

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

Reporting Period: [August] [2023]



Operating Data Summary

Water Production (MG)

	Month	Average Day
Raw Water Treated	560.66	18.1
Finished Water	545.00	17.6

Monthly Chemical Usage (Non-Membrane Usage)

Chemical	Total lbs	lbs/Finished MG
Sodium Hypochlorite	37,641	986.7
Salt (for hypo generation)	112,924	2,960.0
Liquid Ammonium Sulfate	5,544	9.7
Sodium Permanganate	1,513	1.4
Aluminum Chlorohydrate	119,046	39.1
Sodium Hydroxide	4,841	3.4
Hydrofluosilicic Acid	1,136	1.1

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	0.076	
No. Samples > 1 NTU	0	
No. Samples > 5 NTU	0	

Monthly Costs

	Total	\$/Finished MG	\$/1000 gal
Plant Electricity	\$107,040.05	\$196.40	\$0.1964
Total Chemical	\$117,580.26	\$215.74	\$0.2157
Total Labor	\$97,802.64	\$179.45	\$0.1795
Services	\$21,545.08	\$39.53	\$0.0395
Materials and Supplies	\$14,785.64	\$27.13	\$0.0271
Equipment Expenses	\$10,199.20	\$18.71	\$0.0187
Total	\$368,952.87	\$676.97	\$0.6770

Individual Membrane Unit Turbidity Checklist

1. IS TURBIDITY FROM EACH INDIVIDUAL MEMBRANE UNIT RECORDED EVERY 15 MINUTES?	YES/NO
	YES
2. DID ANY SINGLE MEMBRANE UNIT EXCEED 2.0 NTU IN TWO CONSECUTIVE 15 MINUTE PERIODS?	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: 1 - Fluoride feed system down from the 24th to the 28th for repairs.

Signed: LouAnn Fisher 9/8/2023
Date

Title: Water Plant Manager

Operator Certificate No. 25369

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

Month:
Year

August
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	23.49	21.87	20.79		0.73
2	23.24	21.65	22.07		0.72
3	23.04	22.06	21.39		0.72
4	23.11	23.97	23.13		0.77
5	23.03	18.88	15.34		0.77
6	19.24	12.37	13.96		0.68
7	17.56	15.79	14.62		0.69
8	8.34	13.82	13.08		1.78
9	8.40	13.46	13.32		1.30
10	8.48	14.31	14.06		0.64
11	8.65	15.93	16.50		0.61
12	8.91	15.93	14.89		0.65
13	8.94	14.96	14.21		0.72
14	18.87	15.06	13.86		0.74
15	18.74	15.25	14.54		0.67
16	18.67	14.74	16.55		0.65
17	18.67	16.98	16.33		0.66
18	18.72	18.27	17.96		0.69
19	18.66	18.89	18.21		0.66
20	21.53	19.63	19.59		0.68
21	24.38	21.10	20.21		0.70
22	23.80	19.44	18.70		0.79
23	22.64	20.85	20.41		0.71
24	24.51	18.79	18.46		1.81
25	24.97	20.09	19.43		2.07
26	18.56	20.04	19.80		2.07
27	18.32	19.08	19.14		2.07
28	18.50	20.97	19.76		1.11
29	18.62	18.36	17.46		0.65
30	18.72	19.50	19.61		0.68
31	18.77	18.63	17.60		0.38
TOTAL	570.10	560.66	545.00	0.00	28.56
AVG	18.39	18.09	17.58	#DIV/0!	0.92
MAX	24.97	23.97	23.13	0.00	2.07
MIN	8.34	12.37	13.08	0.00	0.38

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

Month: August
Year: 2023

TOTAL CHEMICAL COST:		\$117,580	
Cost Per MG Treated	\$209.72	Cost Per MG Delivered	\$215.74
Million Gallons Treated	560.66	Million Gallons Delivered	545.00

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	18,769	1313.85	203.5	213.29	53.3	103.11	774	4325.99	23.0	59.90	29.6	53.96
2	20,011	1400.76	214.5	224.83	52.7	102.05	817	4564.59	24.2	62.96	31.3	57.06
3	18,903	1323.23	205.9	215.82	52.3	101.16	792	4424.03	23.4	61.11	30.4	55.44
4	20,771	1453.97	222.7	233.42	52.4	101.44	869	4854.50	25.2	65.71	18.4	33.55
5	13,923	974.58	147.8	154.84	52.2	101.08	576	3218.72	17.7	46.22	13.5	24.67
6	13,541	947.90	134.4	140.84	43.8	84.67	511	2854.62	16.0	41.61	19.3	35.22
7	13,994	979.61	140.8	147.59	40.0	77.43	544	3037.96	16.8	43.81	20.6	37.56
8	12,773	894.13	126.2	132.23	18.9	36.61	499	2787.81	15.7	40.81	18.8	34.32
9	12,736	891.54	129.3	135.54	19.1	36.89	494	2759.73	15.5	40.38	18.6	33.93
10	13,458	942.05	136.5	143.06	19.2	37.24	526	2941.75	16.4	42.66	19.9	36.30
11	15,995	1119.67	160.2	167.94	19.6	37.97	631	3523.20	19.0	49.49	23.8	43.39
12	14,909	1043.64	146.2	153.20	20.2	39.10	555	3101.03	17.0	44.31	20.9	38.08
13	14,473	1013.13	140.3	147.06	20.3	39.23	537	2998.94	16.2	42.20	19.6	35.72
14	13,928	974.96	136.9	143.42	42.6	82.48	550	3073.80	16.3	42.58	19.9	36.29
15	14,062	984.32	143.6	150.46	42.5	82.23	564	3153.42	17.0	44.21	21.0	38.22
16	14,311	1001.77	160.4	168.08	42.4	81.95	582	3254.73	18.3	47.76	23.0	41.97
17	14,384	1006.85	154.6	161.99	42.3	81.93	663	3706.50	18.6	48.51	23.4	42.60
18	16,273	1139.14	170.0	178.20	42.5	82.18	766	4280.02	19.9	51.76	25.3	46.04
19	17,216	1205.09	172.4	180.73	42.3	81.90	743	4152.11	20.5	53.36	26.1	47.56
20	18,011	1260.76	185.4	194.34	48.7	94.25	779	4350.89	21.4	55.73	27.4	49.86
21	19,806	1386.39	191.4	200.56	14.3	27.68	835	4664.97	22.8	59.44	29.6	53.87
22	18,408	1288.54	167.7	175.74	0.1	0.11	745	4161.89	27.1	70.61	26.1	47.51
23	23,175	1622.23	197.8	207.33	0.0	0.07	817	4565.29	54.8	142.84	29.6	53.85
24	22,551	1578.57	181.2	189.92	0.0	0.00	772	4314.24	121.8	317.43	1.3	2.44
25	22,582	1580.75	197.5	206.98	0.0	0.00	782	4368.91	200.2	521.73	0.0	0.00
26	22,924	1604.71	201.9	211.62	0.0	0.00	806	4505.89	226.6	590.61	0.0	0.00
27	20,961	1467.26	192.6	201.86	0.0	0.00	750	4193.13	204.1	531.91	0.0	0.00
28	21,178	1482.45	196.7	206.14	0.0	0.00	821	4585.83	178.7	465.69	21.5	39.09
29	16,864	1180.46	172.9	181.24	0.0	0.00	683	3817.98	137.5	358.29	24.0	43.66
30	19,319	1352.35	188.9	198.00	0.0	0.00	803	4486.93	161.1	419.81	28.2	51.33
31	17,525	1226.73	169.5	177.64	0.0	0.00	719	4016.81	145.0	377.78	12.4	22.57
TOTAL	537,734	37,641	5,290	5,544	782	1,513	21,305	119,046	1,858	4,841	624	1,136
AVG	17,346	1214.24	171	178.84	25	48.80	687	3840.20	60	156.17	20	36.65
MAX	23,175	1622.23	223	233.42	53	103.11	869	4854.50	227	590.61	31	57.06
MIN	12,736	891.54	126	132.23	0	0.00	494	2759.73	15	40.38	0	0.00
COST	\$20,022.03		\$11,572.24		\$9,000.89		\$71,903.91		\$1,897.75		\$3,183.44	
\$/MG	\$35.71		\$20.64		\$16.05		\$128.25		\$3.38		\$5.68	

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

Month: August
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
							Phenol	Phenol	Total	Total	
	Daily Max	Daily Min	Daily Max	Daily Min	AM	PM	AM	PM	AM	PM	
1	7.6	7.4	8.2	8.1	144.00	143.00	0.00	0.00	102.00	104.00	1.00
2	7.6	7.4	8.2	8.1	143.00	139.00	0.00	0.00	104.00	101.00	5.00
3	7.7	7.5	8.3	8.2	134.00	138.00	0.00	0.00	102.00	99.00	-3.00
4	7.6	7.5	8.4	8.2	137.00	140.00	0.00	0.00	100.00	98.00	10.00
5	7.5	7.4	8.4	8.2	136.00	129.00	0.00	0.00	101.00	102.00	6.00
6	7.4	7.4	8.3	8.2	132.00	128.00	0.00	0.00	98.00	97.00	4.00
7	7.5	7.4	8.2	8.2	130.00	130.00	0.00	0.00	98.00	99.00	0.00
8	7.5	7.4	8.3	8.2	123.00	126.00	0.00	0.00	95.00	96.00	2.00
9	7.5	7.4	8.3	8.2	128.00	128.00	0.00	0.00	97.00	98.00	1.00
10	7.6	7.4	8.3	8.2	127.00	124.00	0.00	0.00	98.00	96.00	3.00
11	7.5	7.4	8.3	8.2	125.00	124.00	0.00	0.00	99.00	98.00	-1.00
12	7.4	7.4	8.2	8.1	127.00	122.00	0.00	0.00	99.00	98.00	4.00
13	7.4	7.3	8.2	8.1	125.00	124.00	0.00	0.00	99.00	96.00	3.00
14	7.5	7.4	8.3	8.2	127.00	126.00	0.00	0.00	99.00	97.00	3.00
15	7.8	7.5	8.4	8.3	121.00	123.00	0.00	0.00	94.00	95.00	2.00
16	7.9	7.7	8.4	8.4	127.00	127.00	0.00	0.00	98.00	96.00	3.00
17	7.9	7.6	8.4	8.4	125.00	126.00	0.00	0.00	96.00	98.00	2.00
18	7.6	7.5	8.4	8.2	126.00	128.00	0.00	0.00	98.00	96.00	7.00
19	7.5	7.4	8.2	8.1	132.00	133.00	0.00	0.00	98.00	94.00	6.00
20	7.5	7.4	8.1	8.1	134.00	136.00	0.00	0.00	97.00	98.00	1.00
21	7.4	7.3	8.1	8.0	135.00	132.00	0.00	0.00	100.00	99.00	1.00
22	7.4	7.3	8.0	8.0	131.00	135.00	0.00	0.00	99.00	99.00	2.00
23	7.4	7.3	7.7	7.6	135.00	132.00	0.00	0.00	100.00	100.00	2.00
24	7.5	7.5	7.7	7.4	132.00	130.00	0.00	0.00	101.00	101.00	0.00
25	7.6	7.5	8.0	7.7	132.00	124.00	0.00	0.00	101.00	102.00	3.00
26	7.6	7.5	8.0	8.0	128.00	127.00	0.00	0.00	104.00	100.00	2.00
27	7.7	7.6	8.2	8.0	129.00	129.00	0.00	0.00	102.00	100.00	-2.00
28	7.8	7.7	8.2	8.0	126.00	123.00	0.00	0.00	100.00	95.00	1.00
29	7.7	7.7	8.0	8.0	125.00	123.00	0.00	0.00	96.00	97.00	4.00
30	7.9	7.2	8.0	7.9	123.00	121.00	0.00	0.00	97.00	94.00	8.00
31	7.9	7.3	8.1	8.0	120.00	121.00	0.00	0.00	95.00	97.00	2.00
AVG					130	129	0	0	99	98	3
MAX	7.9	7.7	8.4	8.4	144	143	0	0	104	104	10
MIN	7.4	7.2	7.7	7.4	120	121	0	0	94	94	-3

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

Month: August
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	0.03	0.02	0.02	0.02	0.02	0.02	3.98	3.89	3.90	3.92	3.94	3.95
2	0.02	0.02	0.02	0.02	0.02	0.02	4.00	3.98	3.94	3.95	3.96	3.97
3	0.02	0.02	0.02	0.02	0.02	0.02	3.98	4.06	4.04	4.01	3.98	3.98
4	0.02	0.02	0.02	0.02	0.02	0.02	4.01	4.00	4.08	4.12	4.07	4.03
5	0.02	0.02	0.02	0.02	0.02	0.02	3.63	3.97	3.96	3.93	3.85	3.73
6	0.02	0.02	0.02	0.02	0.02	0.02	3.74	3.61	3.58	3.56	3.59	3.65
7	0.02	0.02	0.02	0.02	0.02	0.02	3.92	3.70	3.87	3.98	3.99	3.93
8	0.02	0.02	0.02	0.02	0.02	0.02	3.79	3.92	3.90	3.82	3.79	3.78
9	0.02	0.02	0.02	0.02	0.02	0.02	3.98	3.88	3.93	3.95	4.00	4.00
10	0.02	0.02	0.02	0.02	0.02	0.02	3.99	3.92	3.91	3.88	3.89	3.93
11	0.02	0.02	0.02	0.02	0.02	0.02	3.84	4.01	4.04	4.09	4.03	3.92
12	0.02	0.02	0.02	0.02	0.02	0.02	3.95	3.76	3.76	3.78	3.87	3.99
13	0.02	0.02	0.02	0.02	0.02	0.02	3.96	3.85	3.78	3.78	3.86	3.91
14	0.02	0.02	0.02	0.02	0.02	0.02	4.01	4.06	4.05	4.01	3.99	3.96
15	0.02	0.02	0.02	0.02	0.04	0.02	3.98	4.02	4.04	4.03	4.03	3.96
16	0.02	0.02	0.02	0.02	0.02	0.02	4.03	4.01	4.06	4.10	4.12	4.10
17	0.02	0.02	0.02	0.02	0.02	0.02	3.99	3.97	3.93	3.92	3.92	3.93
18	0.02	0.02	0.02	0.02	0.02	0.02	3.94	4.08	4.09	4.12	4.01	4.01
19	0.03	0.02	0.02	0.02	0.03	0.02	3.79	3.91	3.88	3.86	3.79	3.76
20	0.02	0.02	0.02	0.02	0.02	0.02	3.91	3.82	3.89	3.89	3.89	3.87
21	0.02	0.02	0.02	0.02	0.03	0.02	3.75	3.88	3.85	3.83	3.78	3.75
22	0.03	0.02	0.02	0.06	0.02	0.02	3.45	3.77	3.79	3.61	3.66	3.72
23	0.03	0.03	0.03	0.03	0.02	0.02	3.70	3.73	3.79	3.78	3.69	3.71
24	0.02	0.02	0.02	0.03	0.02	0.03	3.83	3.52	3.76	3.76	3.68	3.69
25	0.02	0.03	0.04	0.02	0.03	0.03	4.03	3.92	3.98	4.04	4.09	4.13
26	0.03	0.03	0.03	0.02	0.02	0.03	3.94	3.92	3.88	3.88	3.91	3.95
27	0.02	0.03	0.02	0.02	0.02	0.02	4.08	3.94	3.93	3.95	4.03	4.08
28	0.02	0.03	0.02	0.02	0.02	0.03	4.01	4.07	4.10	4.14	4.15	4.09
29	0.02	0.03	0.05	0.03	0.02	0.04	3.93	3.96	3.95	3.97	3.98	3.95
30	0.02	0.04	0.02	0.07	0.04	0.06	3.97	3.92	3.92	3.96	4.06	4.03
31	0.07	0.02	0.05	0.04	0.08	0.04	4.08	3.91	3.90	3.95	4.04	4.05
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	0.07	0.04	0.05	0.07	0.08	0.06	4.1	4.1	4.1	4.1	4.2	4.1
MIN	0.02	0.02	0.02	0.02	0.02	0.02	3.4	3.5	3.6	3.6	3.6	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
-----------------------------------	-----

PWSID 1021508

SYSTEM

COBA WTP

MONTH August

*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	20,787	54	0.31	0.31	0.21	0.63	0.53
2	22,073	57	0.31	0.26	0.18	0.59	0.75
3	21,386	55	0.31	0.25	0.34	0.58	0.67
4	23,129	34	0.17	0.33	0.38	0.54	0.55
5	15,343	25	0.19	0.36	0.31	0.45	0.55
6	13,957	35	0.30	0.24	0.21	0.55	0.57
7	14,625	38	0.31	0.25	0.28	0.56	0.61
8	13,079	34	0.31	0.13	0.39	0.53	0.75
9	13,319	34	0.31	0.26	0.37	0.56	0.63
10	14,058	36	0.31	0.24	0.19	0.57	0.63
11	16,502	43	0.32	0.22	0.53	0.51	0.79
12	14,891	38	0.31	0.17	0.52	0.54	0.88
13	14,214	36	0.30	0.22	0.42	0.49	0.67
14	13,862	36	0.31	0.32	0.26	0.56	0.56
15	14,543	38	0.32	0.37	0.38	0.67	0.70
16	16,553	42	0.30	0.31	0.23	0.57	0.59
17	16,327	43	0.31	0.29	0.48	0.68	0.78
18	17,959	46	0.31	0.24	0.18	0.63	0.37
19	18,215	48	0.31	0.35	0.35	0.54	0.68
20	19,586	50	0.31	0.08	0.11	0.36	0.43
21	20,213	54	0.32	0.31	0.25	0.61	0.55
22	18,705	48	0.30	0.41	0.18	0.65	0.49
23	20,405	54	0.32	0.27	0.48	0.57	0.85
24	18,465	2	0.02	0.22	0.39	0.41	0.47
25	19,432	0	0.00	0.38	0.46	0.37	0.43
26	19,805	0	0.00	0.17	0.07	0.29	0.15
27	19,141	0	0.00	0.16	0.17	0.23	0.32
28	19,763	39	0.24	0.25	0.21	0.26	0.49
29	17,458	44	0.30	0.28	0.41	0.56	0.52
30	19,606	51	0.31	0.28	0.12	0.61	0.44
31	17,602	23	0.15	0.35	0.41	0.65	0.65
Total	545,004	1,136					
Avg.	17,581	37	0.25	0.27	0.31	0.53	0.58

*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 Lou Ann Fisher

Title: Water Plant Manager

City Broken Arrow

ODH Form No. 561 / DEQ Form 631-001

Notes: Fluoride feed system down from the 24th to the 28th for repairs.

Public Water System Name: COBA Water Treatment Plant

Month: August

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	10:27	431 W. Quannah Pl.	3.40	J.M.	15:10	4401 W. Norman St.	3.10	J.M.
2	10:38	24606 E. Biddle St.	3.80	J.M.	14:28	1933 W. Toledo St.	3.30	J.M.
3	10:45	1215 W Los Angeles Cir.	3.60	JM	14:55	204 N Redwood Ct.	3.20	JM
4	10:27	1222 N 27th St.	3.70	ME	14:47	4905 S Chestnut Ave.	3.70	ME
5	11:55	4121 E Omaha St.	3.50	ME	12:31	605 S Elder Ave.	3.30	ME
6	11:57	6575 369th E. Ave.	3.60	R.M.	12:52	1903 W. Rockport Pl.	3.20	R.M.
7	11:30	6615 S. 18th Pl.	3.50	J.M.	15:50	3121 W. College St.	2.90	J.M.
8	11:53	1821 S. Date Ave.	3.30	J.M.	15:48	1119 N. Highland Dr.	3.10	J.M.
9	11:48	7401 E. Oak Ridge St.	3.70	J.M.	15:11	409 N. Willow Ave.	2.90	J.M.
10	11:35	4205 E. Omaha St.	2.80	J.M.	15:12	12710 E. 134th St. S.	2.80	J.M.
11	10:50	1217 E. Houston St.	2.70	J.M	15:20	609 S. Elder Ave	2.90	J.M
12	08:15	36500 E. 66th St. S.	3.70	S.B	16:41	6057 S. 353rd E. Ave	3.40	S.B
13	11:28	2401 W. Omaha St.	2.20	T.R.	12:51	2400 E. Kenosha St.	2.90	T.R.
14	11:13	322 W. Detroit St.	2.80	J.M.	13:50	3706 S. Orange Cir.	3.30	J.M.
15	10:53	1301 N. 52nd St.	3.50	J.M.	14:50	5005 S. Lions Ave.	3.40	J.M.
16	10:53	1112 W. Queens Pl.	2.60	J.M.	15:45	1034 W. Boston St.	3.20	J.M.
17	11:45	608 E. Pensacola St.	3.20	J.M	13:55	1817 S. Willow Ave	2.70	J.M
18	10:53	3112 S. Hemlock Ct.	3.30	J.M	14:50	1608 W Lansing St	2.80	J.M
19	11:48	7213 S. Dennis Blvd.	3.80	M.E	12:34	608 E. Pensacola St.	3.60	M.E
20	11:55	6575 369th E. Ave.	3.50	R.M.	12:38	2909 E. Montpelier St.	3.20	R.M.
21	10:55	7838 S. Gum Ave.	3.60	M.L.	14:05	1400 W. Sandusky St.	2.60	M.L.
22	09:15	1417 N. 53rd St.	3.30	M.L.	15:24	6900 S. 115th E. Ave.	2.00	M.L.
23	09:20	4621 N. Sycamore Ave.	2.70	M.L.	14:32	7101 S. 3rd St.	2.10	M.L.
24	10:29	3303 W. Atlanta St.	2.80	M.L.	15:45	1417 N. 53rd St.	2.90	M.L.
25	09:23	775 W. Tucson	2.10	M.L	13:28	1601 W. Vail St.	2.80	M.L
26	11:44	702 E. Mason Dr.	3.40	S.B	12:15	3707 S. Orange Circle	3.00	S.B
27	11:55	36500 E. 66th St. St.	3.40	R.M.	1830	6575 369th E. Ave.	2.80	R.M.
28	10:00	4608 W. Eagle Pass St.	2.60	M.L.	14:10	7213 S. Dennis Blvd.	4.00	M.L.
29	08:00	1200 E. Dover St.	3.10	M.L.	12:00	12314 E. 126th Pl.	3.70	M.L.
30	07:55	801 N. 1st St.	3.30	J.S.	14:20	11715 S. Lynn Lane Rd.	3.10	J.S.
31	10:50	10109 E. 137th E. Ave.	3.00	J.S.	14:20	750 N. 45th St.	3.50	J.S.
Average			3.21	Average			3.08	
Min.			2.10	Min.			2.00	
Max.			3.80	Max.			4.00	