CITY OF BROKEN ARROW
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MONTHLY OPERATIONAL REPORT

City of Broken Arrow Lynn Lane Water Reclamation Facility

January-25

		WEATHER			INFLUENT								EAST OXIDATION DITCH					WEST OXIDATION DITCH					SLUDGE WASTING				
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)	WAS (MGD)	WAS MLSS (mg/L)	CAKE (%)	LANDFILL (Tons)	LANDFILL (D.M. Tons)
1	Wed	46	0.00	P Cloudy	5.418	8.264	18	7.4	297	28	256	278	2.7	270	66	4,120	24	2.9	290	70	4,150	24	0.115	16,150			
2	Thu	53	0.00	Clear	4.981	8.146	19	7.3	257	40	536	415	2.3	280	75	3,750	11	3.3	290	75	3,870	12	0.115	5,400	17	33.31	5.14
3	Fri	47	0.00	Clear	5.386	8.122	18	7.3	262	34	424	307	2.1	280	71	3,940	14	3.2	290	70	4,120	14	0.115	5,010	15	12.37	1.68
4	Sat	50	0.00	Cloudy	5.800	8.124	17	7.4	320	23			3.1	230				3.5	260				0.115				
5	Sun	47	0.01	Rain	5.765	8.224	17	7.4	316	0.5			2.5	240				3.4	280				0.115				
6	Mon	28	0.00	Clear	6.066	8.328	17	7.3	265	12	152	177	1.2	280	71	3,960	34	2.0	290	66	4,370	38	0.115	6,520	16	31.25	4.54
7	Tue	32	0.00	Clear	6.250	8.188	16	7.3	241	20	314	281	2.7	270	62	4,340	18	2.3	290	69	4,230	17	0.115	6,120	17	30.12	4.65
8	Wed	34	0.00	Clear	5.957	8.241	17	7.3	243	24	380	311	3.1	300	73	4,110	15	3.1	300	71	4,240	15	0.115	10,040	17	30.10	4.64
9	Thu	31	0.00	Cloudy	5.649	4.599	17	7.4	261	23	224	282	2.7	290	69	4,220	27	3.0	290	67	4,300	27	0.115	7,370			
10	Fri	37	0.23	Clouy	5.428	8.460	15	7.4	260	23	340	333	3.5	280	78	3,570	15	3.7	280	100	2,800	12	0.115	4,190			
11	Sat	43	0.34	Clear	5.899	8.512	17	7.3	257	28			3.2	270				3.9	290				0.115				
12	Sun	50	0.04	Clear	6.190	8.456	18	7.4	260	29			3.8	280				3.9	290				0.115				
13	Mon	41	0.00	Clear	6.483	8.525	17	7.3	255	23	398	255	1.9	300	64	4,700	15	2.4	300	79	3,800	12	0.115	6,090			
14	Tue	54	0.00	Cloudy	6.025	8.476	16	7.3	262	26	434	253	3.2	330	84	3,950	12	3.4	340	82	4,140	13	0.115	6,620			
15	Wed	52	0.00	Clear	5.755	8.492	17	7.3	265	26	320	269	2.3	310	79	3,920	17	3.5	330	69	4,780	21	0.115	6,710	17	14.67	2.26
16	Thu	60	0.00	Clear	5.832	8.447	16	7.4	267	25	436	289	2.9	330	81	4,050	13	3.8	330	67	4,940	16	0.115	6,420	16	30.92	4.49
17	Fri	56	0.00	P Cloudy	5.755	8.562	17	7.4	273	27	440	284	3.0	330	77	4,280	14	3.0	340	69	4,910	16	0.115	9,330			
18	Sat	45	0.00	Clear	5.589	8.749	16	7.4	284	35			3.4	360				4.2	360				0.115				
19	Sun	26	0.00	Clear	5.681	8.654	16	7.4	282	25			3.9	350				4.8	350				0.115				
20	Mon	28	0.00	Clear	5.824	8.640	17	7.5	263	36	446	301	3.4	350	90	3,900	12	4.4	350	83	4,210	13	0.115	5,700			
21	Tue	26	0.00	Clear	5.941	8.650	17	7.4	253	35	434	314	3.4	350	92	3,790	12	4.7	380	94	4,040	13	0.115	5,630	16	36.81	5.34
22	Wed	43	0.00	Clear	5.923	8.758	16	7.4	248	30	490	375	3.9	430	83	5,190	14	4.3	490	109	4,490	12	0.115	7,010	16	16.29	2.36
23	Thu	39	0.00	Clear	5.764	8.680	16	7.4	255	28	532	412	2.3	450	124	3,640	9	2.7	410	108	3,810	10	0.115	5,980	16	35.81	5.20
24	Fri	54	0.00	Clear	5.665	8.503	16	7.5	274	10	154	248	2.8	420	105	3,990	37	3.3	470	113	4,150	38	0.115		16	19.78	2.87
25	Sat	54	0.00	Clear	5.952	3.716	17	7.4	277	13			3.2	480				3.6	490				0.115				
26	Sun	42	0.00	Cloudy	5.331	3.499	17	7.5	280	13			3.7	440				3.8	460				0.115				
27	Mon	50	0.00	Clear	5.626	3.446	16	7.4	253	15	228	328	2.7	470	115	4,090	26	3.7	450	111	4,040	25	0.115	9,780	15	34.85	4.74
28	Tue	63	0.00	Clear	5.511	3.270	16	7.4	254	23	442	363	2.9	450	105	4,280	14	3.2	420	107	3,920	13	0.115	7,780	16	39.17	5.69
29	Wed	56	0.00	Cloudy	5.465	3.835	16	7.5	280	22	392	374	3.6	470	116	4,040	15	3.8	500	121	4,120	15	0.115	7,420	14	30.77	3.91
30	Thu	56	0.00	Cloudy	5.845	6.336	17	7.3	230	24	410	369	2.7	420	93	4,540	15	3.5	430	107	4,010	13	0.115	6,760	16	16.52	2.40
31	Fri	58	0.00	Cloudy	7.883	7.021	17	7.4	247	20	322	363	3.5	390	98	3,980	13	3.5	400	102	3,930	12	0.115	5,580	16	14.95	2.17
TOTAL :			0.62		180.639																		3.565			427.69	62.07
MIN :		26	0.00		4.981	3.270	15	7.3	230	0.5	152	177	1.2		62	3,570	9	2.0		66	2,800	10	0.115	4,190	14	26.00	
MAX :		63	0.34		7.883	8.758	19	7.5	320	40	536	415	3.9		124	5,190	37	4.8		121	4,940	38	0.115	16,150	17	39.17	5.69
AVG :		45			5.827	7.417	17			24	370	312			86	4,102				87	4,147		0.115	7,164	16	26.73	3.88

	DIGESTER			FINAL EFFLUENT																
Date	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	12,700	13,350		18	7.2	506	17,239	7.4	121	2.00	68.14	2.00	68.14	0.00005	0.0017		0.03	0	4.085	0.199
2				18	8.2			7.3	91	2.00	57.65	2.00	57.65				0.04	0	3.456	0.171
3	12,250	8,200	33	18	8.1			7.2	87								0.03	0	3.987	0.193
4				17	8.2			7.2	90								0.03	0	4.299	0.192
5				17	8.1			7.2	84	2.00	74.83	2.50	93.53				0.02	0	4.486	0.163
6	13,775	8,000	42	15	8.5			7.2	88	2.00	76.16	2.80	106.63			19.7	0.03	0	4.566	0.165
7				17	8.6			7.2	84	2.00	75.08	3.40	127.63				0.03	0	4.501	0.193
8	15,450	8,575	44	16	8.5			7.1	82	2.00	72.17	3.50	126.31				0.03	0	4.327	0.198
9				16	8.3			7.1	75	2.00	70.64	3.70	130.68				0.03	0	4.235	0.196
10	12,800	8,200	36	15	8.5			7.1	75								0.02	0	3.871	0.161
11				14	8.3			7.1	70								0.03	0	4.428	0.166
12				17	8.2			7.1	72	2.00	79.80	2.00	79.80				0.02	0	4.784	0.163
13	15,950			16	8.5			7.1	85	2.00	80.91	2.00	80.91			14.6	0.02	0	4.851	0.163
14				16	8.6			7.2	86	2.00	72.84	2.00	72.84				0.02	0	4.367	0.165
15	19,825	13,025	34	17	8.6			7.2	86	2.00	71.49	2.60	92.94				0.03	0	4.286	0.160
16				16	8.6			7.1	81	2.00	70.77	2.10	74.31				0.02	0	4.243	0.164
17	18,875	10,200	46	17	7.8			7.1	85								0.03	0	4.329	0.164
18				16	8.4			7.2	80								0.02	0	4.451	0.164
19				15	8.8			7.1	78	2.00	72.49	2.00	72.49				0.02	0	4.346	0.161
20	16,700			15	9.1			7.2	76	2.00	71.52	2.00	71.52				0.02	0	4.288	0.160
21				14	9.0			7.1	75	2.00	80.70	4.20	169.47			13.1	0.03	0	4.838	0.165
22	17,600	10,825	38	15	9.0			7.2	95	2.00	73.63	4.00	147.25				0.03	0	4.414	0.165
23				16	8.9			7.2	88	2.00	71.72	4.10	147.03				0.03	0	4.300	0.167
24	17,250	11,575	33	15	7.5			7.1	75								0.03	0	4.091	0.365
25				16	8.6			7.2	79								0.01	0	3.258	0.108
26				16	8.5			7.2	77	2.00	68.96	4.30	148.25				0.03	0	4.134	0.149
27	18,675	12,050	35	15	8.7			7.2	86	2.00	74.61	7.90	294.71			1.0	0.02	0	4.473	0.161
28				15	8.5			7.2	88	2.00	68.19	3.30	112.51				0.02	0	4.088	0.156
29	19,575	12,425	37	16	8.4			7.2	86	2.00	70.11	3.40	119.18				0.02	0	4.203	0.160
30				17	8.0			7.1	84	2.00	82.23	3.60	148.02				0.02	0	4.930	0.157
31	18,175	7,225	60	17	8.3			7.2	78								0.02	0	6.357	0.156
TOTAL :																7.8		0	135.272	5.370
MIN :			33	14	7.2			7.1	70	2.00		2.00				1.0	0.01		3.258	0.108
MAX :			60	18	9.1	506		7.4	121	2.00		4.50		0.05000		19.7	0.04		6.357	0.365
AVG :			40			506	17,239			2.00	72.94	3.15	115.54	0.05000	0.0017				4.364	0.173

NOTES	
Electrical Usage :	44,418
Labor :	72,661
Natural Gas :	655
Communications:	880
Chemical, Laboratory Supplies & Services :	14,803
Repairs, Maintenance, Services & Admin. :	58,884
Sludge (Generation & Transportation) :	14,477
TOTAL COSTS :	206,778
COSTS - 1,000 GAL. TREATED :	1.53
Non-Potable Water Use Savings :	4,489

PARTIAL WEEKLY AVG.NO.'s

Date	Week No.	TSS	BOD

WEEK	1	2	3	4	5
TSS	2.00	2.00	2.00	2.00	
BOD	3.18	2.14	3.26	4.50	

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

Signed : Lynn Handy

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