City of BROKEN ARROW
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MONTHLY OPERATIONAL REPORT

City of Broken Arrow Lynn Lane Water Reclamation Facility

December-25

		WEATHER			INFLUENT								EAST OXIDATION DITCH					WEST OXIDATION DITCH					SLUDGE WASTING					DIGESTER		
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)	THK EFFL MLVSS (mg/L)	BP FEED MLVSS (mg/L)	VECTOR ATT RED. (%)
1	Mon	35	0.02	Cloudy	6.406	7.013	19	7.5	259	40	474	339	2.7	630	199	3,170	8	3.5	700	205	3,420	9	0.135	5,180				12,100	9,375	23
2	Tue	46	0.01	Clear	5.914	7.111	19	7.4	266	16	270	214	2.2	690	210	3,280	16	3.2	700	211	3,320	17	0.135	5,290	16					
3	Wed	43	0.00	P Cloudy	6.037	6.998	18	7.4	226	15	268	208	3.2	640	199	3,220	16	4.1	690	199	3,460	17	0.135	5,200	16	26.52	3.85	12,375	9,150	26
4	Thur	40	0.00	Cloudy	6.460	7.144	17	7.3	243	60	767	364	2.6	710	194	3,660	6	3.5	710	187	3,790	6	0.135	6,010	16	33.40	4.85			
5	Fri	43	0.00	Cloudy	6.043	7.187	19	7.4	238	50	588	383	3.8	750	197	3,800	9	4.5	780	196	3,970	9	0.135	5,780	16	13.30	1.93	13,250	9,225	30
6	Sat	45	0.00	Cloudy	5.705	7.317	19	7.5	272	6			3.4	730				4.4	760				0.135							
7	Sun	44	0.00	Cloudy	5.740	7.403	19	7.5	275	12			2.9	710				4.0	690				0.135							
8	Mon	45	0.00	Cloudy	5.727	7.227	18	7.4	247	13	234	265	1.8	740	186	3,980	24	2.5	750	192	3,900	23	0.135	6,100	16	13.47	1.96	12,500	9,350	25
9	Tue	61	0.00	Clear	5.751	6.961	18	7.4	256	14	338	390	2.0	780	222	3,520	14	2.9	780	180	4,340	18	0.135	6,310	15	25.65	3.49			
10	Wed	56	0.00	Clear	5.737	5.753	18	7.4	256	12	202	169	2.2	740	193	3,830	26	3.1	740	194	3,810	26	0.135	6,330	16	16.69	2.42	14,800	9,300	37
11	Thur	66	0.00	Clear	5.639	3.992	19	7.4	244	17	336	268	2.7	770	191	4,030	17	3.8	770	177	4,340	18	0.135	7,420	16	12.62	1.83			
12	Fri	49	0.00	Clear	5.544	4.015	19	7.4	265	17	198	292	2.8	760	249	3,050	22	3.6	760	248	3,060	22	0.135	5,940				13,325	9,275	30
13	Sat	43	0.00	Cloudy	5.404	4.081	19	7.4	276	20			3.2	800				4.2	760				0.135							
14	Sun	32	0.00	Clear	5.557	3.931	18	7.4	267	20			3.6	820				4.6	780				0.135							
15	Mon	44	0.00	Clear	6.148	3.956	18	7.4	257	18	414	301	2.5	710	197	3,600	11	3.6	710	191	3,720	12	0.150	7,710	15	21.53	2.93	12,750	9,275	27
16	Tue	57	0.00	Cloudy	5.788	3.983	18	7.4	245	20	482	311	2.7	730	195	3,750	11	4.0	750	209	3,590	10	0.150	7,240	15	32.32	4.40			
17	Wed	65	0.00	Cloudy	5.626	4.018	18	7.3	240	20	378	269	0.5	700	190	3,680	14	0.3	710	198	3,590	14	0.150	7,220	15	42.05	5.72	12,400	9,525	23
18	Thur	62	0.00	Cloudy	5.801	4.028	19	7.3	244	17	374	278	2.1	720	198	3,640	13	3.2	700	183	3,830	14	0.150	6,920	16	30.08	4.37			
19	Fri	55	0.00	Cloudy	6.010	3.902	17	7.5	254	18	292	241	2.7	760	199	3,810	17	3.8	740	202	3,660	17	0.150	7,450	15	38.39	5.22	12,375	10,175	18
20	Sat	64	0.00	Clear	5.736	3.721	19	7.4	274	34			2.8	670				4.1	660				0.150							
21	Sun	59	0.00	Clear	5.176	3.636	19	7.3	272	26			2.6	710				3.9	700				0.150							
22	Mon	68	0.00	Clear	5.557	3.662	196	7.4	245	28	488	355	2.4	540	81	6,670	20	3.6	550	118	4,660	14	0.150	7,430	15	38.27	5.21	11,425	9,375	18
23	Tue	76	0.01	P Cloudy	5.650	3.649	20	7.4	262	25	400	320	2.0	650	169	3,840	14	3.2	600	166	3,610	13	0.150	7,060	16	36.78	5.34			
24	Wed	79	0.01	Clear	5.730	3.728	19	7.4	256	15	196	215	1.5	660	168	3,920	28	2.8	630	166	3,790	27	0.150	7,540	15	19.06	2.59	12,325	9,425	24
25	Thur	80	0.00	Clear	5.590	3.675	20	7.4	272	18	240	287	1.4	610	161	3,780	23	2.2	640	174	3,680	22	0.150	7,370						
26	Fri	79	0.00	Clear	5.200	3.720	20	7.4	262	28	342	342	1.2	620	164	3,790	17	2.5	550	170	3,230	15	0.150	6,780	15	37.52	5.11	13,550	8,925	34
27	Sat	85	0.00	Clear	5.532	3.537	20	7.4	267	18			1.4	640				2.2	620				0.150							
28	Sun	71	0.00	Clear	5.400	3.640	21	7.5	275	17			1.3	550				2.1	620				0.150							
29	Mon	37	0.00	Clear	5.363	3.578	18	7.5	272	18	472	253	2.8	690	181	3,810	12	3.5	600	156	3,840	12	0.150	7,120	16	30.12	4.37	13,425	7,775	42
30	Tue	50	0.00	Clear	5.527	3.756	18	7.4	248	20	522	263	4.0	550	183	3,010	8	4.9	560	155	3,620	10	0.150	5,040	16	32.08	4.66			
31	Wed	63	0.00	Clear	5.509	3.560	18	7.4	240	15	578	247	3.5	590	175	3,380	8	4.3	540	142	3,810	10	0.150	6,640	16	34.39	4.99	9,975	8,925	11
TOTAL :			0.05		177.007																		4.440			534.24	75.23			
MIN :		32	0.00		5.176	3.537	17	7.3	226	6	196	169	0.5		81	3,010	6	0.3		118	3,060	6	0.135	5,040	15	80.00				11
MAX :		85	0.02		6.460	7.403	196	7.5	276	60	767	390	4.0		249	6,670	28	4.9		248	4,660	27	0.150	7,710	16	42.05	5.72			42
AVG :		56			5.710	4.835	24			22	385	286			187	3,749				184	3,741		0.143	6,569	16	28.12	3.96			26

		FINAL EFFLUENT																	
Date	Day	°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	Mon	18	7.8			7.3	94	2.00	103.33	2.00	103.33			19.5			6.195	0.277
2	Tue	18	7.8			7.3	96	2.00	99.83	2.00	99.83						5.985	0.281
3	Wed	17	8.0			7.3	85	2.00	100.15	2.10	105.15						6.004	0.282
4	Thur	17	8.2	514	27,384	7.2	82	2.30	122.53	2.50	133.19	0.00005	0.0027				6.388	0.290
5	Fri	17	8.1			7.2	77										5.935	0.484
6	Sat	18	8.1			7.2	75										5.702	0.315
7	Sun	18	7.7			7.2	73	4.30	207.35	2.50	120.55						5.782	0.335
8	Mon	18	7.8			7.2	82	4.10	199.01	3.40	165.03			14.6			5.820	0.320
9	Tue	18	7.3			7.3	118	3.00	145.22	2.10	101.65						5.804	0.334
10	Wed	19	7.4			7.3	110	2.00	97.66	2.00	97.66						5.855	0.337
11	Thur	18	7.5			7.3	102	2.90	139.70	2.60	125.25						5.776	0.331
12	Fri	18	7.3			7.3	100										5.688	0.329
13	Sat	18	7.9			7.3	94										5.564	0.326
14	Sun	17	8.3			7.2	86	3.60	170.90	2.80	132.92						5.692	0.329
15	Mon	16	8.1			7.2	88	2.00	102.50	2.10	107.62			3.1			6.145	0.470
16	Tue	18	7.9			7.2	89	2.30	114.19	2.20	109.23						5.953	0.328
17	Wed	17	7.7			7.2	83	4.20	203.37	2.90	140.42						5.806	0.307
18	Thur	19	7.4			7.2	95	4.30	154.85	5.20	187.26						4.318	0.272
19	Fri	18	7.9			7.2	94										5.130	0.305
20	Sat	19	8.0			7.2	87										4.905	0.322
21	Sun	19	8.1			7.2	84	4.80	174.38	4.20	152.58						4.356	0.311
22	Mon	19	7.7			7.2	89	3.00	115.84	3.60	139.01			12.1			4.630	0.312
23	Tue	19	7.3			7.2	96	2.20	88.00	2.00	80.00						4.796	0.328
24	Wed	20	7.3			7.3	104	3.30	102.60	3.60	111.93						3.728	0.318
25	Thur	20	7.0			7.4	120	3.10	122.75	3.00	118.79						4.748	0.302
26	Fri	21	7.0			7.4	123										4.345	0.310
27	Sat	20	7.0			7.4	122										4.738	0.309
28	Sun	21	4.0			7.5	122	2.00	76.73	2.10	80.56						4.600	0.309
29	Mon	18	4.8			7.4	120	3.10	117.51	2.60	98.55			16.0			4.545	0.311
30	Tue	17	8.1			7.3	102	2.70	106.01	2.80	109.94						4.708	0.305
31	Wed	17	8.2			7.3	90	2.20	84.66	2.00	76.96						4.614	0.320
TOTAL :														11.1			164.255	10.009
MIN :		16	4.0			7.2	73	2.00		2.00				3.1	0		3.728	0.272
MAX :		21	8.3	514		7.5	123	3.28		3.28		0.05000		19.5	0		6.388	0.484
AVG :				514	27,384			2.93	128.22	2.71	117.28	0.05000	0.0027				5.299	0.323

NOTES	
Electrical Usage :	49,839
Labor :	107,980
Natural Gas :	533
Communications:	644
Chemical, Laboratory	19,105
Services & Admin. :	
Repairs, Maintenance,	28,568
Sludge (Generation &	26,748
Transportation) :	
TOTAL COSTS :	233,417
COSTS - 1,000 GAL.	1.42
TREATED :	
Non-Potable Water	8,368
Use Savings :	

12-17 Parshal Flume cleaned.

Conveyor No. 2 out of service. Sludge transported by rolloff.

PARTIAL WEEKLY AVG.NO.'s			
Date	Week No.	TSS	BOD
30-Nov	1	2.00	2.20
1-Jan	5	2.10	2.00

WEEK	1	2	3	4	5
TSS	2.06	3.26	3.28	3.28	2.42
BOD	2.16	2.52	3.04	3.28	2.30

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

Signed :

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