



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Columbia Blvd. Wastewater Treatment Plant, 5001 N. Columbia Blvd., Portland, OR 97203-2098
(503) 823-2400, FAX (503) 823-2409

12 October 1994

Lyle Christensen, DEQ Northwest Region
2020 SW Fourth Avenue, Suite 400
Portland OR 97201-4959

Dear Mr. Christensen,

I am enclosing the bioassay results for the 3rd quarter. There are two report documents instead of the usual one document. The contract lab tested successfully with Ceriodaphnia and Pimephales on the original sample but was unsuccessful with Selenastrum. We resampled later for Selenastrum.

Pimephales showed No Observable Effect on growth and survival in 100% effluent. Ceriodaphnia showed Lowest Observable Effect for growth and survival in 50% effluent. Selenastrum showed Lowest Observable Effect in less than 6.25% effluent. However, our ZID dilution is 1.12% and our MZ dilution is 0.53%, both well below these LOECs.

We are missing BOD values for chlorinated effluent for September 15, 16, 17, and 22.

We are continuing to experience sampling problems with that particular automatic sampler. On these dates the machine did not sample sufficient quantity to support both TSS and BOD lab tests. Since TSS can be performed with smaller aliquots, we had enough sample for TSS but not enough left over for BOD when the sampler came up short.

The reason for the short sample quantities were varied. Filters have plugged; volume settings seemed to have mysteriously changed downward; fluctuating plant water pressures have altered aliquot size. We are continuing to address each problem.

Please call me at 823-2318 if you have questions.

Sincerely,

Larry Erickson
Operations Manager
Tryon Creek WWTP

TRYON CREEK PLANT: CITY OF PORTLAND CLACKAMAS COUNTY
PLANT TYPE: ACTIVATED SLUDGE

PERMIT NO. 101012 (FILE 70735)

POPULATION SERVED: 31000

RECEIVING STREAM: WILLAMETTE RIVER

WASTEWATER TREATMENT PLANT MONITORING REPORT

WASTEWATER TREATMENT PROCESS CONTROL

NUTRIENTS

Date	FLOW		PLANT INFLUENT				PLANT EFFLUENT												ANAEROBIC DIGESTER				AERATION BASIN			Sldg Disp	Flow to CL2	PLANT EFFLUENT						
																			Vol. Sol. Red. (%)				####	Sus								Pre cip	Off Site	CL2 Str
	pH	CO2 %	Alk mg/l	Temp oF	SVI	Sol mg/l	DO mg/l																											
	Oct-94	INF	EFF	pH	BOD mg/l	Sol mg/l	Temp oC	pH	DO mg/l	BOD mg/l	Rem %	Dis lbs	TSS mg/l	Rem %	Dis lbs	Fed lbs	Res mg/l	Coli / 100ml	Fec G.M.															
1	4.49	4.46	7.3	200	196	20	7.4	7.2	10	95	372	7	96	260	270	0.63								265	1643	0.7	0.00	0.030	0.00					
2	4.45	4.43	7.5	204	208		7.4		6	97	222	2	99	74	140	0.57								220	1693	0.4	0.00	0.018	0.00					
3	4.49	4.43	7.7	204	196	19	7.6	6.9	5	98	185	3	98	111	130	0.47	48							220	1512		0.00	0.062	0.00					
4	4.39	4.37	7.1	192	160		7.3		11	94	401	7	96	255	100	0.41	10							216	1426		0.00	0.018	0.00	2.72	12.20	8.87	4.52	
5	4.47	4.45	7.8	186	168		7.5		6	97	222	3	98	111	110	0.41	13							212	1610	0.3	0.00	0.024	0.00					
6	4.36	4.34	7.6	186	184	19	7.3	7.1	6	97	217	2	99	72	130	0.41								162	1403	0.8	0.00	0.018	0.00					
7	4.53	4.51	7.5	192	148	19	7.4	7.2	5	97	188	2	99	75	130	0.37	22							192	1340	0.6	0.00	0.024	0.00					
8	4.54	4.53	7.3	168	146		7.3		6	96	227	4	97	151	140	0.41		19						243	1565		0.00	0.012	0.00					
9	4.36	4.34	7.2	210	208		7.2		6	97	217	4	98	145	130	0.40								228	1545		0.00	0.024	0.00					
10	4.50	4.47	7.8	222	318		7.5		6	97	224	4	99	149	140	0.48	3							212	1423	0.6	0.00	0.032	0.00					
11	4.17	4.15	7.6	198	214	19	7.3	7.0	8	96	277	4	98	139	120	0.60	2							232	1368	0.5	0.00	0.018	0.00	2.91	12.00	10.40	11.57	
12	4.36	4.34	7.5	192	211	19	7.4	7.2	7	96	253	4	98	145	130	0.46	30							241	1502	0.4	0.00	0.024	0.00					
13	4.36	4.32	7.5	210	226	19	7.4	7.2	7	97	252	5	98	180	140	0.53								223	1369	1.0	0.05	0.040	0.00					
14	4.36	4.35	7.9	216	208		7.4					7	97	254	250	0.66								216	1379	0.4	0.20	0.010	0.00					
15	4.37	4.33	7.4	210	192	19	7.3	7.2	8	96	289	5	97	181	130	0.53		6						226	1435	1.2	0.00	0.036	0.00					
16	4.52	4.48	7.5	228	200	18	7.4	6.5				4	98	150	110	0.52								219	1509	0.7	0.00	0.036	0.00					
17	4.32	4.29	8.0	264	252	18	7.5	7.2	12	95	429	6	98	214	110	0.48	6							191	1353	0.8	0.00	0.035	0.00					
18	4.30	4.28	7.9	174	216	18	7.4	7.9	10	94	357	6	97	214	100	0.61	27							197	1469	1.1	0.00	0.018	0.00	2.70	13.60	13.10	4.09	
19	4.20	4.20	7.6	234	274		7.2		8	97	280	4	99	140	250	0.31	4							267	1493	0.1	0.00	0.000	0.00					
20	4.59	4.57	7.3	204	238		7.3		11	95	419	6	97	229	100	0.53								198	1169	0.2	0.12	0.021	0.00					
21	4.72	4.72	7.5	270	220		7.4		14	95	551	7	97	276	130	0.40								190	1387	0.3	0.10	0.000	0.00					
22	4.11	4.11	7.6	204	200		7.3		14	93	480	5	98	171	140	0.53		9						179	1388	0.1	0.00	0.000	0.00					
23	4.45	4.45	7.7	228	230		7.3		15	93	557	6	97	223	160	0.43								189	1344	0.4	0.00	0.000	0.00					
24	4.44	4.38	7.1	258	362		7.4		14	95	511	9	98	329	140	0.46	3							178	1602	0.4	0.00	0.062	0.00					
25	4.40	4.35	7.4	198	208		7.4		16	92	581	10	95	363	150	0.36	25							184	1431	0.3	0.16	0.045	0.00	2.28	14.50	10.80	3.27	
26	6.46	6.41	7.6	180	282		7.3					12	96	641	150	0.31	14							221	1113	0.3	1.95	0.052	0.00					
27	18.22	18.17	7.0		251		7.0					23	91	3485	220	0.25	600							155	1249	3.0	3.80	0.052	0.00					
28	7.24	7.20	7.2	120	90		7.0		6	95	361	8	91	481	250	0.61	570							162	1574	0.9	0.10	0.036	0.00					
29	5.41	5.39	7.1	126	118	17	7.2		10	92	449	8	93	359	130	0.48	5	35						133	1798	1.1	0.00	0.024	0.00					
30	5.17	5.17	7.0	180	140	17	7.3	7.1	10	94	431	6	96	259	170	0.41								134	1526	1.6	0.12	0.000	0.00					
31	9.55	9.52	7.3	180	1154		7.2		20	89	1589	9	99	715	210	0.53	3							134	1346	0.1	2.85	0.026	0.00					
Max	18.22	18.17	8.0	270	1154	20	7.6	7.9	20	98	1589	23	99	3485	270	0.66	600	102	0.0	0	0	0		267	1798	3.0	3.80	0.062	0.00	2.91	14.50	13.10	11.57	
Min	4.11	4.11	7.0	120	90	17	7.0	6.5	5	89	185	2	91	72	100	0.25	2	6	0.0	0	0	0		133	1113	0.1	0.00	0.000	0.00	2.28	12.00	8.87	3.27	
Avg	5.24	5.21		201	239	19		7.1	10	95	390	6	97	340	152	0.47	15	34	####	####	####	####		201	1450	0.7	0.30	0.026	0.00	2.65	13.08	10.79	5.86	
Sum	162.30	161.50													4710																			

PLANT EFFLUENT PERMIT STANDARDS: pH 6.0-9.0; Fecal Coli 200/100 CL2 Res. 1.0 (Daily Max)
 *Sus Sol 20/ 30 mg/l Sus Sol Discharged 1384/ 2077 lbs
 *BOD 20/ 30 mg/l BOD Discharged 1384/ 2077 lbs
 *May 1 - October 31 / November 1 - April 30

I certify that I am familiar with the information contained in this report and that to the best of my knowledge such information is true and complete.

Name and Title: Larry K. Erickson
Operations Manager

Signature

Larry K. Erickson

Remarks: (Improvements, Operational Changes, Weed Control Programs, Etc.)

Influent BOD5 is a Blended Sample Sludge Hauled to Columbia Blvd WTP

All Test Data Subject to Variability of Test

Page 1 Date Oct-94									
	Plant Effluent Nutrients				Flow		Weather		
	Total P	NH3-N	NO3 + NO2-N	TKN	Portland	Lake Oswego	Temperature		Precip
	mg/l	mg/l	mg/l	mg/l	mgd	mgd	Max o F	Min o F	"
10/1/94					2.08	2.41	78	51	0.00
10/2/94					2.10	2.35	71	42	0.00
10/3/94					2.08	2.41	75	45	0.00
10/4/94	2.72	8.87	4.52	12.20	2.04	2.35	75	48	0.00
10/5/94					2.09	2.38		42	0.00
10/6/94					2.03	2.33	72	48	0.00
10/7/94					2.22	2.31	73	46	0.00
10/8/94					2.20	2.34	81	43	0.00
10/9/94					2.14	2.22	76	55	0.00
10/10/94					2.11	2.39	63	47	0.00
10/11/94	2.91	10.40	11.57	12.00	1.91	2.26			0.00
10/12/94					2.02	2.34			0.00
10/13/94					2.04	2.32	68	36	0.05
10/14/94					2.07	2.29	59	46	0.20
10/15/94					2.07	2.30	63	44	0.00
10/16/94					2.15	2.37	63	38	0.00
10/17/94					2.12	2.20	58	39	0.00
10/18/94	2.70	13.10	4.09	13.60	2.03	2.27	62	36	0.00
10/19/94					1.97	2.23	66	40	0.00
10/20/94					2.18	2.41	66	40	0.12
10/21/94					2.38	2.34	66	48	0.10
10/22/94					1.81	2.30	64	41	0.00
10/23/94					2.19	2.26	68	41	0.00
10/24/94					2.10	2.34	71	41	0.00
10/25/94	2.28	10.80	3.27	14.50	2.07	2.33	66	40	0.16
10/26/94					3.45	3.01	55	48	1.95
10/27/94					8.20	10.02	50	48	3.80
10/28/94					2.33	4.91	62	46	0.10
10/29/94					1.98	3.43	58	40	0.00
10/30/94					1.97	3.20	59	43	0.12
10/31/94					3.77	5.78	43	37	2.85
Max	2.91	13.10	11.57	14.50	8.20	10.02	81	55	3.80
Min	2.28	8.87	3.27	12.00	1.81	2.20	43	36	0.00
Avg	2.65	10.79	5.86	13.08	2.38	2.85	65	43	0.30
Sum					73.90	88.40			9.45

Page 2	PRIMARY TREATMENT															
	INFLUENT								EFFLUENT							
	Date Oct-94	Flow		Susp Sol.		BOD5		Pop	Temp	pH	Susp Sol.		BOD5		Det	No.
		mgd	mg/l	lbs	mg/l	lbs	Equiv	oC		mg/l	lbs	mg/l	lbs	Time hrs	Basins On	
10/1/94	4.49	196	7340	200	7489	44055	20	7.3					3.8	3		
10/2/94	4.45	208	7720	204	7571	44536		7.5					3.8	3		
10/3/94	4.49	196	7340	204	7639	44936	19	7.7					3.8	3		
10/4/94	4.39	160	5858	192	7030	41351		7.1					3.9	3		
10/5/94	4.47	168	6263	186	6934	40788		7.8					3.8	3		
10/6/94	4.36	184	6691	186	6763	39785	19	7.6					3.9	3		
10/7/94	4.53	148	5591	192	7254	42669	19	7.5					3.8	3		
10/8/94	4.54	146	5528	168	6361	37418		7.3					3.7	3		
10/9/94	4.36	208	7563	210	7636	44918		7.2					3.9	3		
10/10/94	4.50	318	11935	222	8332	49010		7.8					3.8	3		
10/11/94	4.17	214	7442	198	6886	40506	19	7.6					4.1	3		
10/12/94	4.36	211	7672	192	6982	41068	19	7.5					3.9	3		
10/13/94	4.36	226	8218	210	7636	44918	19	7.5					3.9	3		
10/14/94	4.36	208	7563	216	7854	46202		7.9					3.9	3		
10/15/94	4.37	192	6998	210	7654	45021	19	7.4					3.9	3		
10/16/94	4.52	200	7539	228	8595	50558	18	7.5					3.8	3		
10/17/94	4.32	252	9079	264	9512	55951	18	8.0					3.9	3		
10/18/94	4.30	216	7746	174	6240	36706	18	7.9					4.0	3		
10/19/94	4.20	274	9598	234	8197	48215		7.6					4.0	3		
10/20/94	4.59	238	9111	204	7809	45937		7.3					3.7	3		
10/21/94	4.72	220	8660	270	10628	62521		7.5					3.6	3		
10/22/94	4.11	200	6855	204	6993	41133		7.6					4.1	3		
10/23/94	4.45	230	8536	228	8462	49775		7.7					3.8	3		
10/24/94	4.44	362	13405	258	9554	56198		7.1					3.8	3		
10/25/94	4.40	208	7633	198	7266	42740		7.4					3.9	3		
10/26/94	6.46	282	15193	180	9698	57046		7.6					3.5	4		
10/27/94	18.22	251	38141					7.0					1.6	5		
10/28/94	7.24	90	5434	120	7246	42622		7.2					3.1	4		
10/29/94	5.41	118	5324	126	5685	33441	17	7.1					4.2	4		
10/30/94	5.17	140	6036	180	7761	45654	17	7.0					4.4	4		
10/31/94	9.55	1154	91913	180	14336	84332		7.3					1.8	3		
Max	18.22	1154	91913	270	14336	84332	20	8.0	0	0	0	0	4.4	5		
Min	4.11	90	5324	120	5685	33441	17	7.0	0	0	0	0	1.6	3		
Avg	5.24	239	11610	201	7933	46667	19		####	####	####	####	3.7	3		
Sum	162.30		359925		238002				0		0					

Page 3												
	SECONDARY EFFLUENT											
	Date Oct-94	Flow	Susp Sol.		BOD5		FCSS		SBD	RSSS	Ovr-flow Rate	No. Basins
		mgd	mg/l	lbs	mg/l	lbs	mg/l	lbs	ft	mg/l	gpd / ft2	On
10/1/94	4.46	7	260	40	1488	1553	23575	4.0		296		2
10/2/94	4.43	6	222	17	628	1905	28918	5.3		294		2
10/3/94	4.43	6	222	19	702	2017	30618	4.6		294		2
10/4/94	4.37	16	583	34	1240	1700	25806	3.5		290		2
10/5/94	4.45	10	371	23	853	1708	25927	4.0		295		2
10/6/94	4.34	8	290	23	833	1535	23301	3.2		288		2
10/7/94	4.51	7	263	22	827	1572	23863	3.2		299		2
10/8/94	4.53	6	227	20	755	1565	23757	3.8		300		2
10/9/94	4.34	10	362	18	651	1607	24394	3.5		288		2
10/10/94	4.47	9	335	26	969	1647	25001	3.8		296		2
10/11/94	4.15	8	277	24	831	1517	23028	3.2		275		2
10/12/94	4.34	9	325	27	976	1257	19081	2.4		288		2
10/13/94	4.32	8	288	26	937	924	14026	2.2		287		2
10/14/94	4.35	12	435	10	363	1496	22709	2.4		288		2
10/15/94	4.33	10	361	27	976	901	13677	2.4		287		2
10/16/94	4.48	13	486	28	1047	1689	25639	3.5		297		2
10/17/94	4.29	18	643	34	1215	1516	23013	2.8		284		2
10/18/94	4.28	15	536	28	1000	1388	21070	2.4		284		2
10/19/94	4.20	14	490	32	1121	852	12933	2.3		279		2
10/20/94	4.57	14	534	30	1143	2057	31225	2.8		303		2
10/21/94	4.72	16	630	34	1338	1206	18307	2.2		313		2
10/22/94	4.11					1016	15423	2.8		273		2
10/23/94	4.45	14	520	32	1188	1415	21480	2.9		295		2
10/24/94	4.38	22	803	30	1095	1733	26307	3.3		290		2
10/25/94	4.35	17	617	10	363	1337	20296	2.8		289		2
10/26/94	6.41	23	1229	38	2031	1689	25639	3.7		425		2
10/27/94	18.17	12	1818			2179	33077	9.0		1205		2
10/28/94	7.20	8	481	19	1142	1718	26079	3.6		478		2
10/29/94	5.39	9	404	11	494	1267	19233	2.4		357		2
10/30/94	5.17	16	690	14	604	1625	24668	2.7		343		2
10/31/94	9.52	13	1033	20	1589	2189	33229	5.0		632		2
Max	18.17	23	1818	40	2031	2189	33229	9.0	0	1205		2
Min	4.11	6	222	10	363	852	12933	2.2	0	273		2
Avg	5.21	12	525	25	979	1541	23397	3.4	#DIV/0!	346		2
Sum	161.50		15736		28398							

											Fecal Coliform Count G Ave				
Page 4											164 54 78	89			
	PLANT EFFLUENT														
	Date Oct-94	FLOW	SUS SOL			BOD5			CL2				DO	Ph	FLOW
	mgd	mg/l	lbs	% Rem	mg/l	lbs	% Rem	Contact hrs	Feed lbs/day	Res mg/l			mg/l	SU	mgd
10/1/94	4.46	7	260	96	10	372	95	3.8	270	0.63		102	7.2	7.4	0.00
10/2/94	4.43	2	74	99	6	222	97	3.8	140	0.57				7.4	0.00
10/3/94	4.43	3	111	98	5	185	98	3.8	130	0.47	48		6.9	7.6	0.00
10/4/94	4.37	7	255	96	11	401	94	3.9	100	0.41	10			7.3	0.00
10/5/94	4.45	3	111	98	6	222	97	3.8	110	0.41	13			7.5	0.00
10/6/94	4.34	2	72	99	6	217	97	3.9	130	0.41			7.1	7.3	0.00
10/7/94	4.51	2	75	99	5	188	97	3.7	130	0.37	22		7.2	7.4	0.00
10/8/94	4.53	4	151	97	6	227	96	3.7	140	0.41		19		7.3	0.00
10/9/94	4.34	4	145	98	6	217	97	3.9	130	0.40				7.2	0.00
10/10/94	4.47	4	149	99	6	224	97	3.8	140	0.48	3			7.5	0.00
10/11/94	4.15	4	139	98	8	277	96	4.1	120	0.60	2		7.0	7.3	0.00
10/12/94	4.34	4	145	98	7	253	96	3.9	130	0.46	30		7.2	7.4	0.00
10/13/94	4.32	5	180	98	7	252	97	3.9	140	0.53			7.2	7.4	0.00
10/14/94	4.35	7	254	97				3.9	250	0.66				7.4	0.00
10/15/94	4.33	5	181	97	8	289	96	3.9	130	0.53		6	7.2	7.3	0.00
10/16/94	4.48	4	150	98				3.8	110	0.52			6.5	7.4	0.00
10/17/94	4.29	6	214	98	12	429	95	3.9	110	0.48	6		7.2	7.5	0.00
10/18/94	4.28	6	214	97	10	357	94	3.9	100	0.61	27		7.9	7.4	0.00
10/19/94	4.20	4	140	99	8	280	97	4.0	250	0.31	4			7.2	0.00
10/20/94	4.57	6	229	97	11	419	95	3.7	100	0.53				7.3	0.00
10/21/94	4.72	7	276	97	14	551	95	3.6	130	0.40				7.4	0.00
10/22/94	4.11	5	171	98	14	480	93	4.1	140	0.53		9		7.3	0.00
10/23/94	4.45	6	223	97	15	557	93	3.8	160	0.43				7.3	0.00
10/24/94	4.38	9	329	98	14	511	95	3.8	140	0.46	3			7.4	0.00
10/25/94	4.35	10	363	95	16	581	92	3.9	150	0.36	25			7.4	0.00
10/26/94	6.41	12	641	96				2.6	150	0.31	14			7.3	0.00
10/27/94	18.17	23	3485	91				0.9	220	0.25	600			7.0	0.00
10/28/94	7.20	8	481	91	6	361	95	2.3	250	0.61	570			7.0	0.00
10/29/94	5.39	8	359	93	10	449	92	3.1	130	0.48	5	35		7.2	0.00
10/30/94	5.17	6	259	96	10	431	94	3.3	170	0.41			7.1	7.3	0.00
10/31/94	9.52	9	715	99	20	1589	89	1.8	210	0.53	3			7.2	0.00
Max	18.17	23	3485	99	20	1589	98	4.1	270	0.66	600.0	102.4	7.9	7.6	0.00
Min	4.11	2	72	91	5	185	89	0.9	100	0.25	2.0	5.6	6.5	7.0	0.00
Avg	5.21	6	340	97	10	390	95	3.6	152	0.47	14.9	34.2	7.1		0.00
Sum	161.50		10550			10541			4710						0.00

[illegible]

ater When Digesters Are Back On Line (Delete Heading Row In EL7)

Page 7	SLUDGE PROCESSING													
	Thickened Primary Sludge				WAS			Gravity Belt			TWAS			TPS + Twas
	Dig Feed gal	Tot Sol %	Vol Sol %	Vol Content %	Flow mgd	Susp. Sols mg/l lbs	Capture %	Filtrate mg/l	Poly lbs	Total Sols. %	lbs	Gal Hauled	Sludge Disp Off Site MGD	
Date Oct-94														
10/1/94					0.000	0					0	0	0.0300	
10/2/94		4.33	3.71	85.6	0.000	0					0	0	0.0180	
10/3/94					0.049	10320	4184				5.70	6698	14090	0.0621
10/4/94					0.000	12340	0				6.25	0	0	0.0180
10/5/94					0.000	10960	0				5.17	0	0	0.0240
10/6/94					0.000	9928	0				4.27	0	0	0.0180
10/7/94					0.000	11400	0				5.27	0	0	0.0240
10/8/94					0.000	11660	0				4.87	0	0	0.0120
10/9/94					0.000	0					0	0	0	0.0240
10/10/94		5.77	4.97	86.2	0.082						4.70	7671	19570	0.0316
10/11/94					0.000	0					0	0	0	0.0180
10/12/94					0.000	11380	0				0	0	0	0.0240
10/13/94					0.052	13900	6042				4.99	6530	15690	0.0397
10/14/94					0.033	12720	3547				4.56	3803	10000	0.0100
10/15/94					0.000	14667	0				4.43	0	0	0.0360
10/16/94					0.000	1290	0				0	0	0	0.0360
10/17/94					0.108						5.46	15879	34870	0.0349
10/18/94					0.000	9950	0				5.18	0	0	0.0180
10/19/94					0.000	12990	0				4.83	0	0	0.0000
10/20/94					0.075	11400	7133				4.12	7106	20680	0.0207
10/21/94					0.000	0					0	0	0	0.0000
10/22/94					0.000	0					0	0	0	0.0000
10/23/94					0.000	0					0	0	0	0.0000
10/24/94					0.065	12100	6598				4.49	9845	26290	0.0623
10/25/94					0.039	12800	4112				5.30	4005	9060	0.0451
10/26/94					0.052	12400	5330						16430	0.0524
10/27/94					0.069	11940	6828				4.06	5370	15860	0.0519
10/28/94					0.061	13160	6677				5.84	8597	17650	0.0357
10/29/94					0.000	0					0	0	0	0.0240
10/30/94					0.000	0					0	0	0	0.0000
10/31/94					0.061	13990	7150				5.95	10004	20160	0.0262
Max	0	5.77	4.97	86.2	.108	14667	7150	0.00	0		6.25	15879	34870	0.062
Min	0	4.33	3.71	85.6	.000	1290	0	0.00	0		4.06	0	0	0.000
Avg	#DIV/0!	5.05	4.34	85.9	.024	11565	1986	#DIV/0!	#DIV/0!		5.02	2850	7108	0.026
Sum	0				.745		57601					85506	220350	0.796

MONTHLY REPORT SUMMARY

PRIMARY TREATMENT										
		Influent		Effluent		Rem		Primary		
		mg/l	lbs/ day	mg/l	lbs/ day	%		Feed Sludge		
S S	239	11610		#DIV/0!	#DIV/0!	#DIV/0!		Flow gal/ day	Total Solids %	Volatile Content %
BOD5	201	7933		#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	5.05	85.9
Detent Time hrs		Population Equivalent		Flow mgd		Precip "		Detention Time days		Loading lbs VS / ft3 /day
3.7		46667		5.24		9.45				
SECONDARY TREATMENT										
		Influent		Effluent		Rem				
		mg/l	lbs/ day	mg/l	lbs/ day	%				
S S	239	11610		6	340	97		Total Solids %	Volatile Content %	Vol Sol Reduct %
BOD5	201	7933		10	390	95		#DIV/0!	#DIV/0!	#DIV/0!
F/M		SVI		SRT days		MLSS mg/l				
#DIV/0!		201		#####		1450		Total Solids (TWS) %		Filtrate Solids mg/l
RAS Flow mgd		CL2 Res mg/l		CL2 Feed lbs/day				5.02		#DIV/0!
0.72		0.5		152				Sludge Hauled gal/day		lbs /day
WAS Flow mgd		Aerator Detention Time hrs		Aerator DO mg/l				Digst		18581
.024		6.4		0.7				TWS		7108
								Total		25689
										0
										#DIV/0!
										#DIV/0!