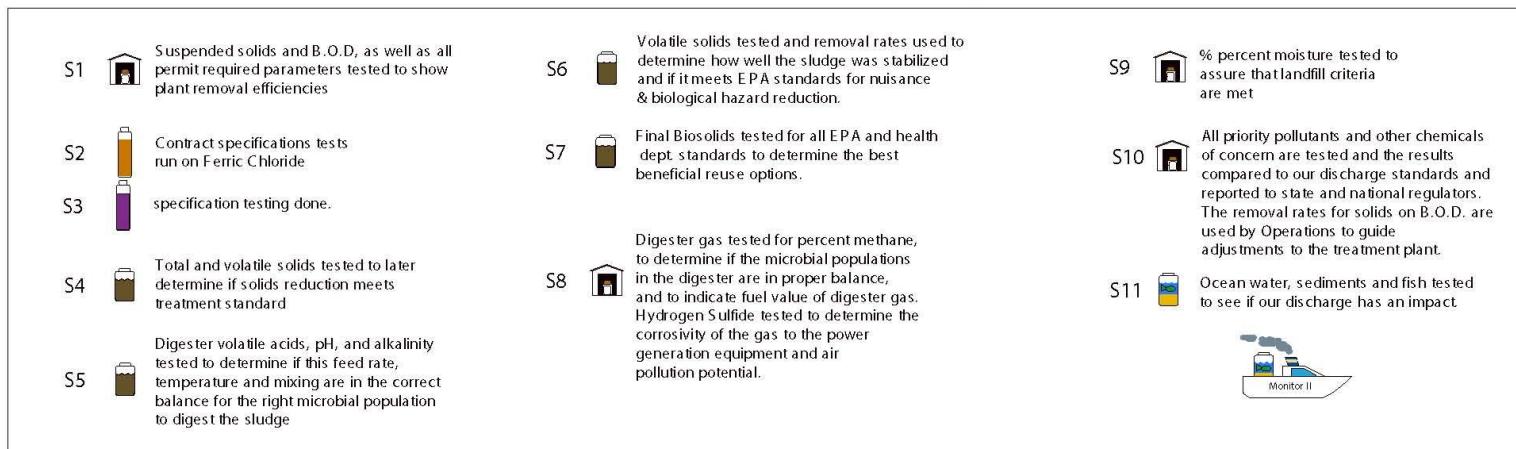
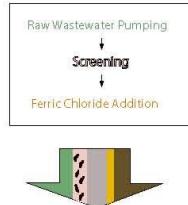


# POINT LOMA TREATMENT PLANT PROCESS FLOW DIAGRAM

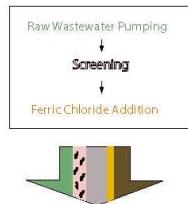
## Wastewater Laboratory Testing



## Pump Station 1



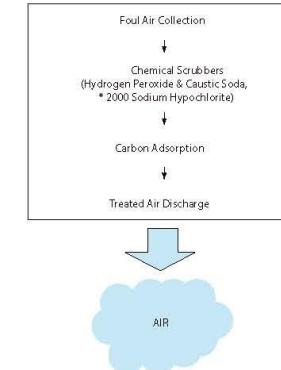
## Pump Station 2



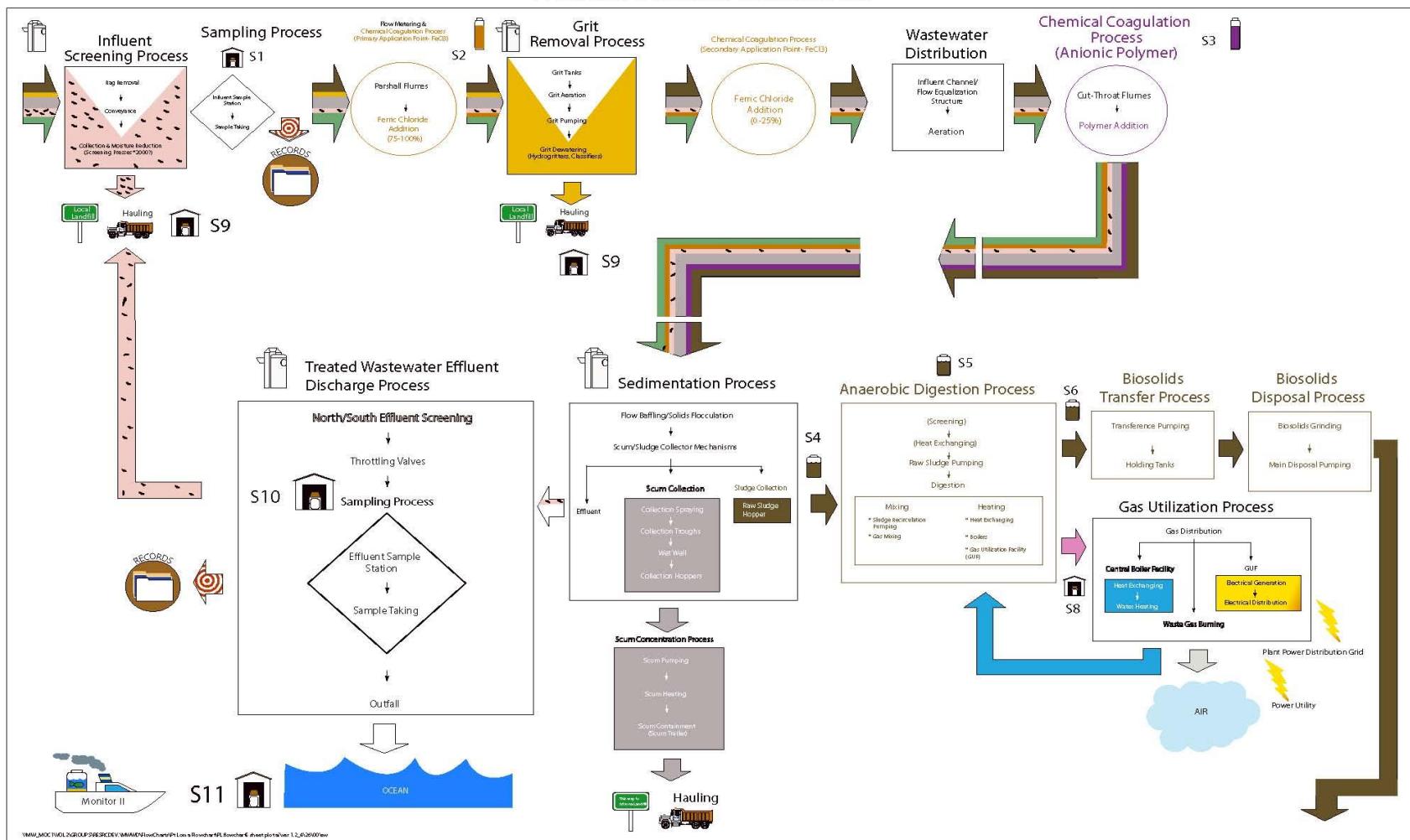
## Legend

	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 - 2011

#### 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	166.5	166.9	165.8	162.9	55.9
02	164.5	161.8	164.2	162.6	57.3
03	169.2	159.4	166.7	162.3	58.2
04	156.5	149.1	155.7	151.0	54.0
05	150.6	147.9	149.6	149.3	55.1
06	149.6	146.3	147.1	144.3	53.2
07	148.0	146.4	147.5	150.0	53.0
08	147.0	144.1	145.8	147.3	53.6
09	148.0	130.5	147.3	147.2	53.9
10	149.6	131.3	147.6	152.0	54.4
11	162.8	150.8	160.4	161.6	57.4
12	157.5	149.4	155.5	160.5	55.0
avg	155.8	148.7	154.4	154.2	55.1

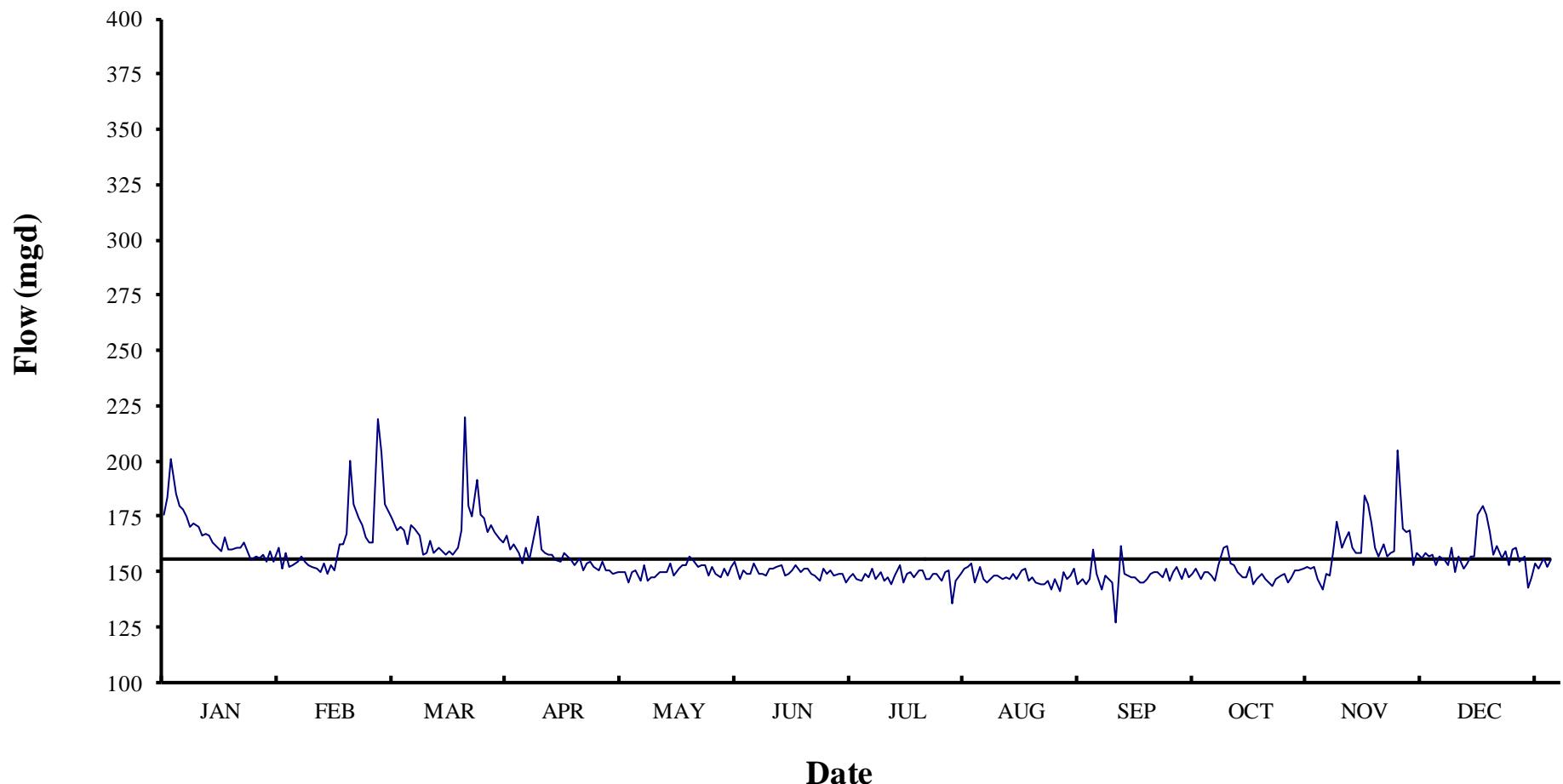
#### WASTEWATER FLOWS Monthly Total Flows - Millions of Gallons

Mon	Pt. L Gould	Pt. L ADS	PS#2 Flow	PS#2 Pumps	PS#1 Flows
01	5,160	5,173	5,138	5,050	1,733
02	4,605	4,531	4,597	4,552	1,603
03	5,245	4,942	5,169	5,030	1,805
04	4,694	4,474	4,670	4,531	1,620
05	4,668	4,585	4,638	4,630	1,708
06	4,489	4,390	4,413	4,330	1,595
07	4,587	4,540	4,574	4,649	1,642
08	4,558	4,466	4,520	4,566	1,661
09	4,441	3,916	4,420	4,416	1,616
10	4,639	4,070	4,577	4,712	1,688
11	4,885	4,523	4,813	4,849	1,722
12	4,882	4,632	4,822	4,974	1,704
avg	4,738	4,520	4,696	4,691	1,675
sum	56,852	54,242	56,352	56,289	20,098

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  
2011 Daily Flows (mgd)**

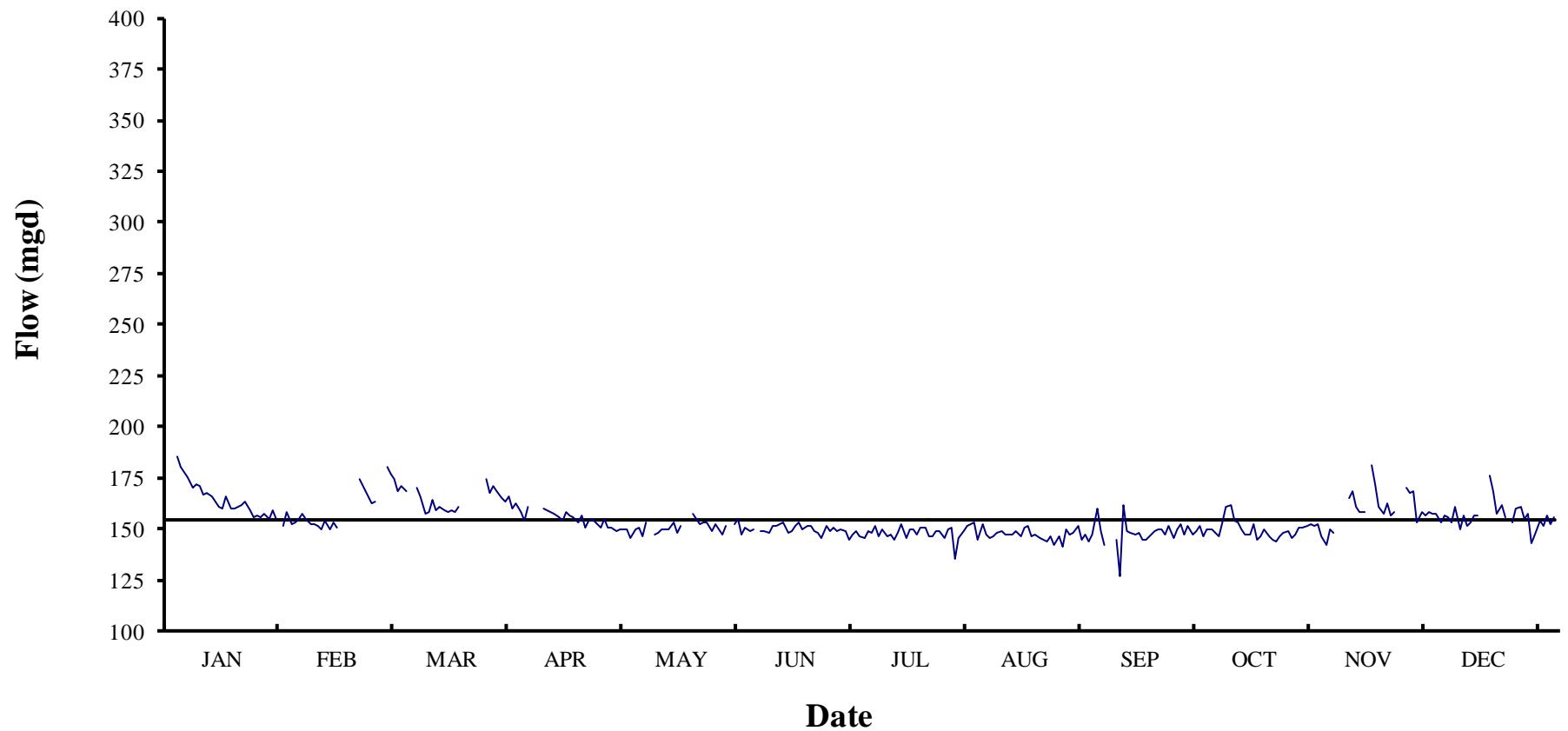


# Point Loma Wastewater Treatment Plant

## 2011 Flows (mgd)

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	176.2	151.6	177.2	166.1	149.8	146.8	148.9	153.4	146.8	149.6	142.0	152.8
2	183.9	158.5	174.2	160.1	149.4	150.5	146.5	144.9	159.8	149.7	149.3	156.9
3	200.7	152.0	168.5	162.2	145.4	148.7	145.6	152.0	149.0	148.2	148.1	155.6
4	185.3	153.2	170.6	158.6	149.8	149.3	148.7	147.0	142.1	146.3	159.2	153.0
5	179.9	154.9	168.6	154.0	150.7	154.0	147.7	145.0	148.1	152.9	172.3	160.8
6	177.8	156.9	162.2	160.9	146.1	148.8	151.5	146.6	146.6	160.8	161.1	149.8
7	175.1	154.7	171.2	155.3	152.8	148.7	146.7	148.4	144.9	161.5	164.7	156.8
8	170.3	152.7	169.8	163.0	145.5	148.4	149.5	148.6	126.7	153.6	168.1	151.1
9	172.1	151.9	166.2	175.0	147.3	151.3	146.1	146.8	161.4	152.9	161.0	153.5
10	170.6	151.6	157.5	159.9	147.7	151.3	147.4	147.4	149.1	149.8	158.4	156.9
11	166.7	149.8	158.3	158.8	149.6	152.4	144.7	146.9	148.3	147.4	158.2	156.6
12	167.3	153.6	164.0	158.0	149.9	153.0	148.1	148.9	147.1	147.1	184.4	175.7
13	166.1	149.4	158.8	157.3	150.0	148.0	152.6	146.3	147.7	151.9	180.7	179.3
14	163.4	152.8	161.0	155.2	153.5	148.9	145.0	150.6	144.7	144.6	171.9	176.0
15	160.7	150.3	159.3	154.3	148.1	151.0	149.3	151.0	144.8	146.7	161.0	168.0
16	159.6	162.4	157.8	158.2	151.5	153.0	150.0	146.0	146.3	149.3	157.0	157.6
17	165.9	162.3	159.0	156.6	152.9	149.5	147.1	147.3	149.1	146.5	162.4	161.3
18	160.0	166.7	157.9	155.2	153.3	151.2	150.8	145.2	149.8	144.8	156.5	155.9
19	160.0	199.9	160.7	153.1	157.3	151.6	150.4	144.5	149.5	143.5	158.3	159.3
20	161.1	180.1	168.4	156.2	155.0	149.2	146.4	144.0	147.3	146.7	159.3	153.1
21	161.2	174.6	220.2	150.5	152.4	147.9	146.4	145.9	151.6	148.4	204.9	160.1
22	163.0	171.0	180.0	153.7	152.9	145.7	148.9	142.0	145.8	149.2	169.8	160.7
23	158.9	165.8	175.2	154.9	153.1	151.2	149.0	146.3	150.1	145.2	167.7	154.8
24	155.5	162.8	191.5	152.0	148.5	148.7	145.7	140.8	152.0	147.1	168.6	157.0
25	156.5	162.9	176.1	150.5	152.5	150.6	149.4	149.8	146.9	150.7	153.3	143.0
26	155.9	218.9	174.5	154.5	149.3	148.4	150.8	147.0	151.1	150.6	158.1	147.4
27	157.3	204.1	167.9	150.5	147.3	149.4	135.5	148.2	147.4	151.2	156.1	153.5
28	154.8	180.2	171.3	150.3	151.6	149.1	145.6	151.5	149.2	152.4	158.4	151.2
29	159.4		168.3	149.1	148.2	145.0	149.1	144.5	151.1	151.8	157.0	156.4
30	154.5		165.0	150.1	152.5	147.2	151.0	147.0	146.4	152.3	157.4	152.0
31	160.8		163.5		154.6		152.3	144.0		146.5		155.5
Average	166.5	164.5	169.2	156.5	150.6	149.6	148.0	147.0	148.0	149.6	162.8	157.5
Minimum	154.5	149.4	157.5	149.1	145.4	145.0	135.5	140.8	126.7	143.5	142.0	143.0
Maximum	200.7	218.9	220.2	175.0	157.3	154.0	152.6	153.4	161.4	161.5	204.9	179.3
Total	5160.2	4605.4	5244.7	4693.8	4668.4	4488.6	4586.6	4557.7	4440.7	4638.9	4885.3	4881.5
												Annual Summary

**Point Loma Wastewater Treatment Plant  
2011 Dry Weather Flows (mgd)**



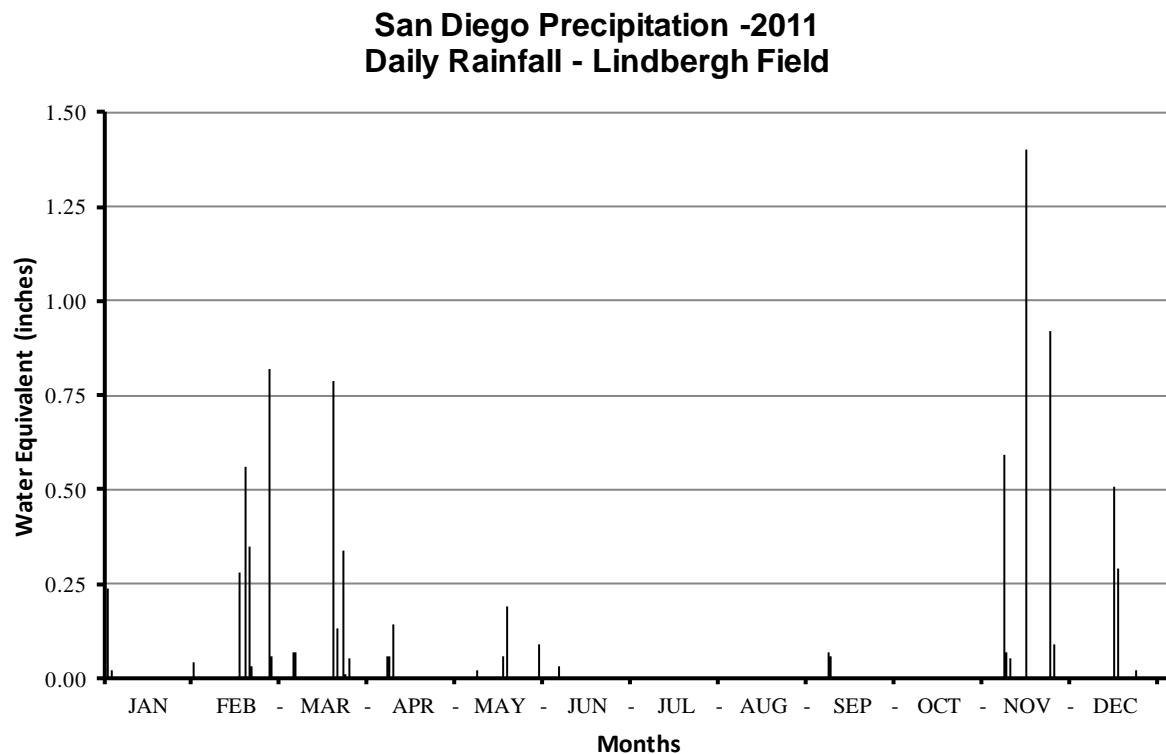
# Point Loma Wastewater Treatment Plant

## 2011 Dry Weather Flows (mgd)

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	176.2	151.6	177.2	166.1	149.8	146.8	148.9	153.4	146.8	149.6	142.0	152.8
2		158.5	174.2	160.1	149.4	150.5	146.5	144.9	159.8	149.7	149.3	156.9
3		152.0	168.5	162.2	145.4	148.7	145.6	152.0	149.0	148.2	148.1	155.6
4	185.3	153.2	170.6	158.6	149.8	149.3	148.7	147.0	142.1	146.3		153.0
5	179.9	154.9	168.6	154.0	150.7		147.7	145.0		152.9		160.8
6	177.8	156.9		160.9	146.1	148.8	151.5	146.6		160.8		149.8
7	175.1	154.7			152.8	148.7	146.7	148.4	144.9	161.5	164.7	156.8
8	170.3	152.7	169.8			148.4	149.5	148.6	126.7	153.6	168.1	151.1
9	172.1	151.9	166.2		147.3	151.3	146.1	146.8	161.4	152.9	161.0	153.5
10	170.6	151.6	157.5	159.9	147.7	151.3	147.4	147.4	149.1	149.8	158.4	156.9
11	166.7	149.8	158.3	158.8	149.6	152.4	144.7	146.9	148.3	147.4	158.2	156.6
12	167.3	153.6	164.0	158.0	149.9	153.0	148.1	148.9	147.1	147.1		
13	166.1	149.4	158.8	157.3	150.0	148.0	152.6	146.3	147.7	151.9	180.7	
14	163.4	152.8	161.0	155.2	153.5	148.9	145.0	150.6	144.7	144.6	171.9	176.0
15	160.7	150.3	159.3	154.3	148.1	151.0	149.3	151.0	144.8	146.7	161.0	168.0
16	159.6		157.8	158.2	151.5	153.0	150.0	146.0	146.3	149.3	157.0	157.6
17	165.9	162.3	159.0	156.6		149.5	147.1	147.3	149.1	146.5	162.4	161.3
18	160.0		157.9	155.2		151.2	150.8	145.2	149.8	144.8	156.5	155.9
19	160.0		160.7	153.1	157.3	151.6	150.4	144.5	149.5	143.5	158.3	
20	161.1			156.2	155.0	149.2	146.4	144.0	147.3	146.7		153.1
21	161.2	174.6		150.5	152.4	147.9	146.4	145.9	151.6	148.4		160.1
22	163.0	171.0	180.0	153.7	152.9	145.7	148.9	142.0	145.8	149.2	169.8	160.7
23	158.9	165.8		154.9	153.1	151.2	149.0	146.3	150.1	145.2	167.7	154.8
24	155.5	162.8		152.0	148.5	148.7	145.7	140.8	152.0	147.1	168.6	157.0
25	156.5	162.9			150.5	152.5	150.6	149.4	149.8	146.9	150.7	153.3
26	155.9		174.5	154.5	149.3	148.4	150.8	147.0	151.1	150.6	158.1	147.4
27	157.3		167.9	150.5	147.3	149.4	135.5	148.2	147.4	151.2	156.1	153.5
28	154.8	180.2	171.3	150.3	151.6	149.1	145.6	151.5	149.2	152.4	158.4	151.2
29	159.4		168.3	149.1		145.0	149.1	144.5	151.1	151.8	157.0	156.4
30	154.5		165.0	150.1	152.5	147.2	151.0	147.0	146.4	152.3	157.4	152.0
31			163.5		154.6		152.3	144.0		146.5		155.5
Average	164.8	157.9	165.8	155.6	150.7	149.5	148.0	147.0	148.1	149.6	160.2	156.0
Minimum	154.5	149.4	157.5	149.1	145.4	145.0	135.5	140.8	126.7	143.5	142.0	143.0
Maximum	185.3	180.2	180.0	166.1	157.3	153.0	152.6	153.4	161.4	161.5	180.7	176.0
Total	4614.9	3473.2	3980.0	4200.6	4068.4	4334.6	4586.6	4557.7	4146.0	4638.9	3844.1	4367.2
												Annual Summary

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## B. Rain Days



**San Diego Precipitation – 2011**  
**Daily Rainfall – Lindbergh Field**

		<b>Total Annual Precipitation=8.62</b>		<b>Maximum=1.4</b>		<b>Trace=0</b>	
First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
Date	Rain	Date	Rain	Date	Rain	Date	Rain
2-Jan-11	0.24	6-Apr-11	T	5-Sep-11	0.07	4-Nov-11	0.59
3-Jan-11	0.02	7-Apr-11	0.06	6-Sep-11	0.06	5-Nov-11	0.07
6-Jan-11	T	8-Apr-11	0.06			6-Nov-11	0.05
7-Jan-11	T	9-Apr-11	0.14			11-Nov-11	T
30-Jan-11	T	18-Apr-11	T			12-Nov-11	1.4
31-Jan-11	0.04	20-Apr-11	T			20-Nov-11	0.92
16-Feb-11	0.28	24-Apr-11	T			21-Nov-11	0.09
18-Feb-11	0.56	25-Apr-11	T			12-Dec-11	0.51
19-Feb-11	0.35	8-May-11	0.02			13-Dec-11	0.29
20-Feb-11	0.03	9-May-11	0			14-Dec-11	T
26-Feb-11	0.82	17-May-11	0.06			15-Dec-11	0.04
27-Feb-11	0.06	18-May-11	0.19			16-Dec-11	T
6-Mar-11	0.07	23-May-11	T			17-Dec-11	T
7-Mar-11	0.07	29-May-11	0.09			19-Dec-11	0.02
19-Mar-11	T	5-Jun-11	0.03				
20-Mar-11	0.79	9-Jun-11	T				
21-Mar-11	0.13	16-Jun-11	T				
22-Mar-11	T						
23-Mar-11	0.34						
24-Mar-11	0.01						
25-Mar-11	0.05						
26-Mar-11	T						
27-Mar-11	T						
<b>TOTALS</b>	<b>3.86</b>		<b>0.65</b>		<b>0.13</b>		<b>3.98</b>

## C. Solids Production

Point Loma Annual Monitoring Report  
Solids Report - TOTALS  
From 01-JAN-2011 To 31-DEC-2011

Month	Pt. Loma		MBC		MBC			
	Raw sludge Gallons	Dry Tons	Digested Sludge Gallons	Dry Tons	Combined Centrate Gallons	Dry Tons	Sludge Wet Tons	Dry Tons
01	35,491,038	5,636	35,491,038	3,219	75,020,797	875	8,823	2,663
02	32,397,871	5,134	32,397,871	2,759	68,306,394	794	8,464	2,514
03	35,467,907	5,821	35,467,907	3,043	74,599,231	951	9,325	2,825
04	35,553,681	5,671	35,553,681	3,085	73,711,486	892	9,030	2,744
05	36,847,985	6,016	36,847,985	3,250	67,380,063	984	9,216	2,671
06	35,168,262	6,024	34,068,262	3,280	62,542,728	1,184	9,555	2,684
07	35,129,412	6,092	35,129,412	3,472	60,385,843	1,024	8,848	2,476
08	35,463,019	5,984	35,399,792	3,491	56,976,529	985	10,205	2,837
09	33,612,326	5,607	32,777,190	3,105	58,074,557	1,020	9,494	2,629
10	35,850,409	5,796	29,074,835	2,737	64,721,077	1,021	9,703	2,600
11	36,565,819	6,087	36,565,819	3,416	62,891,565	891	9,825	2,831
12	37,820,097	6,387	37,819,683	3,394	64,057,682	889	9,022	2,648
avg	35,447,319	5,854	34,716,123	3,188	65,722,329	959	9,292	2,677
sum	425,367,826	70,253	416,593,475	38,251	788,667,952	11,509	111,509	32,122

Point Loma Annual Monitoring Report  
Solids Report - Daily Averages by Month  
From 01-JAN-2011 To 31-DEC-2011

Year Month	Pt. Loma		Pt.Loma		MBC		MBC		
	Raw sludge Gallons	%TS	Dry Tons	Digested Sludge Gallons	%TS	Dry Tons	Combined Centrate Gallons	%TS	Dry Tons
11-01	1,144,872	3.8	178	1,144,872	2.2	104	2,420,026	0.28	28.3
11-02	1,157,067	3.8	183	1,157,067	2.0	99	2,439,514	0.28	28.2
11-03	1,144,126	3.9	188	1,144,126	2.1	98	2,406,427	0.31	30.8
11-04	1,185,123	3.8	191	1,185,123	2.1	103	2,457,050	0.29	29.7
11-05	1,188,645	3.9	195	1,188,645	2.1	105	2,173,550	0.35	31.5
11-06	1,172,275	4.1	203	1,135,609	2.3	109	2,084,758	0.45	38.4
11-07	1,133,207	4.2	196	1,133,207	2.4	112	1,947,930	0.41	32.8
11-08	1,143,968	4.0	194	1,141,929	2.4	112	1,837,953	0.41	31.7
11-09	1,120,411	4.0	185	1,092,573	2.3	103	1,935,819	0.42	33.9
11-10	1,156,465	3.9	190	937,898	2.3	83	2,087,777	0.38	32.9
11-11	1,218,861	4.0	203	1,218,861	2.2	114	2,096,386	0.34	29.6
11-12	1,220,003	4.1	206	1,219,990	2.2	109	2,066,377	0.33	28.6
avg	1,165,419	4.0	193	1,141,658	2.2	104	2,162,797	0.35	31.4
									306
									28.8
									88.3

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 - 2011

Month	Polymer	ACTIVE Pt.Loma	Ferric Polymer Pt.Loma	Ferrous Chloride PS #2	Ferric Chloride Pt.Loma	Sodium hydroxide PS #1	Sodium hydroxide PS #2	Sodium Pt.Loma	NaOCl PS #1	NaOCl PS #2	NaOCl Pt.Loma	Salt PS #1	Salt PS #2	Salt Pt.Loma
	Gallons	Lbs.	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Lbs.	Lbs.	Lbs.
01	144,503	6,081	0	94,811	407	3,728	1,312	2,070	301,667	950	900	15,500		
02	128,561	5,409	0	79,956	350	54	3,406	1,013	2,295	262,106	850	750	14,000	
03	147,022	6,187	0	95,841	118	105	3,578	645	2,704	253,063	1,050	600	15,500	
04	132,031	5,560	0	85,690	364	199	4,300	725	2,748	287,734	950	780	15,000	
05	130,662	5,498	0	83,454	360	84	2,920	839	3,383	315,504	1,050	950	15,500	
06	125,758	5,291	0	79,159	402	35	4,854	855	2,503	306,409	1,050	50	15,000	
07	147,418	6,206	0	94,391	265	122	5,835	1,011	3,230	301,520	800	350	15,500	
08	128,518	5,410	0	83,525	577	107	5,481	990	3,439	316,558	1,000	200	15,500	
09	124,249	5,231	0	82,266	342	91	5,748	813	3,053	305,375	1,006	600	15,000	
10	130,591	5,495	0	84,460	435	198	5,007	593	4,082	306,476	1,600	450	15,500	
11	137,239	5,775	0	89,133	470	44	3,824	419	3,675	317,827	925	100	15,000	
12	136,781	5,756	0	88,969	145	119	3,412	553	3,368	324,693	1,604	500	15,500	
avg	134,444	5,658	0	86,805	353	114	4,341	814	3,046	299,911	1,070	519	15,208	
sum	1,613,333	67,899	0	1,041,655	4,235	1,365	52,093	9,768	36,550	3,598,932	12,835	6,230	182,500	

## E. Gas Production

### Point Loma Wastewater Treatment Plant

#### Gas Report - 2011

#### 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	426.2	432.2	451.6	402.7	445.4	473.7	90.8	.0	2,631.8	155	1,236	1,727	3,118
02	428.5	379.0	447.1	386.1	441.7	494.3	89.9	.0	2,576.6	149	1,138	1,846	3,133
03	462.8	413.5	467.2	403.0	468.2	404.5	87.6	.0	2,619.2	81	1,261	1,855	3,198
04	453.8	413.0	482.8	399.1	465.0	419.2	89.8	.0	2,633.0	184	2,074	1,063	3,321
05	454.7	460.9	481.7	411.7	453.3	398.9	94.9	.0	2,661.3	55	1,371	1,819	3,245
06	459.4	466.2	494.7	432.8	457.4	395.2	98.7	.0	2,705.6	71	1,436	1,792	3,299
07	462.6	463.6	487.7	435.0	458.0	406.6	96.5	.0	2,713.4	49	1,775	1,490	3,314
08	447.8	461.8	469.9	419.7	457.2	386.4	93.0	.0	2,642.8	52	1,371	1,784	3,207
09	427.6	448.3	462.4	405.9	444.5	373.2	91.1	.0	2,562.0	62	1,238	1,753	3,052
10	418.1	459.4	456.8	405.3	441.6	439.1	94.5	.0	2,620.2	91	1,476	1,795	3,363
11	479.1	599.3	458.9	446.1	475.1	396.7	97.5	.0	2,855.2	83	1,435	1,757	3,275
12	490.8	602.3	422.2	437.5	406.5	397.6	98.1	.0	2,756.9	189	1,423	1,549	3,161
avg	450.9	466.6	465.2	415.4	451.2	415.5	93.5	.0	2,664.8	102	1,436	1,686	3,224

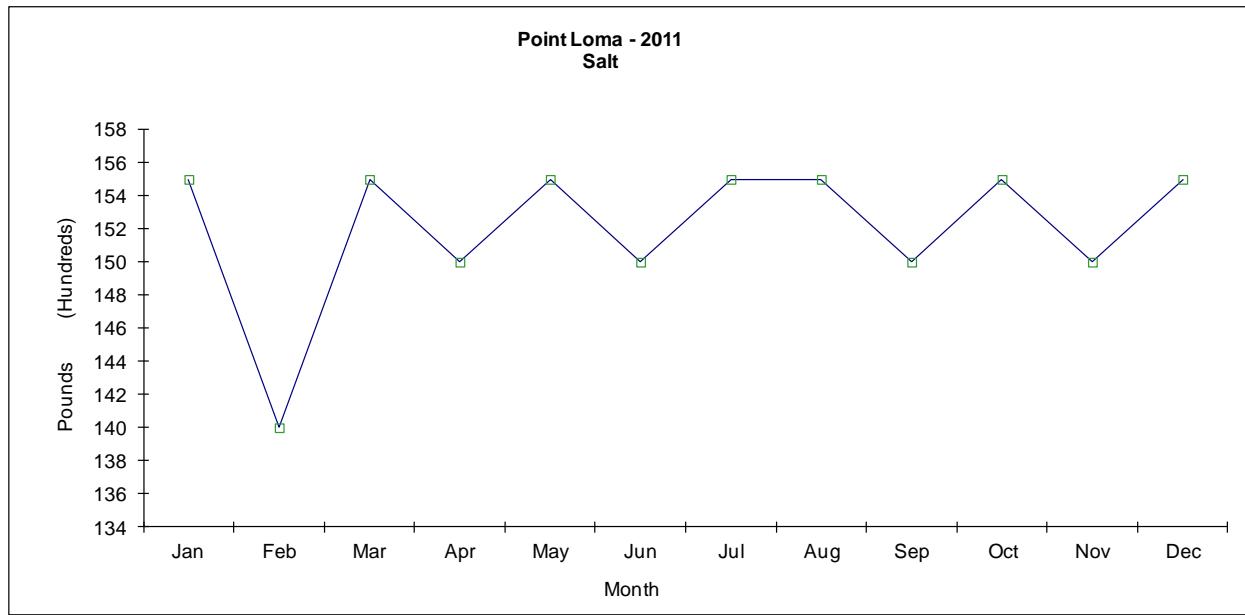
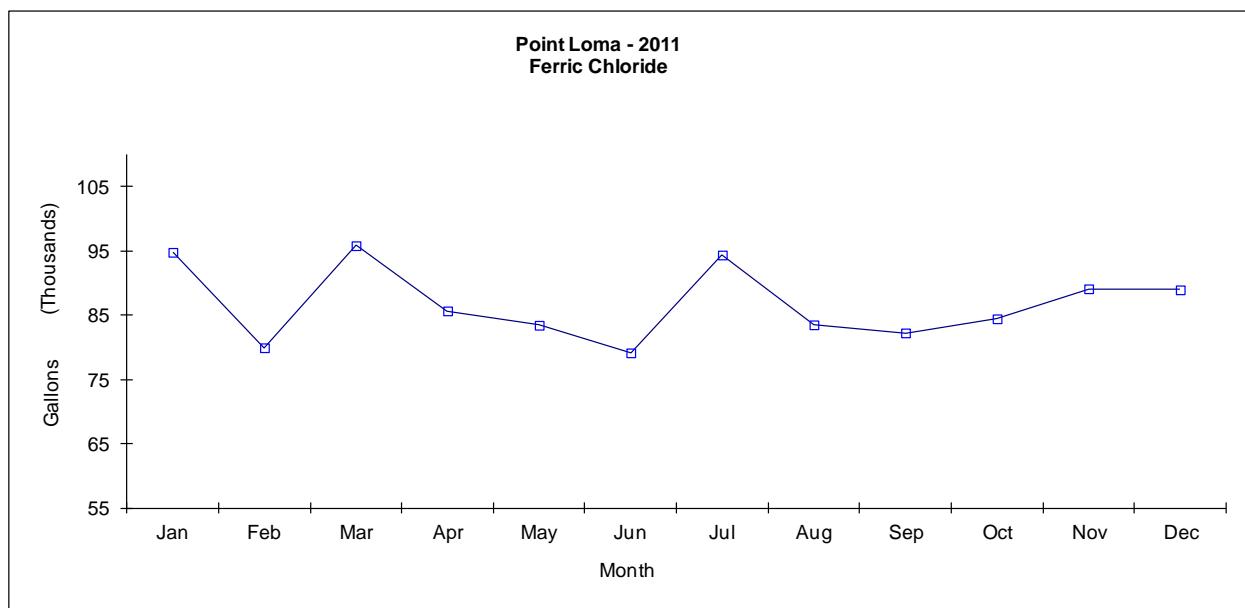
#### Monthly Totals

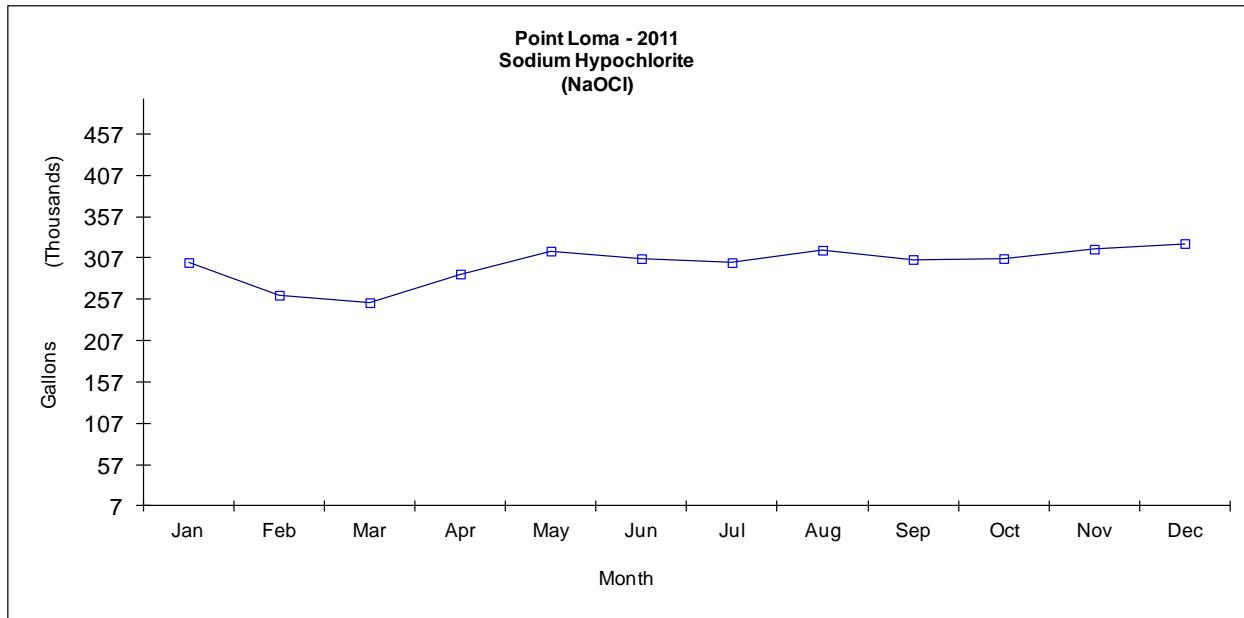
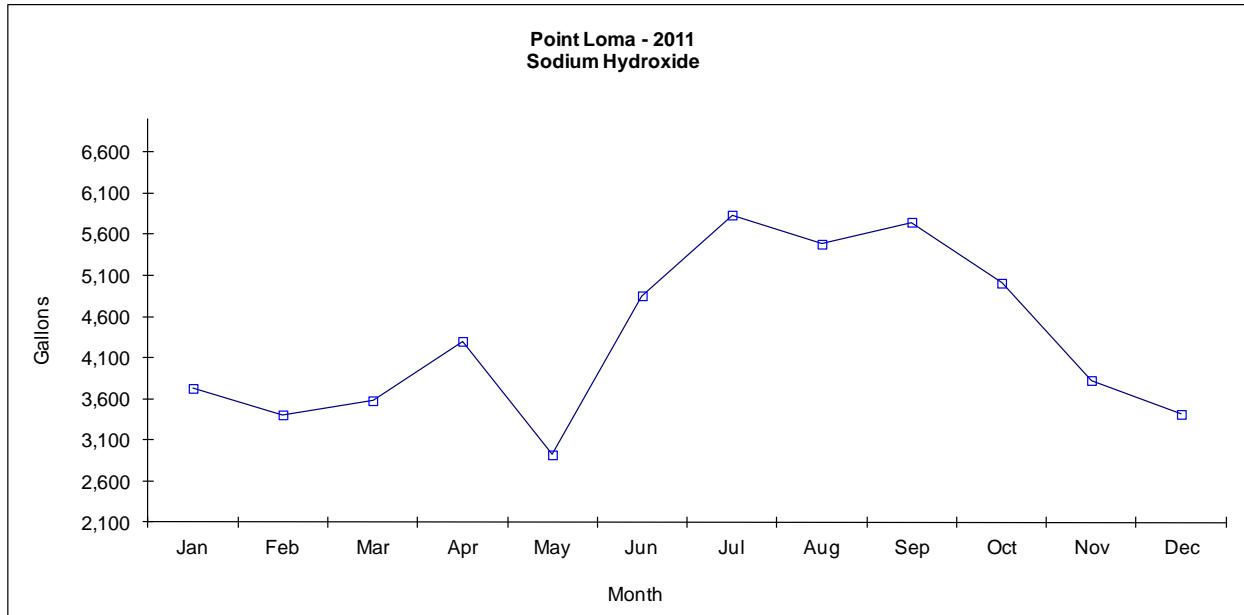
##### GAS PRODUCTION (x1000 Cu. Ft.)

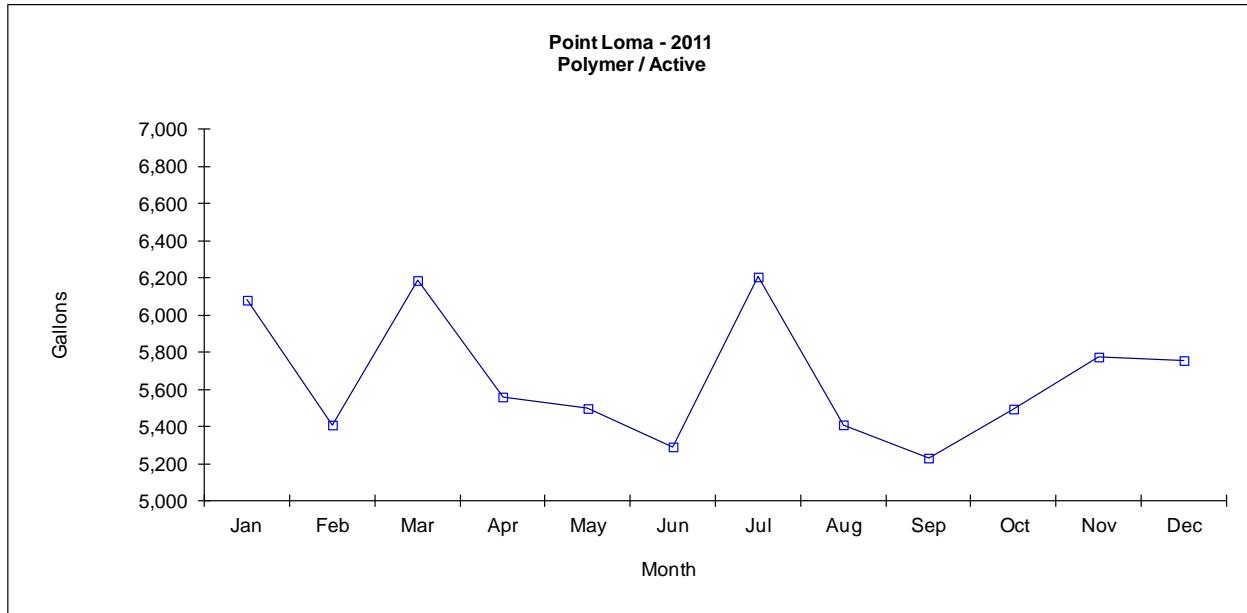
##### GAS CONSUMPTION (x1000 Cu. Ft.)

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	13,212.0	13,399.0	14,001.0	12,484.0	13,806.0	14,685.0	2,816.0	.0	81,587.0	4,792	38,323	53,543	96,658
02	11,997.0	10,611.0	12,520.0	10,810.0	12,368.0	13,840.0	2,516.0	.0	72,146.0	4,178	31,863	51,690	87,731
03	14,347.0	12,819.0	14,482.0	12,492.0	14,514.0	12,541.0	2,716.0	.0	81,195.0	2,503	39,102	57,520	99,125
04	13,615.0	12,391.0	14,483.0	11,974.0	13,949.0	12,577.0	2,694.0	.0	78,989.0	5,511	62,228	31,881	99,620
05	14,096.0	14,289.0	14,932.0	12,764.0	14,053.0	12,367.0	2,942.0	.0	82,501.0	1,717	42,486	56,401	100,604
06	13,782.0	13,986.0	14,840.0	12,983.0	13,723.0	11,855.0	2,960.0	.0	81,169.0	2,143	43,067	53,749	98,959
07	14,340.0	14,371.0	15,118.0	13,484.0	14,198.0	12,605.0	2,990.0	.0	84,116.0	1,512	55,022	46,191	102,725
08	13,882.0	14,316.0	14,567.0	13,010.0	14,174.0	11,977.0	2,883.0	.0	81,926.0	1,617	42,500	55,304	99,421
09	12,828.0	13,450.0	13,871.0	12,177.0	13,336.0	11,197.0	2,734.0	.0	76,859.0	1,845	37,127	52,582	91,554
10	12,960.0	14,240.0	14,162.0	12,563.0	13,691.0	13,611.0	2,931.0	.0	81,227.0	2,829	45,761	55,651	104,241
11	14,373.0	17,980.0	13,767.0	13,382.0	14,253.0	11,902.0	2,925.0	.0	85,657.0	2,502	43,051	52,704	98,257
12	15,216.0	18,670.0	13,089.0	13,561.0	12,602.0	12,325.0	3,041.0	.0	85,463.0	5,848	44,116	48,026	97,990
avg	13,720.7	14,210.2	14,152.7	12,640.3	13,722.3	12,623.5	2,845.7	.0	81,069.6	3,083	43,721	51,270	98,074
sum	164,648.0	170,522.0	169,832.0	151,684.0	164,667.0	151,482.0	34,148.0	.0	972,835.0	36,997	524,646	615,242	1,176,885

## F. Graphs of Chemical Usage







## G. Facilities Out-of-Service Report

### FACILITIES THAT WERE OUT OF SERVICE IN 2011 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	12/31	Tank rehabilitation
Digester 8	1/1	12/31	Roofing repair
West channel	1/1	1/13	Channel rotation
Sed Tank #9	1/1	2/2	Preventive/Corrective maintenance
Sed tank #2	1/5	5/27	Preventive/Corrective maintenance
East Channel	1/13	2/16	Channel rotation
C2 Grit Basin	1/21	1/25	Preventive/Corrective maintenance
Sed Basin #4	1/29	3/23	Preventive/Corrective maintenance
Influent Screen #4	2/22	2/23	Preventive/Corrective maintenance
C2 Grit Basin	3/10	3/10	Preventive/Corrective maintenance
East Channel	3/23	5/4	Channel rotation
Sed Basin #5	3/23	7/16	Preventive/Corrective maintenance
West Channel	5/4	5/28	Channel rotation
Influent Screen #3	5/10	5/10	Preventive/Corrective maintenance
N1 Grit Basin	5/14	5/15	Preventive/Corrective maintenance
East Channel	5/23	6/2	Channel rotation
Sed Basin #11	5/27	6/7	Preventive/Corrective maintenance
West Channel	6/21	7/26	Channel rotation
Sed Basin #2	7/7	8/11	Preventive/Corrective maintenance
Influent Screen #1	7/8	7/8	Preventive/Corrective maintenance
Influent Screen #2	7/11	7/11	Preventive/Corrective maintenance
Sed Basin #6	7/16	7/28	Preventive/Corrective maintenance
Influent Screen #2	7/18	7/18	Preventive/Corrective maintenance
East Channel	7/26	8/25	Channel rotation
Sed Basin #10	7/28	8/28	Preventive/Corrective maintenance
Sed Basin #11	8/11	8/21	Preventive/Corrective maintenance
N1 Grit Basin	8/14	8/17	Preventive/Corrective maintenance
C1 Grit Basin	8/17	8/20	Preventive/Corrective maintenance
N2 Grit Basin	8/21	8/24	Preventive/Corrective maintenance
Sed Basin #12	8/21	9/2	Preventive/Corrective maintenance
C2 Grit Basin	8/24	8/27	Preventive/Corrective maintenance
West Channel	8/25	11/18	Channel rotation
Sed Basin #7	8/28	9/8	Preventive/Corrective maintenance
Influent Screen #1	9/1	9/8	Preventive/Corrective maintenance
Sed Basin #4	9/2	9/24	Preventive/Corrective maintenance
C2 Grit Basin	9/2	9/3	Preventive/Corrective maintenance
Sed Basin #9	9/2	9/21	Preventive/Corrective maintenance
Influent Screen #2	9/6	9/6	Preventive/Corrective maintenance
Influent Screen #4	9/7	9/9	Preventive/Corrective maintenance
Sed Basin #2	9/20	9/25	Preventive/Corrective maintenance
Sed Basin #5	9/24	9/30	Preventive/Corrective maintenance
Sed Basin #12	9/24	12/31	Preventive/Corrective maintenance
Sed Basin #7	9/29	10/25	Preventive/Corrective maintenance
Sed Basin #11	10/25	11/2	Preventive/Corrective maintenance
Sed Basin #2	11/1	12/31	Preventive/Corrective maintenance
East Channel	11/18	12/31	Channel rotation

## FACILITIES THAT WERE OUT OF SERVICE IN 2011

### GRIT CHAMBERS

N1	5/14-5/15; 8/14-8/17
N2	8/21-8/24
C1	8/17-8/20
C2	1/21-1/25; 3/10; 8/24-8/27; 9/2-9/3
S1	1/1-12/31
S2	1/1-12/31

### CHANNELS

EAST	1/13-2/16; 3/23-5/4; 5/23-6/21; 7/26-8/25; 11/18-12/31
WEST	1/1-1/13; 5/4-5/28; 6/21-7/26; 8/25-11/18

### BASINS

1	1/1-12/31
2	1/5-5/27; 7/7-8/11; 9/20-9/25; 11/1-12/31
3	1/1-12/31
4	1/29-3/23; 9/2-9/24
5	3/23-7/16; 9/24-9/30
6	7/16-7/28
7	8/28-9/8; 9/29-10/25
8	
9	1/1-2/2; 9/2-9/21
10	7/28-8/28
11	5/27-6/7; 8/11-8/21; 10/25-11/2
12	8/21-9/2; 9/24-12/31

NEOC	
SEOC	
INFLUENT SCREEN #1	7/8; 9/1-9/8
INFLUENT SCREEN #2	7/11; 7/18; 9/6
INFLUENT SCREEN #3	2/22-2/23; 5/10
INFLUENT SCREEN #4	9/7-9/9
INFLUENT SCREEN #5	

### DIGESTERS

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

FACILITIES THAT WERE OUT OF SERVICE IN 2011

SHUTDOWNS

DATE	FROM	TO	REASON
3/10	0245	0630	Point Loma polymer flush
3/25	0245	0700	PS 2 travelling screen; Point Loma ferrous system repair
5/24	0230	0545	PS 2 quarterly PM's
5/27	0230	0430	PS 2 quarterly PM's
6/3	0330	0630	PS 2 repairs and PM's
6/28	0230	0530	Point Loma switchgear replacement
6/29	0240	0600	Point Loma switchgear replacement
8/2	0220	0640	PS 2 travelling screen
8/5	0419	0634	PS2 travelling screen
9/30	0240	0600	PS 2 quarterly PM's
10/7	0300	0636	PS 2 quarterly PM's and Point Loma polymer flush
10/14	0115	0720	PS 2 wet well cleaning
10/19	0120	0620	PS 2 wet well cleaning and Point Loma valve cleaning
10/20	0115	0600	PS 2 wet well cleaning and Point Loma valve cleaning
12/23	0200	0540	PS 2 PM's

## 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 2011. 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  
Total Solids - Grit and Screenings 2011 (% WT)**

Grit Monthly Averages		Headworks Screenings Monthly		Sludge Screenings Monthly Averages	
JAN	61.7	JAN	46.4	JAN	43.3
FEB	51.6	FEB	48.4	FEB	55.4
MAR	51.3	MAR	48.4	MAR	56.6
APR	48.6	APR	47.9	APR	43.2
MAY	50.5	MAY	46.8	MAY	39.8
JUN	46.8	JUN	49.4	JUN	42.0
JUL	46.4	JUL	48.2	JUL	44.3
AUG	64.1	AUG	51.7	AUG	42.6
SEP	54.7	SEP	52.2	SEP	42.9
OCT	54.5	OCT	47.1	OCT	48.7
NOV	57.8	NOV	45.2	NOV	43.5
DEC	57.7	DEC	48.6	DEC	38.7
<b>AVG</b>	<b>53.8</b>	<b>AVG</b>	<b>48.4</b>	<b>AVG</b>	<b>45.1</b>

## Point Loma Wastewater Treatment Plant

**2011 Grit Total Solid (%WT)**

	Average	Minimum	Maximum
	%WT	%WT	%WT
JAN	61.7	44.0	93.6
FEB	51.6	43.4	70.0
MAR	51.3	43.7	56.5
APR	48.6	40.1	59.2
MAY	50.5	42.8	63.9
JUN	46.8	37.1	58.7
JUL	46.4	40.0	67.6
AUG	64.1	42.0	93.3
SEP	54.7	40.5	68.9
OCT	54.5	42.2	76.7
NOV	57.8	46.0	69.3
DEC	57.7	44.9	78.1

**2011 Headworks Screenings Total Solids (%WT)**

	Average	Minimum	Maximum
	%WT	%WT	%WT
JAN	46.4	39.2	55.5
FEB	48.4	28.7	63.5
MAR	48.4	43.9	54.0
APR	47.9	43.9	54.0
MAY	46.8	39.7	52.4
JUN	49.4	42.7	54.4
JUL	48.2	42.4	54.7
AUG	51.7	40.8	65.0
SEP	52.2	44.2	58.6
OCT	47.1	21.1	52.9
NOV	45.2	22.6	57.9
DEC	48.6	42.2	56.6

**2011 Sludge Screenings Total Solids (%WT)**

	Average	Minimum	Maximum
	%WT	%WT	%WT
JAN	35.4	30.1	43.3
FEB	36.2	32.4	55.4
MAR	37.4	32.4	56.6
APR	35.8	31.8	43.2
MAY	37.6	32.2	39.8
JUN	37.4	33.9	42.0
JUL	36.6	33.2	44.3
AUG	37.8	32.5	42.6
SEP	37.2	33.6	42.9
OCT	38.0	34.6	48.7
NOV	35.9	26.4	43.5
DEC	32.8	28.1	38.7

POINT LOMA WASTEWATER TREATMENT PLANT  
 CALIFORNIA HAZARDOUS WASTE IDENTIFICATION TESTS (Title 22)  
 Metro Biosolids Center Dewatered Sludge  
 From: 01-JUN-2011 to 30-JUN-2011

Source: MBCDEWCN  
 Sample ID: P570762  
 Sample Date: 30-JUN-11

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	2.57	.711	500	*	15.00		
Arsenic		.68 MG/KG	3.58	.99	500	*	5.00	41	
Barium		.05 MG/KG	357.5	98.8	10000	*	100.00		
Beryllium		.02 MG/KG	.13	.036	75	*	.75		
Cadmium		.1 MG/KG	1.52	.42	100	*	1.00	39	
Chromium (VI)			NA	NA	500	NA	5.00		
Chromium		.3 MG/KG	61.1	16.89	2500	*	560.00	1,200	
Cobalt		.2 MG/KG	2.37	.655	8000	*	80.00		
Copper		.4 MG/KG	741	204.9	2500	*	25.00	1,500	2,500
Lead		2 MG/KG	15.9	4.4	1000	*	5.00	300	350
Mercury		.4 MG/KG	.99	.274	20	*	.20	17	
Molybdenum		.1 MG/KG	21.1	5.83	3500	*	350.00		
Nickel		.3 MG/KG	41.6	11.502	2000	*	20.00	420	2,000
Selenium		.47 MG/KG	6.25	1.727	100	*	1.00	100	
Silver		.07 MG/KG	5.93	1.638	500	*	5.00		
Thallium		1 MG/KG	ND	ND	700	*	7.00		
Vanadium		.2 MG/KG	28.3	7.811	2400	*	24.00		
Zinc		.5 MG/KG	942	260	5000	*	250.00	2,800	
Fluoride			NA	NA	18000	NA	180.00		
Sulfides-Reactive		11 MG/KG	6	2					
Sulfides-Total		2170 MG/KG	11700	3235					
Total Solids		WT%	27.7						
Total Volatile Solids		WT%	58.9						
pH		.08 PH	7.69		>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			NA	NA	100	NA	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			NA	NA	17	NA	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			NA	NA	10	NA	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)

MBCDEWCN = Metro Biosolids Center Dewatered Centrifuged Sludge.

POINT LOMA WASTEWATER TREATMENT PLANT  
 CALIFORNIA HAZARDOUS WASTE IDENTIFICATION TESTS (Title 22)  
 Metro Biosolids Center Dewatered Sludge  
 From: 01-NOV-2011 to 30-NOV-2011

Source: MBCDEWCN  
 Sample ID: P597126  
 Sample Date: 30-NOV-11

Constituent	MDL.	Units	CA Health &				STLC	40 CFR 503	Safety code	
			Total Dry Wt.	Total Wet Wt.	TTL C. Wet Wt.	W.E.T. Wet Wt.	mg/L	mg/L	mg/Kg	mg/Kg
Antimony		.5 MG/KG	2.55	.725	500	*	15.00			
Arsenic		.68 MG/KG	4.03	1.15	500	*	5.00		41	
Barium		.05 MG/KG	262	74.7	10000	*	100.00			
Beryllium		.02 MG/KG	.09	.025	75	*	.75			
Cadmium		.1 MG/KG	1.73	.493	100	*	1.00		39	
Chromium (VI)			NA	NA	500	NA	5.00			
Chromium		.3 MG/KG	55.9	15.9	2500	*	560.00	1,200		
Cobalt		.2 MG/KG	3.18	.906	8000	*	80.00			
Copper		.4 MG/KG	678	193	2500	*	25.00	1,500	2,500	
Lead		2 MG/KG	16.2	4.6	1000	*	5.00	300	350	
Mercury		.4 MG/KG	2.23	.635	20	*	.20		17	
Molybdenum		.1 MG/KG	19.6	5.57	3500	*	350.00			
Nickel		.3 MG/KG	40.8	11.6	2000	*	20.00	420	2,000	
Selenium		.47 MG/KG	6.32	1.8	100	*	1.00		100	
Silver		.07 MG/KG	6.45	1.84	500	*	5.00			
Thallium		1 MG/KG	ND	ND	700	*	7.00			
Vanadium		.2 MG/KG	35.4	10.1	2400	*	24.00			
Zinc		.5 MG/KG	805	229	5000	*	250.00		2,800	
Fluoride			NA	NA	18000	NA	180.00			
Sulfides-Reactive		11 MG/KG	ND	ND						
Sulfides-Total		2170 MG/KG	8725	2487						
Total Solids			WT%	28.5						
Total Volatile Solids			WT%	58.6						
pH		.08 PH	7.74		>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			NA	NA	100	NA	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			NA	NA	17	NA	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			NA	NA	10	NA	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)

MBCDEWCN = Metro Biosolids Center Dewatered Centrifuged Sludge.

POINT LOMA WASTEWATER TREATMENT PLANT  
Inorganics and Organics

2011 Annual

GRIT

Analyte:	MDL	Units:	GRIT COMP	GRIT COMP
			01-JUN-2011	02-NOV-2011
Aluminum	4	MG/KG	1920	2840
Antimony	.5	MG/KG	1.1	1.3
Arsenic	.68	MG/KG	2.71	1.41
Barium	.05	MG/KG	135.0	72.2
Beryllium	.02	MG/KG	ND	ND
Cadmium	.1	MG/KG	0.4	0.3
Chromium	.3	MG/KG	28	30
Cobalt	.2	MG/KG	2.1	1.5
Copper	.4	MG/KG	584	410
Iron	20	MG/KG	23600	22000
Lead	2	MG/KG	14	4
Manganese	.2	MG/KG	104	128
Mercury	.4	MG/KG	ND	ND
Molybdenum	.1	MG/KG	6.1	4.4
Nickel	.3	MG/KG	26	17
Selenium	.47	MG/KG	ND	0.53
Silver	.07	MG/KG	1.9	2.2
Thallium	1	MG/KG	ND	ND
Vanadium	.2	MG/KG	8.8	8.0
Zinc	.5	MG/KG	445	169
pH	.08	PH	6.55	6.49
Total Solids	.24	WT%	53.1	50.8
Total Volatile Solids	.11	WT%	42.8	33.0
Aldrin	71000	MG/KG	ND	ND
2,4-Dichlorophenoxyacetic acid		MG/KG	NA*	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	130000	MG/KG	ND	ND
Trichloroethene	2.6	MG/KG	ND	ND
2,4,5-TP (Silvex)		MG/KG	NA*	ND

\*= External contract laboratory suspended operations therefore sample was not analyzed.

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

POINT LOMA WASTEWATER TREATMENT PLANT  
Chlorinated Pesticide Analysis

2011 Annual

Grit

Analyte	MDL	Units	PLR	PLR
			01-JUN-2011	02-NOV-2011
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	ND
p,p-DDE	28000	NG/KG	ND	ND
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	ND
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	130000	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		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		NG/KG	ND	ND
Aldrin + Dieldrin	71000	NG/KG	0	0
Hexachlorocyclohexanes	32000	NG/KG	0	0
DDT and derivatives	71000	NG/KG	0	0
Chlordane + related cmpds.	52000	NG/KG	0	0
Polychlorinated biphenyls	580000	NG/KG	0	0
Chlorinated Hydrocarbons	580000	NG/KG	0	0

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

POINT LOMA WASTEWATER TREATMENT PLANT  
GRIT  
ANALYSIS-ACID EXTRACTABLE COMPOUNDS

2011 Annual

Analyte	MDL	Units	PLR	PLR
			01-JUN-2011	02-NOV-2011
2-Chlorophenol	1310	UG/KG	ND	ND
4-Chloro-3-methylphenol	1900	UG/KG	ND	ND
2,4-Dichlorophenol	914	UG/KG	ND	ND
2,4-Dimethylphenol	1070	UG/KG	ND	ND
2,4-Dinitrophenol		UG/KG	ND	ND
2-Methyl-4,6-dinitrophenol		UG/KG	ND	ND
2-Nitrophenol	1600	UG/KG	ND	ND
4-Nitrophenol		UG/KG	ND	ND
Pentachlorophenol	1170	UG/KG	ND	ND
Phenol	1440	UG/KG	ND	ND
2,4,6-Trichlorophenol	1600	UG/KG	ND	ND
Total Chlorinated Phenols	1900	UG/KG	0.0	0.0
Total Non-Chlorinated Phenols	1600	UG/KG	0.0	0.0
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 2011

Source:	PLR		PLR	
Date:	01-JUN-2011		02-NOV-2011	
Sample:	MDL	Units	P565791	P590462
<hr/>				
Acenaphthene	863	UG/KG	ND	ND
Acenaphthylene	584	UG/KG	ND	ND
Anthracene	986	UG/KG	ND	ND
Benzidine		UG/KG	ND	ND
Benzo[a]anthracene	1100	UG/KG	ND	ND
3,4-Benzo(b)fluoranthene	1127	UG/KG	ND	ND
Benzo[k]fluoranthene	1930	UG/KG	ND	ND
Benzo[a]pyrene	741	UG/KG	<741	<741
Benzo[g,h,i]perylene	301	UG/KG	398	<301
4-Bromophenyl phenyl ether	1030	UG/KG	ND	ND
Bis-(2-chloroethoxy) methane	1630	UG/KG	ND	ND
Bis-(2-chloroethyl) ether	1420	UG/KG	ND	ND
Bis-(2-chloroisopropyl) ether	1090	UG/KG	ND	ND
4-Chlorophenyl phenyl ether	362	UG/KG	ND	ND
2-Chloronaphthalene		UG/KG	ND	ND
Chrysene	352	UG/KG	1050	605
Dibenzo(a,h)anthracene	616	UG/KG	ND	ND
Butyl benzyl phthalate	2210	UG/KG	ND	8750
Di-n-butyl phthalate	1450	UG/KG	<1450	ND
Bis-(2-ethylhexyl) phthalate	3960	UG/KG	ND	ND
Diethyl phthalate	1400	UG/KG	ND	ND
Dimethyl phthalate	356	UG/KG	ND	ND
Di-n-octyl phthalate	3460	UG/KG	ND	ND
3,3-Dichlorobenzidine	2030	UG/KG	ND	ND
2,4-Dinitrotoluene	1030	UG/KG	ND	ND
2,6-Dinitrotoluene	1890	UG/KG	ND	ND
1,2-Diphenylhydrazine	1590	UG/KG	ND	ND
Fluoranthene	216	UG/KG	1370	1530
Fluorene	2520	UG/KG	ND	ND
Hexachlorobenzene	813	UG/KG	ND	ND
Hexachlorobutadiene	940	UG/KG	ND	ND
Hexachlorocyclopentadiene	1890	UG/KG	ND	ND
Hexachloroethane	382	UG/KG	ND	ND
Indeno(1,2,3-CD)pyrene	953	UG/KG	ND	ND
Isophorone	1820	UG/KG	ND	ND
Naphthalene	2150	UG/KG	ND	ND
Nitrobenzene	2800	UG/KG	ND	ND
N-nitrosodimethylamine		UG/KG	ND	ND
N-nitrosodi-n-propylamine	1360	UG/KG	ND	ND
N-nitrosodiphenylamine	1330	UG/KG	ND	ND
Phenanthrene	1040	UG/KG	ND	<1040
Pyrene	1150	UG/KG	<1150	<1150
1,2,4-Trichlorobenzene	979	UG/KG	ND	ND
1,3-Dichlorobenzene	733	UG/KG	ND	ND
1,2-Dichlorobenzene	342	UG/KG	ND	ND
1,4-Dichlorobenzene	1270	UG/KG	ND	ND
<hr/>				
Polynuc. Aromatic Hydrocarbons	2520	UG/KG	1448	605
Total Dichlorobenzenes	733	UG/KG	0	0
<hr/>				
Base/Neutral Compounds	3960	UG/KG	2818	10885

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

POINT LOMA WASTEWATER TREATMENT PLANT  
GRIT  
Priority Pollutants Purgeable Compounds

2011 Annual

Analyte	MDL	Units	PLR	PLR
			01-JUN-2011 P565791	02-NOV-2011 P590462
Acrolein	6.4	UG/KG	ND	ND
Acrylonitrile	3.9	UG/KG	ND	ND
Benzene	2.1	UG/KG	ND	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	8.7	5.5
Chloroethane	3.6	UG/KG	ND	ND
Chloroform	2.3	UG/KG	3.6	10.8
Chloromethane	3.4	UG/KG	ND	ND
Dibromochloromethane	2.4	UG/KG	ND	ND
1,2-Dichlorobenzene	1.5	UG/KG	ND	4.8
1,3-Dichlorobenzene	1.8	UG/KG	ND	ND
1,4-Dichlorobenzene	1.5	UG/KG	316.0	82.9
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	3.8	18.4
Methylene chloride	3.5	UG/KG	46.0	4.5
1,1,2,2-Tetrachloroethane	5.9	UG/KG	ND	ND
Tetrachloroethene	2.8	UG/KG	ND	8.8
Toluene	1.2	UG/KG	189.0	287.0
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
Halomethane Purgeable Cmpnds	6.9	UG/KG	0.0	0.0
Total Dichlorobenzenes	1.8	UG/KG	0.0	4.8
Purgeable Compounds	6.9	UG/KG	251.1	335.0

Additional Analytes Determined;

Acetone	31.4	UG/KG	9590	4990
Allyl chloride	3.6	UG/KG	ND	ND
Benzyl chloride	4.3	UG/KG	ND	ND
2-Butanone	36.3	UG/KG	2060	1320
Carbon disulfide	4.7	UG/KG	32.5	83.7
Chloroprene	3.1	UG/KG	ND	ND
1,2-Dibromoethane	2.5	UG/KG	ND	ND
Isopropylbenzene	1.3	UG/KG	3.9	12.6
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	ND	33.4
Styrene	1.7	UG/KG	11.4	21.5
1,2,4-Trichlorobenzene	2.5	UG/KG	ND	ND
meta,para xylenes	4.2	UG/KG	10.7	67.0
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

2011 Annual

GRIT

Analyte	MDL	Units	PLR 02-NOV-2011 P590462
2,4-Dichlorophenoxyacetic acid	MG/KG		ND
2,4,5-TP (Silvex)	MG/KG		ND

Note: No data is reported for the first half of the year. External contract laboratory suspended operations therefore sample was not analyzed.

ND=not detected  
NS=not sampled  
NA=not analyzed

## I. Raw Sludge Data Summary

### 2011 POINT LOMA WASTEWATER TREATMENT PLANT ANNUAL REPORT

#### Raw Sludge Monthly average of daily average

Month	pH	%Total Solids	%Total Volatile Solids
January	5.96	3.8	77.2
February	5.97	3.8	78.4
March	6.01	3.9	79.2
April	5.93	3.8	78.8
May	5.59	3.9	78.0
June	5.54	4.1	78.9
July	5.50	4.2	79.2
August	5.36	4.1	78.2
September	5.49	4.0	78.2
October	5.58	3.9	77.8
November	5.81	4.0	78.3
December	5.86	4.1	78.4
<b>Averages</b>	<b>5.72</b>	<b>4.0</b>	<b>78.4</b>

## J. Digester and Digested Sludge Data Summary

Point Loma Wastewater Treatment Plant Annual Report  
Digesters  
Year: 2011

N1P

	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)
JANUARY -2011	7.06	2.2	56.1	2560	66	62.5	37.2
FEBRUARY -2011	7.02	2.2	58.1	2420	63	62.4	37.3
MARCH -2011	7.09	2.1	59.2	2500	67	62.1	37.6
APRIL -2011	7.04	2.1	60.1	2380	70	62.1	37.6
MAY -2011	6.91	2.2	61.4	1770	64	60.9	38.7
JUNE -2011	6.90	2.3	62.8	1600	62	61.1	38.4
JULY -2011	7.00	2.4	62.6	1770	57	61.9	37.9
AUGUST -2011	7.01	2.4	61.2	1930	55	59.0	38.1
SEPTEMBER -2011	7.01	2.3	61.1	1930	55	61.6	38.2
OCTOBER -2011	7.01	2.3	60.0	2070	63	61.7	38.1
NOVEMBER -2011	7.00	2.3	59.2	2050	65	61.4	38.4
DECEMBER -2011	7.04	2.2	59.4	2090	65	61.2	38.6
Average:	7.01	2.3	60.1	2089	63	61.5	38.0

N2P

	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)
JANUARY -2011	7.06	2.0	55.8	2600	66	62.6	37.2
FEBRUARY -2011	7.04	1.9	57.7	2470	62	62.4	37.3
MARCH -2011	7.08	2.0	58.9	2570	70	62.1	37.6
APRIL -2011	7.05	2.0	59.1	2530	73	62.1	37.6
MAY -2011	6.91	2.1	60.3	1990	61	60.8	38.8
JUNE -2011	6.96	2.2	62.0	1730	58	61.1	38.6
JULY -2011	7.00	2.3	61.7	1860	57	62.0	37.7
AUGUST -2011	7.02	2.3	60.6	2010	54	55.0	40.5
SEPTEMBER -2011	7.03	2.3	60.0	2070	58	61.9	37.9
OCTOBER -2011	7.03	2.2	60.0	2140	64	62.0	37.8
NOVEMBER -2011	7.02	2.2	58.4	2200	67	61.6	38.2
DECEMBER -2011	7.07	2.1	58.3	2250	65	61.3	38.5
Average:	7.02	2.1	59.4	2202	63	61.2	38.1

C1P

	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
JANUARY -2011	7.01	2.2	55.8	2500	71	62.8	36.9	*
FEBRUARY -2011	7.04	2.0	57.8	2450	67	62.5	37.2	*
MARCH -2011	7.06	2.1	58.8	2540	72	62.4	37.3	*
APRIL -2011	7.05	2.1	59.1	2540	76	62.4	37.3	*
MAY -2011	6.89	2.1	60.2	1990	62	61.1	38.6	*
JUNE -2011	6.91	2.3	62.0	1740	63	61.4	38.4	*
JULY -2011	6.97	2.3	61.3	1880	60	62.0	37.8	*
AUGUST -2011	7.01	2.4	60.7	2030	59	61.9	38.0	*
SEPTEMBER -2011	7.02	2.3	60.2	2050	60	61.8	38.0	*
OCTOBER -2011	7.01	2.3	59.5	2110	67	61.9	37.9	*
NOVEMBER -2011	6.99	2.3	59.3	2110	79	61.6	38.2	*
DECEMBER -2011	7.02	2.2	58.4	2270	73	61.5	38.3	*
Average:	7.00	2.2	59.4	2184	67	61.9	37.8	*

Point Loma Wastewater Treatment Plant Annual Report  
Digesters  
Year: 2011

C2P

		Total Solids	Volatile Solids	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)
	pH	(%)	(%)				
JANUARY -2011	7.05	2.2	57.0	2490	74	62.7	36.9
FEBRUARY -2011	7.01	2.1	58.7	2350	67	62.5	37.2
MARCH -2011	7.05	2.1	59.5	2500	76	62.5	37.2
APRIL -2011	7.02	2.1	59.9	2440	74	62.5	37.2
MAY -2011	6.88	2.1	61.0	1900	59	61.2	38.5
JUNE -2011	6.92	2.3	62.5	1670	60	61.4	38.3
JULY -2011	6.98	2.3	61.8	1830	58	62.2	37.6
AUGUST -2011	7.00	2.3	61.0	1940	55	62.0	37.8
SEPTEMBER-2011	7.02	2.3	60.5	1980	58	61.9	37.9
OCTOBER -2011	7.02	2.3	59.8	2050	67	62.1	37.7
NOVEMBER -2011	7.00	2.2	59.0	2110	69	61.7	38.1
DECEMBER -2011	7.02	2.1	59.0	2170	68	61.6	38.2
Average:	7.00	2.2	60.0	2119	65	62.0	37.7

S1P

		Total Solids	Volatile Solids	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
	pH	(%)	(%)					
JANUARY -2011	7.08	2.1	56.2	2590	72	62.6	37.0	*
FEBRUARY -2011	7.04	2.0	58.3	2450	69	62.8	36.9	*
MARCH -2011	7.07	2.1	58.9	2590	70	62.5	37.2	*
APRIL -2011	7.04	2.1	59.7	2500	75	62.5	37.2	20
MAY -2011	6.90	2.1	61.2	1910	62	61.1	38.5	*
JUNE -2011	6.94	2.5	62.3	1720	61	61.5	38.3	*
JULY -2011	6.99	2.6	61.7	1840	61	62.2	37.6	*
AUGUST -2011	7.02	2.4	60.8	2000	58	62.0	37.8	*
SEPTEMBER-2011	7.04	2.2	60.7	2020	61	61.9	38.0	*
OCTOBER -2011	7.09	2.2	59.8	2090	67	62.1	37.7	*
NOVEMBER -2011	7.05	2.2	58.6	2180	71	61.6	38.3	*
DECEMBER -2011	7.04	2.1	58.9	2190	67	61.3	38.5	*
Average:	7.03	2.2	59.8	2173	66	62.0	37.8	20

S2P

		Total Solids	Volatile Solids	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
	pH	(%)	(%)					
JANUARY -2011	7.05	2.2	57.1	2530	74	62.3	37.5	22
FEBRUARY -2011	7.04	2.1	58.7	2290	68	62.2	37.5	24
MARCH -2011	7.06	2.0	59.6	2530	71	62.4	37.3	21
APRIL -2011	7.05	2.1	60.2	2450	76	62.3	37.3	24
MAY -2011	6.90	2.1	61.3	1850	60	61.2	38.4	26
JUNE -2011	6.94	2.3	62.9	1630	59	61.5	38.2	28
JULY -2011	7.00	2.4	62.1	1760	61	61.9	37.8	28
AUGUST -2011	7.02	2.4	61.1	1980	59	62.0	37.7	26
SEPTEMBER-2011	7.03	2.3	60.4	2000	63	61.7	38.2	28
OCTOBER -2011	7.04	2.3	61.1	1980	68	61.9	37.9	30
NOVEMBER -2011	7.03	2.3	58.6	2150	72	61.5	38.4	29
DECEMBER -2011	7.03	2.2	59.0	2150	70	61.4	38.5	30
Average:	7.02	2.2	60.2	2108	67	61.9	37.9	26

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DIG 7

	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
JANUARY -2011	7.12	1.9	54.9	2710	74	63.6	36.1	*
FEBRUARY -2011	7.12	1.9	57.1	2580	71	63.4	36.2	*
MARCH -2011	7.14	1.9	57.5	2710	74	63.3	36.4	*
APRIL -2011	7.15	1.9	57.6	2660	81	63.2	36.4	*
MAY -2011	7.00	1.9	59.3	2130	66	62.5	37.1	*
JUNE -2011	7.04	2.1	61.1	1840	61	62.5	37.1	*
JULY -2011	7.07	2.2	61.2	1940	61	62.6	37.2	*
AUGUST -2011	7.13	2.2	59.6	2120	60	62.4	37.4	*
SEPTEMBER-2011	7.10	2.1	59.2	2160	63	62.3	37.5	*
OCTOBER -2011	7.11	2.1	58.9	2230	72	62.5	37.3	*
NOVEMBER -2011	7.13	2.1	57.3	2290	78	62.4	37.4	*
DECEMBER -2011	7.12	2.0	57.0	2340	77	62.1	37.5	*
Average:	7.10	2.0	58.4	2309	70	62.7	37.0	*

DIG 8

	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
JAUARY -2011	*	*	*	*	*	*	*	*
Not in Service								
FEBRUARY -2011	*	*	*	*	*	*	*	*
MARCH -2011	*	*	*	*	*	*	*	*
APRIL -2011	*	*	*	*	*	*	*	*
MAY -2011	*	*	*	*	*	*	*	*
JUNE -2011	*	*	*	*	*	*	*	*
JULY -2011	*	*	*	*	*	*	*	*
AUGUST -2011	*	*	*	*	*	*	*	*
SEPTEMBER-2011	*	*	*	*	*	*	*	*
OCTOBER -2011	*	*	*	*	*	*	*	*
NOVEMBER -2011	*	*	*	*	*	*	*	*
DECEMBER -2011	*	*	*	*	*	*	*	*
Average:	*	*	*	*	*	*	*	*

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