CITY OF BROKEN ARROW
Where opportunity lives

MONTHLY OPERATIONAL REPORT

City of Broken Arrow Lynn Lane Water Reclamation Facility

November-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	Sat	59	0.00	Cloudy	5.794	7.223	22	7.4	258	26			3.3	340				4.3	310				0.150							
2	Sun	63	0.01	Clear	6.087	7.032	22	7.5	261	34			3.4	340				4.5	340				0.150							
3	Mon	75	0.00	Clear	6.103	7.112	20	7.4	235	29	466	254	2.4	340	106	3,200	9	3.3	350	105	3,320	9	0.150	5,460	16	28.59	4.44	12,650	8,700	31
4	Tue	76	0.00	Clear	5.883	7.104	21	7.4	224	28	482	264	2.5	400	120	3,320	9	3.2	420	109	3,860	11	0.150	5,110	16	14.23	2.21			
5	Wed	74	0.00	Clear	5.642	7.137	21	7.3	240	29	384	233	1.6	400	123	3,250	12	2.8	380	112	3,380	12	0.150	6,210	16	31.26	4.85	12,225	9,050	26
6	Thu	78	0.00	P Cloudy	5.632	7.320	21	7.4	235	34	690	247	2.9	390	115	3,380	7	3.8	400	126	3,180	7	0.150	4,940	16	32.41	5.03			
7	Fri	75	0.00	Clear	5.594	6.951	22	7.4	234	10	216	150	2.9	400	126	3,180	21	3.6	400	122	3,280	22	0.150	4,290	17	15.42	2.54	11,550	9,325	19
8	Sat	76	0.00	Clear	5.452	6.977	21	7.5	260	13			3.0	420				3.7	400				0.150							
9	Sun	50	0.00	P Cloudy	5.443	6.962	20	7.4	258	17			3.3	390				4.0	430				0.150							
10	Mon	44	0.00	Clear	5.657	7.016	19	7.4	236	24	524	298	2.6	400	125	3,190	9	3.7	400	122	3,280	9	0.150	5,160	17	30.26	4.99	11,500	8,800	23
11	Tue	68	0.00	Clear	5.661	7.001	20	7.5	254	26	740	262	3.0	430	142	3,020	6	3.9	450	146	3,090	6	0.150	4,540						
12	Wed	72	0.00	Clear	5.342	6.841	20	7.4	237	24	482	274	3.2	400	127	3,150	10	4.3	400	125	3,200	10	0.150	4,070	16	35.11	5.45	12,800	9,025	29
13	Thu	79	0.00	Clear	5.420	7.070	20	7.3	230	29	460	257	3.4	480	156	3,080	10	4.2	500	151	3,310	11	0.150	4,410	16	33.94	5.27			
14	Fri	77	0.00	P Cloudy	5.252	7.086	21	7.4	234	28	450	265	3.0	500	159	3,140	11	3.8	420	130	3,240	11	0.150	4,030	16	13.68	2.12	13,525	9,350	31
15	Sat	85	0.00	Cloudy	5.405	7.170	22	7.5	262	33			2.4	480				3.1	450				0.150							
16	Sun	77	0.00	Clear	5.430	7.062	21	7.4	269	37			2.4	450				3.4	430				0.150							
17	Mon	72	0.00	Cloudy	5.596	6.993	22	7.3	238	23	348	313	2.3	520	156	3,330	14	3.3	540	155	3,480	14	0.150	4,380	16	20.42	3.17	11,800	9,075	23
18	Tue	76	0.00	Clear	5.381	7.102	22	7.3	222	33	406	341	2.4	500	163	3,060	11	3.4	570	189	3,010	11	0.150	4,020	17	32.02	5.28			
19	Wed	75	0.00	P Cloudy	5.343	6.968	20	7.5	243	29	606	306	2.5	490	159	3,080	8	3.5	480	157	3,050	8	0.150	4,330	17	15.55	2.56	12,725	9,025	29
20	Thu	67	1.33	Cloudy	5.342	6.928	21	7.4	242	30	360	306	1.9	580	153	3,800	16	3.1	550	174	3,160	13	0.135	4,650						
21	Fri	73	0.00	Clear	7.986	6.840	22	7.3	216	23	362	281	2.2	500	145	3,460	10	3.1	500	152	3,300	9	0.135	6,010				12,650	9,775	23
22	Sat	53	0.00	Cloudy	7.185	6.674	21	7.4	254	30			2.3	570				3.3	570				0.135							
23	Sun	53	0.68	Cloudy	6.317	6.806	21	7.3	233	27			2.5	550				3.7	550				0.135							
24	Mon	58	0.28	Cloudy	7.581	6.778	20	7.1	164	29	416	270	2.6	530	162	3,270	8	3.4	550	174	3,160	8	0.135	7,030				11,600	7,975	31
25	Tue	63	0.00	Cloudy	8.771	6.798	20	7.4	250	7.5	108	101	2.1	570	175	3,250	27	3.0	610	181	3,370	28	0.135	5,800						
26	Wed	49	0.00	Clear	7.368	7.052	19	7.4	258	7.5	165	136	3.2	620	185	3,350	22	4.1	670	191	3,500	23	0.135	5,220				12,825	6,550	49
27	Thu	54	0.00	Clear	6.827	7.084	20	7.4	264	5	102	143	3.1	630	209	3,010	35	4.0	610	190	3,210	37	0.135	4,660						
28	Fri	58	0.11	Clear	6.371	7.098	19	7.3	285	15	524	341	2.7	640	216	2,960	7	3.8	620	186	3,340	8	0.135	4,760				11,725	7,100	39
29	Sat	51	0.01	Cloudy	6.129	7.057	20	7.4	275	3			2.7	660				3.6	660				0.135							
30	Sun	37	0.00	Clear	6.181	6.981	18	7.5	260	38			3.3	610				4.1	610				0.135							
TOTAL :			2.42		182.175																		4.335			302.89	47.92			
MIN :		37	0.00		5.252	6.674	18	7.1	164	3	102	101	1.6		106	2,960	6	2.8		105	3,010	6	0.135	4,020	16	19.00				19
MAX :		85	1.33		8.771	7.320	22	7.5	285	38	740	341	3.4		216	3,800	35	4.5		191	3,860	37	0.150	7,030	17	35.11	5.45			49
AVG :		66			6.073	7.007	21			24	415	252			151	3,224				150	3,286		0.145	4,954	16	25.24	3.99			30

		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	Sat	21	7.9			7.3	91										5.177	0.299
2	Sun	21	8.0	518	23,385	7.3	82	3.50	158.01	3.10	139.95	0.00005	0.0023				5.413	0.322
3	Mon	20	7.8			7.3	86	6.00	271.22	4.00	180.81			2419.6			5.420	0.302
4	Tue	21	7.4			7.3	96	8.90	390.65	3.60	158.02						5.263	0.306
5	Wed	21	7.3			7.2	86	2.40	101.62	2.00	84.68			11.0			5.077	0.309
6	Thu	22	7.4			7.2	79	2.80	117.20	2.00	83.72						5.019	0.318
7	Fri	22	7.3			7.2	76										5.006	0.308
8	Sat	21	7.5			7.2	76										4.910	0.307
9	Sun	20	7.6			7.2	70	2.40	98.38	2.00	81.98						4.915	0.306
10	Mon	18	7.7			7.2	73	2.40	103.44	2.00	86.20			9.7			5.168	0.305
11	Tue	19	8.0			7.2	70	2.50	102.71	2.00	82.17						4.926	0.281
12	Wed	19	8.0			7.1	71	2.00	85.43	2.00	85.43						5.122	0.324
13	Thu	20	7.8			7.1	64	2.50	103.17	2.00	82.53						4.948	0.302
14	Fri	21	7.3			7.1	56										4.849	0.295
15	Sat	22	7.2			7.1	60										5.009	0.305
16	Sun	21	7.3			7.2	63	2.00	80.18	2.00	80.18						4.807	0.279
17	Mon	22	7.2			7.2	76	2.00	88.24	2.00	88.24			4.1			5.290	0.313
18	Tue	21	7.0			7.3	87	11.70	490.91	5.10	213.99						5.031	0.299
19	Wed	21	6.4			7.3	75	2.00	83.45	2.00	83.45						5.003	0.300
20	Thu	22	7.1			7.2	70	2.00	82.43	2.00	82.43						4.942	0.301
21	Fri	22	6.8			7.2	80										7.735	0.306
22	Sat	21	7.6			7.3	96										6.795	0.291
23	Sun	20	7.4			7.4	94	2.00	101.36	2.00	101.36						6.077	0.312
24	Mon	20	6.6			7.2	93	2.50	151.79	2.00	121.43			5.2			7.280	0.303
25	Tue	21	7.3			7.4	110	2.00	144.57	2.00	144.57						8.667	0.292
26	Wed	19	7.7			7.4	117	2.00	120.03	2.00	120.03						7.196	0.300
27	Thu	19	7.7			7.4	116	2.00	111.14	2.20	122.25						6.663	0.299
28	Fri	19	7.8			7.4	114										6.211	0.335
29	Sat	20	7.6			7.3	103										6.012	0.256
30	Sun	19	8.0			7.3	98	2.00	101.80	2.20	111.98						6.103	0.289
TOTAL :														22.3		0	170.034	9.064
MIN :		18	6.4			7.1	56	2.00		2.00				4.1	0		4.807	0.256
MAX :		22	8.0	518		7.4	117	4.72		2.94		0.05000		2419.6	0		8.667	0.335
AVG :				518	23,385			3.22	147.03	2.39	111.21	0.05000	0.0023				5.668	0.302

Electrical Usage :	44,940
Labor :	69,989
Natural Gas :	315
Communications:	303
Chemical, Laboratory Supplies & Services :	18,415
Repairs, Maintenance, Services & Admin. :	43,982
Sludge (Generation & Transportation) :	11,871
TOTAL COSTS :	189,814
COSTS - 1,000 GAL. TREATED :	1.12
Non-Potable Water Use Savings :	7,578

NOTES

11-3 UV Reactor lamps shut down to a temporary low flow condition during a clarifier cleaning process. Lab Operator sampling E.Coli at the time.

11-20 No. 2 Conveyor failed due to ripped lining. Take out of service. Use mini-conveyors to dewater sludge and load to rolloffs.

PARTIAL WEEKLY AVG.NO.'s

Date	Week No.	TSS	BOD
TSS	4.72	2.36	3.94	2.10
BOD	2.94	2.00	2.62	2.04

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

Signed : David Handy

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