

# ***Appendix C - 5***

***Summary of Nonradiological Monitoring Data***

**Table C - 5.1**  
**West Valley Demonstration Project State Pollutant Discharge**  
**Elimination System (SPDES) Sampling Program**  
**(effective September 1990)**

Outfall	Parameter	Limit	Sample Frequency
<b>001 (Process and Storm Wastewater)</b>	Flow	Monitor	2 per discharge
	Aluminum, total	14.0 mg/L	2 per discharge
	Ammonia (NH <sub>3</sub> )	*	2 per discharge
	Arsenic, dissolved	0.15 mg/L	2 per discharge
	BOD-5	**	2 per discharge
	Iron, total	**	2 per discharge
	Zinc, total recoverable	0.48 mg/L	2 per discharge
	Suspended solids	45.0 mg/L	2 per discharge
	Cyanide amenable to chlorination	0.022 mg/L	2 per discharge
	Settleable solids	0.3 mL/L	2 per discharge
	pH (range)	6.0 - 9.0	2 per discharge
	Oil and grease	15.0 mg/L	2 per discharge
	Sulfate	Monitor	2 per discharge
	Nitrate	Monitor	2 per discharge
	Nitrite	Monitor	2 per discharge
	Chromium (hexavalent), total rec.	Monitor	2 per discharge
	Cadmium, total recoverable	0.007 mg/L	2 per discharge
	Copper, total recoverable	0.03 mg/L	2 per discharge
	Lead, total recoverable	0.15 mg/L	2 per discharge
	Nickel, total	2.7 mg/L	2 per discharge
	Dichlorodifluoromethane	0.01 mg/L	2 per discharge
	Trichlorofluoromethane	0.01 mg/L	2 per discharge
	3,3-dichlorobenzidine	0.01 mg/L	2 per discharge
	Tributyl phosphate	32 mg/L	2 per discharge
	Vanadium	0.19 mg/L	2 per discharge
	Chromium, total	0.050 mg/L	annual
	Selenium, total	0.040 mg/L	annual
	Barium	0.5 mg/L	annual
	Antimony	1.0 mg/L	annual
	Chloroform	0.3 mg/L	annual
	Bis (2-ethylhexyl) phthalate	1.6 mg/L	semi-annual
	4-dodecene	0.6 mg/L	semi-annual
<b>007 (Sanitary and Utility Wastewater)</b>	Flow	Monitor	3 per month
	Ammonia	*	3 per month
	BOD-5	**	3 per month
	Iron, total	**	3 per month
	Suspended solids	45.0 mg/L	2 per month
	Settleable solids	0.3 mL/L	weekly
	pH (range)	6.0 - 9.0	weekly
	Chloroform	0.020 mg/L	annual
<b>008 (French Drain Wastewater)</b>	Flow	Monitor	3 per month
	BOD-5	**	3 per month
	Iron, total	**	3 per month
	pH (range)	6.0 - 9.0	weekly
	Silver, total	0.008 mg/L	annual
	Zinc, total	0.100 mg/L	annual

\* Reported as flow-weighted average of outfalls 001 and 007. Limit is 2.1 mg/L.

\*\* Reported as flow-weighted average of outfalls 001, 007, and 008. Limits are 5.0 mg/L for BOD-5 and 0.31 mg/L for FE. Iron data are net limits reported after background concentrations are subtracted.

**Table C - 5.2**

**West Valley Demonstration Project  
1992 SPDES Noncompliance Episodes**

<b>Date</b>	<b>Outfall</b>	<b>Parameters</b>	<b>Limit</b>	<b>Value</b>	<b>Comments</b>
<b>June 17, 1992</b>	007	Settleable Solids	0.3 ml/L	20 ml/L	<i>Draining of clarifier sump to outfall</i>
<b>December 9, 1992</b>	<i>Sum of the outfalls 001, 007, and 008</i>	Fe	0.31 mg/L	0.37 mg/L	<i>High iron values at outfall 001</i>

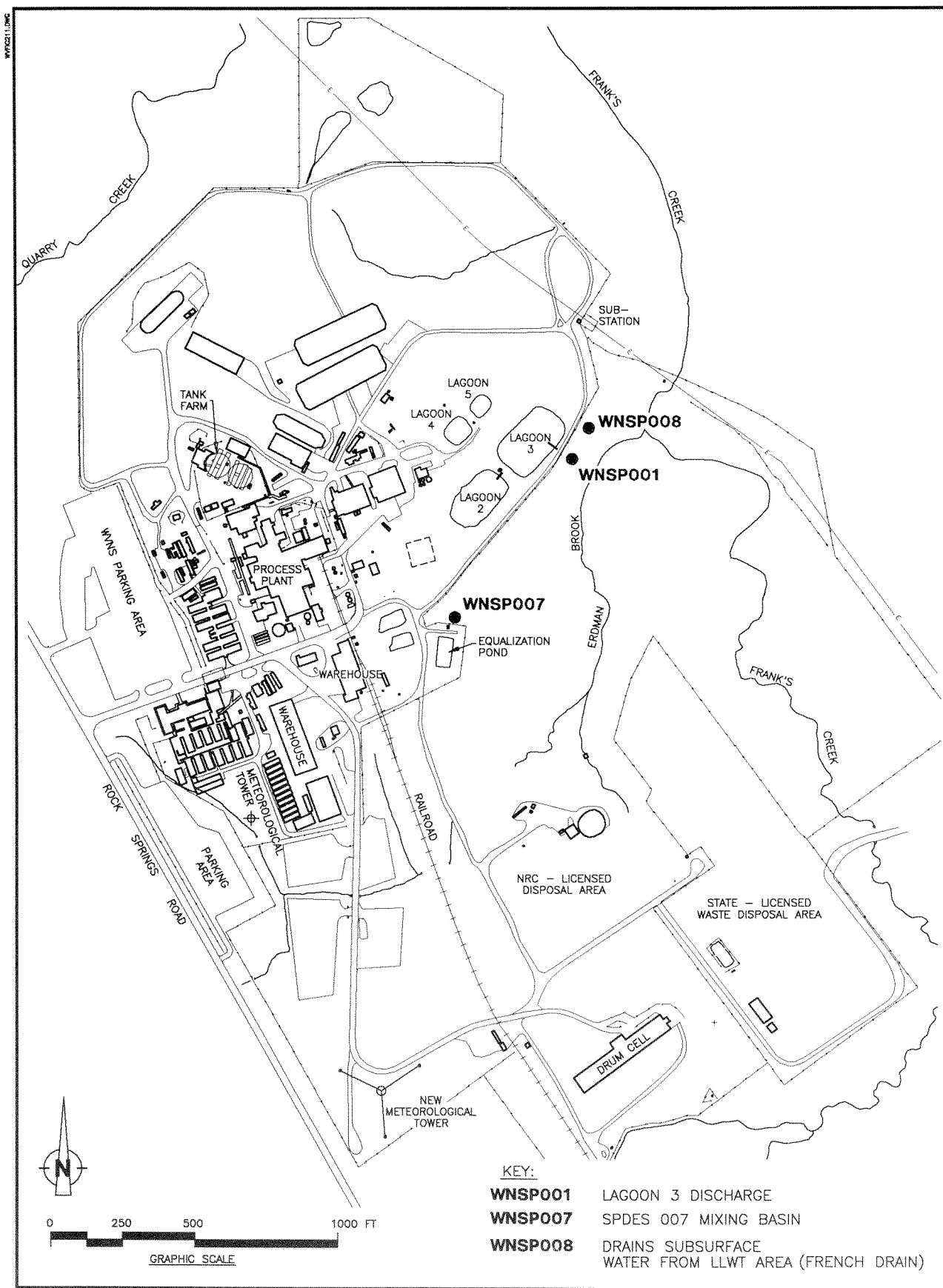
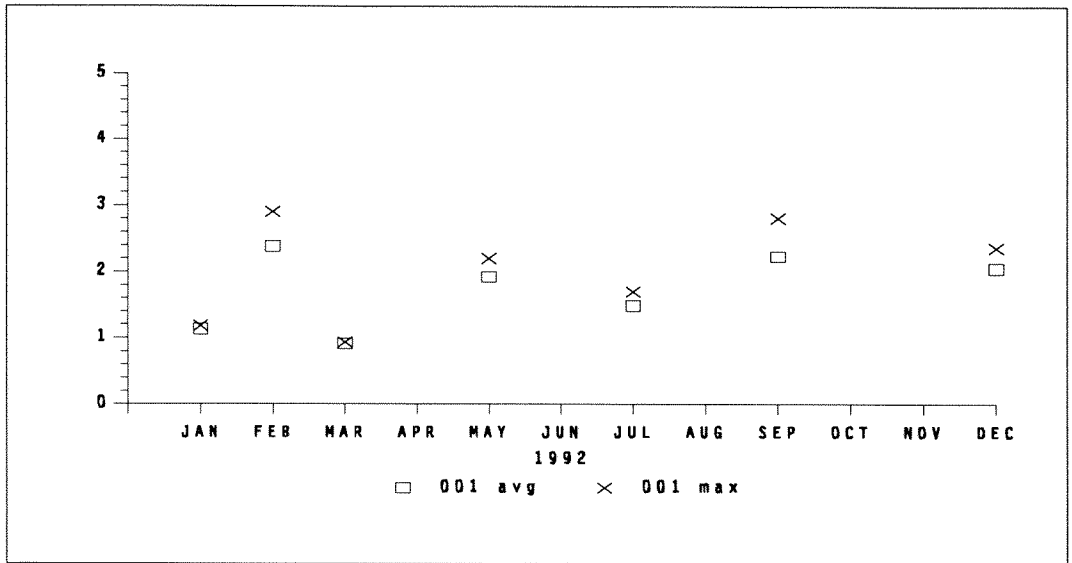


Figure C-5.1. SPDES Monitoring Points.

**Figure C - 5.2**

BIOCHEMICAL  
OXYGEN  
DEMAND-5  
(mg/L)

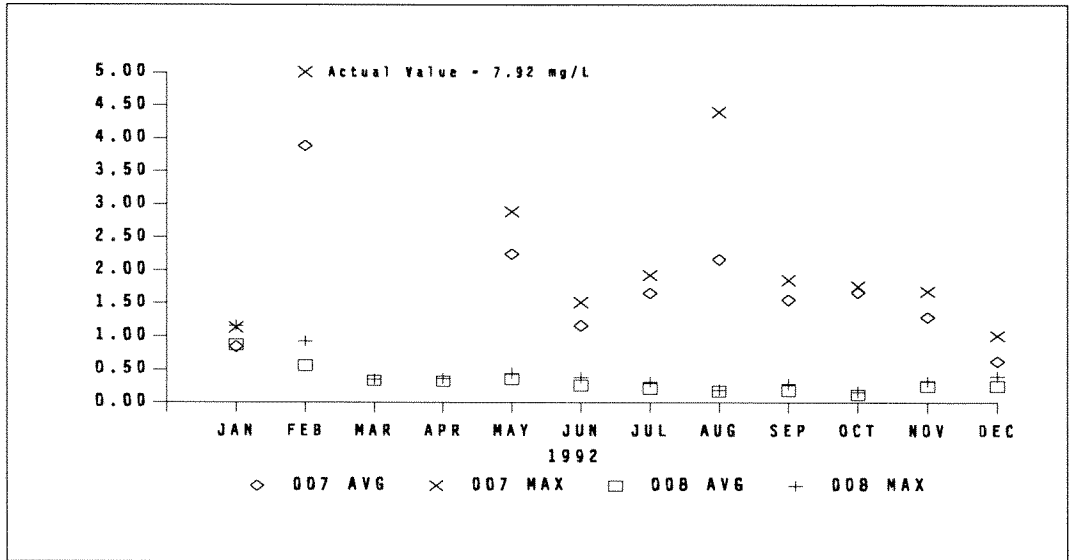
**Outfall 001**



**Figure C - 5.3**

BIOCHEMICAL  
OXYGEN  
DEMAND-5  
(mg/L)

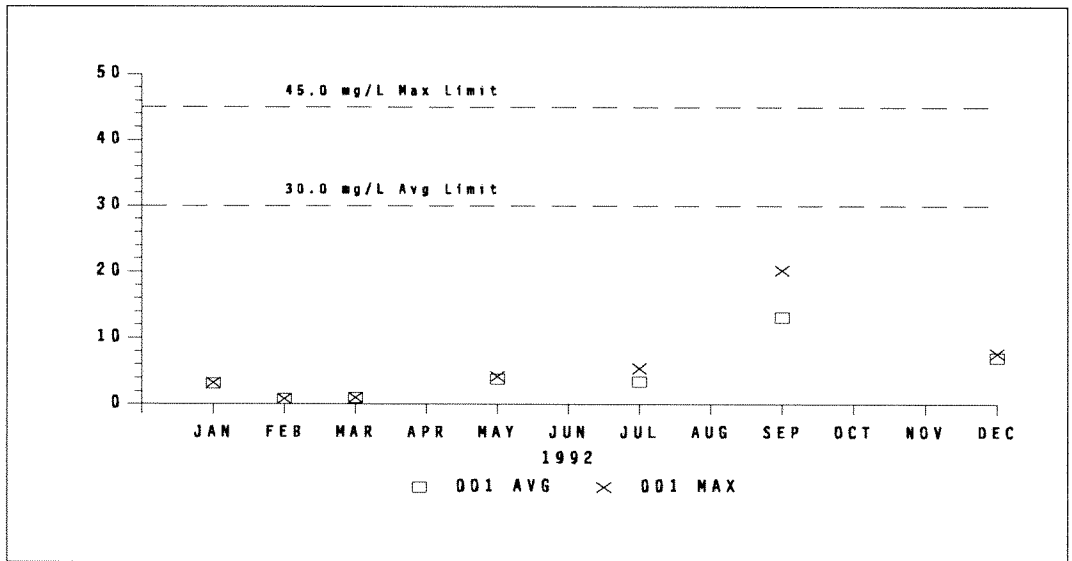
**Outfalls 007  
and 008**



**Figure C - 5.4**

SUSPENDED  
SOLIDS  
(mg/L)

**Outfall 001**



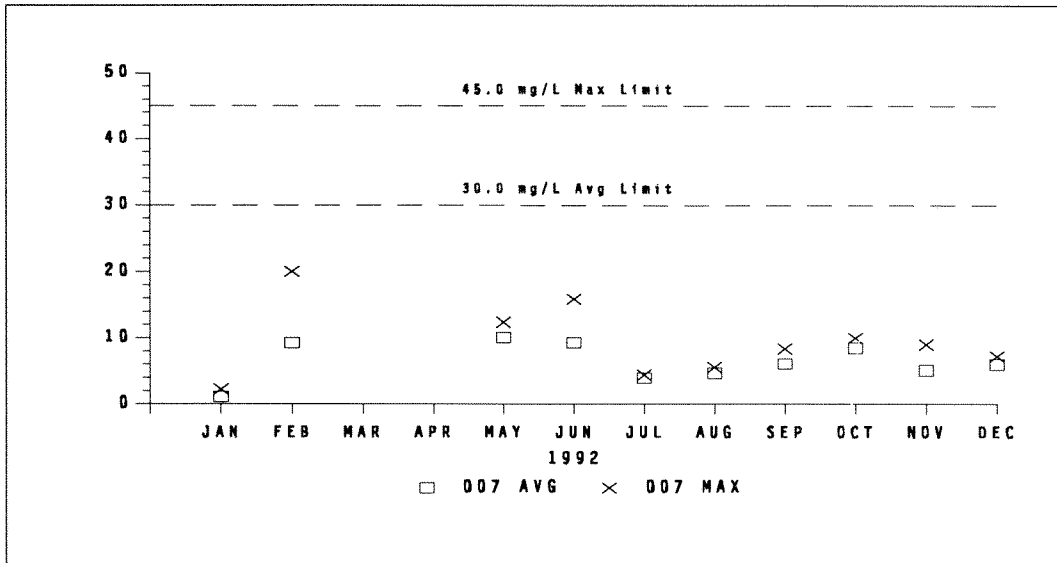


Figure C - 5.5

SUSPENDED SOLIDS (mg/L)

Outfall 007

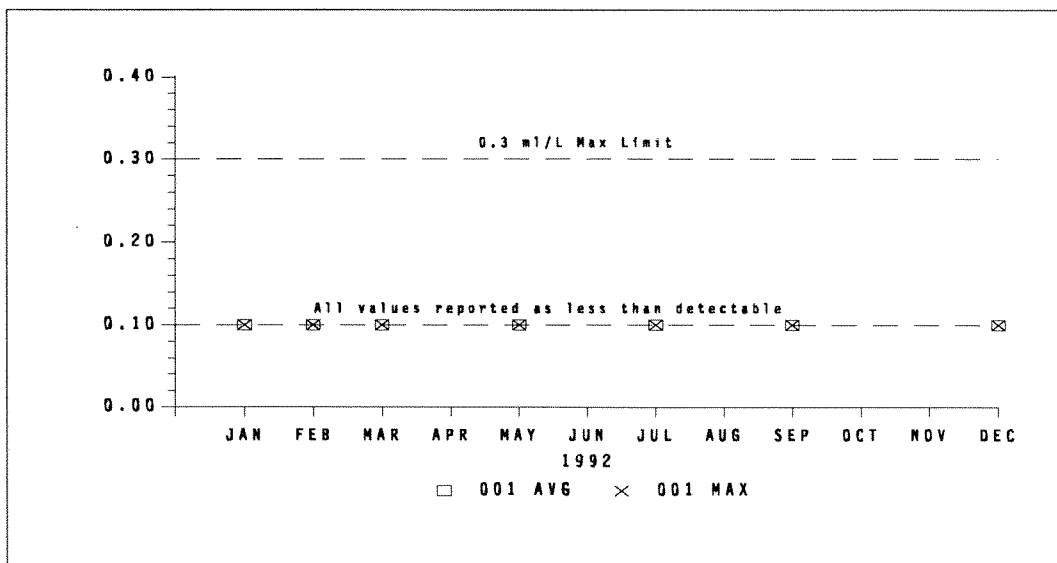


Figure C - 5.6

SETTLEABLE SOLIDS (ml/L)

Outfall 001

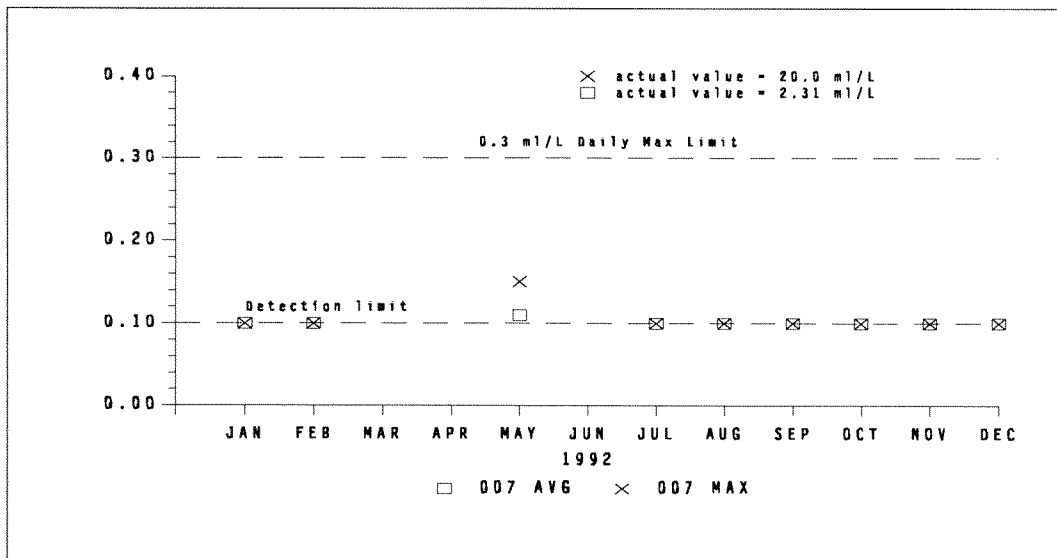


Figure C - 5.7

SETTLEABLE SOLIDS (ml/L)

Outfall 007

Figure C - 5.8

AMMONIA  
(mg/L)

Outfall 001

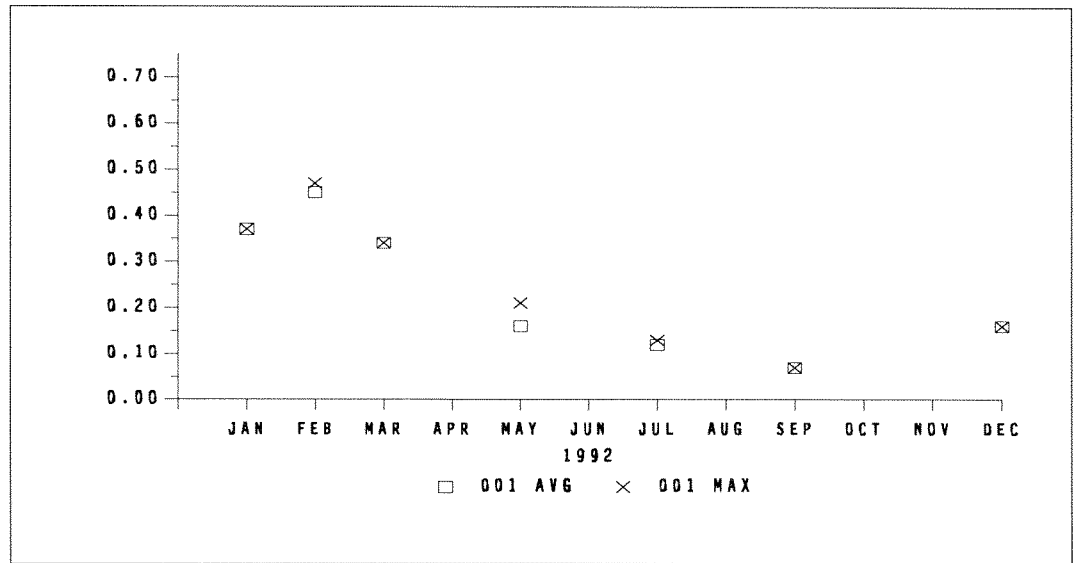


Figure C - 5.9

AMMONIA  
(mg/L)

Outfall 007

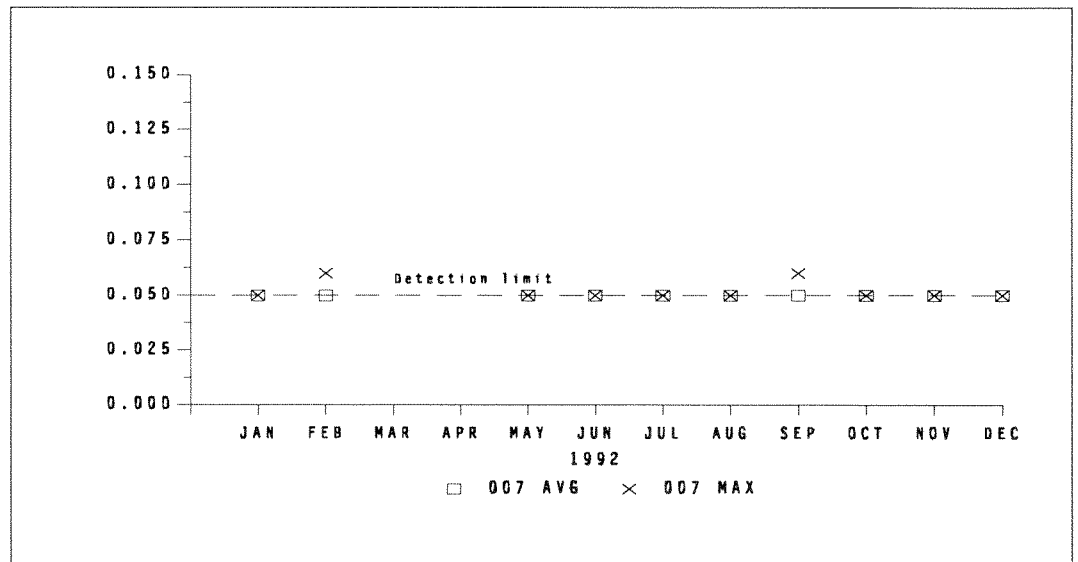
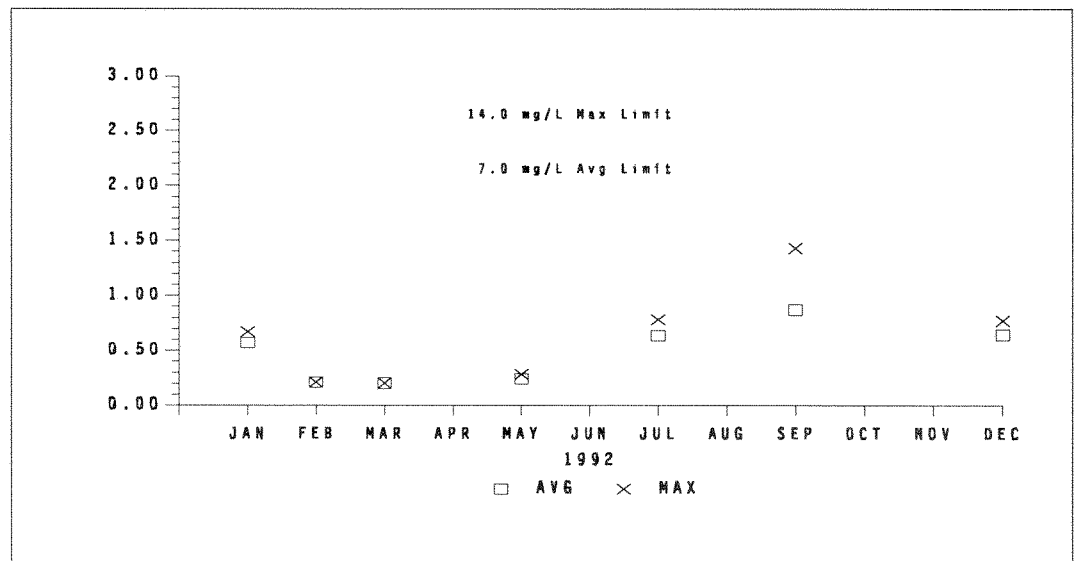


Figure C - 5.10

METALS (ALUMINUM)  
(mg/L)

Outfall 001



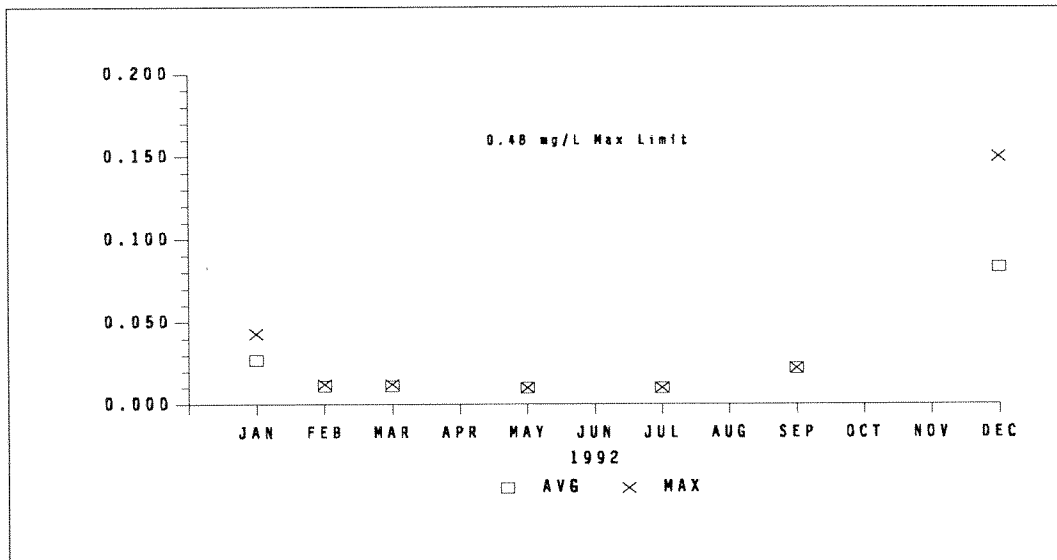


Figure C - 5.11

METALS (ZINC)  
(mg/L)

Outfall 001

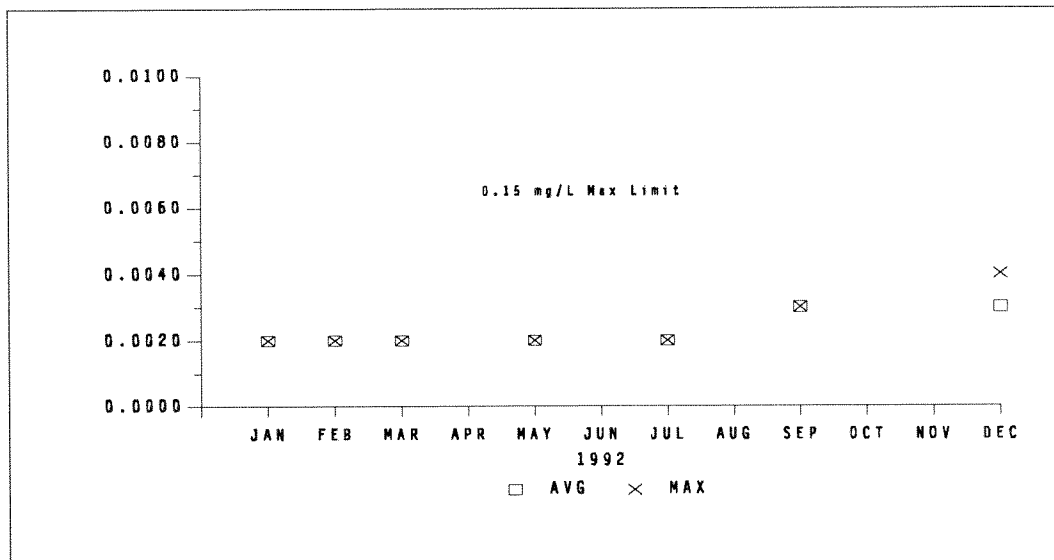


Figure C - 5.12

METALS (ARSENIC)  
(mg/L)

Outfall 001

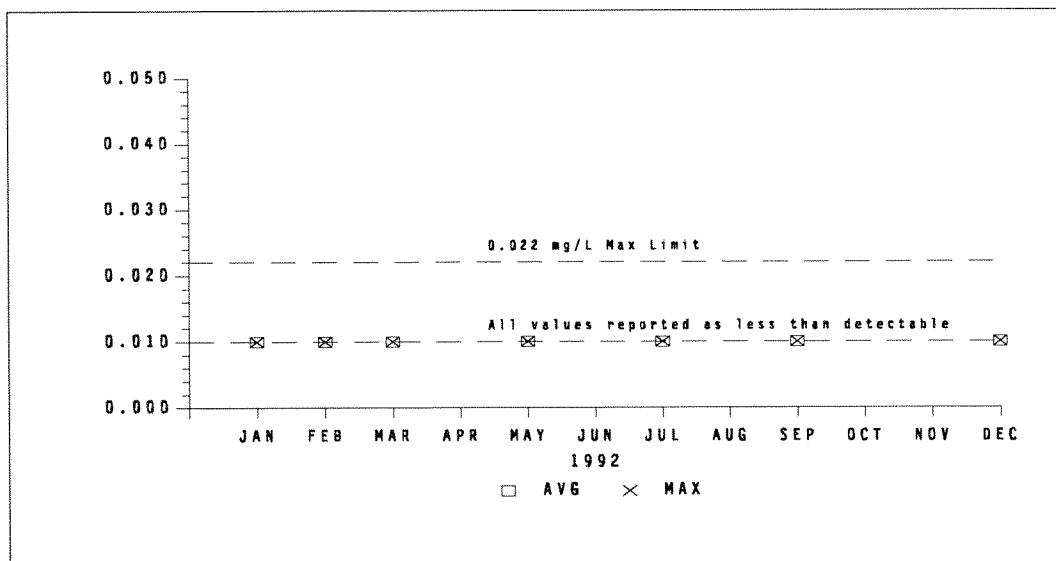


Figure C - 5.13

CYANIDE  
(mg/L)

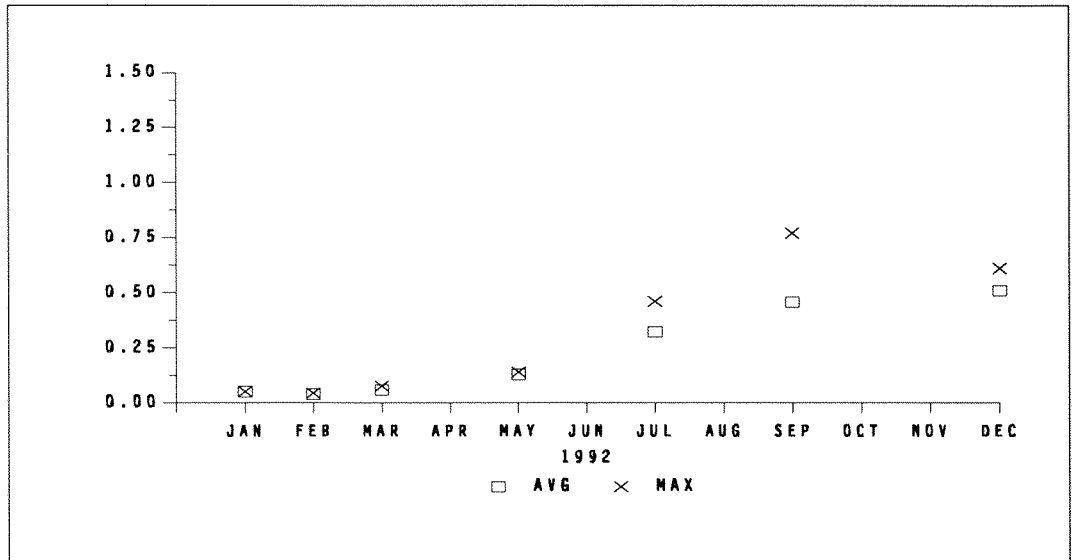
Outfall 001



**Figure C - 5.14**

METALS (IRON)  
(mg/L)

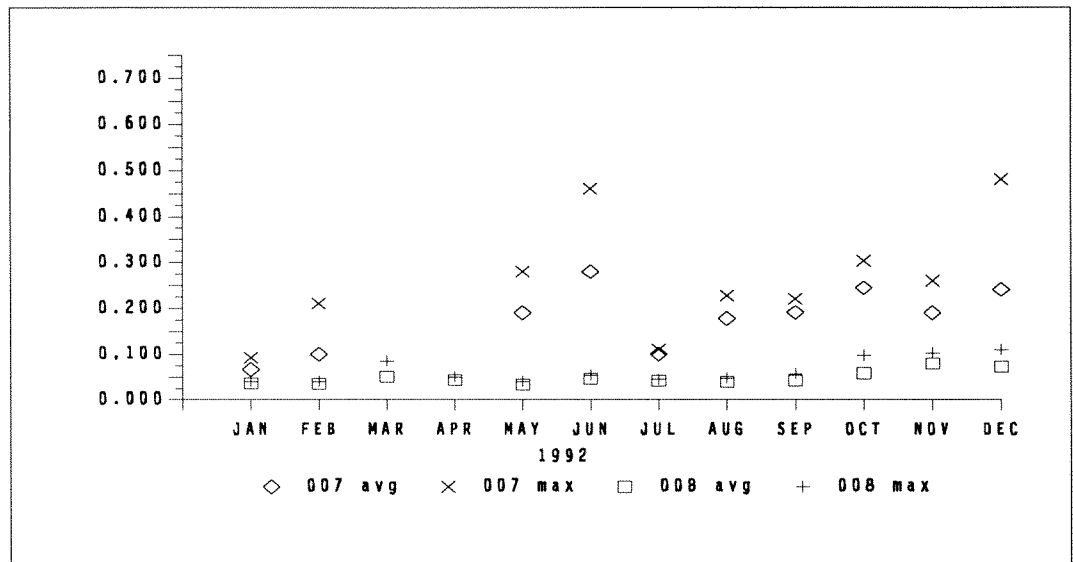
Outfall 001



**Figure C - 5.15**

METALS (IRON)  
(mg/L)

Outfalls 007  
and 008



**Figure C - 5.16**

METALS (COPPER)  
(mg/L)

Outfall 001

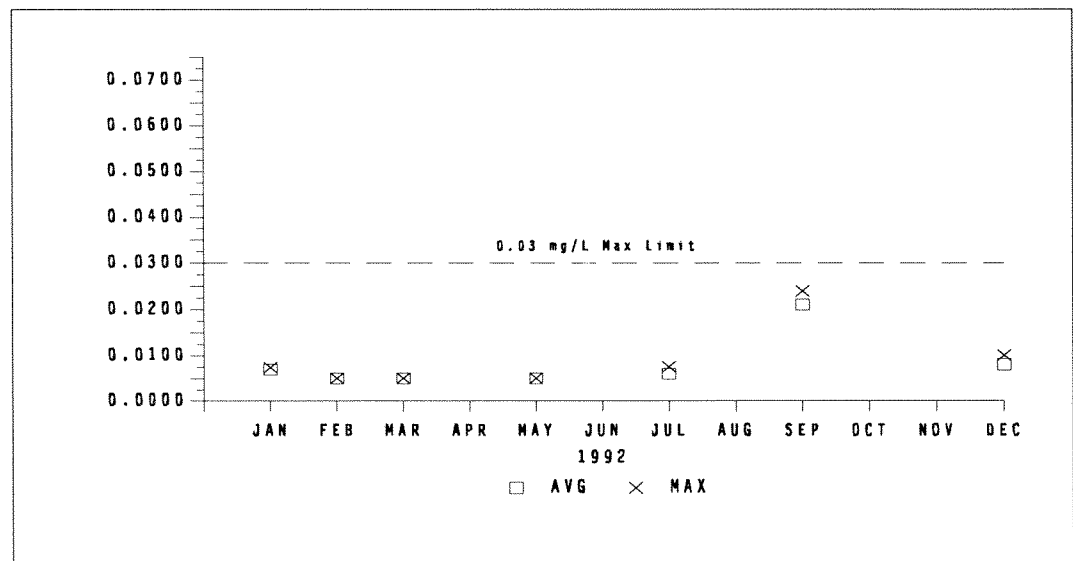


Figure C - 5.17

METALS (CADMIUM)  
(mg/L)

Outfall 001

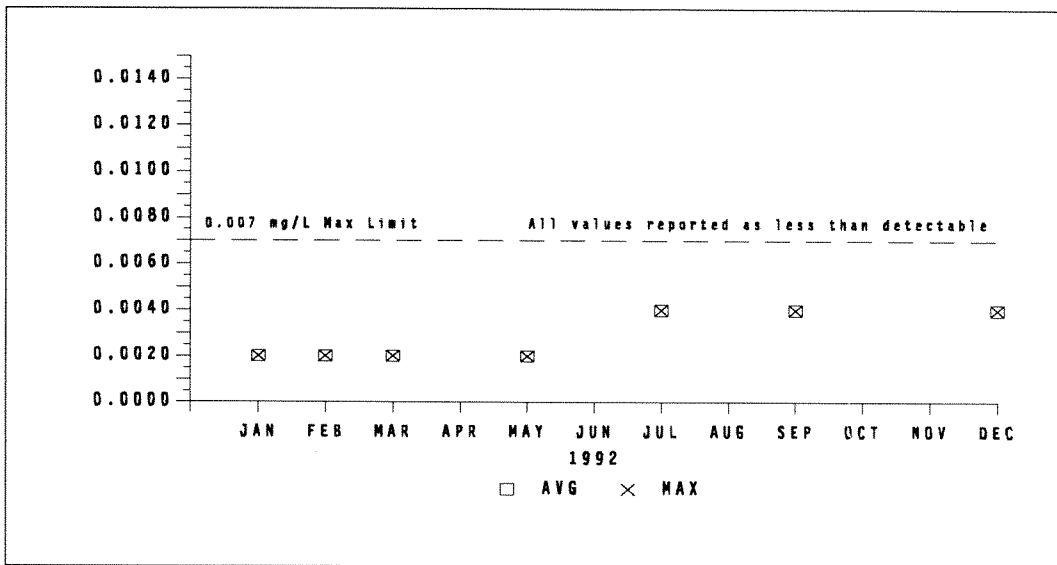


Figure C - 5.18

METALS (CHROMIUM, VI)  
(mg/L)

Outfall 001

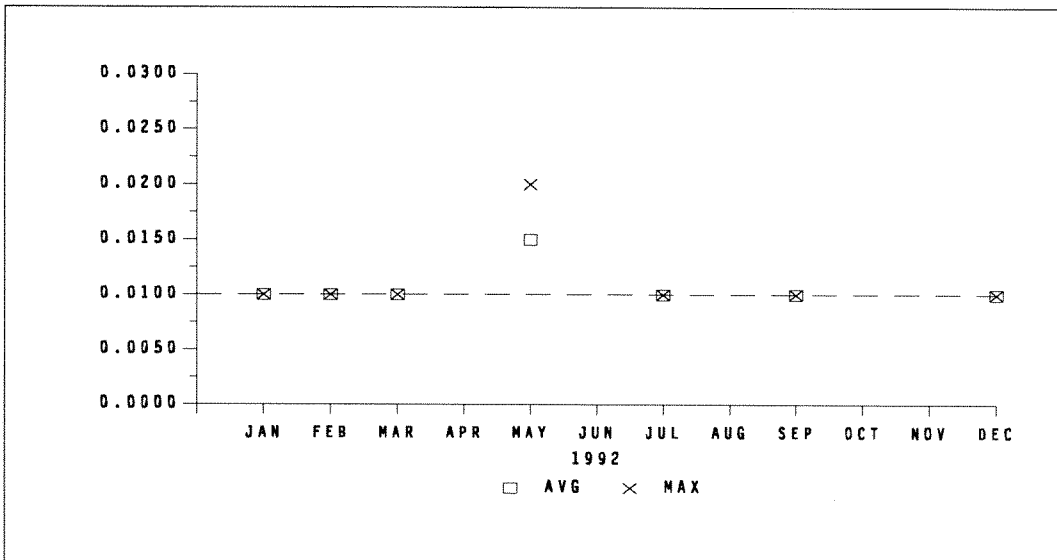


Figure C - 5.19

METALS (LEAD)  
(mg/L)

Outfall 001

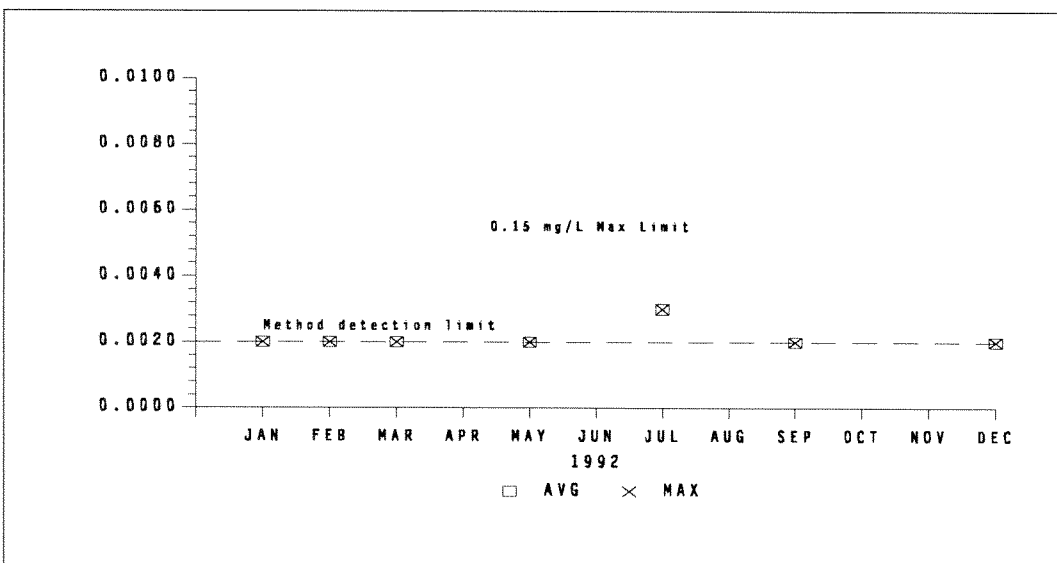


Figure C - 5.20

NITRATE (NO<sub>3</sub>-N)  
(mg/L)

Outfall 001

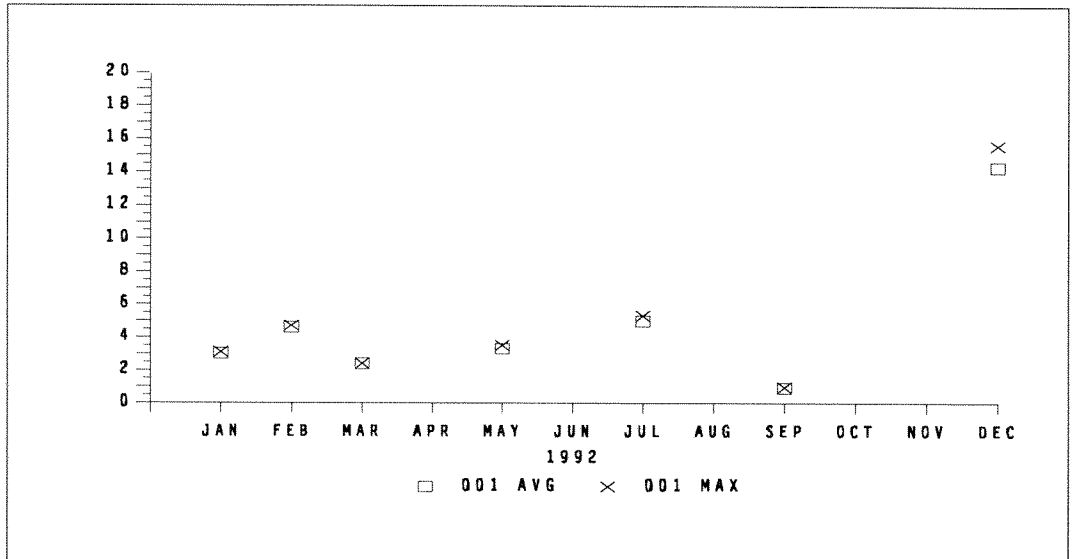


Figure C - 5.21

NITRITE (NO<sub>2</sub>-N)  
(mg/L)

Outfall 001

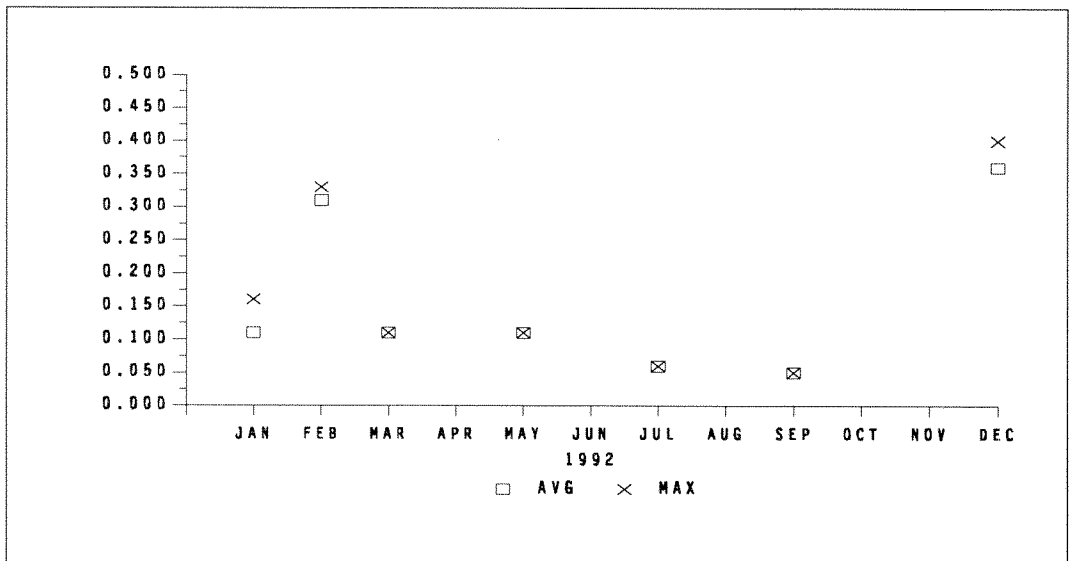
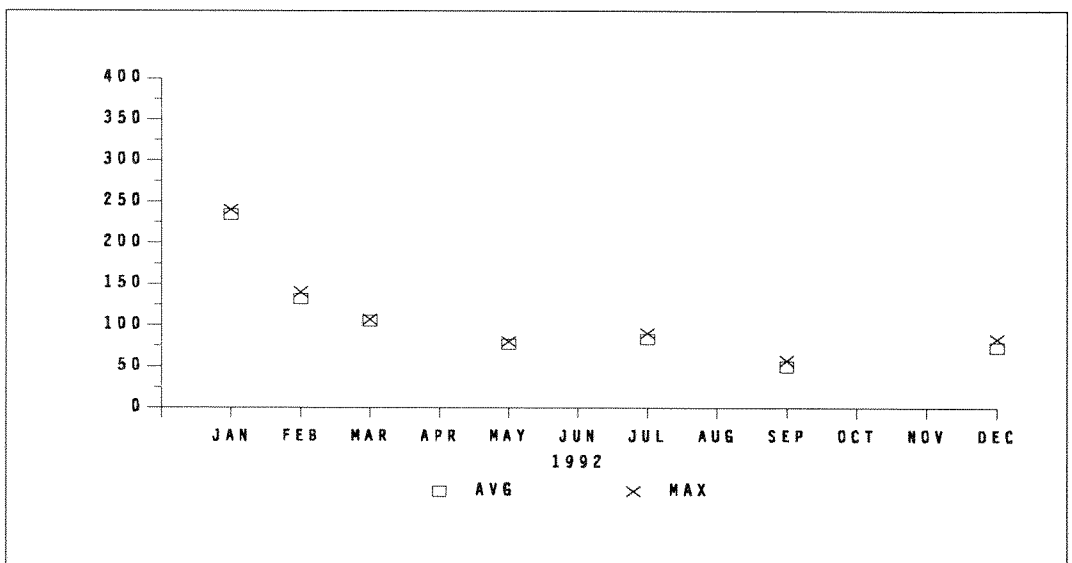
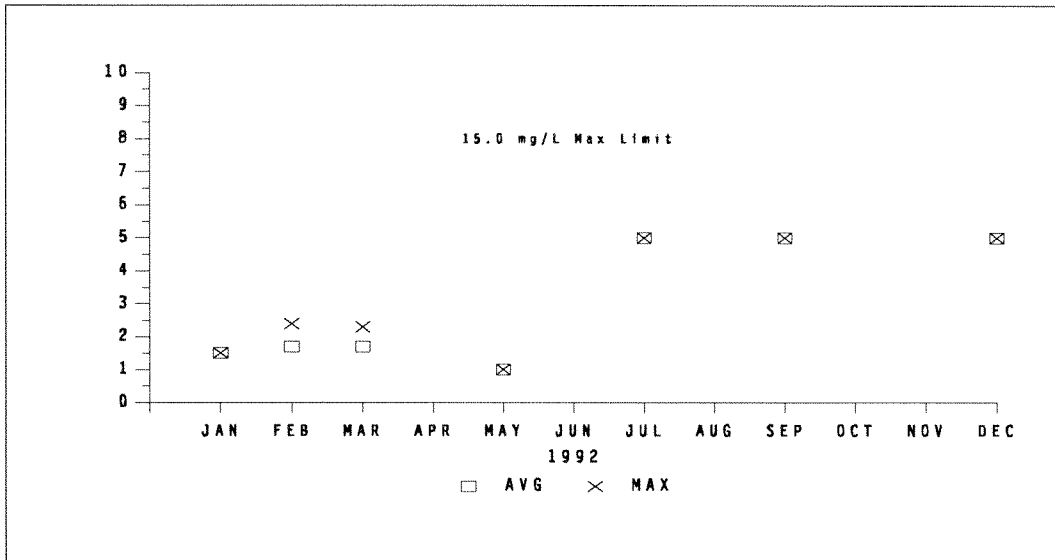


Figure C - 5.22

SULFATE-S  
(mg/L)

Outfall 001

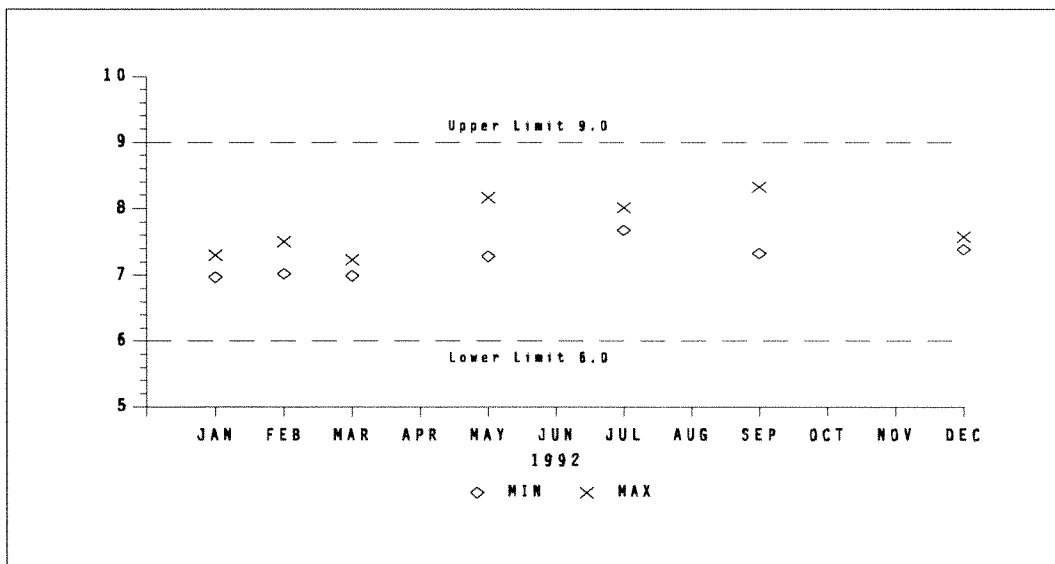




**Figure C - 5.23**

OIL AND GREASE  
(mg/L)

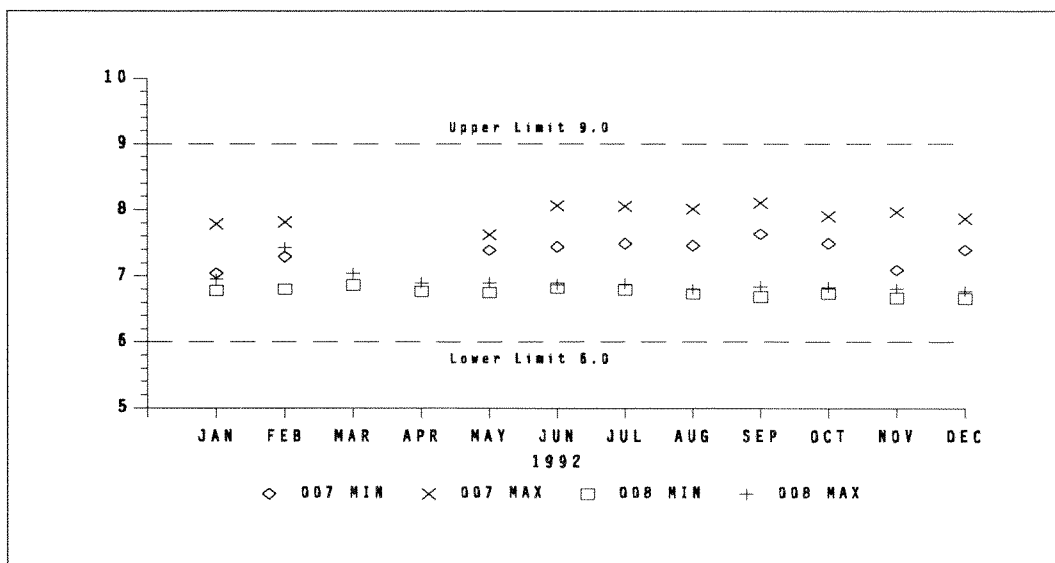
**Outfall 001**



**Figure C - 5.24**

pH  
(standard units)

**Outfall 001**



**Figure C - 5.25**

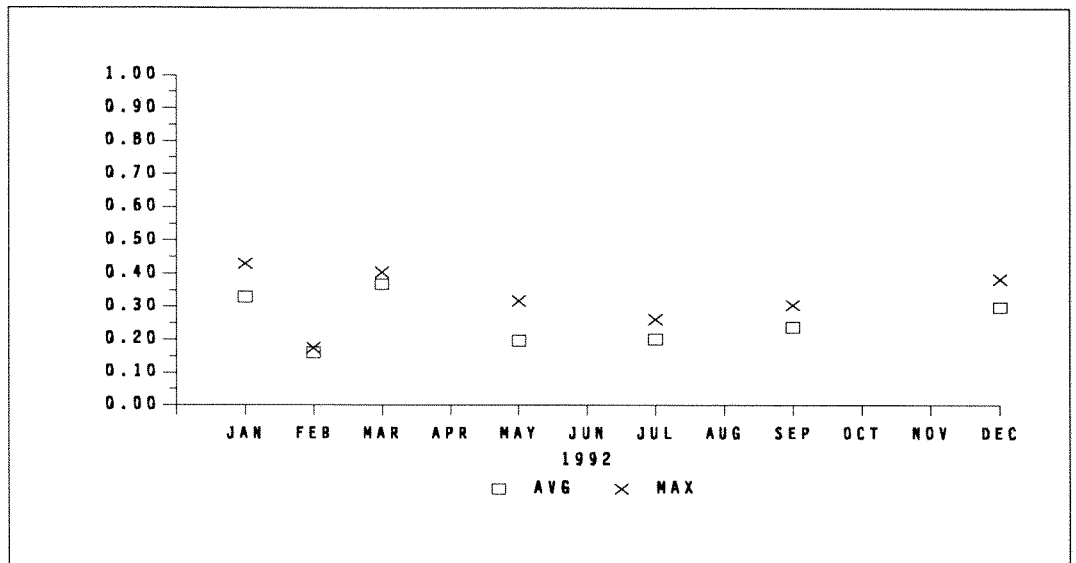
pH  
(standard units)

**Outfalls 007  
and 008**

**Figure C - 5.26**

DISCHARGE RATE  
(MGD)

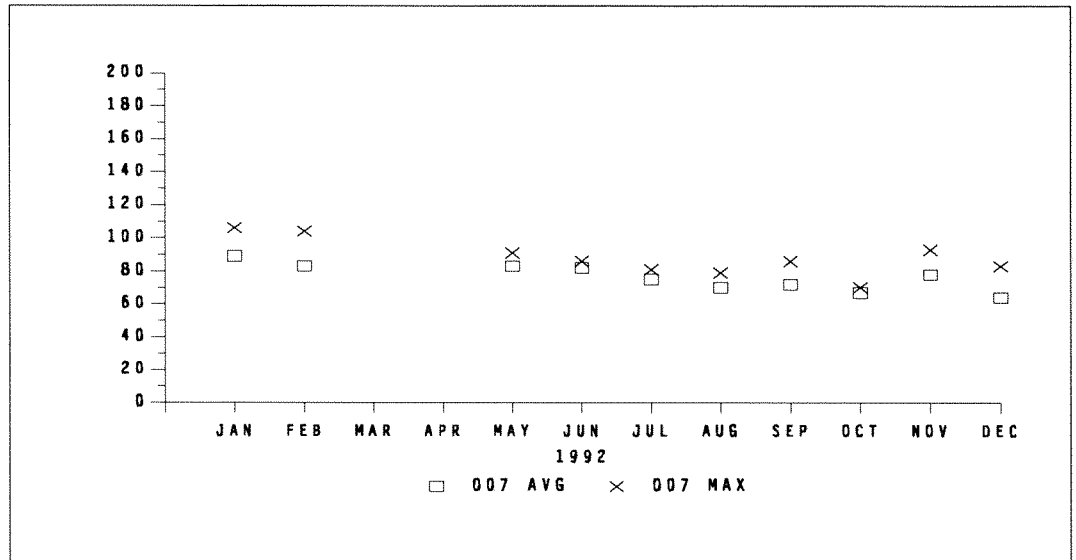
**Outfall 001**



**Figure C - 5.27**

DISCHARGE RATE  
(GPD X 1000)

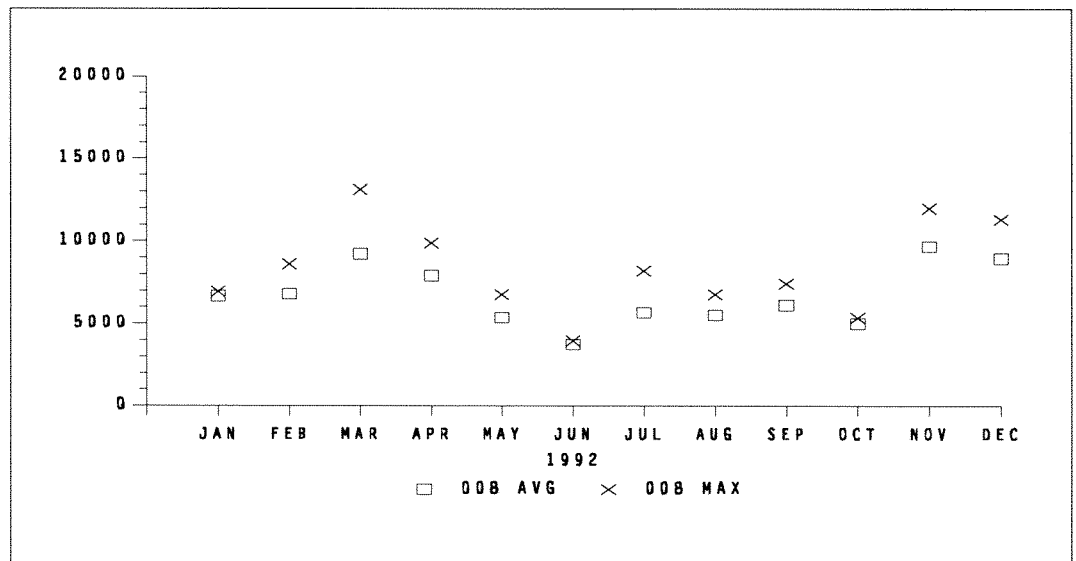
**Outfall 007**

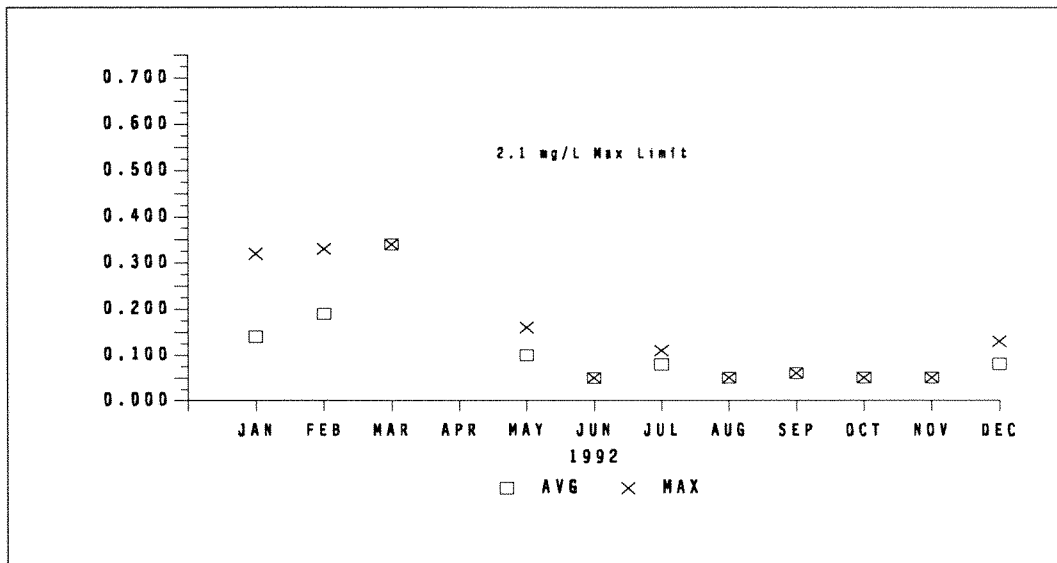


**Figure C - 5.28**

DISCHARGE RATE  
(GPD)

**Outfall 008**

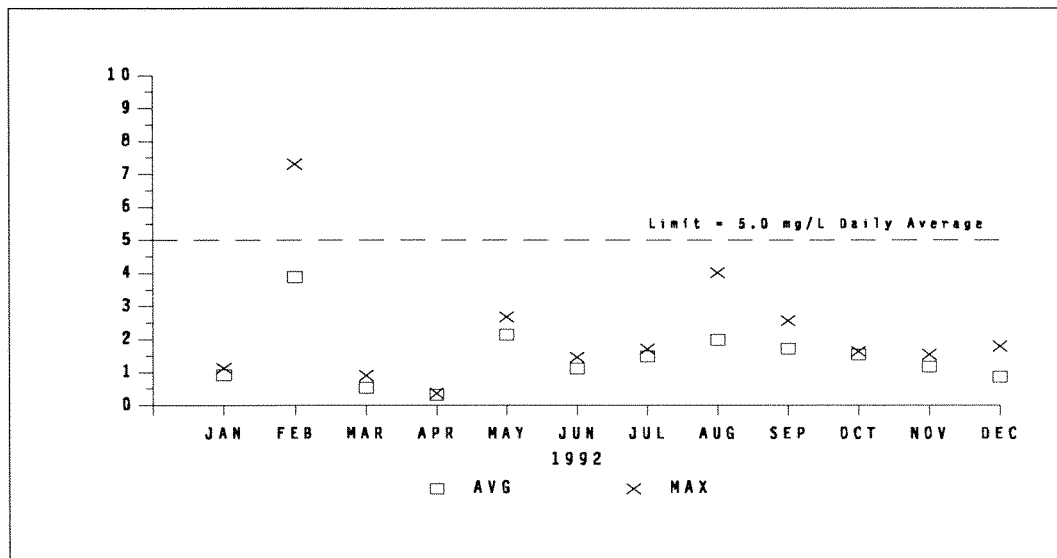




**Figure C - 5.29**

FLOW-WEIGHTED  
AVERAGES  
(mg/L)

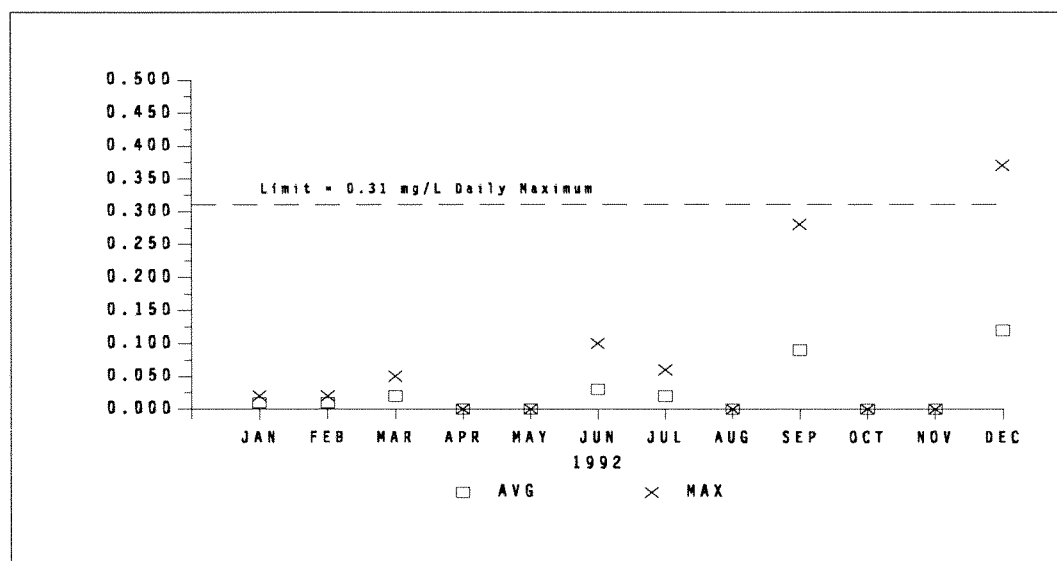
**Ammonia**



**Figure C - 5.30**

FLOW-WEIGHTED  
AVERAGES  
(mg/L)

**Biochemical Oxygen  
Demand-5**



**Figure C - 5.31**

FLOW-WEIGHTED  
AVERAGES  
(mg/L)

**Iron**

Figure C - 5.32

NICKEL  
(mg/L)

Outfall 001

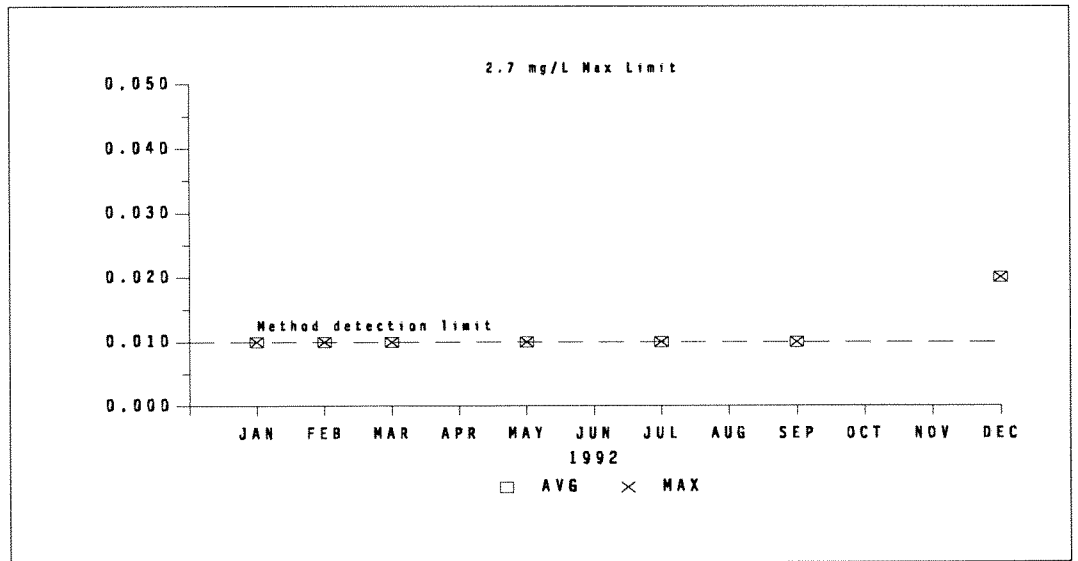


Figure C - 5.33

TRICHLOROFLUOROMETHANE  
(mg/L)

Outfall 001

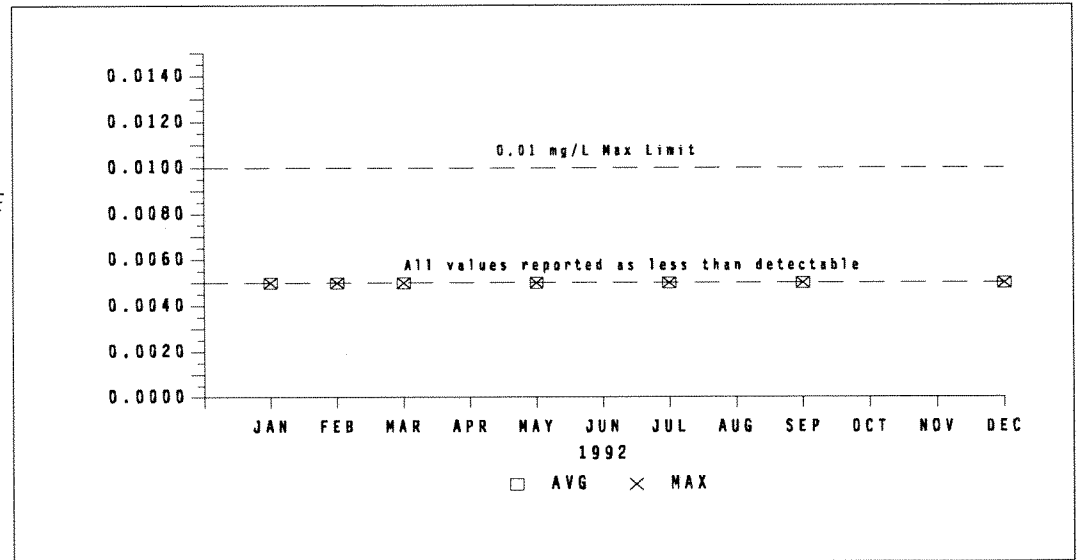
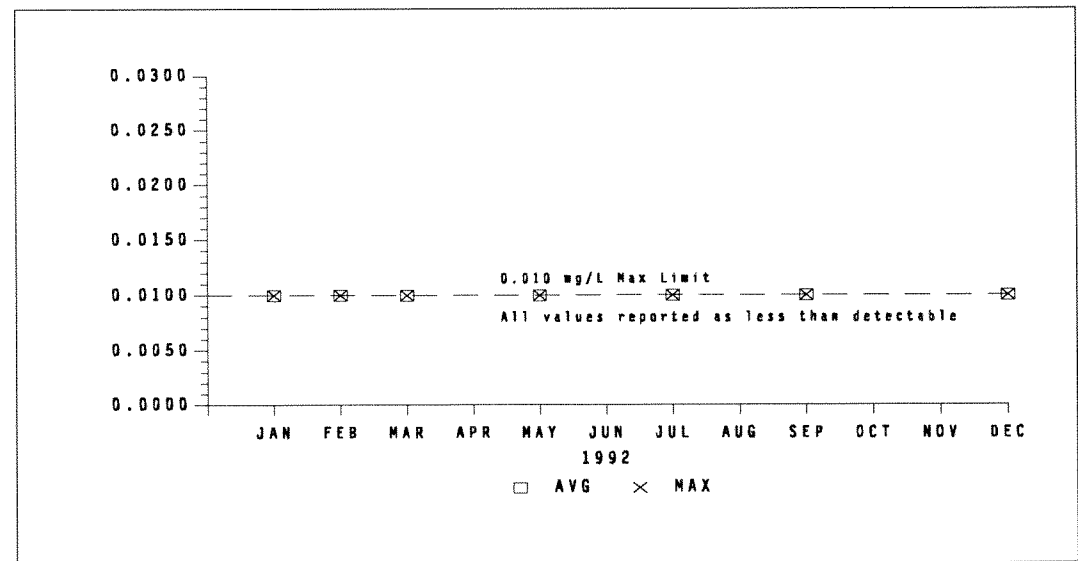


Figure C - 5.34

3,3-DICHLOROBENZIDINE  
(mg/L)

Outfall 001



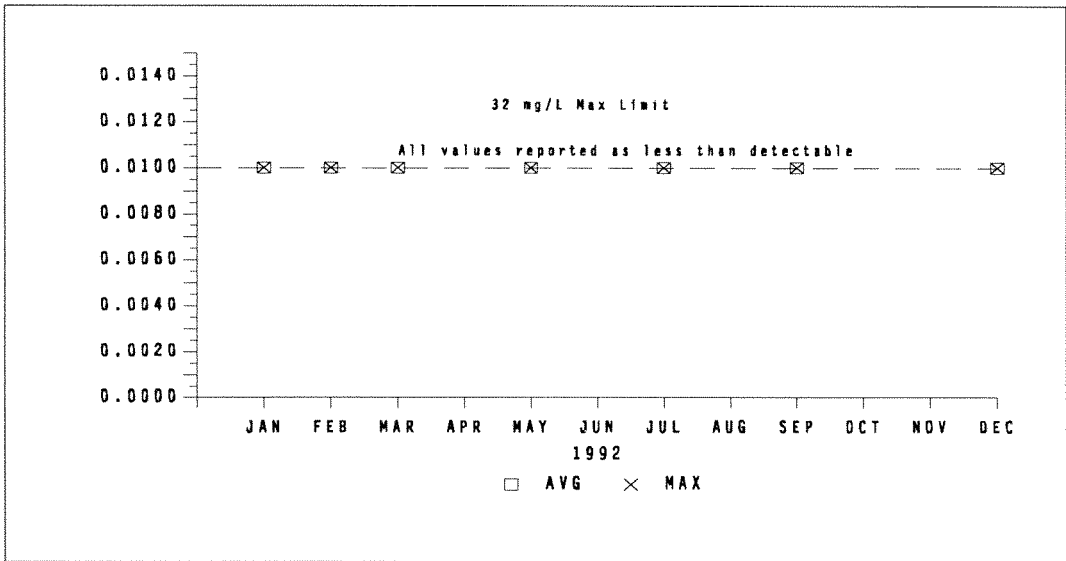


Figure C - 5.35

TRIBUTYL PHOSPHATE  
(mg/L)

Outfall 001

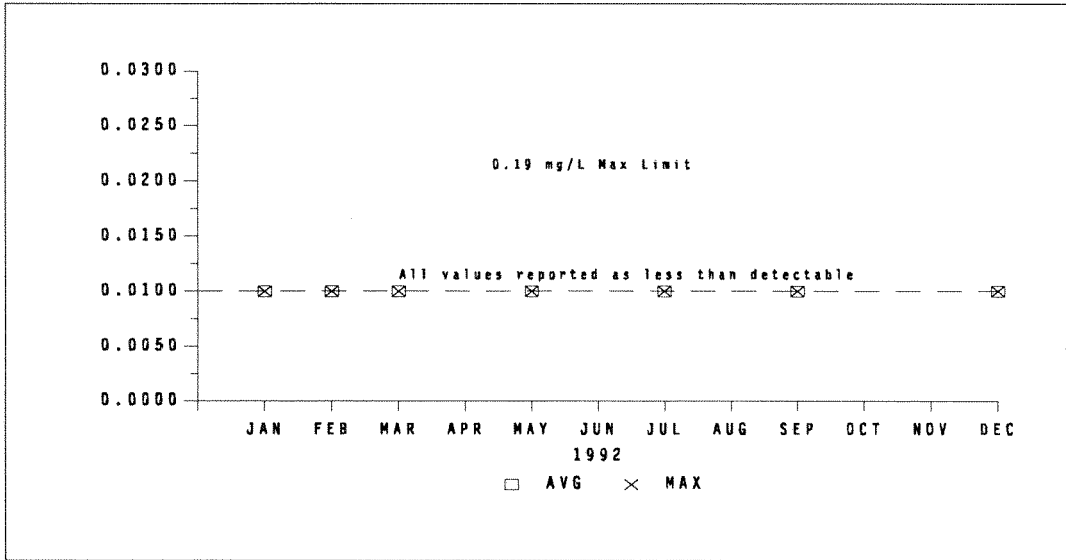


Figure C - 5.36

VANADIUM  
(mg/L)

Outfall 001

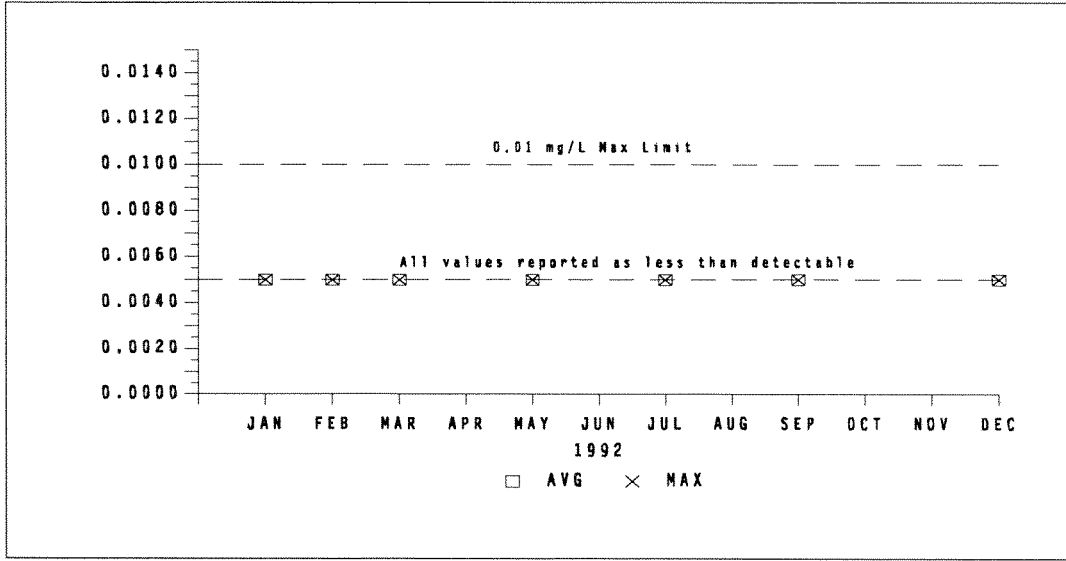


Figure C - 5.37

DICHLORODIFLUOROMETHANE  
(mg/L)

Outfall 001