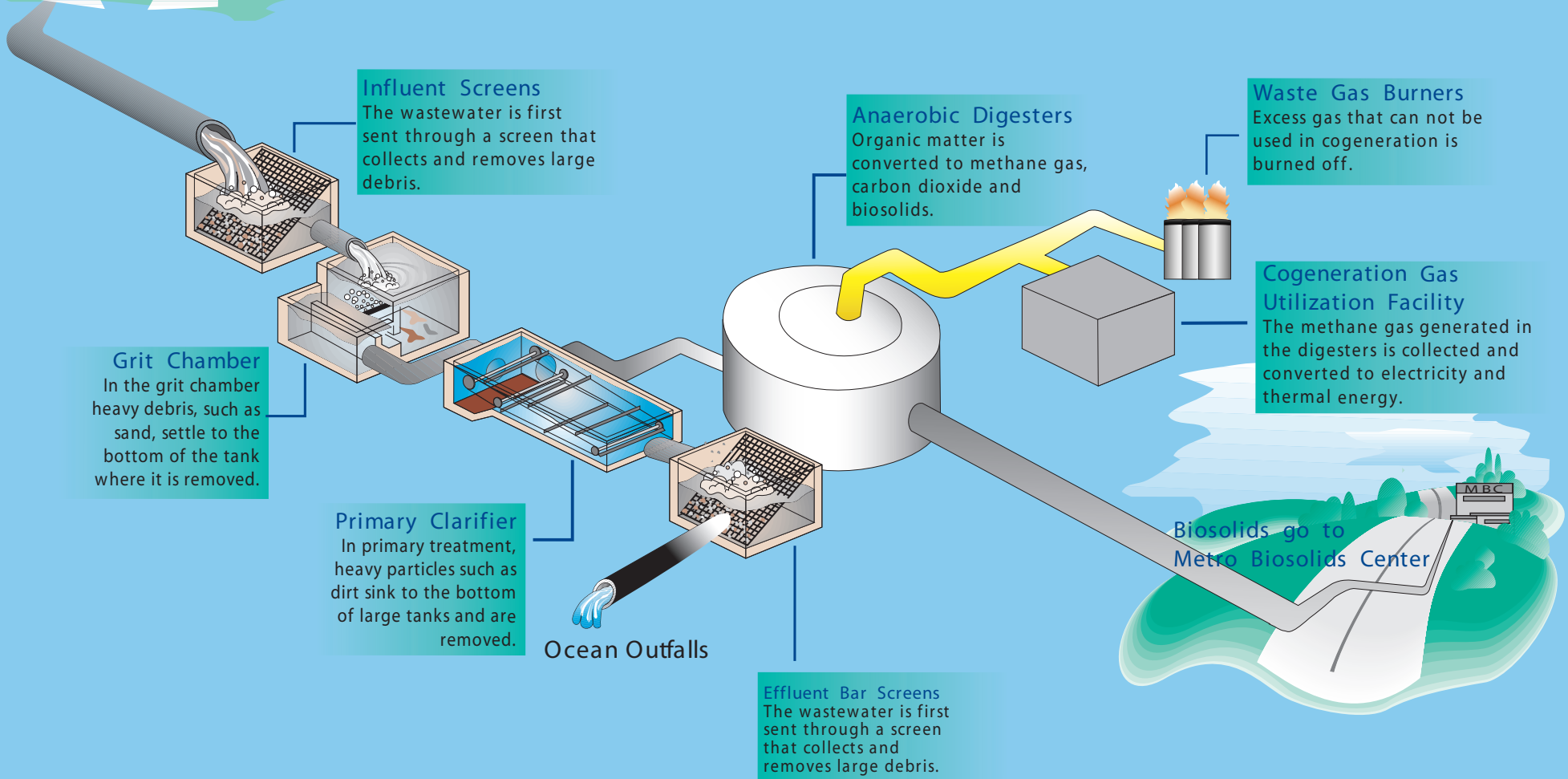


Point Loma Wastewater Treatment Plant Process



Influent Screens
The wastewater is first sent through a screen that collects and removes large debris.

Grit Chamber
In the grit chamber heavy debris, such as sand, settle to the bottom of the tank where it is removed.

Primary Clarifier
In primary treatment, heavy particles such as dirt sink to the bottom of large tanks and are removed.

Anaerobic Digesters
Organic matter is converted to methane gas, carbon dioxide and biosolids.

Waste Gas Burners
Excess gas that can not be used in cogeneration is burned off.

Cogeneration Gas Utilization Facility
The methane gas generated in the digesters is collected and converted to electricity and thermal energy.

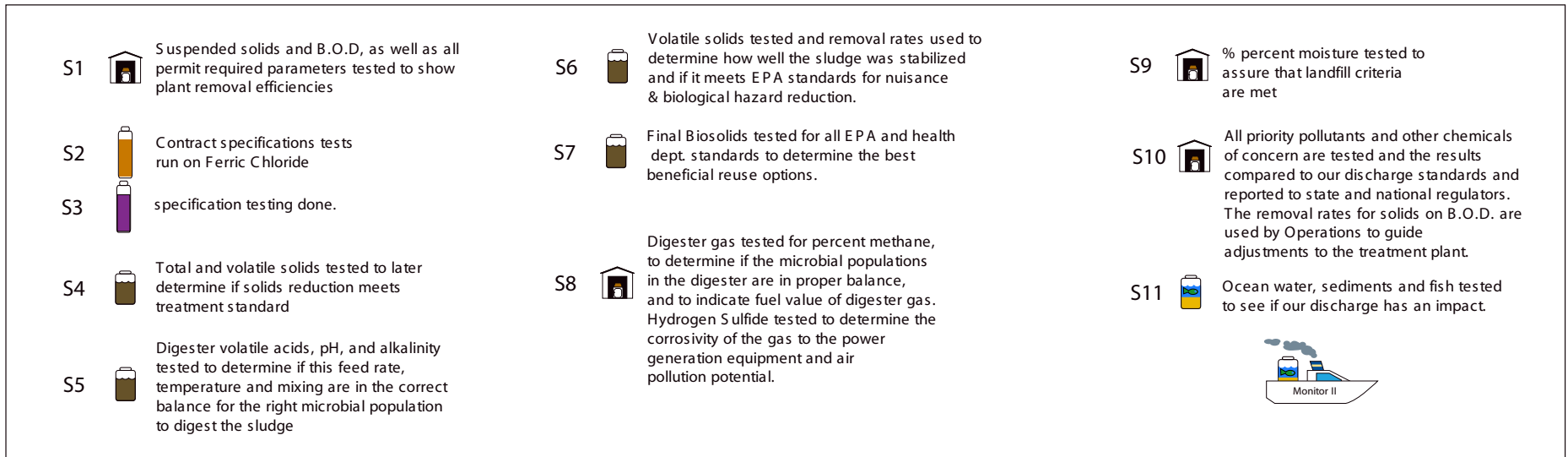
Effluent Bar Screens
The wastewater is first sent through a screen that collects and removes large debris.

Biosolids go to Metro Biosolids Center

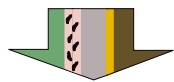
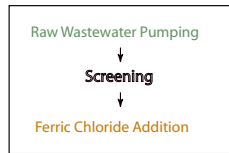
Ocean Outfalls

POINT LOMA TREATMENT PLANT PROCESS FLOW DIAGRAM

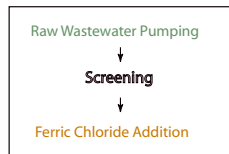
Wastewater Laboratory Testing



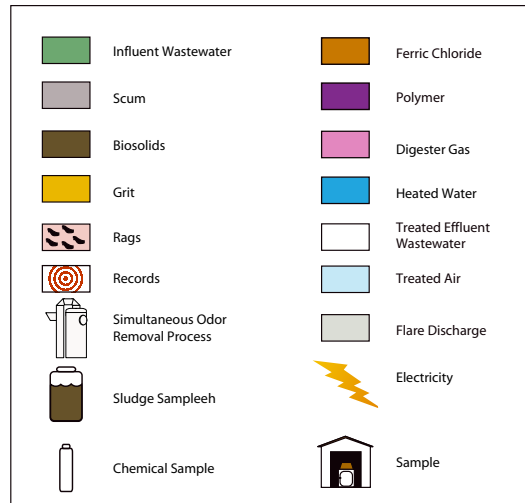
Pump Station 1



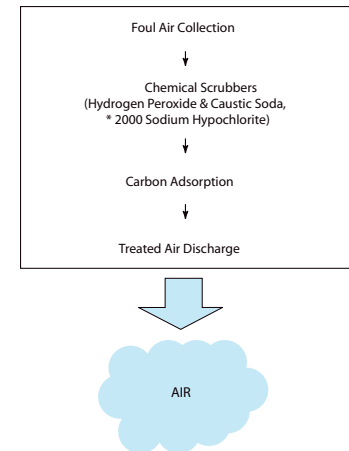
Pump Station 2



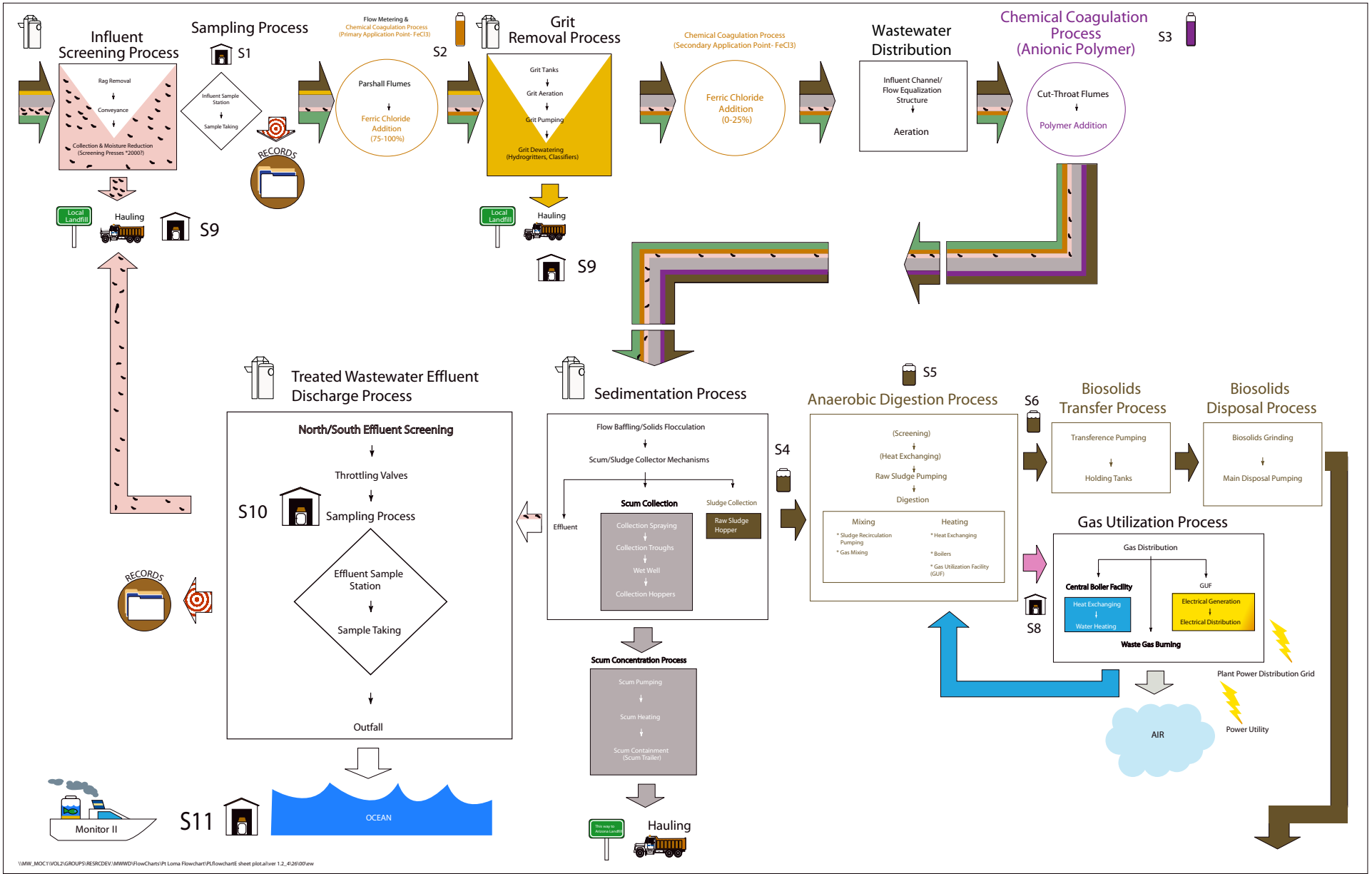
Legend



Odor Removal Process



Point Loma Wastewater Treatment Plant



\\WWW_MOC1VOL2\GROUPS\RESRC\DEV\MMWD\FlowCharts\PL Loma Flowchart\PLflowchart1 sheet plot.aliver 1.2_426/00/ew



- 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 - 2004

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	169.0	169.0	169.0	177.5	66.4
02	179.6	179.6	179.6	199.7	65.3
03	176.5	176.5	176.5	193.8	67.3
04	171.3	173.8	171.3	175.5	63.6
05	167.5		167.5	155.0	64.0
06	166.8		166.8	170.9	65.2
07	170.5		170.5	191.8	63.0
08	168.5		168.5	190.6	61.5
09	168.8		168.8	190.5	61.9
10	187.0		187.0	188.7	66.0
11	182.4		183.0	190.6	64.8
12	178.7		188.7	188.8	64.3
avg	173.9	174.7	174.8	184.5	64.4
sum	2,086.6	698.9	2,097.2	2,213.5	773.4

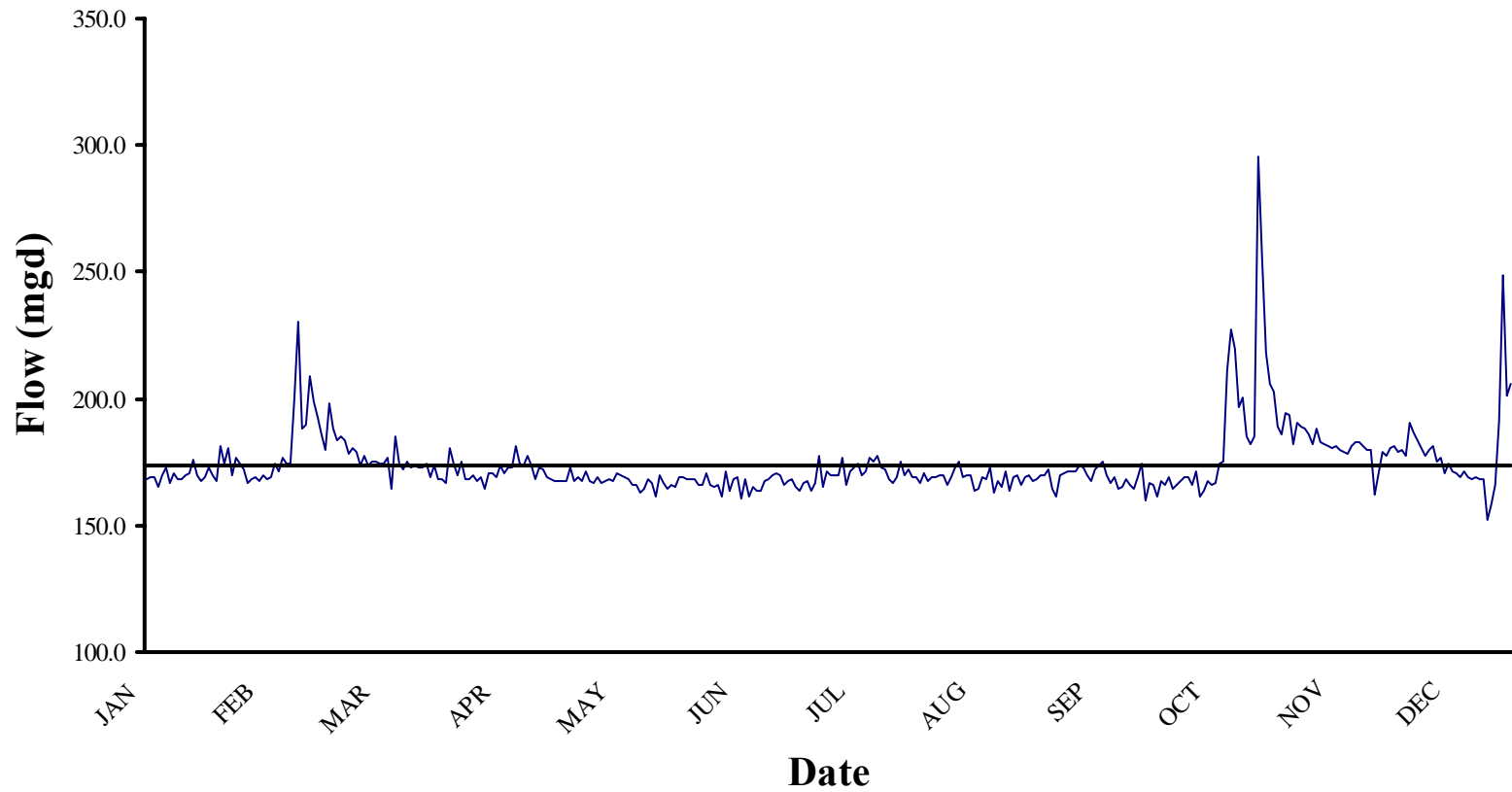
WASTEWATER FLOWS

Monthly Total Flows - Millions of Gallons

Mon	Pt. L Gould	Pt. L ADS	PS#2 Flow	PS#2 Pumps	PS#1 Flows
01	5,239	5,239	5,239	5,502	2,060
02	5,209	5,209	5,209	5,791	1,895
03	5,471	5,471	5,471	6,009	2,086
04	5,139	521	5,139	5,265	1,909
05	5,191		5,191	4,806	1,984
06	5,003		5,003	5,126	1,955
07	5,287		5,287	5,945	1,952
08	5,223		5,223	5,909	1,905
09	5,065		5,065	5,716	1,858
10	5,797		5,797	5,851	2,047
11	5,472		5,490	5,719	1,945
12	5,541		5,850	5,854	1,993
avg	5,303	4,110	5,330	5,624	1,966
sum	63,636	16,441	63,964	67,493	23,588

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.

Point Loma Wastewater Treatment Plant 2004 Daily Flows (mgd)

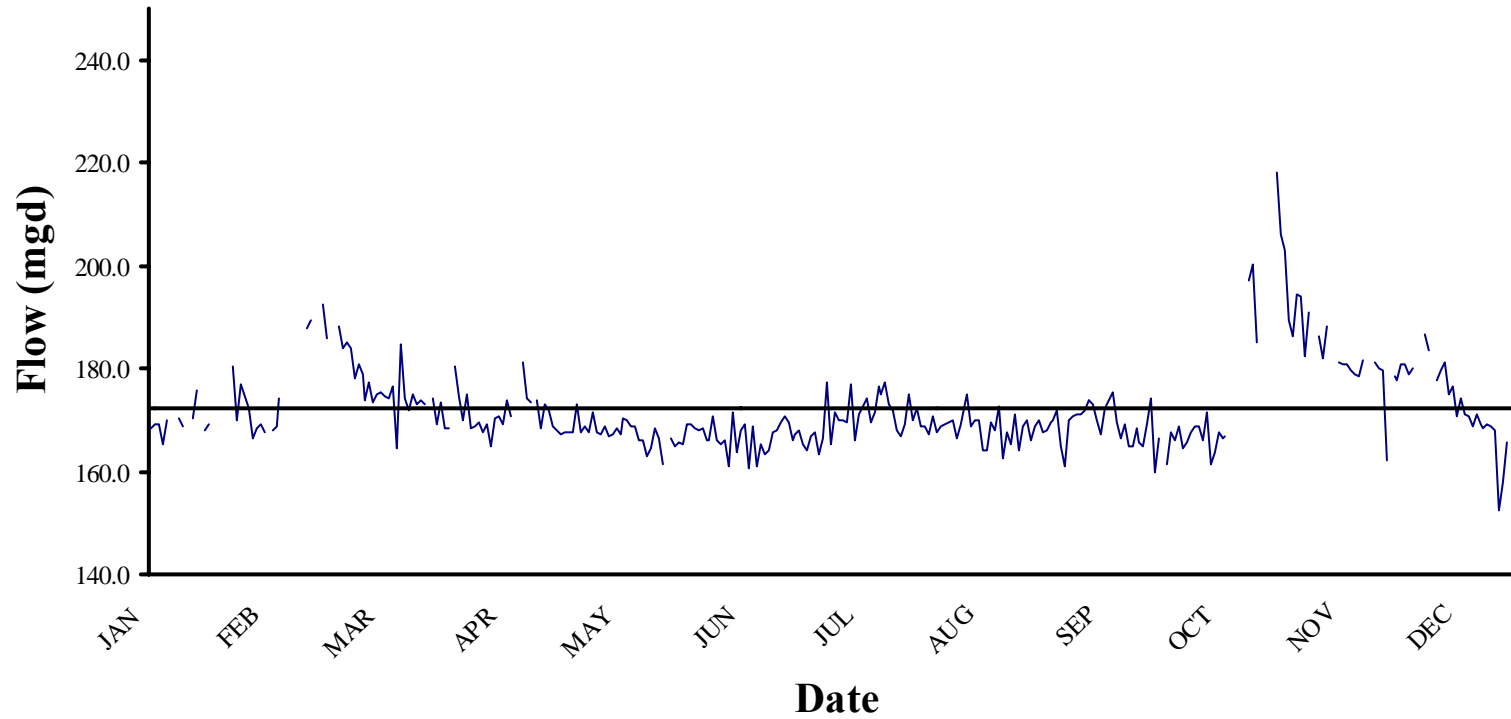


Point Loma Wastewater Treatment Plant

2004 Flows (mgd)

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	153.0	169.5	180.0	166.7	167.6	169.2	164.0	167.1	169.7	161.6	189.3	181.0	
2	160.8	167.1	198.5	180.3	167.5	168.5	166.9	170.8	170.0	167.5	186.2	178.8	
3	173.4	181.3	188.2	174.5	173.1	168.2	167.7	167.8	171.8	166.1	194.3	180.0	
4	174.7	174.6	183.9	169.9	167.5	168.4	163.5	168.7	164.7	168.7	193.9	177.5	
5	169.1	180.3	185.0	175.0	168.8	166.0	166.5	169.1	161.0	164.4	182.3	190.4	
6	171.8	169.8	183.9	168.3	167.6	166.0	177.3	169.5	170.0	165.7	190.8	186.7	
7	168.0	177.0	178.2	168.6	171.4	170.6	165.1	170.1	170.8	167.4	188.7	183.6	
8	169.0	174.5	180.9	169.5	167.7	166.0	171.4	166.3	171.1	168.9	188.0	180.8	
9	169.6	172.3	178.9	167.5	167.1	165.3	170.1	169.0	171.0	168.7	186.2	177.6	
10	170.7	166.6	173.9	169.0	168.7	166.0	170.1	172.9	171.7	166.1	182.1	179.6	
11	171.8	168.3	177.3	164.7	166.7	161.0	169.6	174.9	173.7	171.3	188.1	181.0	
12	170.1	169.3	173.6	170.5	167.3	171.5	177.0	168.8	173.0	161.3	182.5	174.9	
13	164.8	167.8	175.0	170.8	168.5	163.9	166.1	170.1	170.0	163.5	181.7	176.5	
14	168.7	169.6	175.3	169.3	167.3	168.1	171.0	170.0	167.3	167.7	181.1	170.5	
15	168.3	168.1	174.4	173.9	170.3	169.1	172.8	164.0	172.4	166.3	180.8	174.2	
16	169.1	168.8	174.3	170.6	169.9	160.8	174.4	164.2	174.0	166.8	181.0	171.1	
17	169.3	174.0	176.6	173.0	168.9	168.6	169.6	169.4	175.2	174.4	179.6	170.6	
18	165.4	171.7	164.3	172.8	168.6	161.2	171.4	167.9	169.7	174.8	179.0	168.9	
19	169.9	176.8	184.8	181.0	165.9	165.4	176.5	172.5	166.5	211.6	178.4	171.2	
20	172.5	174.1	174.3	174.2	165.9	163.3	175.1	162.7	169.2	227.5	181.6	169.2	
21	166.5	174.1	172.0	173.3	163.1	164.0	177.3	167.7	164.7	219.7	182.8	168.3	
22	170.2	199.8	175.1	177.1	164.5	167.6	173.0	165.1	165.0	197.0	182.7	169.2	
23	168.6	230.2	173.2	173.9	168.4	168.1	171.8	171.2	168.4	200.4	181.2	168.6	
24	168.5	188.0	173.9	168.4	166.5	169.6	168.0	164.0	165.7	185.0	180.1	168.1	
25	170.2	189.5	173.2	172.9	161.4	170.7	166.8	168.8	164.7	182.2	179.5	152.3	
26	170.5	209.1	172.6	171.8	169.7	169.4	169.3	170.1	169.0	185.0	162.2	158.0	
27	175.7	198.8	174.1	168.7	166.4	166.2	175.0	166.2	174.2	295.2	170.8	165.6	
28	169.5	192.6	169.2	167.9	164.8	167.3	169.9	168.9	160.0	254.6	178.6	191.1	
29	167.8	185.8	173.4	167.4	165.7	167.9	172.1	169.8	166.5	218.3	177.6	248.8	
30	169.2		168.2	167.8	165.1	165.2	168.7	167.7	165.9	206.2	180.8	201.2	Annual
31	172.9		168.4		169.3		168.7	168.0		203.0		205.7	Summary
Average	169.0	179.4	176.6	171.3	167.5	166.8	170.5	168.5	168.9	187.0	182.4	178.7	173.9
Minimum	153.0	166.6	164.3	164.7	161.4	160.8	163.5	162.7	160.0	161.3	162.2	152.3	152.3
Maximum	175.7	230.2	198.5	181.0	173.1	171.5	177.3	174.9	175.2	295.2	194.3	248.8	295.2
Total	5239.4	5023.4	5474.5	5139.2	5191.1	5002.7	5286.6	5223.0	5066.7	5796.7	5471.7	5540.8	63455.7

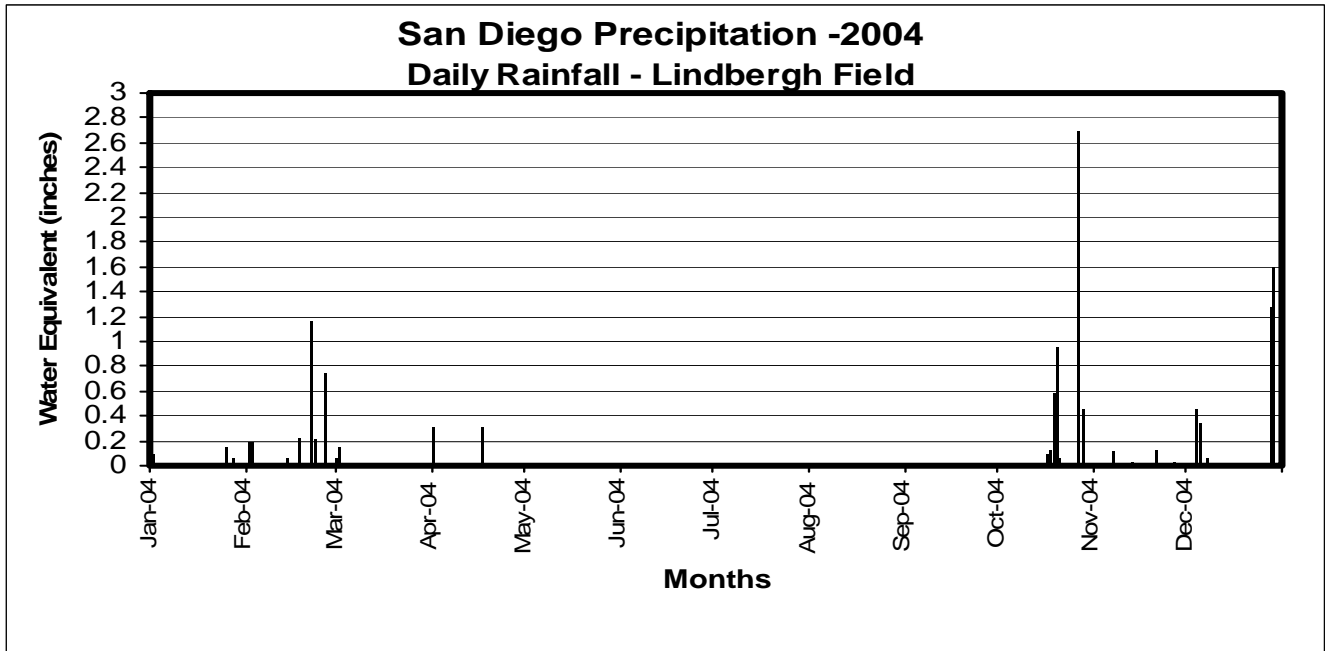
Point Loma Wastewater Treatment Plant 2004 Daily Dry Flows (mgd)



**Point Loma Wastewater Treatment Plant
2004 Dry Flows (mgd)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	153.0	169.5			167.6	169.2	164.0	167.1	169.7	161.6	189.3	181.0	
2				180.3	167.5	168.5	166.9	170.8	170.0	167.5	186.2	178.8	
3			188.2	174.5	173.1	168.2	167.7	167.8	171.8	166.1	194.3	180.0	
4	174.7		183.9	169.9	167.5	168.4	163.5	168.7	164.7	168.7	193.9		
5	169.1	180.3	185.0	175.0	168.8	166.0	166.5	169.1	161.0	164.4	182.3		
6	171.8	169.8	183.9	168.3	167.6	166.0	177.3	169.5	170.0	165.7	190.8	186.7	
7		177.0	178.2	168.6	171.4	170.6	165.1	170.1	170.8	167.4		183.6	
8	169.0	174.5	180.9	169.5	167.7	166.0	171.4	166.3	171.1	168.9			
9	169.6	172.3	178.9	167.5	167.1	165.3	170.1	169.0	171.0	168.7	186.2	177.6	
10	170.7	166.6	173.9	169.0	168.7	166.0	170.1	172.9	171.7	166.1	182.1	179.6	
11	171.8	168.3	177.3	164.7	166.7	161.0	169.6	174.9	173.7	171.3	188.1	181.0	
12	170.1	169.3	173.6	170.5	167.3	171.5	177.0	168.8	173.0	161.3		174.9	
13	164.8	167.8	175.0	170.8	168.5	163.9	166.1	170.1	170.0	163.5		176.5	
14	168.7		175.3	169.3	167.3	168.1	171.0	170.0	167.3	167.7	181.1	170.5	
15	168.3	168.1	174.4	173.9	170.3	169.1	172.8	164.0	172.4	166.3	180.8	174.2	
16	169.1	168.8	174.3	170.6	169.9	160.8	174.4	164.2	174.0	166.8	181.0	171.1	
17	169.3	174.0	176.6		168.9	168.6	169.6	169.4	175.2		179.6	170.6	
18	165.4		164.3		168.6	161.2	171.4	167.9	169.7		179.0	168.9	
19	169.9	176.8	184.8	181.0	165.9	165.4	176.5	172.5	166.5		178.4	171.2	
20			174.3	174.2	165.9	163.3	175.1	162.7	169.2		181.6	169.2	
21			172.0	173.3	163.1	164.0	177.3	167.7	164.7			168.3	
22	170.2		175.1		164.5	167.6	173.0	165.1	165.0	197.0		169.2	
23	168.6		173.2	173.9	168.4	168.1	171.8	171.2	168.4	200.4	181.2	168.6	
24		188.0	173.9	168.4	166.5	169.6	168.0	164.0	165.7	185.0	180.1	168.1	
25		189.5	173.2	172.9	161.4	170.7	166.8	168.8	164.7		179.5	152.3	
26	170.5			171.8		169.4	169.3	170.1	169.0		162.2	158.0	
27	175.7		174.1	168.7	166.4	166.2	175.0	166.2	174.2			165.6	
28		192.6	169.2	167.9	164.8	167.3	169.9	168.9	160.0		178.6		
29	167.8	185.8	173.4	167.4	165.7	167.9	172.1	169.8	166.5	218.3	177.6		
30	169.2		168.2	167.8	165.1	165.2	168.7	167.7		206.2	180.8		
31			168.4		169.3		168.7	168.0		203.0			
Average	169.0	174.9	175.8	171.3	167.4	166.8	170.5	168.5	169.0	176.0	182.4	172.7	172.0
Minimum	153.0	166.6	164.3	164.7	161.4	160.8	163.5	162.7	160.0	161.3	162.2	152.3	152.3
Maximum	175.7	192.6	188.2	181.0	173.1	171.5	177.3	174.9	175.2	218.3	194.3	186.7	218.3
Total	3717.2	2973.0	4923.5	5139.2	5021.4	5002.7	5286.6	5223.0	4900.8	3871.7	4194.5	4145.4	54398.9

B. Rain Days



Total precipitation = 13.29 inches, Maximum = 2.7 inches, Trace = T

First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
Date	Rain	Date	Rain	Date	Rain	Date	Rain
2-Jan-04	0.09	01-Apr-04	0.3	30-Sep-04	T	17-Oct-04	0.09
3-Jan-04	0.02	17-Apr-04	0.3			18-Oct-04	0.13
7-Jan-04	T	18-Apr-04	T			19-Oct-04	0.58
20-Jan-04	T	22-Apr-04	T			20-Oct-04	0.95
21-Jan-04	T	26-May-04	T			21-Oct-04	0.07
24-Jan-04	T					25-Oct-04	T
25-Jan-04	0.15					26-Oct-04	0.01
28-Jan-04	0.06					27-Oct-04	2.7
31-Jan-04	0.02					28-Oct-04	0.45
2-Feb-04	0.19					7-Nov-04	0.12
3-Feb-04	0.19					8-Nov-04	0.01
4-Feb-04	T					12-Nov-04	T
14-Feb-04	0.06					13-Nov-04	0.04
18-Feb-04	0.23					21-Nov-04	0.13
20-Feb-04	T					22-Nov-04	T
21-Feb-04	0.02					27-Nov-04	0.03
22-Feb-04	1.16					4-Dec-04	0.45
23-Feb-04	0.21					5-Dec-04	0.34
26-Feb-04	0.74					8-Dec-04	0.06
27-Feb-04	0.01					28-Dec-04	1.27
1-Mar-04	0.07					29-Dec-04	1.6
2-Mar-04	0.14					30-Dec-04	0.02
26-Mar-04	0.01					31-Dec-04	0.27
TOTALS	3.37	0.6		0		9.32	ANNUAL TOTAL
							13.29

C. Solids Production

Point Loma Annual Monitoring Report Solids Report - TOTALS

From 01-JAN-2004 To 31-DEC-2004

Month	Pt. Loma Raw sludge		Pt. Loma Digested Sludge		MBC Combined Centrate		MBC Dewatered Sludge	
	Gallons	Tons	Gallons	Tons	Gallons	Tons	Wet Tons	Dry Tons
01	35,355,343	6,548	34,213,260	3,724	49,098,330	566	11,209	3,227
02	31,529,267	5,862	28,873,890	2,953	67,497,419	634	9,268	2,676
03	33,004,739	6,102	32,301,530	3,214	80,157,434	753	10,843	3,223
04	32,815,205	5,832	32,114,660	3,214	77,701,851	718	10,993	3,201
05	34,027,228	6,031	33,751,230	3,399	78,721,618	796	11,006	3,059
06	32,815,116	5,724	32,668,150	3,282	73,956,834	776	11,683	3,310
07	33,937,347	5,873	33,839,510	3,306	75,529,109	842	10,953	3,104
08	35,118,037	5,837	35,695,580	3,559	74,420,643	899	11,622	3,230
09	32,132,228	5,460	33,384,670	3,308	69,155,809	837	11,479	3,219
10	34,864,613	6,310	41,194,850	4,212	76,227,411	938	12,070	3,412
11	31,628,107	5,193	32,512,230	3,288	70,190,355	739	10,907	3,376
12	32,041,961	5,114	36,714,800	3,485	77,468,620	880	11,035	3,383
avg	33,272,433	5,824	33,938,697	3,412	72,510,453	781	11,089	3,202
sum	399,269,191	69,885	407,264,360	40,944	870,125,433	9,377	133,067	38,420

Solids Report - Daily Averages by Month From 01-JAN-2004 To 31-DEC-2004

Month	Pt. Loma Raw sludge		Pt. Loma Digested Sludge		MBC Combined Centrate		MBC Dewatered Sludge					
	Gallons	%TS	Tons	Gallons	%TS	Tons	%TS	Tons	Wet Tons	%TS	Dry Tons	
01	1,140,495	4.4	209	1,103,654	2.6	119	1,583,817	0.28	17.6	362	28.8	104.1
02	1,087,216	4.5	202	995,651	2.5	96	2,327,497	0.23	22.5	320	28.9	92.3
03	1,064,669	4.4	194	1,041,985	2.4	103	2,585,724	0.23	24.3	350	29.7	104.0
04	1,093,840	4.3	194	1,070,489	2.4	106	2,590,062	0.22	23.9	366	29.1	106.7
05	1,097,653	4.3	194	1,088,749	2.4	109	2,539,407	0.24	25.7	355	27.8	98.7
06	1,093,837	4.2	191	1,088,938	2.4	109	2,465,228	0.25	25.8	389	28.3	110.3
07	1,094,753	4.2	190	1,091,597	2.3	106	2,436,423	0.27	27.1	353	28.3	100.1
08	1,132,840	4.0	188	1,151,470	2.4	114	2,400,666	0.29	28.9	375	27.8	104.2
09	1,071,074	4.1	181	1,112,822	2.4	110	2,305,194	0.29	27.9	383	28.0	107.3
10	1,124,665	4.3	204	1,328,866	2.5	137	2,458,949	0.30	30.1	389	28.3	110.0
11	1,054,270	3.9	173	1,083,741	2.4	104	2,339,679	0.25	24.7	364	30.9	112.5
12	1,033,612	3.8	162	1,184,348	2.3	113	2,498,988	0.27	28.5	356	30.7	109.1
avg	1,090,744	4.2	190	1,111,859	2.4	111	2,377,636	0.26	25.6	363	28.9	104.9

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

*Values for Wet Tons of dewatered sludge are based on calculated volumes from eight positive displacement cake pumps and are subject to inaccuracies. The mechanical condition of the cake pumps and the variability of sludge concentrations can effect the overall accuracies of these reported values.

D. Chemical usage

Point Loma Annual Chemical Usage Report Monthly Totals - 2004

Month	Polymer Pt.Loma Gallons	Polymer Pt.Loma Lbs.	ACTIVE Polymer Pt.Loma Lbs.	Ferric Chloride PS #2 Gallons	Ferrous Chloride PS #2 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	199,432		8,399	93,643		281,295	561		3,492	2,538		19,317	2,100	400	15,500
02	185,867		7,829	87,258		261,970	346		2,344	1,802		15,411	1,751		14,500
03	185,652		7,815	92,213		257,599	430		3,253	1,489	9	26,042	2,050	300	15,500
04	176,533		7,434	63,817		275,409	178		4,087	3,054	5,628	24,445	1,550	300	15,000
05	186,164		7,838	81,298		289,238	938	30	5,139	1,782	1,400	24,495	1,650	450	15,500
06	174,369		7,341	80,696		221,520	583		5,784	2,517		22,300	1,700	150	15,000
07	184,116		7,751	85,405		211,230	644		5,377	2,056	70	20,100	2,350		15,500
08	180,686		7,610	91,490		235,991	391		6,185	800		28,138	1,300		15,500
09	177,374		7,466	87,696		267,854	226		7,397	988		27,733	1,800		15,000
10	201,113		8,471	91,726		292,998	271		6,026	1,270		27,373	1,503	300	15,500
11	189,692		7,988	38,651	54,198	257,173	165	2	3,120	1,445	85	15,318	1,500	450	15,000
12	191,090		8,050		115,537	270,248	143	0	3,836	304	82	12,894	1,450	700	15,500
avg	186,007		7,833	81,263	84,868	260,210	406	11	4,670	1,670	1,212	21,964	1,725	381	15,250
sum	2,232,089		93,992	893,893	169,735	3,122,525	4,876	32	56,040	20,045	7,274	263,566	20,704	3,050	183,000

E. Gas Production

Point Loma Wastewater Treatment Plant Gas Report - 2004

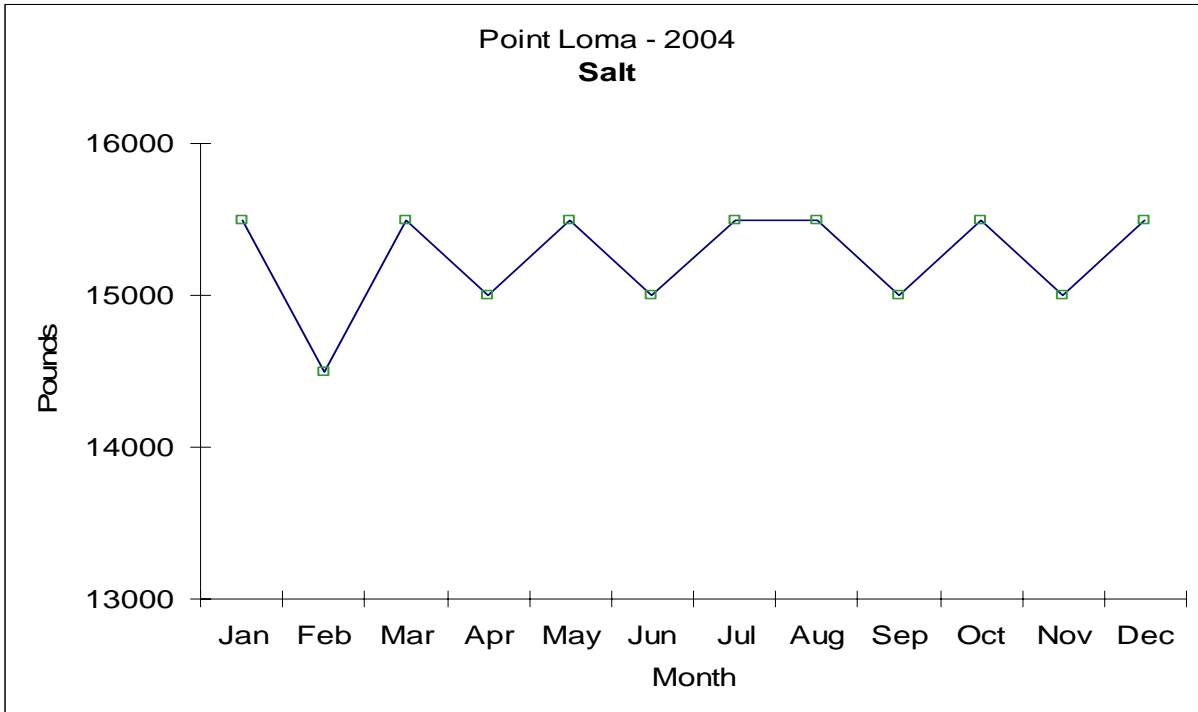
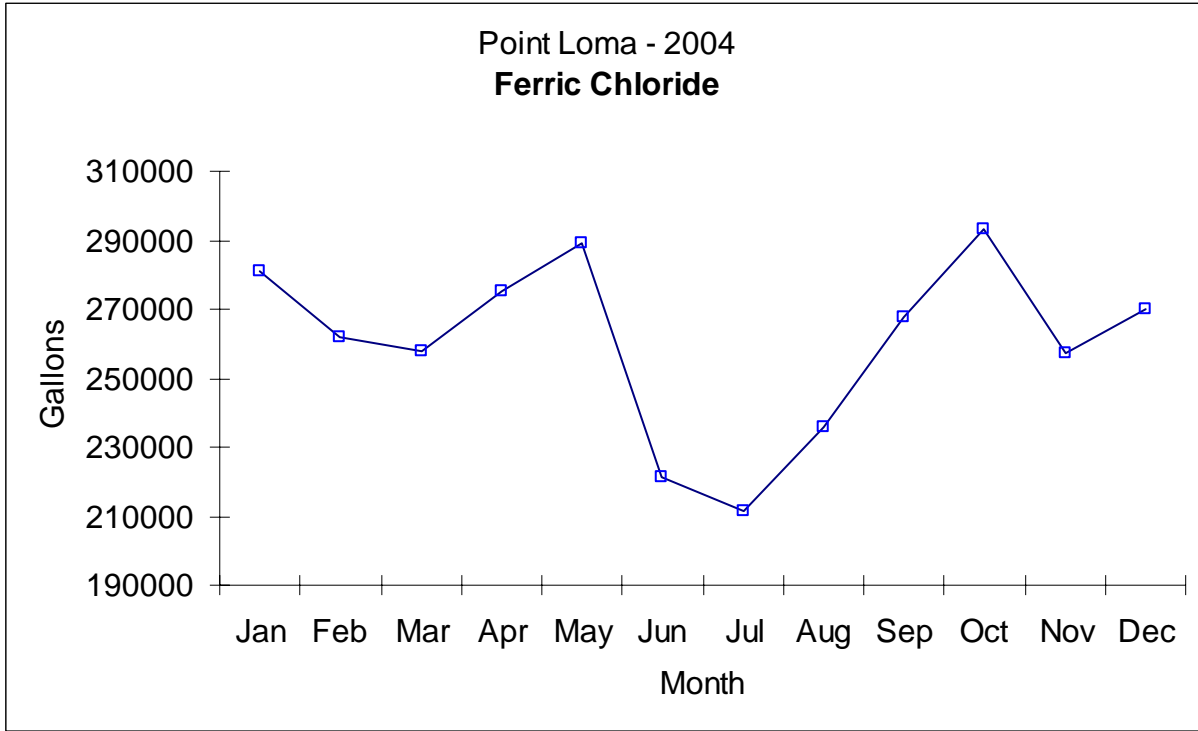
Daily Monthly Averages

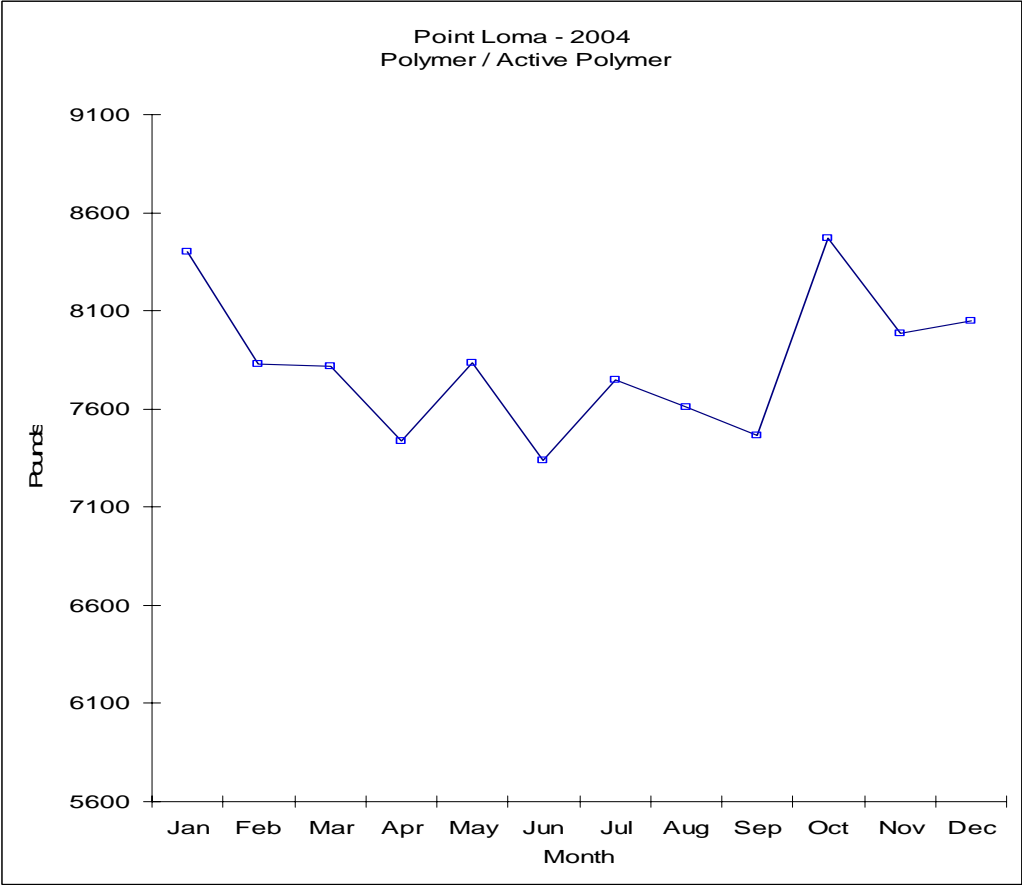
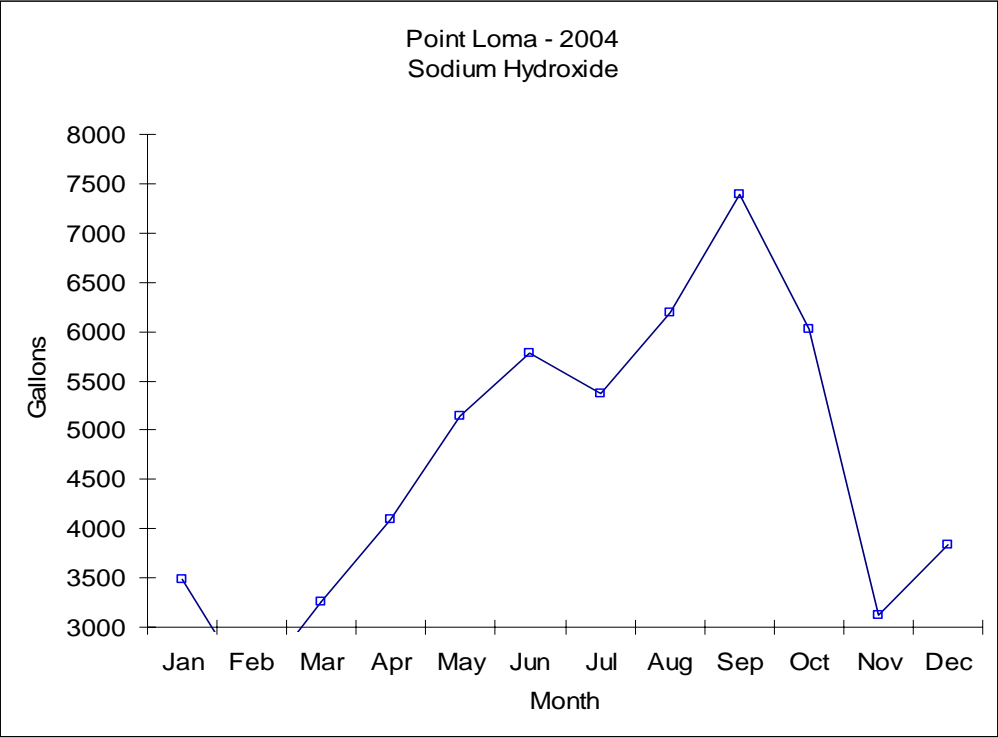
GAS PRODUCTION (x1000 Cu. Ft.)					GAS CONSUMPTION (x1000 Cu. Ft.)							
Month	N-1-P	N-2-P	C-1-P	C-2-P	S-1-P	S-2-P	Dig 7	Total	Boilers	Burners	GUF	Total
01	776.2	.0	690.4	561.3	.0	.0	90.9	2,027.9	27	1,578	1,773	3,378
02	645.3	348.0	582.1	530.0	.0	.0	72.0	2,105.3	75	1,626	1,573	3,273
03	588.5	581.4	532.4	486.0	.0	.8	51.6	2,189.1	86	1,749	1,456	3,292
04	568.5	576.2	510.2	471.2	.0	.0	44.6	2,126.1	23	1,456	1,703	3,182
05	559.7	549.3	499.6	465.9	.0	.0	45.1	2,074.5	9	1,283	1,752	3,045
06	563.8	557.2	500.4	467.2	.0	.0	41.2	2,088.6	10	1,305	1,771	3,087
07	551.8	567.6	488.0	462.6	.0	.0	42.0	2,070.0	17	1,427	1,677	3,121
08	538.2	566.9	484.3	451.6	.0	.0	47.2	2,041.0	7	1,315	1,800	3,123
09	518.1	553.5	459.4	431.6	.0	.0	48.6	1,962.6	12	1,162	1,819	2,992
10	536.0	566.9	457.7	417.3	.0	.0	79.8	1,977.8	36	1,459	1,721	3,217
11	524.5	573.5	464.3	367.7	.0	.0	94.6	1,930.1	19	1,384	1,799	3,201
12	500.7	564.7	431.0	373.0	.0	.0	85.0	1,869.4	61	1,378	1,762	3,201
avg	572.6	500.4	508.3	457.1	.0	.1	61.9	2,038.5	32	1,427	1,717	3,176

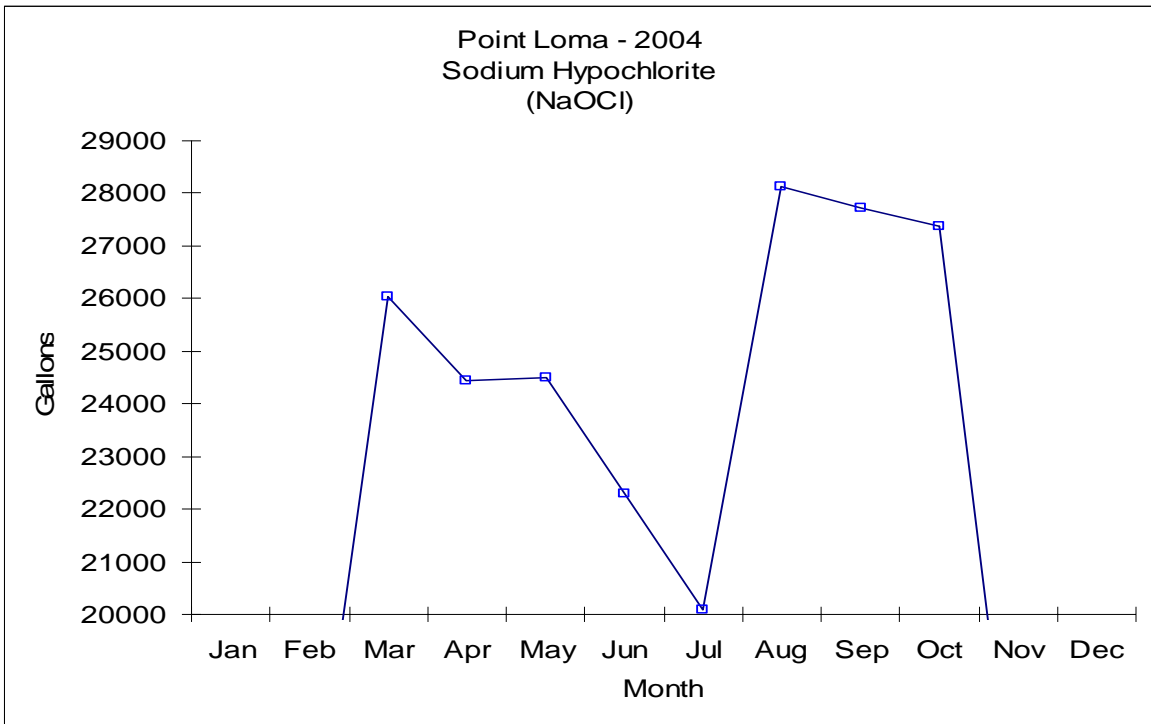
Monthly Totals

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	Total	Boilers	Burners	GUF	Total
01	24,063.0	.0	21,402.0	17,400.0	.0	.0	2,817.0	62,865.0	841	48,909	54,955	104,705
02	18,713.0	10,092.0	16,880.0	15,369.0	.0	.0	2,089.0	61,054.0	2,175	47,149	45,604	94,928
03	18,242.0	18,023.0	16,504.0	15,066.0	.0	26.0	1,600.0	67,861.0	2,680	54,231	45,136	102,047
04	17,055.0	17,287.0	15,307.0	14,135.0	.0	.0	1,339.0	63,784.0	695	43,681	51,088	95,464
05	17,352.0	17,029.0	15,488.0	14,442.0	.0	.0	1,398.0	64,311.0	278	39,782	54,325	94,385
06	16,913.0	16,717.0	15,013.0	14,016.0	.0	.0	1,237.0	62,659.0	299	39,161	53,142	92,602
07	17,105.0	17,597.0	15,128.0	14,340.0	.0	.0	1,301.0	64,170.0	534	44,231	51,976	96,741
08	16,683.0	17,573.0	15,014.0	14,000.0	.0	.0	1,463.0	63,270.0	229	40,773	55,798	96,800
09	15,544.0	16,604.0	13,782.0	12,948.0	.0	.0	1,458.0	58,878.0	345	34,856	54,555	89,756
10	16,616.0	17,573.0	14,188.0	12,936.0	.0	.0	2,473.0	61,313.0	1,120	45,232	53,360	99,712
11	15,735.0	17,205.0	13,930.0	11,032.0	.0	.0	2,838.0	57,902.0	565	41,512	53,958	96,035
12	15,521.0	17,507.0	13,362.0	11,562.0	.0	.0	2,636.0	57,952.0	1,884	42,726	54,623	99,233
avg	17,461.8	15,267.3	15,499.8	13,937.2	.0	2.2	1,887.4	62,168.3	970	43,520	52,377	96,867
sum	209,542.0	183,207.0	185,998.0	167,246.0	.0	26.0	22,649.0	746,019.0	11,645	522,243	628,520	1,162,408

F. Graphs of Chemical Usage







G. Facilities That Were Out Of Service In 2004 By Date

FACILITY OOS	FROM	TO	REASON
S1P Digester	01/01	12/31	Contractor rehabilitation
S2P Digester	01/01	12/31	Contractor rehabilitation
N2P Digester	01/01	02/09	Digester Cleaning
Sed Basin #12	01/01	02/05	Poor removals
Sed Basin #11	01/01	03/27	Poor Removals
Sed Basin #10	01/01	03/27	Preventive Maintenance
Inf screen #3	01/01	06/09	Preventive maintenance
Inf screen #2	01/02	01/08	Overhaul
West Inf Channel	01/01	01/09	Channel rotation / grit scouring
East Inf Channel	01/09	03/18	Channel rotation / grit scouring
NEOC & Screens	01/10	01/13	Installation of new gate
N2 Grit Basin	01/13	01/13	Line Repair
Sed Basin #1	01/15	12/31	Sprocket replacement and rehab
Inf Screen #5	01/21	01/22	Preventive maintenance
Inf screen #2	03/18	03/18	Replaced back plate shocks
West Inf Channel	03/18	04/09	Channel rotation / grit scouring
Sed Basin #7	03/27	11/01	Preventive Maintenance
Sed Basin #8	03/27	09/08	Preventive Maintenance
East Inf Channel	04/09	05/06	Channel rotation / grit scouring
C2 Grit Basin	04/14	04/14	Line repair
C2 Grit Basin	05/05	05/05	Line Repair
West Inf Channel	05/06	06/02	Channel rotation / grit scouring
East Inf Channel	06/02	07/01	Channel rotation / grit scouring
Inf screen #1	06/09	08/31	Screen repair
West Inf Channel	07/01	07/29	Channel rotation / grit scouring
N1 Grit Basin	07/05	07/23	Preventive Maintenance
Inf Screen #5	07/08	07/09	I&C repair
Inf Screen #2	07/22	07/22	Replace tension springs
East Inf Channel	07/29	09/21	Channel rotation / grit scouring
Sed Tank #12	08/11	09/01	High Blankets
Inf Screen #2	08/31	09/01	I&C repair
Sed Basin #10	09/01	09/28	Broken Flight repair
Inf Screen #3	09/16	09/17	I&C repair

FACILITIES THAT WERE OUT OF SERVICE IN 2004 BY DATE

FACILITY OOS	FROM	TO	REASON
Sed Basin #12	09/20	10/21	High blankets
Sed Basin #11	09/21	11/04	High Blankets
West Inf Channel	09/21	10/27	Channel rotation / grit scouring
Inf Screen #1	09/27	09/27	I&C Repair
N2 grit Basin	10/18	10/20	Repair suction pipe
Inf Screen #1	10/27	10/28	Screens OOS due to high influent flows
Inf Screen #2	10/27	10/28	Screens OOS due to high influent flows
Inf Screen #3	10/27	10/28	Screens OOS due to high influent flows
Inf Screen #4	10/27	10/28	Screens OOS due to high influent flows
Inf Screen #5	10/27	10/28	Screens OOS due to high influent flows
Sed Basin #8	11/01	12/23	Scum trough seal replacement
N1 Grit Basin	11/01	11/01	Unplugged line
N2 Grit Basin	11/01	11/10	Preventive Maintenance
MBC Pipeline	11/02	11/04	Pipeline repair
Sed Basin #4	11/04	12/31	Preventive maintenance
West Inf Channel	11/17	12/16	Channel rotation / grit scouring
C2 Grit Basin	11/16	11/19	Preventive maintenance
C1 Grit Basin	11/21	11/23	Preventive maintenance
N1 Grit Basin	11/29	12/3	Preventive maintenance

FACILITY OOS	FROM	TO	REASON
Inf Screen #2	12/05	12/15	I&C Repair
Inf Screen #1	12/15	12/16	I&C Repair
Inf Screen #3	12/16	12/20	I&C Repair
East Inf Channel	12/16	12/31	Channel rotation / grit scouring
Inf Screen #4	12/20	12/21	I&C Repair
Inf Screen #5	12/21	12/22	I&C Repair
Sed Basin #3	12/23	12/31	High Blankets

GRIT CHAMBERS

N1	11/01; 07/05-07/23; 11/29-12/03
N2	01/13; 10/18-10/20; 11/01-11/10
C1	11/21-11/23
C2	4/14; 05/05; 11/16-11/19
S1	Out of Service all year
S2	Out of Service all year

CHANNELS

EAST	01/09-03/18; 04/09-05/06; 06/02-07/01; 07/29-09/21; 12/16-12/31
WEST	1/01-1/09; 3/18-4/09; 5/06-6/02; 7/01-7/29; 9/21-10/27; 11/17-12/16

BASINS

1	01/15-12/31
2	
3	12/23-12/31
4	11/04-12/31
5	
6	
7	03/27-11/01
8	03/27-09/08; 11/01-12/23
9	
10	01/01-03/27; 09/01-09/28;
11	01/01-03/27; 09/21-11/04;
12	01/01-02/05; 08/11-09/01; 09/20-10/21

NORTH EFFLUENT SCREENS	01/10-01/13
SOUTH EFFLUENT SCREENS	
INFLUENT SCREEN #1	06/09-08/31; 09/27; 10/27-10/28;12/15-12/16
INFLUENT SCREEN #2	1/02-1/08;3/18;7/22;8/31-9/01;10/27-10/28;12/05-12/15
INFLUENT SCREEN #3	01/01-06/09; 09/16-09/17; 10/27-10/28; 12/16-12/20
INFLUENT SCREEN #4	10/27-10/28; 12/20-12/21
INFLUENT SCREEN #5	01/21-01/22; 07/08-07/09; 10/27-10/28; 12/21-12/22

FACILITIES THAT WERE OUT OF SERVICE IN 2004
FACILITY: DATES OUT OF SERVICE

DIGESTERS

N1P	01/01-02/09
N2P	
C1P	
C2P	
S1P	01/01-12/31
S2P	01/01-12/31
Dig 7	
Dig 8	

SHUTDOWNS

DATE	FROM	TO	
Date	From	To	
02/06	0200	0600	Pump Station 2 work
04/16	0200	0530	Pump Station 2 work
05/10	0200	0600	East Portal Interceptor work
05/11	0100	0515	East Portal Interceptor work
05/12	0100	0530	East Portal Interceptor work
05/13	0100	0530	East Portal Interceptor work
05/14	0100	0545	East Portal Interceptor work
05/17	0100	0545	East Portal Interceptor work
05/18	0100	0545	East Portal Interceptor work
05/19	0100	0530	East Portal Interceptor work
05/24	0100	0545	East Portal Interceptor work
05/25	0100	0600	East Portal Interceptor work
05/26	0100	0545	East Portal Interceptor work
05/27	0100	0515	East Portal Interceptor work
05/28	0130	0530	East Portal Interceptor work
06/11	0130	0530	East Portal Interceptor work
06/21	0130	0530	East Portal Interceptor work
07/07	0100	0245	East Portal Interceptor work
07/13	0100	0530	East Portal Interceptor work
07/16	0100	0530	East Portal Interceptor work
08/27	0100	0400	East Portal Interceptor work
11/05	0130	0430	Divers in Channel
12/03	0300	0315	Pump Station 2 pump problems
12/17	0130	0430	Pump Station 2 work

**FACILITIES THAT WERE OUT OF SERVICE IN 2004
FACILITY: DATES OUT OF SERVICE**

DIGESTERS

N1P	01/01-02/09
N2P	
C1P	
C2P	
S1P	01/01-12/31
S2P	01/01-12/31
Dig 7	
Dig 8	

SHUTDOWNS

DATE	FROM	TO	
02/06	0200	0600	Pump Station 2 work
04/16	0200	0530	Pump Station 2 work
05/10	0200	0600	East Portal Interceptor work
05/11	0100	0515	East Portal Interceptor work
05/12	0100	0530	East Portal Interceptor work
05/13	0100	0530	East Portal Interceptor work
05/14	0100	0545	East Portal Interceptor work
05/17	0100	0545	East Portal Interceptor work
05/18	0100	0545	East Portal Interceptor work
05/19	0100	0530	East Portal Interceptor work
05/24	0100	0545	East Portal Interceptor work
05/25	0100	0600	East Portal Interceptor work
05/26	0100	0545	East Portal Interceptor work
05/27	0100	0515	East Portal Interceptor work
05/28	0130	0530	East Portal Interceptor work
06/11	0130	0530	East Portal Interceptor work
06/21	0130	0530	East Portal Interceptor work
07/07	0100	0245	East Portal Interceptor work
07/13	0100	0530	East Portal Interceptor work
07/16	0100	0530	East Portal Interceptor work
08/27	0100	0400	East Portal Interceptor work
11/05	0130	0430	Divers in Channel
12/03	0300	0315	Pump Station 2 pump problems
12/17	0130	0430	Pump Station 2 work

H. Grit Analyses

The following are reports of the analyses of grit samples taken from the Pt. Loma WWTP headworks (grit removal chambers) in 2004. Reports include Title 22 analyses and Total Solids. 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. Samples from the grit bins are taken daily for 7-8 consecutive days and composited together to form the annual sample.

**Point Loma Wastewater Treatment Plant
Total Solids - Grit and Screenings 2004 (%WT)**

Grit Monthly Averages		Headworks Screenings Monthly Averages		Sludge Screenings Monthly Averages	
JAN	52.7	JAN	45.1	JAN	40.2
FEB	63.9	FEB	42.8	FEB	40.0
MAR	63.6	MAR	43.0	MAR	40.5
APR	57.7	APR	42.6	APR	39.5
MAY	63.5	MAY	45.8	MAY	40.2
JUN	72.3	JUN	47.4	JUN	40.2
JUL	63.1	JUL	43.7	JUL	41.1
AUG	61.1	AUG	50.4	AUG	40.9
SEP	48.3	SEP	38.7	SEP	43.1
OCT	54.1	OCT	46.8	OCT	41.2
NOV	69.7	NOV	60.3	NOV	40.4
DEC	67.2	DEC	53.0	DEC	39.1
AVG	61.4	AVG	46.6	AVG	40.5

**Point Loma Wastewater Treatment Plant
2004 Grit Total Solids (%WT) at Point Loma**

Day	Jan % WT	Feb % WT	Mar % WT	Apr % WT	May % WT	Jun % WT	Jul % WT	Aug % WT	Sep % WT	Oct % WT	Nov % WT	Dec % WT
1	51.7	70.7	59.6	57.8	51.4	71.8	47.1	65.3	61.5	42.4	69.0	80.1
2	50.1	64.2	74.8	58.4	48.3	84.9	60.7	66.2	59.4	52.6	79.7	75.8
3	49.8	44.8	73.5	54.0	51.3	85.3	58.8	82.5	56.7	57.9	70.9	66.8
4	56.0	70.2	65.3	48.7	47.7	82.4	61.5	67.6	50.9	47.7	71.8	75.3
5	54.1	48.9	79.5	50.8	77.6	85.2	66.8	67.0	49.5	58.6	76.7	57.7
6	51.1	51.3	76.7	53.2	52.6	67.3	77.6	61.0	42.0	49.2	71.4	59.1
7	47.5	78.7	68.4	56.5	47.1	70.5	57.1	67.3	43.8	52.9	78.4	46.0
8	45.5	67.0	69.6	57.4	55.5	62.0	88.0	65.1	72.9	44.6	65.6	53.5
9	42.9	57.9	56.3	59.3	57.5	80.3	55.3	63.6	41.3	50.7	64.3	45.2
10	43.8	47.2	75.3	57.5	47.3	62.2	66.5	52.7	64.2	46.1	76.0	66.4
11	72.7	65.8	62.1	47.4	49.1	72.3	66.2	69.0	51.6	42.0	78.7	66.1
12	51.9	46.8	49.6	47.0	52.0	85.1	70.0	62.3	53.4	43.6	77.4	56.4
13	49.0	43.1	65.5	53.9	57.9	77.9	73.4	51.8	40.2	41.8	59.2	62.9
14	54.9	72.6	66.4	68.3	57.1	66.0	75.1	51.7	41.2	41.8	57.9	57.1
15	55.9	56.5	69.5	81.7	51.6	77.8	61.1	60.7	43.0	42.6	56.4	65.9
16	64.6	75.0	69.0	63.1	54.3	77.9	61.7	53.0	44.0	48.6	63.9	65.0
17	42.3	63.6	60.2	69.6	50.0	82.3	68.3	61.3	41.8	47.1	65.9	73.3
18	47.3	50.8	65.2	75.3	83.1	66.1	65.6	61.2	65.9	44.9	79.2	88.8
19	56.2	67.6	66.2	66.2	61.5	76.1	58.6	73.6	54.6	53.1	74.3	68.9
20	55.2	64.7	70.6	56.9	76.1	71.6	65.7	50.6	43.1	50.5	61.2	68.2
21	43.1	67.0	66.0	69.3	54.3	74.5	57.0	64.5	41.2	53.3	62.4	67.8
22	50.4	65.8	66.9	57.0	68.7	77.6	58.3	63.9	43.9	56.5	81.5	75.2
23	56.9	73.7	53.8	52.4	85.0	49.4	62.1	58.4	45.8	59.3	74.3	83.0
24	41.9	80.5	53.9	49.9	62.8	67.5	62.6	45.0	41.9	49.5	78.2	83.3
25	46.7	77.6	50.6	52.1	85.5	70.0	64.0	47.0	42.3	72.6	64.6	65.9
26	62.0	67.2	50.1	52.5	84.7	73.7	52.8	42.0	44.8	51.9	46.5	70.9
27	59.7	79.7	65.6	58.2	74.3	50.8	50.4	58.8	44.8	50.1	50.8	77.1
28	57.7	72.7	63.7	52.4	86.7	72.6	46.0	64.0	43.9	79.2	79.3	49.1
29	53.6	62.6	53.2	58.7	90.8	77.0	65.9	63.4	35.5	79.7	74.5	73.6
30	58.8		50.9	46.3	81.3	50.9	59.3	67.9	44.8	81.0	81.6	58.2
31	60.4		52.7		66.5		71.2	65.1		85.2		80.8
Avg	52.7	63.9	63.6	57.7	63.5	72.3	63.1	61.1	48.3	54.1	69.7	67.2
Min	41.9	43.1	49.6	46.3	47.1	49.4	46.0	42.0	35.5	41.8	46.5	45.2
Max	72.7	80.5	79.5	81.7	90.8	85.3	88.0	82.5	72.9	85.2	81.6	88.8

Point Loma Wastewater Treatment Plant
2004 Headworks Screenings Total Solids (%WT) at Point Loma

Day	Jan % WT	Feb % WT	Mar % WT	Apr % WT	May % WT	Jun % WT	Jul % WT	Aug % WT	Sep % WT	Oct % WT	Nov % WT	Dec % WT
1	48.2	46.1	39.9				39.8				63.8	
2				39.9	54.5			61.7				51.4
3			31.6			43.5						
4		38.7	47.8							56.1	54.5	
5				51.8	36.9		41.7	60.9				
6												53.3
7					32.4	47.4				49.9		
8	38.5	35.5				65.9	44.7		39.3		60.9	
9		49.2	35.1					47.1				
10					41.3			37.6				
11	44.3			43.4						44.6	72.5	
12		40.1	39.5	47.7			42.6	65.0				
13					43.5	58.4			35.9	46.5		
14							51.1					62.5
15	51.1		44.4	35.6			36.4		35.1		60.0	42.1
16								43.0				
17					59.5	44.6						
18	44.7	44.9	38.2					50.2		42.5	52.4	
19				49.8			46.4	50.8				
20					48.5				37.0			
21			51.4	32.9		36.9		38.3	45.1			
22							53.6				56.7	
23		39.0						45.1	40.7			63.9
24			52.0		44.9	40.4						62.2
25	41.2									45.0		
26	46.1	48.5		36.6			41.2	49.3	44.9			
27					42.9	45.5		36.2				
28				50.9		44.3				44.8		35.7
29	46.5		50.3				39.5	43.7			61.4	
30				37.3				40.8				
31			43.0		53.1							
Avg	45.1	42.8	43.0	42.6	45.8	47.4	43.7	50.4	38.7	46.8	60.3	53.0
Min	38.5	35.5	31.6	32.9	32.4	36.9	36.4	37.6	35.1	42.5	52.4	35.7
Max	51.1	49.2	52.0	51.8	59.5	65.9	53.6	65.0	44.9	56.1	72.5	63.9

Point Loma Wastewater Treatment Plant
2004 Sludge Screenings Total Solids (% WT) at Point Loma

Day	Jan % WT	Feb % WT	Mar % WT	Apr % WT	May % WT	Jun % WT	Jul % WT	Aug % WT	Sep % WT	Oct % WT	Nov % WT	Dec % WT
1	43.5	42.1	39.4	44.5		39.2	39.8	40.3	41.1	41.6	38.4	40.5
2	43.0	37.5	47.9	40.5	57.4	38.3	44.1	39.3	45.9	40.9	39.9	38.0
3	37.7	40.6	39.0		38.5	40.7		38.3	40.9	44.3	41.2	39.4
4	43.3	40.5	38.9	42.7	40.2	40.6		39.0		42.8	41.4	38.3
5	41.5	37.6	40.1	36.5		40.5	36.4	43.0	46.7	41.9	38.4	38.7
6	39.0	38.0	39.1		39.1	39.5	39.2	41.5	45.9	42.8	43.9	39.5
7	38.6	41.9	37.9	39.5	41.5	41.7	41.3	39.9	40.9	44.3	38.4	38.0
8	43.9	42.5		39.9	41.9	41.7	41.9	44.2	41.8	42.7	39.0	36.6
9	39.9	38.4	41.6	39.7	42.9	38.9	41.6	40.0	41.7		38.1	40.4
10	41.6	40.2	39.0		39.9	38.5	44.7	39.2	42.5	45.4	42.0	36.9
11	40.1	42.9	39.5	45.4	41.0	42.4	42.7	41.1	41.0	40.3	40.3	32.9
12	40.3	40.9		39.2	40.9	36.5	41.7	42.1	46.3	41.7	42.2	38.8
13	36.2	37.5	36.1	39.7	38.6	36.7	39.6	41.3	40.2	42.4	39.6	39.3
14		40.6	40.0	40.2	39.2	42.9	35.7	42.2	46.8	38.2	42.2	39.9
15	38.0	42.1	38.7	34.8	38.6	37.7	46.2	35.0	42.9	38.9	38.5	39.6
16	38.8	36.2	38.0	37.3	38.8	60.8	38.0	40.2	39.6	39.0	42.4	38.7
17	43.6	41.3	42.9	40.7	41.3	42.7	41.5	42.9	37.8	40.4	39.8	41.6
18	40.3	40.3	41.5	37.2	39.1	40.8	41.7	38.5	40.9	41.4	37.2	39.0
19	35.3	39.0	40.7	37.2	41.0	38.1	42.1	41.0	38.1	41.1	40.1	38.6
20	39.1	40.9	40.5	34.9	37.5	38.5	41.5	38.6	39.2	38.6	39.6	37.7
21	42.7	42.4	46.8	40.9	37.0	35.7	41.3	40.8	41.4	39.3	43.6	38.8
22	44.4	37.8	41.3	40.6	37.4	39.4	38.0	43.8	44.4	42.6	38.8	34.9
23	39.7	37.9	38.4	40.7	38.0	39.7	42.3	40.1	42.4	41.6	42.3	40.3
24	40.8	43.7	38.4	38.9	39.8	38.1	42.5	39.1	42.4	38.5	41.1	39.4
25	41.1	42.1	39.5	40.7	39.4	40.2	40.6	40.8		41.6	50.5	39.4
26	38.7	36.8		40.6	39.4	43.0	41.4	43.1	67.8	42.5	36.9	42.3
27	36.4	38.8	40.0	39.4	37.0	38.9	41.5	43.1	43.8	39.0	39.6	38.9
28		39.6	43.4	39.0	40.0	36.3	40.8	42.6	40.5	42.0	40.3	45.5
29	42.8	39.9	40.6	40.4	40.1	39.4	40.6	40.1	42.6	40.7	38.1	40.6
30	37.9		42.7	35.3	42.6	39.5	41.5	47.8	41.9	38.7	37.6	39.3
31	38.6		40.8		37.7		42.3	38.9		40.8		39.0
Avg	40.2	40.0	40.5	39.5	40.2	40.2	41.1	40.9	43.1	41.2	40.4	39.1
Min	35.3	36.2	36.1	34.8	37.0	35.7	35.7	35.0	37.8	38.2	36.9	32.9
Max	44.4	43.7	47.9	45.4	57.4	60.8	46.2	47.8	67.8	45.4	50.5	45.5

Title 22 reports for Grit

POINT LOMA WASTEWATER TREATMENT PLANT
 CALIFORNIA HAZARDOUS WASTE IDENTIFICATION TESTS (Title 22)
 Point Loma Quarterly Grit Composite

From: 01-NOV-2004 to: 01-NOV-2004

Source: GRIT COMP
 Sample ID: P276694
 Sample Date: 01-NOV-2004

INORGANICS	Constituent	MDL	Units	Total Conc	Total Conc	TTLIC Limit	W.E.T. Conc	STLC Limit	40 CFR 503	CA Health &
				Dry Wt.	Wet Wt.	Wet Wt.	Wet Wt.	Wet Wt.	Limits **	Safety Code
				mg/Kg	mg/Kg	mg/Kg	mg/L	mg/L	mg/Kg	mg/Kg
	Antimony	4.51	mg/kg	2.8	2.1	500	*	15	-	-
	Arsenic	.68	mg/kg	1.8	1.4	500	*	5.0	41	-
	Barium	.023	mg/kg	189	141	10000	*	100	-	-
	Beryllium	.004	mg/kg	0.13	0.10	75	*	0.75	-	-
	Cadmium	.018	mg/kg	0.89	0.67	100	*	1.0	39	-
	Chromium (VI)	NA	mg/kg	NA	NA	500	NA	5.0	-	-
	Chromium	.083	mg/kg	67.4	50.4	2500	*	560	1200	-
	Cobalt	.083	mg/kg	4.19	3.13	8000	*	80	-	-
	Copper	.215	mg/kg	500	374	2500	*	25	1500	2500
	Lead	.604	mg/kg	43.5	32.56	1000	*	5.0	300	350
	Mercury	.132	mg/kg	0.7	0.52	20	*	0.2	17	-
	Molybdenum	.143	mg/kg	7.0	5.3	3500	*	350.0	-	-
	Nickel	.063	mg/kg	35.5	26.6	2000	*	20	420	2000
	Selenium	.47	mg/kg	0.76	0.57	100	*	1.0	36	-
	Silver	.06	mg/kg	38.0	28.44	500	*	5.0	-	-
	Thallium	.771	mg/kg	ND	ND	700	*	7.0	-	-
	Vanadium	.064	mg/kg	22.8	17.05	2400	*	24	-	-
	Zinc	.946	mg/kg	345	258	5000	*	250	2800	-
	Fluoride	NA	mg/kg	NA	NA	18000	NA	180	-	-
	Sulfides-Reactive	11	mg/kg	NA	NA	-	-	-	-	-
	Sulfides-Total	2170	mg/kg	NA	NA	-	-	-	-	-
	Total Solids	NA	Wt%	74.85	-	-	-	-	-	-
	Total Volatile Solids	NA	Wt%	15.2	-	-	-	-	-	-
	pH	NA	pH Units	7.31	>2 - < 12	-	-	-	-	-

ORGANICS	Constituent	MDL	Units	Total Conc	Total Conc	TTLIC Limit	W.E.T. Conc	STLC Limit
				Dry Wt.	Wet Wt.	Wet Wt.	Wet Wt.	Wet Wt.
				mg/Kg	mg/Kg	mg/Kg	mg/L	mg/L
	Aldrin	0.00002	mg/Kg	ND	ND	1.4	*	0.14
	Chlordanes	0.000014	mg/Kg	0.0410	0.0307	2.5	*	0.25
	DDT, DDE, DDD	0.00004	mg/Kg	ND	ND	1.0	*	0.10
	2,4-D	3.4	mg/Kg	ND	ND	100	*	10
	Dieldrin	0.00002	mg/Kg	ND	ND	8.0	*	0.8
	Endrin	0.00003	mg/Kg	ND	ND	0.2	*	0.02
	Heptachlor	0.000003	mg/Kg	ND	ND	4.7	*	0.47
	Kepone	NA	mg/Kg	NA	NA	21	NA	2
	Lindane	0.00001	mg/Kg	ND	ND	4.0	*	0.4
	Methoxychlor	NA	mg/Kg	ND	ND	100	*	10
	Mirex	0.00002	mg/Kg	ND	ND	21	*	2
	Pentachlorophenol	0.8	mg/Kg	ND	ND	17	NA	1.7
	PCBs (Arochlors)	NA	mg/Kg	ND	ND	50	*	5.0
	Toxaphene	0.00024	mg/Kg	ND	ND	5	*	0.5
	Trichloroethene	0.0253	mg/Kg	ND	ND	2040	*	204
	2,4,5-TP	4.4	mg/Kg	ND	ND	10	*	1

TTLIC = Total Threshold Limit Concentration.
 STLC = Soluble Threshold Limit Concentration.
 W.E.T. = Waste Extraction Technique.
 * = The total 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.
 TTLIC = Total Threshold Limit Concentration.

POINT LOMA WASTEWATER TREATMENT PLANT
 CALIFORNIA HAZARDOUS WASTE IDENTIFICATION TESTS (Title 22)
 Point Loma Quarterly Grit Composite

From: 01-JUN-2004 to: 01-JUN-2004

Source: GRIT COMP
 Sample ID: P258063
 Sample Date: 01-JUN-2004

INORGANICS		Total Conc Dry Wt. mg/Kg	Total Conc Wet Wt. mg/Kg	TTLc Limit Wet Wt. mg/Kg	W.E.T. Conc Wet Wt. mg/L	STLC Limit Wet Wt. mg/L	40 CFR 503 Limits ** mg/Kg	CA Health & Safety Code Limits *** mg/Kg
Antimony	4.51 mg/kg	3.0	2.4	500	*	15	-	-
Arsenic	.68 mg/kg	1.6	1.3	500	*	5.0	41	-
Barium	.023 mg/kg	62	50	10000	*	100	-	-
Beryllium	.004 mg/kg	0.15	0.12	75	*	0.75	-	-
Cadmium	.018 mg/kg	0.63	0.51	100	*	1.0	39	-
Chromium (VI)	NA mg/kg	NA	NA	500	NA	5.0	-	-
Chromium	.083 mg/kg	20.3	16.4	2500	*	560	1200	-
Cobalt	.083 mg/kg	2.26	1.82	8000	*	80	-	-
Copper	.215 mg/kg	323	261	2500	*	25	1500	2500
Lead	.604 mg/kg	23.7	19.15	1000	*	5.0	300	350
Mercury	.132 mg/kg	0.14	0.11	20	*	0.2	17	-
Molybdenum	.143 mg/kg	3.0	2.4	3500	*	350.0	-	-
Nickel	.063 mg/kg	25.6	20.7	2000	*	20	420	2000
Selenium	.47 mg/kg	0.57	0.46	100	*	1.0	36	-
Silver	.06 mg/kg	2.22	1.80	500	*	5.0	-	-
Thallium	.771 mg/kg	ND	ND	700	*	7.0	-	-
Vanadium	.064 mg/kg	14.9	12.07	2400	*	24	-	-
Zinc	.946 mg/kg	208	168	5000	*	250	2800	-
Fluoride	NA mg/kg	NA	NA	18000	NA	180	-	-
Sulfides-Reactive	11 mg/kg	NA	NA	-	-	-	-	-
Sulfides-Total	2170 mg/kg	NA	NA	-	-	-	-	-
Total Solids	NA Wt%	80.75	-	-	-	-	-	-
Total Volatile Solids	NA Wt%	16.8	-	-	-	-	-	-
pH	NA pH Units	6.54	-	>2 - < 12	-	-	-	-

ORGANICS		Total Conc Dry Wt. mg/Kg	Total Conc Wet Wt. mg/Kg	TTLc Limit Wet Wt. mg/Kg	W.E.T. Conc Wet Wt. mg/L	STLC Limit Wet Wt. mg/L
Aldrin	0.00002 mg/Kg	ND	ND	1.4	*	0.14
Chlordanes	0.000014 mg/Kg	ND	ND	2.5	*	0.25
DDT, DDE, DDD	0.00004 mg/Kg	ND	ND	1.0	*	0.10
2,4-D	3.4 mg/Kg	ND	ND	100	*	10
Dieldrin	0.00002 mg/Kg	ND	ND	8.0	*	0.8
Endrin	0.00003 mg/Kg	ND	ND	0.2	*	0.02
Heptachlor	0.000003 mg/Kg	ND	ND	4.7	*	0.47
Kepone	NA mg/Kg	NA	NA	21	NA	2
Lindane	0.00001 mg/Kg	ND	ND	4.0	*	0.4
Methoxychlor	NA mg/Kg	ND	ND	100	*	10
Mirex	0.00002 mg/Kg	ND	ND	21	*	2
Pentachlorophenol	0.8 mg/Kg	ND	ND	17	NA	1.7
PCBs (Arochlors)	NA mg/Kg	ND	ND	50	*	5.0
Toxaphene	0.00024 mg/Kg	ND	ND	5	*	0.5
Trichloroethene	0.0253 mg/Kg	ND	ND	2040	*	204
2,4,5-TP	4.4 mg/Kg	ND	ND	10	*	1

Senior Chemist

TTLc = Total Threshold Limit Concentration.
 STLC = Soluble Threshold Limit Concentration.
 W.E.T. = Waste Extraction Technique.
 * = The total 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.
 TTLc = Total Threshold Limit Concentration.

POINT LOMA WASTEWATER TREATMENT PLANT
 QUARTERLY GRIT COMPOSITES
 Inorganics and Organics

From: 01-JAN-2004 to: 31-DEC-2004

Analyte:	MDL	Units:	GRIT COMP	GRIT COMP
			01-JUN-2004 P258063	01-NOV-2004 P276694
Aluminum	2.3	MG/KG	5020	7190
Antimony	.274	MG/KG	3.0	2.8
Arsenic	.33	MG/KG	1.59	1.82
Barium	.0037	MG/KG	61.7	189.0
Beryllium	.00213	MG/KG	0.15	0.13
Cadmium	.0201	MG/KG	0.6	0.9
Chromium	.0366	MG/KG	20	67
Cobalt	.023	MG/KG	2.3	4.2
Copper	.0566	MG/KG	323	500
Iron	1.5	MG/KG	14500	26800
Lead	.161	MG/KG	24	44
Manganese	.00939	MG/KG	125	195
Mercury	.003	MG/KG	0.14	0.70
Molybdenum	.0478	MG/KG	3.0	7.0
Nickel	.0798	MG/KG	26	36
Selenium	.24	MG/KG	0.57	0.76
Silver	.0345	MG/KG	2.2	38.0
Thallium	.478	MG/KG	ND	ND
Vanadium	.118	MG/KG	14.9	22.8
Zinc	.0176	MG/KG	208	345
pH	3	PH	6.54	7.31
Total Solids	.24	WT%	80.8	74.9
Total Volatile Solids	.11	WT%	16.8	15.2
Aldrin	71000	MG/KG	ND	ND
2,4-dichlorophenoxyacetic acid	6.84	MG/KG	ND	ND
Dieldrin	35000	MG/KG	ND	ND
Endrin	35000	MG/KG	ND	ND
Heptachlor	28000	MG/KG	ND	ND
BHC, Gamma isomer	18000	MG/KG	ND	<18000.000
Methoxychlor	71000	MG/KG	ND	ND
Pentachlorophenol	1170	MG/KG	ND	ND
Toxaphene	130000	MG/KG	ND	ND
Trichloroethene	25.3	MG/KG	ND	ND
2,4,5-TP (Silvex)	6.33	MG/KG	ND	ND

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

POINT LOMA WASTEWATER TREATMENT PLANT

GRIT - Chlorinated Pesticide Analysis

From 01-JAN-2004 to 31-DEC-2004

Grit

Analyte	MDL	Units	PLR	PLR
			01-JUN-2004 P258063	01-NOV-2004 P276694
=====	=====	=====	=====	=====
Aldrin	71000	NG/KG	ND	ND
Dieldrin	35000	NG/KG	ND	ND
BHC, Alpha isomer	28000	NG/KG	ND	ND
BHC, Beta isomer	45000	NG/KG	ND	ND
BHC, Gamma isomer	18000	NG/KG	ND	<18000
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	3800	NG/KG	ND	7600
p,p-DDT	35000	NG/KG	ND	<35000
Heptachlor	28000	NG/KG	ND	ND
Heptachlor epoxide	28000	NG/KG	ND	ND
Alpha (cis) Chlordane	28000	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	45000	NG/KG	0	0
DDT and derivatives	71000	NG/KG	0	7600
Chlordane + related cmpds.	52000	NG/KG	0	0
Polychlorinated biphenyls	580000	NG/KG	0	0
=====	=====	=====	=====	=====
Chlorinated Hydrocarbons	580000	NG/KG	0	7600

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

POINT LOMA WASTEWATER TREATMENT PLANT
GRIT- ANALYSIS-ACID EXTRACTABLE COMPOUNDS

From 01-JAN-2004 to 31-DEC-2004

Analyte	MDL	Units	PLR	PLR
			01-JUN-2004 P258063	01-NOV-2004 P276694
2-chlorophenol	1310	UG/KG	ND	ND
2,4-dichlorophenol	914	UG/KG	ND	ND
4-chloro-3-methylphenol	1900	UG/KG	ND	ND
2,4,6-trichlorophenol	1600	UG/KG	ND	ND
Pentachlorophenol	1170	UG/KG	ND	ND
Phenol	1440	UG/KG	ND	ND
2-nitrophenol	1600	UG/KG	ND	ND
2,4-dimethylphenol	1070	UG/KG	ND	ND
2,4-dinitrophenol		UG/KG	ND	ND
4-nitrophenol		UG/KG	ND	ND
2-methyl-4,6-dinitrophenol		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

From 01-JAN-2004 to 31-DEC-2004

Analyte	MDL	Units	PLR	PLR
			01-JUN-2004 P258063	01-NOV-2004 P276694
=====	=====	=====	=====	=====
bis(2-chloroethyl) ether	1420	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	13700	2580
Bis-(2-chloroisopropyl) ether	1090	UG/KG	ND	ND
N-nitrosodi-n-propylamine	1360	UG/KG	ND	ND
Nitrobenzene	2800	UG/KG	ND	ND
Hexachloroethane	382	UG/KG	ND	ND
Isophorone	1820	UG/KG	ND	ND
bis(2-chloroethoxy)methane	1630	UG/KG	ND	ND
1,2,4-trichlorobenzene	979	UG/KG	ND	ND
Naphthalene	2150	UG/KG	ND	ND
Hexachlorobutadiene	940	UG/KG	ND	ND
Hexachlorocyclopentadiene	1890	UG/KG	ND	ND
2-chloronaphthalene		UG/KG	ND	ND
Acenaphthylene	584	UG/KG	ND	ND
Dimethyl phthalate	356	UG/KG	ND	ND
2,6-dinitrotoluene	1890	UG/KG	ND	ND
Acenaphthene	863	UG/KG	ND	ND
2,4-dinitrotoluene	1030	UG/KG	ND	ND
Fluorene	2520	UG/KG	ND	ND
4-chlorophenyl phenyl ether	362	UG/KG	ND	ND
Diethyl phthalate	1400	UG/KG	ND	ND
N-nitrosodiphenylamine	1330	UG/KG	ND	ND
4-bromophenyl phenyl ether	1030	UG/KG	ND	ND
Hexachlorobenzene	813	UG/KG	ND	ND
Phenanthrene	1040	UG/KG	ND	ND
Anthracene	986	UG/KG	ND	ND
Di-n-butyl phthalate	1450	UG/KG	ND	6500
N-nitrosodimethylamine		UG/KG	ND	ND
Fluoranthene	216	UG/KG	ND	641
Pyrene	1150	UG/KG	ND	<1150
Butyl benzyl phthalate	2210	UG/KG	ND	3640
Chrysene	352	UG/KG	ND	433
Benzo[A]anthracene	1100	UG/KG	ND	ND
Bis-(2-ethylhexyl) phthalate	3960	UG/KG	ND	4700
Di-n-octyl phthalate	3460	UG/KG	ND	ND
Benzo[K]fluoranthene	1930	UG/KG	ND	ND
3,4-benzo(B)fluoranthene	1127	UG/KG	ND	ND
Benzo[A]pyrene	741	UG/KG	ND	ND
Indeno(1,2,3-CD)pyrene	953	UG/KG	ND	ND
Dibenzo(A,H)anthracene	616	UG/KG	ND	ND
Benzo[G,H,I]perylene	301	UG/KG	ND	ND
1,2-diphenylhydrazine	1590	UG/KG	ND	ND
=====	=====	=====	=====	=====
Polynuc. Aromatic Hydrocarbons	2520	UG/KG	0	433
Total Dichlorobenzenes	733	UG/KG	0	0
=====	=====	=====	=====	=====
Base/Neutral Compounds	3960	UG/KG	13700	18494

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

POINT LOMA WASTEWATER TREATMENT PLANT
GRIT - Priority Pollutants Purgeable Compounds

From 01-JAN-2004 to 31-DEC-2004

Analyte	MDL	Units	PLR	
			01-JUN-2004 P258063	01-NOV-2004 P276694
Chloromethane	25.8	UG/KG	ND	ND
Bromomethane	29.2	UG/KG	ND	ND
Vinyl chloride	26.2	UG/KG	ND	ND
Chloroethane	61	UG/KG	ND	ND
1,1-dichloroethane	25.7	UG/KG	ND	ND
Trichlorofluoromethane	28	UG/KG	ND	ND
Methylene chloride	62.5	UG/KG	ND	ND
1,1-dichloroethene	25.1	UG/KG	ND	ND
trans-1,2-dichloroethene	24.9	UG/KG	ND	ND
Chloroform	25.6	UG/KG	ND	ND
1,2-dichloroethane	20.5	UG/KG	ND	ND
1,1,1-trichloroethane	27.4	UG/KG	ND	ND
Carbon tetrachloride	15.6	UG/KG	ND	ND
Bromodichloromethane	17	UG/KG	ND	ND
1,2-dichloropropane	25.5	UG/KG	ND	ND
trans-1,3-dichloropropene	17	UG/KG	ND	ND
Trichloroethene	25.3	UG/KG	ND	ND
Benzene	26.5	UG/KG	ND	ND
Dibromochloromethane	24.2	UG/KG	ND	ND
1,1,2-trichloroethane	35.1	UG/KG	ND	ND
cis-1,3-dichloropropene	21.5	UG/KG	ND	ND
2-chloroethylvinyl ether	53.6	UG/KG	ND	ND
Bromoform	26.1	UG/KG	ND	ND
1,1,2,2-tetrachloroethane	64	UG/KG	ND	ND
Tetrachloroethene	21.5	UG/KG	ND	ND
Chlorobenzene	31.1	UG/KG	ND	ND
Toluene	48	UG/KG	ND	ND
Ethylbenzene	90.5	UG/KG	ND	ND
Acrylonitrile	275	UG/KG	ND	ND
Acrolein	70.9	UG/KG	ND	ND
Halomethane Purgeable Cmpnds	29.2	UG/KG	0.0	0.0
Purgeable Compounds	275	UG/KG	0.0	0.0

Additional analytes determined;

Allyl chloride	25	UG/KG	ND	ND
4-methyl-2-pentanone	24	UG/KG	ND	ND
meta,para xylenes	35	UG/KG	ND	ND
Styrene	19	UG/KG	ND	ND
1,2,4-trichlorobenzene	979	UG/KG	ND	ND
Methyl Iodide	19	UG/KG	ND	ND
Chloroprene	17	UG/KG	ND	ND
Methyl methacrylate	36	UG/KG	ND	ND
2-nitropropane		UG/KG	ND	ND
1,2-dibromoethane	17	UG/KG	ND	ND
Isopropylbenzene	17	UG/KG	ND	ND
Benzyl chloride	38	UG/KG	ND	ND
ortho-xylene	23	UG/KG	ND	ND
Acetone	185	UG/KG	469.0	1290.0
Carbon disulfide	34	UG/KG	ND	ND
2-butanone		UG/KG	139.0	ND

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

POINT LOMA WASTEWATER TREATMENT PLANT

GRIT - Herbicides

From 01-JAN-2004 to 31-DEC-2004

Grit

Analyte	MDL	Units	PLR	PLR
			01-JUN-2004	01-NOV-2004
=====	=====	=====	P258063	P276694
2,4-dichlorophenoxyacetic acid	6.84	MG/KG	ND	ND
2,4,5-TP (Silvex)	6.33	MG/KG	ND	ND

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

I. Raw Sludge Data Summary

POINT LOMA WASTEWATER TREATMENT PLANT ANNUAL REPORT
YEAR: 2004

Raw Sludge
Average of 3 Shifts

Month	pH	%Total Solids	%Total Volatile Solids
January	5.97	4.4	75.2
February	6.19	4.5	73.9
March	6.00	4.4	75.2
April	6.02	4.3	74.5
May	5.96	4.3	74.8
June	5.92	4.2	75.3
July	5.78	4.1	74.8
August	5.77	4.0	75.8
September	5.78	4.1	74.4
October	6.09	4.4	71.1
November	6.19	3.9	74.3
December	6.21	3.8	75.3
Averages	5.99	4.2	74.6

J. Digester and Digested Sludge Data Summary

Point Loma Wastewater Treatment Plant Annual Report 2004 Digesters

N1P

	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)
JANUARY -2004	7.24	2.5	54.7	2950	56	62.5	37.1
FEBRUARY -2004	7.21	2.4	55.0	3090	55	62.3	37.4
MARCH -2004	7.21	2.4	54.3	3250	59	62.3	37.3
APRIL -2004	7.19	2.4	53.6	3050	63	62.5	37.2
MAY -2004	7.17	2.4	54.5	2920	60	62.5	37.1
JUNE -2004	7.17	2.4	54.5	2820	55	62.6	37.0
JULY -2004	7.17	2.4	55.2	2850	54	62.8	36.9
AUGUST -2004	7.14	2.3	55.6	2770	59	62.8	36.8
SEPTEMBER-2004	7.17	2.3	55.3	2620	53	62.9	36.6
OCTOBER -2004	7.18	2.5	53.0	2700	50	63.0	36.6
NOVEMBER -2004	7.18	2.4	52.3	2930	48	62.6	37.1
DECEMBER -2004	7.19	2.2	53.3	2860	52	62.5	37.1
Average:	7.19	2.4	54.3	2901	55	62.6	37.0

N2P

	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)
FEBRUARY -2004	7.11	2.1	52.9	2540	52	63.2	36.4
MARCH -2004	7.21	2.2	54.2	3100	57	62.4	37.2
APRIL -2004	7.20	2.3	53.6	3010	62	62.5	37.1
MAY -2004	7.19	2.3	54.9	2950	61	62.6	36.9
JUNE -2004	7.19	2.3	54.7	2930	56	62.7	36.9
JULY -2004	7.18	2.2	55.4	2900	57	62.8	36.9
AUGUST -2004	7.18	2.2	55.6	2880	59	62.9	36.7
SEPTEMBER-2004	7.21	2.3	56.0	2610	54	63.1	36.5
OCTOBER -2004	7.19	2.4	53.8	2680	50	63.0	36.5
NOVEMBER -2004	7.18	2.4	52.7	2960	48	62.8	36.9
DECEMBER -2004	7.19	2.2	53.5	2880	53	62.6	37.0
Average:	7.18	2.3	54.3	2858	55	62.8	36.8

C1P

	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)
JANUARY -2004	7.23	2.7	53.7	2970	60	62.7	37.1
FEBRUARY -2004	7.22	2.6	54.6	3090	63	62.6	37.2
MARCH -2004	7.21	2.5	53.6	3300	61	62.6	37.2
APRIL -2004	7.22	2.5	52.9	3040	63	62.7	37.1
MAY -2004	7.20	2.5	52.7	2930	62	62.8	36.9
JUNE -2004	7.19	2.5	52.8	2880	54	62.8	37.0
JULY -2004	7.19	2.5	53.8	2890	57	62.9	36.8
AUGUST -2004	7.16	2.5	53.5	2800	58	63.0	36.7
SEPTEMBER-2004	7.18	2.4	54.5	2660	53	63.2	36.5
OCTOBER -2004	7.21	2.5	52.9	2740	51	63.1	36.6
NOVEMBER -2004	7.21	2.4	51.8	2960	48	62.9	36.9
DECEMBER -2004	7.20	2.4	50.8	2890	55	62.8	36.9
Average:	7.20	2.5	53.1	2929	57	62.8	36.9

Point Loma Wastewater Treatment Plant Annual Report
2004 Digesters

C2P

	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)
JANUARY -2004	7.24	2.5	56.3	2920	57	62.9	36.9
FEBRUARY -2004	7.25	2.5	55.7	3030	57	62.7	37.0
MARCH -2004	7.23	2.4	54.6	3230	63	62.7	37.0
APRIL -2004	7.23	2.4	53.5	3010	62	62.9	36.8
MAY -2004	7.21	2.4	54.9	2890	61	62.9	36.7
JUNE -2004	7.20	2.4	55.0	2800	55	62.9	36.8
JULY -2004	7.20	2.3	55.2	2810	55	63.0	36.7
AUGUST -2004	7.17	2.4	54.8	2740	58	63.2	36.5
SEPTEMBER-2004	7.20	2.4	55.9	2630	54	63.2	36.5
OCTOBER -2004	7.21	2.4	53.7	2670	53	63.3	36.3
NOVEMBER -2004	7.21	2.4	51.8	2990	48	63.0	36.7
DECEMBER -2004	7.22	2.2	53.1	2940	54	62.8	36.8
	7.21	2.4	54.5	2888	56	63.0	36.7

S1P

	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
JANUARY - 2004	*	*	*	*	*	*	*	*
FEBRUARY- 2004	*	*	*	*	*	*	*	*
MARCH - 2004	*	*	*	*	*	*	*	*
APRIL - 2004	*	*	*	*	*	*	*	*
MAY - 2004	*	*	*	*	*	*	*	*
JUNE - 2004	*	*	*	*	*	*	*	*
JULY - 2004	*	*	*	*	*	*	*	*
AUGUST - 2004	*	*	*	*	*	*	*	*
SEPTEMBER-2004	*	*	*	*	*	*	*	*
OCTOBER - 2004	*	*	*	*	*	*	*	*
NOVEMBER- 2004	*	*	*	*	*	*	*	*
DECEMBER- 2004	*	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*

"This Digester was taken out of service on May 29, 2003 for rehabilitation."

S2P

	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
JANUARY - 2004	*	*	*	*	*	*	*	*
FEBRUARY- 2004	*	*	*	*	*	*	*	*
MARCH - 2004	*	*	*	*	*	*	*	*
APRIL - 2004	*	*	*	*	*	*	*	*
MAY - 2004	*	*	*	*	*	*	*	*
JUNE - 2004	*	*	*	*	*	*	*	*
JULY - 2004	*	*	*	*	*	*	*	*
AUGUST - 2004	*	*	*	*	*	*	*	*
SEPTEMBER-2004	*	*	*	*	*	*	*	*
OCTOBER - 2004	*	*	*	*	*	*	*	*
NOVEMBER- 2004	*	*	*	*	*	*	*	*
DECEMBER- 2004	*	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*

* = Not in service

Point Loma Wastewater Treatment Plant Annual Report
2004 Digesters

DIG 7

	pH	Total Solids (%)	volatile Solids (%)	Alkalinity (mg/L)	volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
JANUARY -2004	7.30	2.4	54.3	3130	57	63.0	36.5	*
FEBRUARY -2004	7.28	2.3	54.8	3170	56	62.6	36.9	*
MARCH -2004	7.29	2.2	53.3	3370	57	62.8	36.6	*
APRIL -2004	7.29	2.2	53.1	3160	62	62.4	37.0	*
MAY -2004	7.27	2.2	53.8	3040	62	62.5	36.9	*
JUNE -2004	7.27	2.2	54.2	2960	56	62.5	36.9	*
JULY -2004	7.25	2.1	54.8	2980	59	62.5	36.8	*
AUGUST -2004	7.23	2.2	54.9	2880	60	62.8	36.5	*
SEPTEMBER-2004	7.26	2.2	54.6	2740	54	62.5	36.8	*
OCTOBER -2004	7.25	2.3	53.8	2760	52	62.5	36.9	*
NOVEMBER -2004	7.27	2.0	49.5	3010	51	62.4	37.2	*
DECEMBER -2004	7.24	2.1	53.8	2920	55	62.6	36.9	*
=====	=====	=====	=====	=====	=====	=====	=====	=====
	7.27	2.2	53.7	3010	57	62.6	36.8	*

DIG 8

	pH	Total Solids (%)	volatile Solids (%)	Alkalinity (mg/L)	volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
JANUARY -2004	7.25	2.4	56.9	2930	58	62.7	36.9	*
FEBRUARY -2004	7.24	2.4	56.2	3040	55	62.2	37.5	*
MARCH -2004	7.24	2.4	55.1	3170	58	62.6	37.1	*
APRIL -2004	7.23	2.4	54.4	2930	63	62.3	37.2	*
MAY -2004	7.21	2.4	56.1	2790	63	62.4	37.0	*
JUNE -2004	7.22	2.4	55.6	2750	56	62.5	37.0	*
JULY -2004	7.21	2.3	56.3	2730	58	62.7	36.8	*
AUGUST -2004	7.17	2.3	56.3	2590	59	63.0	36.6	*
SEPTEMBER-2004	7.20	2.4	56.2	2460	54	62.7	36.9	*
OCTOBER -2004	7.20	2.4	55.4	2450	52	62.8	36.9	*
NOVEMBER -2004	7.20	2.4	55.3	2670	51	62.5	37.2	*
DECEMBER -2004	7.18	2.2	57.8	2520	55	62.1	37.5	*
=====	=====	=====	=====	=====	=====	=====	=====	=====
	7.21	2.4	56.0	2753	57	62.5	37.1	*