City of BROKEN ARROW
Where opportunity lives

MONTHLY OPERATIONAL REPORT

City of Broken Arrow Lynn Lane Water Reclamation Facility

January-26

		WEATHER			INFLUENT								EAST OXIDATION DITCH					WEST OXIDATION DITCH				
Date	Day	°F	Rain	Cloud Conditions	Flow (MGD)	RAS (MGD)	°C	pH	Alk.	Sett. Solids	TSS (mg/L)	BOD (mg/L)	D.O. (mg/L)	30 Min. Settl.	SVI (ml/gm)	MLSS (mg/L)	Sl. Age (Days)	D.O. (mg/L)	30 Min. Settl.	SVI (ml/gm)	MLSS (mg/L)	Sl. Age (Days)
1	Thu	63	0.00	Clear	5.532	3.580	18	7.5	271	16	376	225	3.2	510	153	3,340	13	3.9	520	143	3,640	14
2	Fri	63	0.04	Clear	5.133	3.668	19	7.4	280	18	716	227	2.5	480	121	3,970	9	3.7	500	123	4,070	9
3	Sat	47	0.00	Cloudy	5.405	3.747	17	7.5	277	22			2.4	500				3.2	490			
4	Sun	54	0.00	Clear	5.161	3.810	18	7.5	285	21			2.1	560				3.2	610			
5	Mon	68	0.01	Clear	5.599	3.800	18	7.5	284	20	494	307	1.0	500	131	3,810	11	2.4	520	133	3,900	11
6	Tue	72	0.01	Clear	5.432	3.774	18	7.4	267	18	332	269	1.9	540	143	3,770	17	2.9	570	157	3,630	16
7	Wed	70	0.00	Cloudy	5.390	3.987	19	7.5	262	19	388	195	1.7	510	137	3,720	14	2.8	560	149	3,770	14
8	Thu	73	0.28	Cloudy	5.334	4.075	20	7.5	274	20	344	204	1.8	590	151	3,920	17	3.3	560	147	3,800	17
9	Fri	59	0.00	Clear	5.692	4.006	19	7.4	254	18	526	257	3.0	850	238	3,570	10	3.9	860	244	3,520	9
10	Sat	51	0.00	Clear	5.402	4.985	17	7.4	275	4			3.1	490				4.3	550			
11	Sun	47	0.00	Clear	5.417	5.024	18	7.5	269	20			3.8	560				4.7	560			
12	Mon	67	0.00	Clear	5.685	5.000	18	7.5	254	17	260	283	2.6	570	173	3,290	18	3.7	530	138	3,850	21
13	Tue	73	0.00	Clear	5.474	5.031	18	7.5	246	18	430	306	3.4	490	133	3,690	13	4.5	470	128	3,680	13
14	Wed	56	0.00	P Cloudy	5.187	5.017	18	7.4	257	18	312	275	3.5	500	139	3,590	18	4.4	500	130	3,840	19
15	Thu	51	0.00	Clear	5.253	4.880	17	7.6	286	53	705	586	3.6	690	186	3,700	8	4.7	620	161	3,840	8
16	Fri	51	0.00	Clear	5.288	4.876	18	7.5	267	25	882	392	3.4	650	156	4,170	7	4.3	610	142	4,310	7
17	Sat	40	0.00	Clear	5.412	4.888	16	7.4	283	30			4.0	600				4.7	700			
18	Sun	48	0.00	Clear	6.091	4.867	15	7.4	287	25			3.9	520				4.7	520			
19	Mon	35	0.00	Cloudy	5.238	4.792	17	7.5	262	16	410	313	4.4	570	150	3,790	14	5.2	590	143	4,130	15
20	Tue	49	0.00	Clear	5.272	5.050	16	7.5	249	25	970	312	3.6	530	137	3,870	6	4.3	560	156	3,590	6
21	Wed	53	0.00	Cloudy	5.755	4.959	16	7.4	263	20	942	293	2.8	520	147	3,530	5	3.8	530	146	3,640	5
22	Thu	56	0.00	Clear	5.898	4.902	17	7.5	255	17	304	291	4.0	490	138	3,540	16	4.9	510	148	3,440	15
23	Fri	37	0.00	Cloudy	5.454	4.902	16	7.5	262	18	272	233	4.1	500	142	3,530	19	5.2	510	139	3,660	20
24	Sat	14	0.00	Cloudy	6.112	4.844	15	7.5	245	16			4.1	490				4.8	540			
25	Sun	17	0.00	Cloudy	7.098	4.795	15	7.4	243	17			4.4	540				5.2	560			
26	Mon	27	0.12	Clear	6.898	4.833	16	7.5	241	15	308	237	4.9	470	136	3,460	13	5.5	460	143	3,210	12
27	Tue	40	0.12	Clear	6.658	4.630	16	7.4	241	15	410	253	3.9	430	139	3,100	9	4.7	500	149	3,350	10
28	Wed	44	0.04	Clear	6.399	4.748	16	7.4	246	14	214	212	4.2	430	131	3,290	19	5.1	490	152	3,230	19
29	Thu	49	0.00	Clear	6.315	4.541	16	7.5	247	14	212	243	4.1	490	157	3,130	19	4.9	480	145	3,300	20
30	Fri	30	0.00	Cloudy	6.202	4.653	16	7.5	239	16	230	247	4.5	530	170	3,110	17	5.3	550	165	3,340	19
31	Sat	24	0.00	Clear	5.894	4.668	17	7.4	256	17			4.8	410				5.7	400			
TOTAL :			0.62		177.080																	
MIN :		14	0.00		5.133	3.580	15	7.4	239	4	212	195	1.0		121	3,100	5	2.4		123	3,210	5
MAX :		73	0.28		7.098	5.050	20	7.6	287	53	970	586	4.9		238	4,170	19	5.7		244	4,310	21
AVG :		49			5.712	4.559	17			19	456	280			150	3,586				149	3,670	

	SLUDGE WASTING					DIGESTER			FINAL EFFLUENT																
Date	WAS (MGD)	WAS MLSS (mg/L)	CAKE (%)	LANDFILL (Tons)	LANDFILL (D.M. Tons)	THK EFFL MLVSS (mg/L)	BP FEED MLVSS (mg/L)	VECTOR ATT. RED. (%)	°C	D.O. (mg/L)	TDS (mg/L)	TDS (lbs)	pH	Alk.	TSS (mg/L)	TSS (lbs)	BOD (mg/L)	BOD (lbs)	Hg (mg/L)	Hg (lbs.)	E.Coli	Cl2 Res	CL2 lbs/day	Effl. Flow (MGD)	Non-Potable (MGD)
1	0.150	6,280	15						18	8.4			7.3	88	2.10	81.42	2.00	77.55						4.649	0.328
2	0.150	6,270	14	35.18	4.47	14,500	13,850	4	18	7.5			7.3	95										4.376	0.318
3	0.150								17	7.9			7.3	91										4.554	0.322
4	0.150								17	8.1	493	18,099	7.3	89	3.10	113.81	2.50	91.78						4.402	0.309
5	0.150	7,570	16	32.11	4.66	16,525	10,675	35	18	7.3			7.3	99	2.60	104.39	2.70	108.40			8.6			4.814	0.331
6	0.150	7,380	16	33.68	4.89				18	7.2			7.3	101	2.30	88.79	2.30	88.79						4.629	0.321
7	0.150	6,860	16	43.07	6.25	14,800	11,025	26	19	7.4			7.3	101	2.20	83.87	2.20	83.87	0.00005	0.0019				4.571	0.329
8	0.150	6,020							19	7.1			7.2	96	2.40	90.63	3.40	128.40						4.528	0.329
9	0.170	5,970	16	35.08	5.09	12,575	11,200	11	19	7.5			7.3	96										4.847	0.312
10	0.170								18	7.9			7.3	92										4.434	0.324
11	0.170								17	7.9			7.2	84	3.20	121.62	3.70	140.62						4.557	0.319
12	0.000	6,300	17	33.75	5.21	11,600	8,925	23	17	7.7			7.2	86	2.80	107.89	2.80	107.89			55.6			4.620	0.442
13	0.000	6,370	16	48.59	7.05				18	7.9			7.2	83	2.40	86.83	2.90	104.92						4.338	0.460
14	0.000	5,680	15	5.80	0.79				18	7.9			7.2	78	3.00	106.18	3.00	106.18						4.244	0.462
15	0.170	6,070							17	8.1			7.1	72	3.90	144.61	2.80	103.82						4.446	0.339
16	0.170	6,590	15	44.39	6.04	13,575	10,900	20	17	8.0			7.1	64										4.363	0.357
17	0.170								16	8.2			7.1	60										4.516	0.347
18	0.170								15	8.3			7.0	63	3.50	151.06	3.00	129.48						5.175	0.337
19	0.170	6,170	15	18.96	2.58	14,950	11,675	22	16	8.6			7.1	66	2.80	102.52	2.80	102.52						4.390	0.329
20	0.170	6,510	15	36.11	4.91				16	8.8			7.2	74	3.30	121.56	2.60	95.78			4.0			4.417	0.336
21	0.170	6,720	15	35.17	4.79	14,250	11,900	16	16	8.0			7.1	70	3.00	121.97	2.70	109.78						4.875	0.326
22	0.170	5,520	15	51.51	7.01				17	8.2			7.2	76	3.50	147.91	2.90	122.55						5.067	0.326
23	0.170	5,690	16	36.06	5.23	14,225	11,950	16	16	8.6			7.2	73										4.586	0.328
24	0.170								15	8.5			7.2	72										5.242	0.327
25	0.170								14	8.7			7.1	66	4.10	198.74	3.30	159.96						5.812	0.328
26	0.170	6,300				15,200	11,600	24	14	8.8			7.2	71	3.20	156.55	3.40	166.34						5.866	0.315
27	0.170	6,610	15	34.66	4.72				15	8.6			7.2	73	3.60	174.74	3.10	150.47			4.1			5.820	0.319
28	0.170	6,540	15	46.39	6.31	16,275	13,075	20	15	8.7			7.2	81	3.30	152.33	2.80	129.25						5.535	3.220
29	0.170	6,090	15	57.83	7.87				16	8.4			7.2	80	3.00	136.93	3.20	146.06						5.473	0.313
30	0.170	5,710	15	30.73	4.18	15,075	12,725	16	15	8.7			7.2	80										5.336	0.315
31	0.170		15	12.88	1.75				16	9.4			7.2	76										5.110	0.320
TOTAL :	4.600			671.95	93.81																9.4		0	149.592	13.388
MIN :	0.000	5,520	14	97.00				4	14	7.1			7.0	60	2.10		2.00				4.0	0		4.244	0.309
MAX :	0.170	7,570	17	57.83	7.87			35	19	9.4	493		7.3	101	3.44		3.16		0.05000		55.6	0		5.866	3.220
AVG :	0.148	6,328	15	35.37	4.94			19			493	18,099			3.01	123.54	2.86	116.88	0.05000	0.0019				4.826	0.432

NOTES	
Electrical Usage :	53,428
Labor :	106,447
Natural Gas :	517
Communications:	351
Chemical, Laboratory Supplies & Services :	16,068
Repairs, Maintenance, Services & Admin. :	77,311
Sludge (Generation & Transportation) :	29,764
TOTAL COSTS :	283,885
COSTS - 1,000 GAL.	1.90
TREATED :	
Non-Potable Water Use Savings :	11,192

01-12 thru 14 Waste pumps out of operation.

Cleaning South Digester.

PARTIAL WEEKLY AVG.NO.'s					
Date	Week No.		TSS	BOD	
WEEK	1	2	3	4	5
TSS	2.52	3.06	3.22	3.44	
BOD	2.62	3.04	2.80	3.16	

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

Signed :

Title : *Lynn Lane Water Reclamation Facility Manager (WRF)*