

ENCLOSURE

**ANNUAL SUMMARY REPORT ON
DISCHARGE MONITORING
AT THE
DIABLO CANYON POWER PLANT**

(NPDES NO. CA0003751)

2006

**2006 Annual Summary Report on Discharge Monitoring
at the
Diablo Canyon Power Plant**

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OVERVIEW

- A. This annual summary report follows the format used in quarterly monitoring reports. Analytical results below the respective Reporting Limit (ND or non-detect) are plotted as a "zero" value in accordance with ELAP guidance. Less-than results are typically reported to express an average of values that include non-detects and at least one positive result. These less-than results are plotted conservatively at the value. During 2006, discharges occurred from all discharge paths except 001I, 001K, and 017.
- B. California Ocean Plan Table B substances that were not analyzed for have not been added to the discharge stream. The substances listed in Table B in the 1990 Ocean Plan were each analyzed for and reported in the permit renewal application for Diablo Canyon Power Plant (DCPP) submitted in October 1994 and January 2001. There have been no changes in the activities conducted at the plant that would have significantly affected the results previously reported in the above referenced documents.

SUMMARY OF MONITORING PROGRAM

A. Monitoring of Plant Influent and Effluent

1. Monitoring Data

- a. Appendix 1 provides a list of the discharge path names for ease of reference. Appendix 2 contains monitoring data in tabular form. Appendix 3 contains monitoring data in graphical form.
- b. Annual oil and grease analyses were performed in November on Stormwater/Yard Drain Discharges 005, 008, 009, 013, and 015. Results were less than 5 mg/l for discharges 005, 009 and 013. Results for discharges 008 and 015 were both 6 mg/l. No discharges that resulted in adequate sample quantities occurred from 016 and no discharge occurred from 017 during 2006.
- c. In November, Discharge 001D (Liquid Radioactive Waste Treatment System) annual grab samples for lithium, boron, and hydrazine were collected and analyzed. The results were less than 0.010 mg/l, 118 mg/l, and 0.005 mg/l, respectively.

2. Facility Operating and Maintenance Manual

Pacific Gas and Electric Company (PG&E) maintains a multiple volume Plant Manual (manual) at DCPP that contains procedures used for operation and maintenance activities at the plant, including those activities that relate to wastewater handling, treatment, sampling, analysis and discharge.

Plant procedures are prepared and reviewed by DCPP Staff and approved by DCPP Management. DCPP conducts biennial internal audits that review NPDES Plant procedures contained in the manual. Ongoing reviews of Plant procedures are conducted to assure that the manual remains valid, current, and complete for the facility.

3. Laboratories Used to Monitor Compliance

The following laboratories were used during 2006 for monitoring compliance. They are certified under the appropriate agencies for the test/analyses they perform. As part of the on-going annual certification process, these laboratories take part in, and have passed, annual quality performance evaluation testing.

- a. PG&E Chemistry Laboratory, DCPP, Avila Beach, California (Lab Certification # CA01036)

- b. Aquatic Bioassay Consultants, Ventura, California (Lab Certification # CA01907)
- c. FGL Environmental, Santa Paula, California (Lab Certification # CA00140)
- d. Creek Environmental, San Luis Obispo, California (Lab Certification # CA00975)
- e. Columbia Analytical Services, Kelso, Washington (Lab Certification # WA00035)
- f. SevernTrent Laboratories, Earth City, Missouri (Lab Certification # MO00054)

4. Review of Compliance Record and Corrective Actions

a. Circulating Water Pump Chlorination/Bromination Monitoring

The 2006 quarterly NPDES reports discuss chlorination cycles when discharge monitoring was interrupted. These are listed below with brief descriptions of the cause and corrective action. When these monitoring interruptions occurred, engineering evaluations (approved by the CCRWQCB January 13, 1994; PG&E Letter No. DCL-94-002) were performed. Detailed descriptions of these evaluations are included in the quarterly reports. Evaluations concluded that discharge chlorine limits were not exceeded during these events. An apparent exceedence occurred in December 2006 unrelated to an unmonitored condition (reference section 4.j.).

Date	Chlorination Cycle Monitoring interruptions	Cause	Corrective Action
12/30/05 to 01/05/06	Unit 1 28 readings	Sample flow restricted by storm-related debris	Debris removed and monitor recalibrated.
01/12/06	Unit 1 1 reading	Monitor vendor-related calibration error.	Calibration corrected.
01/12/06 to 01/18/06	Unit 1 and Unit 2 72 readings	Cross-tie in sample piping left open after weekly flush.	Valve closed. Procedure revised to minimize probability of recurrence.
03/27/06 to 03/30/06	Unit 1 21 readings	Air supply to monitor mixing chamber restricted by biological growth.	Air supply to mixing chamber restored.
05/18/06 to 05/25/06	Unit 1 41 readings	Sample flow restricted due to biological fouling.	Fouled section of instrument replaced
05/19/06 to 05/25/06	Unit 2 47 readings	Calibration problem during post-outage start-up.	Monitor recalibrated.
07/20/06 to 07/27/06	Unit 1 35 readings	Plankton fouling of the sensor.	Replaced monitor flow block, and increased piping flush frequency.
08/10/06	Unit 1 – 2 readings	Low reagent	Replaced reagent
08/10/06	Unit 2 – 1 reading	Calibration problem	Recalibrated monitor
10/19/06	Unit 2 – 1 reading	Air entrained in sample line during calibration	Recalibrated monitor

b. Closed Cooling Water Releases

During 2006, maintenance activities that required draining of closed cooling water systems were performed and are summarized below. PG&E received concurrence from the CCRWQCB in response to letters dated July 19, 1995 (PG&E Letter DCL-95-156), May 23, 1996 (PG&E Letter DCL-96-522), and May 19, 1997 (PG&E Letter DCL-97-533) regarding the use of glutaraldehyde and isothiazolin to control microbiological growth and corrosion in DCP's closed cooling water systems. Any drainage from these systems is discharged at a flow-rate

such that the chronic toxicity level is below the "No Observable Effect Concentration" (NOEC) at NPDES Discharge 001. The volumes of cooling water drained in 2006 from the component cooling water (CCW), intake cooling water (ICW), and service cooling water (SCW) systems are presented below. The glutaraldehyde and isothiazoline concentrations presented in the table below are system concentrations, not concentrations at the point of discharge to receiving water.

Date	System	Volume (gal)	Glutaraldehyde (mg/l)	Isothiazoline (mg/l)	Reason & Comment
02/22/06	Unit 1 SCW	15,151	67	0.4	Routine maintenance
02/23/06	Unit 1 SCW	17,850	67	0.4	Routine maintenance
03/01/06	Unit 1 ICW	3,100	224	4.1	Routine maintenance
04/18/06	Unit 2 ICW	1,150	224	2.7	Routine maintenance
05/04/06	Unit 2 SCW	24,000	140	4.4	Routine maintenance
07/20/06	Unit 1 SCW	33,000	100	3.2	Routine maintenance
08/17/06	Unit 1 ICW	3,300	201	2.8	Routine maintenance
09/08/06	Unit 2 SCW	33,000	157	6.0	Routine maintenance
09/15/06	Unit 1 SCW	60	55	1.0	Routine maintenance
09/19-20/06	Unit 1 CCW	180,300	215	0.0	Routine maintenance
10/05/06	Unit 2 CCW	182,100	196	0.0	Routine maintenance

c. Injections of sulfur hexafluoride (SF6)

Injections of sulfur hexafluoride (SF6) into DCP's condensers were performed to detect saltwater leaks during this year. CCRWQCB's Sorrel Marks concurred during conversations held in May 1996 that periodic use of SF6 would not increase DCP's probability of exceeding NPDES permit limitations. Injections during 2006 are summarized below.

Date	Number of Injections	Duration (sec)	Injection Rate of SF6 (Standard Cubic Feet per Minute)	Total SF6 Injected (Cubic Feet)
01/14/06	7	30	10	35
10/16/06	2	30	10	10
10/30/06	12	30	5	30
11/01/06	11	30	10	55

d. January

On January 12, 2006, chemical drain tank 0-2 (CDT 0-2) was discharged. A sample from the tank was analyzed using hexane extraction to measure oil and grease content. The result was 26 mg/L of hexane-extractable material. This value apparently exceeded the monthly and daily limits (15 mg/L and 20 mg/L, respectively) for oil and grease for discharge pathway 001D. However, the result is believed to be a false positive due to the presence of liquid scintillation (LS) solution in the CDT and the sample. Prior to extraction, it was identified that the sample had a whitish tint. This tint is believed to have been caused by a small amount of waste LS solution that had entered the tank during rinsing of residue from bulk solution containers before disposal. The practice of segregating the waste LS solution for separate disposal has been used since May 2005 when LS solution was found to give false positive results from samples extracted with hexane to measure oil and grease. Five CDT samples had been extracted using the hexane method subsequent to May 2005, with no results greater than 9 mg/L, and the improved laboratory processes for managing LS solution were believed to have eliminated the potential for biased positive results. However, rinsing of empty bulk containers was not specifically addressed, and the 26 mg/L value is believed to be a result of this practice. Permanent postings were subsequently installed in the Chemistry laboratory to prohibit rinsing of any container that contained LS solution into the CDTs. During the remainder of the quarter, eight follow-up samples were taken and analyzed using the hexane extraction method. The highest result of these follow-up samples was 5.1 mg/l. Regional Water Control Board staff

were notified on January 19, 2006 regarding the CDT 0-2 issue, and correspondence regarding the LS solution was forwarded on February 21, 2006.

e. March

During routine preventative maintenance on March 29, 2006, the discharge temperature recorder for Unit 2 was found to be high out of tolerance. The recorder was adjusted and retested. Subsequent data was within specifications. A review of historical temperature data indicated that the recorder may have been out of tolerance since the end of the Unit 1 refueling outage (early December 2005). Since that time Unit 2 discharge temperatures have averaged about 2 degrees F above Unit 1 values. Therefore, actual discharge temperatures and differential temperatures were slightly lower than the values that had been reported for December 2005 and for January, February and March of 2006. The reported values are slightly inaccurate in a conservative direction, therefore there were no exceedences of NPDES temperature limits.

f. April

On April 17, 2006 condensate from Unit 2 was discharged overboard via point 001J during shut down of the unit for routine maintenance. The monthly samples for suspended solids and oil and grease from this discharge were missed due to human error on the part of the technician responsible for collection of the samples. The cause of this error has been evaluated, and implementation of comprehensive measures to prevent recurrence is in progress. The daily maximum concentration limits for suspended solids and oil and grease discharged from 001J are 100 mg/L and 20 mg/L, respectively. Samples were taken from Unit 2 001J at the next available opportunity on May 20, 2006. Analysis results were below the 1.4 mg/L detection limit for oil and grease, and less than the 5 mg/L reporting limit for suspended solids. There is no operational reason to believe that analysis results would have been higher if samples had been taken from the water discharged on April 17, 2006.

g. May

Starting on May 17, 2006 firewater was inadvertently discharged via 001E due to a leaking valve. The firewater was being used to cool the service cooling water heat exchanger. The butterfly valve on the heat exchanger was not completely sealing off flow, and an estimated 15 gpm of firewater leaked past the valve for 72 hours. Total volume discharged was approximately 64,800 gallons over the 72 hours. Water that is normally discharged via 001E is pure water with corrosion inhibitors and biocides added. The firewater was clean freshwater with no corrosion inhibitors and no biocides. Firewater is a routine component of 001 discharge.

h. July

On July 27, 2006 a pipe leading from the seawater reverse osmosis unit burst along the roadway leading up to the raw water storage reservoirs, sending freshwater into Discharge Path 006. Upon discovery, active measures were taken to prevent erosion and sediment from entering the storm water drainage ditch and ocean outfall. Flow was stopped and the pipe was repaired by the end of the day on July 28. It is estimated that a maximum of 2,000 gallons of freshwater was released. The description in the NPDES permit includes only rainwater for Discharge 006. Even though the released water was pure freshwater, technically it is not rainwater and Regional Water Quality Control Board staff were notified on July 28, 2006.

i. October

In late October and early November 2006, DCPD replaced a check valve in the outfall pipe of discharge 001H, discharge for the High Conductivity Tank (HCT). This required re-routing the 001H waste water (after normal filtration and neutralization processes) to the dirty side of the turbine building sump. From there the water flowed through the oily-water-separator and overboard via 001F. This process did not change the character of HCT waste water. The HCT

discharge (001H re-routed through the 001F outfall) continued to comply with NPDES permit limitations. This temporary re-route was discussed with CCRWQCB staff prior to initiating the work and written concurrence for the re-route was received on October 18, 2006. As requested by CCRWQCB staff, volumes of water discharged through this temporary re-route were documented and are listed below.

10/25/06	22,732 gallons
10/31/06	22,156 gallons
<u>11/02/06</u>	<u>22,156 gallons</u>
Total:	67,044 gallons

j. December

On December 15, 2006 during the 4:00 AM routine chlorination of the circulating water tunnels for Unit 1, the discharge chlorine monitor momentarily spiked up from a steady reading of 46 µg/L to an instantaneous peak of 97 µg/L, then immediately dropped back down to the 46 µg/L level. The total residual oxidant instantaneous maximum for Discharge 001 per DCPD NPDES Permit Order 90-09 is 200 µg/L. However, the calculated discharge limit in accordance with the California Ocean Plan is 89 µg/L. CCRWQCB staff were notified of the incident by telephone on December 15, 2006. Subsequent investigation determined that the most probable cause of the event was an electrical disturbance in the discharge monitor 120-Volt AC power supply. The Unit 1 discharge monitor was inspected following discovery of the recorded spike and found to be operating normally and within calibration limits. Unit 1 chemical injection cycles subsequent to the 4:00 AM treatment displayed expected residual chlorine concentrations in the 40-50 µg/L range. Condenser waterbox chlorine monitors recorded normal oxidant curves during the 0400 treatment with no indications of a chemical concentration spike ruling out momentary excess chlorine injection at the seawater system intake. The post condenser dechlorination system was found to be operating within normal parameters with no indications of chemical flow restriction, feed pump volume or pressure loss, significant power supply disruption, or any other evidence of equipment operational anomaly. Furthermore, the chemical injection system is designed to trip-off in the event of a significant equipment fault. No system trip occurred. In response to this event, the electric power system to the discharge monitors and associated recording equipment is being equipped with an in-line uninterruptible power supply (UPS) reserve battery unit with continuous voltage and amperage output conditioning.

B. Monitoring of Receiving Water

1. Ecological Studies at Diablo Canyon

Marine ecological monitoring was continued during 2006 under the Receiving Water Monitoring Program (RWMP) as requested in a letter from the Central Coast Regional Water Quality Control Board (CCRWQCB) dated December 9, 1998, and as detailed in a letter from PG&E dated January 8, 1999 (DCL-99-503). This program includes tasks from the Ecological Monitoring Program (EMP) with additional stations and increased sampling frequencies. This program replaces the EMP and the Thermal Effects Monitoring Program (TEMP). Several one-year-only tasks outlined in the above letters were completed in 1999 and were not requested to be performed in 2006. Results of 2005 RWMP data were submitted to the CCRWQCB on April 28, 2006. A table in Appendix 4 summarizes requirements and completed tasks for 2006. The second replicate of the fourth survey of Fish Observation Transects was completed for only three out of twelve stations due to unfavorable ocean conditions from December 2006 through January 2007.

2. In Situ Bioassay

Results of the Mussel Watch Program are reported to the CCRWQCB directly by the California Department of Fish and Game in their periodic report for this program.

C. Sodium Bromide Treatment Program

DCPP continued its integrated sodium bromide and "foul release coating" strategy to control macrofouling in the Circulating Water System (CWS). The treatment program consists of six 20-minute injections (at four hour intervals) of a blend of generic sodium bromide and sodium hypochlorite into DCP's seawater intake conduits. Each injection attempts to achieve a target concentration of 200 parts per billion (ppb) Total Residual Oxidant (TRO) at the inlet waterbox of the main condensers. Discharge TRO, measured at the plant outfall, remained below NPDES limitations, except for one reading in December (reference section 4.j). Typically, discharge values were between 20 ppb to 50 ppb. In conjunction with the chemical treatment, untreated portions of the cooling water system were previously painted with a non-toxic "foul release coating" to reduce or prevent attachment of fouling organisms.

Both conduits of Unit 1 were treated throughout the first three quarters of 2006 with simultaneous injections of sodium bromide and sodium hypochlorite six times a day. There were brief interruptions in late July, August, and September due to a flow alarm system trip, depletion of sodium bromide chemical stock due to supply delays, and piping maintenance activities. Both conduits of Unit 1 continued the simultaneous injection treatment through October 2006. Sodium bromide injections were shut down in early November in preparation for a Unit 1 tunnel cleaning. Sodium hypochlorite injections to the Unit 1 main conduits were maintained until November 21st when the Unit 1 injection system was secured for the tunnel cleaning. Simultaneous injections of sodium bromide and sodium hypochlorite were restarted in late November after completion of the tunnel cleaning. There was one other brief interruption in the Unit-1 treatment schedule in early December when a Unit 2 circulating water pump automatically shut down.

Both conduits of Unit 2 were treated throughout the first quarter of 2006 with simultaneous injections of sodium bromide and sodium hypochlorite six times a day until late March when sodium bromide injections were turned off in anticipation of the 2R13 refueling outage. Microfouling injections of sodium hypochlorite continued six times a day until mid-April when all Unit 2 injections were terminated for the start of 2R13. Simultaneous injections of sodium bromide and sodium hypochlorite six times a day were initiated shortly after the middle of May once the circulating water pumps were returned to service. This treatment schedule continued throughout the remainder of 2006 with brief interruptions in late July, August, September, and mid-December due to a flow alarm system trip, depletion of sodium bromide chemical stock due to supply delays, piping maintenance activities, storm wave induced condenser cleaning, a circulating water pump 2-1 shut down, and a tunnel cleaning for the 2-1 conduit.

APPENDIX 1

DIABLO CANYON POWER PLANT

NPDES DISCHARGE POINTS	
DISCHARGE NUMBER	DESCRIPTION
001	Once-Through Cooling Water
001 A	Firewater Systems
001 B	Auxiliary Salt Water Cooling System
001 C	Discharge Deleted
001 D	Liquid Radioactive Waste Treatment System
001 E	Service Cooling Water System
001 F	Turbine Building Sump
001 G	Make-Up Water System Waste Effluent
001 H	Condensate Demineralizer Regenerant
001 I	Seawater Evaporator Blowdown
001 J	Condensate Pumps Discharge Header Overboard
001 K	Condenser Tube Sheet Leak Detection Dump Tank Overboard
001 L	Steam Generator Blowdown
001 M	Wastewater Holding and Treatment System
001 N	Sanitary Wastewater Treatment System
001 P	Seawater Reverse Osmosis System Blowdown
002	Intake Structure Building Floor Drains
003	Intake Screen Wash
004	Bio Lab and Storm Water Runoff
005, 008, 009, 013, 014, 015	Yard Storm Drains
006, 007, 010, 011, 012	Storm Water Runoff
016	Bio Lab Seawater Supply Pump Valve Drain
017	Seawater Reverse Osmosis System Blowdown Drain

APPENDIX 2

TABULAR SUMMARIES OF INFLUENT AND EFFLUENT MONITORING

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DISCHARGE 001

Month	TEMPERATURE (DEG F)						FLOW (MGD)				
	INFLUENT			EFFLUENT			DELTA T		high	low	avg
	high	low	avg	high	low	avg	high	avg			
JAN	57.0	52.6	54.5	77.1	72.1	74.2	20.1	19.7	2486	2486	2486
FEB	55.1	51.3	52.9	74.8	70.6	72.5	19.9	19.5	2486	2486	2486
MAR	54.9	50.1	52.1	74.8	70.0	72.0	20.3	19.8	2486	2486	2486
APR	56.5	50.7	53.5	75.5	68.7	72.3	19.4	18.8	2486	1239	1927
MAY	55.7	49.3	51.6	71.3	62.7	68.7	19.1	17.1	2486	1239	1624
JUN	53.5	49.9	51.7	72.0	67.5	70.2	18.9	17.9	2486	2486	2486
JUL	58.5	50.3	53.9	77.1	68.8	72.5	18.8	18.6	2486	2486	2486
AUG	58.6	53.1	55.6	77.2	71.8	74.1	19.0	18.5	2486	2486	2486
SEP	58.7	52.4	55.8	77.5	71.2	74.7	19.5	18.8	2486	2486	2486
OCT	59.1	55.2	57.6	78.2	74.3	76.6	19.4	19.0	2486	2486	2486
NOV	58.5	53.9	55.5	77.6	73.2	74.6	20.0	19.2	2486	1899	2430
DEC	58.3	53.4	55.5	75.8	71.2	73.7	19.4	18.2	2486	1732	2324
limit:	-			-			22		2760		

The INFLUENT and EFFLUENT "high" and "low" temperature values correspond to the highest and lowest daily average value for that month. The INFLUENT high and low temperature does not necessarily correspond to the same day as the EFFLUENT high and low temperature for that month. The "avg" temperature for INFLUENT and EFFLUENT is the average for the entire month. The Monthly Delta T "high" is the highest Delta T for a day of the month based on daily average INFLUENT and EFFLUENT temperature values. The "Avg" temperature is calculated from INFLUENT and EFFLUENT monthly avg values.

DISCHARGE 001

Month	TOTAL RESIDUAL CHLORINE (daily max. ug/l)			TOTAL CHLORINE USED (lbs/day)		
	high	low	avg	high	low	avg
JAN	64	<10	51	605	360	465
FEB	60	<10	28	461	360	392
MAR	60	<10	34	504	353	404
APR	42	<10	25	547	187	316
MAY	55	<20	28	475	173	283
JUN	66	13	31	533	403	484
JUL	73	<10	41	667	446	538
AUG	73	<10	35	864	619	745
SEP	60	<10	20	922	511	686
OCT	87	<10	40	922	677	747
NOV	87	<7	37	734	288	533
DEC	97	7	36	655	410	573

Note that the residual chlorine limits in Permit CA0003751, Order 90-09, is a daily max of 200 ug/l and includes a time-based limit (per the Ocean Plan) which depends on the length of the respective chlorination cycle.

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DISCHARGE 001

METALS (monthly avg. ug/l)

Month	CHROMIUM		COPPER		NICKEL		*ZINC	
	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent
JAN	ND(10)	ND(10)	ND(10)	ND(10)	10	11	ND(10)	ND(10)
FEB	ND(10)							
MAR	ND(10)							
APR	ND(10)							
MAY	ND(10)							
JUN	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	59	ND(10)
JUL	ND(10)							
AUG	ND(10)							
SEP	ND(10)							
OCT	ND(10)							
NOV	ND(10)							
DEC	ND(10)							
6-month median limit:		10	-	10	-	30	-	70

* Note: Influent zinc has been historically higher than effluent concentrations.

**DISCHARGE 001
VARIOUS ANNUAL ANALYSES
(monthly avg. ug/l)**

Parameter	Influent	Effluent	6-Mo. Med. Effluent Limit
Arsenic	1.5	1.5	30
Cadmium	0.03	0.03	10
Cyanide	ND(10)	ND(10)	30
Lead	0.02	0.05	10
Mercury	ND(0.0010)	ND(0.0010)	0.2
Silver	0.02	0.02	2.9
Titanium	-	10	none
*Phenolic Compounds (non-chlorinated)	ND(11.82)	ND(11.82)	150
**Phenolic Cmpds (chlorinated)	ND(3.36)	ND(3.36)	10
***PCB's	ND(1.59)	ND(1.59)	none

*Reporting limit [ND(11.82)] shown is the sum of individual Reporting Limits for 8 target compounds.

**Reporting limit [ND(3.36)] shown is the sum of individual Reporting Limits for 6 target compounds.

***Reporting limit [ND(1.59)] shown is the sum of individual Reporting Limits for 7 target compounds.

DISCHARGE 001

AMMONIA (as N) (ug/l)

Month	Influent	Effluent
JAN	ND(200)	ND(200)
FEB		
MAR		
APR	ND(200)	ND(200)
MAY		
JUN		
JUL	ND(200)	ND(200)
AUG		
SEP		
OCT	ND(200)	ND(200)
NOV		
DEC		
6-month median limit:		3060

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MONTHLY pH (averages)

Discharge: Month	001		002	003	004	001P
	Influent	Effluent				
JAN	8.0	8.0	8.0	8.0	8.0	7.8
FEB	7.8	7.8	7.9	7.9	7.9	7.7
MAR	8.0	8.0	8.0	8.0	7.9	7.8
APR	8.0	8.0	8.0	8.0	8.0	7.7
MAY	7.8	7.8	7.8	7.8	7.8	7.6
JUN	7.9	7.9	7.9	7.9	7.9	7.6
JUL	8.0	8.0	7.8	7.8	7.8	7.6
AUG	8.0	8.0	8.0	8.0	8.0	7.7
SEP	8.0	8.0	7.9	7.9	7.9	7.8
OCT	7.9	7.9	8.0	7.9	7.9	7.6
NOV	7.9	7.9	8.0	7.8	8.0	7.7
DEC	8.0	8.0	8.1	8.0	8.0	7.8

DISCHARGE 001F

Month	GREASE & OIL (mg/l)		SUSPENDED SOLIDS (mg/l)	
	high	avg	high	avg
JAN	ND(5)	ND(5)	10	10
FEB	ND(5)	ND(5)	5	5
MAR	ND(5)	ND(5)	13	13
APR	ND(5)	ND(5)	12	11
MAY	ND(5)	ND(5)	6	6
JUN	ND(5)	ND(5)	ND(5)	ND(5)
JUL	ND(5)	ND(5)	11	11
AUG	ND(5)	ND(5)	9	8
SEP	ND(5)	ND(5)	11	10
OCT	ND(5)	ND(5)	22	21
NOV	ND(5)	ND(5)	18	17
DEC	ND(5)	ND(5)	13	12
limit:	20	15	100	30

Note: "high" limits based upon Daily Maximum limits. "avg" limits based upon Monthly Average Limits.

**DISCHARGE 001N
(Monthly Summary of Weekly Data)**

Month	GREASE & OIL (mg/l)			SUSPENDED SOLIDS (mg/l)			SETTLABLE SOLIDS (ml/l)		
	high	low	avg	high	low	avg	high	low	avg
JAN	ND(5)	ND(5)	ND(5)	33	5	14	ND(0.1)	ND(0.1)	ND(0.1)
FEB	ND(5)	ND(5)	ND(5)	10	ND(5)	7	ND(0.1)	ND(0.1)	ND(0.1)
MAR	ND(5)	ND(5)	ND(5)	18	ND(5)	8	ND(0.1)	ND(0.1)	ND(0.1)
APR	ND(5)	ND(5)	ND(5)	28	12	18	ND(0.1)	ND(0.1)	ND(0.1)
MAY	ND(5)	ND(5)	ND(5)	56	24	40	ND(0.1)	ND(0.1)	ND(0.1)
JUN	ND(5)	ND(5)	ND(5)	10	5	8	ND(0.1)	ND(0.1)	ND(0.1)
JUL	6	ND(5)	<5	27	6	13	ND(0.1)	ND(0.1)	ND(0.1)
AUG	ND(5)	ND(5)	ND(5)	14	7	10	0.1	ND(0.1)	<0.1
SEP	ND(5)	ND(5)	ND(5)	26	8	18	0.1	ND(0.1)	<0.1
OCT	ND(5)	ND(5)	ND(5)	14	6	10	ND(0.1)	ND(0.1)	ND(0.1)
NOV	ND(5)	ND(5)	ND(5)	16	10	13	ND(0.1)	ND(0.1)	ND(0.1)
DEC	ND(5)	ND(5)	ND(5)	20	15	18	ND(0.1)	ND(0.1)	ND(0.1)
limit:	20	-	15	-	-	60	3.0	-	1.0

Note: "high" limits based upon Daily Maximum limits. "avg" limits based upon Monthly Average limits.

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DISCHARGE 001D, H, L, F, METALS (avg. ug/l)

Month	001D				001 H				001L				001F			
	Ag	Cd	Cr	Cu	Ag	Cd	Cr	Cu	Ag	Cd	Cr	Cu	Ag	Cd	Cr	Cu
JAN	ND(1)	ND(10)	ND(10)	ND(10)	ND(2)	ND(10)	17	42	ND(1)	ND(10)	ND(10)	ND(10)	ND(1)	ND(10)	27	12
FEB	ND(1)															
MAR																
APR	ND(10)	ND(10)	ND(10)	13	ND(10)	ND(10)	16	55	ND(10)	ND(10)	ND(10)	13	ND(10)	ND(10)	15	ND(10)
MAY																
JUN																
JUL	ND(10.0)	ND(10)	ND(10)	ND(10)	ND(10.0)	ND(10)	21	38	ND(10.0)	ND(10)	ND(10)	ND(10)	ND(10.0)	ND(10)	ND(10)	ND(10)
AUG	ND(10)															
SEP																
OCT	ND(10)	ND(10)	ND(10)	10	ND(10)	ND(10)	20	30	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	18
NOV																
DEC																

limit: none

Note: 001D, 001H and 001L analyses performed on quarterly composites. 001F analyses performed quarterly on a composite of weekly samples.

DISCHARGE 001D, H, L, F, METALS (avg. ug/l)

Month	001D				001 H				001L				001F			
	Hg	Ni	Pb	Zn	Hg	Ni	Pb	Zn	Hg	Ni	Pb	Zn	Hg	Ni	Pb	Zn
JAN	ND(0.2)	ND(10)	ND(10)	67	ND(0.2)	17	ND(10)	10	ND(0.2)	ND(10)	ND(10)	<10	ND(0.2)	19	ND(10)	22
FEB	ND(0.2)															
MAR																
APR	ND(0.20)	ND(10)	35	236	0.27	17	ND(10)	17	ND(0.20)	ND(10)	ND(10)	ND(10)	ND(0.20)	11	ND(10)	17
MAY																
JUN																
JUL	ND(0.20)	ND(10)	ND(10)	214	0.23	16	ND(10)	<10	ND(0.20)	ND(10)	ND(10)	ND(10)	ND(0.20)	10	ND(10)	22
AUG	ND(0.20)															
SEP																
OCT	ND(0.20)	ND(10)	ND(10)	109	ND(0.20)	18	ND(10)	11	ND(0.20)	ND(10)	ND(10)	ND(10)	ND(0.20)	15	ND(10)	33
NOV																
DEC																

limit: none

Note: 001D, 001H and 001L analyses performed on quarterly composites, except for mercury (due to holding time). 001F analyses performed quarterly on a composite of weekly samples.

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**MONTHLY TOTAL SUSPENDED SOLIDS
Averages (mg/l)**

Month	001D*	001G	001H	001I	001J	001K	001L	001M	001P	002	003
JAN	<5	ND(5)	ND(5)				ND(5)		ND(5)	5	17
FEB	<5	ND(5)	ND(5)				ND(5)		ND(5)	ND(5)	ND(5)
MAR	<5	ND(5)	ND(5)				ND(5)		ND(5)	6	7
APR	<5	ND(5)	ND(5)				ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
MAY	7	ND(5)	6		ND(5)		ND(5)		ND(5)	ND(5)	5
JUN	<5	5	ND(5)				ND(5)		ND(5)	ND(5)	5
JUL	<5	ND(5)	8				ND(5)		ND(5)	ND(5)	7
AUG	<5	ND(5)	ND(5)		ND(5)		ND(5)	ND(5)	14	<5	9
SEP	<5	ND(5)	ND(5)				ND(5)		ND(5)	ND(5)	ND(5)
OCT	<5	ND(5)	ND(5)				ND(5)		5	11	ND(5)
NOV	<5	ND(5)	10				ND(5)		ND(5)	ND(5)	8
DEC	<5	ND(5)	ND(5)		ND(5)		ND(5)		ND(5)	ND(5)	ND(5)

Limit: 30 30 30 30 30 30 30 30 30 30 30 -

* Discharges from 001D are batched. Monthly averages are flow weighted.
Note: No discharges occurred from 001I and 001K during 2006.
Blank spots for other discharge points indicate that no discharge occurred during that particular month.

**QUARTERLY GREASE & OIL
Averages by Month (mg/l)**

Month	001D*	001G	001H	001I	001J	001K	001L	001M	001P	002	003	004
JAN	<5	ND(5)	ND(5)				ND(5)		ND(5)	ND(5)	ND(5)	ND(5)
FEB	<5											
MAR	ND(5)											
APR	ND(5)	ND(5)	ND(5)				ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
MAY	<5				ND(5)							
JUN	ND(5)											
JUL	ND(5)	ND(5)	ND(5)				ND(5)		ND(5)	ND(5)	ND(5)	ND(5)
AUG	<5				ND(5)			ND(5)				
SEP	ND(5)											
OCT	<5	ND(5)	ND(5)				ND(5)		ND(5)	ND(5)	ND(5)	ND(5)
NOV	<5						ND(5)					
DEC	ND(5)				ND(5)							

Limit: 15 15 15 15 15 15 15 15 15 15 15 15

* Discharges from 001D are batched. Monthly averages are flow weighted.
Note: No discharges occurred from 001I and 001K during 2006.

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**QUARTERLY ACUTE AND CHRONIC TOXICITY TESTING
(toxicity units, tu_a and tu_c)**

Month	ACUTE		*CHRONIC
	Test Result	6-Month Median	Test Result
JAN			
FEB	0.00	0.00	1.0
MAR			
APR			
MAY	0.00	0.00	1.0
JUN			
JUL			
AUG	0.00	0.00	1.0
SEP			
OCT			
NOV	0.00	0.00	1.0
DEC			
6-month median limit:		0.26	5.1

* It should be noted that this parameter is monitored for the State Ocean Plan instead of the NPDES permit. A value of 1.0 indicates no chronic toxicity.

**DISCHARGE 001N
ANNUAL ANALYSES**

Sludge Parameter	Result	Limit
Percent Moisture	99%	None
Total Kjeldahl Nitrogen	580 mg/kg	None
Ammonia (N)	95 mg/kg	None
Nitrate (N)	ND(1) mg/kg	None
Total Phosphorus	210 mg/kg	None
pH	6.7	None
Oil and Grease	6 mg/kg	None
Boron	ND(3) mg/kg	None
Cadmium	ND(0.3) mg/kg	10 X STLC*
Copper	3 mg/kg	10 X STLC
Chromium	ND(0.5) mg/kg	10 X STLC
Lead	ND(1) mg/kg	10 X STLC
Nickel	ND(0.5) mg/kg	10 X STLC
Mercury	ND(0.04) mg/kg	10 X STLC
Zinc	7 mg/kg	10 X STLC
Volume	0.76 tons	None

Note: Annual samples were collected in October.

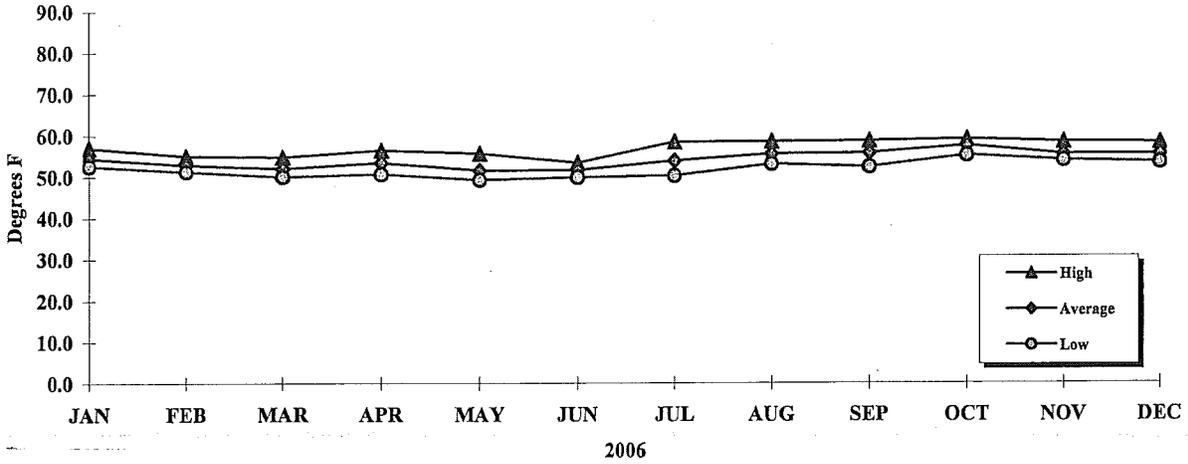
* STLC = Soluble Threshold Limit Concentration

APPENDIX 3

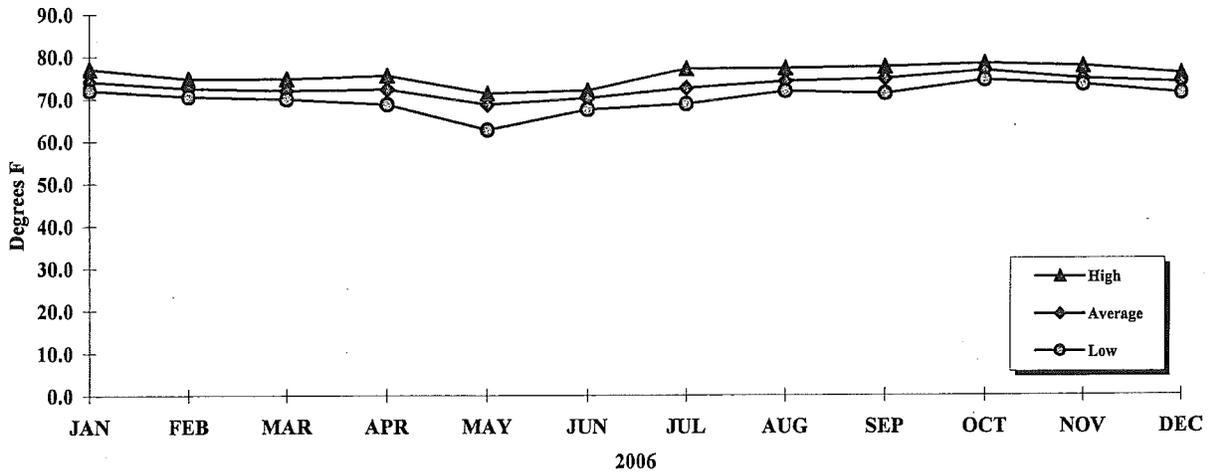
GRAPHICAL SUMMARIES OF INFLUENT AND EFFLUENT MONITORING

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DISCHARGE 001 INFLUENT
Temperature (°F)

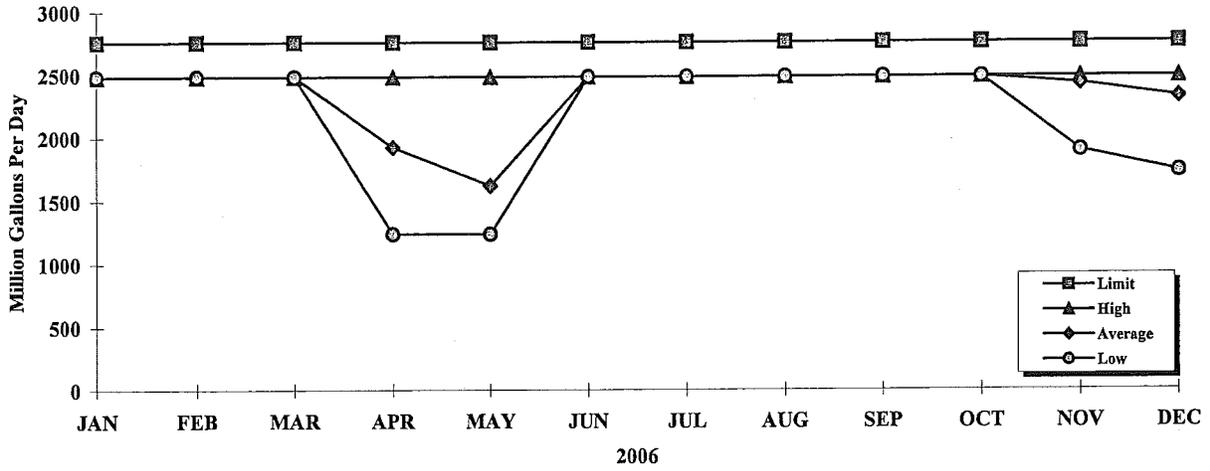


DISCHARGE 001 EFFLUENT
Temperature (°F)

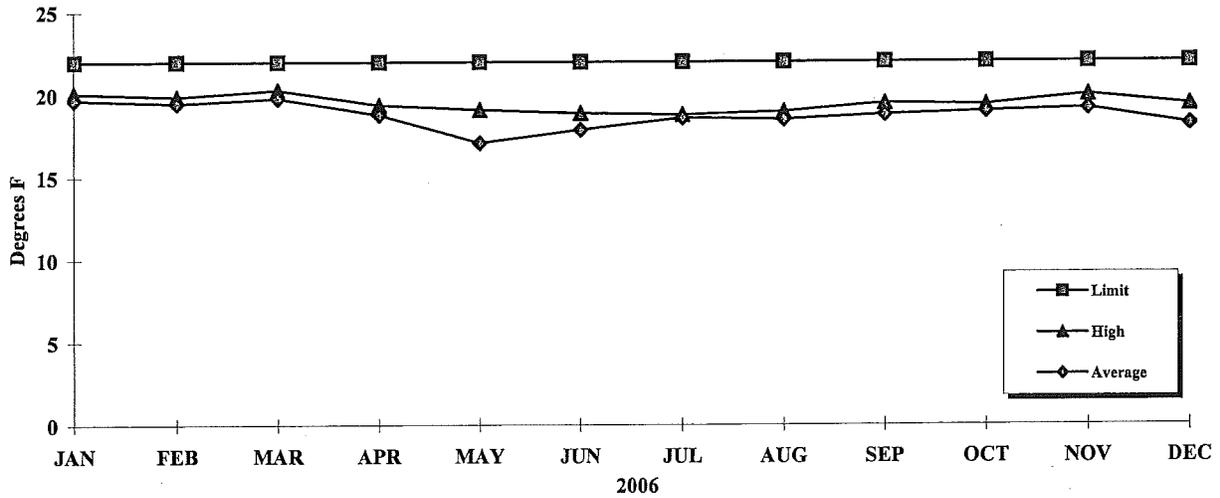


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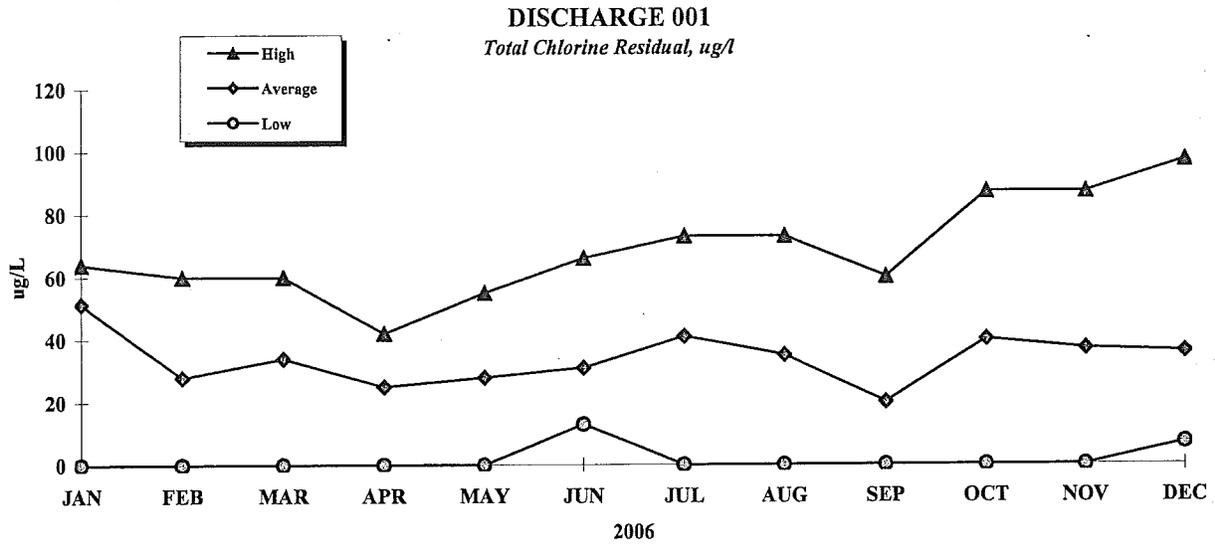
DISCHARGE 001 EFFLUENT
Flow (MGD)



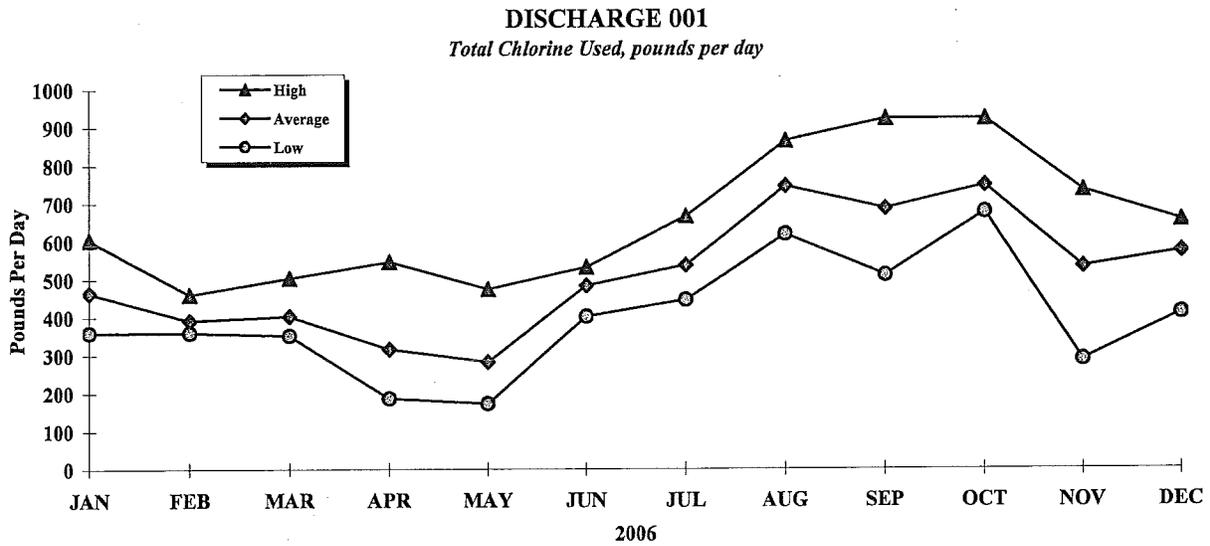
DISCHARGE 001 EFFLUENT
Monthly Delta T (°F)



**2006 Annual Summary Report on Discharge Monitoring
at the
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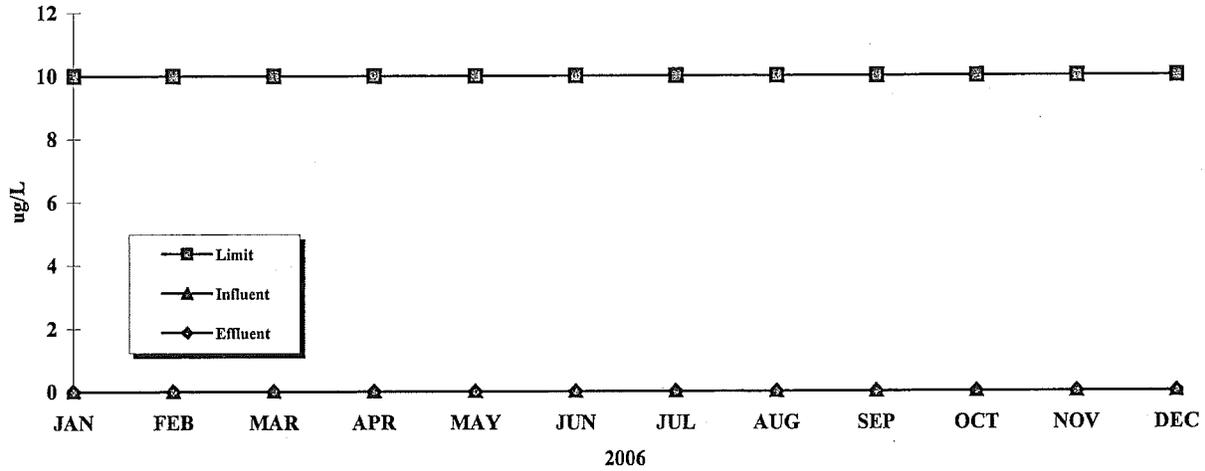


Note: Values plotted at zero were below the reporting limit.



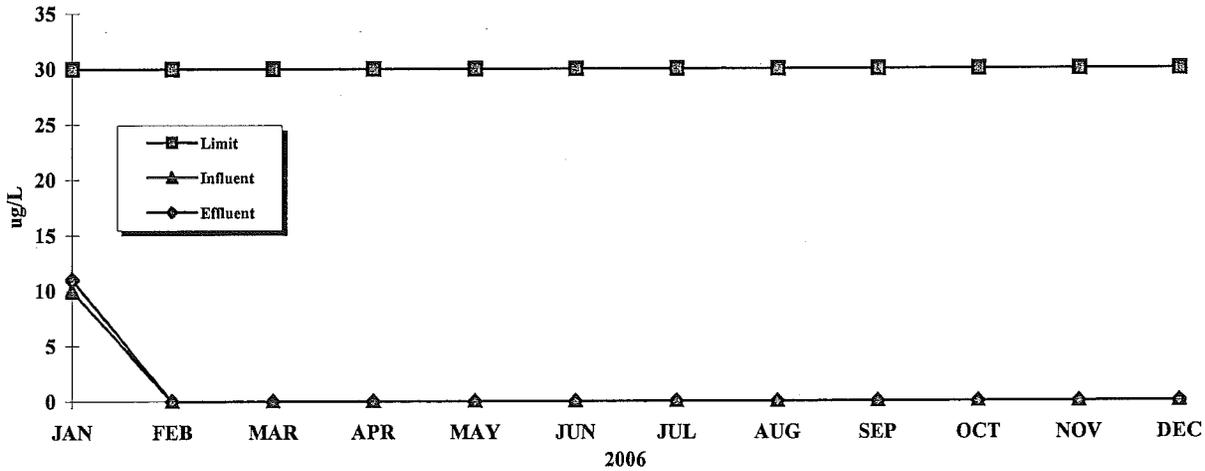
2006 Annual Summary Report on Discharge Monitoring at the Diablo Canyon Power Plant

DISCHARGE 001
Copper (monthly average, ug/l)



Note: The analyte was not detected at or above the reporting limit for values plotted at zero.
The 6-month median limit (the most conservative limit) is plotted on this chart.
The daily maximum limit for Copper is 50 ug/l.

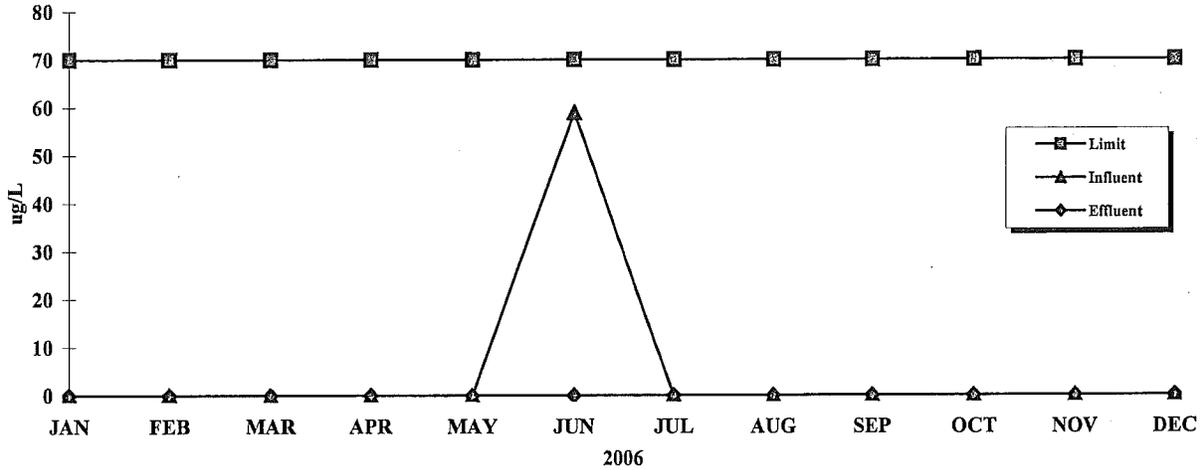
DISCHARGE 001
Nickel (monthly average, ug/l)



Note: The analyte was not detected at or above the reporting limit for values plotted at zero.
The 6-month median limit (the most conservative limit) is plotted on this chart.
The daily maximum limit for Nickel is 100 ug/l.

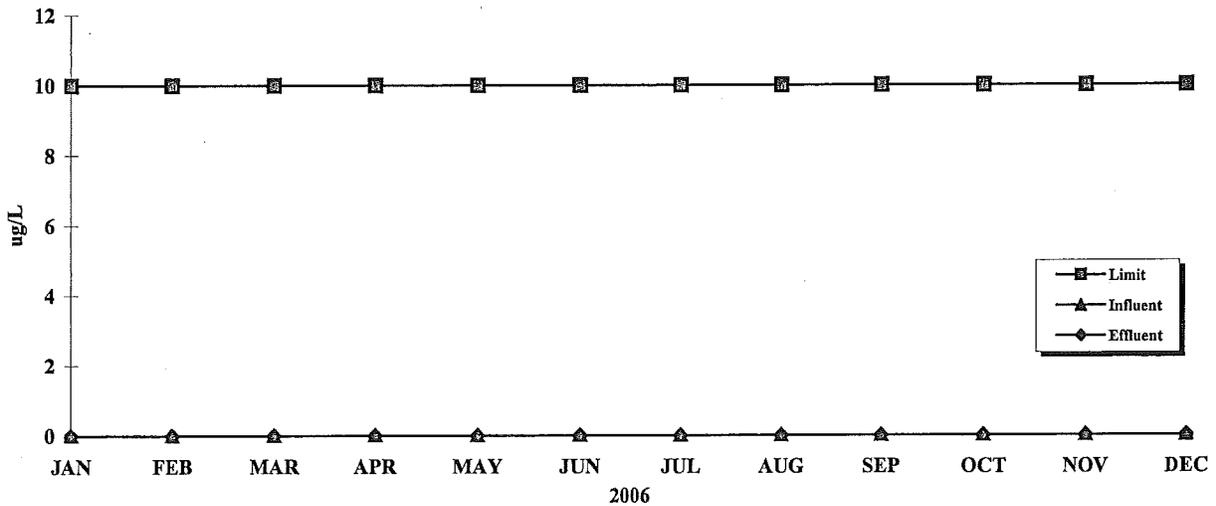
2006 Annual Summary Report on Discharge Monitoring
at the
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DISCHARGE 001
Zinc (monthly average, ug/l)



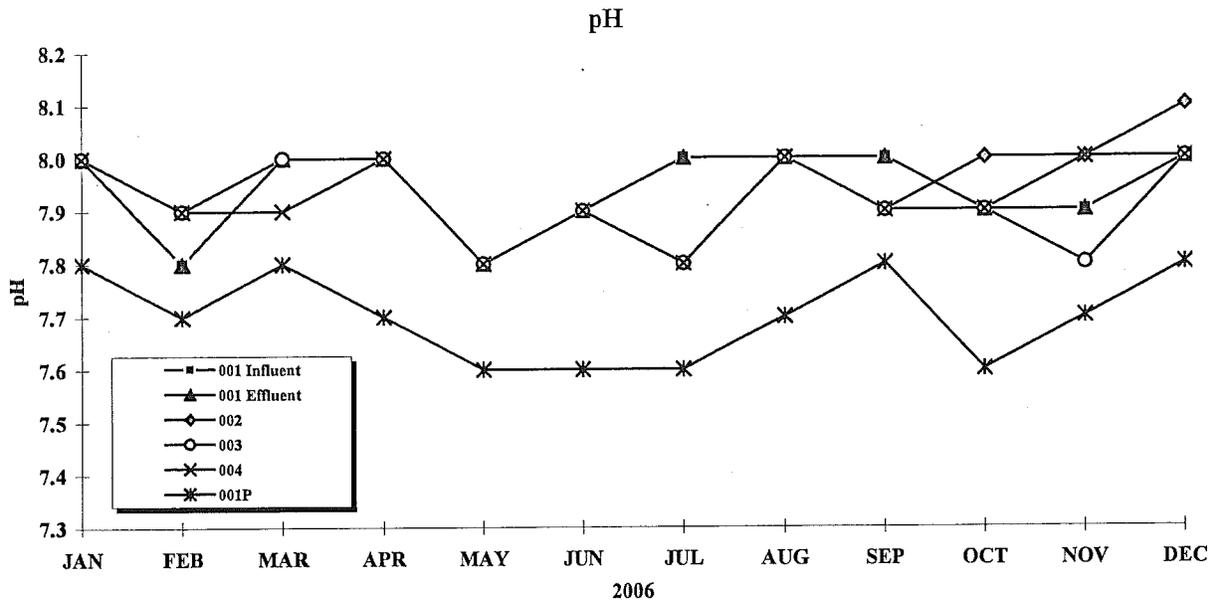
Note: The analyte was not detected at or above the reporting limit for values plotted at zero.

DISCHARGE 001
Chromium (monthly average, ug/l)

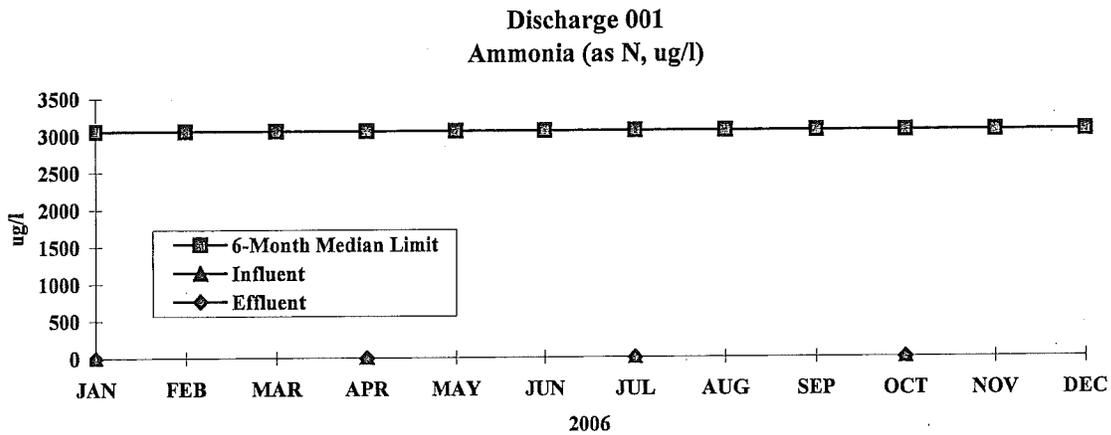


Note: The analyte was not detected at or above the reporting limit for values plotted at zero.
The 6-month median limit is plotted on this chart. The daily maximum limit for chromium is 40 ug/l.

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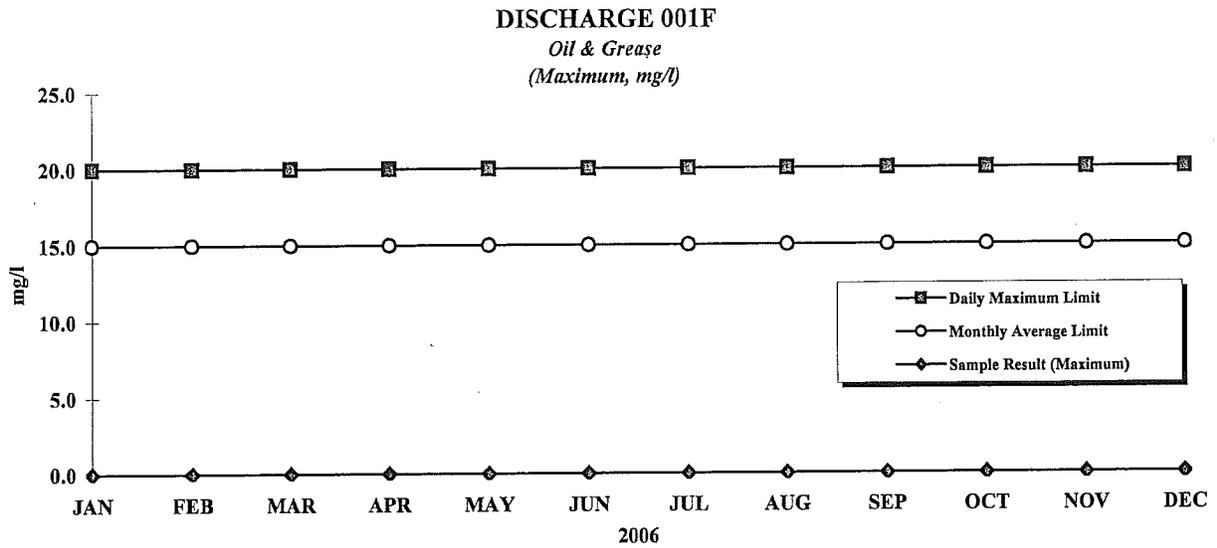


Note: Several data points on this chart overlap.

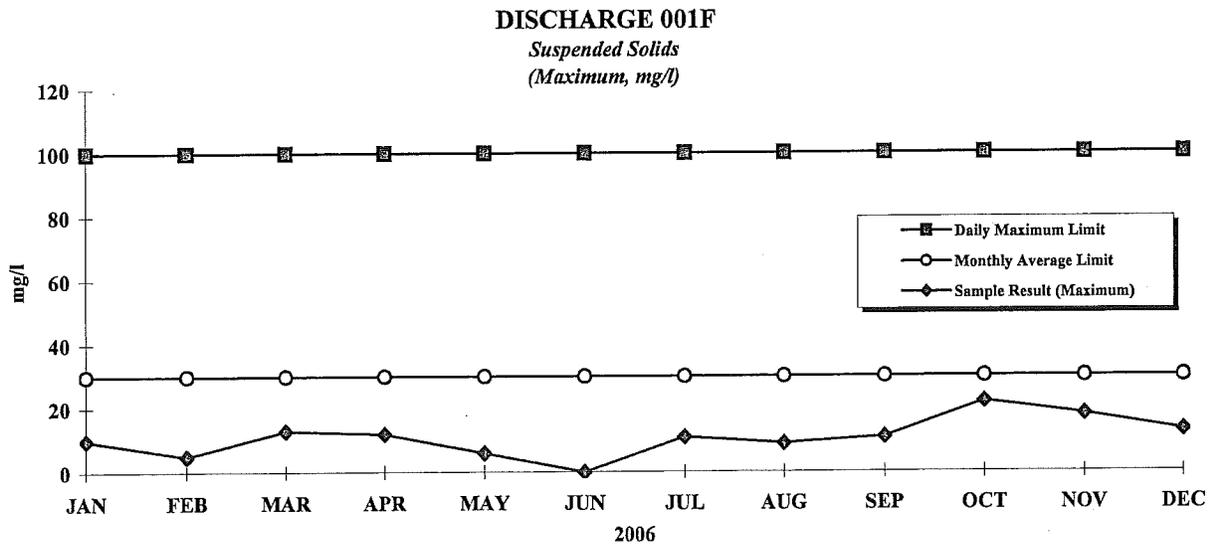


Note: The analyte was not detected at or above the reporting limit for values plotted at zero.
Influent and Effluent values overlap at four points on this plot.

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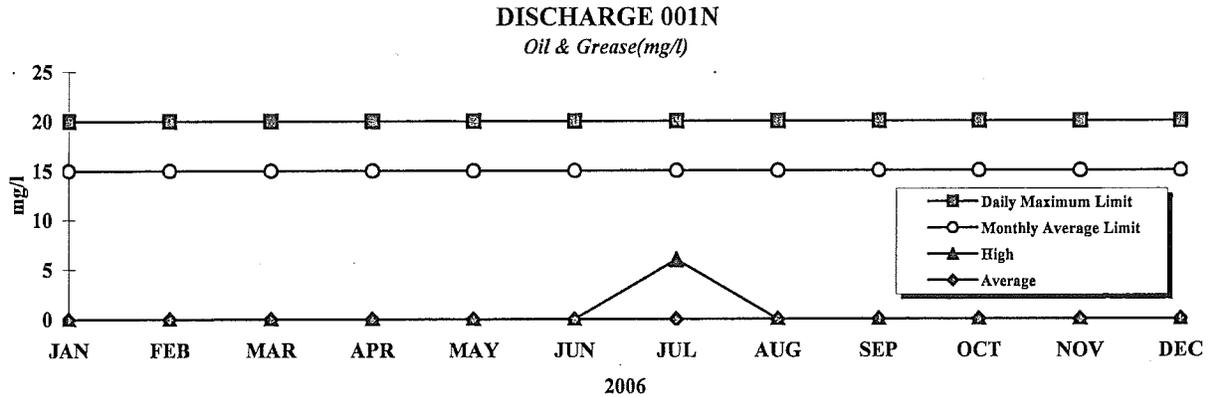


Note: Values plotted at zero were below the reporting limit.

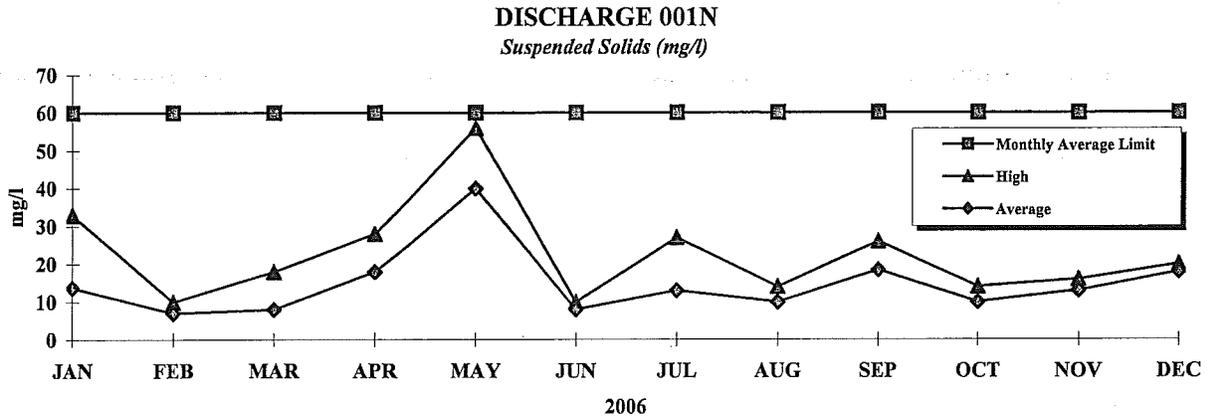


Note: Maximum values are plotted. The analyte was not detected at or above the reporting limit for values plotted at zero.

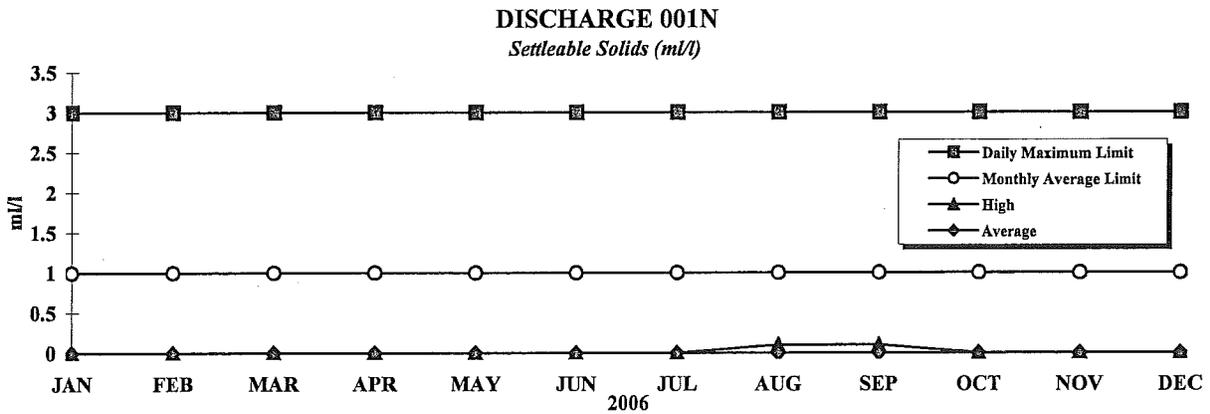
2006 Annual Summary Report on Discharge Monitoring at the Diablo Canyon Power Plant



Note: Values plotted at zero were below the reporting limit.
High, low and average values overlap at eleven points on this plot.

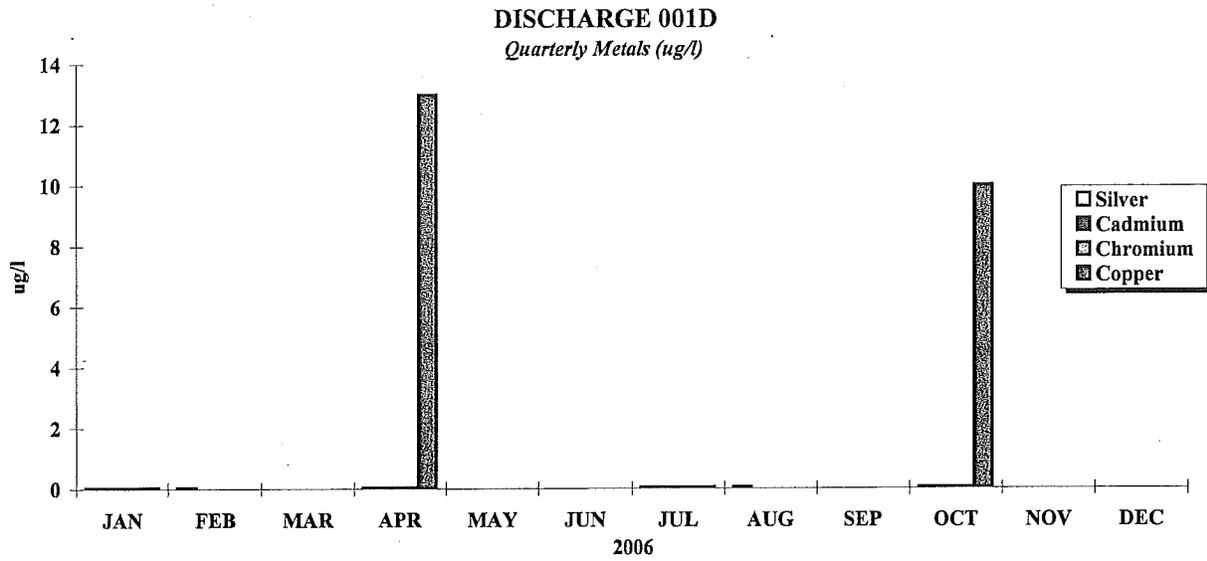


Note: Values plotted at zero were below the reporting limit.

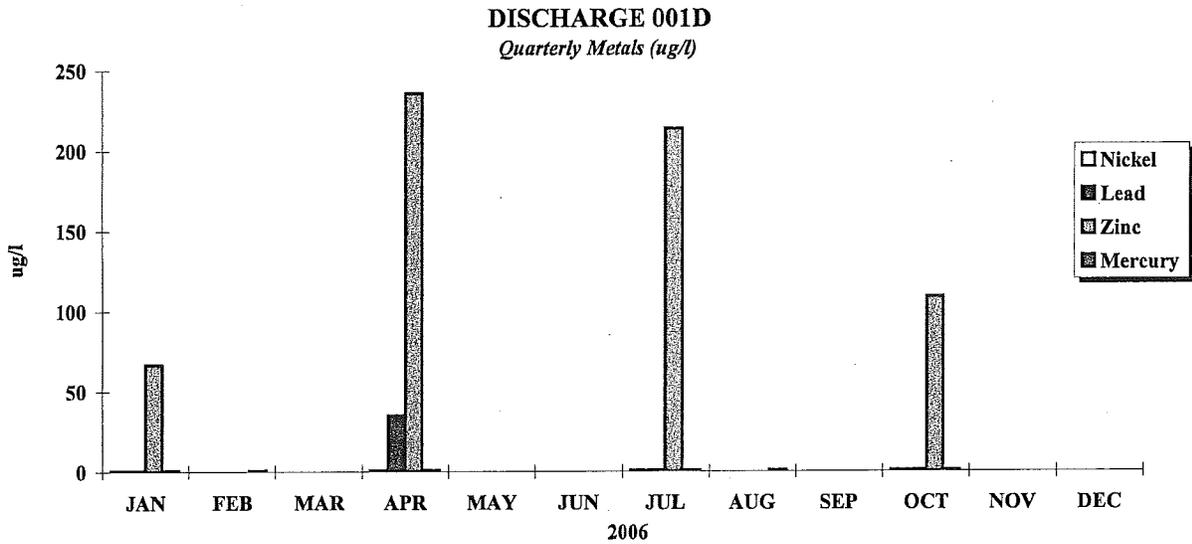


Note: Values plotted at zero were below the reporting limit.
High, average, and low values overlap at ten points on this plot.

**2006 Annual Summary Report on Discharge Monitoring
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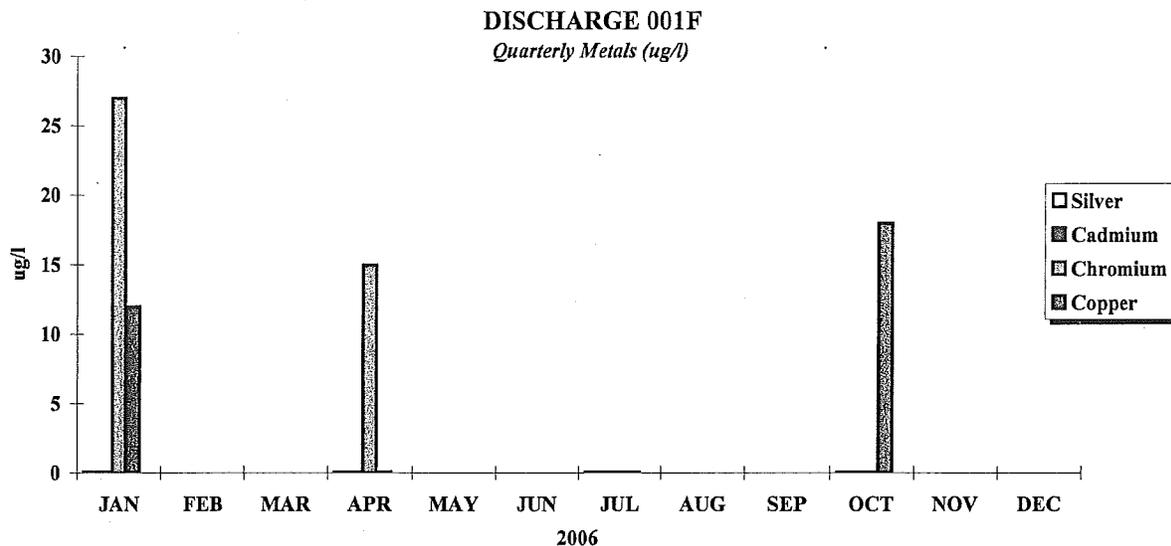


Note: The analyte was not detected at or above the reporting limit for values plotted at zero.

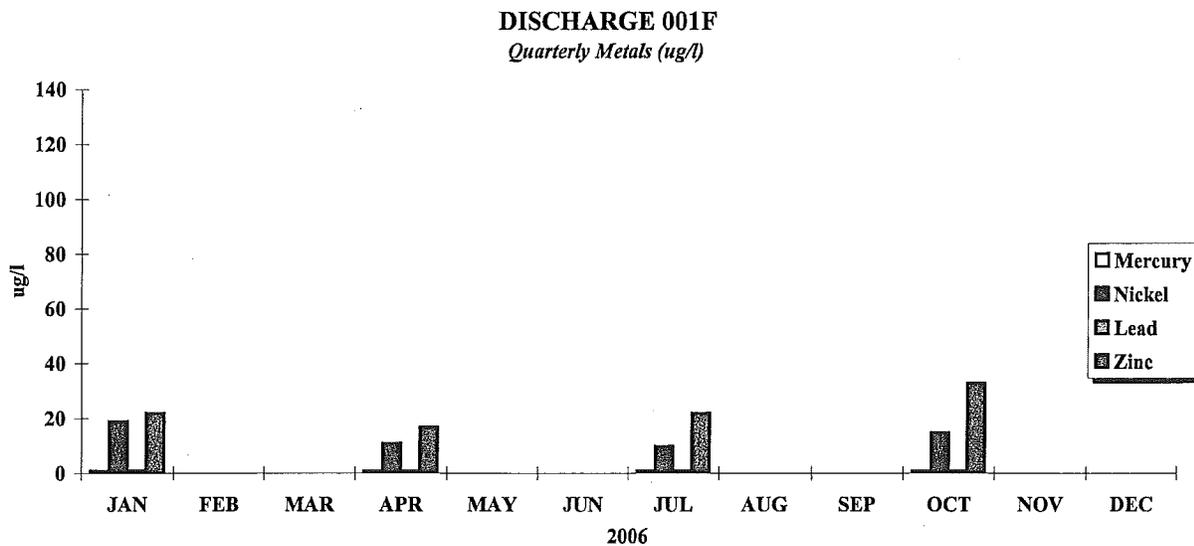


Note: The analyte was not detected at or above the reporting limit for values plotted at zero.

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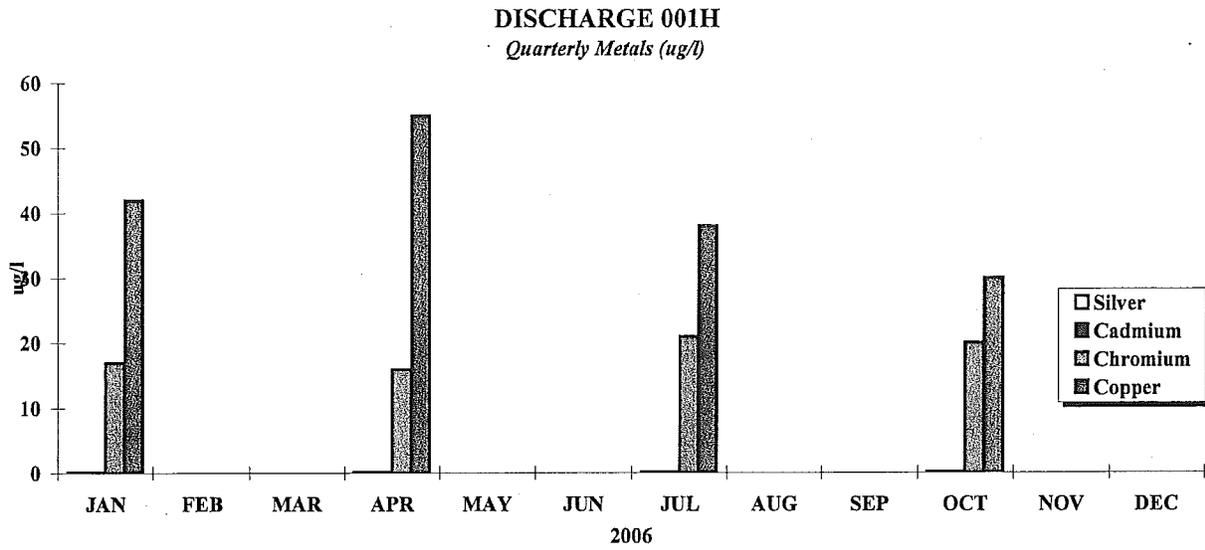


Note: The analyte was not detected at or above the reporting limit for values plotted at zero.

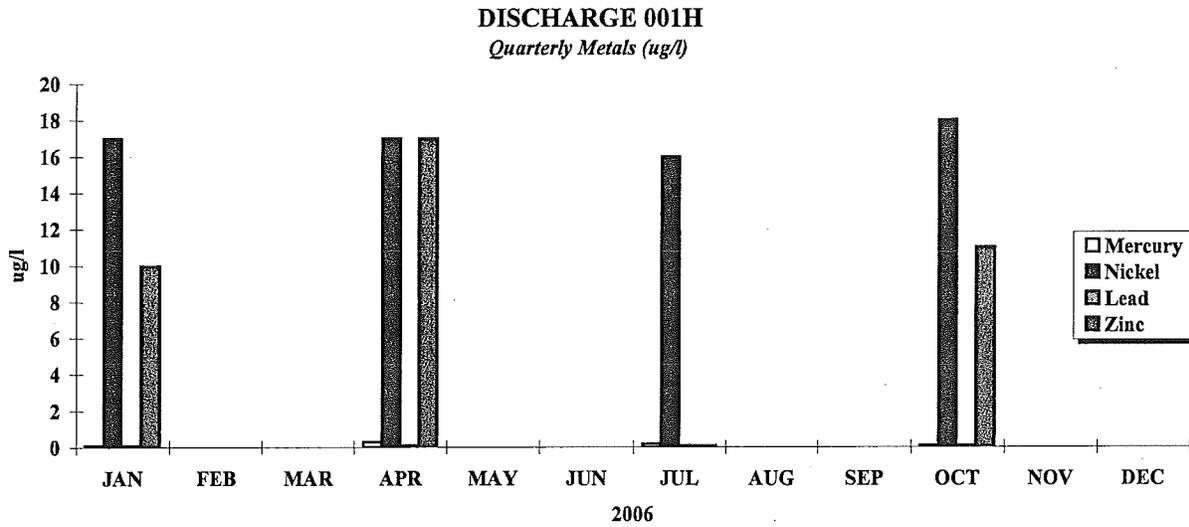


Note: The analyte was not detected at or above the reporting limit for values plotted at zero.

**2006 Annual Summary Report on Discharge Monitoring
at the
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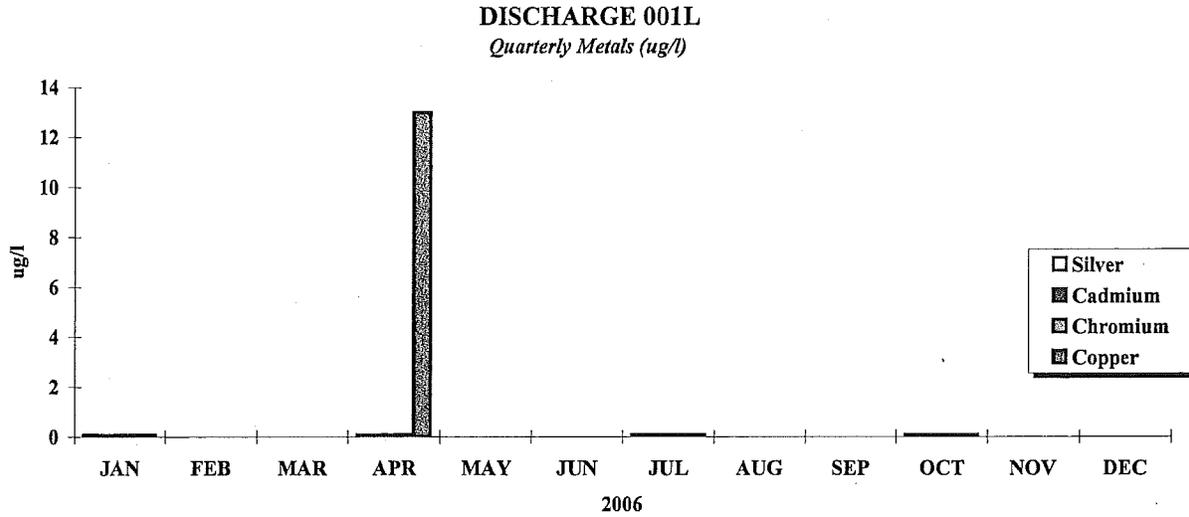


Note: The analyte was not detected at or above the reporting limit for values plotted at zero.

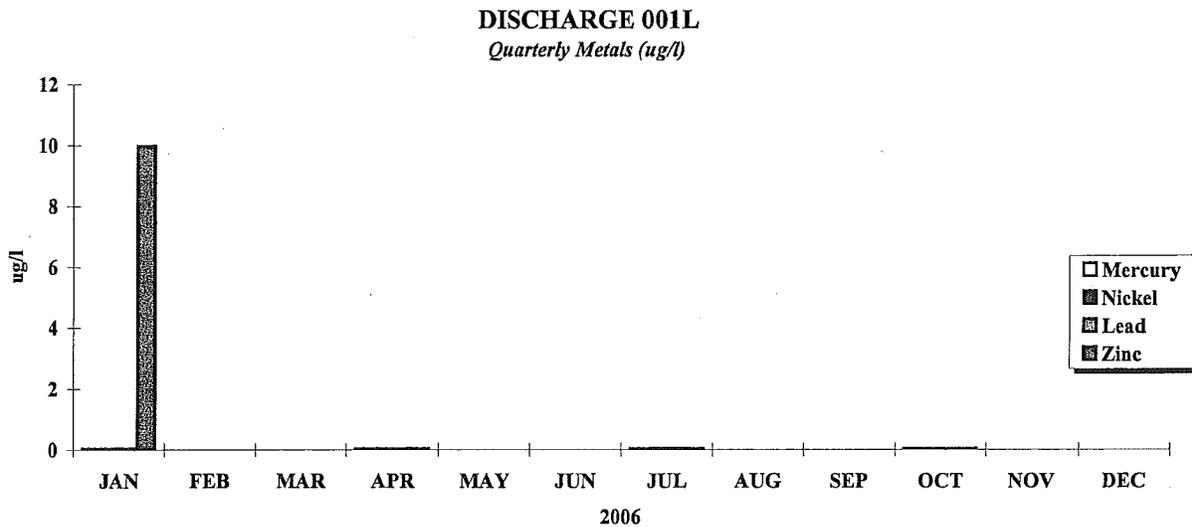


Note: The analyte was not detected at or above the reporting limit for values plotted at zero.

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Note: The analyte was not detected at or above the reporting limit for values plotted at zero.

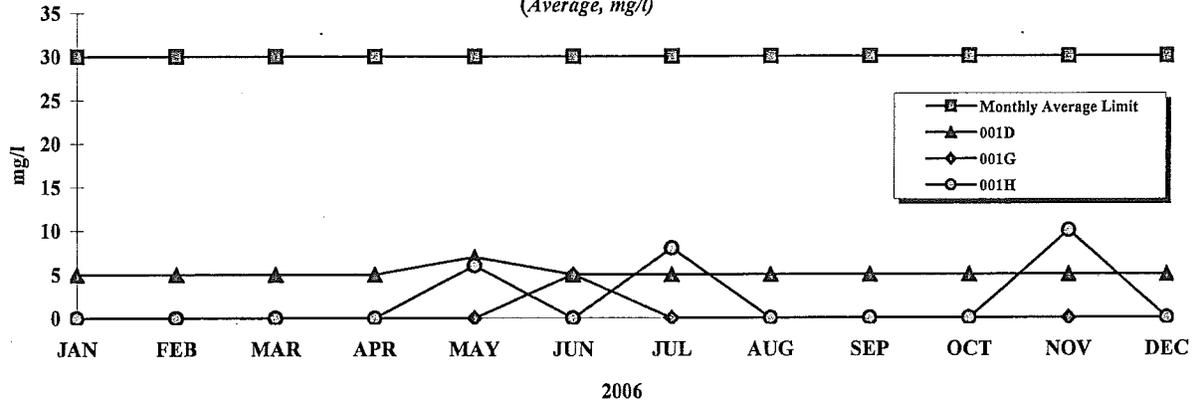


Note: The analyte was not detected at or above the reporting limit for values plotted at zero.

2006 Annual Summary Report on Discharge Monitoring at the Diablo Canyon Power Plant

MONTHLY TOTAL SUSPENDED SOLIDS

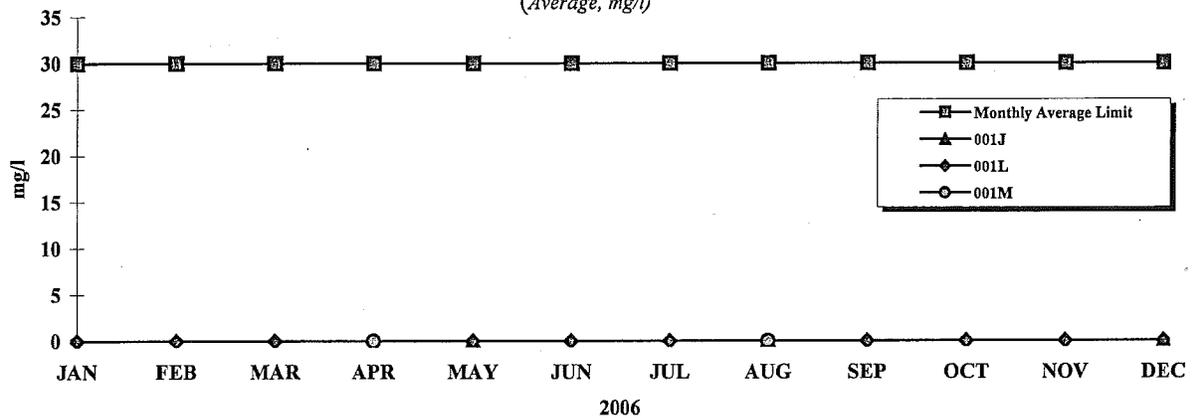
(Average, mg/l)



Note: Points on chart may overlap. Values plotted at zero were below the reporting limit.

MONTHLY TOTAL SUSPENDED SOLIDS

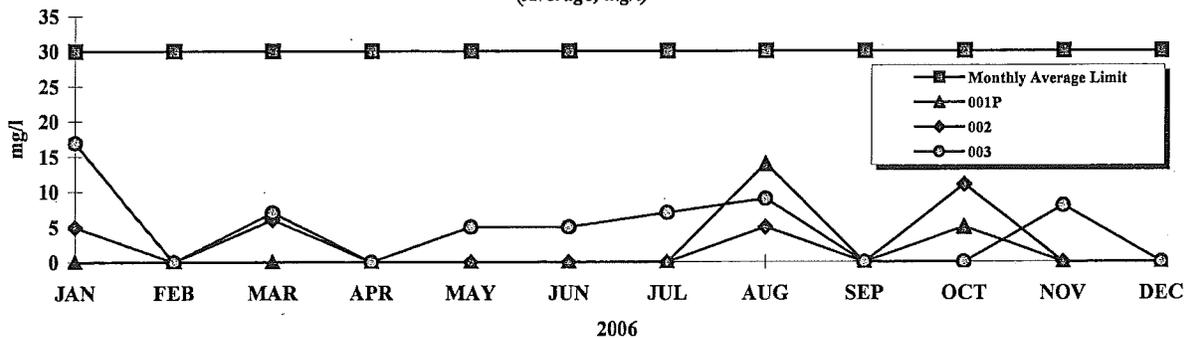
(Average, mg/l)



Note: Points on chart may overlap. Values plotted at zero were below the reporting limit.

MONTHLY TOTAL SUSPENDED SOLIDS

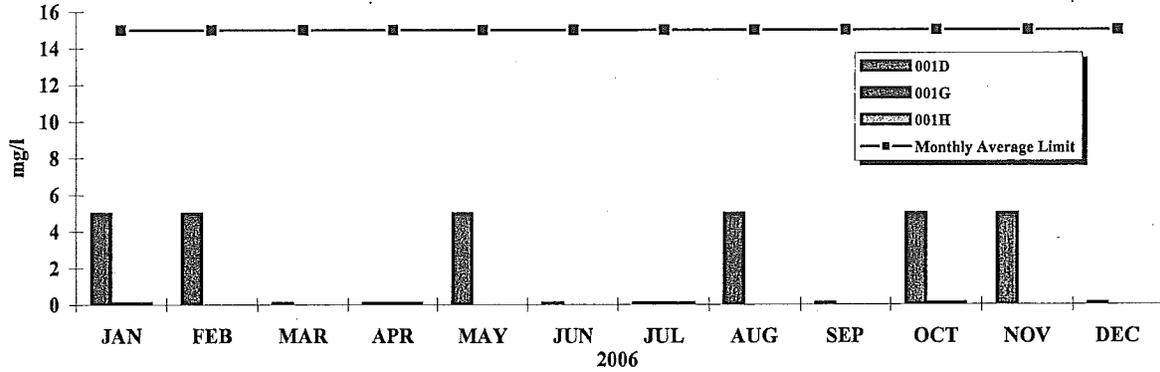
(Average, mg/l)



Note: Points on chart may overlap. Values plotted at zero were below the reporting limit.

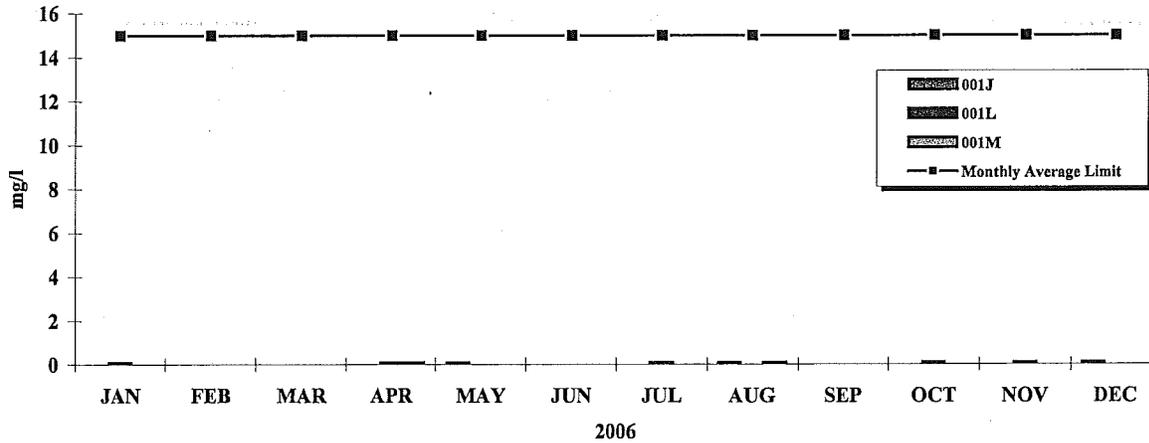
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**QUARTERLY OIL & GREASE
(Average, mg/l)**



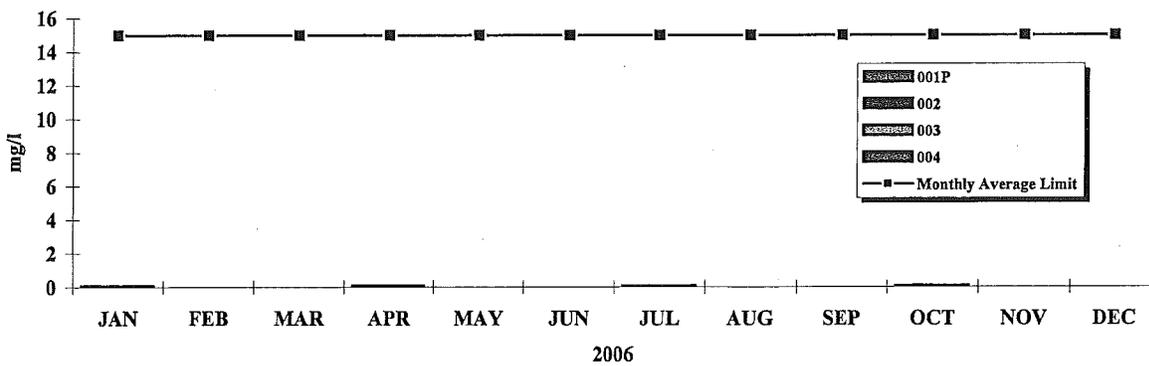
Note: Values plotted at zero were below the reporting limit. Less than values are plotted at the value.

**QUARTERLY OIL & GREASE
(Average, mg/l)**



Note: Values plotted at zero were below the reporting limit.

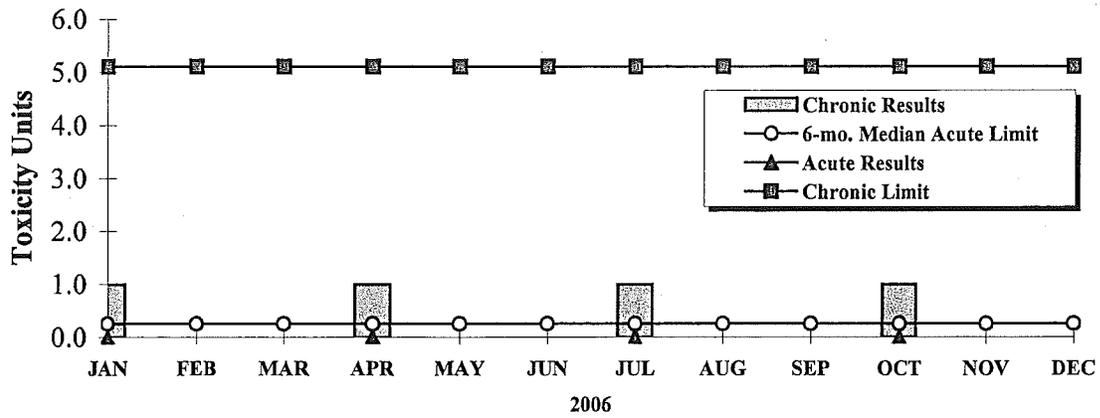
**QUARTERLY OIL & GREASE
(Average, mg/l)**



Note: Values plotted at zero were below the reporting limit.

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ACUTE AND CHRONIC TOXICITY



APPENDIX 4

SUMMARY OF RWMP MONITORING FOR 2006

Study	RWMP Stations/ Surveys per Year	1st Survey Completion Stations/ Dates	2nd Survey Completion Stations/ Dates	3rd Survey Completion Stations/ Dates	4th Survey Completion Stations/ Dates
Horizontal Band Transects	14 / 4x	Jan 28	May 19	Jul 28	Dec 20
Vertical Band Transects	5 / 4x	Jan 31	Jun 14	Aug 11	Dec 7
Benthic Stations	8 / 4x	Mar 31	Jun 12	Aug 28	Nov 20
Fish Observation Transects	12 / 4x	May 5	Jul 28	Oct 4	Jan 15 07 ***
Bull Kelp Census	* / 1x				Oct 4
Temperature Monitoring	24 / **	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec

* Diablo Cove census.

** Temperature measured throughout the year at 20 minute intervals (14 intertidal and 10 subtidal stations).

*** The second replicate of the fourth survey of Fish Observation Transects was completed for only 3 out of 12 stations due to poor ocean conditions from December 2006 through January 2007.