CITY OF BROKEN ARROW
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MONTHLY OPERATIONAL REPORT

City of Broken Arrow Lynn Lane Water Reclamation Facility

August-19

		WEATHER			INFLUENT								OXIDATION DITCH					SLUDGE				FINAL EFFLUENT															STREAM SURVEILLANCE										
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)	WAS (MGD)	CAKE (%)	LANDFILL (Tons)	LANDFILL (D.M. Tons)	°C	D.O. (mg/L)	TDS (mg/L)	TDS (lbs)	pH	Alk.	TSS (mg/L)	TSS (lbs)	BOD (mg/L)	BOD (lbs)	Hg	Hg (lbs.)	E.Coli	Cl2 Res	Flow (MGD)	°C Upstr.	°C Dnstr.	D.O. Upstr.	D.O. Dnstr.	pH Upstr.	pH Dnstr.	App. Upstr.	App. Dnstr.	Fec. Coli. Upstr.	Fec. Coli. Dnstr.	Hrdss.
1	Thur	92	0.01	cloudy	4.564	3.162	24	7.4	349	15	214	193	0.1	280	94	2,970	12	0.204	18	19.61	3.42	24	6.9			7.5	192	2.00	47.74	4.00	95.48				0.05	2.862											
2	Fri	81	0.31	cloudy	4.486	3.074	24	7.5	358	18	262	288	0.1	250	137	1,820	6	0.201	18	35.08	6.13	24	6.8			7.5	198								0.05	2.824											
3	Sat	86	0.01	cloudy	4.528	2.912	23	7.3	276	16			0.2	280				0.198				24	6.8			7.5	185								0.05	2.873											
4	Sun	92	0.00	cloudy	4.513	2.866	23	7.3	270	17			0.1	260				0.206				24	6.7	385	9,061	7.4	169	2.00	47.07	5.00	117.68	0.00005	0.0012		0.05	2.822											
5	Mon	95	0.00	cloudy	4.595	2.773	24	7.4	327	16	182	256	0.1	270	136	1,989	10	0.202	17			23	6.9			7.5	171	2.00	48.14	7.00	168.48			1.0	0.05	2.886											
6	Tue	98	0.00	p. cloudy	4.693	2.753	24	7.4	312	12	324	248	0.1	250	82	3,065	8	0.224	17	33.65	5.55	24	6.7			7.5	198	2.00	49.02	6.00	147.07			1.0	0.05	2.939											
7	Wed	100	0.00	clear	4.459	3.136	24	7.2	258	20	266	299	0.1	300	107	2,800	9	0.196				24	6.7			7.5	188	2.00	46.82	12.00	280.92				0.05	2.807											
8	Thur	82	0.01	p. cloudy	4.390	2.843	23	7.3	299	10	182	226	0.1	350	149	2,350	12	0.205	17	18.66	3.08	24	6.7			7.5	191	2.00	46.27	8.00	185.08				0.05	2.774											
9	Fri	83	1.35	cloudy	4.517	3.318	24	7.4	305	14	272	211	0.2	350	120	2,915	9	0.203	17	40.09	6.61	24	6.5			7.5	195								0.05	2.851											
10	Sat	97	0.06	cloudy	5.718	3.204	23	7.4	257	12			0.1	350				0.197				24	6.8			7.4	164								0.05	3.553											
11	Sun	98	0.00	clear	5.060	3.187	24	7.3	266	10			0.1	360				0.200				25	6.6			7.5	165	3.00	79.19	7.00	184.77				0.05	3.165											
12	Mon	98	0.00	clear	4.895	3.180	24	7.3	312	12	212	243	0.1	320	97	3,285	13	0.212	16	24.28	3.77	24	6.8			7.5	172	2.00	51.12	6.00	153.37			2.0	0.05	3.065											
13	Tue	88	0.04	cloudy	4.802	3.216	24	7.3	271	15	196	261	0.1	300	85	3,545	15	0.196	16	17.19	2.67	25	6.6			7.5	196	2.00	50.39	5.00	125.98			1.0	0.05	3.021											
14	Wed	94	0.00	cloudy	4.517	3.060	24	7.4	341	17	210	240	0.1	310	105	2,960	12	0.218	15	40.11	5.84	24	6.9			7.5	186	2.00	47.27	7.00	165.45				0.05	2.834											
15	Thur	96	0.00	p. cloudy	4.585	3.007	24	7.4	292	19	206	250	0.2	330	113	2,930	12	0.160	15	20.74	3.02	26	6.9			7.6	190								0.05	2.880											
16	Fri	96	0.00	p. cloudy	4.533	2.776	23	7.3	298	19	220	253	0.1	310	100	3,115	12	0.228	17	24.38	4.02	24	6.5			7.4	190								0.05	4.533											
17	Sat	97	0.00	clear	4.419	2.736	23	7.2	260	19			0.1	300				0.191				26	6.7			7.4	165	3.00	68.40	5.00	114.01				0.05	2.734											
18	Sun	92	0.03	clear	4.383	2.792	23	7.2	258	18			0.1	280				0.179				25	6.6			7.4	156	2.00	46.62	6.00	139.86				0.05	2.795											
19	Mon	101	0.00	clear	4.744	2.704	24	7.4	305	16	204	245	0.1	250	75	3,340	14	0.536	16	16.77	2.60	24	6.7			7.6	165	2.00	48.87	5.00	122.18			1.0	0.05	2.930											
20	Tue	101	0.00	clear	4.591	3.043	24	7.3	280	18	246	245	0.1	250	124	2,010	7	0.262	16	42.88	6.66	25	6.8			7.4	182	4.00	95.91	6.00	143.87			1.0	0.05	2.875											
21	Wed	98	0.35	clear	4.616	2.945	24	7.3	297	19	256	299	0.2	290	124	2,330	8	0.212	17	22.86	3.77	25	6.7			7.4	188	4.00	96.94	7.00	169.65				0.05	2.906											
22	Thur	84	1.38	cloudy	4.589	3.355	24	7.4	321	8	130	215	0.2	260	87	3,005	20	0.231	16	20.77	3.22	24	6.9			7.5	203	2.00	48.32	8.00	193.29				0.05	2.897											
23	Fri	80	2.72	cloudy	6.278	3.040	24	7.0	140	14	644	285	0.2	170	64	2,640	3	0.220	16	40.90	6.35	24	6.6			7.3	162								0.05	3.923											
24	Sat	89	0.00	cloudy	7.438	4.775	24	7.3	246	8			0.9	210				0.217				24	7.0			7.4	125								0.05	4.609	PARTIAL WEEKLY AVG.NO.'s										
25	Sun	87	0.64	cloudy	5.774	4.876	23	7.3	264	8			1.0	230				0.226				24	6.9			7.3	155	2.00	60.20	6.00	180.59				0.05	3.609	Date	Week No.		TSS	BOD						
26	Mon	95	0.02	clear	6.486	4.929	24	7.3	268	10	244	191	0.2	210	65	3,215	8	0.229	17	20.37	3.36	24	6.8			7.4	151	2.00	66.74	6.00	200.21			4.0	0.05	4.001											
27	Tue			cloudy	6.416	4.942	24	7.1	174	10	186	201	0.2	200	44	4,589	15	0.215	17	21.18	3.49	24	6.5			7.4	169	2.00	66.77	3.00	100.16			1.0	0.05	4.003											
28	Wed	89	0.00	p. cloudy	4.968	4.926	23	7.3	252	9	292	170	0.1	190	82	2,319	6	0.229	19	15.87	2.93	23	7.3			7.4	142	2.00	52.01	5.00	130.02				0.05	3.118											
29	Thur	91	0.00	p. cloudy	5.107	4.939	24	7.5	312	15	84	134	0.1	190	59	3,194	30	0.223	19	36.42	6.71	25	6.8			7.5	163	2.00	53.84	3.00	80.76				0.05	3.228											
30	Fri	79	0.85	cloudy	5.690	3.737	24	7.1	168	19	306	179	0.2	180	41	4,407	10	0.221				24	6.6			7.4	174								0.05	3.552											
31	Sat	82	0.01	cloudy	7.096	3.763	23	7.3	262	7			0.8	210				0.227				23	7.2			7.5	156								0.05	4.314											
TOTAL :			7.79		157.450															511.81	83.20													1.3		100.183	TSS	2.00	2.40	2.80	2.00						
MIN :		79	0.00		4.383	2.704	23	7.0	140	7	84	134	0.1	150	41	1,820	3	0.160	15	26.00		23	6.5			7.3	125	2.00		3.00				1.0	0.05	2.734	BOD	7.60	6.00	6.40	4.60						
MAX :		101	2.72		7.438	4.942	24	7.5	358	77	644	299	1.0	200	149	4,589	30	0.536	19	42.88	6.71	26	7.3	385		7.6	203	2.80		7.60		0.05000		4.0	0.05	4.609											
AVG :		91			5.079	3.418	24			14	243	233		193	95			0.222	17	26.94	4.38			385	9,061			2.29	57.98	6.05	152.33	0.05000	0.0012			3.232											

REMARKS : Grab sample on 08-22-19 for Settleable Solids.
On 08-18-19 Influent totalizer was used due to Effluent totalizer being down
Missed BOD/TSS sample on 09-15-19; Retake BOD/TSS on 09-17-19

Electrical Costs :	19,034.24
Labor Costs :	42,619.03
Chemicals, Lab Supplies & Services :	16,932.05
Repairs, Maint., Services & Admin. :	16,501.58
Sludge (Generation & Transportation) :	14,800.01
TOTAL COSTS :	109,886.91
COST / TRTD. 1000 GAL :	1.10

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

Signed : David Handy

Title : LLWRRF Manager