



March 28, 2008

Mr. Roger Briggs

Executive Officer  
Central Coast Region  
California Regional Water Quality Control Board  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401

Subject: City of Soledad 2007 Annual Report

Attention: Mr. Tom Kukol

Dear Mr. Briggs:

We would like to submit the attached **City of Soledad 2007 Annual Discharger Engineering Technical Report** and supporting documents in compliance with **Order No. R3-2005-0074 Provision E**.

If you have any questions, please call me at 831-223-5175.

Sincerely,

A handwritten signature in black ink that reads "Peter Le". The signature is written in a cursive, slightly slanted style.

Peter Le  
Senior Engineer

248 Main Street, Soledad, CA 93960

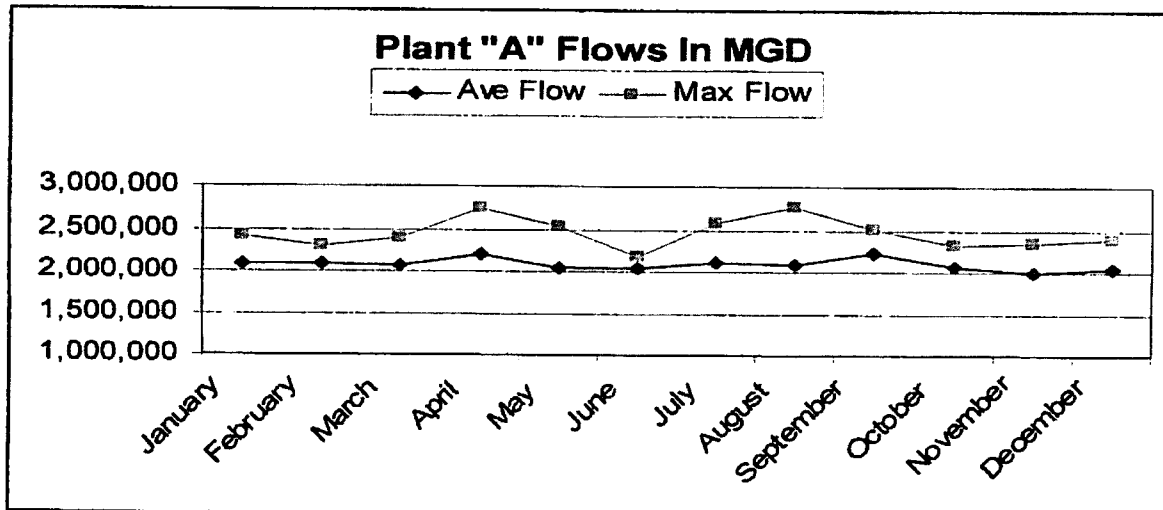
## L. Engineering Technical Report

This section of the Annual Report evaluates performance and capacity with respect to the treatment and disposal systems detailing:

1. inputs and outputs
2. precipitation
3. infiltration/percolation
4. evaporation

<b>Plant A Flows</b>	<b>Gallons Total Q</b>	<b>Gallons Average Q</b>	<b>Gallons Max Q</b>	<b>Gallons Min Q</b>
January	64,584,744	2,083,379	2,407,903	1,870,488
February	58,569,567	2,091,770	2,290,925	1,913,493
March	63,852,797	2,059,768	2,395,184	1,809,796
April	66,107,303	2,203,577	2,737,546	1,921,885
May	63,679,428	2,054,175	2,532,013	1,693,109
June	36,738,669	2,041,037	2,184,437	1,731,833
July	65,429,600	2,110,632	2,570,500	1,150,500
August	64,663,800	2,085,929	2,769,400	960,000
September	66,688,700	2,222,957	2,503,900	1,964,700
October	63,841,680	2,059,409	2,314,000	1,571,050
November	60,095,320	2,003,177	2,343,600	1,733,000
December	62,332,580	2,042,986	2,387,900	1,741,700
<b>Annual Total</b>	<b>737,584,188</b>	<b>25,058,761</b>	<b>29,437,308</b>	<b>18,489,804</b>
<b>Average</b>				

PLC down for twelve days during June

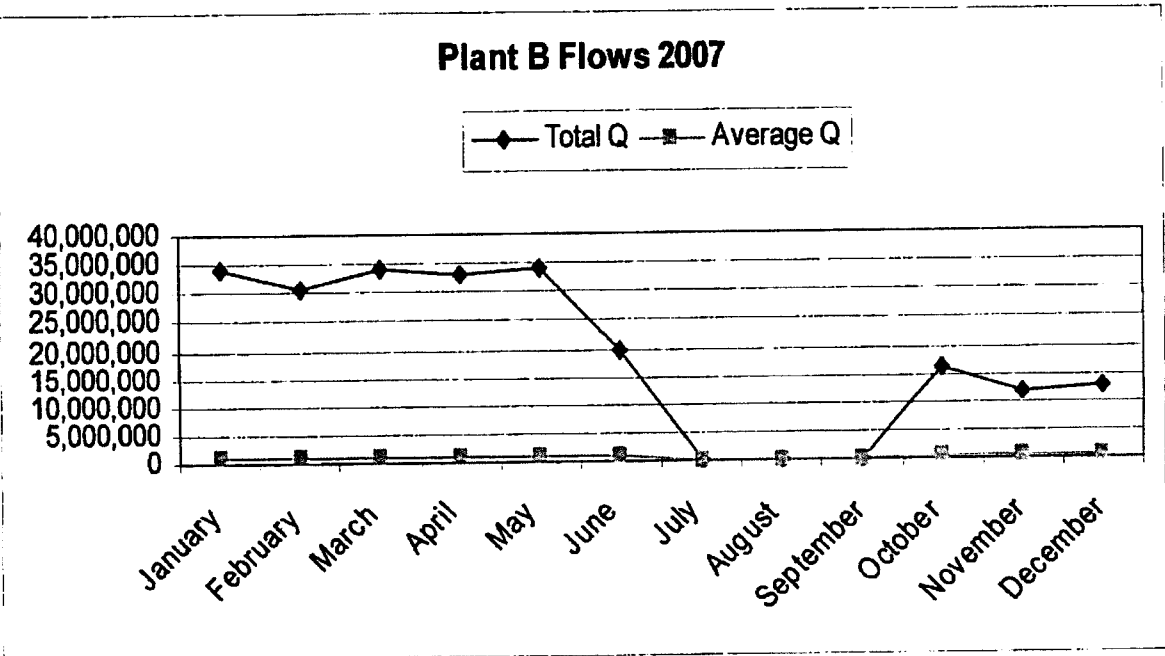


The issues with flow meters, although ongoing, are being resolved and an update will be incorporated into the 2008 Quarterly Report. Average Plant "A" Flow maintained a greater than 750,000 GPD unused capacity through out 2007.

Plant B Flows	Gallons Total Q	Gallons Average Q	Gallons Max Q	Gallons Min Q
January	34,101,956	1,100,063	1,100,127	1,100,002
February	30,801,248	1,100,045	1,100,102	1,100,001
March	34,101,723	1,100,056	1,100,105	1,100,004
April	33,002,157	1,100,072	1,100,136	1,100,017
May	34,102,052	1,100,066	1,100,128	1,100,015
June	19,800,721	1,100,040	1,100,090	1,100,001
July	No			
August		Data		
September			Inputs	
October	16,164,606	521,439	1,446,600	0
November	12,027,544	400,918	468,720	346,600
December	12,655,364	408,560	477,580	348,340
Annual Total				
Average				

PLC and Data Lines Down; Mid June, July, August, and September.

The issues with the Flow Meters and the Diverter Valve Controls are being resolved and Diversion to the Prison Plant is being accomplished by hand operation.



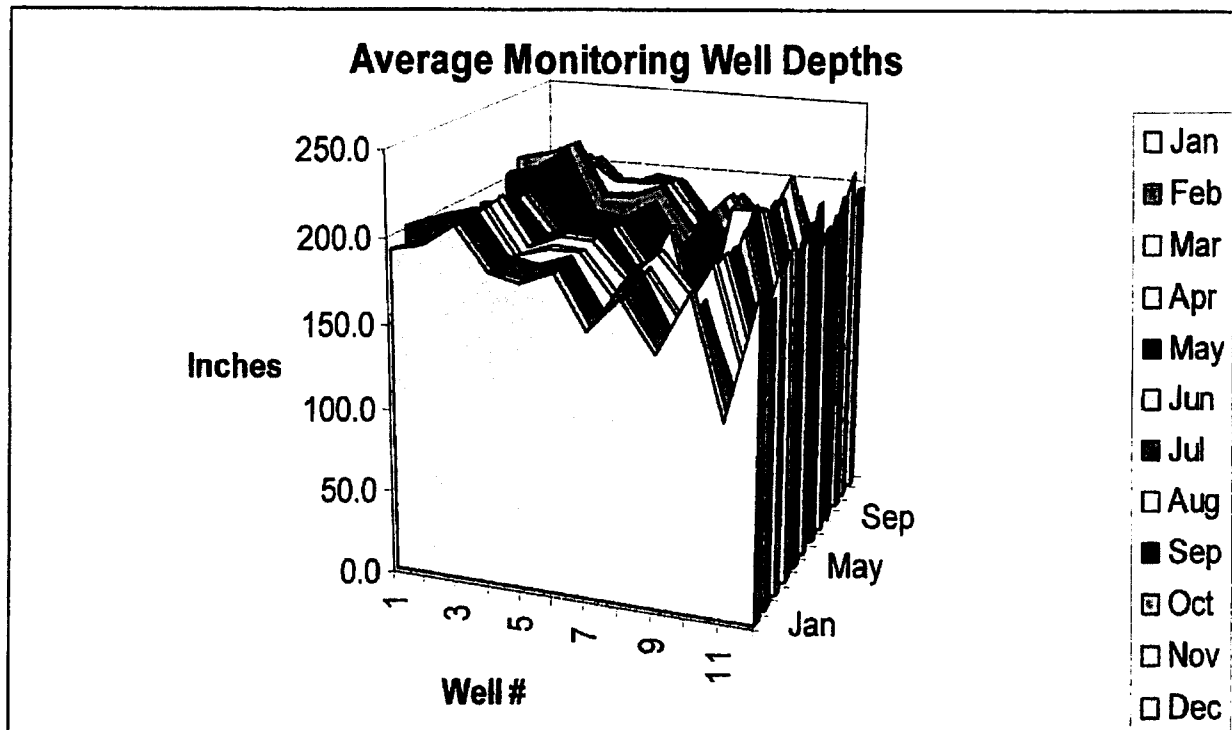
The Hydraulic Balance data is gathered from a compilation of in-house readings data and area wide monthly humidity data.

### Annual Percolation Pond Data 2007

	Rainfall	Evaporation	Plant A	Hydraulic Balance	Plant B	Hyd. Bal.
	Total Feet	Total Feet	RIBs #	MGD	RIBs #	MGD
January	0.75	0.06	3&4&7	2.12	1&2&3&5	1.4
February	1.98	0.03	3&4&7	2.66	1&2&3&5	1.4
March	1.03	0.05	3&4&7&8	2.12	1&2&3&5	0.63
April	0	0.3	3&4&7&8	2.88	1&2&3&5	0.63
May	0	0.3	6&7&8	2.18	1&2&3&5	0.63
June	0	0.3	6&7&8	2.45	1&2&3&5	0.6
July	0	0.3	5&6&7&8	2.26	1&2&3&5	0.58
August	0	0.3	5&6&8	2.47	1&2&3&5	0.60
September	0.48	0.2	7&8	2.36	1&2&3&5	0.40
October	0.52	0.2	7&8	2.43	1&2&3&5	0.40
November	0.05	0.3	7&8	2.42	1&2&3&5	0.40
December	0.5	0.1	7&8	2.74	1&2&3&5	0.50
Total	5.31	2.44	46.9 ac Ave	2.42 Ave	12.8 ac Ave	0.68 Ave

#### Plant (A) Hydraulic Balance:

With 5.31 ft 2007 Rainfall minus 2.44 ft 2007 Evaporation equaling 2.87 ft times 104 acres equals  $298.48 \text{ ac/ft/yr} \times 325,851 \text{ g/ac-ft} = (97.3 \text{ MG/yr}) / 365 \text{ days/yr} = 0.267 \text{ MGD}$ . The 2007 annual Plant (A) influent was  $737.6 \text{ MG} / 365 = 2.02 \text{ MGD}$ , therefore,  $2.02 + 0.267 = 2.29 \text{ MGD}$  disposed of by percolation during 2007. With 2 feet of freeboard remaining through out the Plant there remained 245 MG of unused capacity for the year.



**Plant (B) Hydraulic Balance:**

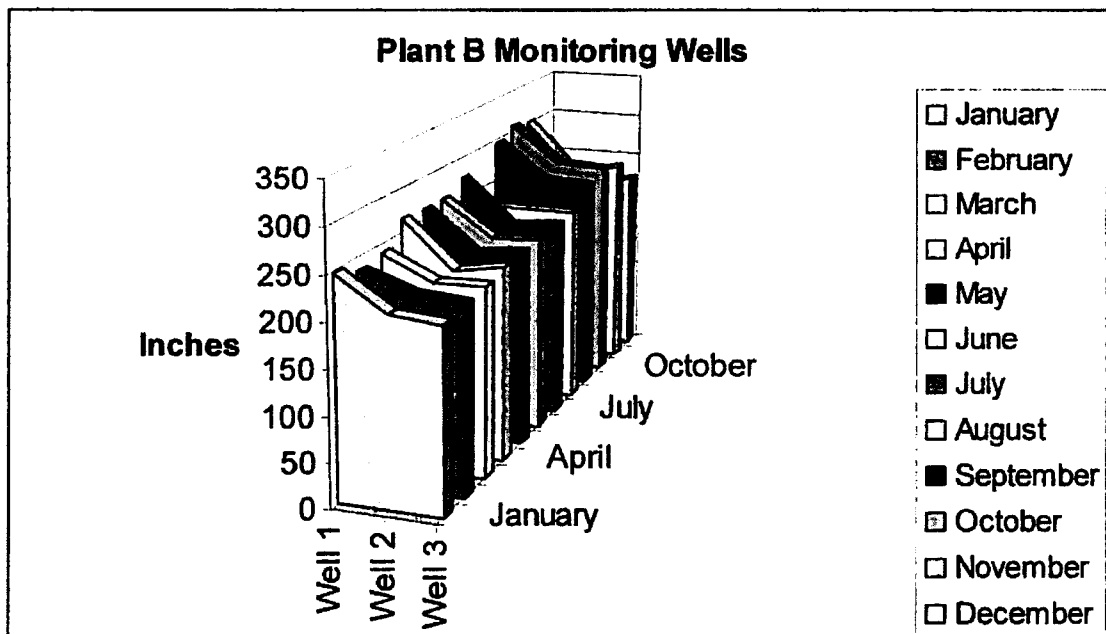
Using the same rainfall to evaporation balance of 2.87ft times 16.8 acres equals 48.2 ac/ft/yr. Therefore, 42.8 ac/ft/yr x 325,828 g/ac-ft = 15.7 MG/yr + 272.0 MG/yr influent = 287.7 MG percolated for the year. The high rate was accomplished during a period where the monitoring well data indicates and average ground water level at fifty (40) inches lower that annual average.

**Plant B Monitoring Wells Average Depths For 2007**

In Feet	Well 1	Well 2	Well 3
January	247	210	204
February	234	214	209
March	240	213	213
April	264	211	220
May	262	218	222
June	261	220	222
July	275	222	227
August	228	228	228
September	295	253	250
October	306	264	260
November	300	239	252
December	269	209	224
<b>Average</b>	<b>265.1</b>	<b>225.1</b>	<b>227.6</b>

**Conclusion:**

By all indications the Plant (A) and Plant (B) disposal systems are operating well within required capacity limits.

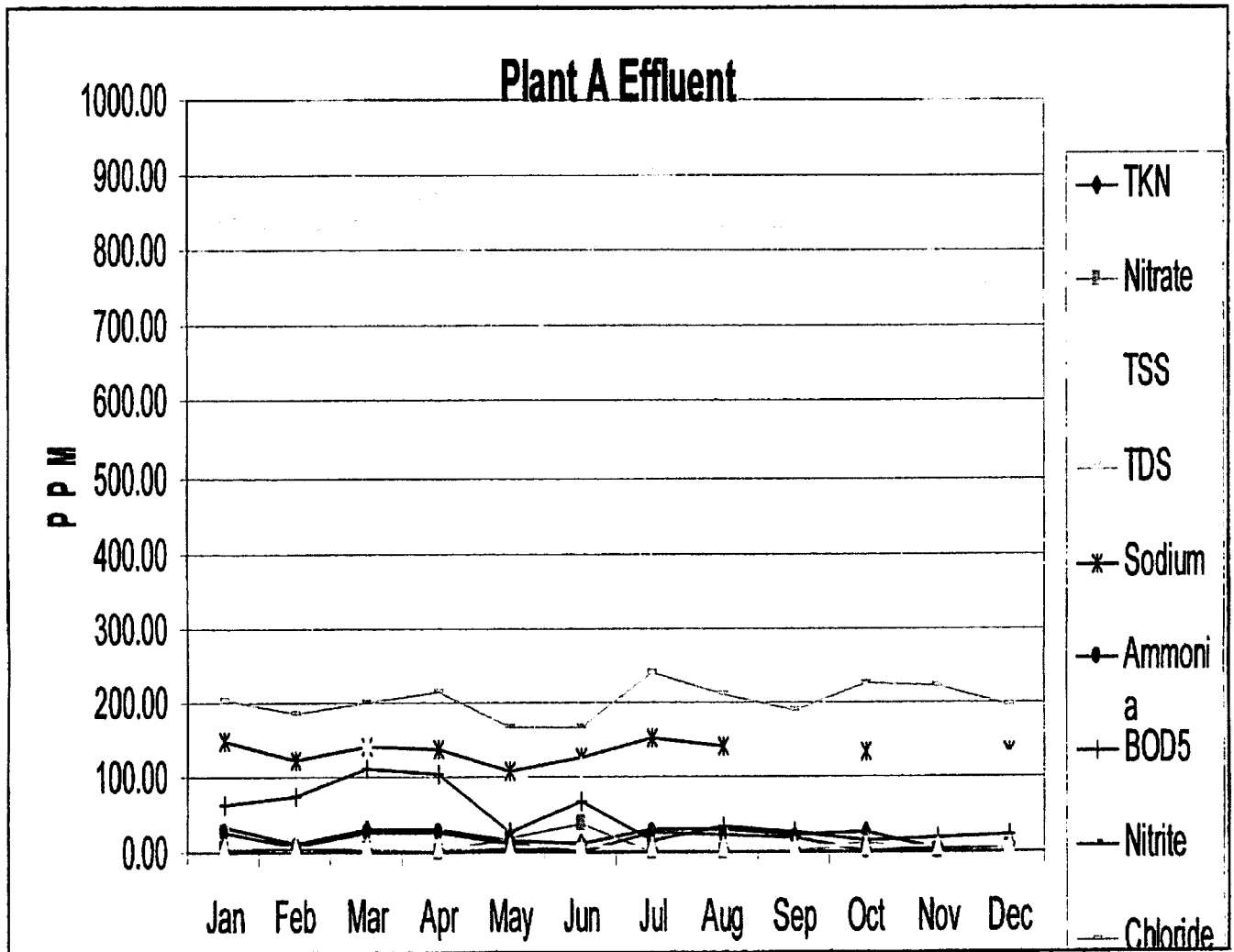


**Plant (A):**

Water quality results for 2007 are highlighted by limit breaks for BOD and TSS as follows:

**Plant A Effluent Water Quality**

	<u>TKN</u>	<u>Nitrate</u>	<u>TSS</u>	<u>TDS</u>	<u>Sodium</u>	<u>BOD5</u>	<u>Nitrite</u>	<u>Chloride</u>	<u>Sulfate(q)</u>	<u>pH</u>
January	32.7	2.0	42.0	850.0	147.0	25.5	64.0	0.5	202.0	
February	12.2	5.0	29.0	820.0	121.0	7.1	75.0	7.6	186.0	
March	31.3	2.0	56.0	845.0	140.0	24.9	109.0	0.3	198.0	139.0
April	30.3	1.0	42.0	880.0	138.0	24.1	104.0	0.6	215.0	
May	16.2	17.0	100.0	640.0	106.0	11.1	27.0	2.2	165.0	
June	9.8	36.0	92.0	780.0	124.0	1.1	67.0	1.5	167.0	113.0
July	31.0	0.2	44.0	910.0	152.0	26.8	14.0	0.1	239.0	
August	28.4	ND	37.0	830.0	140.0	20.3	32.0	0.2	209.0	
September	21.9	ND	37.0	830.0	-	17.5	27.0	1.0	190.0	153.0
October	27.1	10.8	69.0	870.0	133.0	1.1	14.0	0.3	225.0	
November	5.0	1.1	42.0	795.0	-	0.3	19.0	3.1	220.0	
December	5.6	7.2	47.0	780.0	131.0	0.6	21.0	5.6	197.0	123.0
<b>Average</b>	32.7	2.0	█	850.0	147.0	25.5	64.0	0.5	202.0	
<b>Limits</b>		5	30	990	175	30		250	205	6.5 To 8.3

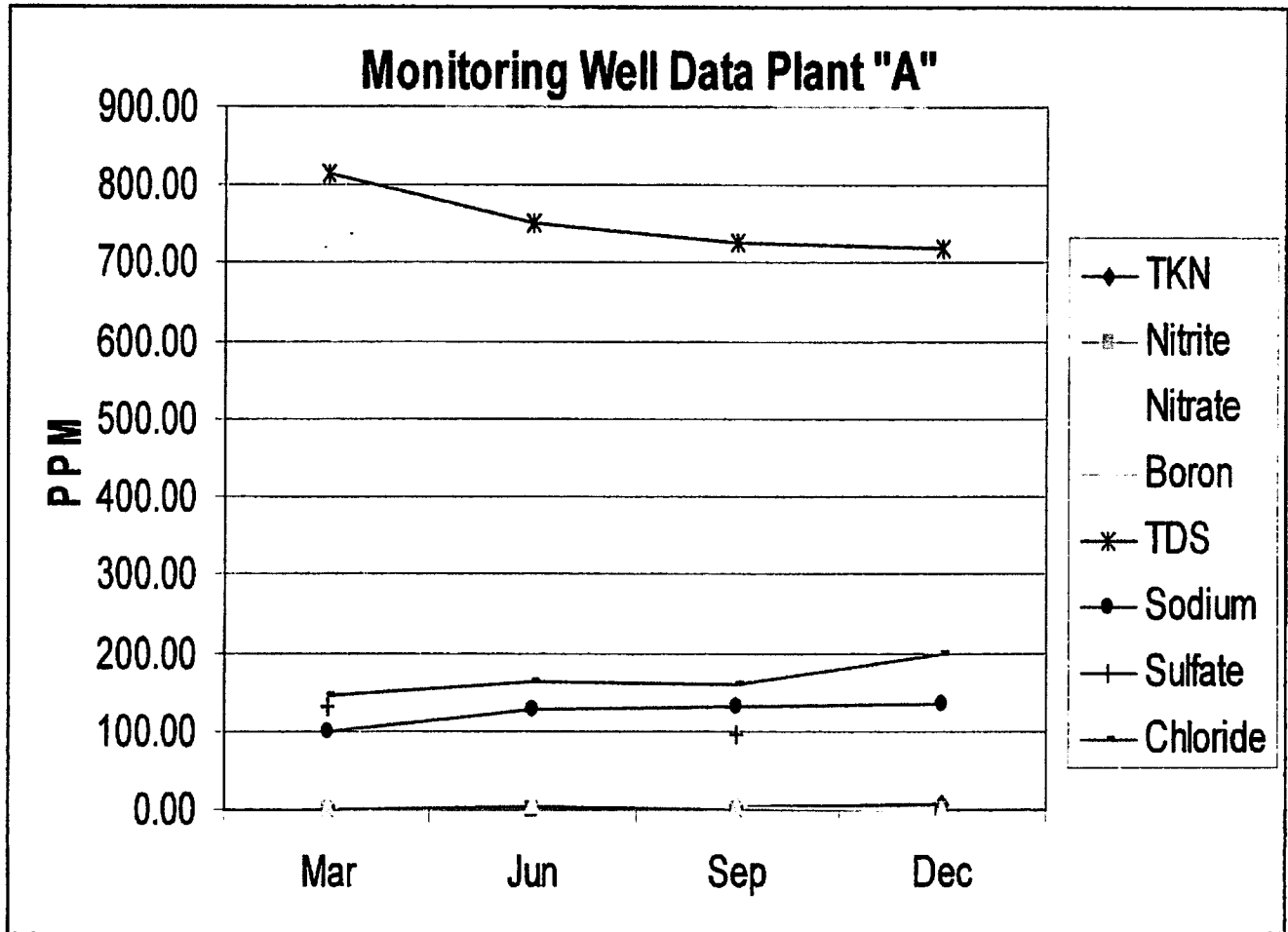


The TSS limit was exceeded for the year by 12 PPM average, all other limits were met.

**Plant (A):**

Plant A Monitoring Wells Water Quality Average

	<u>TKN</u>	<u>Nitrite</u>	<u>Nitrate</u>	<u>Boron</u>	<u>TDS</u>	<u>Sodium</u>	<u>Sulfate</u>
<b>March</b>	2.77	0.03	4.00	0.19	813.33	97.67	132.33
<b>June</b>	2.97	0.05			752.67	127.33	
<b>September</b>	5.20	0.29	3.20	0.38	726.67	130.33	97.33
<b>December</b>	6.90	0.00	0.40		720.00	136.00	
<b>Limits</b>			8.0				



Overall the water quality results show the ground water to be within objectives for the Salinas River Sub-basin Plan.

