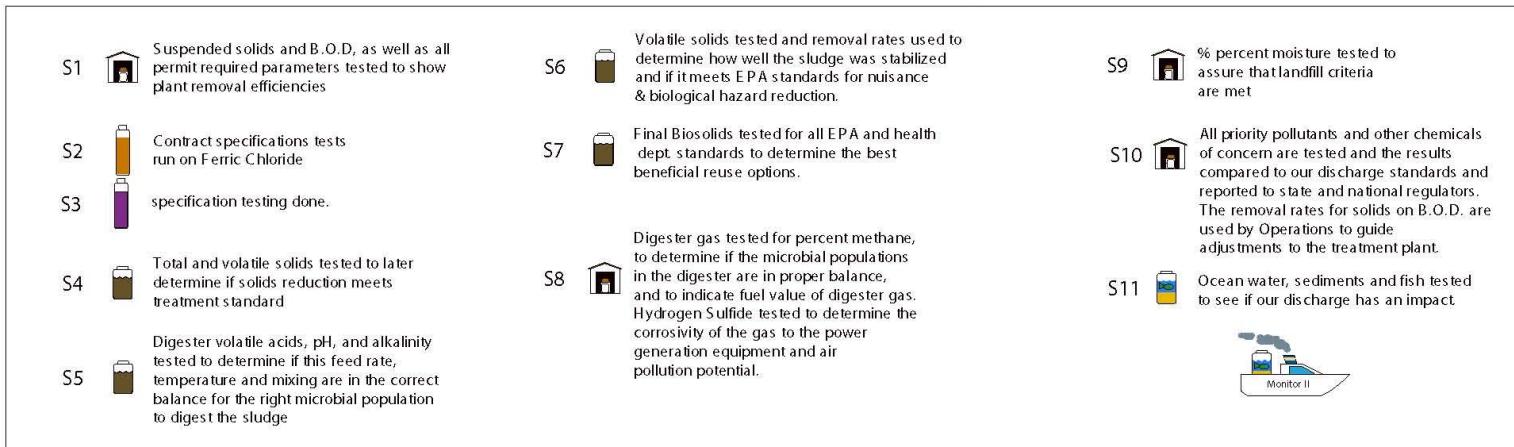
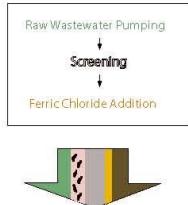


# POINT LOMA TREATMENT PLANT PROCESS FLOW DIAGRAM

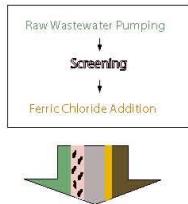
## Wastewater Laboratory Testing



## Pump Station 1



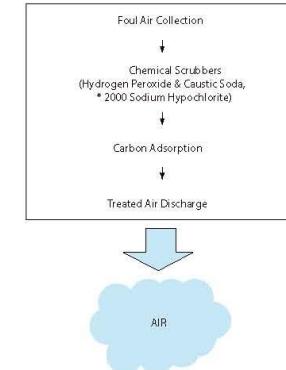
## Pump Station 2



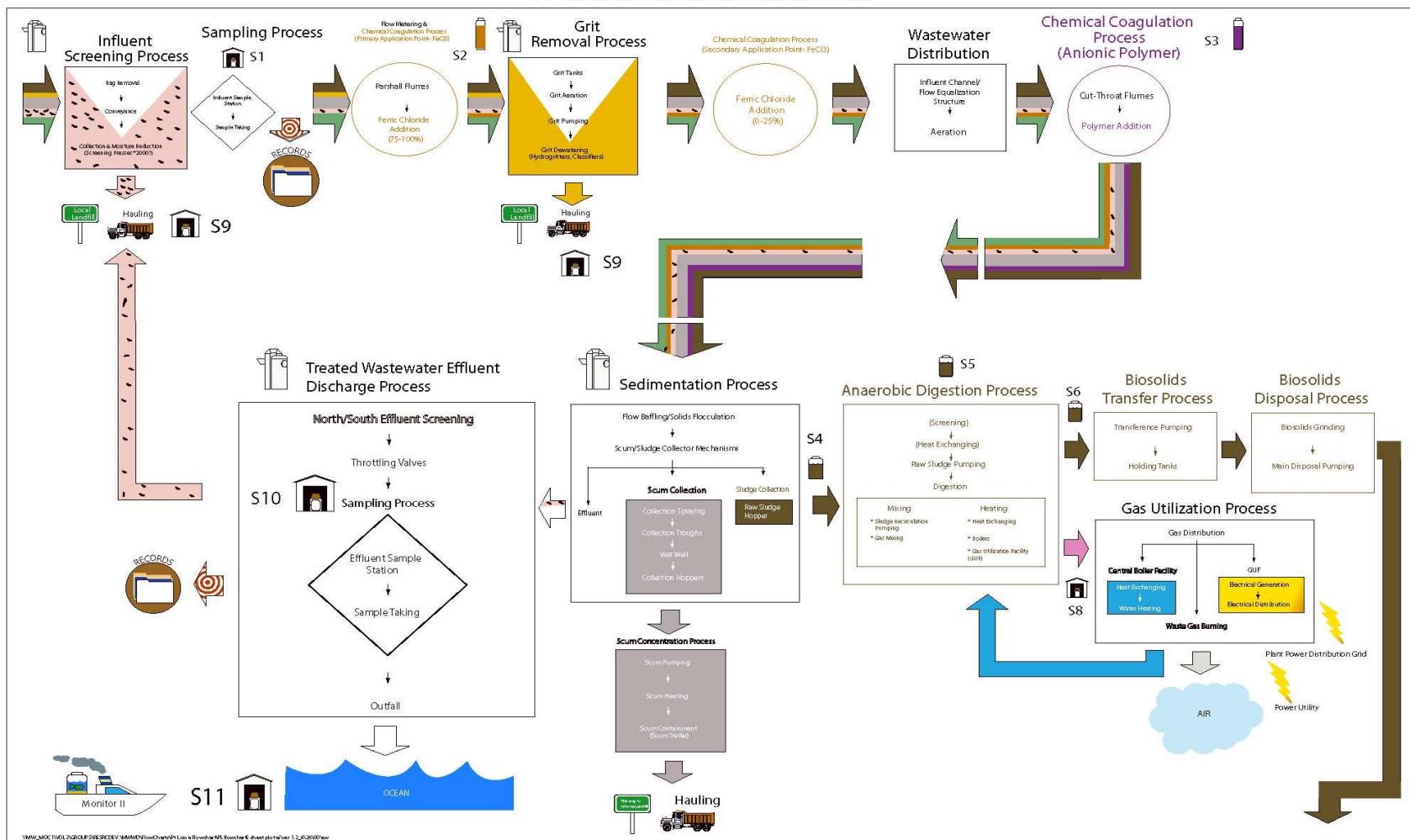
## Legend

	Influent Wastewater		Ferric Chloride
	Scum		Polymer
	Biosolids		Digester Gas
	Grit		Heated Water
	Rags		Treated Effluent Wastewater
	Records		Treated Air
	Simultaneous Odor Removal Process		Flare Discharge
	Sludge Sample		Electricity
	Chemical Sample		Sample

## Odor Removal Process



## Point Loma Wastewater Treatment Plant



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### **III. Plant Operations Summary**

- A. Flows
- B. Rain Days
- C. Solids Production
- D. Chemical Usage
- E. Gas Production
- F. Graphs of Chemical Usage
- G. Facilities Out-of-Service Report
- H. Grit Analyses
- I. Raw Sludge Data Summary
- J. Digester and Digested Sludge Data Summary

## A. Flows

### Point Loma Wastewater Treatment Plant Annual Monitoring Report Flow Report - 2012

#### WASTEWATER FLOWS Daily Average Flows - Millions of Gallons

Mon	Pt. L Gould	Pt. L ADS	PS#2 Flow	PS#2 Pumps	PS#1 Flows
01	153.9	149.5	151.7	152.7	54.4
02	149.6	151.6	151.9	156.4	54.7
03	152.8	153.5	154.9	158.9	55.0
04	152.2	151.5	152.1	155.4	53.8
05	147.2	190.9	146.7	150.6	53.8
06	143.6	155.1	144.4	133.2	52.1
07	144.1	184.2	143.9	134.5	52.5
08	143.1	170.5	143.1	137.9	52.9
09	142.4	140.8	142.7	135.6	52.7
10	144.7	140.1	142.4	136.9	53.2
11	149.3	141.1	142.5	159.1	53.7
12	152.2	149.5	147.0	131.2	54.2
avg	147.9	156.5	146.9	145.2	53.6
sum	1,775.1	1,878.3	1,763.2	1,742.4	643.1

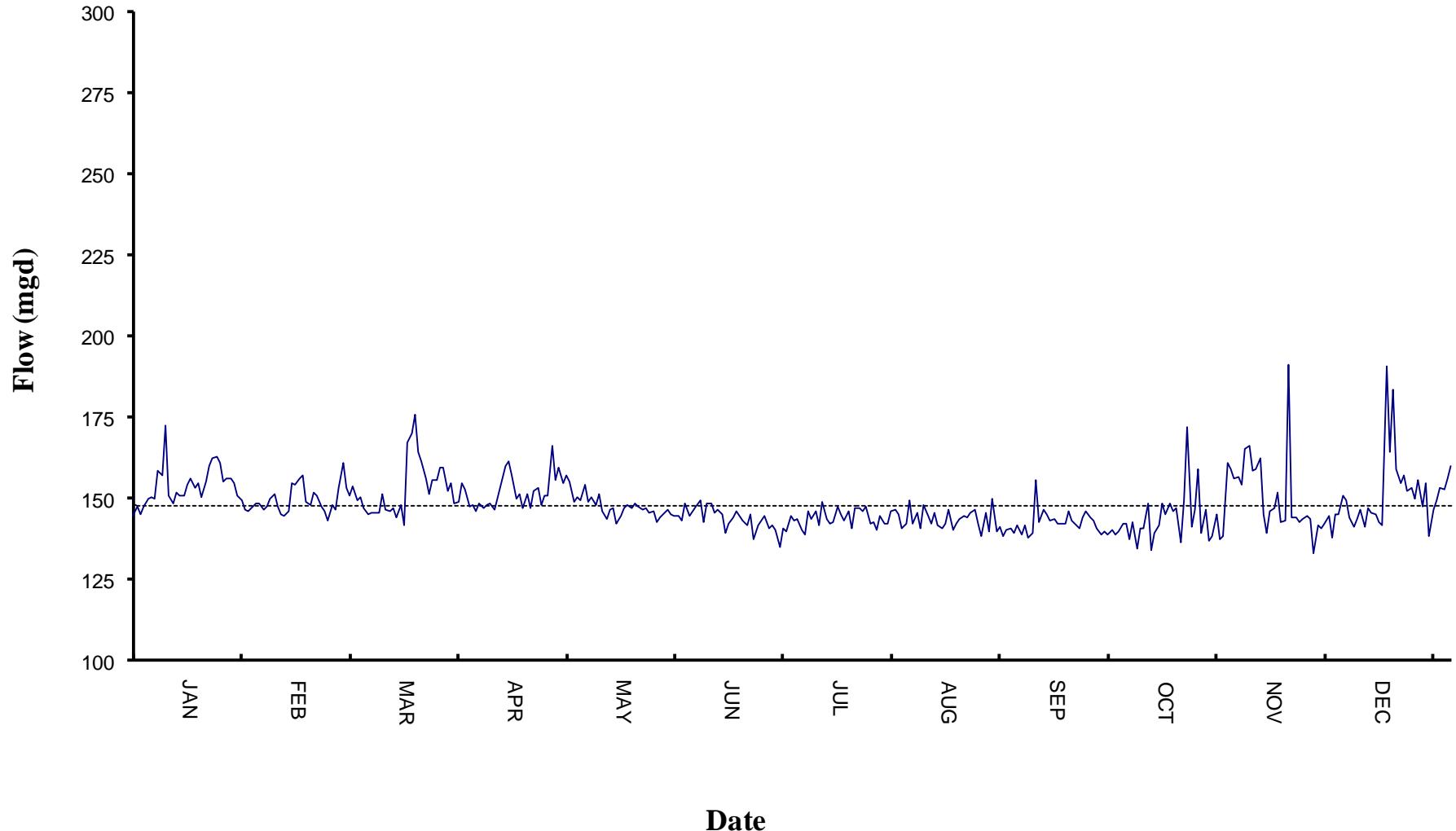
#### WASTEWATER FLOWS Monthly Total Flows - Millions of Gallons

Mon	Pt. L Gould	Pt. L ADS	PS#2 Flow	PS#2 Pumps	PS#1 Flows
01	4,770	4,633	4,704	4,734	1,687
02	4,337	4,396	4,406	4,536	1,586
03	4,738	4,759	4,803	4,925	1,704
04	4,566	4,546	4,562	4,663	1,615
05	4,563	5,918	4,547	4,668	1,667
06	4,309	4,652	4,331	3,997	1,563
07	4,468	5,712	4,461	4,169	1,627
08	4,436	5,287	4,435	4,275	1,640
09	4,271	4,224	4,280	4,069	1,582
10	4,486	4,342	4,414	4,106	1,649
11	4,478	4,232	4,274	4,772	1,611
12	4,720	4,636	4,556	4,066	1,682
avg	4,512	4,778	4,481	4,415	1,634
sum	54,141	57,336	53,773	52,982	19,613

NOTES: The flows taken at the Pt. Loma WWTP are from the Parshall flumes at the headworks. Water depth in the flume is measured by 2 meters. The Gould meters measure water pressure. The ADS meters are sonar devices that measure the distance of the water level below the meter. The flows through Pump Station II (PS#2) are from venturi meters. PS#2 flow is the flow from the totalizer to which all of the venturi meters feed. PS#2 Pumps is the sum of the readings on the individual venturi meters which are connected to each of the pumps at the pump station. PS#1 is the flow from the venturi meters at Pump Station 1.

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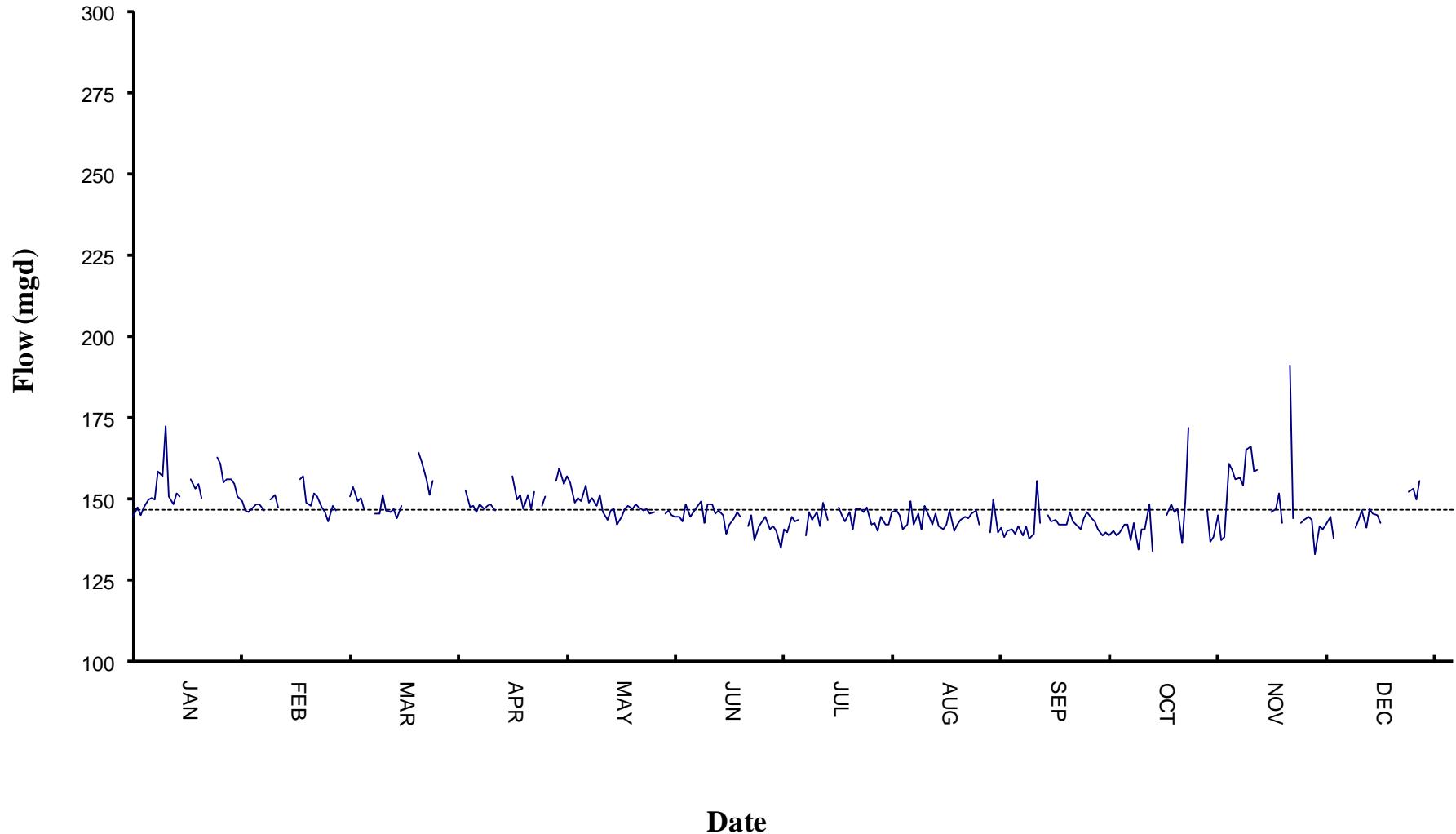
**Point Loma Wastewater Treatment Plant**  
**2012 Daily Flows (mgd)**



**Point Loma Wastewater Treatment Plant**  
**2012 Flows (mgd)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	144.8	146.8	150.8	154.7	155.2	143.3	144.6	140.6	154.8	142.4	156.1	151.1
2	147.4	145.9	153.7	152.6	149.1	148.7	143.3	142.3	142.0	142.2	156.8	149.6
3	145.2	147.4	149.5	147.3	150.3	144.7	143.6	149.3	138.7	137.5	154.1	144.1
4	147.4	148.3	150.4	148.2	149.2	145.9	140.1	142.0	141.9	142.6	165.1	141.3
5	150.0	148.3	147.2	146.0	154.2	147.7	139.0	145.8	137.8	134.7	166.1	143.7
6	150.4	146.7	145.3	148.4	149.1	149.3	146.2	140.6	139.5	140.7	158.7	146.6
7	149.9	147.7	145.6	147.2	150.4	142.9	143.7	147.8	155.7	140.8	159.3	141.2
8	158.7	150.1	145.5	148.0	148.0	148.7	146.1	144.6	142.5	148.6	162.5	147.1
9	157.1	151.6	145.5	148.3	151.2	148.2	141.6	142.1	146.7	133.9	145.3	145.6
10	172.7	147.5	151.2	146.7	146.0	145.4	148.9	145.7	145.3	139.1	139.6	145.0
11	150.8	145.1	146.4	150.3	143.7	146.6	143.8	141.9	143.4	141.5	146.1	142.9
12	148.4	144.6	145.9	154.1	146.4	145.3	142.3	140.6	143.5	148.6	147.1	141.9
13	151.7	145.9	146.8	160.1	146.8	139.5	142.8	142.2	142.2	145.0	152.1	190.7
14	150.8	154.8	143.9	161.4	142.3	142.2	147.3	146.7	142.4	148.3	142.8	164.5
15	150.9	154.5	147.9	157.0	144.8	144.3	145.1	140.3	142.3	146.1	143.4	183.7
16	154.4	156.1	141.5	150.0	146.9	145.9	143.3	142.2	146.3	147.0	191.5	159.2
17	156.3	157.2	167.0	151.5	148.0	144.5	146.0	143.8	143.1	136.6	144.1	154.6
18	153.4	148.9	170.2	147.1	146.9	143.0	140.9	144.7	142.4	149.5	144.1	157.2
19	155.0	147.8	176.0	151.4	148.5	141.6	146.8	144.1	141.0	172.0	142.6	152.5
20	150.6	151.9	164.6	147.2	147.5	145.2	147.2	145.8	144.1	141.5	143.6	153.2
21	155.4	150.8	161.3	152.1	146.7	137.6	145.9	146.6	146.0	146.6	144.6	149.8
22	159.9	147.4	156.0	153.2	147.0	141.7	147.5	142.2	144.0	158.8	143.6	155.6
23	162.3	146.2	151.6	148.0	145.5	143.3	142.1	138.6	143.4	139.5	133.2	147.6
24	162.9	143.3	155.5	150.8	146.0	144.7	142.5	145.4	141.0	146.3	141.5	154.6
25	161.0	148.2	155.6	151.0	142.8	140.6	140.3	139.8	139.0	136.8	140.6	138.6
26	155.0	146.4	159.3	166.3	144.2	141.9	144.5	149.9	139.9	138.2	142.1	146.6
27	156.4	153.5	159.6	155.6	145.6	140.5	142.3	139.7	139.0	144.9	144.6	149.6
28	156.1	160.9	152.2	159.6	146.6	135.2	142.5	141.4	140.2	137.5	137.9	153.1
29	154.9	153.4	154.6	154.9	145.3	140.8	146.1	138.2	138.9	138.6	145.1	152.6
30	151.0		148.6	157.1	144.6	139.9	146.4	140.1	139.9	161.1	144.9	156.1
31	149.2		149.0		144.7		145.3	141.0		159.1		160.1
Average	153.9	149.6	152.8	152.2	147.2	143.6	144.1	143.1	142.9	144.7	149.3	152.2
Minimum	144.8	143.3	141.5	146.0	142.3	135.2	139.0	138.2	137.8	133.9	133.2	138.6
Maximum	172.7	160.9	176.0	166.3	155.2	149.3	148.9	149.9	155.7	172.0	191.5	191
Total	4769.8	4337.1	4738.0	4565.9	4563.2	4308.7	4468.1	4436.0	4286.7	4485.7	4478.5	4719.5
												Summary

**Point Loma Wastewater Treatment Plant**  
**2012 Dry Weather Flows (mgd)**



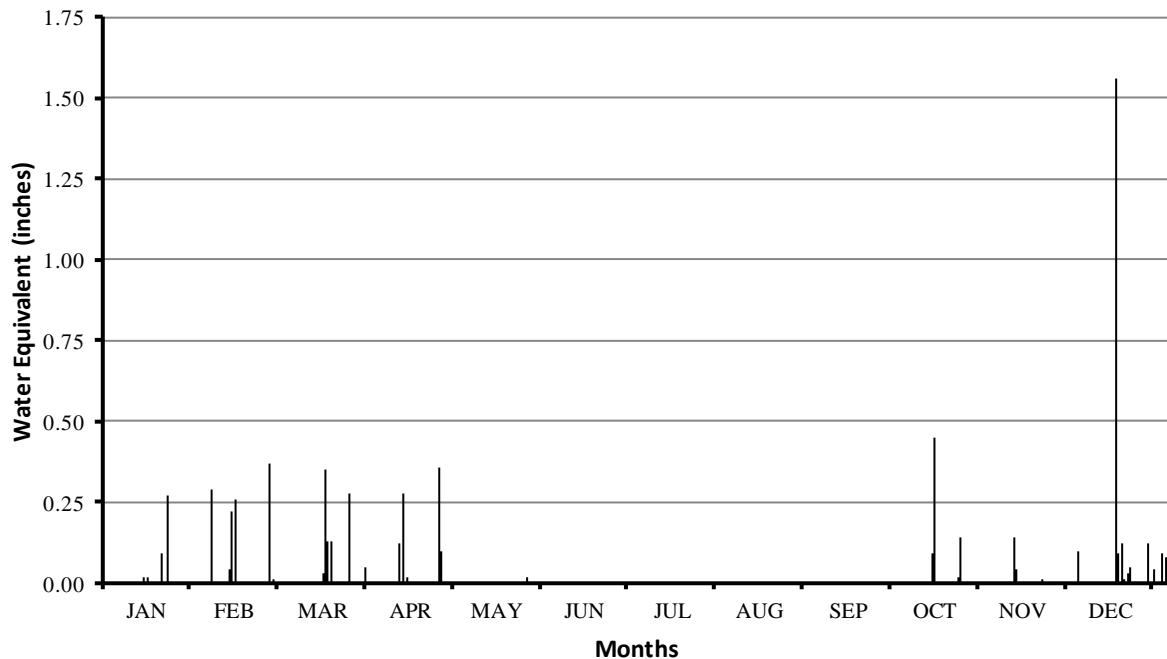
**Point Loma Wastewater Treatment Plant**  
**2012 Dry Weather Flows (mgd)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	144.8	146.8	150.8		155.2	143.3	144.6	140.6		142.4	156.1	151.1
2	147.4	145.9	153.7	152.6	149.1	148.7	143.3	142.3	142.0	142.2	156.8	
3	145.2	147.4	149.5	147.3	150.3	144.7	143.6	149.3	138.7	137.5	154.1	
4	147.4	148.3	150.4	148.2	149.2	145.9		142.0	141.9	142.6	165.1	141.3
5	150.0	148.3	147.2	146.0	154.2	147.7	139.0	145.8	137.8	134.7	166.1	143.7
6	150.4	146.7		148.4	149.1	149.3	146.2	140.6	139.5	140.7	158.7	146.6
7	149.9			147.2	150.4	142.9	143.7	147.8	155.7	140.8	159.3	141.2
8	158.7	150.1	145.5	148.0	148.0	148.7	146.1	144.6	142.5	148.6		147.1
9	157.1	151.6	145.5	148.3	151.2	148.2	141.6	142.1		133.9		145.6
10	172.7	147.5	151.2	146.7	146.0	145.4	148.9	145.7	145.3			145.0
11	150.8		146.4		143.7	146.6	143.8	141.9	143.4		146.1	142.9
12	148.4		145.9		146.4	145.3		140.6	143.5		147.1	
13	151.7		146.8		146.8	139.5		142.2	142.2	145.0	152.1	
14	150.8		143.9		142.3	142.2	147.3	146.7	142.4	148.3	142.8	
15			147.9	157.0	144.8	144.3	145.1	140.3	142.3	146.1		
16				156.1	150.0	146.9	145.9	143.3	142.2	146.3	147.0	191.5
17	156.3	157.2			151.5	148.0	144.5	146.0	143.8	143.1	136.6	144.1
18	153.4	148.9			147.1	146.9		140.9	144.7	142.4	149.5	
19	155.0	147.8			151.4	148.5	141.6	146.8	144.1	141.0	172.0	142.6
20	150.6	151.9	164.6	147.2	147.5	145.2	147.2	145.8	144.1		143.6	153.2
21			150.8	161.3	152.1	146.7	137.6	145.9	146.6	146.0		144.6
22	159.9	147.4	156.0			147.0	141.7	147.5	142.2	144.0	158.8	143.6
23		146.2	151.6	148.0	145.5	143.3	142.1		143.4			133.2
24	162.9	143.3	155.5	150.8	146.0	144.7	142.5		141.0	146.3		141.5
25	161.0	148.2				140.6	140.3	139.8	139.0	136.8	140.6	138.6
26	155.0	146.4				141.9	144.5	149.9	139.9	138.2	142.1	
27	156.4			159.6	155.6	145.6	140.5	142.3	139.7	139.0	144.9	144.6
28	156.1				159.6	146.6	135.2	142.5	141.4	140.2	137.5	137.9
29	154.9					154.9	145.3	140.8	146.1	138.2	138.6	
30	151.0				148.6	157.1	144.6	139.9	146.4	140.1	139.9	161.1
31	149.2						144.7	145.3	141.0		159.1	
Average	153.6	148.8	151.1	150.7	147.5	143.6	144.4	143.2	142.3	145.2	150.2	148.0
Minimum	144.8	143.3	143.9	146.0	142.3	135.2	139.0	138.2	137.8	133.9	133.2	138.6
Maximum	172.7	157.2	164.6	159.6	155.2	149.3	148.9	149.9	155.7	172.0	191.5	191
Total	4146.8	2976.7	3021.8	3314.8	4276.2	4165.8	4042.9	4152.0	3985.2	3629.0	3453.7	2367.2
											Annual	
											160.1	Summary

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## B. Rain Days

**San Diego Precipitation -2012  
Daily Rainfall - Lindbergh Field**



**San Diego Precipitation – 2012**  
**Daily Rainfall – Lindbergh Field**

First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
Date	Rain	Date	Rain	Date	Rain	Date	Rain
15-Jan-12	0.02	1-Apr-12	T	4-Jul-12	T	10-Oct-12	T
16-Jan-12	0.02	11-Apr-12	0.12	12-Jul-12	T	11-Oct-12	0.09
21-Jan-12	0.09	12-Apr-12	T	13-Jul-12	T	12-Oct-12	0.45
23-Jan-12	0.27	13-Apr-12	0.28	23-Aug-12	T	20-Oct-12	0.02
7-Feb-12	0.29	14-Apr-12	0.02	24-Aug-12	T	21-Oct-12	0.14
11-Feb-12	T	22-Apr-12	T	9-Sep-12	T	23-Oct-12	T
12-Feb-12	T	25-Apr-12	0.36			8-Nov-12	0.17
13-Feb-12	0.04	26-Apr-12	0.1			9-Nov-12	0.04
14-Feb-12	0.22	25-May-12	0.02			10-Nov-12	T
15-Feb-12	0.26	26-May-12	7			15-Nov-12	T
27-Feb-12	0.37	18-Jun-12	T			18-Nov-12	0.01
28-Feb-12	0.01					29-Nov-12	T
29-Feb-12	T					30-Nov-12	0.1
6-Mar-12	T					2-Dec-12	T
7-Mar-12	T					3-Dec-12	T
16-Mar-12	0.03					12-Dec-12	T
17-Mar-12	0.35					13-Dec-12	1.56
18-Mar-12	0.13					14-Dec-12	0.09
19-Mar-12	0.13					15-Dec-12	0.12
25-Mar-12	0.28					16-Dec-12	0.01
26-Mar-12	T					17-Dec-12	0.03
28-Mar-12	T					18-Dec-12	0.05
29-Mar-12	T					23-Dec-12	T
31-Mar-12	0.05					24-Dec-12	0.12
						26-Dec-12	0.04
						27-Dec-12	T
						29-Dec-12	0.09
						30-Dec-12	0.08
<b>TOTALS</b>	2.56		7.9		0		3.21

## C. Solids Production

Point Loma Annual Monitoring Report  
Solids Report - TOTALS  
From 01-JAN-2012 To 31-DEC-2012

Month	Pt. Loma		Pt.Loma		MBC		MBC	
	Raw sludge Gallons	Dry Tons	Digested Sludge Gallons	Dry Tons	Combined Centrate Gallons	Dry Tons	Dewatered Sludge Wet Tons	Dry Tons
01	37,394,980	6,147	37,394,980	3,376	66,173,011	900	8,805	2,574
02	35,264,596	5,775	35,263,886	3,125	59,330,351	808	7,964	2,444
03	36,557,429	6,225	36,557,429	3,332	62,191,862	799	8,582	2,563
04	34,507,919	6,110	34,507,919	3,186	58,552,999	774	8,227	2,354
05	37,140,751	6,314	37,140,751	3,407	68,046,741	954	10,201	2,832
06	35,806,927	6,184	35,806,789	3,377	70,226,454	1,074	9,362	2,587
07	34,869,448	6,096	34,869,448	3,483	70,634,591	1,241	9,873	2,671
08	36,484,550	6,062	36,484,550	3,506	69,908,300	1,165	10,309	2,861
09	36,283,992	6,254	36,283,992	3,432	67,378,003	1,096	8,955	2,497
10	37,011,569	6,188	37,012,268	3,517	69,203,191	1,043	10,572	2,937
11	35,621,049	5,807	35,621,049	3,243	64,978,284	840	9,145	2,625
12	36,620,700	6,296	36,620,700	3,416	68,015,405	851	9,176	2,548
avg	36,130,326	6,121	36,130,313	3,367	66,219,933	962	9,264	2,624
sum	433,563,910	73,457	433,563,761	40,400	794,639,192	11,545	111,172	31,493

Point Loma Annual Monitoring Report  
Solids Report - Daily Averages by Month  
From 01-JAN-2012 To 31-DEC-2012

Year Month	Pt. Loma		Pt.Loma		MBC		MBC		Dry Tons			
	Raw sludge Gallons	%TS	Dry Tons	Sludge Gallons	%TS	Dry Tons	Combined Centrate Gallons	%TS		Dry Tons		
12-01	1,206,290	3.9	198	1,206,290	2.2	108	2,134,613	0.33	29.0	284	29.2	83.0
12-02	1,216,021	3.9	199	1,215,996	2.1	108	2,045,874	0.33	27.8	275	30.7	84.3
12-03	1,179,272	4.1	205	1,179,272	2.2	109	2,006,189	0.31	25.6	277	29.9	82.7
12-04	1,150,264	4.2	209	1,150,264	2.2	106	1,951,767	0.32	25.8	274	28.6	78.5
12-05	1,198,089	4.1	205	1,198,089	2.2	110	2,195,056	0.34	30.8	329	27.8	91.4
12-06	1,193,564	4.1	208	1,193,560	2.3	113	2,340,882	0.37	35.8	312	27.6	86.2
12-07	1,124,821	4.2	196	1,124,821	2.4	111	2,278,535	0.42	40.0	318	27.1	86.2
12-08	1,176,921	4.0	196	1,176,921	2.3	113	2,255,107	0.40	37.3	333	27.7	92.3
12-09	1,209,466	4.1	211	1,209,466	2.3	113	2,245,933	0.39	36.6	298	27.9	83.2
12-10	1,193,922	4.0	204	1,193,944	2.3	113	2,232,361	0.36	33.6	341	27.8	94.7
12-11	1,187,368	3.9	186	1,187,368	2.2	105	2,165,943	0.31	28.0	305	28.7	87.5
12-12	1,181,313	4.1	205	1,181,313	2.2	111	2,194,045	0.30	27.5	296	27.8	82.2
avg	1,184,776	4.1	202	1,184,775	2.2	110	2,170,525	0.35	31.5	304	28.4	86.0

Note: A ton is a "short ton" or 2000 lbs of dry solids.

The mechanical condition of the cake pumps and the variability of sludge concentrations can affect the overall accuracies of these reported values.

## D. Chemical Usage

### Point Loma Annual Chemical Usage Report

#### Monthly Totals - 2012

Month	Polymer Pt.Loma Gallons	ACTIVE Polymer Pt.Loma Lbs.	Ferric Chloride Gallons	Ferrous Chloride Gallons	Ferric Chloride Pt.Loma Gallons	Sodium hydroxide PS #1 Gallons	Sodium hydroxide PS #2 Gallons	Sodium hydroxide Pt.Loma Gallons	NaOCl PS #1 Gallons	NaOCl PS #2 Gallons	NaOCl Pt.Loma Gallons	Salt PS #1 Lbs.	Salt PS #2 Lbs.	Salt Pt.Loma Lbs.
01	132,224	5,565	0		84,456	281	34	3,740	303	3,043	314,139	2,050	600	15,500
02	121,037	5,096	0		78,901	363	32	3,063	127	1,547	281,461	1,200	400	14,500
03	132,261	5,569	0		85,169	276	20	4,439	273	2,710	309,513	1,000	300	15,500
04	126,758	5,336	0		76,960	523	22	3,292	315	1,602	360,019	1,100	150	15,000
05	126,647	5,332	0		77,193	572	36	4,108	380	1,814	414,200	2,150	950	15,500
06	120,446	5,068	0		73,952	645	40	4,068	338	1,720	433,463	1,600	350	15,000
07	123,476	5,197	0		79,038	328	72	5,020	239	3,019	472,625	700	350	15,500
08	123,825	5,211	0		78,042	390	63	5,625	201	2,885	531,056	1,250	400	15,500
09	120,612	5,074	0		74,539	351	44	4,908	185	2,344	540,473	350	1,010	15,000
10	132,311	5,562	0		82,700	394	51	4,702	264	3,137	559,692	1,000	1,350	15,500
11	125,496	5,276	0		78,472	319	46	4,662	225	2,012	431,355	850	950	15,000
12	132,864	5,583	0		81,500	396	66	4,312	191	3,246	462,344	1,550	500	15,500
avg	126,496	5,322	0		79,244	403	44	4,328	253	2,423	425,862	1,233	609	15,250
sum	1,517,956	63,869	0		950,922	4,838	526	51,939	3,041	29,079	5,110,340	14,800	7,310	183,000

## E. Gas Production

### Point Loma Wastewater Treatment Plant

#### Gas Report - 2012

#### Daily Monthly Averages

##### GAS PRODUCTION (x1000 Cu. Ft.)

##### GAS CONSUMPTION (x1000 Cu. Ft.)

Month	N-1-P	N-2-P	C-1-P	C-2-P	S-1-P	S-2-P	Dig 7	Dig 8	Total	Boilers	Burners	GUF	Total
01	499.3	580.0	421.7	414.4	491.4	393.4	95.3	.0	2,800.2	128	1,100	1,814	3,042
02	456.7	645.0	442.3	432.7	481.6	415.4	97.4	.0	2,873.7	109	1,153	1,853	3,115
03	445.2	657.2	461.7	447.6	509.8	419.4	96.0	.0	2,940.9	104	965	1,855	2,923
04	506.9	641.3	468.9	445.1	489.6	414.0	98.1	.0	2,965.8	99	686	1,825	2,610
05	466.7	571.3	489.2	454.3	490.0	412.5	97.3	.0	2,884.0	105	84	1,860	2,049
06	477.6	529.8	494.0	453.8	489.9	421.0	99.5	.0	2,866.1	115	410	1,480	2,005
07	484.6	471.7	528.8	423.5	467.2	387.9	96.5	.0	2,763.8	80	153	1,423	1,656
08	456.3	459.4	529.8	435.5	476.2	382.9	102.0	.0	2,740.2	74	168	1,876	2,118
09	422.7	484.4	481.2	426.2	503.3	395.1	95.7	.0	2,713.0	85	489	1,832	2,406
10	418.9	492.9	487.0	423.3	542.3	388.1	100.6	.0	2,752.5	67	100	1,868	2,036
11	426.2	479.7	491.5	426.6	520.0	377.5	94.9	.0	2,721.4	65	491	1,860	2,416
12	466.1	483.3	526.3	446.3	465.8	410.6	93.5	.0	2,798.4	162	796	1,499	2,457
avg	460.6	541.3	485.2	435.8	493.9	401.5	97.2	.0	2,818.3	99	550	1,754	2,403

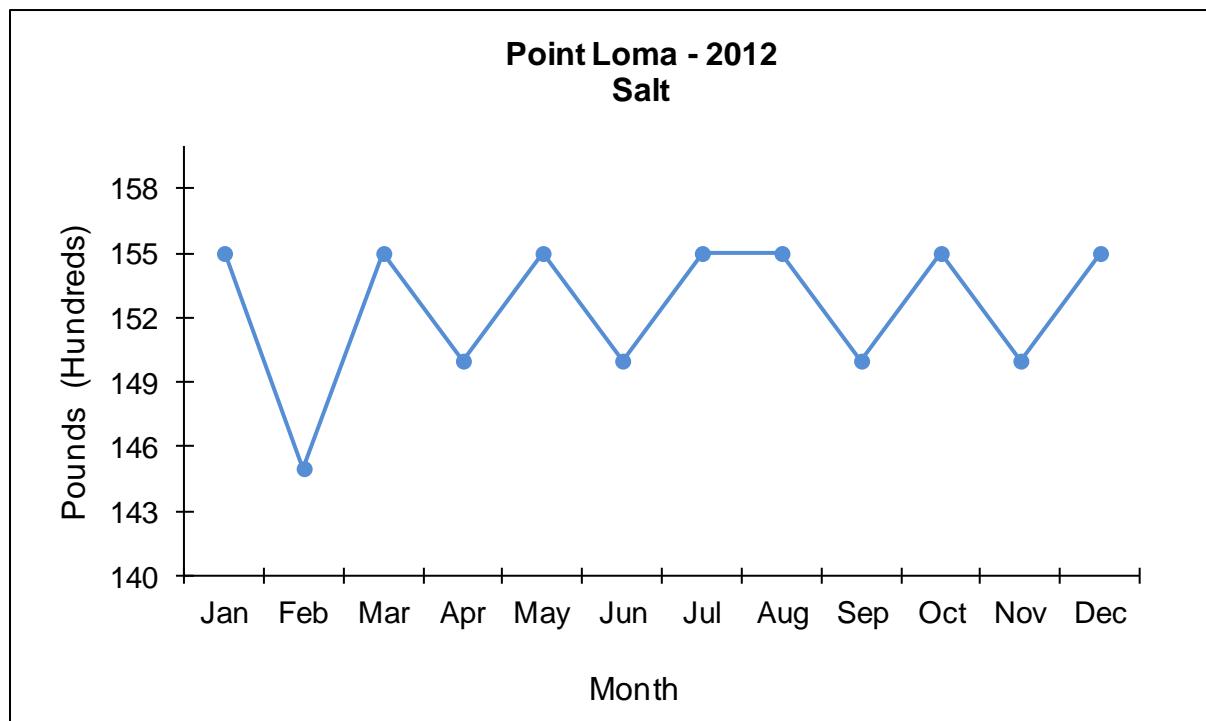
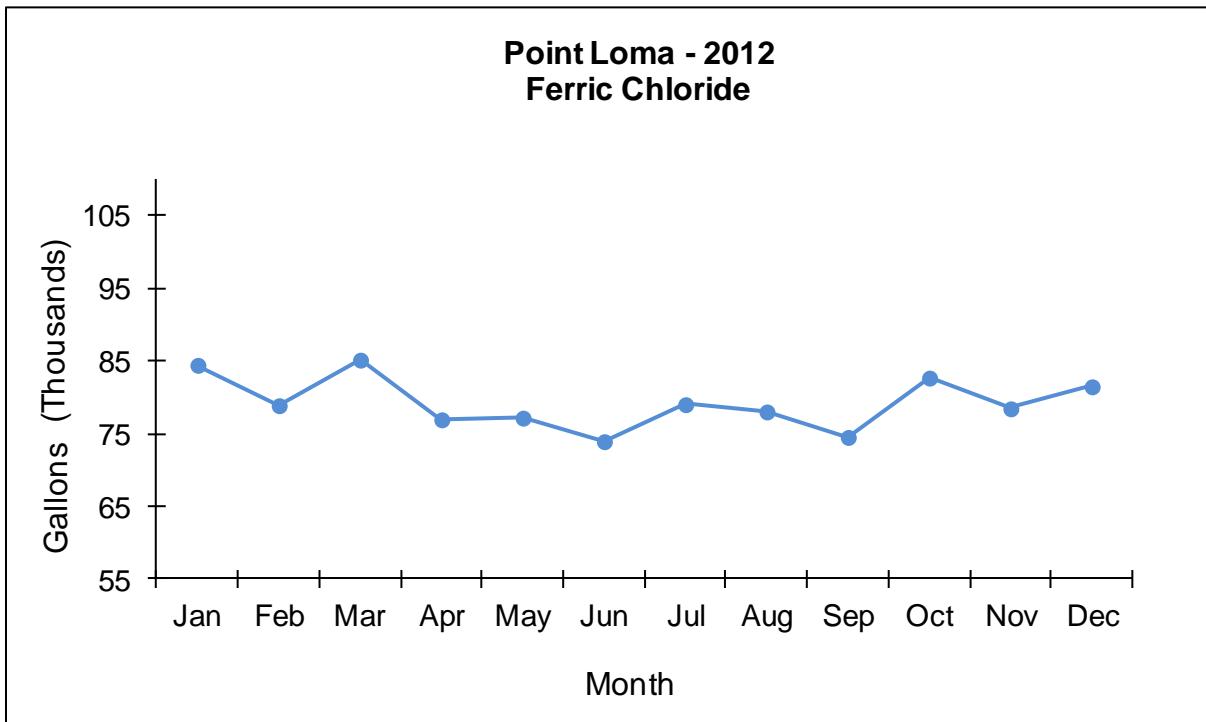
#### Monthly Totals

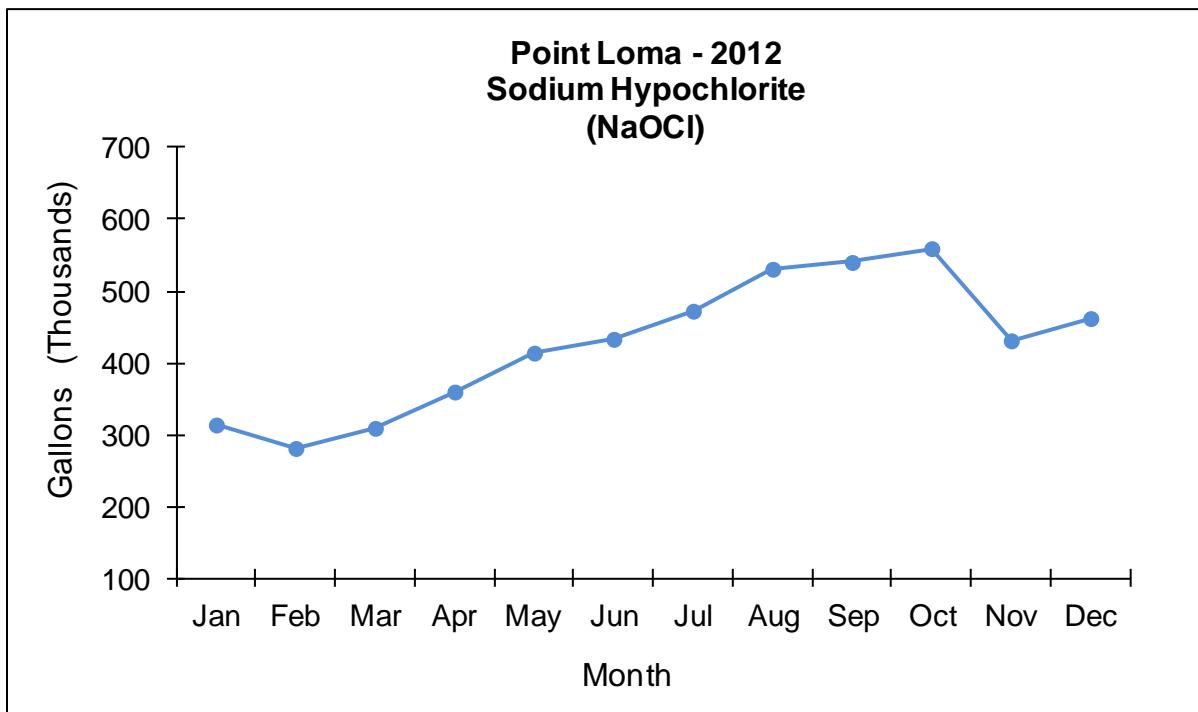
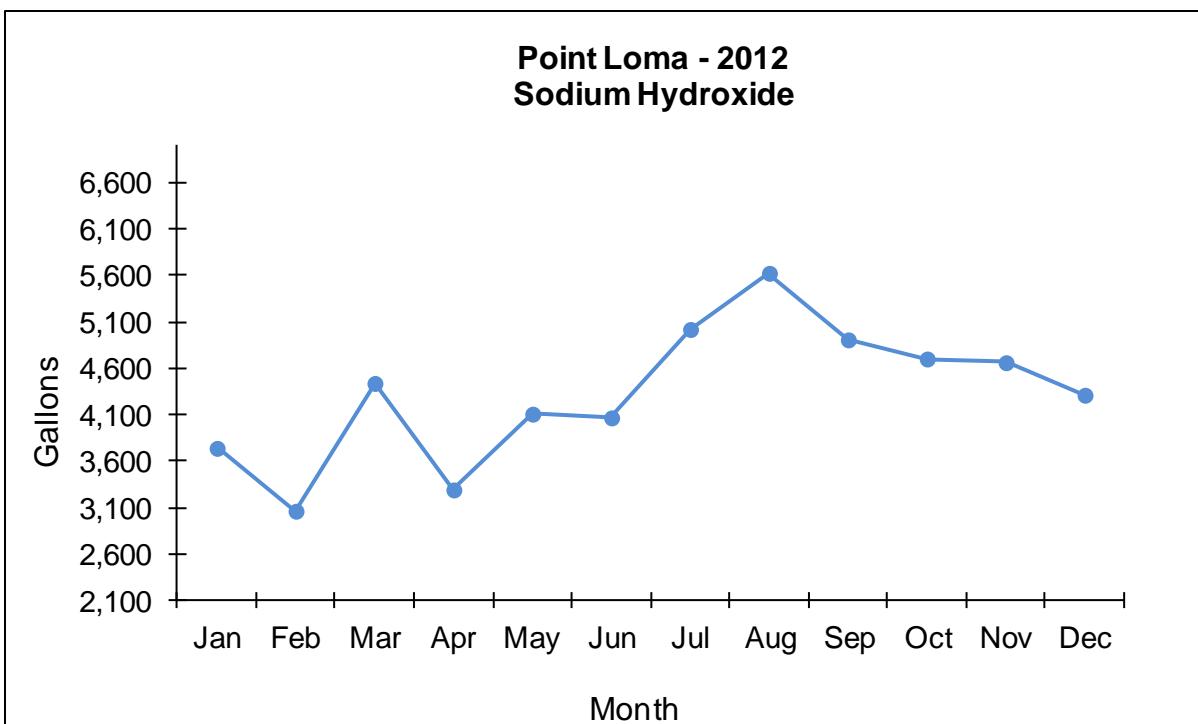
##### GAS PRODUCTION (x1000 Cu. Ft.)

##### GAS CONSUMPTION (x1000 Cu. Ft.)

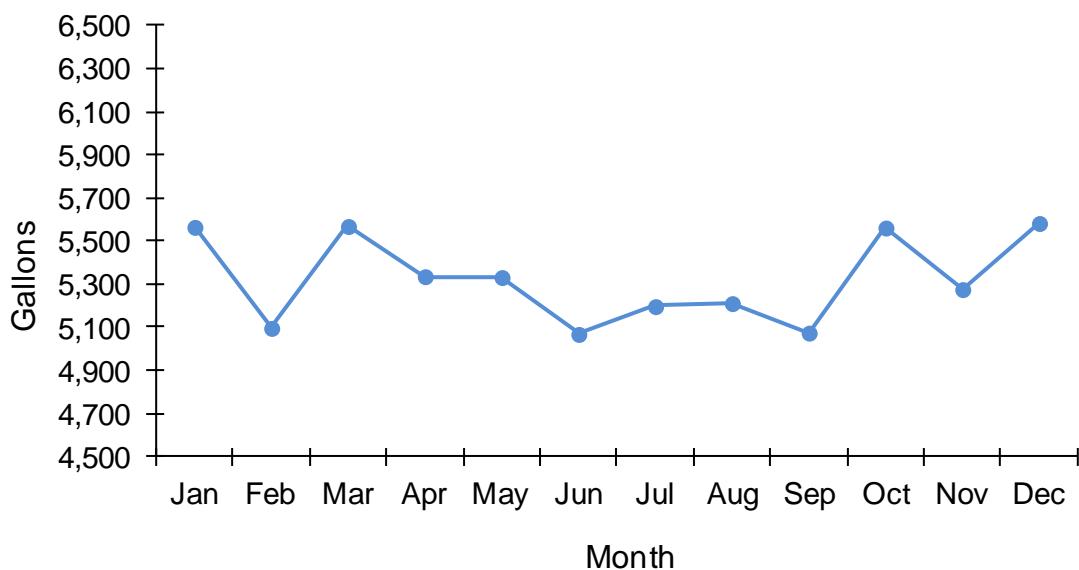
Month	N-1-P	N-2-P	C-1-P	C-2-P	S-1-P	S-2-P	Dig 7	Dig 8	Total	Boilers	Burners	GUF	Total
01	15,479.0	17,981.0	13,073.0	12,845.0	15,232.0	12,196.0	2,953.0	.0	86,806.0	3,980	34,085	56,229	94,294
02	13,245.0	18,704.0	12,826.0	12,548.0	13,965.0	12,048.0	2,824.0	.0	83,336.0	3,155	33,436	53,736	90,327
03	13,801.0	20,372.0	14,313.0	13,876.0	15,805.0	13,002.0	2,975.0	.0	91,169.0	3,219	29,914	57,494	90,627
04	15,206.0	19,239.0	14,068.0	13,354.0	14,687.0	12,421.0	2,943.0	.0	88,975.0	2,958	20,584	54,764	78,306
05	14,467.0	17,711.0	15,165.0	14,083.0	15,190.0	12,789.0	3,015.0	.0	89,405.0	3,250	2,596	57,671	63,517
06	14,329.0	15,893.0	14,821.0	13,615.0	14,697.0	12,629.0	2,986.0	.0	85,984.0	3,439	12,308	44,393	60,140
07	15,023.0	14,624.0	16,394.0	13,130.0	14,482.0	12,024.0	2,993.0	.0	85,677.0	2,477	4,746	44,101	51,324
08	14,145.0	14,242.0	16,425.0	13,500.0	14,762.0	11,871.0	3,163.0	.0	84,945.0	2,293	5,218	58,157	65,668
09	12,682.0	14,533.0	14,437.0	12,785.0	15,099.0	11,854.0	2,870.0	.0	81,390.0	2,556	14,662	54,969	72,187
10	12,985.0	15,281.0	15,098.0	13,121.0	16,811.0	12,030.0	3,120.0	.0	85,326.0	2,084	3,103	57,920	63,107
11	12,786.0	14,390.0	14,745.0	12,798.0	15,599.0	11,325.0	2,846.0	.0	81,643.0	1,947	14,735	55,787	72,469
12	14,448.0	14,981.0	16,316.0	13,836.0	14,439.0	12,729.0	2,900.0	.0	86,749.0	5,033	24,668	46,466	76,167
avg	14,049.7	16,495.9	14,806.8	13,290.9	15,064.0	12,243.2	2,965.7	.0	85,950.4	3,033	16,671	53,474	73,178
sum	168,596.0	197,951.0	177,681.0	159,491.0	180,768.0	146,918.0	35,588.0	.0	1,031,405.0	36,391	200,055	641,687	878,133

## F. Graphs of Chemical Usage





**Point Loma - 2012  
Active Polymer**



## G. Facilities Out-of-Service Report

### FACILITIES THAT WERE OUT OF SERVICE IN 2012 BY DATE

FACILITY OOS	FROM	TO	REASON
S1 Grit Basin	1/1	12/31	Tank rehabilitation
S2 Grit Basin	1/1	12/31	Tank rehabilitation
Sed Basin #1	1/1	12/31	Tank rehabilitation
Sed Basin #3	1/1	12/20	Tank rehabilitation
Digester 8	1/1	12/31	Roofing repair
Sedimentation Basin #2	1/1	2/1	Preventive/Corrective maintenance
East Channel	1/1	1/11	Channel Rotation
Sedimentation Basin #12	1/1	1/26	Preventive/Corrective maintenance
Influent Screen #3	1/17	1/19	Corrective Maintenance
West Channel	1/11	3/8	Channel Rotation
Sedimentation Basin #5	1/26	3/17	Preventive/Corrective maintenance
Sedimentation Basin #7	2/1	2/8	Preventive/Corrective maintenance
N2 Grit Basin	2/3	2/3	Preventive/Corrective maintenance
Sedimentation Basin #9	2/8	3/1	Preventive/Corrective maintenance
Influent Screen #3	2/24	2/24	Corrective Maintenance
Sedimentation Basin #10	3/1	4/15	Preventive/Corrective maintenance
East Channel	3/8	5/9	Channel Rotation
Sedimentation Basin #2	3/16	4/11	Preventive/Corrective maintenance
Influent Screen #3	4/10	4/10	Corrective Maintenance
Sedimentation Basin #12	4/11	6/2	Preventive/Corrective maintenance
Sedimentation Basin #11	4/13	5/3	Preventive/Corrective maintenance
Sedimentation Basin #6	5/2	5/6	Preventive/Corrective maintenance
Sedimentation Basin #8	5/4	5/30	Preventive/Corrective maintenance
West Channel	5/9	6/21	Channel Rotation
C1 Grit Basin	5/14	5/15	Preventive/Corrective maintenance
Influent Screen #3	5/14	5/14	Corrective Maintenance
C1 Grit Basin	5/29	5/31	Preventive/Corrective maintenance
Sedimentation Basin #11	5/29	7/18	Preventive/Corrective maintenance
Sedimentation Basin #10	6/2	7/6	Preventive/Corrective maintenance
C1 Grit Basin	6/3	6/5	Preventive/Corrective maintenance
C2 Grit Basin	6/11	6/13	Preventive/Corrective maintenance
East Channel	6/21	7/17	Channel Rotation
Sedimentation Basin #9	6/22	7/6	Preventive/Corrective maintenance
C2 Grit Basin	6/23	6/27	Preventive/Corrective maintenance
N2 Grit Basin	6/27	7/1	Preventive/Corrective maintenance
Sedimentation Basin #7	7/5	7/18	Preventive/Corrective maintenance
C1 Grit Basin	7/5	7/5	Preventive/Corrective maintenance
Influent Screen #3	7/13	7/13	Corrective Maintenance
West Channel	7/17	9/19	Channel Rotation
Sedimentation Basin #6	7/19	12/31	Preventive/Corrective maintenance
Sedimentation Basin #9	7/19	7/28	Preventive/Corrective maintenance
Sedimentation Basin #4	7/28	8/10	Preventive/Corrective maintenance
NEOC	7/31	8/2	Hydro maintenance
C1 Grit Basin	8/2	8/3	Preventive/Corrective maintenance
Sedimentation Basin #5	8/10	9/5	Preventive/Corrective maintenance
N2 Grit Basin	8/13	9/6	Influent Channel Repair
C2 Grit Basin	8/13	9/6	Influent Channel Repair
Influent Screen #5	8/27	8/27	Corrective Maintenance
Sedimentation Basin #4	9/5	12/8	Tank rehabilitation
East Channel	9/19	10/17	Channel Rotation
West Channel	10/17	11/13	Channel Rotation

East Channel	11/13	12/11	Channel Rotation
Sedimentation Basin #5	12/8	12/31	Tank rehabilitation
West Channel	12/11	12/31	Channel Rotation
Sedimentation Basin #7	12/12	12/14	Preventive/Corrective maintenance
Sedimentation Basin #7	12/18	12/23	Preventive/Corrective maintenance

#### FACILITIES THAT WERE OUT OF SERVICE IN 2012

##### GRIT CHAMBERS

N1	
N2	2/3; 6/27-7/1; 8/13-9/6
C1	5/14-5/15; 5/29-5/31; 6/3-6/5; 7/5; 8/2-8/3
C2	6/11-6/13; 6/23-6/27; 8/13-9/6
S1	1/1-12/31
S2	1/1-12/31

##### CHANNELS

EAST	1/1-1/11; 3/8-5/9; 6/21-7/17; 9/19-10/17; 11/13-12/11
WEST	1/11-3/8; 5/9-6/21; 7/17-9/19; 10/17-11/13; 12/11-12/31

##### BASINS

1	1/1-12/31
2	1/1-2/1; 3/16-4/11
3	1/1-12/20
4	7/28-8/10; 9/5-12/8
5	1/26-3/17; 8/10-9/5; 12/8-12/31
6	5/2-5/6; 7/19-12/31
7	2/1-2/8; 7/5-7/18; 12/12-12/14; 12/18-12/23
8	5/4-5/30
9	2/8-3/1; 6/22-7/6; 7/19-7/28
10	3/1-4/15; 6/2-6/22
11	4/13-5/3; 5/29-7/18
12	1/1-1/26; 4/11-6/2

NEOC	7/31-8/2
SEOC	
INFLUENT SCREEN #1	
INFLUENT SCREEN #2	7/16
INFLUENT SCREEN #3	1/17-1/19; 2/24; 4/10; 5/14; 7/13
INFLUENT SCREEN #4	
INFLUENT SCREEN #5	8/27

##### DIGESTERS

N1P	
N2P	
C1P	
C2P	
S1P	
S2P	
Dig 7	
Dig 8	1/1-12/31

FACILITIES THAT WERE OUT OF SERVICE IN 2012

SHUTDOWNS

DATE	FROM	TO	REASON
2/10/2012			Piping Repair
2/11/2012			Piping Repair
2/12/2012			Piping Repair
3/23/2012			PS 1&2 Screen repairs
7/11/2012			PS 1&2 Screen PM's
7/12/2012			PS 2 Piping Repair
7/13/2012			PS 1&2 Screen PM's
7/27/2012			PS 1&2 Stilling Wells PM's
7/31/2012			Hydro Inspection
8/1/2012			Hydro Inspection
8/4/2012			Influent Channel Repair
8/5/2012			Influent Channel Repair
8/6/2012			Influent Channel Repair
8/7/2012			Influent Channel Repair
8/9/2012			Influent Channel Repair
8/10/2012			Influent Channel Repair
8/14/2012			Influent Channel Repair
8/30/2012			PS 2 Piping Repair
10/11/2012			East Portal Force Main Inspection
10/12/2012			East Portal Force Main Inspection
11/20/2012			PS 2 Wetwell Cleaning
11/21/2012			PS 2 Wetwell Cleaning
11/28/2012			PS 2 3 Way Valve Repair
11/30/2012			PS 2 Stilling Well Transmitter Repair
12/7/2012			PS 2 3 Way Valve Repair

## H. Grit and Screenings

The following are reports of the analyses of grit samples taken from the Pt. Loma WWTP headworks (grit removal chambers) in 2012. Reports include Title 22 analyses and Total Solids. Title 22 sampling and analysis of PLR grit occurs on a Semi-Annual basis. Samples from the grit bins are taken daily for 7 consecutive days and composited together to form the Semi-Annual sample. Although everywhere else in this report PLR refers to Point Loma WWTP raw Influent sewage, in this section, it refers to the grit removed from the grit chambers at the headworks building at the influent end of the plant.

**Point Loma Wastewater Treatment Plant**  
**Monthly Total Solids Averages - Grit and Screenings 2012 (% WT)**

Grit		Headworks Screenings		Sludge Screenings	
JAN	58.6	JAN	49.5	JAN	34.0
FEB	56.5	FEB	51.3	FEB	35.1
MAR	55.3	MAR	46.5	MAR	35.9
APR	54.7	APR	46.1	APR	37.3
MAY	53.8	MAY	47.4	MAY	37.2
JUN	51.9	JUN	51.2	JUN	36.7
JUL	57.0	JUL	55.5	JUL	37.3
AUG	57.0	AUG	48.2	AUG	36.0
SEP	53.6	SEP	46.8	SEP	36.9
OCT	47.0	OCT	42.3	OCT	38.7
NOV	45.4	NOV	43.8	NOV	38.1
DEC	48.8	DEC	37.4	DEC	37.4
<b>AVG</b>	<b>53.3</b>	<b>AVG</b>	<b>47.2</b>	<b>AVG</b>	<b>36.7</b>

## Point Loma Wastewater Treatment Plant

**2012 Grit Total Solid (%WT)**

	Average	Minimum	Maximum
	% WT	% WT	% WT
JAN	58.6	48.8	76.6
FEB	56.5	48.2	65.7
MAR	55.3	42.1	72.1
APR	54.7	38.2	74.7
MAY	53.8	37.3	66.2
JUN	51.9	44.7	67.7
JUL	57.0	44.7	92.0
AUG	57.0	46.6	93.0
SEP	53.6	42.4	64.0
OCT	47.0	39.8	57.4
NOV	45.4	37.0	60.4
DEC	48.8	41.9	58.9

**2012 Sludge Screenings Total Solids (%WT)**

	Average	Minimum	Maximum
	% WT	% WT	% WT
JAN	34.0	30.2	39.9
FEB	35.1	30.2	45.0
MAR	35.9	32.5	43.5
APR	37.3	33.1	49.6
MAY	37.2	34.6	40.5
JUN	36.7	34.0	40.6
JUL	37.3	33.4	41.4
AUG	36.0	21.7	43.1
SEP	36.9	34.0	41.5
OCT	38.7	30.8	87.4
NOV	38.1	33.1	43.0
DEC	37.4	33.4	40.4

**2012 Headworks Screenings Total Solids (%WT)**

	Average	Minimum	Maximum
	% WT	% WT	% WT
JAN	49.5	43.2	62.1
FEB	51.3	44.4	58.7
MAR	46.5	35.9	57.7
APR	46.1	40.9	50.7
MAY	47.4	37.0	59.0
JUN	51.2	45.9	55.5
JUL	55.5	48.4	67.0
AUG	48.2	37.3	54.6
SEP	46.8	41.4	59.4
OCT	42.3	32.6	52.9
NOV	43.8	29.7	59.8
DEC	37.4	27.6	47.4

POINT LOMA WASTEWATER TREATMENT PLANT  
 CALIFORNIA HAZARDOUS WASTE IDENTIFICATION TESTS (Title 22)  
 GRIT  
 From: 01-JUN-2012 to 30-JUN-2012

Source: PLR  
 Sample ID: P618908  
 Sample Date: 04-JUN-12

Constituent	MDL.	Units	Total	Total	TTLC	W.E.T.	STLC	40 CFR 503	CA Health & Safety code
			Dry Wt. mg/Kg	Wet Wt. mg/Kg	Wet Wt. mg/Kg	Wet Wt. mg/L	Wet Wt. mg/L	Limits ** mg/Kg	Limits *** mg/Kg
Antimony		.5 MG/KG	.94	0.52	500	*	15.00		
Arsenic		.68 MG/KG	2.45	1.35	500	*	5.00	41	
Barium		.05 MG/KG	99.9	54.9	10000	*	100.00		
Beryllium		.02 MG/KG	ND	ND	75	*	.75		
Cadmium		.1 MG/KG	.4	.21	100	*	1.00	39	
Chromium (VI)			NA	NA	500	NA	5.00		
Chromium		.3 MG/KG	56.1	30.83	2500	*	560.00	1,200	
Cobalt		.2 MG/KG	1.9	1.1	8000	*	80.00		
Copper		.4 MG/KG	311	171	2500	*	25.00	1,500	2,500
Lead		2 MG/KG	25	14	1000	*	5.00	300	350
Mercury		.2 MG/KG	ND	ND	20	*	.20	17	
Molybdenum		.1 MG/KG	4.4	2.4	3500	*	350.00		
Nickel		.3 MG/KG	18.6	10.2	2000	*	20.00	420	2,000
Selenium		.47 MG/KG	.61	.34	100	*	1.00	100	
Silver		.07 MG/KG	2.57	1.41	500	*	5.00		
Thallium		1 MG/KG	ND	ND	700	*	7.00		
Vanadium		.2 MG/KG	9.2	5.04	2400	*	24.00		
Zinc		.5 MG/KG	366	201	5000	*	250.00	2,800	
Fluoride			NA	NA	18000	NA	180.00		
Total Solids		WT%	55						
Total Volatile Solids		.11 WT%	35.1						
pH		PH	6.83		>2 - <12				
Aldrin		.071 MG/KG	ND	ND	1.4	*	.14		
Chlordanes		.048 MG/KG	ND	ND	2.5	*	.25		
DDT, DDE, DDD		.071 MG/KG	ND	ND	1.0	*	.10		
2,4-D		2.66 MG/KG	ND	ND	100	*	10.00		
Dieldrin		.035 MG/KG	ND	ND	8.0	*	.80		
Endrin		.035 MG/KG	ND	ND	0.2	*	.02		
Heptachlor		.016 MG/KG	ND	ND	4.7	*	.47		
Kepone			NA	NA	21	NA	2.10		
Lindane		0 MG/KG	ND	ND	4.0	*	.40		
Methoxychlor		.1 MG/KG	ND	ND	100	*	10.00		
Mirex		.018 MG/KG	ND	ND	21	*	2.10		
Pentachlorophenol		1.17 MG/KG	ND	ND	17	*	1.70		
PCBs (Arochlor)		.58 MG/KG	ND	ND	50	*	5.00		
Toxaphene		.13 MG/KG	ND	ND	5	*	.50		
Trichloroethene		.003 MG/KG	ND	ND	2040	*	204.00		
2,4,5-TP		2.87 MG/KG	ND	ND	10	*	1.00		

On the basis of these analyses, I certify that this dried sludge is non-hazardous as defined by California Code, Title 22, Section 66699.

TTLC = Total Threshold Limit Concentration.

STLC = Soluble Threshold Limit Concentration.

W.E.T. = Waste Extraction Technique.

\* = The total wet concentration is less than 10 times the STLC. Therefore by definition, this substance is present in concentrations that are less than the limits for hazardous wastes.

\*\* = Limits are in mg/Kg (dry weight) based on 40 CFR part 503.13 Table 3 "Limits for Land Application".

\*\*\* = The California State Health and Safety Code 25157.8 established lower a limit for Lead.

NA = Not Analyzed, ND= Not Detected, NS= Not Sampled, NR= Not Required

MDL = Method Detection Limit (are in mg/Kg per dry weight; except for pH and Total and Volatile Solids)

PLR = Point Loma Raw

POINT LOMA WASTEWATER TREATMENT PLANT  
CALIFORNIA HAZARDOUS WASTE IDENTIFICATION TESTS (Title 22)  
GRIT  
From: 01-NOV-2012 to 30-NOV-2012

Source: PLR  
Sample ID: P638325  
Sample Date: 01-NOV-12

Constituent	MDL.	Units	Total	Total	TTLC	W.E.T.	STLC	40 CFR 503	CA Health & Safety code
			Dry Wt.	Wet Wt.	Wet Wt.	Wet Wt.	Wet Wt.	Limits **	Limits ***
		mg/Kg	mg/Kg	mg/Kg	mg/L	mg/L	mg/Kg	mg/Kg	
Antimony		.5 MG/KG	8.8	4.1	500	*	15.00		
Arsenic		.68 MG/KG	.76	.36	500	*	5.00	41	
Barium		.05 MG/KG	81.9	38.5	10000	*	100.00		
Beryllium		.02 MG/KG	ND	ND	75	*	.75		
Cadmium		.1 MG/KG	.3	0.14	100	*	1.00	39	
Chromium (VI)			NA	NA	500	NA	5.00		
Chromium		.3 MG/KG	15.6	7.33	2500	*	560.00	1,200	
Cobalt		.2 MG/KG	1.1	0.52	8000	*	80.00		
Copper		.4 MG/KG	253	119	2500	*	25.00	1,500	2,500
Lead		2 MG/KG	20	9.3	1000	*	5.00	300	350
Mercury			NA	NA	20	NA	.20	17	
Molybdenum		.1 MG/KG	3	1.41	3500	*	350.00		
Nickel		.3 MG/KG	16.9	7.94	2000	*	20.00	420	2,000
Selenium		.47 MG/KG	.52	0.24	100	*	1.00	100	
Silver		.07 MG/KG	17.2	8.08	500	*	5.00		
Thallium		1 MG/KG	ND	ND	700	*	7.00		
Vanadium		.2 MG/KG	7.8	3.66	2400	*	24.00		
Zinc		.5 MG/KG	227	107	5000	*	250.00	2,800	
Total Solids		WT%	47						
Total Volatile Solids		.11 WT%	56.9						
pH		PH	6.35		>2 - <12				
Aldrin		.01 MG/KG	ND	ND	1.4	*	.14		
Chlordanes		.003 MG/KG	.002	.0011	2.5	*	.25		
DDT, DDE, DDD		.002 MG/KG	0	.002	1.0	*	.10		
2,4-D		.07 MG/KG	ND	ND	100	*	10.00		
Dieldrin		.002 MG/KG	ND	ND	8.0	*	.80		
Endrin		.003 MG/KG	ND	ND	0.2	*	.02		
Heptachlor		.001 MG/KG	ND	ND	4.7	*	.47		
Kepone			NA	NA	21	NA	2.10		
Lindane		0 MG/KG	ND	ND	4.0	*	.40		
Methoxychlor		0 MG/KG	ND	ND	100	*	10.00		
Mirex		.001 MG/KG	ND	ND	21	*	2.10		
Pentachlorophenol		1.17 MG/KG	ND	ND	17	*	1.70		
PCBs (Arochlors)		.02 MG/KG	ND	ND	50	*	5.00		
Toxaphene		.18 MG/KG	ND	ND	5	*	.50		
Trichloroethene		.003 MG/KG	ND	ND	2040	*	204.00		
2,4,5-TP		.03 MG/KG	ND	ND	10	*	1.00		

On the basis of these analyses, I certify that this dried sludge is non-hazardous as defined by California Code, Title 22, Section 66699.

TTLC = Total Threshold Limit Concentration.

STLC = Soluble Threshold Limit Concentration.

W.E.T. = Waste Extraction Technique.

\* = The total wet concentration is less than 10 times the STLC. Therefore by definition,

. this substance is present in concentrations that are less than the limits for hazardous wastes.

\*\* = Limits are in mg/Kg (dry weight) based on 40 CFR part 503.13 Table 3 "Limits for Land Application".

\*\*\* = The California State Health and Safety Code 25157.8 established lower a limit for Lead.

NA = Not Analyzed, ND= Not Detected, NS= Not Sampled, NR= Not Required

MDL = Method Detection Limit (are in mg/Kg per dry weight; except for pH and Total and Volatile Solids)

PLR = Point Loma Raw

POINT LOMA WASTEWATER TREATMENT PLANT  
Inorganics and Organics

2012 Annual

Source			GRIT COMP	GRIT COMP
Date			04-JUN-2012	01-NOV-2012
Analyte:	MDL	Units:	P618908	P638325
Aluminum	4	MG/KG	2100	2200
Antimony	.5	MG/KG	0.9	8.8
Arsenic	.68	MG/KG	2.45	0.76
Barium	.05	MG/KG	99.9	81.9
Beryllium	.02	MG/KG	ND	ND
Cadmium	.1	MG/KG	0.4	0.3
Chromium	.3	MG/KG	56	16
Cobalt	.2	MG/KG	1.9	1.1
Copper	.4	MG/KG	311	253
Iron	20	MG/KG	22900	20600
Lead	2	MG/KG	25	20
Manganese	.2	MG/KG	169	135
Mercury	.2	MG/KG	ND	NA
Molybdenum	.1	MG/KG	4.4	3.0
Nickel	.3	MG/KG	19	17
Selenium	.47	MG/KG	0.61	0.52
Silver	.07	MG/KG	2.6	17.2
Thallium, Total Recoverable	1	MG/KG	ND	ND
Vanadium	.2	MG/KG	9.2	7.8
Zinc	.5	MG/KG	366	227
pH		PH	6.83	6.35
Total Solids	.24	WT%	55.0	47.0
Total Volatile Solids	.11	WT%	35.1	56.9
Aldrin	71000	MG/KG	ND	ND
2,4-Dichlorophenoxyacetic acid	2.66	MG/KG	ND	ND
Dieldrin	35000	MG/KG	ND	ND
Endrin	35000	MG/KG	ND	ND
Heptachlor	16000	MG/KG	ND	ND
BHC, Gamma isomer	18000	MG/KG	ND	ND
Methoxychlor	71000	MG/KG	ND	ND
Pentachlorophenol	1170	MG/KG	ND	ND
Toxaphene	183000	MG/KG	ND	ND
Trichloroethene	2.6	MG/KG	ND	ND
2,4,5-TP (Silvex)	2.87	MG/KG	ND	ND

NA= Not Analyzed, ND= Not Detected, NS= Not Sampled, NR= Not Required

POINT LOMA WASTEWATER TREATMENT PLANT  
Chlorinated Pesticide Analysis

Annual 2012

**Grit**

Source:	PLR		PLR	
Date:	04-JUN-2012		01-NOV-2012	
Analyte	MDL	Units	P618908	P638325
<hr/>				
Aldrin	71000	NG/KG	ND	ND
Dieldrin	35000	NG/KG	ND	ND
BHC, Alpha isomer	28000	NG/KG	ND	ND
BHC, Beta isomer	32000	NG/KG	ND	ND
BHC, Gamma isomer	18000	NG/KG	ND	ND
BHC, Delta isomer	28000	NG/KG	ND	ND
o,p-DDD	28000	NG/KG	ND	ND
o,p-DDE	52000	NG/KG	ND	ND
o,p-DDT	71000	NG/KG	ND	ND
p,p-DDD	18000	NG/KG	ND	1130
p,p-DDE	28000	NG/KG	ND	2290
p,p-DDT	35000	NG/KG	ND	ND
Heptachlor	16000	NG/KG	ND	ND
Heptachlor epoxide	28000	NG/KG	ND	ND
Alpha (cis) Chlordane	13000	NG/KG	ND	ND
Gamma (trans) Chlordane	48000	NG/KG	ND	2300
Alpha Chlordene		NG/KG	NA	NA
Gamma Chlordene		NG/KG	NA	NA
Oxychlordane	28000	NG/KG	ND	ND
Trans Nonachlor	18000	NG/KG	ND	ND
Cis Nonachlor	52000	NG/KG	ND	ND
Alpha Endosulfan	18000	NG/KG	ND	ND
Beta Endosulfan	28000	NG/KG	ND	ND
Endosulfan Sulfate	45000	NG/KG	ND	ND
Endrin	35000	NG/KG	ND	ND
Endrin aldehyde	52000	NG/KG	ND	ND
Toxaphene	183000	NG/KG	ND	ND
Mirex	18000	NG/KG	ND	ND
Methoxychlor	71000	NG/KG	ND	ND
PCB 1016	260000	NG/KG	ND	ND
PCB 1221	580000	NG/KG	ND	ND
PCB 1232	220000	NG/KG	ND	ND
PCB 1242	7000	NG/KG	ND	ND
PCB 1248	310000	NG/KG	ND	ND
PCB 1254	130000	NG/KG	ND	ND
PCB 1260	86000	NG/KG	ND	ND
PCB 1262	5000	NG/KG	ND	ND
<hr/>				
Aldrin + Dieldrin	71000	NG/KG	0	0
Hexachlorocyclohexanes	32000	NG/KG	0	0
DDT and derivatives	71000	NG/KG	0	3420
Chlordane + related cmpds.	52000	NG/KG	0	2300
Polychlorinated biphenyls	580000	NG/KG	0	0
<hr/>				
Chlorinated Hydrocarbons	580000	NG/KG	0	5720

ND=not detected  
NA=not analyzed

POINT LOMA WASTEWATER TREATMENT PLANT  
GRIT  
ANALYSIS-ACID EXTRACTABLE COMPOUNDS

2012 Annual

Source		PLR	PLR
Date		04-JUN-2012	01-NOV-2012
Analyte	MDL	Units	P618908
<hr/>			
2-Chlorophenol	1310	UG/KG	ND
4-Chloro-3-methylphenol	1900	UG/KG	ND
2,4-Dichlorophenol	914	UG/KG	ND
2,4-Dimethylphenol	1070	UG/KG	ND
2,4-Dinitrophenol		UG/KG	ND
2-Methyl-4,6-dinitrophenol		UG/KG	ND
2-Nitrophenol	1600	UG/KG	ND
4-Nitrophenol		UG/KG	ND
Pentachlorophenol	1170	UG/KG	ND
Phenol	1440	UG/KG	ND
2,4,6-Trichlorophenol	1600	UG/KG	ND
<hr/>			
Total Chlorinated Phenols	1900	UG/KG	0.0
Total Non-Chlorinated Phenols	1600	UG/KG	0.0
<hr/>			
Phenols	1900	UG/KG	0.0
			0.0

nd= not detected, NA= not analyzed NS= not sampled

POINT LOMA WASTEWATER TREATMENT PLANT  
GRIT  
Priority Pollutants Base/Neutral Compounds

Annual 2012

Source:		PLR	PLR
Date:		04-JUN-2012	01-NOV-2012
Sample:	MDL	Units	P618908
			P638325
Acenaphthene	863	UG/KG	ND
Acenaphthylene	584	UG/KG	ND
Anthracene	986	UG/KG	ND
Benzidine		UG/KG	ND
Benzo[a]anthracene	1100	UG/KG	ND
3,4-Benzo(b)fluoranthene	1127	UG/KG	ND
Benzo[k]fluoranthene	1930	UG/KG	ND
Benzo[a]pyrene	741	UG/KG	ND
Benzo[g,h,i]perylene	301	UG/KG	ND
4-Bromophenyl phenyl ether	1030	UG/KG	ND
Bis-(2-chloroethoxy) methane	1630	UG/KG	ND
Bis-(2-chloroethyl) ether	1420	UG/KG	ND
Bis-(2-chloroisopropyl) ether	1090	UG/KG	ND
4-Chlorophenyl phenyl ether	362	UG/KG	ND
2-Chloronaphthalene		UG/KG	ND
Chrysene	352	UG/KG	405
Dibenzo(a,h)anthracene	616	UG/KG	ND
Butyl benzyl phthalate	2210	UG/KG	ND
Di-n-butyl phthalate	1450	UG/KG	1550
Bis-(2-ethylhexyl) phthalate	3960	UG/KG	<3960 <3960
Diethyl phthalate	1400	UG/KG	ND
Dimethyl phthalate	356	UG/KG	ND
Di-n-octyl phthalate	3460	UG/KG	ND
3,3-Dichlorobenzidine	2030	UG/KG	ND
2,4-Dinitrotoluene	1030	UG/KG	ND
2,6-Dinitrotoluene	1890	UG/KG	ND
1,2-Diphenylhydrazine	1590	UG/KG	ND
Fluoranthene	216	UG/KG	878 423
Fluorene	2520	UG/KG	ND
Hexachlorobenzene	813	UG/KG	ND
Hexachlorobutadiene	940	UG/KG	ND
Hexachlorocyclopentadiene	1890	UG/KG	ND
Hexachloroethane	382	UG/KG	ND
Indeno(1,2,3-CD)pyrene	953	UG/KG	ND
Isophorone	1820	UG/KG	ND
Naphthalene	2150	UG/KG	ND
Nitrobenzene	2800	UG/KG	ND
N-nitrosodimethylamine		UG/KG	ND
N-nitrosodi-n-propylamine	1360	UG/KG	ND
N-nitrosodiphenylamine	1330	UG/KG	ND
Phanthrene	1040	UG/KG	ND
Pyrene	1150	UG/KG	ND
1,2,4-Trichlorobenzene	2.5	UG/KG	ND
1,3-Dichlorobenzene	733	UG/KG	ND
1,2-Dichlorobenzene	342	UG/KG	ND
1,4-Dichlorobenzene	1270	UG/KG	ND
Polynuc. Aromatic Hydrocarbons	2520	UG/KG	405 0
Total Dichlorobenzenes	733	UG/KG	0 0
Base/Neutral Compounds	3960	UG/KG	2833 1378

nd= not detected, NA= not analyzed, NS= not sampled

POINT LOMA WASTEWATER TREATMENT PLANT  
GRIT  
Priority Pollutants Purgeable Compounds

2012 Annual

Source		PLR	PLR
Date		04-JUN-2012	01-NOV-2012
Analyte	MDL	Units	P618908 P638325
<hr/>			
Acrolein	6.4	UG/KG	ND ND
Acrylonitrile	3.9	UG/KG	ND ND
Benzene	2.1	UG/KG	2.3 ND
Bromodichloromethane	2.2	UG/KG	ND ND
Bromoform	2.4	UG/KG	ND ND
Bromomethane	6.9	UG/KG	ND ND
Carbon tetrachloride	3	UG/KG	ND ND
Chlorobenzene	1	UG/KG	4.2 8.9
Chloroethane	3.6	UG/KG	ND ND
Chloroform	2.3	UG/KG	ND 9.7
Chloromethane	3.4	UG/KG	ND ND
Dibromochloromethane	2.4	UG/KG	ND ND
1,2-Dichlorobenzene	1.5	UG/KG	2.7 ND
1,3-Dichlorobenzene	1.8	UG/KG	ND ND
1,4-Dichlorobenzene	1.5	UG/KG	92.7 496.0
1,1-Dichloroethane	1.9	UG/KG	ND ND
1,1-Dichloroethene	5	UG/KG	ND ND
1,2-Dichloroethane	3.6	UG/KG	ND ND
trans-1,2-dichloroethene	3.5	UG/KG	ND ND
1,2-Dichloropropane	2.6	UG/KG	ND ND
cis-1,3-dichloropropene	2.5	UG/KG	ND ND
trans-1,3-dichloropropene	2.1	UG/KG	ND ND
Ethylbenzene	1.4	UG/KG	10.4 20.7
Methylene chloride	3.5	UG/KG	18.3 4.9
1,1,2,2-Tetrachloroethane	5.9	UG/KG	ND ND
Tetrachloroethene	2.8	UG/KG	7.5 4.8
Toluene	1.2	UG/KG	318 630
1,1,1-Trichloroethane	3.2	UG/KG	ND ND
1,1,2-Trichloroethane	2.8	UG/KG	ND ND
Trichloroethene	2.6	UG/KG	ND ND
Vinyl chloride	4.8	UG/KG	ND ND
<hr/>			
Halomethane Purgeable Cmpnds	6.9	UG/KG	0.0 0.0
<hr/>			
Total Dichlorobenzenes	1.8	UG/KG	2.7 0.0
<hr/>			
Purgeable Compounds	6.9	UG/KG	361 679

Additional volatile organic compounds determined;

		PLR	PLR
		04-JUN-2012	01-NOV-2012
Analyte	MDL	Units	P618908 P638325
<hr/>			
Acetone	31.4	UG/KG	5860 5600
Allyl chloride	3.6	UG/KG	ND ND
Benzyl chloride	4.3	UG/KG	ND ND
2-Butanone	36.3	UG/KG	1420 1710
Carbon disulfide	4.7	UG/KG	52.2 89.6
Chloroprene	3.1	UG/KG	ND ND
1,2-Dibromoethane	2.5	UG/KG	ND ND
Isopropylbenzene	1.3	UG/KG	12.0 18.6
Methyl Iodide	3.8	UG/KG	ND ND
Methyl methacrylate	2.4	UG/KG	ND ND
2-Nitropropane	45.8	UG/KG	ND ND
ortho-xylene	1.9	UG/KG	14.9 17.8
Styrene	1.7	UG/KG	66.2 31.3
1,2,4-Trichlorobenzene	979	UG/KG	ND ND
meta,para xylenes	4.2	UG/KG	31.2 47.6
Trichlorofluoromethane	2.2	UG/KG	ND ND
2-Chloroethylvinyl ether	5.5	UG/KG	ND ND
4-Methyl-2-pentanone	9.7	UG/KG	ND ND

nd= not detected, NA= not analyzed, NS= not sampled

POINT LOMA WASTEWATER TREATMENT PLANT  
Herbicides - GRIT

Annual 2012

Source:	PLR	PLR		
Date:	04-JUN-2012	01-NOV-2012		
Analyte	MDL	Units	P618908	P638325
=====	=====	=====	=====	=====
2,4-Dichlorophenoxyacetic acid	2.66	MG/KG	ND	ND
2,4,5-TP (Silvex)	2.87	MG/KG	ND	ND

ND=not detected

## I. Raw Sludge Data Summary

### 2012 POINT LOMA WASTEWATER TREATMENT PLANT ANNUAL REPORT

**Raw Sludge**  
**Monthly average of daily average**

<b>Month</b>	<b>pH</b>	<b>%Total Solids</b>	<b>%Total Volatile Solids</b>
January	5.81	3.9	78.3
February	5.95	3.9	78.7
March	5.83	4.1	79.5
April	5.66	4.2	80.0
May	5.66	4.1	79.6
June	5.57	4.2	79.2
July	5.45	4.2	78.7
August	5.57	4.0	79.4
September	5.43	4.1	78.9
October	5.58	4.0	78.9
November	5.62	3.9	79.8
December	5.61	4.1	80.0
<b>Averages</b>	<b>4.06</b>	<b>79.3</b>	<b>79.3</b>

## J. Digester and Digested Sludge Data Summary

Point Loma Wastewater Treatment Plant Annual Report  
Digesters  
Year: 2012

N1P

Month	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)
JANUARY -2012	7.01	2.2	59.1	2090	67	61.2	38.6
FEBRUARY -2012	7.02	2.2	59.7	2210	70	61.1	38.8
MARCH -2012	7.02	2.2	60.6	2310	82	61.1	38.7
APRIL -2012	7.06	2.2	62.4	2320	89	61.5	38.7
MAY -2012	7.05	2.3	61.3	2290	79	61.5	38.4
JUNE -2012	7.03	2.3	61.5	2090	68	61.1	42.5
JULY -2012	7.03	2.5	61.9	2010	60	61.6	38.3
AUGUST -2012	7.02	2.4	61.9	1910	64	61.2	38.5
SEPTEMBER -2012	7.04	2.3	61.9	1910	56	61.4	38.4
OCTOBER -2012	7.04	2.3	61.7	1940	54	61.6	38.3
NOVEMBER -2012	7.07	2.2	61.7	2100	119	61.0	38.9
DECEMBER -2012	7.05	2.3	61.8	2260	75	61.7	38.2
Average:	7.04	2.3	61.3	2120	74	61.3	38.9

N2P

Month	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)
JANUARY -2012	7.02	2.1	58.2	2290	65	61.2	38.6
FEBRUARY -2012	7.04	2.0	59.2	2290	70	61.1	38.7
MARCH -2012	7.05	2.1	60.7	2330	82	61.2	38.6
APRIL -2012	7.06	2.1	61.9	2400	87	61.2	38.7
MAY -2012	7.07	2.1	61.0	2400	81	61.2	38.6
JUNE -2012	7.05	2.2	61.0	2230	75	61.2	38.7
JULY -2012	7.06	2.3	61.0	2200	67	61.9	38.0
AUGUST -2012	7.07	2.2	60.9	2130	66	61.3	38.5
SEPTEMBER -2012	7.04	2.2	61.3	2010	56	61.5	38.4
OCTOBER -2012	7.06	2.2	60.9	2060	51	61.7	38.2
NOVEMBER -2012	7.06	2.1	60.9	2190	62	61.2	38.6
DECEMBER -2012	7.07	2.1	60.5	2450	78	61.9	37.9
Average:	7.05	2.1	60.6	2248	70	61.4	38.5

C1P

Month	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
JANUARY -2012	6.99	2.3	58.7	2230	72	61.3	38.5	*
FEBRUARY -2012	6.99	2.3	59.7	2240	75	61.5	38.4	*
MARCH -2012	7.01	2.3	60.5	2310	86	61.3	38.6	*
APRIL -2012	7.06	2.4	60.1	2450	95	61.3	38.7	*
MAY -2012	7.05	2.2	60.7	2380	93	61.2	38.6	*
JUNE -2012	7.04	2.3	61.3	2160	82	61.2	38.7	*
JULY -2012	7.03	2.4	61.4	2040	66	61.8	38.1	*
AUGUST -2012	7.02	2.4	61.8	1910	66	61.3	38.5	*
SEPTEMBER -2012	7.05	2.4	62.0	1950	54	61.7	38.2	*
OCTOBER -2012	7.05	2.3	61.0	1960	53	61.7	38.2	*
NOVEMBER -2012	7.07	2.2	60.7	2110	61	61.2	38.7	*
DECEMBER -2012	7.06	2.3	60.3	2280	73	61.8	38.1	*
Average:	7.04	2.3	60.7	2168	73	61.4	38.4	*

Point Loma Wastewater Treatment Plant Annual Report

Digesters

Year: 2012

C2P

Month		pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)
JANUARY	-2012	7.00	2.1	59.2	2140	66	61.4	38.5
FEBRUARY	-2012	7.00	2.2	59.2	2230	71	61.2	38.6
MARCH	-2012	7.03	2.2	60.5	2280	84	61.2	38.6
APRIL	-2012	7.08	2.2	61.8	2420	93	61.3	38.6
MAY	-2012	7.06	2.2	60.7	2390	85	61.0	38.8
JUNE	-2012	7.06	2.3	61.0	2160	74	61.1	38.8
JULY	-2012	7.05	2.4	61.2	2090	64	61.7	38.2
AUGUST	-2012	7.03	2.3	61.1	1990	65	61.3	38.6
SEPTEMBER	-2012	7.04	2.3	61.2	1960	56	61.5	38.4
OCTOBER	-2012	7.04	2.3	60.9	1960	50	61.7	38.1
NOVEMBER	-2012	7.06	2.1	60.7	2130	60	61.3	38.6
DECEMBER	-2012	7.06	2.2	60.7	2320	72	62.0	37.9
Average:		7.04	2.2	60.7	2173	70	61.4	38.5

S1P

Month		pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
JANUARY	-2012	7.03	2.1	59.5	2140	69	61.3	38.5	*
FEBRUARY	-2012	7.03	2.1	59.6	2210	74	61.4	38.4	*
MARCH	-2012	7.04	2.1	60.8	2290	86	61.1	38.7	*
APRIL	-2012	7.07	2.1	62.0	2420	97	61.2	38.7	*
MAY	-2012	7.10	2.2	61.0	2430	85	61.3	38.6	*
JUNE	-2012	7.07	2.2	61.5	2220	75	61.3	38.6	*
JULY	-2012	7.07	2.4	61.3	2160	66	61.7	38.2	*
AUGUST	-2012	7.06	2.3	61.7	2040	66	61.3	38.5	*
SEPTEMBER	-2012	7.08	2.3	61.9	1980	56	61.5	38.3	*
OCTOBER	-2012	7.06	2.3	62.1	1980	53	61.6	38.3	*
NOVEMBER	-2012	7.06	2.2	61.8	2140	64	61.0	38.8	*
DECEMBER	-2012	6.99	2.3	62.5	2280	94	61.8	38.1	*
Average:		7.06	2.2	61.3	2191	74	61.4	38.5	*

S2P

Month		pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
JANUARY	-2012	7.02	2.2	59.3	2140	74	61.3	38.6	30
FEBRUARY	-2012	7.02	2.2	60.1	2200	79	61.1	38.8	29
MARCH	-2012	7.03	2.2	61.3	2260	91	61.2	38.7	27
APRIL	-2012	7.05	2.2	62.4	2340	95	61.2	38.7	28
MAY	-2012	7.06	2.2	61.2	2330	87	61.2	38.7	31
JUNE	-2012	7.08	2.3	61.5	2170	73	61.2	38.8	32
JULY	-2012	7.06	2.4	60.9	2080	64	61.7	38.1	28
AUGUST	-2012	7.03	2.3	61.3	2000	63	61.2	38.7	30
SEPTEMBER	-2012	7.09	2.2	61.4	1930	55	61.5	38.4	30
OCTOBER	-2012	7.08	2.3	61.1	1950	50	61.5	38.4	24
NOVEMBER	-2012	7.09	2.2	61.2	2130	66	61.2	38.7	28
DECEMBER	-2012	7.09	2.3	60.8	2330	80	61.8	38.1	29
Average:		7.06	2.3	61.0	2155	73	61.3	38.6	29

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DIG 7

Month	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
JANUARY -2012	7.11	2.0	57.3	2330	77	62.0	37.7	*
FEBRUARY -2012	7.11	1.9	57.2	2360	82	61.9	38.0	*
MARCH -2012	7.15	2.0	58.9	2460	95	62.1	37.8	*
APRIL -2012	7.17	2.0	60.0	2540	104	62.1	37.9	*
MAY -2012	7.19	2.1	59.7	2530	92	61.9	38.0	*
JUNE -2012	7.16	2.1	59.5	2340	80	61.8	38.1	*
JULY -2012	7.15	2.2	59.8	2230	69	62.4	37.6	*
AUGUST -2012	7.15	2.2	60.5	2160	72	62.1	37.8	*
SEPTEMBER-2012	7.16	2.1	60.4	2090	58	62.1	37.7	*
OCTOBER -2012	7.18	2.1	60.0	2110	54	62.2	41.9	*
NOVEMBER -2012	7.16	2.0	59.7	2270	65	61.9	37.9	*
DECEMBER -2012	7.18	2.0	59.4	2460	78	62.7	37.1	*
Average:	7.16	2.1	59.4	2323	77	62.1	38.1	*

DIG 8

	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
JANUARY -2012								
FEBRUARY -2012								
MARCH -2012								
APRIL -2012								
MAY -2012								
JUNE -2012								
JULY -2012								
AUGUST -2012								
SEPTEMBER-2012								
OCTOBER -2012								
NOVEMBER -2012								
DECEMBER -2012								
Average:	*	*	*	*	*	*	*	*

Not in Service.

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