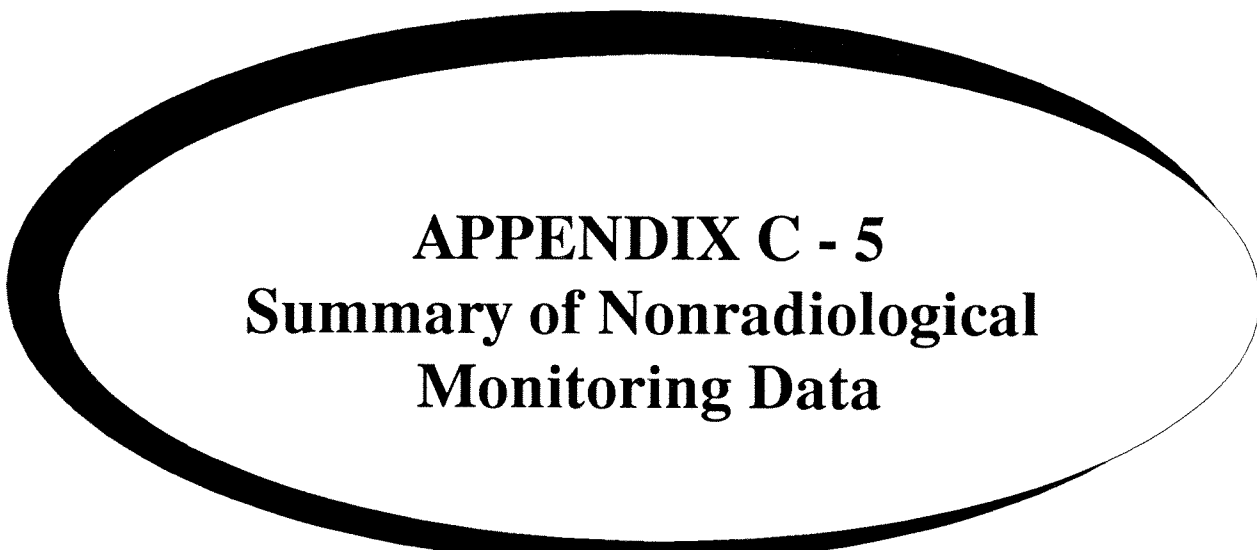




Grab-Sampling Surface Water



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
001 (Process and Storm Wastewater)	Flow	Monitor	2 per discharge
	Aluminum, total	14.0 mg/L	2 per discharge
	Ammonia (NH ₃)	*	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
	Solids, suspended	45.0 mg/L	2 per discharge
	Cyanide, amenable to chlor.	0.022 mg/L	2 per discharge
	Solids, settleable	0.3 mL/L	2 per discharge
	pH (range)	6.0-9.0	2 per discharge
	Oil & 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
	007 (Sanitary and Utility Wastewater)	Flow	Monitor
Ammonia (NH ₃)		*	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
008 (French Drain Wastewater)	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 1990 SPDES Noncompliance Episodes

Date	Outfall	Parameter	Limit	Value	Comments
FEB 90	Sum 001,007 008	NH3	2.1 mg/L	3.46 mg/L	STP Flow-through
FEB 90	Sum 001,007 008	NH3	2.1 mg/L	3.86 mg/L	As above
FEB 90	Sum 001,007 008	NH3	2.1 mg/L	3.27 mg/L	As above
FEB 90	Sum 001,007 008	NH3	2.1 mg/L	2.81 mg/L	As above
FEB 90	Sum 001,007 008	NH3	2.1 mg/L	5.21 mg/L	As above
FEB 90	Sum 001,007 008	NH3	2.1 mg/L	3.97 mg/L	As above
FEB 90	Sum 001,007 008	BOD-5	5.0 mg/L	12.04 mg/L	Related to above
NOV 90	Sum 001,007, 008	Fe	0.31 mg/L	0.87 mg/L	001 Fe high
NOV 90	007	Settleable Solids	0.3 mL/L	0.5 mL/L	Floc material

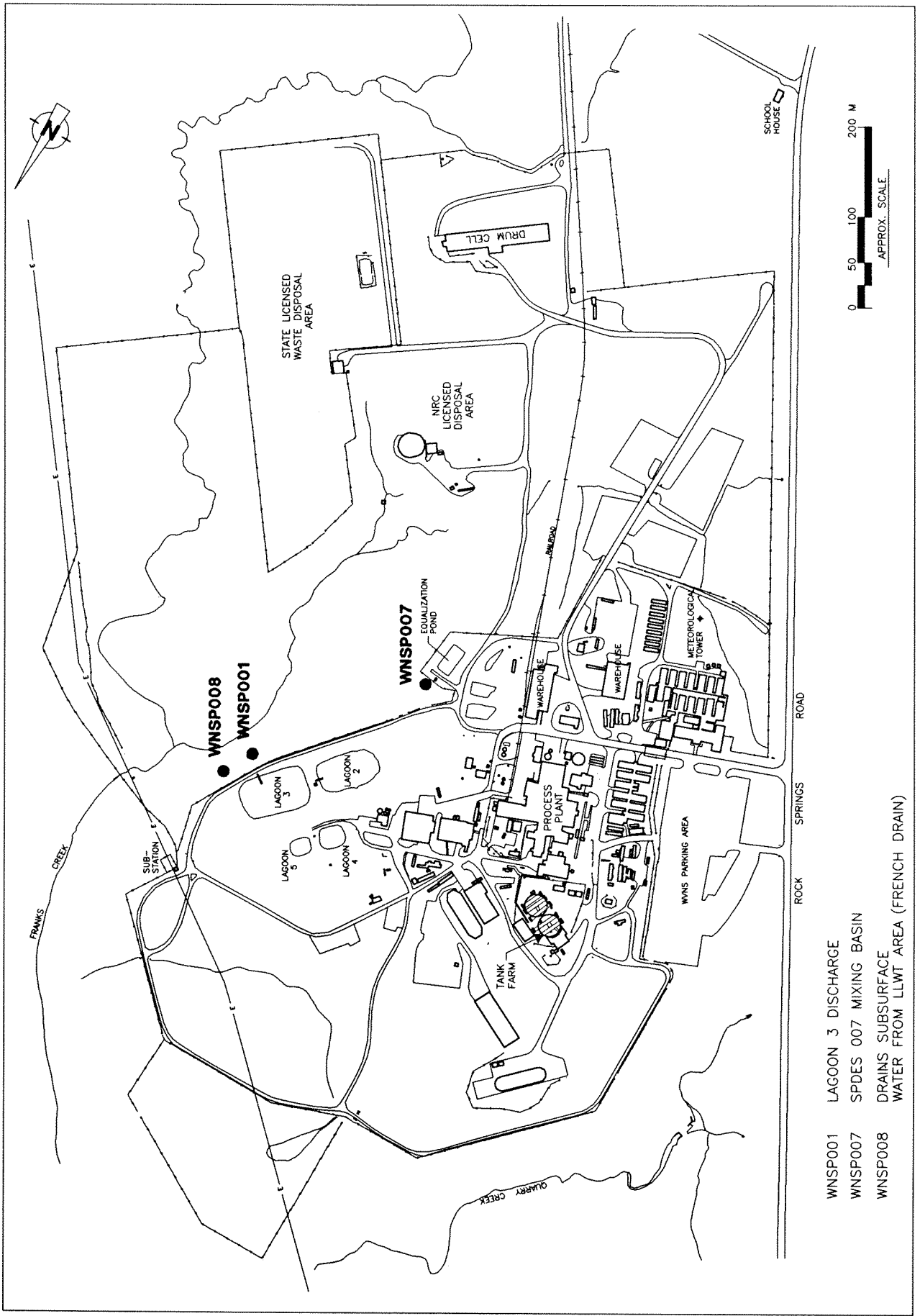


Figure C-5.1. Location of SPDES Monitoring Points.

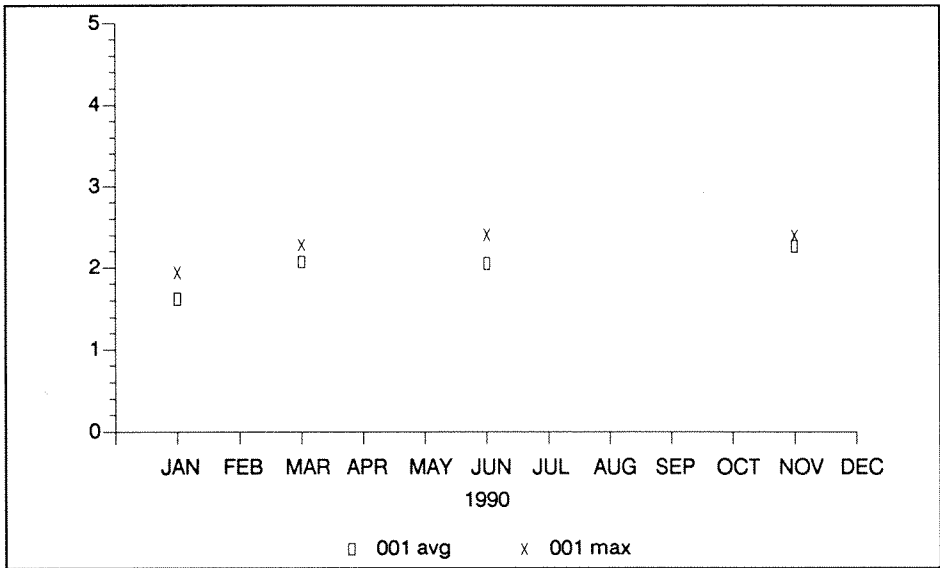


Figure C-5.2

Biochemical Oxygen Demand - 5

(mg/L)

Outfall 001

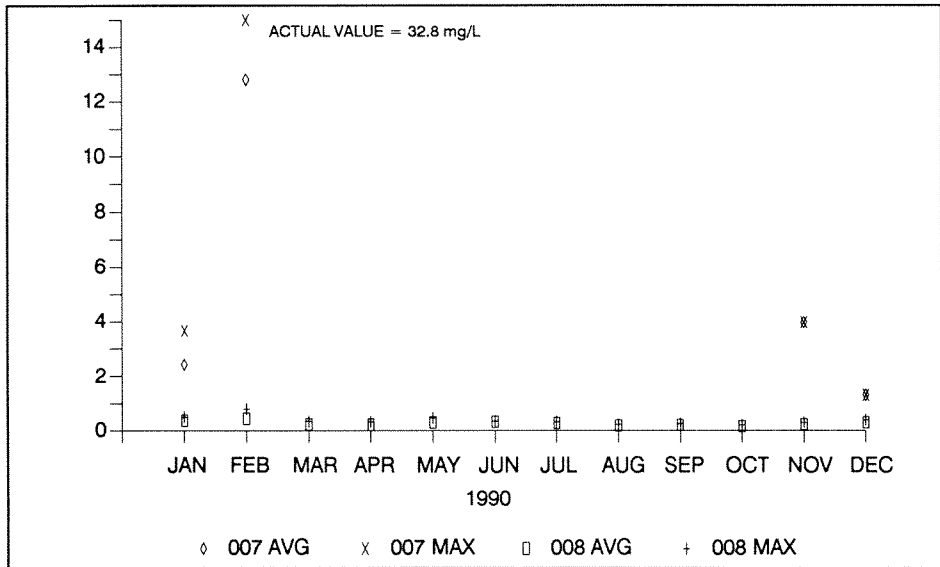


Figure C - 5.3

Biochemical Oxygen Demand - 5

(mg/L)

Outfalls 007 and 008

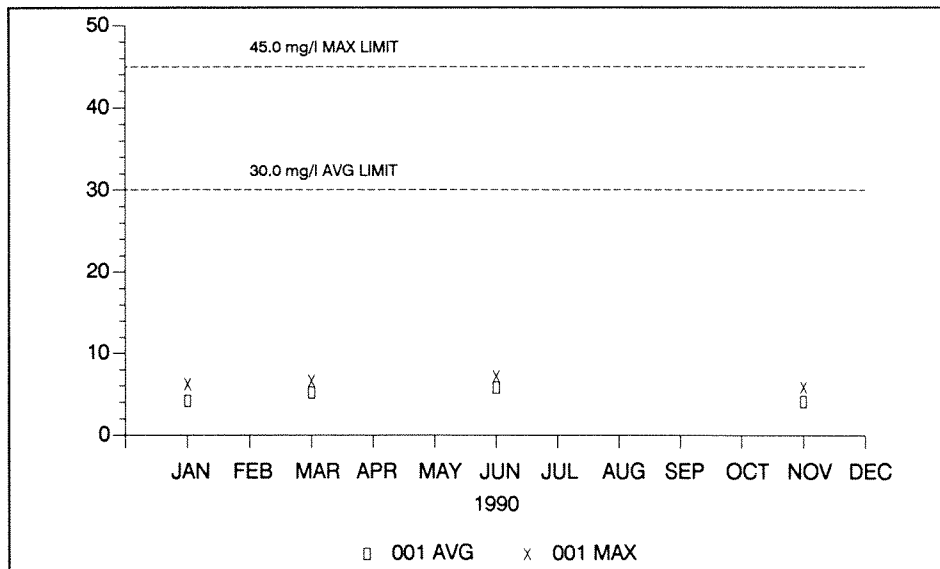
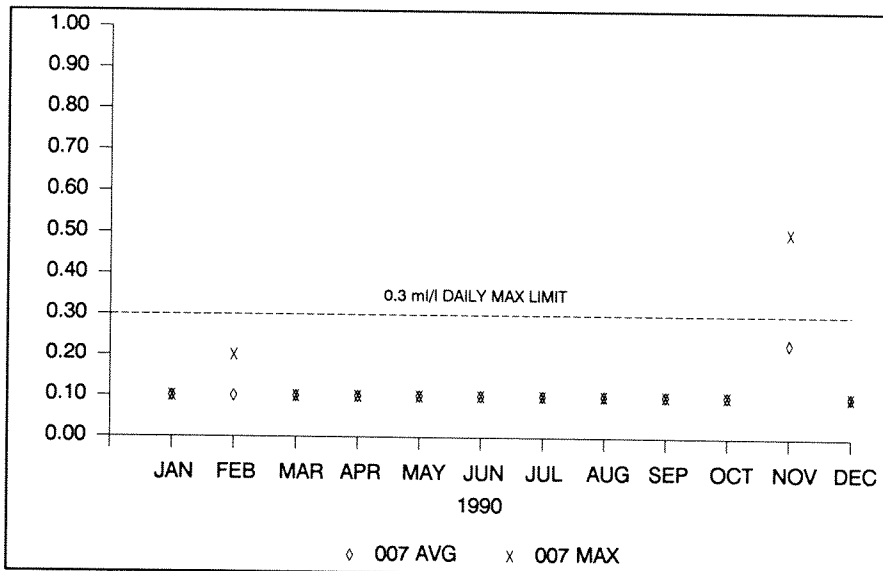
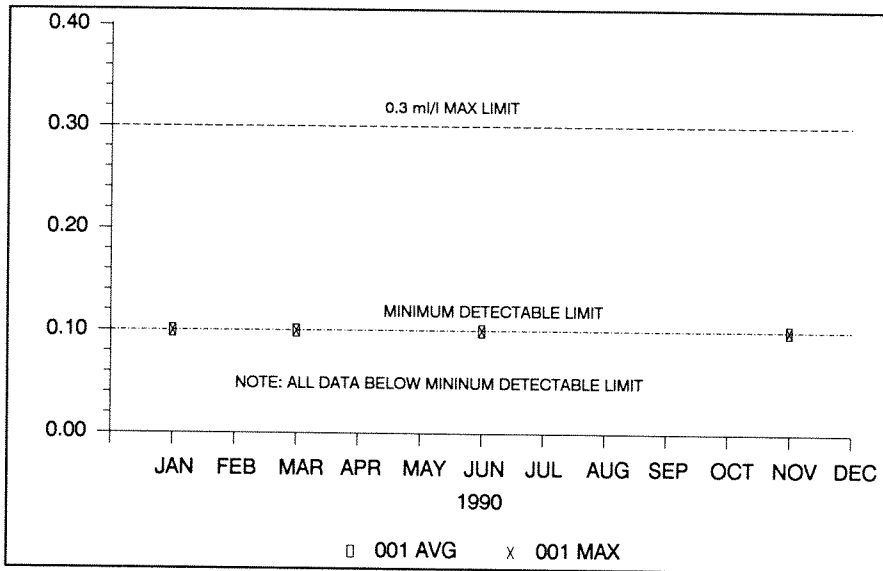
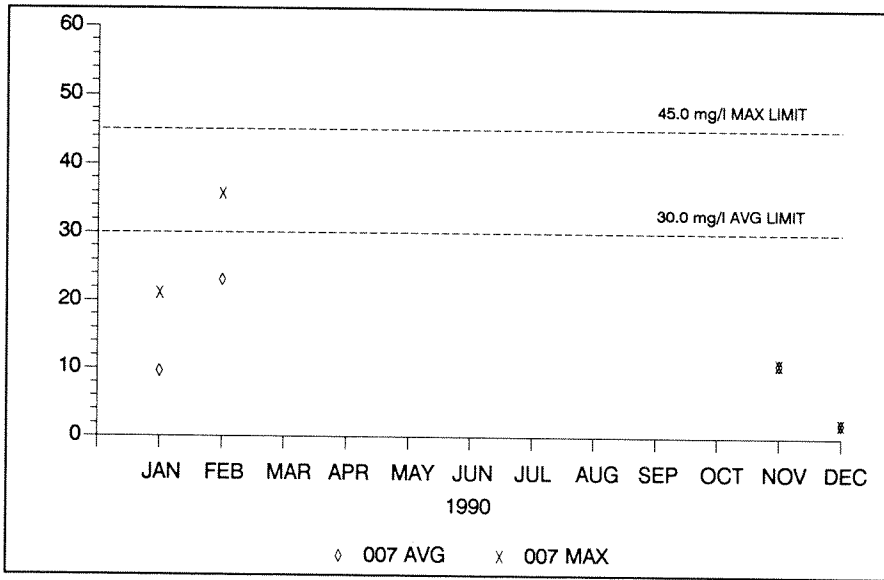


Figure C - 5.4

Suspended Solids

(mg/L)

Outfall 001



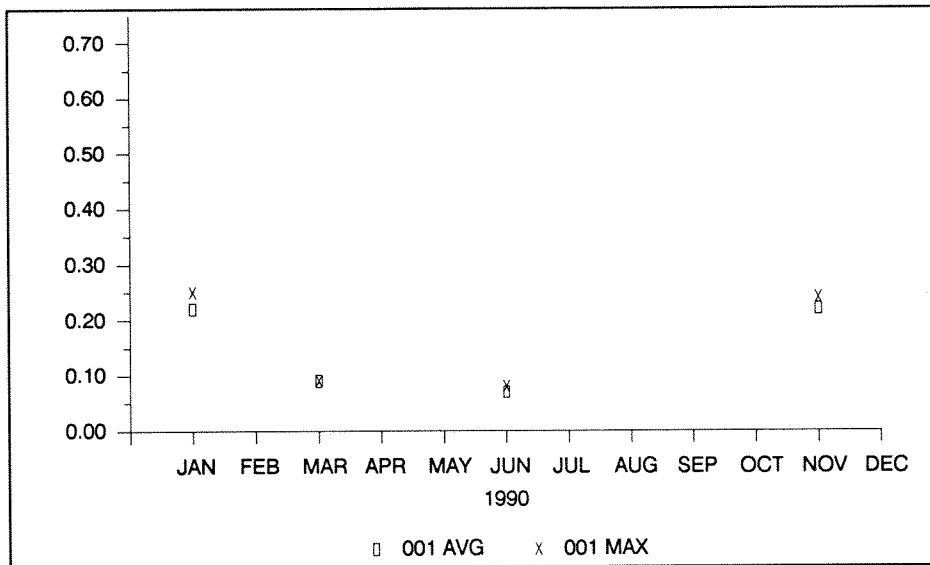


Figure C - 5. 8

**Ammonia
(mg/L)**

Outfall 001

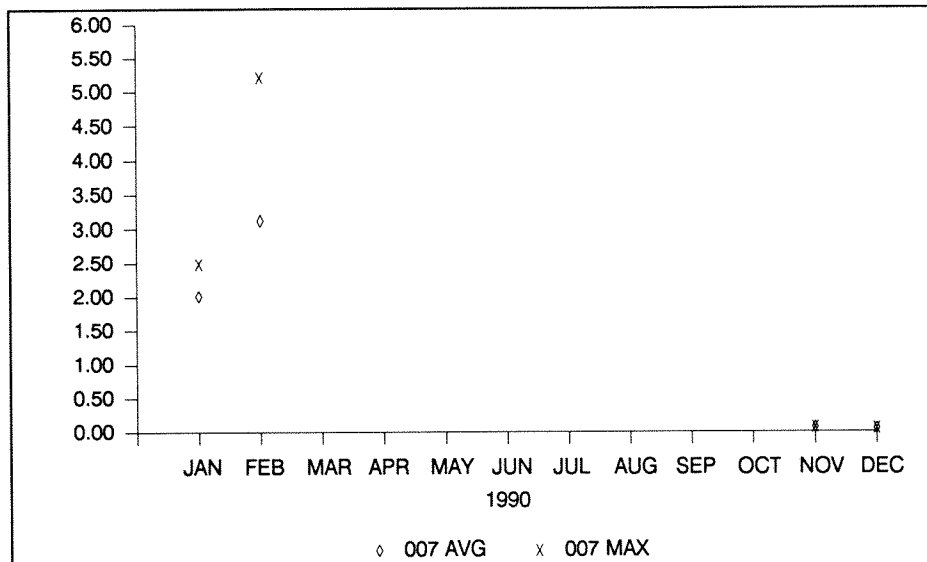


Figure C - 5. 9

**Ammonia
(mg/L)**

Outfall 007

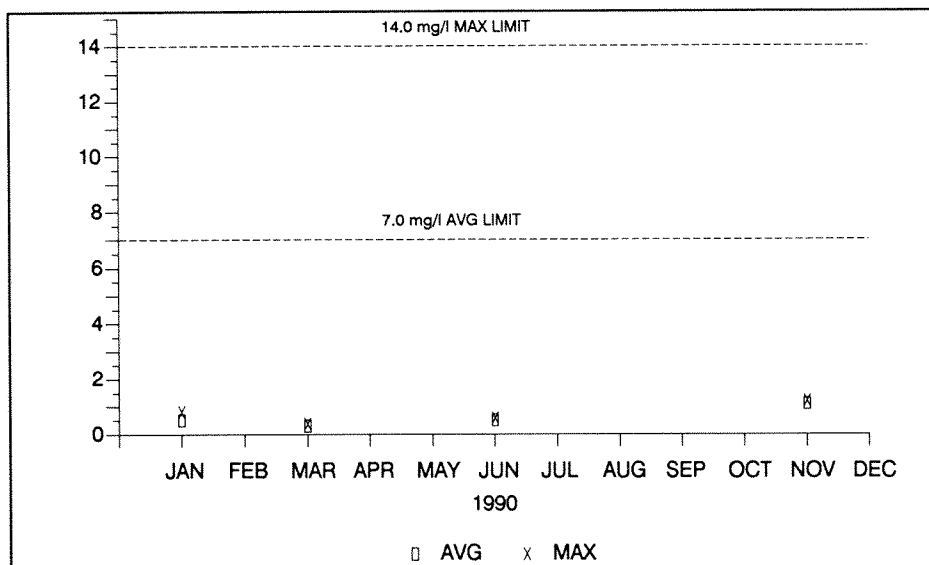


Figure C - 5. 10

**Metals - Aluminum
(Al)
(mg/L)**

Outfall 001

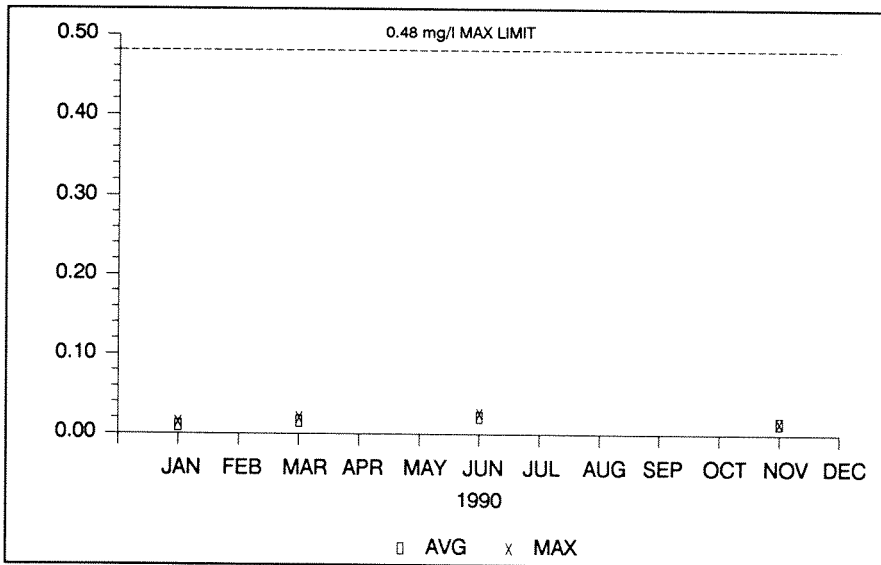


Figure C - 5.11

**Metals - Zinc (Zn)
Total Recoverable
(mg/L)**

Outfall 001

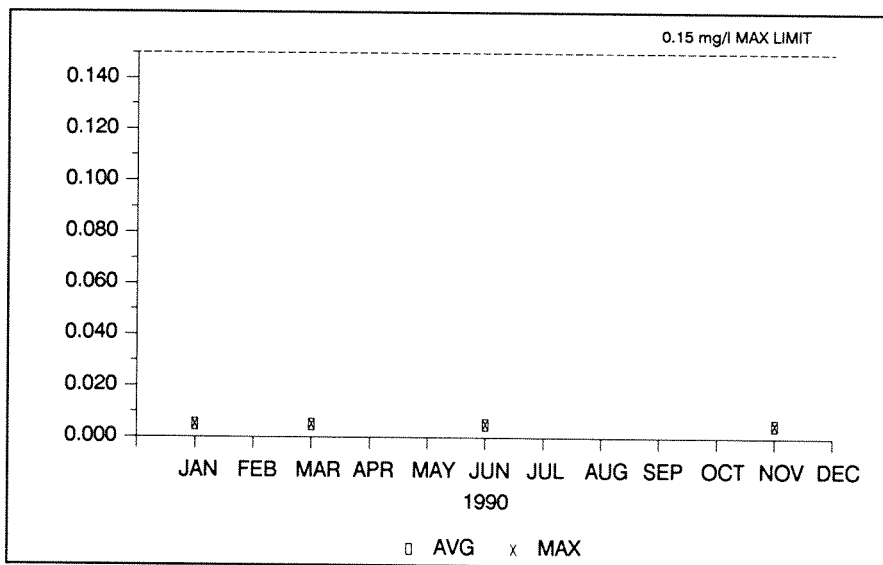


Figure C - 5.12

**Metals - Arsenic (As)
Dissolved
(mg/L)**

Outfall 001

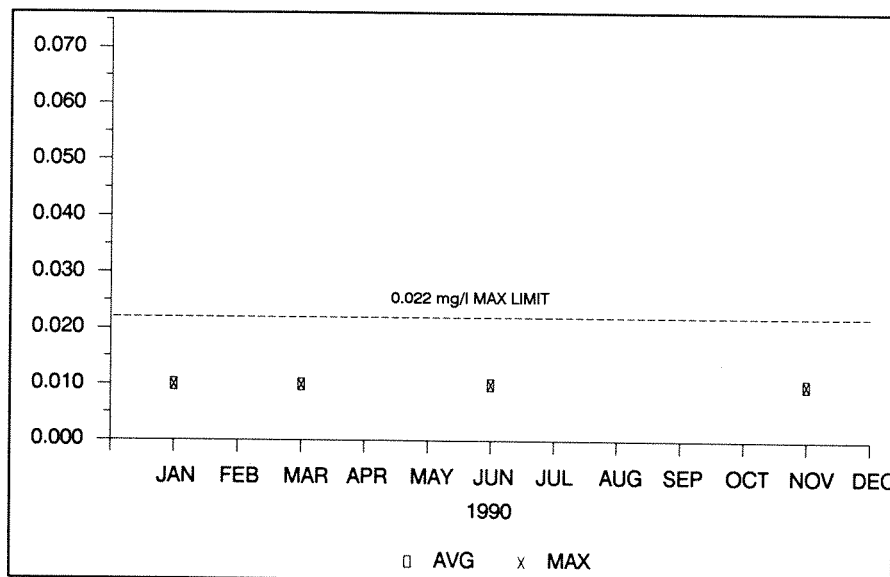


Figure C - 5.13

**Cyanide Amenable to
Chlorination
(mg/L)**

Outfall 001

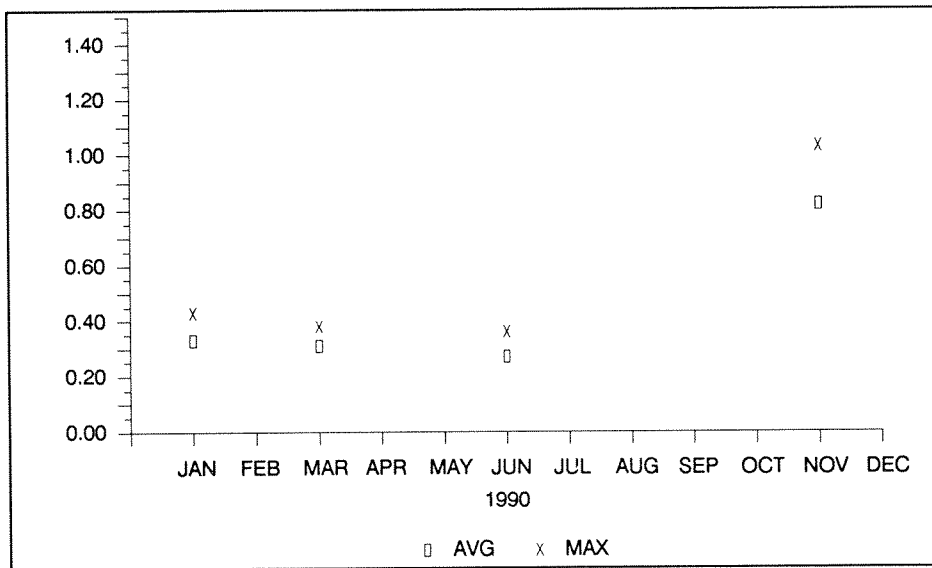


Figure C - 5.14

Metals - Iron (*Fe*)
(mg/L)

Outfall 001

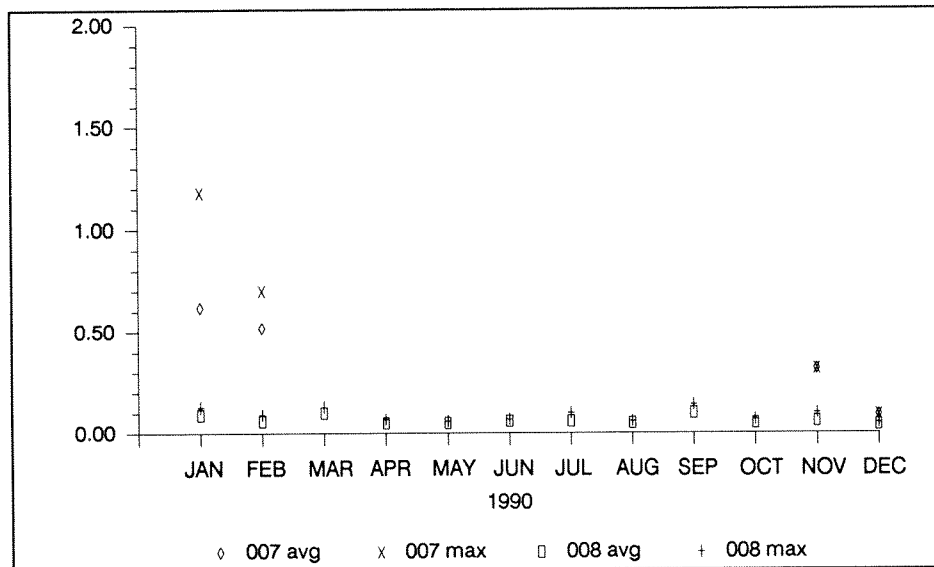


Figure C - 5.15

Metals - Iron (*Fe*)
(mg/L)

Outfalls 007 and 008

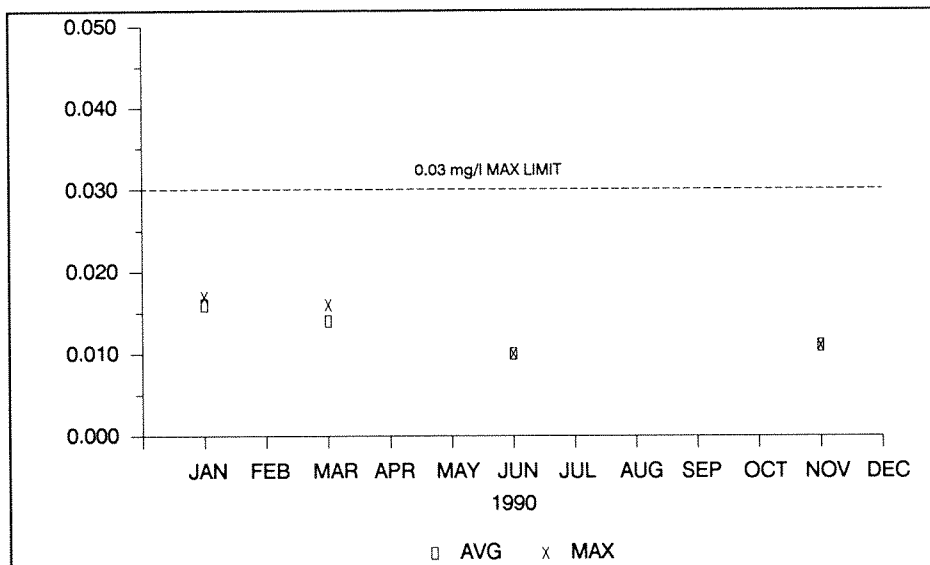


Figure C - 5.16

Metals - Copper (*Cu*)
Total Recoverable
(mg/L)

Outfall 001

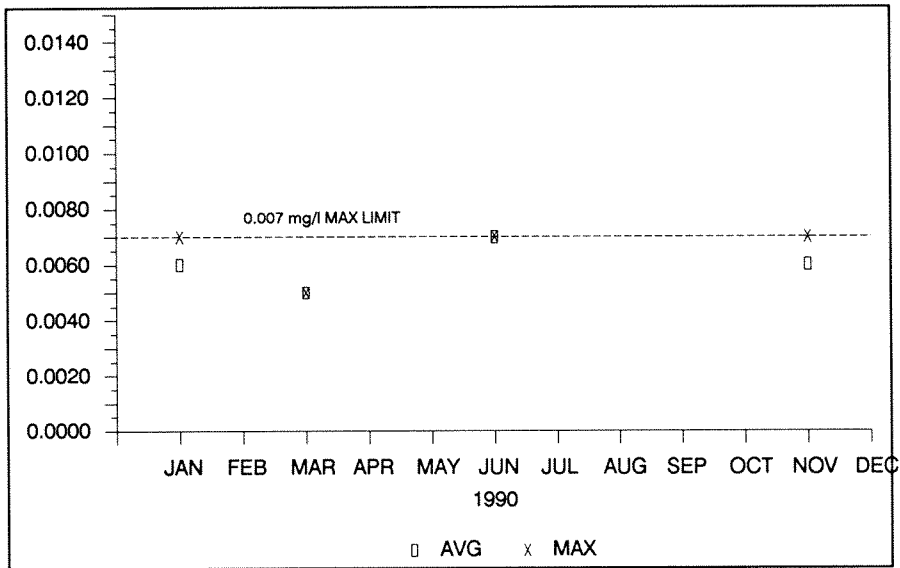


Figure C - 5.17

Metals - Cadmium (Cd)

Total Recoverable

(mg/L)

Outfall 001

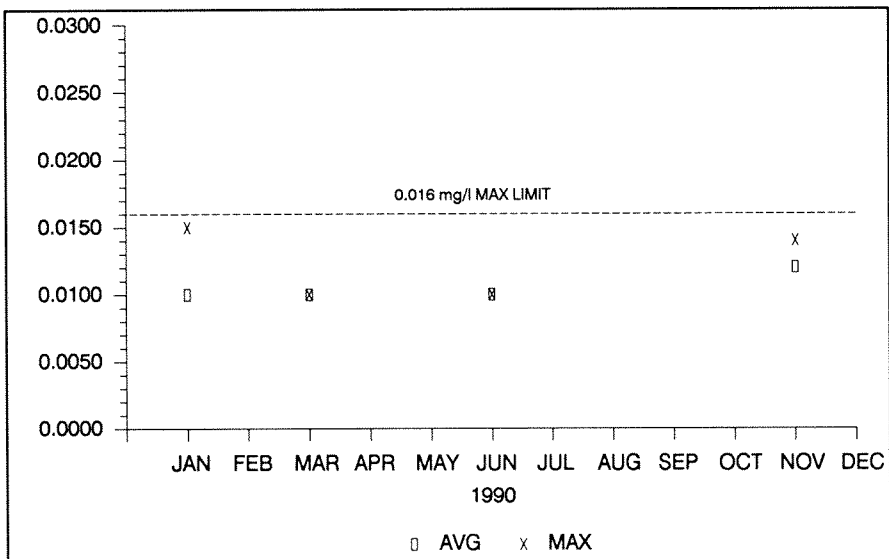


Figure C - 5.18

Metals - Chromium (Cr, VI)

Total Recoverable

(mg/L)

Outfall 001

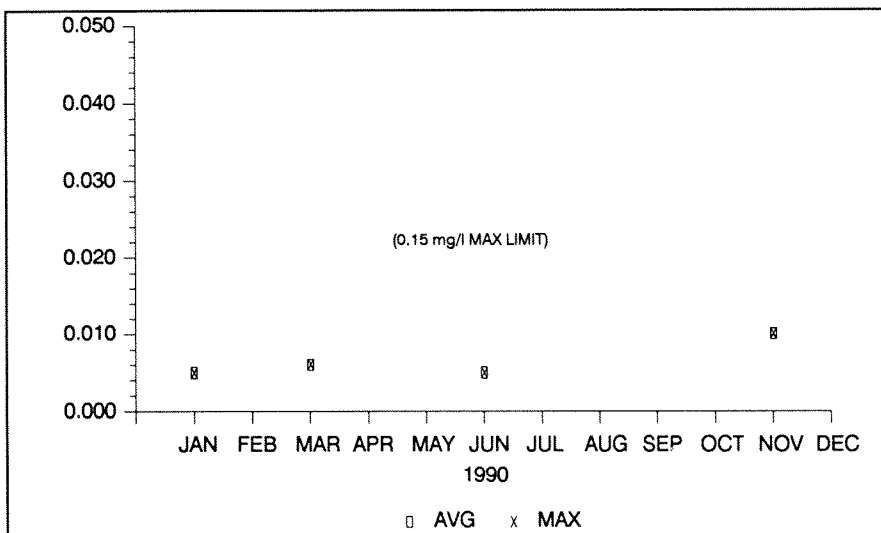


Figure C - 5.19

Metals - Lead (Pb)

(mg/L)

Outfall 001

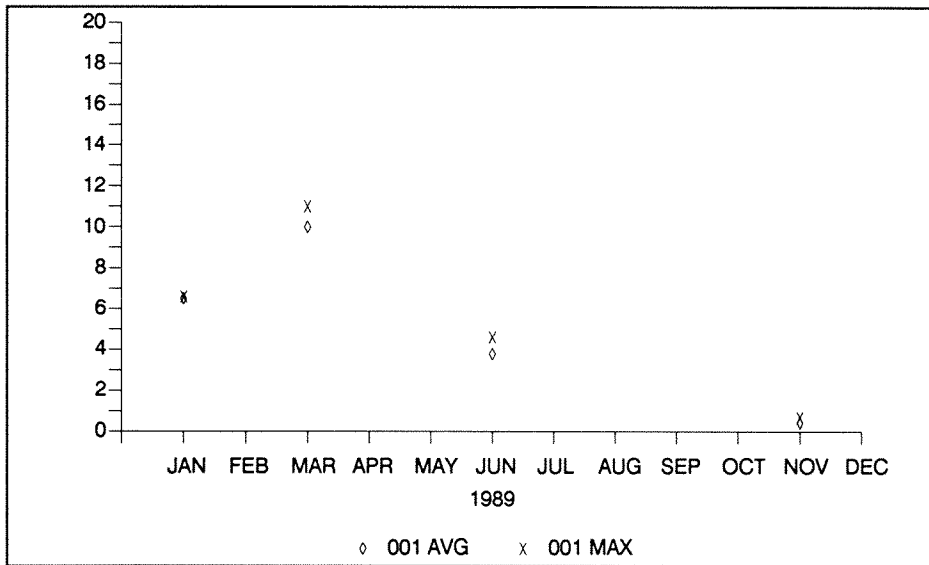


Figure C - 5. 20

**Nitrate (NO-3)
(mg/L)**

Outfall 001

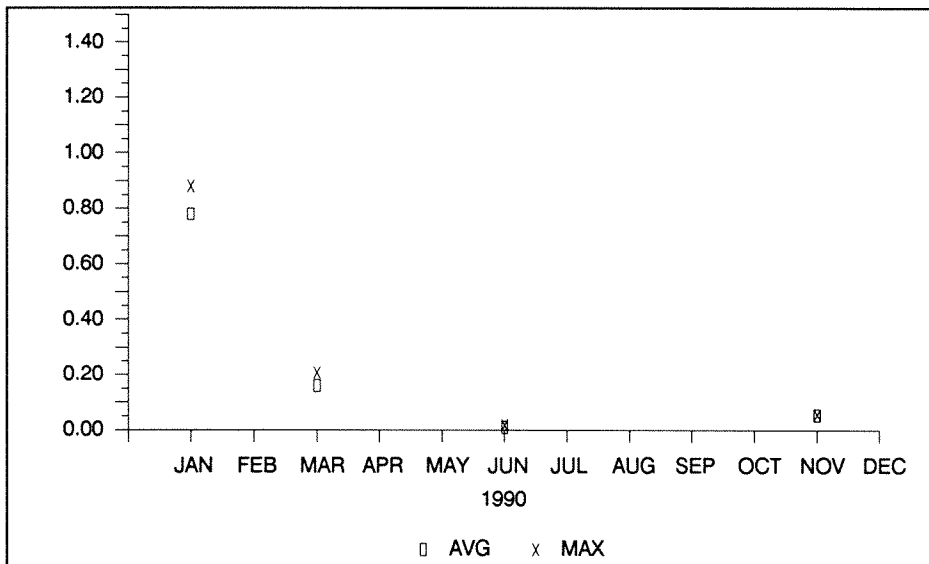


Figure C - 5. 21

**Nitrite (NO-2)
(mg/L)**

Outfall 001

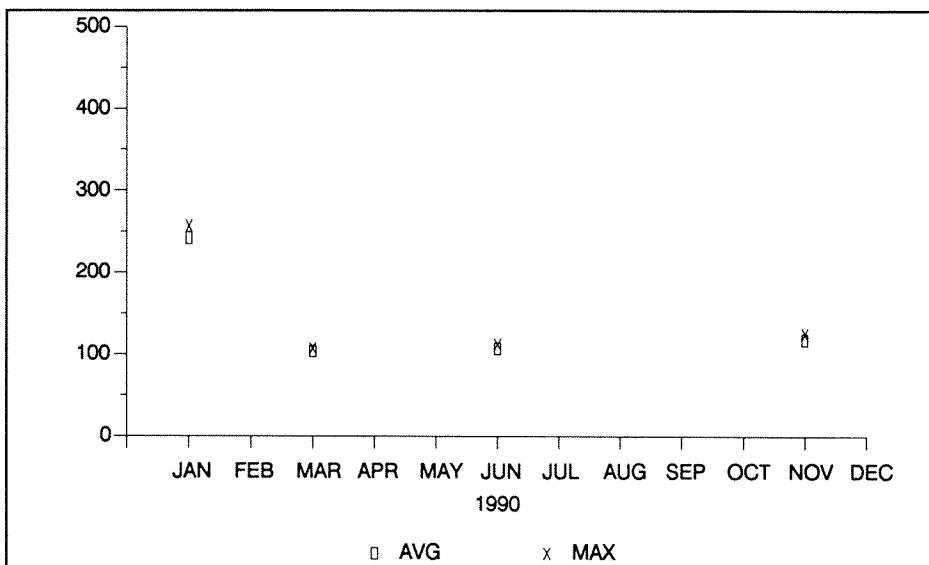
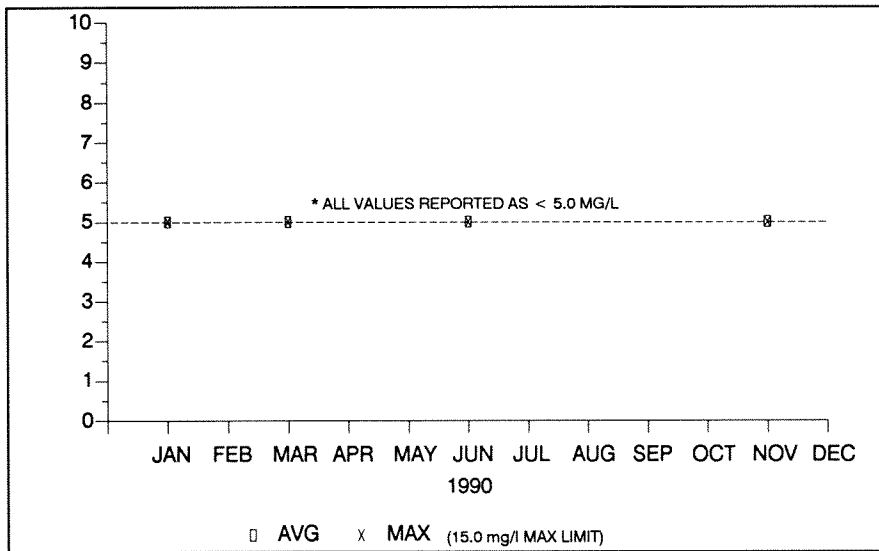


Figure C - 5. 22

**Sulfate
(mg/L)**

Outfall 001

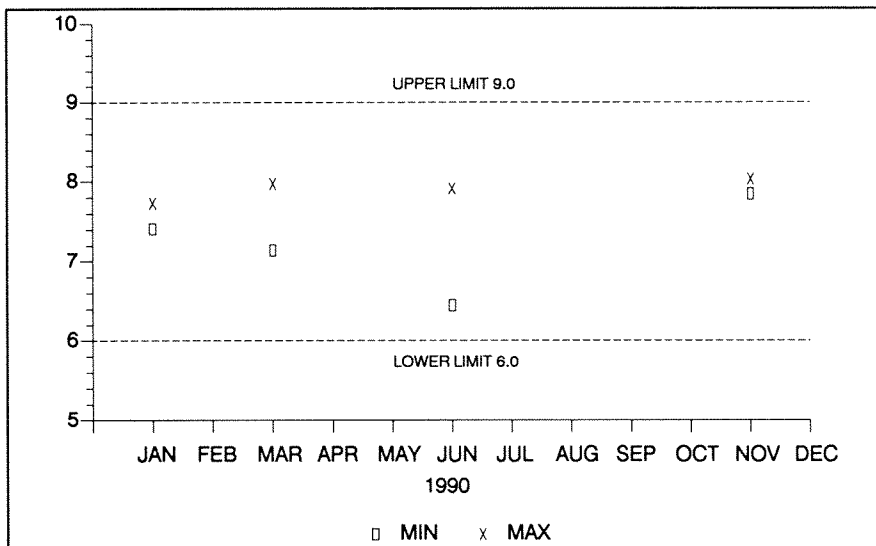
Figure C - 5. 23



Oil and Grease
(mg/L)

Outfall 001

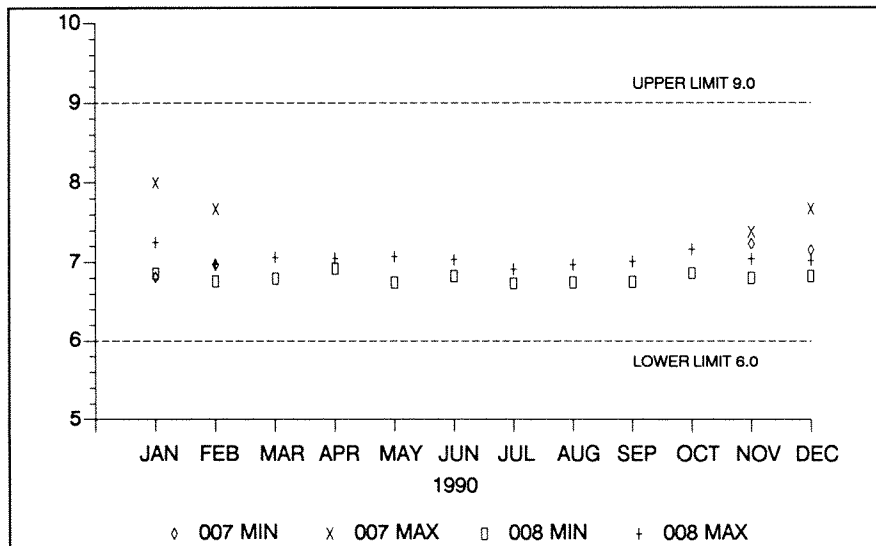
Figure C - 5. 24



pH (standard units)

Outfall 001

Figure C - 5. 25



pH (standard units)

Outfalls 007 and 008

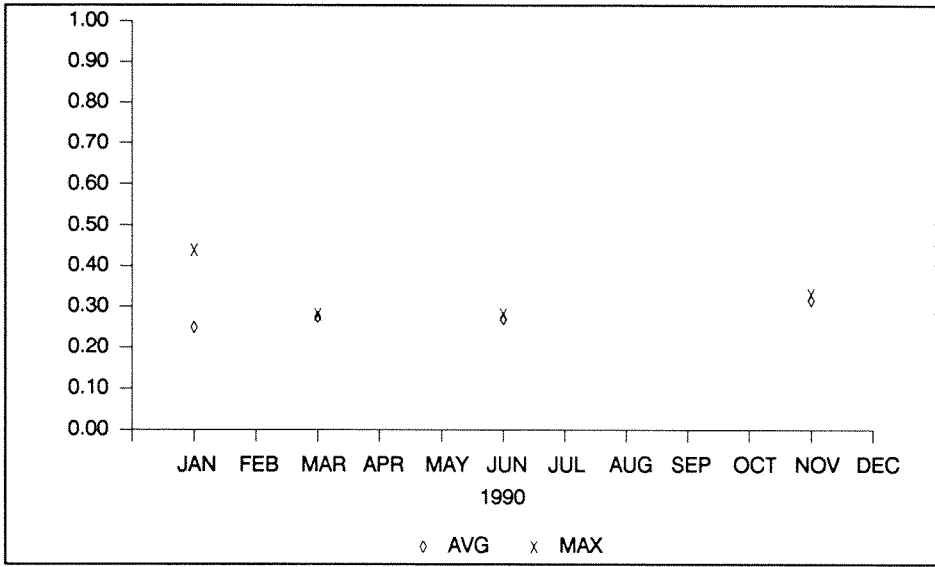


Figure C - 5.26

**Discharge Rate
(MGD)**

Outfall 001

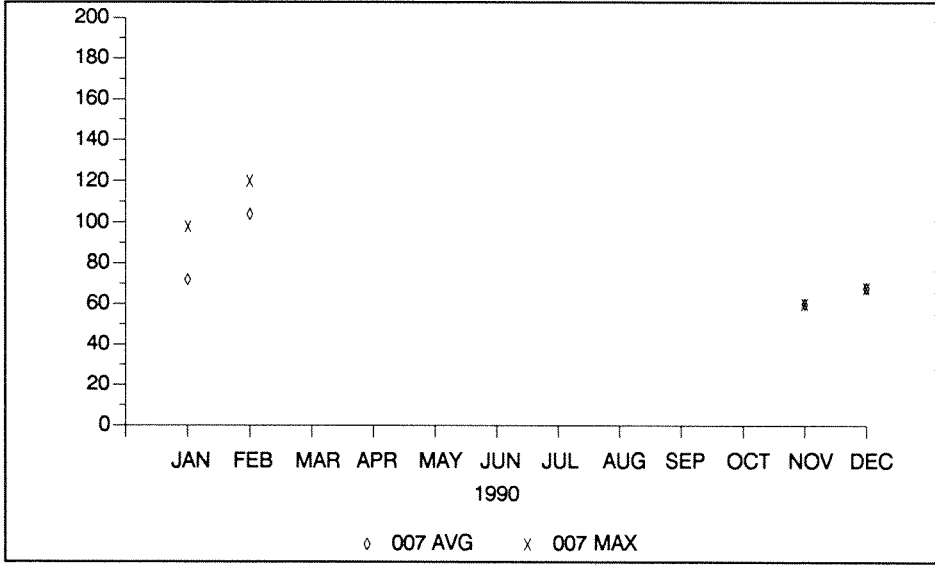


Figure C - 5.27

**Discharge Rate
(GPD x 1000)**

Outfall 007

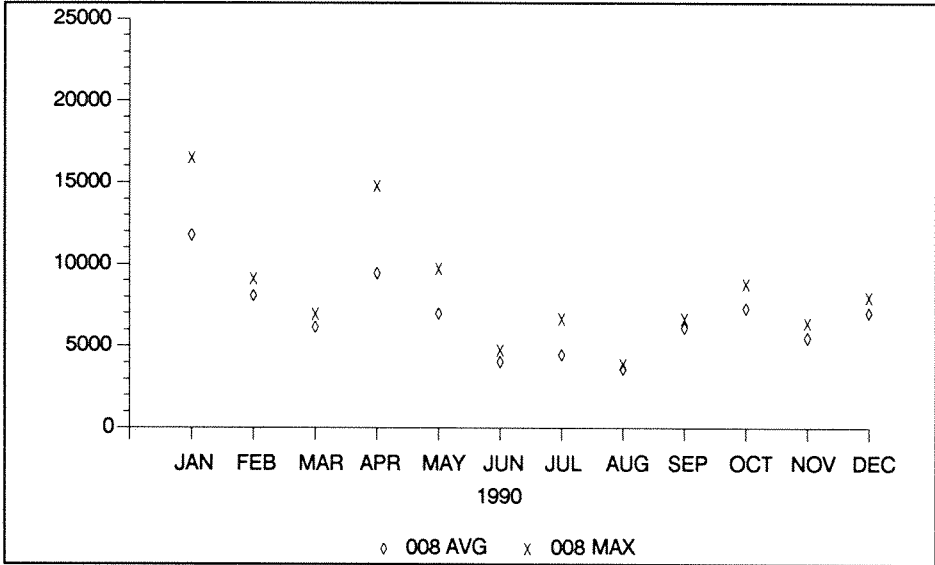


Figure C - 5.28

**Discharge Rate
(GPD)**

Outfall 008

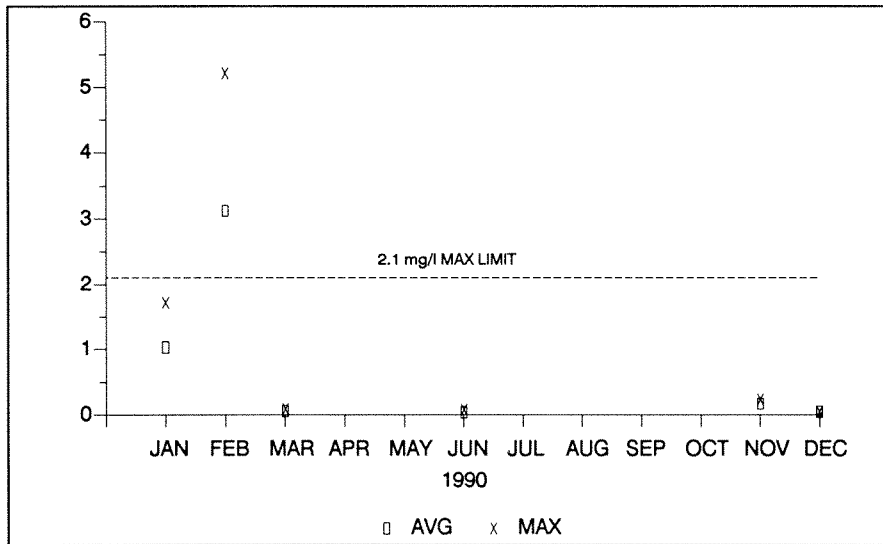


Figure C - 5. 29
Flow-weighted Averages
Ammonia
(mg/L)
Outfalls 001 and 007

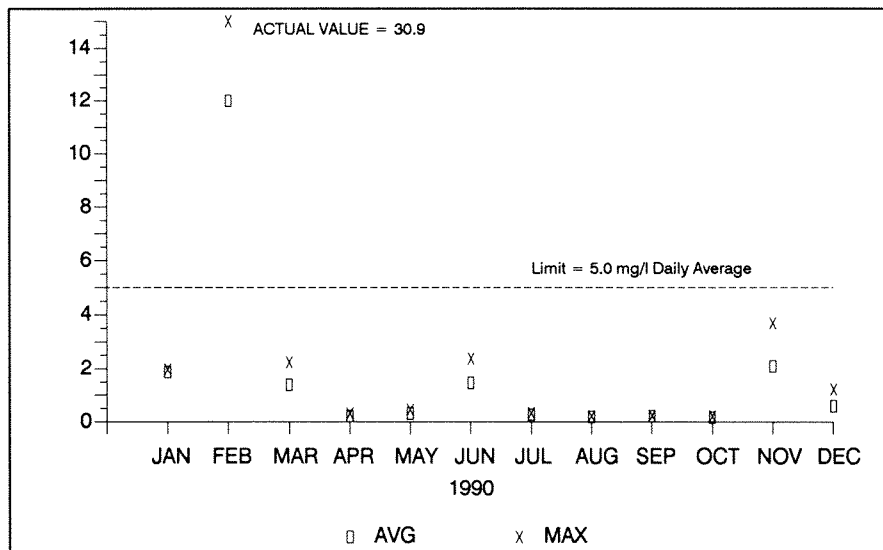


Figure C - 5. 30
Flow-weighted Averages
Biochemical Oxygen Demand - 5
(mg/L)
Outfalls 001, 007, and 008

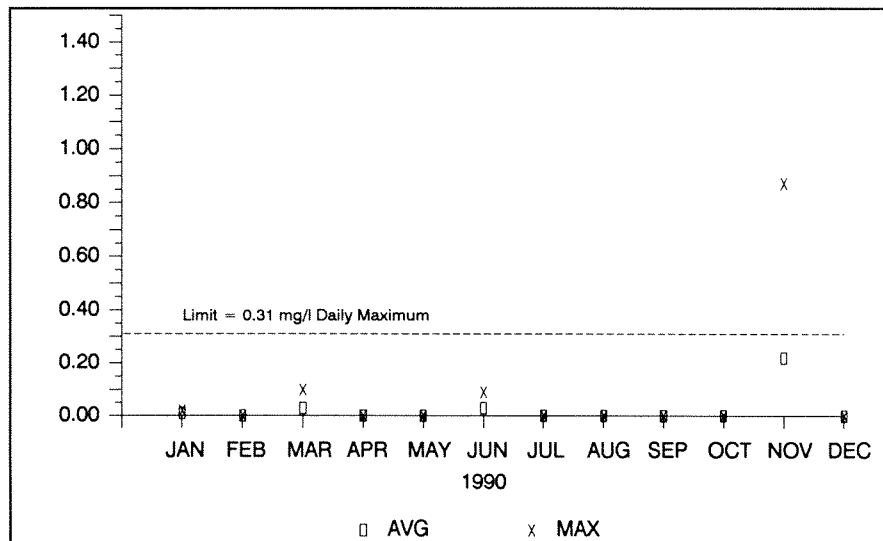


Figure C - 5. 31
Flow-weighted Averages
Iron (Fe)
(mg/L)
Outfalls 001, 007, and 008

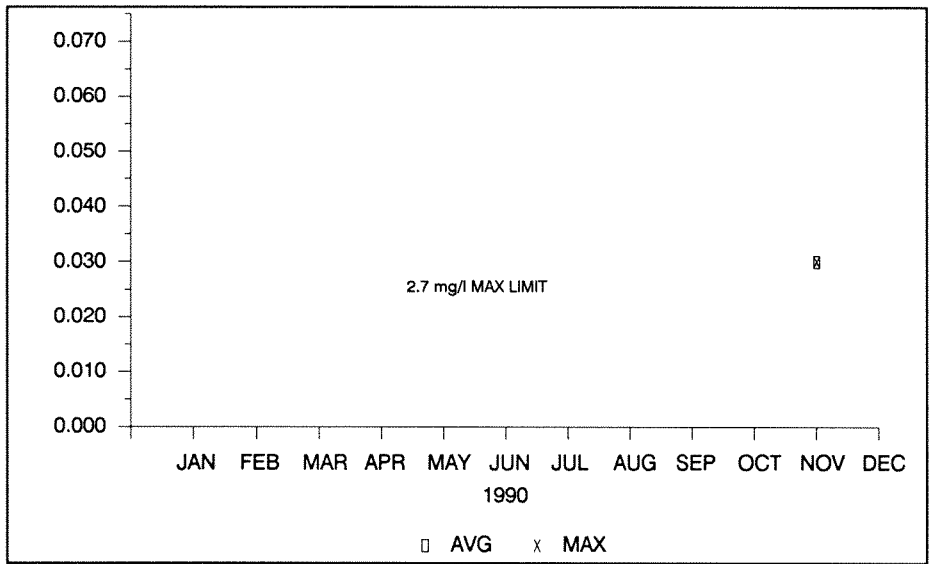


Figure C - 5.32

Nickel
(mg/L)
Outfall 001

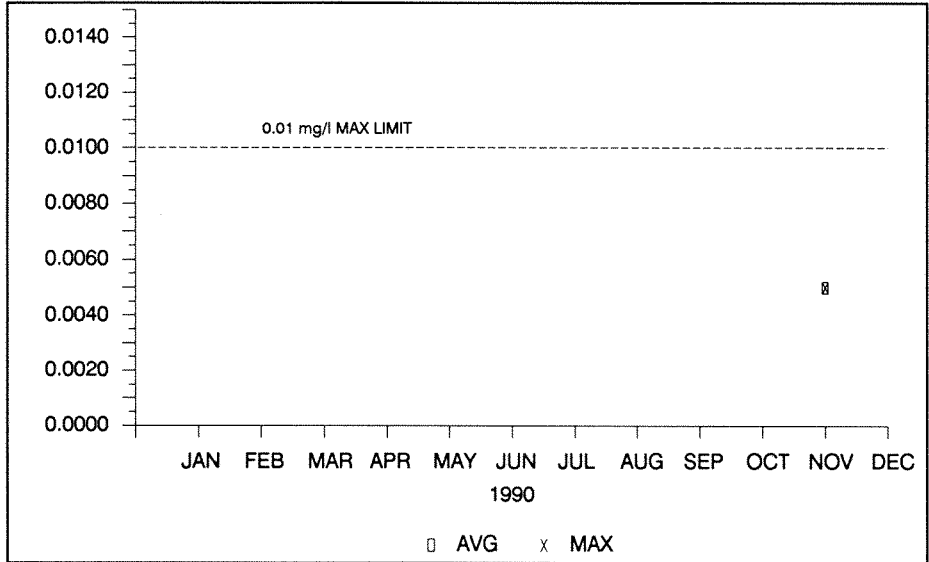


Figure C - 5.33

Trichlorofluoromethane
(mg/L)
Outfall 001

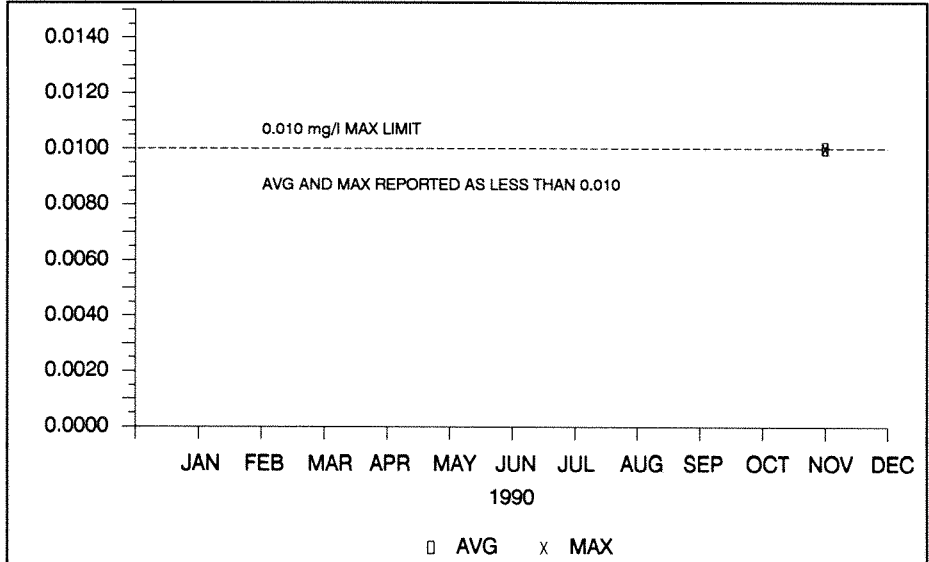


Figure C - 5.34

3,3 - dichlorobenzidine
(mg/L)
Outfall 001

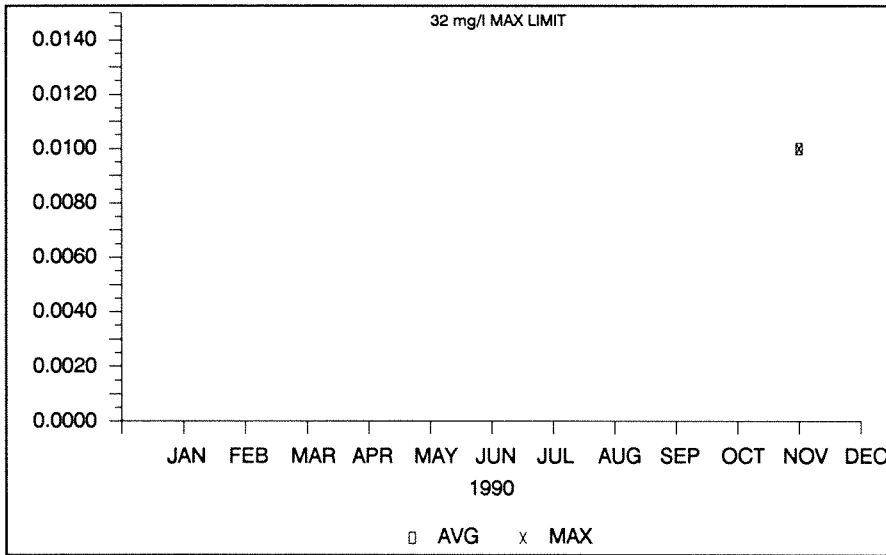


Figure C - 5.35

**Tributyl phosphate
(mg/L)
Outfall 001**

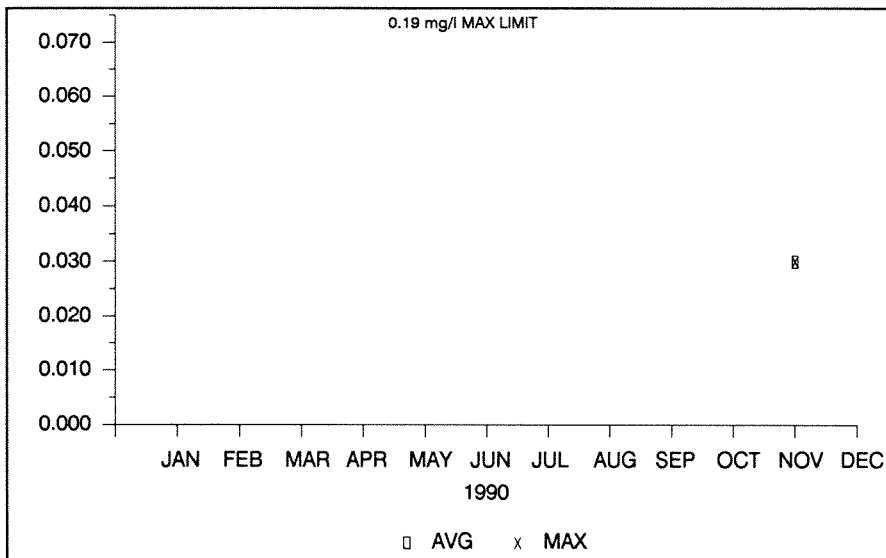


Figure C - 5.36

**Vanadium
(mg/L)
Outfall 001**