



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Columbia Boulevard Wastewater Treatment Plant

5001 N Columbia Boulevard, Portland, Oregon 97203 ■ Nick Fish, Commissioner ■ Michael Jordan, Director

July 15, 2015

State of Oregon
DEQ Northwest Region Office
700 NE Multnomah St.
Suite 600
Portland, OR 97232

COLUMBIA BOULEVARD WASTEWATER TREATMENT PLANT MONITORING REPORT JUNE 2015

Attached is the June 2015 Monitoring Report for the City of Portland Columbia Boulevard Treatment Plant.

All parameters were within permit limitations during the month.

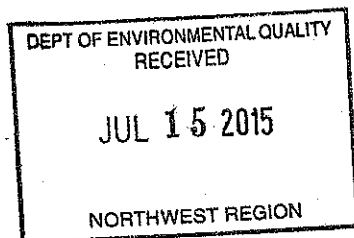
Also included this month is the quarterly Triangle Lake Groundwater Monitoring Report and the quarterly flow meter calibration report.

Please note that some names have been changed on the flow meter calibration report page. These changes align with our current regulatory strategy, which we talked about in our recent meeting.

If you have any questions regarding these reports, please call me at 823-2438.

Sincerely yours,

Mike Ciolli
Wastewater Treatment Manager for Operations



Columbia Boulevard Wastewater Treatment Plant Monitoring Report

City of Portland, Multnomah County
Permit No. 101505 (File 70725)

Population served 601,510
June 2015

Receiving Stream: Columbia River
Plant Type: Activated Sludge

Date	Plant Flows					Influent Pump Station		Avg Rain	Plant Influent			Wastewater Treatment Plant											Notes
	Total	Peak	2°	Wet Weather	% Wet Weather							OF #1 Cl ₂	BOD	BOD mg/l	% BOD	Lbs. BOD	Lbs. BOD	TSS	TSS mg/l	% TSS	Lbs. TSS	Lbs. TSS	
Jun 2015	in MG	in MGD	in MG	in MG	% Total Flow	Total Flow in MG	Wet Well Max Inches	inches	pH	BOD mg/l	TSS mg/l	Residual	mg/l	Weekly Avg	Removal	Discharged	Weekly Avg	mg/l	Weekly Avg	Removal	Discharged	Weekly Avg	See Page 4
1	69	129	69			0.00	143.1	0.17	7.0	328	282	0.4	15		95	8637		14		95	8061		
2	55	77	55			0.00	139.2	0.18	7.2	410	286	0.5	13		97	5928		17		94	7753		
3	66	142	66			0.00	143.5	0.09	7.0	260	224	0.7	>22		92	12168		13		94	7190		
4	78	162	78			0.03	142.0	0.01	7.1	274	292	0.6	13		95	8431		18		94	11673		
5	57	93	57			0.00	118.9	0.00	7.1	417	512	0.5	13		97	6222		13		97	6222		
6	53	75	53			0.00	122.5	0.00	6.7	315	296	0.5	7	13	98	3096	6658	10	14	97	4423	6995	
7	50	74	50			0.00	127.5	0.00	6.9	256	200	0.5	6		98	2494		7		97	2910		
8	52	68	52			0.00	131.1	0.00	7.2	366	306	0.5	8		98	3475		10		97	4343		
9	42	82	42			0.00	138.2	0.00	7.0	384	410	0.6	10		97	3532		13		97	4592		
10	62	94	62			0.00	134.5	0.00	6.7	366	405	0.5	18		95	9349		16		96	8311		
11	53	74	53			0.00	151.1	0.00	7.3	367	312	0.5	12		97	5273		12		96	5273		
12	53	73	53			0.07	149.3	0.00	6.8	421	332	0.5	12		97	5260		14		96	6137		
13	53	80	53			0.00	144.1	0.00	7.2	374	380	0.5	7	10	98	3111	4642	12	12	97	5333	5271	
14	49	73	49			0.00	143.8	0.00	6.8	325	323	0.5	6		98	2476		9		97	3714		
15	52	80	52			0.00	146.4	0.00	6.9	347	331	0.6	9		97	3927		13		96	5673		
16	53	85	53			0.03	139.1	0.00	7.0	est.306	308	0.5	est.8					10		97	4404		Note 1
17	52	74	52			0.00	102.8	0.00	7.0	394	400	0.6	20		95	8735		13		97	5678		
18	53	82	53			0.00	108.1	0.00	7.1	385	378	0.5	14		96	6138		13		97	5700		
19	51	75	51			0.00	120.1	0.00	7.2	369	334	0.6	10		97	4223		13		96	5490		
20	49	70	49			0.02	119.3	0.00	7.0	753	380	0.5	8	11	99	3247	4791	10	12	97	4059	4960	
21	47	69	47			0.00	96.6	0.00	6.9	272	250	0.6	5		98	1967		6		98	2360		
22	51	69	51			0.00	116.3	0.00	6.9	369	394	0.5	6		98	2537		8		98	3382		
23	47	74	47			0.00	130.8	0.00	7.0	396	375	0.5	14		96	5520		8		98	3155		
24	53	83	53			0.00	140.5	0.00	6.8	479	334	0.5	23		95	10201		12		96	5322		
25	53	79	53			0.02	137.4	0.01	7.0	478	358	0.5	15		97	6595		8		98	3517		
26	53	75	53			0.00	114.5	0.00	7.0	472	315	0.5	20		96	8919		13		96	5797		
27	51	70	51			0.00	130.4	0.00	7.1	397	325	0.5	16	14	96	6860	6086	16	10	95	6860	4342	
28	50	73	50			0.02	139.5	0.00	7.0	310	365	0.5	20		94	8327		12		97	4996		
29	54	72	54			0.00	115.4	0.00	7.1	333	328	0.5	6		98	2680		8		98	3573		
30	51	81	51			0.00	140.1	0.00	6.8	466	405	0.5	7		98	3000		31		92	13284		
Max	78	162	78			0.07	151.1	0.18	7.3	753	512	0.7	23	14	99	12168	6658	31	14	98	13284	6995	
Min	42		42			0.00	96.6		6.7	256	200	0.4	5		92	1967		6		92	2360		
Sum	1613		1613			0.18		0.45								162329					169185		
Avg	54		54			0.01	130.9	0.02	7.0	382	338	0.5	12		97	5598		12		96	5640		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system of those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Title: Mike Ciolli, Wastewater Treatment Manager for Operations
Certificate # 10286, type: Treatment, grade IV
Signature: 

Columbia Boulevard Wastewater Treatment Plant Monitoring Report

City of Portland, Multnomah County
Permit No. 101505 (File 70725)

June 2015

Receiving Stream: Columbia River
Plant Type: Activated Sludge

Date	Wet Weather Treatment Facility											Combined Discharges: 001 + 003 (Combined Total Conc. is calculated using a flow weighted average.)												Notes		
												Total Pounds		Weekly Lbs. Avg.		Total Conc.		Weekly Conc. Avg.		Outfall						
	Jun 2015	BOD mg/l	BOD mg/l Weekly Avg	% BOD Removal	Lbs. BOD Discharged	Lbs BOD Weekly Avg	TSS mg/l	TSS mg/l Weekly Avg	% TSS Removal	Lbs. TSS Discharged	Lbs TSS Weekly Avg	OF #3 CL2 Residual	Dry + Wet BOD	Dry + Wet TSS	Dry + Wet BOD	Dry + Wet TSS	Dry + Wet BOD	Dry + Wet TSS	Dry + Wet BOD	Dry + Wet TSS	OF #1 E. Coli	OF #3 E. Coli	OF #1 pH		OF #3 pH	See Page 4
1													8637	8061			15	14			<1		7.4			
2													5928	7753			13	17			2		7.2			
3													12168	7190			22	13			1		7.1			
4													8431	11673			13	18			3		7.2			
5													6222	6222			13	13			8		7.1			
6													3096	4423	7414	7554	7	10	14	14	1		7.0			
7													2494	2910			6	7			3		7.1			
8													3475	4343			8	10			2		7.2			
9													3532	4592			10	13			<1		7.3			
10													9349	8311			18	16			<1		7.2			
11													5273	5273			12	12			1		7.2			
12													5260	6137			12	14			2		7.2			
13													3111	5333	4642	5271	7	12	10	12	2		7.2			
14													2476	3714			6	9			7		7.1			
15													3927	5673			9	13			6		7.2			
16														4404				10				2		7.2		
17													8735	5678			20	13			1		7.2			
18													6138	5700			14	13			<1		7.2			
19													4223	5490			10	13			<1		7.3			
20													3247	4059	4791	4960	8	10	11	12	3		7.0			
21													1967	2360			5	6			<1		7.0			
22													2537	3382			6	8			3		7.2			
23													5520	3155			14	8			1		7.3			
24													10201	5322			23	12			2		7.0			
25													6595	3517			15	8			2		7.2			
26													8919	5797			20	13			3		7.2			
27													6860	6860	6086	4342	16	16	14	10	11		7.1			
28													8327	4996			20	12			4		7.1			
29													2680	3573			6	8			2		7.2			
30													3000	13284			7	31			1		7.2			
Max													12168	13284	7414	7554	23	31	14	14	11		7.4			
Min													1967	2360			5	6			<1		7.0			
Sum													162329	169185												
Avg													5598	5640			12	12			2		7.2			

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Name and Title: Mike Ciolli, Wastewater Treatment Manager for Operations
Certificate # 10286, type: Treatment, grade IV
Signature: 

Columbia Boulevard Wastewater Treatment Plant Monitoring Report

City of Portland, Multnomah County
Permit No. 101505 (File 70725)

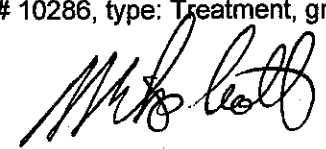
June 2015

Receiving Stream: Columbia River
Plant Type: Activated Sludge

Date	CSO Flows (Swan Island)		Plant			Temperatures			Notes
	Total Flow	Max	Effluent						
Jun 2015	in MG	Elev. In Feet	Alkalinity OF 1 Monthly, in mg/L	Alkalinity OF 3 Monthly, in mg/L	Cl2 used in Lbs Cl2	Effluent Daily Max, °C	Weekly Avg of Daily Max, °C	Thermal Load Million Kcal/day	See Page 4
1	37.36	17.3			1685	19.4			
2	19.53	18.8			1681	19.2			
3	40.56	18.8			1690	19.1			
4	46.40	18.4			1921	18.8			
5	10.32	3.6			1897	19.8			
6	1.47	2.8			1536	19.8	19.4	-139.0	
7	1.47	2.8			1198	19.9			
8	1.48	2.8			1394	20.2			
9	8.81	12.5			1378	21.1			
10	19.48	10.6	232		2595	20.3			
11	2.52	2.8			1815	20.7			
12	1.52	2.8			1642	20.2			
13	1.77	2.8			1418	20.1	20.3	67.2	
14	1.48	2.8			1133	20.1			
15	1.80	2.8			1342	20.1			
16	1.56	2.8			1470	20.2			
17	1.64	2.8			1649	20.3			
18	1.48	2.9			1939	20.7			
19	1.50	2.8			1812	20.6			
20	1.40	2.8			1509	20.4	20.3	64.7	
21	1.43	2.8			1226	20.3			
22	1.45	2.8			1036	20.2			
23	11.87	3.6			1469	20.7			
24	19.52	3.2			2132	20.9			
25	6.80	2.9			1775	21.0			
26	1.48	2.8			2792	21.6			
27	1.47	2.8			2229	21.6	20.9	175.0	
28	1.47	2.8			1779	21.3			
29	1.48	2.8			1319	21.3			
30	1.68	2.8			2351	21.5			
Max	46.40	18.8			2792	21.6	20.9	175.0	
Min	1.40				1036			-139.0	
Sum	252.20				50813				
Avg	8.41		232		1694		20.2	42.0	

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Name and Title: Mike Ciolli, Wastewater Treatment Manager for Operations
Certificate # 10286, type: Treatment, grade IV

Signature: 

Columbia Boulevard Wastewater Treatment Plant Monitoring Report

Nutrients and Notes

City of Portland, Multnomah County
Permit No. 101505 (File 70725)

June 2015

Receiving Stream: Columbia River
Plant Type: Activated Sludge

Dry Weather Effluent Weekly Nutrients (May to October)

Sample Date	2-Jun-15	9-Jun-15	16-Jun-15	23-Jun-15	30-Jun-15	Average	Max
NH ₃ - N (mg/l)	27.80	37.00	36.90	30.00	34.50	33.24	37.00
NO ₂ + NO ₃ -N (mg/l)	0.15	0.12	0.12	0.13	0.19	0.14	0.19
TKN (mg/l)	34.40	49.40	42.00	30.50	36.80	38.62	49.40
Total PO ₄ -P (mg/l)	1.76	2.32	2.10	1.43	1.58	1.84	2.32

Wet Weather Effluent Weekly Nutrients (May to October)

Sample Date						Average	Max
NH ₃ - N (mg/l)							
NO ₂ + NO ₃ -N (mg/l)							
TKN (mg/l)							
Total PO ₄ -P (mg/l)							

Notes

[illegible]

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Name and Title: Mike Ciolli, Wastewater Treatment Manager for Operations
Certificate # 10286, type: Treatment, grade IV
Signature: 

Mr. Self

Columbia Boulevard Wastewater Treatment Plant Monitoring Report

Quarterly Triangle Lake Groundwater Report

City of Portland, Multnomah County
Permit No. 101505 (File 70725)

June 2015

Receiving Stream: Columbia River
Plant Type: Activated Sludge

Sample Date(s): May 20, 2015

for months: April 2015
May 2015
June 2015

Test Parameter	Well #1	Well #2	Well #3A	Well #4	Well #5 *	Well #6 *	Units	Preservation	Method used	Detection limit	Notes
Water Level	12.40	10.89	10.01	9.81	9.70	9.34	feet				Wells 3A & 5: DL = 0.40 mg/L
TDS	2000	373	742	429	340	856	mg/L	cool 4° C	SM 2540C	5 mg/L	
Ortho-phosphate-P	<0.02	<0.02	<0.40	<0.02	<0.40	<0.02	mg/L	cool 4° C	EPA 365.1	0.02 mg/L	
Chloride	45	6.1	34	12	13	28	mg/L	cool 4° C	EPA 300.0	2 mg/L	
NO2-N + NO3-N	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	mg/L	cool 4° C	EPA 353.2 EPA 300.0	0.01 mg/L 0.20 mg/L	
Sulfate	<2.0	<2.0	<2.0	<2.0	<2.0	60	mg/L	cool 4° C	EPA 300.0	2 mg/L	

* Wells #5 and #6 are part of the mono-fill project. The numbers reflected here are an attempt to develop a baseline for later comparison.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system of those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Title: Mike Ciolli, Wastewater Treatment Manager for Operations
Certificate # 10286, type: Treatment, grade IV
Signature:



Columbia Boulevard Wastewater Treatment Plant Monitoring Report

Quarterly Flow Meter Calibration Report

City of Portland, Multnomah County
Permit No. 101505 (File 70725)

June 2015

for months:

April 2015

May 2015

June 2015

Meter	Date calibration completed *
Headworks -- Influent Pump # 1	5/21/2015
Headworks -- Influent Pump # 2	5/21/2015
Headworks -- Influent Pump # 3	5/21/2015
Headworks -- Influent Pump # 4	5/21/2015
Headworks -- Influent Pump # 5	5/21/2015
Headworks -- Influent Pump # 6	5/21/2015
Dry Weather Primary -- North Flowmeter	5/19/2015
Dry Weather Primary -- South Flowmeter	5/19/2015
Secondary Diversion -- Channel A Flowmeter	renamed 784 as of 10/7/2014
Secondary Diversion -- Channel B Flowmeter	2 channels replaced with single
Secondary Diversion -- Channel C Flowmeter	gate & flowmeter 785, 10/7/2014
Headworks Peak Flow Channel	5/18/2015
WW Effluent Flow Control Structure -- Flowmeter 784	6/1/2015
WW Effluent Flow Control Structure -- Flowmeter 785	6/8/2015

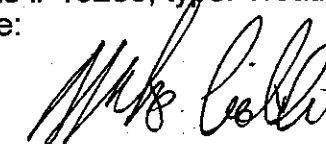
* Meters inspected and checked as per manufacturer's recommendations.

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Name and Title: Mike Ciolli, Wastewater Treatment
Manager for Operations

Certificate # 10286, type: Treatment, grade IV

Signature:



Supplementary Data for Internal Use Only

DATE	FLOW					BOD					BOD POUNDS					TSS					TSS POUNDS					BOD %				% REDUCTION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	INF MGD	EFF MGD	2" MGD	BY-PASS MGD	Rain Fall Inches	HW INF	PRIMARY EFF	C12 EFF	HEADWORKS INF	BYPASS EFF	PLANT EFF	HW INF	PRI EFF	C12 EFF	LBS. INF	BYPASS EFF	LBS. EFF	PRI EFF	PLANT EFF	PRI EFF	PLANT EFF	PRI EFF	PLANT EFF	PRI EFF	PLANT EFF	PRI EFF	PLANT EFF																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

June 16: BOD results should be considered estimates due to failed check standard results.

Secondary

Columbia Blvd. Wastewater Treatment Plant

Supplementary Data for Internal Use Only

DATE	Total Flow MGD	2° Flow MGD	SRT Days (7 days avg)	EFFL Turb	2° Cl ₂ TSS	2° Cl ₂ BOD	Effluent 12.5% Hypo Gals	Effluent Cl ₂ used in lbs	Process 12.5% Hypo Gals	SVI	MLSS	CTSS	Aers. online	Finals online	Aerator LBS.	Final Clarifier LBS	Total LBS.
June 2015																	
1	69	69	2.7	10	14	15	2717	1685		222	1274	480	8	8	154,702	46,757	201,460
2	55	55	2.7	10	17	13	2712	1681		217	1641	636	8	8	199,267	61,954	261,221
3	66	66	2.7	9	13	22	2726	1690		301	1432	896	8	8	173,888	87,280	261,169
4	78	78	2.6	10	18	13	3096	1921		272	1303	817	8	8	158,224	79,585	237,809
5	57	57	2.6	9	13	13	3060	1897		297	1590	692	8	7	193,074	58,982	252,057
6	53	53	2.6	7	10	7	2478	1536		317	1627	444	8	7	197,567	37,844	235,412
7	50	50	2.5	5	7	6	1933	1198		287	1642	556	7	7	182,773	47,391	230,164
8	52	52	2.5	6	10	8	2248	1394		259	1342	502	7	7	142,590	42,768	185,378
9	42	42	2.5	8	13	10	2222	1378		230	1401	755	7	7	148,858	64,352	213,211
10	62	62	2.5	10	16	18	4186	2595		251	1591	746	7	7	169,046	63,585	232,631
11	53	53	2.5	10	12	12	2927	1815		363	1606	864	7	7	170,640	73,843	244,283
12	53	53	2.4	11	14	12	2649	1642		335	1580	840	7	7	167,878	71,597	239,475
13	53	53	2.3	8	12	7	2287	1418		358	1545	639	7	7	184,159	54,485	218,624
14	49	49	2.3	6	9	6	1828	1133		291	1324	723	7	7	140,677	61,625	202,302
15	52	52	2.3	7	13	9	2165	1342		283	1379	410	7	7	146,521	34,946	181,467
16	53	53	2.2	8	10	est.8	2371	1470		276	1324	594	7	7	140,677	50,629	191,307
17	52	52	2.1	9	13	20	2659	1649		288	1333	666	7	7	141,633	56,766	198,400
18	53	53	2.1	8	13	14	3128	1939		332	1470	538	7	7	156,190	45,856	202,046
19	51	51	2.2	7	13	10	2922	1812		362	1396	612	7	7	148,327	52,164	200,491
20	49	49	2.2	6	10	8	2434	1509		343	1493	447	7	7	158,634	38,100	196,734
21	47	47	2.2	5	6	5	1978	1226		331	1328	562	7	7	141,102	47,902	189,004
22	51	51	2.3	5	8	6	1671	1036		311	1252	499	7	7	133,027	42,532	175,559
23	47	47	2.3	6	8	14	2369	1489		315	1302	600	7	7	138,340	51,141	189,480
24	53	53	2.3	8	12	23	3439	2132		309	1418	700	7	7	150,665	59,664	210,329
25	53	53	2.3	7	8	15	2863	1775		364	1358	580	7	7	144,290	49,436	193,726
26	53	53	2.3	10	13	20	4503	2792		326	1528	549	7	7	162,352	46,794	209,146
27	51	51	2.2	10	16	16	3595	2229		383	1515	600	7	7	160,971	51,141	212,112
28	50	50	2.2	8	12	20	2870	1779		410	1332	843	7	7	141,527	71,853	213,380
29	54	54	2.1	5	8	6	2127	1319		435	1282	698	7	7	136,215	59,494	195,708
30	51	51	2.0	6	31	7	3792	2351		342	1294	406	7	7	137,490	34,605	172,095
MAX	78	78	2.7	11.1	31.0	23.0	4503	2792		435	1642	896	8	8	199,267	87,280	261,221
MIN	42	42	2.0	4.6	6.0	5.0	1671	1036		217	1252	406	7	7	133,027	34,605	172,095
SUM	1613	1613					81,957	50,813									
AVG	54	54	2.4	7.8	12	12	2732	1694		314	1430	630	7	7	156,710	54,829	211,539

June 16: BOD results should be considered estimates due to failed check standard results.

Supplementary Data for Internal Use Only

DATE	Columbia Wasting				Total TWAS To D5, D6, D7, D8, D9 & D10						Digester TWAS Feed Distribution						
	Volume MGD	WAS Dry lbs	WAS Dry tons	WAS mg/L	Volume MGD	TWAS Dry lbs	TWAS Dry tons	Tot Solids %	Vol Solids %	% Volatile Solids	Dig5 gal x100	Dig 6 gal x100	Dig 7 gal x100	Dig 8 gal x100	Dig 9 gal x100	Dig 10 gal x100	
June 2015																	
1	1.688	78,836	39.42	5600	0.211	59,350	29.67	3.37	2.66	79	213	216	874	214	215	213	
2	1.913	82,963	41.48	5200	0.231	70,817	35.41	3.68	2.92	79	260	259	1380	273	286	256	
3	2.068	94,859	47.43	5500	0.311	87,433	43.72	3.37	2.66	79	321	303	1727	328	329	322	
4	2.021	91,018	45.51	5400	0.307	81,770	40.89	3.19	2.60	82	306	323	1755	315	282	282	
5	2.030	93,116	46.56	5500	0.249	66,573	33.29	3.21	2.61	81	291	292	1590	306	302	302	
6	1.967	93,507	46.75	5700	0.286	75,742	37.87	3.18	2.60	82	381	291	1530	274	284	284	
7	1.937	87,235	43.62	5400	0.273	71,374	35.69	3.13	2.50	80	275	276	1495	269	280	280	
8	1.727	80,658	40.33	5600	0.253	63,165	31.58	2.99	2.40	80	259	263	1240	263	258	258	
9	1.414	63,681	31.84	5400	0.158	44,969	22.48	3.42	2.73	80	183	184	1007	204	204	204	
10	1.823	85,141	42.57	5600	0.259	79,405	39.70	3.67	3.03	83	259	261	1233	271	282	266	
11	2.087	106,174	53.09	6100	0.322	106,180	53.09	3.96	3.28	83	321	320	1656	332	347	328	
12	2.241	112,140	56.07	6000	0.248	78,706	39.35	3.80	3.15	83	306	309	1658	300	296	292	
13	2.309	111,691	55.85	5800	0.307	91,039	45.52	3.55	2.92	82	306	307	1691	330	326	308	
14	2.084	95,593	47.80	5500	0.251	71,734	35.87	3.43	2.80	82	259	259	1369	245	255	261	
15	1.891	82,009	41.00	5200	0.228	72,014	36.01	3.79	2.95	78	244	244	962	251	251	244	
16	1.781	75,753	37.88	5100	0.230	70,148	35.07	3.65	2.89	79	198	212	802	214	201	198	
17	1.975	79,063	39.53	4800	0.259	76,871	38.44	3.56	2.87	81	259	260	1178	266	287	261	
18	2.067	82,746	41.37	4800	0.270	78,777	39.39	3.50	2.83	81	274	276	1452	266	270	276	
19	2.065	80,944	40.47	4700	0.331	94,158	47.08	3.41	2.74	80	229	230	908	244	232	229	
20	2.331	91,371	45.69	4700	0.193	54,180	27.09	3.37	2.72	81	243	244	1184	249	248	245	
21	2.130	85,268	42.63	4800	0.232	62,094	31.05	3.21	2.67	83	229	216	1543	244	235	230	
22	1.715	68,655	34.33	4800	0.225	58,787	29.39	3.13	2.56	82	229	228	1879	210	230	229	
23	1.758	71,842	35.92	4900	0.260	75,923	37.96	3.50	2.93	84	212	212	1593	210	217	214	
24	2.021	79,219	39.61	4700	0.236	67,498	33.75	3.43	2.94	86	229	229	1811	238	230	229	
25	2.304	92,234	46.12	4800	0.296	74,642	37.32	3.02	2.59	86	306	301	1703	284	313	308	
26	2.416	94,702	47.35	4700	0.254	67,139	33.57	3.17	2.76	87	275	279	1710	306	266	277	
27	2.515	100,680	50.34	4800	0.356	76,299	38.15	2.57	2.27	88	369	362	1673	369	366	370	
28	2.273	100,471	50.24	5300	0.358	76,387	38.19	2.56	2.23	87	352	356	1682	359	363	356	
29	2.290	105,042	52.52	5500	0.259	55,723	27.86	2.58	2.19	85	385	384	1780	415	409	388	
30	1.967	90,226	45.11	5500	0.277	66,882	33.44	2.89	2.37	82	287	270	1645	268	277	290	
MAX	2.515	112,140	56.07	6100	0.358	106,180	53.09	3.96	3.28	88	385	384	1879	415	409	388	
MIN	1.414	63681	31.84	4700	0.158	44,969	22.48	2.56	2.19	78	183	184	802	204	201	198	
SUM	60.808	2,656,839	1328.42		7.931	2,175,778	1,087.89				8260	8166	43710	8317	8281	8200	
AVG	2.027	88561	44.28	5247	0.264	72,526	36.26	3.31	2.71	82	275	272	1457	277	276	273	

Beginning October 2013, Digester #7 is TWAS only digester

Primary Sludge

Columbia Blvd. Wastewater Treatment Plant

Supplementary Data for Internal Use Only

DATE	1° Sludge Volume MG	1° Sludge Mass Dry Tons	Primary Sludge Density			Dig. 5 Pri Feed gal X100	Dig. 6 Pri Feed gal X100	Dig. 8 Pri Feed gal X100	Dig. 9 Pri Feed gal X100	Dig. 10 Pri Feed gal X100	Loading lb/day VS/1000 cu.ft. (DIG 5, 8, 9, 10 COMBINED)
			Tot Sol %	Vol Sol %	% Vol Sol						
1	0.364	44.68	2.94	2.28	78	717	716	705	675	671	217
2	0.519	66.10	3.01	2.22	74	982	1036	1060	1036	977	300
3	0.417	39.13	2.25	1.62	72	848	831	834	781	773	176
4	0.553	39.91	1.73	1.31	76	1144	1229	1194	1047	915	189
5	0.571	71.61	3.01	2.27	75	1100	1187	1123	1265	1113	338
6	0.563	87.14	3.71	2.98	80	1106	1149	1082	1225	1096	437
7	0.479	57.18	2.86	2.30	80	935	927	972	1123	914	287
8	0.476	41.12	2.07	1.69	82	935	953	979	1119	965	210
9	0.476	52.61	2.65	2.19	83	970	1000	1033	923	929	272
10	0.514	62.40	2.91	2.25	77	1003	947	1045	1042	1001	302
11	0.528	52.84	2.40	1.95	81	1021	1200	1083	1084	1029	268
12	0.574	66.04	2.76	2.20	80	1127	1223	1176	1138	1095	329
13	0.446	50.73	2.73	2.21	81	903	1123	921	884	880	257
14	0.341	44.12	3.10	2.47	80	684	832	690	705	678	220
15	0.455	52.15	2.75	2.24	81	920	1129	933	931	889	265
16	0.503	56.83	2.71	2.21	82	903	1050	923	916	958	290
17	0.478	70.57	3.54	2.77	78	937	1142	973	996	1142	345
18	0.435	64.44	3.55	2.85	80	858	895	889	857	874	323
19	0.441	57.91	3.15	2.54	81	874	1061	926	826	1060	292
20	0.430	50.03	2.79	2.29	82	854	985	870	862	967	257
21	0.396	47.03	2.85	2.44	86	775	877	810	801	879	252
22	0.417	50.13	2.88	2.49	86	821	1027	862	869	1010	271
23	0.503	45.35	2.16	1.75	81	985	1128	1022	1026	1093	230
24	0.438	42.58	2.33	1.87	80	860	1007	888	876	967	214
25	0.454	49.07	2.59	2.21	85	911	1122	938	944	1125	262
26	0.498	46.16	2.22	1.77	80	1008	1223	1067	1054	1181	230
27	0.449	51.14	2.73	2.25	82	898	1092	922	942	1093	263
28	0.416	49.10	2.83	2.32	82	852	1059	863	862	1057	252
29	0.433	50.07	2.77	2.14	77	860	1099	895	909	1104	242
30	0.432	47.94	2.66	2.13	80	858	990	881	882	979	240
MAX	0.5738	87.14	3.71	2.98	86	1144	1229	1194	1265	1181	437
MIN	0.3413	39.13	1.73	1.31	72	684	716	690	675	671	176
SUM	14.0028	1,605.12				27649	31,239	28559	28600	29414	
AVG	0.4668	53.50	2.75	2.21	80	922	1041	952	953	980	268

Beginning October 2013, Digester #7 is TWAS only digester

Digester Sludge Densities

Columbia Blvd. Wastewater Treatment Plant

Supplementary Data for Internal Use Only

DATE	Dig #1			Dig #2			Dig #5			Dig #6			Dig #7			Dig #8			Dig #9			Dig #10		
	% Total Solids	% Volatile Solids		% Total Solids	% Volatile Solids		% Total Solids	% Volatile Solids		% Total Solids	% Volatile Solids		% Total Solids	% Volatile Solids		% Total Solids	% Volatile Solids		% Total Solids	% Volatile Solids		% Total Solids	% Volatile Solids	
June 2015																								
1																								
2				1.35	0.76		1.58	0.95		1.60	0.95		1.98	1.31		1.60	0.97		1.61	0.94		1.69	0.99	
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10				1.27	0.73		1.60	0.96		1.52	0.92		1.95	1.33		1.58	0.95		1.53	0.90		1.58	0.93	
11																								
12																								
13																								
14																								
15																								
16				1.23	0.73		1.55	0.94		1.52	0.91		2.02	1.38		1.67	1.03		1.44	0.87		1.51	0.89	
17																								
18																								
19																								
20																								
21																								
22																								
23				1.15	0.69		1.50	0.90		1.48	0.88		1.92	1.33		1.57	0.94		1.39	0.84		1.51	0.89	
24																								
25																								
26																								
27																								
28																								
29																								
30				1.50	0.92		1.46	0.90		1.49	0.89		1.79	1.22		1.62	1.00		1.42	0.86		1.61	0.98	
MAX	1.50	0.92		1.35	0.76		1.60	0.96		1.60	0.95		2.02	1.38		1.67	1.03		1.61	0.94		1.69	0.99	
MIN	1.50	0.92		1.15	0.69		1.46	0.90		1.48	0.88		1.79	1.22		1.57	0.94		1.39	0.84		1.51	0.89	
AVG	1.50	0.92		1.25	0.73		1.54	0.93		1.52	0.91		1.93	1.31		1.61	0.98		1.48	0.88		1.58	0.94	

Beginning October 2013, Digester #7 is TWAS only digester

D1 offline March 3 - June 28 D2 offline June 29, 2015

Digesters

Columbia Blvd. Wastewater Treatment Plant

Supplementary Data for Internal Use Only

	Digester Temperature								Digester pH				Alkalinity						Volatile Acids						Where To			
DATE	D-1	D-2	D-5	D-6	D-7	D-8	D-9	D-10	D-5	D-6	D-7	D-8	D-9	D-10	D-5	D-6	D-7	D-8	D-9	D-10	D-5	D-6	D-7	D-8	D-9	D-10	Digester Distribution	Where To
June 2015	temp.	temp.	temp.	temp.	temp.	temp.	temp.	temp.	pH	pH	pH	pH	pH	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Dry Tons	To T. Lake
1	100	99	99	99	99	99	99	99	7.2	7.3	7.5	7.2	7.2	7.2	3110	2920	5980	2980	2960	3210	40	38	50	42	52	32	37,525	8,227
2	100	99	99	99	99	99	99	99	7.2	7.2	7.6	7.3	7.0	7.2	3310	3000	6400	3120	3030	3150	42	42	80	40	32	35	52,166	8,750
3	100	99	99	99	99	99	99	99	7.2	7.1	7.5	7.2	7.1	7.1	3250	3050	6010	3310	3170	3020	42	45	62	45	42	32	41,841	11,567
4	100	99	99	99	99	99	99	99	7.2	7.2	7.6	7.2	7.2	7.2	3360	3070	7140	3210	3070	3290	42	42	62	42	40	40	53,270	12,881
5	100	99	99	99	100	99	99	99	7.2	7.2	7.4	7.4	7.2	7.1	3290	3060	6170	3080	2980	3350	42	50	95	45	38	42	56,462	8,355
6	100	99	99	99	99	99	99	99	7.0	7.1	7.5	7.2	7.1	7.1	3020	2930	5950	3160	3050	3100	40	48	58	42	42	40	55,816	47,246
7	100	99	99	99	99	99	99	99	7.2	7.1	7.4	7.2	7.2	7.2	3170	2870	5770	2900	3070	3160	45	35	40	58	60	50	48,642	6,477
8	100	99	99	99	99	99	99	99	7.1	7.2	7.5	7.1	7.1	7.2	3270	2860	6070	3330	2970	3320	40	42	62	35	38	30	30,427	26,278
9	100	99	99	99	99	99	99	99	7.1	7.2	7.7	7.2	7.1	7.2	3050	2950	6020	3130	2890	3190	40	40	55	45	38	40	44,839	2,702
10	100	99	99	98	99	99	98	99	7.1	7.2	7.5	7.2	7.2	7.1	3160	3180	5670	2930	2790	3220	48	42	50	52	58	42	51,292	11,091
11	100	98	96	99	99	97	99	99	7.0	7.1	7.5	7.2	7.1	7.2	3280	2990	6430	2980	2870	3080	38	45	55	48	38	42	55,678	12,070
12	99	98	96	99	99	97	99	99	7.1	7.1	7.6	7.1	7.0	7.1	3480	3130	6810	3040	3360	3120	45	45	68	45	38	32	54,914	10,507
13	100	99	99	99	99	99	99	99	7.2	7.1	7.7	7.2	7.1	7.1	3330	3100	6790	3430	3160	3340	65	48	110	58	52	50	50,772	8,777
14	100	99	99	99	99	99	99	99	7.0	7.1	7.5	7.2	7.2	7.1	3050	3030	6270	2950	3060	3330	35	30	58	50	50	38	35,680	9,052
15	100	99	99	99	99	99	99	99	7.0	7.1	7.5	7.2	7.1	7.1	3240	2870	6030	3020	2870	3100	38	55	75	45	40	45	47,774	7,463
16	100	99	99	99	99	99	99	99	7.1	7.2	7.4	7.2	7.2	7.2	3180	2930	5620	3000	3040	3130	48	48	88	48	40	42	51,771	7,430
17	100	99	99	99	99	99	99	99	7.1	7.1	7.5	7.2	7.1	7.2	3220	3270	6100	3090	3030	3300	38	38	42	48	40	42	50,584	8,409
18	100	99	99	99	99	99	99	99	7.1	7.2	7.4	7.2	7.1	7.2	3290	3030	6360	3130	3010	3280	40	45	65	55	45	48	36,346	23,382
19	100	99	99	99	99	99	99	99	7.2	7.2	7.5	7.2	7.1	7.2	3060	2820	6340	3140	3170	3260	42	45	72	45	40	40	43,708	8,784
20	100	99	99	99	99	99	99	99	7.2	7.1	7.5	7.2	7.1	7.2	3210	3090	6360	3170	3160	3270	42	45	60	40	42	42	39,114	10,078
21	100	99	99	99	99	99	99	99	7.2	7.1	7.6	7.2	7.1	7.2	3210	2950	5900	3200	3020	3140	38	38	60	40	38	38	39,337	6,779
22	100	99	99	99	99	99	99	99	7.2	7.1	7.5	7.2	7.2	7.2	3230	3020	5710	3250	2880	3130	42	35	60	40	42	50	48,107	8,952
23	100	99	99	99	99	99	99	99	7.1	7.2	7.5	7.2	7.2	7.1	3220	3030	6390	3260	3030	3260	42	40	60	42	42	40	45,977	7,926
24	99	99	99	99	99	99	99	99	7.2	7.2	7.5	7.2	7.1	7.2	3350	3280	6450	3010	3060	3220	40	42	55	45	38	40	41,154	8,073
25	100	99	99	99	99	99	99	99	7.2	7.1	7.7	7.3	7.1	7.1	3410	3060	6360	3220	3080	3120	45	42	60	42	40	40	40,697	9,575
26	100	99	99	99	99	99	99	99	7.2	7.2	7.7	7.2	7.1	7.2	3560	3280	7350	3410	3270	3400	42	40	62	45	45	38	51,153	10,192
27	100	99	99	99	99	99	99	99	7.2	7.2	7.6	7.2	7.2	7.2	3480	3310	6600	3300	3070	3210	42	48	78	52	40	38	43,063	10,407
28	100	99	99	99	99	99	99	99	7.2	7.3	7.7	7.3	7.2	7.2	3480	3010	6320	3110	3240	3220	32	32	60	50	52	35	43,444	11,238
29			99	99	99	99	99	99	7.2	7.2	7.6	7.3	7.1	7.2	3290	3020	6290	3160	3050	3140	45	48	70	50	42	45	66,232	6,927
30	99		99	99	99	99	99	99	7.1	7.2	7.6	7.2	7.2	7.2	3410	3080	5850	3300	3190	3590	35	40	82	70	52	50	39,753	0,000
31																												
MAX	99	100	99	99	100	99	99	99	7.2	7.3	7.7	7.4	7.2	7.2	3560	3310	7350	3430	3360	3590	65	55	110	70	60	50	66,232	47,246
MIN	99	99	98	96	98	97	99	99	7.0	7.1	7.4	7.1	7.0	7.1	3020	2820	5620	2900	2790	3020	32	30	40	35	32	30	7,770	8,391
SUM																											1397,539	329,595
AVG	99	100	99	99	99	99	99	99	7.1	7.2	7.5	7.2	7.1	7.2	3266	3040	6250	3144	3053	3222	42	42	65	47	43	41	46,585	10,987

D1 offline March 3 - June 28 D2 offline June 29, 2015

Beginning October 2013, Digester #7 is TWAS only digester.

Gas Production **Columbia Blvd. Wastewater Treatment Plant**

Supplementary Data for Internal Use Only

Digester 5-10 Daily Gas Production

DATE	Dig #5 scf	Dig #6 scf	Dig #7 scf	Dig #8 scf	Dig #9 scf	Dig #10 scf	June-2015	scf	% of total
June 2015									
1	249	266	263	254	216	155			
2	252	274	257	252	198	170			
3	264	282	276	262	192	179			
4	252	292	300	249	191	176			
5	289	351	268	275	200	186			
6	359	434	270	361	250	234			
7	291	350	268	309	218	207			
8	270	323	267	290	214	204			
9	257	299	252	271	206	199			
10	281	282	268	280	203	192			
11	295	328	287	295	240	229			
12	295	327	322	298	230	217			
13	319	364	342	331	221	219			
14	257	330	281	266	197	184			
15	294	377	282	314	228	217			
16	307	368	268	327	242	217			
17	300	378	280	325	235	220			
18	289	350	281	299	213	203			
19	295	359	265	336	225	206			
20	274	352	262	338	219	200			
21	252	297	263	302	192	182			
22	284	313	285	299	209	203			
23	340	326	311	339	215	206			
24	311	299	329	318	204	196			
25	344	348	333	346	237	216			
26	332	337	318	334	240	221			
27	347	345	322	345	240	225			
28	338	319	332	331	212	191			
29	347	326	338	345	210	189			
30	326	312	285	315	212	187			
MAX	359	434	342	361	250	234			
MIN	249	266	252	249	191	155			
SUM	8,910,000	9,908,000	8,675,000	9,206,000	6,509,000	6,030,000			
AVG	297	330	289	307	217	201			
							June-2015		
							Dig 1-10 Production	44,409,432	100.0
							Dig 5-10 Production	49,238,000	110.9

Columbia Blvd. Wastewater Treatment Plant

Gas Report

Supplementary Data for Internal Use Only

Natural Gas and Sewer Gas; daily usage and monthly totals (in scf)

DATE	TUYE south meter #1	DCB east (boiler #2) meter #2	DCB west (boiler #1) meter #3	SLPR boiler #1	SLPR boiler #2	Malarkey	Waste Gas Burner	Co-gen	microturbine (x100)	Natural Gas (x1000)
June 2015										
1	617920	0	48473	0	91377	458800	215653	648000		10
2	674741	4328	79436	0	124507	318900	284877	621000		11
3	677713	7416	0	0	109915	349900	299650	609000		10
4	735395	4608	5822	0	106047	336500	463000	0		10
5	735134	5112	311505	0	93554	200000	635317	853000		8
6	789793	0	178553	0	93605	351500	697553	648000		10
7	754144	0	108393	0	84202	224400	629001	612000		8
8	965295	0	116320	0	70092	445200	522974	630000		10
9	795183	8	33	1	60218	346300	512279	606000		9
10	773190	0	0	0	88861	413000	316021	653000		10
11	733143	0	0	0	114634	488600	623000	655000		8
12	876727	0	179000	0	87147	0	384000	625000		8
13	776163	0	311234	0	202	834900	399098	645000		9
14	619562	0	78470	0	67	417400	508836	591000		9
15	962930	0	113997	0	40660	439400	477550	0		8
16	790312	0	91074	0	116112	394700	461028	1327000		0
17	873896	0	160426	0	87243	325800	628581	630000		10
18	675777	0	48484	0	68247	424100	428700	619000		8
19	873274	0	109732	0	71725	434200	598005	623000		10
20	810179	0	45007	0	79751	415900	503111	631000		9
21	646011	2856	26302	0	73643	160700	635502	607000		9
22	877967	0	54767	0	74300	374800	370814	697000		10
23	770912	3432	66981	0	70544	372500	459971	621000		9
24	829538	2344	24043	0	57916	399300	579427	583000		10
25	673599	2944	0	0	40975	462200	741000	642000		14
26	1042103	1008	0	0	25702	394700	777823	617000		9
27	871130	0	0	0	70146	347800	773372	634000		9
28	702096	0	1	0	67749	195000	824368	632000		8
29	922820	0	83025	0	50623	350800	366291	661000		10
30	847156	3768	92727	0	0	363600	852895	424000		10
MAX	1,042,103	7416	311,505	1	124507	834,900	852,895	1,327,000	0	14
MIN	617,920	0	0	0	0	0	215,653	0	0	0
SUM	23,693,803	37,824	2,333,805	1	2,119,764	11,039,000	15,949,697	18,344,000	0	273
AVG	789,793	1261	77,794	0	70659	367,967	531,657	611,467	0	9

one cogen unit uses 232 cuft/min
or 13,934 cuft/hour for 1 unit
as per manufacturer

one micro turbine uses 750 cuft / hour
4 units total

Supplementary Data for Internal Use Only

DATE	FEED					FILTRATE			CAKE				POLYMER			
	# OF PRESSES	TOTAL PUMP HRS.	GALLONS X 1000	% SOLIDS	DRY TONS	% SOLIDS COMPOSITE	DRY TONS	% CAPTURE	WET TONS TO TRUCK	% SOLIDS	DRY TONS TO TRUCK	LBS. USED	LBS POLY / FEED DRY TONS	LBS POLY / CAKE DRY TONS		
June 2015																
1	4	75.7	915	1.55	59.1				208.95	19.99	41.77	1033	17	25		
2	4	75.9	838	1.41	49.3	0.19	6.6	87	174.50	19.70	34.38	1157	23	34		
3	4	80.0	612	1.53	39.1				209.37	19.80	41.46	1217	31	29		
4	4	16.3	834	1.50	52.1				209.47	19.03	39.86	963	18	24		
5	4	72.8	887	1.51	55.8				209.59	18.21	38.17	1056	19	28		
6	4	74.6	904	1.58	59.6				209.15	18.20	38.07	1264	21	33		
7	3	70.9	897	1.53	57.2				209.21	17.97	37.60	1126	20	30		
8	4	69.0	798	1.74	57.9				209.02	23.58	49.29	1057	18	21		
9	3	72.6	866	1.73	62.5	0.15	5.4	91	209.21	23.55	49.27	911	15	18		
10	4	81.1	918	1.80	68.9				209.54	22.96	48.11	1057	15	22		
11	4	95.4	1069	1.47	65.5				209.52	22.02	46.14	1286	20	28		
12	4	67.2	887	1.32	48.8				209.21	21.84	45.69	1017	21	22		
13	4	75.8	996	1.26	52.4				207.49	20.87	43.30	1313	25	30		
14	4	89.1	1069	1.33	59.3				174.02	20.98	36.51	1394	24	38		
15	4	72.5	880	1.44	52.8				209.02	19.02	39.76	1223	23	31		
16	3	73.2	938	1.31	51.3	0.15	5.9	89	209.05	19.49	40.74	1256	24	31		
17	4	67.6	902	1.67	62.8				209.07	20.04	41.90	1158	18	28		
18	4	73.9	965	1.97	79.3				209.50	19.93	41.75	1322	17	32		
19	4	64.2	808	1.61	54.2				209.53	20.31	42.56	1088	20	26		
20	3	74.4	978	2.37	96.6				209.47	22.00	46.08	1294	13	28		
21	3	73.6	966	1.58	63.7				209.64	20.66	43.31	1321	21	31		
22	3	64.7	810	2.53	85.5				209.26	23.91	50.03	1098	13	22		
23	3	70.2	864	1.59	57.3	0.13	4.7	92	209.31	21.38	44.75	1202	21	27		
24	3	70.3	812	1.63	55.2				209.02	20.76	43.39	1112	20	26		
25	4	78.6	877	1.38	50.5				209.18	27.63	57.80	1096	22	19		
26	4	72.6	783	1.33	43.4				139.64	22.42	31.31	1007	23	32		
27	4	73.8	788	1.38	45.3				209.81	19.50	40.91	1033	23	25		
28	3	73.3	803	1.42	47.5				209.38	19.32	40.45	960	20	24		
29	4	63.3	716	1.52	45.4				174.40	20.46	35.68	959	21	27		
30	4	74.4	762	1.87	59.4	0.14	4.4	93	209.30	21.18	44.33	1009	17	23		
MAX	4	95.4	1069	2.53	96.6	0.19	6.6	93	209.81	27.63	57.80	1394	31	38		
MIN	3	16.3	612	1.26	39.1	0.13	4.4	87	139.64	17.97	31.31	911	13	18		
SUM		2157.0	26142		1737.8		27.1		6102.83		1274.36	33987	604			
AVG	4	71.9	871	1.60	57.9	0.15	5.4	90	203.43	20.89	42.48	1133	20	27		

Supplementary Data for Internal Use Only

DATE	Plant Flow MGD	Plant Flow Temperatures						Dry Weather Primaries			Volatile Acids		
		Influent Temperature °F			Effluent Temperature °F			Average Effluent Temp	Tanks in service	Detention Time hours	Headworks	Primary Effluent	Chlorinated Effluent
		A-shift	B-shift	C-shift	A-shift	B-shift	C-shift						
1	69	62	64	67	66	66	66	66	4	1.8			
2	55	65	66	65	65	66	65	65	4	2.5			
3	66	65	65	65	66	66	66	66	4	2.0			
4	78	64	66	65	65	66	65	65	4	1.7	52	50	12
5	57	66	66	66	67	68	66	67	3	1.8			
6	53	64	65	66	67	67	67	67	3	1.9			
7	50	64	66	66	67	68	66	67	3	2.0	50	40	10
8	52	65	67	66	67	68	67	67	3	1.9			
9	42		68	66	67	69	68	68	3	2.4			
10	62	66	67	66	66	68	68	68	4	2.0			
11	53	66	66	66	66	68	67	68	4	2.6	70	62	12
12	53	66	67	67	67	68	67	68	4	2.3			
13	53	65		66	66	68	67	68	3	1.9			
14	49	65	67	67	66	68	67	68	3	2.0	58	48	12
15	52	68	67	67	67	68	67	68	3	1.9			
16	53	66	67	67	67	68	68	68	3	1.9			
17	52	67	68	65	66	68	68	68	3	1.9			
18	53	67	68	66	67	69	68	69	3	1.9	65	65	10
19	51	67	68	68	68	69	68	68	3	2.0			
20	49	66		67	66	68	68	68	3	2.1			
21	47	66	67	67	67	68	68	68	3	2.1	48	35	10
22	51	68	68	67	67	68	68	68	3	2.0			
23	47	67	68	68	68	69	68	69	3	2.1			
24	53	68	68	67	68	69	69	69	3	1.9			
25	53	68	69	68	68	69	69	69	3	1.9	92	82	12
26	53	68	68	69	68	71	71	70	3	1.9			
27	51	66		68	67	70	70	70	3	2.0			
28	50	66	69	69	68	70	70	70	3	2.0	52	45	12
29	54	68	69	68	68	70	70	70	3	1.9			
30	51	68	69	69	69	70	71	70	3	2.0			
31													
MAX	78	68	69	69	69	71	71	70	4	2.6	92	82	12
MIN	42	62	64	65	64	65	66	65	3	1.7	48	35	10
SUM	1613												
AVG	54	66	67	67	67	68	68	68	3.2	2.0	61	53	11

Supplementary Data for Internal Use Only

DATE	FEED					FILTRATE			TWAS			POLYMER		
	# OF BELTS	TOTAL BELT HOURS	GALLONS IN MGD	% SOLIDS (WAS)	DRY TONS	% Total Solids (composite)	Dry Tons	Estimated Capture Rate %	GALLONS X 100	% SOLIDS	TOTAL DRY TONS	LBS. USED	LBS POLY / FEED DRY TONS	LBS POLY / TWAS DRY TONS
June 2015														
1	3	73.6	1.69	0.54	38.0				211165	3.74	3293.3	392	10	0
2	3	69.7	1.91	0.54	43.1	0.04	3.19	93	230740	4.33	4166.3	432	10	0
3	3	72.0	2.07	0.58	50.0				311084	3.58	4644.0	476	10	0
4	3	70.4	2.02	0.49	41.3				307353	4.00	5126.6	461	11	0
5	3	70.9	2.03	0.63	53.3				248671	3.84	3981.9	448	8	0
6	3	75.4	1.97	0.52	42.7				285592	3.40	4049.1	461	11	0
7	3	69.1	1.94	0.57	46.0				273420	3.94	4492.2	424	9	0
8	3	61.7	1.73	0.58	41.8				253303	3.60	3802.6	375	9	0
9	3	47.6	1.41	0.57	33.6	0.03	1.77	95	157661	4.25	2794.1	315	9	0
10	3	52.1	1.82	0.68	51.7				259427	4.09	4424.6	398	8	0
11	3	76.6	2.09	0.59	51.3				321500	4.32	5791.6	500	10	0
12	3	66.5	2.24	0.55	51.4				248346	4.07	4214.9	473	9	0
13	3	73.3	2.31	0.49	47.2				307492	3.86	4949.5	538	11	0
14	3	74.5	2.08	0.57	49.5				250763	3.79	3963.1	511	10	0
15	3	69.0	1.89	0.48	37.9				227829	4.08	3876.2	413	11	0
16	3	73.0	1.78	0.47	34.9	0.04	2.97	91	230438	4.25	4083.9	413	12	0
17	3	71.2	1.98	0.45	37.1				258907	3.70	3994.7	445	12	0
18	3	73.7	2.07	0.53	45.7				269877	4.09	4602.8	488	11	0
19	3	69.9	2.07	0.45	38.7				331084	3.60	4970.2	354	9	0
20	3	73.3	2.33	0.50	48.6				192771	4.40	3537.0	487	10	0
21	3	73.3	2.13	0.44	39.1				231943	3.60	3481.9	459	12	0
22	3	72.7	1.72	0.53	37.9				225200	3.60	3380.7	341	9	0
23	3	70.2	1.76	0.49	35.9	0.04	2.93	92	260100	3.99	4327.6	350	10	0
24	3	70.3	2.02	0.38	32.0				235956	3.80	3739.0	388	12	0
25	3	75.0	2.30	0.54	51.9				296354	3.44	4251.1	487	9	0
26	3	68.6	2.42	0.47	47.4				253951	3.34	3537.0	487	10	0
27	3	73.3	2.52	0.55	57.7				355976	3.23	4794.7	583	10	0
28	3	73.2	2.27	0.58	55.0				357778	2.82	4207.3	578	11	0
29	3	68.5	2.29	0.66	63.0				258968	3.01	3250.5	577	9	0
30	3	74.0	1.97	0.40	32.8	0.03	2.46	93	277490	3.32	3841.7	455	14	0
MAX	3	76.6	2.52	0.68	63.0	0.04	3.19	95	357778	4.40	5791.6	583	14	0
MIN	3	47.6	1.41	0.38	32.0	0.03	1.77	91	157661	2.82	2794.1	315	8	0
SUM		2102.6	60.81		1336.5				7931139		123570.2	13513		3
AVG	3	70.1	2.03	0.53	44.5	0.04	2.66	93	264371	3.77	4119.0	450	10	0

Supplementary Data for Internal Use Only

Date	BP % Total Solids	Cake to Trucks (wet tons)	Cake to Trucks (Dry Tons)	Lagoon to Press Feed (Dry Tons)	Belt Press Feed (Dry Tons)	Estimated Capture Rate	Digesters to Press Feed (Dry Tons)	Digesters to Lagoon (Dry Tons)	Solids to Madison Ranch (Dry Tons)
June 2015									
1	19.99	208.95	41.8	34.9	59.1	71	24.3	8.2	41.8
2	19.70	174.50	34.4	28.1	49.3	70	21.1	8.8	34.4
3	19.80	209.37	41.5	80.4	39.1			11.6	41.5
4	19.03	209.47	39.9	23.4	52.1	76	28.8	12.9	39.9
5	18.21	209.59	38.2	26.2	55.8	68	29.7	8.4	38.2
6	18.20	209.15	38.1	13.2	59.6	64	46.4	47.2	38.1
7	17.97	209.21	37.6	8.8	57.2	66	48.5	6.5	37.6
8	23.58	209.02	49.3	54.3	57.9	85	3.6	26.3	49.3
9	23.55	209.21	49.3	49.6	62.5	79	12.9	2.7	49.3
10	22.96	209.54	48.1	39.2	68.9	70	29.7	11.1	48.1
11	22.02	209.52	46.1	39.8	65.5	70	25.8	12.1	46.1
12	21.84	209.21	45.7	40.8	48.8	94	8.0	10.6	45.7
13	20.87	207.49	43.3	7.1	52.4	83	45.3	8.8	43.3
14	20.98	174.02	36.5	28.0	59.3	62	31.3	9.1	36.5
15	19.02	209.02	39.8	27.5	52.8	75	25.4	7.5	39.8
16	19.49	209.05	40.7	33.5	51.3	79	17.8	7.4	40.7
17	20.04	209.07	41.9	44.9	62.8	67	17.9	8.4	41.9
18	19.93	209.50	41.8	44.9	79.3	53	34.4	23.4	41.8
19	20.31	209.53	42.6	15.3	54.2	78	38.9	8.8	42.6
20	22.00	209.47	46.1	13.7	96.6	48	83.0	10.1	46.1
21	20.66	209.64	43.3	28.1	63.7	68	35.5	6.8	43.3
22	23.91	209.26	50.0	29.8	85.5	59	55.7	9.0	50.0
23	21.38	209.31	44.8	23.1	57.3	78	34.2	7.9	44.8
24	20.76	209.02	43.4	23.3	55.2	79	31.9	8.1	43.4
25	27.63	209.18	57.8	60.6	50.5			9.6	57.8
26	22.42	139.64	31.3	62.8	43.4	72		10.2	31.3
27	19.50	209.81	40.9	34.9	45.3	90	10.5	10.4	40.9
28	19.32	209.38	40.5	8.6	47.5	85	38.9	11.2	40.5
29	20.46	174.40	35.7	0.0	45.4	79	45.4	6.9	35.7
30	21.18	209.30	44.3	16.4	59.4	75	43.0	0.0	44.3
Max	27.63	209.8	57.8	80.4	96.6	94	83.0	47.2	57.8
Min	17.97	139.6	31.3	0.0	39.1	48	3.6	0.0	31.3
Std	2.04	16.1	5.3	18.3	12.2	10	16.6	8.4	5.3
Sum	626.71	6102.8	1274.4	941.0	1737.8	73	867.6	329.6	1274.4
Avg	20.89	203.4	42.5	31.4	57.9	73	32.1	11.0	42.5

Supplementary Data for Internal Use Only

Date	Primary Sludge				TWAS				D5				D6				D7				D8				D9				D10				
	TS	VS	%	VOL	TS	VS	%	VOL	PS	TWAS	Vol Sol	Loading (lbs VS/ft ² /day)	PS	TWAS	Vol Sol	Loading (lbs VS/ft ² /day)	PS	TWAS	Vol Sol	Loading (lbs VS/ft ² /day)	PS	TWAS	Vol Sol	Loading (lbs VS/ft ² /day)	PS	TWAS	Vol Sol	Loading (lbs VS/ft ² /day)	PS	TWAS	Vol Sol	Loading (lbs VS/ft ² /day)	
June 2015																																	
1	2.94	2.28	78	3.37	2.68	79	3.37	2.68	7170	2130	183592	0.58	7160	2160	184087	0.59	8740	193992	0.62	7050	2140	181532	0.58	6750	2150	176049	0.52	6710	2130	174845	0.56		
2	3.01	2.22	74	3.68	2.92	79	3.68	2.92	9820	2600	245133	0.78	10360	2590	254887	0.81	13800	336069	1.07	10600	2730	262740	0.84	10360	2660	256592	0.75	9770	2560	243233	0.77		
3	2.25	1.62	72	3.37	2.68	79	3.37	2.68	8480	3210	185784	0.59	8310	3030	179493	0.57	17270	383125	1.22	8340	3280	185445	0.59	7810	3290	178506	0.57	7730	3220	175672	0.56		
4	1.73	1.31	76	3.19	2.80	82	3.19	2.80	11440	3060	191340	0.61	12290	3230	204312	0.65	17550	380554	1.21	11940	3150	198754	0.63	10470	2820	175538	0.56	9150	2820	161116	0.51		
5	3.01	2.27	75	3.21	2.61	81	3.21	2.61	11000	2910	271593	0.66	11870	2920	288281	0.62	15900	346102	1.10	11230	3060	279212	0.69	12650	3020	305225	0.97	11130	3020	276448	0.88		
6	3.71	2.98	80	3.18	2.60	82	3.18	2.60	11060	3810	357492	1.14	11490	2910	348664	1.11	15300	331765	1.06	10820	2740	328328	1.04	12250	2840	366034	1.16	10960	2840	333974	1.06		
7	2.86	2.30	80	3.13	2.50	80	3.13	2.50	9950	2750	236089	0.75	9270	2760	255383	0.75	14950	311708	0.99	9720	2690	242536	0.77	11230	2800	273794	0.87	9140	2800	233703	0.74		
8	2.07	1.69	82	2.99	2.40	80	2.99	2.40	9350	2590	183626	0.58	9530	2630	186984	0.59	12400	248198	0.79	9790	2630	190628	0.61	11190	2580	209360	0.67	9650	2580	187654	0.60		
9	2.65	2.19	83	3.42	2.73	80	3.42	2.73	9700	1830	218832	0.70	10000	1840	224539	0.71	10070	228276	0.73	10330	2040	235120	0.75	9230	2040	215029	0.68	9250	2040	216125	0.69		
10	2.91	2.25	77	3.87	3.03	83	3.87	3.03	10030	2590	253663	0.81	9470	2610	243660	0.77	12330	311582	0.99	10450	2710	264576	0.84	10420	2620	261739	0.83	10010	2660	255066	0.81		
11	2.40	1.95	81	3.95	3.28	83	3.95	3.28	10210	3210	253855	0.81	12000	3200	292693	0.90	16560	453002	1.44	10830	3320	266948	0.85	10840	3470	271213	0.86	10290	3280	257071	0.82		
12	2.76	2.20	80	3.8	3.15	83	3.8	3.15	11270	3060	287171	0.91	12230	3090	305573	0.97	16580	435371	1.39	11760	3000	294585	0.94	11380	2960	286562	0.91	10950	2920	277622	0.88		
13	2.73	2.21	81	3.55	2.92	82	3.55	2.92	9030	3060	240955	0.77	11230	3070	281748	0.90	16910	411806	1.31	9210	3300	250117	0.80	8840	3260	242324	0.77	8800	3080	237203	0.76		
14	3.10	2.47	80	3.43	2.80	82	3.43	2.80	6940	2590	201384	0.64	8320	2690	231872	0.74	13690	319889	1.02	8900	2450	198351	0.63	7050	2550	204776	0.65	6780	2610	200615	0.64		
15	2.75	2.24	81	3.79	2.95	78	3.79	2.95	9200	2440	231902	0.74	11290	2440	270947	0.86	9620	236581	0.75	9330	2510	238053	0.75	9310	2510	235679	0.75	8890	2440	228111	0.72		
16	2.71	2.21	82	3.65	2.89	79	3.65	2.89	9030	1980	214159	0.68	10500	2120	244627	0.78	8020	193303	0.61	9230	2140	221701	0.71	9160	2010	217278	0.69	9560	1980	224296	0.71		
17	3.54	2.77	78	3.56	2.87	81	3.56	2.87	9370	2590	278458	0.89	11420	2600	326056	1.04	11780	281964	0.90	9730	2690	288450	0.92	9980	2670	284003	0.94	11420	2610	326295	1.04		
18	3.55	2.85	80	3.5	2.83	81	3.5	2.83	8590	2740	268008	0.85	8950	2760	277875	0.89	14520	342704	1.09	8980	2680	274088	0.87	8570	2700	267426	0.85	8740	2760	272883	0.87		
19	3.15	2.54	81	3.41	2.74	80	3.41	2.74	8740	2290	237475	0.76	10610	2300	277317	0.89	9080	207483	0.66	9260	2440	251918	0.80	8260	2320	227992	0.73	10600	2290	276876	0.88		
20	2.79	2.29	82	3.37	2.72	81	3.37	2.72	8540	2430	218226	0.69	9850	2440	243472	0.77	11840	266588	0.85	8700	2490	222843	0.71	8620	2480	220888	0.70	9670	2450	240261	0.76		
21	2.85	2.44	86	3.21	2.67	83	3.21	2.67	7750	2290	208703	0.66	8770	2160	226964	0.72	15490	343592	1.09	8100	2440	219165	0.70	8010	2350	215330	0.68	8790	2300	230089	0.73		
22	2.88	2.49	86	3.13	2.56	82	3.13	2.56	8210	2290	219386	0.70	10270	2280	261952	0.83	18790	401174	1.28	8620	2100	223844	0.71	8690	2300	229568	0.73	10100	2290	258535	0.82		
23	2.16	1.75	81	3.5	2.93	84	3.5	2.93	9850	2120	195565	0.62	11280	2120	216436	0.69	15630	389269	1.24	10220	2100	200477	0.64	10260	2170	202771	0.64	10930	2140	211817	0.67		
24	2.33	1.87	80	3.43	2.84	86	3.43	2.84	8800	2290	190274	0.61	10070	2290	213200	0.68	18110	444050	1.41	8880	2380	196847	0.63	8760	2300	193014	0.61	9670	2290	206961	0.66		
25	2.59	2.21	85	3.02	2.69	86	3.02	2.69	9110	3060	234008	0.74	11220	3010	271818	0.86	17030	367858	1.17	9380	2840	234232	0.74	9440	3130	241602	0.77	11250	3080	273883	0.87		
26	2.22	1.77	80	3.17	2.76	87	3.17	2.76	10080	2750	212100	0.67	12230	2790	244758	0.78	17100	363615	1.25	10670	3060	227945	0.72	10540	2660	216818	0.69	11810	2770	236098	0.76		
27	2.73	2.25	82	2.57	2.27	88	2.57	2.27	8980	3690	238368	0.76	10920	3620	273447	0.87	16730	316729	1.01	9220	3690	242872	0.77	9420	3660	246057	0.78	10930	3700	275149	0.88		
28	2.83	2.32	82	2.86	2.23	87	2.86	2.23	8520	3920	230317	0.73	10590	3560	271113	0.86	16820	312922	0.99	8630	3590	233748	0.74	8620	3630	234298	0.75	10570	3560	270726	0.86		
29	2.77	2.14	77	2.88	2.19	85	2.88	2.19	8600	3850	223808	0.71	10990	3840	266281	0.85	17800	325110	1.03	8980	4150	235534	0.75	9090	4090	238937	0.75	11040	3880	267904	0.85		
30	2.66	2.13	80	2.89	2.37	82	2.89	2.37	8580	2870	209145	0.67	9800	2700	229233	0.73	16450	325147	1.03	8810	2680	209475	0.67	8820	2770	211432	0.67	9790	2900	231232	0.74		
Max	3.71	2.98	86	3.96	3.28	88	3.96	3.28	11440	3850	357492	1.14	12290	3840	348664	1.11	18790	453002	1.44	11940	4150	328326	1.04	12650	4090	366034	1.16	11810	3880	333974	1.06		
Min	1.73	1.31	72	2.56	2.19	78	2.56	2.19	6940	1830	183592	0.58	7160	1840	179493	0.57	8020	183303	0.61	6900	2040	181532	0.58	6750	2010	175538	0.52	6710	1980	161116	0.51		
Sum									276490	82600			312390	81660			437100		285590	83170		286000	82810		266000		294140		82000				
Avg	2.75	2.21	80	3.31	2.71	82	3.31	2.71	9216	2753	230720	0.73	10413	2722	262240	0.80	14570	328081	1.04	9520	2772	238629	0.75	9533	2760	237128	0.75	9805	2733	242059	0.77		

Volume D1, D2 = 1,216,784 gal = 162,660 ft³
Volume D5, D6, D7, D8 = 2,362,087 gal = 314,430 ft³
Volume D9, D10 = 2,543,200 gal = 340,000 ft³

Volume D1, D2 = 1,216,784 gal = 162,660 ft³Volume D5, D6, D7, D8 = 2,352,097 gal = 314,430 ft³Volume D9, D10 = 2,543,200 gal = 340,000 ft³

Beginning October 2013, Digester #7 is TWAS only digester

Supplementary Data for Internal Use Only

DATE	All				Primary Sludge				TWAS				PS		TWAS		D5				D6				D7							
	VS %	VS %	Red	Vol	TS %	VS %	Vol	TS %	VS %	Vol	Feed Total	Feed Total	PS Feed	TWAS Feed	Feed %	TS %	VS %	Vol %	Red %	PS Feed	TWAS Feed	Feed %	TS %	VS %	Vol %	Red %	TWAS Feed	Feed %	TS %	VS %	Vol %	Red %
Jun 2015	Feed																															
1	78			78	2.94	2.26	78	3.37	2.66	79	364,460	211,165	717	213	78	716	216	78		716	216	78					874	79				
2	75	61		74	3.01	2.22	74	3.68	2.92	79	518,693	230,740	982	260	75	1036	259	75	60	50	1036	259	75	1.6	0.95	59	1380	79	1.98	1.31	66	49
3	75			72	2.25	1.62	72	3.37	2.66	79	417,090	311,084	848	321	74	831	303	74		831	303	74					1727	79				
4	78			82	1.73	1.31	76	3.19	2.60	82	553,268	307,353	1144	306	77	1229	323	77		1229	323	77					1755	82				
5	77			75	3.01	2.27	75	3.21	2.61	81	570,518	248,671	1100	291	77	1187	292	77		1187	292	77					1590	81				
6	81			80	3.71	2.98	80	3.18	2.60	82	583,244	285,592	1106	381	81	1149	291	81		1149	291	81					1530	82				
7	80			80	2.86	2.30	80	3.13	2.50	80	479,428	273,420	935	275	80	927	276	80		927	276	80					1495	80				
8	81			82	2.07	1.69	82	2.99	2.40	80	476,387	263,303	935	269	81	953	263	81		953	263	81					1240	80				
9	82	77		83	2.65	2.19	83	3.42	2.73	80	476,120	157,661	970	183	82	1000	184	82	60	68	1000	184	82	1.52	0.92	61	1007	80	1.95	1.33	68	46
10	79			77	2.91	2.25	77	3.67	3.03	83	514,234	259,427	1003	259	78	947	261	78		947	261	78					1233	83				
11	82			81	2.40	1.95	81	3.96	3.28	83	527,936	321,500	1021	321	82	1200	320	82		1200	320	82					1686	83				
12	81			80	2.76	2.20	80	3.80	3.15	83	573,793	248,346	1127	306	80	1223	309	80		1223	309	80					1658	83				
13	81			81	2.73	2.21	81	3.55	2.92	82	445,629	307,492	903	306	81	1123	307	81		1123	307	81					1691	82				
14	81			80	3.10	2.47	80	3.43	2.80	82	341,328	250,763	684	269	80	832	259	80		832	259	80					1369	82				
15	80			81	2.75	2.24	81	3.79	2.95	78	454,770	227,829	920	244	81	1129	244	81		1129	244	81					962	78				
16	81	72		82	2.71	2.21	82	3.65	2.89	79	502,925	230,438	903	198	81	1050	212	81	61	64	1050	212	81	1.52	0.91	60	802	79	2.02	1.38	58	43
17	79			78	3.54	2.77	78	3.56	2.87	81	478,064	268,907	937	259	79	1142	260	79		1142	260	79					1178	81				
18	81			80	3.55	2.85	80	3.50	2.83	81	435,300	269,877	858	274	80	895	276	80		895	276	80					1452	81				
19	81			81	3.15	2.54	81	3.41	2.74	80	440,871	331,084	874	229	81	1061	230	81		1061	230	81					908	80				
20	82			82	2.79	2.29	82	3.37	2.72	81	429,989	192,771	854	243	82	985	244	82		985	244	82					1184	81				
21	85			86	2.85	2.44	86	3.21	2.67	83	395,747	231,943	775	229	85	877	216	85		877	216	85					1543	83				
22	85			86	2.88	2.49	86	3.13	2.56	82	417,391	225,200	821	229	85	1027	228	86		1027	228	86					1879	82				
23	82	75		81	2.16	1.75	81	3.50	2.93	84	503,444	260,100	985	212	81	1128	212	81	60	66	1128	212	81	1.48	0.88	59	1593	84	1.92	1.33	66	56
24	82			80	2.33	1.87	80	3.43	2.94	86	438,216	235,956	860	229	81	1007	229	81		1007	229	81					1811	86				
25	85			86	2.59	2.21	86	3.02	2.59	86	454,371	296,354	911	306	85	1122	301	85		1122	301	85					1703	86				
26	82			80	2.22	1.77	80	3.17	2.76	87	498,665	253,951	1008	275	81	1223	279	81		1223	279	81					1710	87				
27	85			82	2.73	2.25	82	2.57	2.27	88	449,216	355,976	898	369	84	1092	362	84		1092	362	84					1673	88				
28	84			82	2.83	2.32	82	2.56	2.23	87	416,038	357,778	852	352	83	1059	356	83		1059	356	83					1882	87				
29	80			77	2.77	2.14	77	2.58	2.19	85	433,480	258,968	860	385	80	1099	384	79		1099	384	79					1780	85				
30	81	70		80	2.66	2.13	80	2.89	2.37	82	432,158	277,490	868	287	81	990	270	80	61	61	990	270	80	1.49	0.89	60	1645	82	1.79	1.22	68	53
MAX	85	77		86	3.71	2.98	86	3.96	3.28	88	573,793	357,778	1144	385	85	1229	384	86	62	68	1229	384	86	1.60	0.95	61	1879	88	2.02	1.38	69	56
MIN	75	61		72	1.73	1.31	72	2.56	2.19	78	341,328	157,661	716	184	74	716	184	74	60	59	716	184	74	1.48	0.88	59	802	78	1.79	1.22	66	43
SUM											14,002,773	7,931,139				31,239	8,166										43,710					
AVG	81	73		80	2.75	2.21	80	3.31	2.71	82	466,759	264,371	1041	272	80.50	1041	272	80.50	60	64	1041	272	80.50	1.52	0.91	60	1457	82	1.93	1.31	68	54

Beginning October 2013, Digester #7 is TWAS only digester

Supplementary Data for Internal Use Only

DATE	D8						D9						D10						D1						D2						Belt Press Feed					
	PS Feed	TWAS Feed	Feed % Vol	TS %	VS %	Vol Red %	PS Feed	TWAS Feed	Feed % Vol	TS %	VS %	Vol Red %	PS Feed	TWAS Feed	Feed % Vol	TS %	VS %	Vol Red %	Feed % Vol	TS %	VS %	Vol Red %	Feed % Vol	TS %	VS %	Vol Red %	Feed % Vol	TS %	VS %	Vol Red %						
Jun 2015																																				
1	705	214	78				675	215	78				671	213	78																					
2	1060	273	75	1.6	0.97	61	48	1036	266	75	1.61	0.94	58	53																						
3	834	328	74				781	329	74				773	322	74																					
4	1194	315	77				1047	282	77				915	282	77																					
5	1123	306	77				1265	302	77				1113	302	77																					
6	1082	274	81				1225	284	81				1096	284	81																					
7	972	269	80				1123	280	80				914	280	80																					
8	979	263	81				1119	258	81				965	258	81																					
9	1033	204	82	1.58	0.95	60	67	923	204	82	1.53	0.9	59	69																						
10	1045	271	78				1042	262	78				1001	266	78																					
11	1063	332	82				1084	347	82				1029	328	82																					
12	1176	300	80				1138	296	80				1095	292	80																					
13	921	330	81				884	326	81				880	308	81																					
14	690	245	80				705	255	80				678	261	80																					
15	933	251	81				931	251	81				889	244	81																					
16	923	214	81	1.67	1.03	62	63	916	201	81	1.44	0.87	60	64																						
17	973	266	79				996	267	79				1142	261	79																					
18	899	266	80				857	270	80				874	276	80																					
19	926	244	81				826	232	81				1060	229	81																					
20	870	249	82				862	248	82				967	245	82																					
21	810	244	85				801	235	85				879	230	85																					
22	862	210	86				869	230	85				1010	229	86																					
23	1022	210	81	1.57	0.94	60	66	1026	217	81	1.39	0.84	60	65																						
24	888	238	81				876	230	81				967	229	81																					
25	938	264	85				944	313	85				1125	308	85																					
26	1067	306	81				1054	266	81				1181	277	81																					
27	922	369	84				942	366	84				1093	370	84																					
28	863	359	83				862	363	83				1057	356	83																					
29	895	415	80				909	409	80				1104	388	79																					
30	881	268	81	1.62	1	62	61	882	277	81	1.42	0.86	61	62																						
MAX	1194	415	88	1.67	1.03	62	67	1265	409	85	1.61	0.94	60	69																						
MIN	690	204	74	1.57	0.94	60	48	675	201	74	1.39	0.84	58	53																						
SUM	28,559	8,317					28,500	8,281					29,414	8,200																						
AVG	952	277	81	1.61	0.98	61	62	953	276	81	1.48	0.88	60	64																						
												</																								

D1 offline March 3 - June 28

D2 offline June 28, 2015

City of Portland
Sewage Release Report to DEQ
6/1/2015 to 6/30/2015

City System

Incident Date	Location	Service Request #	Discharge (gal)	Cause	Destination:
6/3/2015	1321 NE DAVIS ST	163256	10	Roots	Outside Building - Street
6/3/2015	3230 SE 111TH AVE	163250	5	Maintenance Work	Inside Building - First Floor, Bathroom
6/4/2015	4914 SE 75TH AVE	163271	200	Roots	Inside Building - Unfinished Basement
6/18/2015	6212 SE 21ST AVE	163328	20	Structural Defect	Inside Building - Unfinished Basement
6/22/2015	9825 SW RIVERSIDE DR	163341	2,900	Equipment Failure	Outside Building - Waterway: Willamette River
6/22/2015	9357 SE SUN CREST DR	163343	30	Structural Defect	Inside Building - Finished Basement
6/24/2015	936 NE BEECH ST	163357	10	Structural Defect	Outside Building - Underground
6/26/2015	5928 N BORTHWICK AVE	163367	5	Structural Defect	Inside Building - Unfinished Basement
6/30/2015	4025 SW HAMILTON ST	163378	30	Roots	Inside Building - Unfinished Basement

Risk Claim sewage releases - Previously unreported incidences that occurred prior to 6/1/2015

2/4/2015	1714 NW COUCH ST	163403	Unknown	Roots	Inside Building - Unfinished Basement
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Private Responsibility or No Release

Incident Date	Location	Service Request #
6/4/2015	4569 NE 36TH AVE	163266
6/4/2015	6428 SE 97TH AVE	163273
6/5/2015	9815 SW CAPITOL HWY	163269
6/8/2015	621 SE MANCHESTER PL	163276
6/8/2015	5116 NE 41ST AVE	163300
6/10/2015	9380 NE HALSEY ST	163289
6/10/2015	7295 SW CAPITOL HILL RD	163295
6/17/2015	3025 NE 57TH AVE	163319
6/17/2015	1973 N JANTZEN AVE	163321
6/22/2015	8050 NE MARTIN LUTHER	163342
6/22/2015	6212 SE 21ST AVE	163338
6/23/2015	201 NE 2ND AVE	163362
6/23/2015	7540 SE 32ND AVE	163348
6/25/2015	0111 SW WHITAKER ST	163358
6/25/2015	3509 SE DIVISION ST	163363

Private Responsibility or No Release - Previously unreported incidences that occurred prior to 6/1/2015

5/21/2015	4040 SE OAK ST	163298
5/22/2015	13606 NE FREMONT CT	163428
5/26/2015	11222 SW SOUTHRIDGE DR	163211

