.70		0.73
20	24.58	17.54	16.91		0.67
21	24.27	16.95	14.81		0.72
22	24.08	13.86	14.09		0.66
23	19.74	16.13	16.70		0.64
24	17.91	17.75	18.08		0.66
25	16.29	18.56	18.16		0.65
26	19.23	19.68	19.27		0.68
27	18.98	19.86	19.52		0.69
28	18.70	21.41	21.88		0.75
29	18.63	19.68	19.09		0.66
30	18.57	20.68	20.67		0.72
31	22.77	23.74	23.18		0.81
TOTAL	531.31	526.75	517.59	0.00	21.29
AVG	17.14	16.99	16.70	#DIV/0!	0.69
MAX	24.58	23.74	23.18	0.00	0.85
MIN	9.98	12.20	12.22	0.00	0.64

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

Month: July
Year: 2023

TOTAL CHEMICAL COST:		\$95,475	
Cost Per MG Treated	\$181.25	Cost Per MG Delivered	\$184.46
Million Gallons Treated	526.75	Million Gallons Delivered	517.59

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	20,019	1401.32	159.2	166.83	0.0	0.00	616	3444.81	0.0	0.00	23.4	42.55
2	21,588	1511.17	180.8	189.47	0.0	0.00	693	3871.25	0.0	0.00	26.1	47.55
3	21,976	1538.34	191.1	200.29	0.0	0.00	732	4092.02	0.0	0.00	27.7	50.53
4	16,828	1177.99	143.1	149.96	0.0	0.00	536	2996.78	0.0	0.00	20.4	37.24
5	17,587	1231.12	150.9	158.15	0.0	0.00	559	3123.86	0.0	0.00	21.3	38.75
6	14,275	999.27	119.7	125.41	0.0	0.00	459	2566.56	0.0	0.00	17.3	31.58
7	15,546	1088.21	133.5	139.89	0.0	0.00	504	2814.45	0.0	0.00	18.9	34.51
8	14,735	1031.48	123.8	129.75	0.0	0.00	480	2683.25	0.0	0.00	18.0	32.85
9	14,249	997.40	126.4	132.49	0.0	0.00	468	2614.70	0.0	0.00	17.6	31.99
10	16,980	1188.62	144.0	150.96	0.0	0.00	563	3145.78	0.0	0.00	21.2	38.61
11	16,104	1127.25	141.5	148.29	0.0	0.00	535	2988.16	0.0	0.00	20.1	36.60
12	19,580	1370.63	171.2	179.37	0.0	0.00	632	3529.63	0.0	0.00	23.7	43.08
13	19,575	1370.26	161.1	168.78	0.0	0.00	619	3459.69	0.0	0.00	23.3	42.48
14	18,832	1318.21	157.5	165.11	0.0	0.00	595	3326.69	0.0	0.00	22.5	40.91
15	13,992	979.45	123.4	129.33	0.0	0.00	446	2490.41	0.0	0.00	16.7	30.37
16	18,726	1310.85	157.9	165.50	0.0	0.00	602	3364.09	0.0	0.00	22.6	41.10
17	19,978	1398.49	172.0	180.23	0.0	0.00	644	3596.78	0.0	0.00	24.4	44.53
18	17,218	1205.26	165.2	173.11	0.0	0.00	585	3271.60	31.2	81.30	22.1	40.32
19	20,981	1468.70	197.7	207.23	0.0	0.00	756	4226.83	33.1	86.23	28.9	52.58
20	16,443	1151.01	168.8	176.94	0.0	0.00	616	3442.68	18.8	48.89	23.4	42.63
21	15,415	1079.02	146.2	153.25	0.0	0.00	566	3161.45	17.6	45.98	21.5	39.22
22	13,753	962.73	139.1	145.74	0.0	0.00	510	2848.62	15.9	41.53	19.1	34.78
23	16,692	1168.44	162.8	170.58	0.0	0.00	635	3548.51	19.2	49.95	24.0	43.69
24	17,767	1243.68	174.1	182.48	0.0	0.00	668	3730.44	20.1	52.34	25.3	46.05
25	20,050	1403.53	174.8	183.24	0.0	0.00	677	3781.92	20.4	53.10	25.6	46.58
26	18,773	1314.08	185.9	194.79	0.0	0.00	731	4086.57	21.8	56.79	27.5	50.17
27	18,162	1271.31	191.0	200.18	0.0	0.00	725	4048.72	21.8	56.72	27.5	50.08
28	20,878	1461.47	214.3	224.54	15.2	29.37	832	4647.37	24.5	63.90	31.5	57.43
29	17,414	1218.96	186.9	195.87	42.3	81.78	693	3874.91	21.2	55.23	26.4	48.16
30	19,302	1351.17	202.3	212.05	42.1	81.53	778	4349.99	23.4	60.95	29.7	54.02
31	21,706	1519.39	227.0	237.89	51.6	99.75	880	4914.64	26.1	67.91	33.5	61.10
TOTAL	555,126	38,859	5,093	5,338	151	292	19,336	108,043	315	821	731	1,332
AVG	17,907	1253.51	164	172.18	5	9.43	624	3485.26	10	26.48	24	42.97
MAX	21,976	1538.34	227	237.89	52	99.75	880	4914.64	33	86.23	34	61.10
MIN	13,753	962.73	120	125.41	0	0.00	446	2490.41	0	0.00	17	30.37
COST	\$13,280.38		\$11,141.80		\$1,739.94		\$65,258.06		\$321.76		\$3,732.66	
\$/MG	\$25.21		\$21.15		\$3.30		\$123.89		\$0.61		\$7.09	

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

Month: July
Year: 2023

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	7.6	7.4	7.9	7.9	169.00	168.00	0.00	0.00	112.00	112.00	0.00
2	7.6	7.5	7.9	7.9	171.00	168.00	0.00	0.00	112.00	110.00	3.00
3	7.6	7.5	8.0	7.9	166.00	167.00	0.00	0.00	111.00	112.00	1.00
4	7.6	7.5	8.0	7.9	171.00	167.00	0.00	0.00	113.00	113.00	-1.00
5	7.6	7.5	8.0	7.9	164.00	170.00	0.00	0.00	111.00	112.00	-1.00
6	7.6	7.5	8.0	8.0	169.00	169.00	0.00	0.00	113.00	114.00	6.00
7	7.6	7.5	8.0	8.0	168.00	165.00	0.00	0.00	113.00	111.00	1.00
8	7.6	7.5	8.0	8.0	164.00	170.00	0.00	0.00	112.00	113.00	3.00
9	7.6	7.5	8.0	7.9	166.00	164.00	0.00	0.00	111.00	112.00	5.00
10	7.7	7.5	8.0	8.0	165.00	166.00	0.00	0.00	113.00	114.00	-4.00
11	7.6	7.5	8.0	7.9	166.00	162.00	0.00	0.00	109.00	112.00	5.00
12	7.6	7.5	8.0	7.9	163.00	160.00	0.00	0.00	111.00	114.00	2.00
13	7.5	7.4	8.0	7.9	160.00	157.00	0.00	0.00	112.00	110.00	2.00
14	7.6	7.4	7.9	7.9	158.00	159.00	0.00	0.00	112.00	115.00	3.00
15	7.5	7.5	7.9	7.9	158.00	158.00	0.00	0.00	112.00	108.00	2.00
16	7.5	7.4	7.9	7.9	159.00	158.00	0.00	0.00	110.00	110.00	-1.00
17	7.5	7.4	7.9	7.9	159.00	157.00	0.00	0.00	109.00	110.00	3.00
18	7.5	7.5	8.1	7.9	151.00	155.00	0.00	0.00	107.00	111.00	-3.00
19	7.6	7.5	8.2	8.1	162.00	155.00	0.00	0.00	112.00	112.00	5.00
20	7.6	7.5	8.3	8.2	156.00	160.00	0.00	0.00	109.00	111.00	0.00
21	7.6	7.5	8.2	8.2	159.00	159.00	0.00	0.00	113.00	111.00	3.00
22	7.5	7.5	8.3	8.2	159.00	157.00	0.00	0.00	113.00	108.00	6.00
23	7.6	7.4	8.2	8.2	156.00	155.00	0.00	0.00	112.00	111.00	3.00
24	7.5	7.4	8.2	8.1	150.00	156.00	0.00	0.00	112.00	110.00	5.00
25	7.5	7.4	8.2	8.1	152.00	157.00	0.00	0.00	110.00	113.00	5.00
26	7.6	7.5	8.3	8.2	156.00	153.00	0.00	0.00	112.00	107.00	4.00
27	7.6	7.5	8.3	8.2	155.00	152.00	0.00	0.00	109.00	109.00	2.00
28	7.6	6.9	8.3	8.2	152.00	149.00	0.00	0.00	110.00	106.00	4.00
29	7.8	7.0	8.3	8.2	152.00	151.00	0.00	0.00	107.00	108.00	4.00
30	7.7	6.9	8.2	8.2	150.00	147.00	0.00	0.00	107.00	106.00	1.00
31	7.6	7.4	8.2	8.1	149.00	144.00	0.00	0.00	108.00	104.00	-3.00
AVG					160	159	0	0	111	111	2
MAX	7.8	7.5	8.3	8.2	171	170	0	0	113	115	6
MIN	7.5	6.9	7.9	7.9	149	144	0	0	107	104	-4

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

Month: July
Year: 2023

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	3.69	3.92	3.88	3.88	3.82	3.67
2	0.02	0.02	0.02	0.03	0.02	0.02	3.96	3.89	3.96	3.96	3.89	3.93
3	0.03	0.02	0.02	0.02	0.02	0.02	3.98	4.01	4.01	4.01	4.02	4.04
4	0.02	0.02	0.02	0.02	0.02	0.02	3.94	3.85	3.83	3.85	3.89	3.90
5	0.02	0.02	0.02	0.02	0.02	0.02	4.00	3.94	3.93	3.97	3.96	3.96
6	0.02	0.02	0.02	0.02	0.02	0.02	3.73	4.00	4.01	3.98	3.89	3.78
7	0.02	0.02	0.02	0.02	0.02	0.02	3.84	3.75	3.83	3.88	3.84	3.82
8	0.02	0.02	0.02	0.02	0.02	0.02	3.80	3.86	3.93	3.89	3.88	3.81
9	0.02	0.02	0.02	0.03	0.02	0.02	3.89	3.83	3.82	3.79	3.80	3.72
10	0.02	0.02	0.02	0.02	0.02	0.02	3.89	3.94	4.01	4.01	3.97	3.92
11	0.02	0.03	0.02	0.02	0.02	0.02	3.78	3.87	3.87	3.85	3.80	3.75
12	0.03	0.02	0.02	0.02	0.02	0.02	4.13	3.84	3.90	3.98	3.92	4.08
13	0.02	0.02	0.02	0.02	0.02	0.02	3.86	4.10	4.05	4.02	3.91	3.86
14	0.02	0.02	0.02	0.02	0.02	0.02	3.89	3.82	3.83	3.91	4.03	4.02
15	0.02	0.02	0.02	0.02	0.02	0.02	3.85	3.77	3.76	3.77	3.81	3.86
16	0.02	0.02	0.02	0.02	0.02	0.02	3.92	3.94	4.04	4.03	3.94	3.90
17	0.03	0.02	0.02	0.02	0.03	0.05	3.91	3.94	3.96	3.96	3.95	3.91
18	0.03	0.02	0.05	0.02	0.03	0.02	4.17	3.96	3.99	4.00	4.05	4.16
19	0.02	0.02	0.03	0.02	0.03	0.03	4.00	4.14	4.11	4.11	4.04	4.03
20	0.02	0.02	0.02	0.03	0.02	0.02	4.03	4.02	4.02	4.03	4.04	4.03
21	0.02	0.02	0.02	0.02	0.02	0.02	3.73	4.06	4.05	4.00	3.90	3.82
22	0.03	0.02	0.02	0.03	0.02	0.02	3.87	3.72	3.76	3.73	3.81	3.85
23	0.03	0.02	0.02	0.02	0.02	0.03	3.91	3.92	3.93	3.91	3.91	3.91
24	0.03	0.02	0.03	0.02	0.03	0.03	3.97	3.92	3.91	3.90	3.89	3.97
25	0.03	0.03	0.03	0.03	0.03	0.03	3.98	3.88	3.99	3.98	3.95	3.93
26	0.02	0.03	0.02	0.02	0.02	0.02	4.06	4.01	3.99	3.99	4.03	4.06
27	0.02	0.02	0.02	0.02	0.02	0.02	4.01	4.07	4.07	4.04	4.00	3.99
28	0.03	0.02	0.02	0.02	0.02	0.03	4.07	4.02	4.04	4.08	4.12	4.06
29	0.03	0.02	0.03	0.02	0.02	0.02	4.09	4.03	3.98	3.98	4.01	4.05
30	0.02	0.02	0.02	0.02	0.02	0.02	4.04	4.11	4.10	4.06	4.02	4.04
31	0.02	0.02	0.03	0.04	0.03	0.02	3.90	4.05	4.06	4.06	3.97	3.91
AVG	0.02	0.02	0.02	0.02	0.02	0.02	3.9	3.9	4.0	4.0	3.9	3.9
MAX	0.03	0.03	0.05	0.04	0.03	0.05	4.2	4.1	4.1	4.1	4.1	4.2
MIN	0.02	0.02	0.02	0.02	0.02	0.02	3.7	3.7	3.8	3.7	3.8	3.7

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
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PWSID 1021508

SYSTEM

COBA WTP

MONTH July

*Type of Material Applied

Hydrofluosilicic Acid

YEAR 2023

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	16,258	43	0.31	0.36	0.18	0.74	0.66
2	18,465	48	0.31	0.31	0.39	0.70	0.71
3	19,518	51	0.31	0.39	0.44	0.85	0.76
4	14,615	37	0.31	0.39	0.49	0.63	0.86
5	15,419	39	0.30	0.54	0.44	0.79	0.82
6	12,221	32	0.31	0.36	0.49	0.66	0.73
7	13,633	35	0.30	0.39	0.45	0.70	0.63
8	12,645	33	0.31	0.50	0.48	0.73	0.83
9	12,912	32	0.30	0.24	0.20	0.62	0.55
10	14,685	39	0.32	0.35	0.33	0.67	0.71
11	14,239	37	0.31	0.36	0.43	0.71	0.76
12	17,197	43	0.30	0.37	0.42	0.68	0.51
13	16,180	42	0.31	0.37	0.39	0.68	0.70
14	15,829	41	0.31	0.31	0.47	0.78	0.80
15	12,399	30	0.29	0.31	0.23	0.78	0.60
16	15,841	41	0.31	0.24	0.39	0.71	0.67
17	17,138	45	0.31	0.32	0.44	0.67	0.72
18	16,337	40	0.30	0.34	0.33	0.86	0.67
19	19,699	53	0.32	0.33	0.20	0.66	0.55
20	16,912	43	0.30	0.18	0.42	0.54	0.80
21	14,810	39	0.32	0.30	0.20	0.68	0.50
22	14,087	35	0.30	0.20	0.39	0.76	0.68
23	16,705	44	0.31	0.31	0.32	0.82	0.77
24	18,082	46	0.31	0.31	0.25	0.65	0.56
25	18,158	47	0.31	0.41	0.31	0.78	0.67
26	19,269	50	0.31	0.30	0.53	0.63	0.81
27	19,516	50	0.31	0.28	0.45	0.66	0.86
28	21,882	57	0.31	0.23	0.43	0.57	0.79
29	19,088	48	0.30	0.23	0.19	0.56	0.62
30	20,665	54	0.31	0.26	0.35	0.61	0.47
31	23,181	61	0.32	0.29	0.22	0.60	0.48
Total	517,586	1,332					
Avg.	16,696	43	0.31	0.33	0.36	0.69	0.69

*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

1000 N.E. Tenth Street

Oklahoma City, OK 73117-1299

Dept 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

Title: Water Plant Manager

City Broken Arrow

ODH Form No. 561 / DEQ Form 631-001

Notes:

Public Water System Name: COBA Water Treatment Plant

Month: July

PWS ID No.:

OK 1021508

Year: 2023

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	11:50	601 N. Palm Ave	2.70	S.B	12:40	2513 E. Dallas St.	3.40	S.B
2	11:28	508 E. Detroit St.	3.50	T.R.	12:43	2401 W. Omaha St.	3.30	T.R.
3	11:20	1116 W. Granger St.	3.20	J.B.	12:15	322 W. Detroit St.	2.50	J.B.
4	11:52	3707 S. Orange Cir.	2.80	R.M.	13:30	1309 E. Reno St.	3.40	R.M.
5	09:45	205 E. Freeport St.	2.60	J.M.	14:40	11405 E. 132nd Pl. S.	2.70	J.M.
6	11:20	1719 N. Butternut Ct.	3.50	J.M.	15:05	2704 E Vancouver St	3.50	J.M.
7	11:52	104 E. Laredo Pl.	3.20	J.M	16:57	3329 W. Freeport St.	2.20	J.M
8	11:40	7213 S Dennis Blvd.	3.70	ME	12:10	608 E Pensacola St.	2.80	ME
9	11:56	25695 E. 71st St. S.	3.20	T.R.	12:44	2700 N. 7th St.	3.40	T.R.
10	11:33	513 E. Pensacola St.	2.50	J.M.	16:22	2907 E. Pawhuska St.	3.60	J.M.
11	11:02	4121 E. Omaha St.	2.10	J.M.	14:53	1805 S. Willow Ave.	2.10	J.M.
12	11:03	3825 W. Galveston St.	2.20	J.M.	15:33	1117 S. 35th St.	2.70	J.M.
13	11:30	2613 N. 10th St.	3.60	J.M.	16:38	1013 S. Willow Ave.	2.50	J.M.
14	11:33	3113 W El Dorado St	2.70	JM	15:40	1609 S 9th St	3.10	JM
15	10:44	36500 E. 66th St. S.	2.70	S.B	16:15	6057 S. 353rd E. Ave	3.00	S.B
16	11:55	6575 369th E. Ave.	3.80	T.R.	15:52	6057 S. 353rd E. Ave.	2.20	T.R.
17	10:24	7805 S. Peach Ave.	3.00	J.M.	15:10	1300 E. Kenosha St.	3.00	J.M.
18	11:45	1821 S. Date Ave.	3.10	J.M.	14:07	6709 S. 19th St.	2.70	J.M.
19	10:27	1137 S. Tamarack Ave.	2.60	J.M.	14:55	1701 N. 13th St.	3.90	J.M.
20	11:01	310 E Freeport St.	2.60	J.M.	14:32	2109 W. Vicksburg St.	3.60	J.M.
21	11:26	12602 S Garnett Rd.	2.20	JM	15:55	4621 N. Sycamore Ave.	3.40	J.M.
22	11:53	804 N 1st St.	3.00	ME	12:59	2513 E Dallas St.	3.50	ME
23	11:55	2909 E. Montpelier St.	3.30	R.M.	12:43	4001 S. Chestnut Ave.	3.70	R.M.
24	10:55	8216 E. Norman St.	3.70	J.M.	14:32	4417 W. Urbana St.	2.60	J.M.
25	11:54	2909 E. Montpelier St.	3.10	J.M.	14:43	2032 W. Broadway St.	2.90	J.M.
26	11:40	1009 E. Vancouver St.	2.90	J.M.	16:49	13605 136th St. S.	2.50	J.M.
27	11:31	7403 S. Dennis Blvd.	3.70	J.M.	14:31	2013 W. Delmar St.	3.40	J.M.
28	11:28	1404 W. Queens St.	2.90	J.M	17:22	775 W. Tucson St.	2.60	J.M
29	11:39	1301 N. 53rd St.	3.90	S.B	12:15	1116 W. Granger St.	3.40	S.B
30	11:36	2700 N. 7th St.	4.00	T.R.	12:50	601 N. Palm Ave.	3.80	T.R.
31	10:48	1101 W. El Dorado St.	2.70	J.M.	16:17	1607 E. South Park Pl	3.50	J.M.

Average 3.05

Min. 2.10

Max. 4.00

Average 3.06

Min. 2.10

Max. 3.90