CITY OF BROKEN ARROW
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MONTHLY OPERATIONAL REPORT

City of Broken Arrow Lynn Lane Water Reclamation Facility

May-24

		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	79	2.09	Cloudy	9.805	7.420	19	7.0	115	10	520	131	2.7	430	120	3,580	6	3.7	460	128	3,590	6	0.160	7,130	11	28.06	2.99
2	Thu	80	0.70	Cloudy	11.478	7.461	20	7.4	238	5.5	260	117	2.4	420	128	3,280	9	2.6	450	130	3,450	9	0.160	7,420	13	71.38	9.00
3	Fri	82	0.74	Cloudy	12.268	7.371	20	7.2	167	9	192	113	2.6	310	105	2,940	10	3.1	350	116	3,030	10	0.160	8,710	12	52.71	6.14
4	Sat	80	0.12	Clear	14.317	5.273	21	7.3	255	8			1.2	350				1.7	340				0.160				
5	Sun	66	0.74	Rain	8.382	5.445	25	7.3	294	10			2.1	400				1.9	470				0.160				
6	Mon	78	0.09	Cloudy	10.671	7.317	20	7.3	248	15	514	135	1.7	400	102	3,930	6	2.0	430	118	3,640	5	0.160	9,270	13	34.90	4.40
7	Tue	84	0.57	Clear	11.998	8.754	20	7.2	164	8	242	148	1.5	340	97	3,520	10	2.3	380	97	3,900	11	0.160	9,170	13	38.50	4.86
8	Wed	88	0.00	Cloudy	12.201	8.912	21	7.2	256	5	276	146	1.6	360	88	4,080	10	2.0	350	92	3,820	9	0.160	6,970	13	35.45	4.47
9	Thu	80	0.00	Clear	8.843	9.611	20	7.4	264	10	292	241	1.4	320	93	3,440	11	1.7	380	97	3,900	12	0.160	6,560	13	28.70	3.62
10	Fri	78	0.00	Clear	7.567	9.487	20	7.4	270	6	290	201	1.4	290	77	3,760	14	2.3	310	80	3,890	14	0.160	6,080	13	16.24	2.05
11	Sat	85	0.00	Clear	6.833	6.493	21	7.3	263	14			2.2	280				2.9	290				0.160				
12	Sun	79	0.00	Clear	6.609	6.749	21	7.3	257	17			1.8	220				2.2	250				0.160				
13	Mon	76	0.58	Cloudy	6.603	6.951	20	7.3	260	15	386	221	0.7	220	60	3,680	12	1.1	220	55	3,970	12	0.160	7,500	14	17.08	2.32
14	Tue	79	0.00	Clear	8.279	6.993	20	7.4	278	12	532	209	1.1	200	58	3,420	6	1.3	200	56	3,570	6	0.160	6,940	14	34.81	4.73
15	Wed	84	0.07	Cloudy	7.054	6.552	20	7.4	283	15	496	198	1.0	180	51	3,550	8	1.6	180	47	3,860	9	0.160	6,620	14	32.83	4.46
16	Thu	74	0.09	Cloudy	6.537	6.778	20	7.3	267	16	258	207	1.7	170	54	3,150	15	1.6	170	49	3,470	16	0.160	6,540	14	49.04	6.66
17	Fri	83	0.00	Clear	6.427	6.890	21	7.5	287	16	282	167	1.2	160	48	3,340	15	1.9	160	48	3,320	15	0.160	5,470	14	32.87	4.46
18	Sat	88	0.00	Clear	6.487	3.481	20	7.3	268	15			1.9	190				2.9	190				0.160				
19	Sun	88	0.00	Clear	6.206	3.469	20	7.3	354	18			2.2	190				3.1	190				0.160				
20	Mon	88	0.05	Clear	6.501	3.542	21	7.1	188	6.5	606	178	0.8	150				1.5	180				0.160				
21	Tue	87	0.06	P Cloudy	8.384	3.574	21	7.3	261	11	256	169	1.1	200				1.9	200				0.160				
22	Wed	76	0.13	P Cloudy	7.817	3.623	20	7.4	225	2.5	166	70.1	2.3	200				2.6	200				0.160				
23	Thu	82	0.00	Clear	9.541	3.429	21	7.3	262	8	254	148	1.7	200	85	2,350	8	2.3	200	82	2,440	8	0.160	4,210	15	31.86	4.64
24	Fri	87	0.00	Clear	7.539	3.577	21	7.4	288	12	186	146	2.0	210	70	3,010	17	2.8	210	71	2,940	17	0.160	7,580	15	36.29	5.28
25	Sat	88	0.00	Clear	6.694	3.390	21	7.4	273	12			3.0	220				3.9	220				0.160				
26	Sun	80	0.00	Clear	6.317	3.318	21	7.4	260	13			2.8	210				3.7	220				0.160				
27	Mon	80	0.00	Clear	6.024	3.224	21	7.4	292	15	192	165	2.8	220	71	3,090	21	3.6	220	72	3,040	21	0.160	5,980	15		
28	Tue	80	0.00	Cloudy	7.991	3.339	21	7.3	264	14	236	230	1.3	240	84	2,860	12	2.2	240	75	3,220	14	0.160	7,290	15	15.89	2.31
29	Wed	79	0.01	Cloudy	5.757	3.102	21	7.4	298	17	216	217	1.7	250	77	3,240	21	2.5	250	83	3,010	19	0.160	6,920			
30	Thu	78	0.13	Cloudy	5.630	3.241	21	7.3	272	16	214	236	2.2	250	86	2,900	19	2.9	280	88	3,170	21	0.160	6,050	15	31.01	4.51
31	Fri	77	0.00	Cloudy	6.111	3.115	22	7.4	281	16	244	234	1.7	280	82	3,430	18	2.5	290	87	3,330	18	0.160	7,720	15	33.14	4.82
TOTAL :			6.17		252.871																		4.960			620.76	81.73
MIN :		66	0.00		5.630	3.102	19	7.0	115	2.5	166	70.1	0.7		48	2,350	6	1.1		47	2,440	5	0.160	4,210	11	40.00	
MAX :		88	2.09		14.317	9.611	25	7.5	354	18	606	241	3.0		128	4,080	21	3.9		130	3,970	21	0.160	9,270	15	71.38	9.00
AVG :		81			8.157	5.545	21			12	309	175			82	3,328				84	3,428		0.160	7,007	14	34.49	4.54

	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	10,225	10,125		21	7.0	452	28,163	7.3	116	2.00	124.62	2.00	124.62	0.00005	0.0031		0.04	0	7.471	0.280
2				21	7.2			7.4	132	2.00	147.20	2.00	147.20				0.04	0	8.825	0.303
3	11,800	8,725	26	20	6.0			7.2	123								0.04	0	9.485	0.280
4				22	7.1			7.5	143								0.04	0	10.498	0.375
5				20	7.3			7.4	141	2.00	84.83	2.10	89.08				0.04	0	5.086	0.235
6	13,125	8,725	34	20	6.9			7.4	140	2.00	164.58	2.00	164.58			2419.6	0.04	0	9.867	0.297
7				21	5.2			7.3	133	2.80	221.38	2.20	173.94			2419.6	0.04	0	9.480	0.296
8	12,775	8,475	34	21	7.0			7.4	141	2.00	152.22	2.30	175.05				0.04	0	9.126	0.295
9				21	7.2			7.4	146	2.00	108.40	2.00	108.40				0.04	0	6.499	0.364
10	12,250	8,125	34	21	7.3			7.4	131								0.04	0	5.331	0.299
11				21	7.1			7.4	124								0.04	0	4.642	0.301
12				21	6.6			7.3	120	3.20	116.55	2.20	80.13				0.04	0	4.367	0.327
13	15,225	8,550	44	21	6.6			7.3	132	4.10	157.70	3.00	115.39			2.0	0.04	0	4.612	0.351
14				21	6.6			7.4	147	4.30	212.20	3.00	148.04			4.1	0.04	0	5.917	0.378
15	10,450	8,700	17	21	6.7			7.4	154	4.60	181.23	3.00	118.19				0.04	0	4.724	0.395
16				21	6.6			7.4	157	4.00	152.76	2.70	103.11				0.04	0	4.579	0.360
17	7,075	7,800		21	6.6			7.4	123								0.04	0	4.674	0.284
18				22	6.5			7.3	116								0.04	0	4.438	0.363
19				22	6.7			7.3	104	2.00	70.21	2.00	70.21				0.04	0	4.209	0.354
20				22	6.3			7.3	117	2.00	76.54	2.30	88.03			5.2	0.04	0	4.589	0.338
21				23	7.1			7.5	121	2.00	107.14	2.20	117.85			1.0	0.04	0	6.423	0.230
22				22	7.3			7.4	120	2.00	99.98	2.10	104.98				0.04	0	5.994	0.205
23				23	7.1			7.5	124	2.00	119.51	2.30	137.44				0.04	0	7.165	0.208
24				22	7.4			7.5	127								0.04	0	5.649	0.200
25				22	7.5			7.5	126								0.04	0	4.657	0.204
26				22	7.1			7.5	115	2.00	74.34	3.20	118.95				0.04	0	4.457	0.199
27	18,500	7,900	57	22	7.1			7.4	108	2.00	65.75	3.00	98.63				0.04	0	3.942	0.207
28				22	7.3			7.5	116	2.00	63.37	3.10	98.22			1.0	0.04	0	3.799	0.225
29	20,075			23	7.3			7.5	124	2.00	65.52	3.30	108.11			1.0	0.04	0	3.928	0.215
30				23	7.2			7.5	122	2.00	65.27	3.50	114.22				0.04	0	3.913	0.194
31	18,025	7,675	57	22	7.1			7.4	112								0.04	0	4.469	0.200
TOTAL :																11.2		0	182.815	8.762
MIN :			17	20	5.2			7.2	104	2.00		2.00				1.0	0.04		3.799	0.194
MAX :			57	23	7.5	452		7.5	157	4.04		3.22		0.05000		2419.6	0.04		10.498	0.395
AVG :			38			452	28,163			2.50	119.60	2.52	118.38	0.05000	0.0031				5.897	0.283

NOTES	
Electrical Usage :	46,494
Labor :	68,207
Natural Gas :	160
Chemical, Laboratory	29,513
Supplies & Services :	
Repairs, Maintenance,	76,164
Services & Admin. :	
Sludge (Generation &	24,399
Transportation) :	
TOTAL COSTS :	244,938
COSTS - 1,000 GAL.	1.34
TREATED :	
Non-Potable Water	7,325
Use Savings :	

5-20 Analytical balance failed. No solids recorded until new one arrived on 5-23.

PARTIAL WEEKLY AVG.NO.'s					
Date	Week No.		TSS	BOD	
WEEK	1	2	3	4	5
TSS	2.16	4.04	2.00	2.00	
BOD	2.12	2.78	2.18	3.22	

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

Signed :

Title : Lynn Lane Water Reclamation Facility Manager (WRF)