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RECIP.NAME RECIPIENT AFFILIATION

See Environ Rpts

BRIGGS,R.W. California, State of

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Pacific Gas and Electric Company

Diablo Canyon Power Plant
P.O. Box 56
Avila Beach, CA 93424
805/545-6000

Robert P. Powers
Vice President–Diablo Canyon
Operations and Plant Manager

October 20, 1997

PG&E Letter DCL-97-586

Mr. Roger W. Briggs, Executive Officer
California Regional Water Quality Control Board
Central Coast Region
81 Higuera Street, Suite 200
San Luis Obispo, CA 93401-5414

Dear Mr. Briggs:

Discharge Monitoring and Reporting Program
Diablo Canyon Power Plant -- NPDES No. CA0003751

In accordance with Order 90-09, NPDES No. CA0003751, enclosed is the Third Quarter 1997 Report on Discharge Monitoring at Diablo Canyon Power Plant (Enclosure 1).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. The results of the influent and effluent monitoring presented are the observed results of the measurements and analyses required by the monitoring program, and is neither an assertion of the adequacy of any instrument reading or analytical result, nor an endorsement of the appropriateness of any analytical or measurement procedure. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Rick Hernandez at (805) 545-4662.

Sincerely,

IE25

Robert P. Powers

9710270106 970930
PDR ADOCK 05000275
R PDR

cc: Debra Johnston
California Department of Fish and Game
20 Lower Ragsdale, Suite 100
Monterey, California 93490

Regional Administrator, Region 9
U. S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105
Attention: Carey Houk (W-5-3)

Regional Administrator
U.S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Dr., Suite 400
Arlington, TX 76011-8064

Director
U. S. Nuclear Regulatory Commission
Region IV, Field Office
1450 Maria Lane, Suite 210
Walnut Creek, CA 94596-5368

Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Chief, Marine Resources Division
California Department of Fish and Game
Resources Building
1416 Ninth Street
Sacramento, CA 95814

Enclosure

PG&E Letter DCL-97-586

ENCLOSURE 1

THIRD QUARTER 1997

REPORT ON DISCHARGE MONITORING AT DIABLO CANYON POWER PLANT

..9710270106

PACIFIC GAS AND ELECTRIC COMPANY

NUCLEAR POWER GENERATION

Third Quarter 1997

REPORT ON
DISCHARGE MONITORING AT
DIABLO CANYON POWER PLANT

(NPDES No. CA0003751)

PACIFIC GAS AND ELECTRIC COMPANY

Third Quarter 1997

REPORT ON DISCHARGE MONITORING AT
DIABLO CANYON POWER PLANT

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APPENDIX 3

Influent and Effluent Monitoring - August, 1997

APPENDIX 4

Influent and Effluent Monitoring - September, 1997

APPENDIX 5

Acute Bioassay - July 7-11, 1997

APPENDIX 6

Chronic Bioassays - July 16-18 and September 10-12, 1997

APPENDIX 7

Revetment Construction Monitoring Project - March/April 1997

OVERVIEW

A. During the third quarter of 1997, discharges occurred from Discharge Paths 001 (once through cooling water), 001B, 001D, 001E, 001F, 001G, 001H, 001J, 001L, 001M, 001N, 001P, and 002 through 015. No discharges occurred from Discharge Paths 001I, 001K, 016, and 017. A list of all of the permit discharge pathways, including name and number, is provided in **Appendix 1.**

B. On July 2, 1997, 18 gallons of Unit 1 service cooling water (SCW) containing gultaraldehyde at a concentration of 59 mg/l and isothiazoline at a concentration of 10 mg/l was drained to NPDES Discharge 001. PG&E received concurrence from the CCRWQCB in a letter dated July 19, 1995 (PG&E Letter DCL-95-156) to use the above chemicals to control microbiological growth and corrosion in PG&E's closed cooling water systems. The discharge was drained at a flowrate such that the chronic toxicity level was below the "No Observable Effect Concentration" (NOEC) at NPDES Discharge 001. The discharge was due to maintenance.

C. On July 14, 1997, an estimated 100 to 200 gallons of untreated sewage overflowed from storage tanks in the parking lot north of the Training Building and was ultimately contained in the settling pond next to NPDES Discharge 004. The sewage overflowed from the storage tanks because the associated station pump had been shut down. The material did not reach the Intake Cove.

Verbal notification was made to Sorrel Marks of the CCRWQCB on July 14, 1997. The CCRWQCB requested that a description of the event and its resolution be included in this report in lieu of submitting a five-day report.

DCPP's hazardous material response team responded to the incident. Based on recommendations from the CCRWQCB, the remainder of the material was hosed down to the settling pond. A pumper truck was called; they removed the majority of the material in the settling pond. The truck also removed the material in the storage tanks. The remaining material in the settling pond was allowed to evaporate and decompose under sunlight (UV).

Individuals in the training building responsible for shutting down the pump station were counseled to prevent future recurrences. The individuals had turned off the power to the panel controlling the pump for a training demonstration.

C. On July 29, 1997, a hydraulic hose on the kelp harvester leaked approximately 4 ounces of food grade hydraulic fluid into the Intake Cove creating a ten foot by ten foot sheen. The hydraulic fluid was immediately removed with absorbent pads. The kelp harvester was removed from the water for hose repair and system maintenance.

Verbal notification was made to Sorrel Marks of the CCRWQCB on July 29, 1997. The CCRWQCB requested that a description of the event and its resolution be included in this report in lieu of submitting a five-day report.

D. On August 4, 1997, the 1600 hour injection for Unit 1 and the 1700 hour injection for Unit 2 were not monitored due to mechanical failure of each Unit's respective discharge analyzers. The monitors were repaired, recalibrated, and placed back into service.

Verbal notification was made to Sorrel Marks of the CCRWQCB on August 5, 1997. The CCRWQCB requested that a description of the event and its resolution be included in this report in lieu of submitting a five-day report.

As sodium hypochlorite and sodium bisulfite (dechlorination chemical) flowrates were not changed, discharge TRC concentrations remained within NPDES limits prior to and after the missed monitoring incident, and operation of the main circulating water remained constant; it is concluded that the TRC concentration during the unmonitored discharge cycles remained within NPDES limits. This engineering evaluation was performed in accordance with PG&E Letter DCL-94-002 as authorized by the CCRWQCB.

E. On August 5, 1997, a meeting was held with Sorrel Marks of the CCRWQCB to discuss the changes in NPDES discharge locations that had been made at the Intake Structure. At this meeting, Ms. Marks requested that a description of the changes be included in the quarterly report.

The majority of intake sump water (NPDES Discharge 002) was re-routed to NPDES Discharge 001 beginning in late 1996 as described in PG&E Letter DCL-96-500 (dated March 11, 1997). The re-route was concurred with by the CCRWQCB on April 30, 1996. However, while the majority of water from the Intake Structure (Intake Sump and Screen Wash Collection Sump) was re-routed to NPDES Discharge 001, excess water from the screen wash pumps that is unable to be collected in the Screen Wash Collection Sump continues to be discharged via NPDES Discharge 002. As such, DCPP will continue to perform all NPDES required monitoring for NPDES Discharge 002.

F. On August 11, 1997, Sorrel Marks of the CCRWQCB was contacted regarding potential mis-statements contained in the first and second quarter NPDES reports. Ms. Marks requested that clarification of the mis-statements be included in this report in lieu of submitting a five-day report.

In the overview section of the 1997 first quarter NPDES report, it was reported that DCPP planned to review all drains in the turbine building and mark them with "don't dump hazmat down drains" as a response to an incident on January 30, 1997 when it was suspected that a hazardous material had been disposed of in the turbine building sump. While DCPP did review marking the drains in the turbine building; it was determined that this method of marking the drains would have limited effectiveness and require continued remarking due to routine cleaning and buffing of the floors in this area.

In the overview section of the 1997 second quarter NPDES report, it was reported that on June 21, 1997, oily water separator (OWS) valve FCV-800 failed partially open. FCV-800 actually failed closed, and failed closed on two other dates (June 23, 1997 and June 30, 1997).

During routine operation, FCV-800 opens at startup and recycles effluent back to the turbine building sump for a defined time period. After recirculation, which allows the effluent to stabilize, the effluent is discharged overboard. While recirculation is not necessary to meet NPDES oil and grease limitations, it provides additional assurance. NPDES oil and grease limits were not exceeded for the month of June or July. The valve was repaired on July 17, 1997.

G. On August 21, 1997, the 0900 hour injection for Unit 2 was not monitored due operator error (the operator mistakenly shut down the Unit 2 discharge analyzer for calibration during the injection cycle). The operator was counseled regarding the proper technique to use to determine if a chemical injection is in progress.

Verbal notification was made to Sorrel Marks of the CCRWQCB on August 25, 1997. The CCRWQCB requested that a description of the event and its resolution be included in this report in lieu of submitting a five-day report.

As sodium hypochlorite and sodium bisulfite (dechlorination chemical) flowrates were not changed, discharge TRC concentrations remained within NPDES limits prior to and after the missed monitoring incident, and operation of the main circulating water remained constant; it is concluded that the TRC concentration during the unmonitored discharge cycles remained within NPDES limits. This engineering evaluation was performed in accordance with PG&E Letter DCL-94-002 as authorized by the CCRWQCB.

H. On August 26, 1997, the 1300 hour injection for Unit 2 was not monitored due to failure of the discharge analyzer. The analyzer failed due to biofouling on the analyzer probe. To prevent future failures due to biofouling, the frequency of preventative checks on each Unit's discharge analyzer probes has been increased from monthly to weekly.

Verbal notification was made to Sorrel Marks of the CCRWQCB on August 27, 1997. The CCRWQCB requested that a description of the event and its resolution be included in this report in lieu of submitting a five-day report.

As sodium hypochlorite and sodium bisulfite (dechlorination chemical) flowrates were not changed, discharge TRC concentrations remained within NPDES limits prior to and after the missed monitoring incident, and operation of the main circulating water remained constant; it is concluded that the TRC concentration during the unmonitored discharge cycles remained within NPDES limits. This engineering evaluation was performed in accordance with PG&E Letter DCL-94-002 as authorized by the CCRWQCB.

I. During May 1996 conversations were held with Sorrel Marks of the CCRWQCB about injecting sulfur hexafluoride (SF_6) into DCPP's condensers to detect saltwater leaks. It was agreed that the SF_6 would off-gas during discharge and periodic use would not increase DCPP's probability of exceeding NPDES permit limitations. Ms. Marks requested that PG&E include the amount and duration of future injections in quarterly monitoring reports. During the third quarter of 1997, the following injections of SF_6 occurred:

Date	Conduit	Number of Injections	Duration (seconds)	Injection Rate of SF_6 (SCFM)
8/22/97	2-1	3	30	10

J. In all cases, chemical, radiochemical, toxicity analyses, and receiving water monitoring were performed in accordance with chemical analysis and biological procedures contained in the Diablo Canyon Power Plant (DCPP), Units 1 and 2 Plant Manual, Volume 8, by State approved laboratories, or laboratories meeting the requirements specified in the CCRWQCB: "Standard Provisions and Reporting Requirements," dated January 25, 1985.

SUMMARY OF MONITORING PROGRAM

A. Monitoring of Plant Influent and Effluent

1. The results of the July, August, and September 1997 plant influent and effluent monitoring are reported on Q2 forms in **Appendices 2, 3, and 4,** respectively. Additional laboratory results are included behind the Q2 forms to ensure that all analytical data are reported "uncensored." The additional data are used to develop the "average" values reported on the Q2 forms when analyses are performed several times in one day (i.e., for TRC, an average value is reported on the Q2 form).

2. Results from one acute bioassay on water sampled from Discharge 001, performed July 7-11, 1997, are included in **Appendix 5.** The acute toxicity test results show that toxicity was 0.0 (no mortality occurred during the test).

3. Results from two chronic bioassays on water sampled from Discharge 001, performed July 16-18 and September 10-12, 1997, are included in **Appendix 6.** Both test results show that chronic toxicity was 1.0 (no chronic toxicity in the water sample). The second test was conducted since some of the data entries on two data sheets were questionable.

4. Listed below are the detection limits used for plant effluent analyses performed during the quarter:

Parameter	Detection Limit	
Oil and Grease	3	mg/l
Oil and Grease (Sewage Plant)	5	mg/l
Total Residual Chlorine	0.020	mg/l*
Suspended Solids	1	mg/l
Settleable Solids	0.1	mg/l
Ammonia (N)	0.082	mg/l
Metals (chelation extraction)		

Chromium	0.005 mg/l
Copper	0.003 mg/l
Nickel	0.003 mg/l
Zinc	0.003 mg/l

* Reference PG&E Letter DCL-94-192 submitted to Regional Water Quality Control Board, Central Coast Region, August 31, 1994.

B. Monitoring of Receiving Waters

1. Ecological Studies at Diablo Canyon

Ecological studies in the vicinity of Diablo Cove conducted during the second quarter continued under the Diablo Canyon Ecological Monitoring Program (EMP). This program was initiated on July 1, 1995 as required in revised Monitoring and Reporting Program 90-09 and replaces the Thermal Effects Monitoring Program (TEMP). Results of the EMP are reported along with other receiving water monitoring activities in separate biannual reports two months after summer and winter surveys.

2. Dissolved Oxygen Measurements

Dissolved oxygen measurements are reported in the biannual Receiving Water Monitoring reports.

3. Study plans for the shell debris deposition and foam studies are currently being reviewed and should be submitted to the DCPP Technical Working Group for review during 1997.

4. In Situ Bioassay

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

C. Acti-Brom Treatment Program

Diablo Canyon Power Plant is continuing its use of the proprietary chemical Acti-Brom to control the growth of macrofouling organisms in its main circulating water conduits. Over the last twelve months numerous improvements were made to the Acti-Brom / sodium hypochlorite injection system. These changes now allow all four of the circulating water conduits to be chemically treated simultaneously.

At the beginning of this quarter, all of DCPP's four circulating water conduits were being treated with Acti-Brom. As in the past, each treated conduit received a twenty minute injection every four hours (six injections a day) of Acti-Brom in combination with sodium hypochlorite (NaOCl). Each injection had a nominal concentration of 200 parts per billion Total Residual Oxidant (TRO) when measured at the inlet waterbox of the condenser. Discharge TRO, measured at the plant outfall, was considerably lower due to dilution effects, the turbulent nature of the flow at the Discharge Structure, and additional chlorine demand contributed by the discharge from the other conduits.

Unit 1 conduits were cleaned during the 1R8 refueling outage. Acti-Brom treatment of both Unit 1 conduits resumed at the conclusion of the outage in late May and has been operational throughout the third quarter.

Unit 2 conduits started showing signs of significant fouling in August. Since condenser and intake forebay cleanings did not solve the problem, a conduit cleaning was conducted September 5 - 10. Unit 2 chemical treatments were terminated on August 28 once the conduit cleaning became necessary. Chemical treatment was resumed in both conduits upon completion of the conduit cleaning and has been operational throughout the rest of September. Treatment of Unit 2 conduits was discontinued October 1, 1997 in anticipation of the approaching 2R8 refueling outage (scheduled to begin on February 14, 1997).

Date	Conduit	Number of Injections	Duration (seconds)	Injection Rate of SF_6 (SCFM)
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APPENDIX 1

DIABLO CANYON POWER PLANT

NPDES DISCHARGE POINTS	
DISCHARGE NUMBER	DESCRIPTION
001	Once-Though 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

DIABLO CANYON POWER PLANT

Influent and Effluent Monitoring

July 1997

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

CILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
2003001	BEGINNING	97 / 07 / 01	ENDING	97 / 07 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	INFLUENT TEMPERATURE DEGREES F METERED CONTINUOUS	*	EFFLUENT 001 TEMPERATURE DEGREES F METERED CONTINUOUS	*	DELTA TEMP TEMPERATURE DEGREES F METERED CONTINUOUS	*	EFFLUENT 001 FLOW MGD RECORDED DAILY	*	INFLUENT pH pH UNITS GRAB MONTHLY	*	EFFLUENT 001 pH pH UNITS GRAB MONTHLY (***)	*	EFFLUENT 001P pH pH UNITS GRAB MONTHLY	*	EFFLUENT 002 pH pH UNITS GRAB MONTHLY
1	52.6		72.1		19.5		2557								
2	52.0		66.5		14.5		2057								
3	51.8		64.4		12.6		1851								
4	53.1		63.5		10.4		2412								
5	53.1		65.7		12.6		2563								
6	52.6		65.9		13.3		2561								
7	51.8		65.6		13.8		2557								
8	53.6		70.3		16.7		2552							2	7.9
9	54.8		71.3		16.5		2561								
10	54.5		72.4		17.9		2538								
11	54.8		73.6		18.8		2554						7.8		
12	55.7		74.7		19.0		2557								
13	55.8		75.1		19.3		2559								
14	55.2		74.5		19.3		2561								
15	54.7		74.0		19.3		2554		7.8		7.8				
16	53.4		72.6		19.2		2565								
17	52.5		71.8		19.3		2561								
18	51.7		70.9		19.2		2564								
19	53.6		72.7		19.1		2551								
20	54.7		73.5		18.8		2442								
21	55.0		74.2		19.2		2566								
22	55.5		75.0		19.5		2561								
23	56.2		75.6		19.4		2567								
24	56.9		76.2		19.3		2559								
25	57.6		76.9		19.3		2563						7.7		
26	58.2		77.4		19.2		2564								
27	58.0		77.4		19.4		2557								
28	58.3		77.8		19.5		2559								
29	58.9		78.7		19.8		2563								
30	60.1		79.3		19.2		2563								
31	58.3		78.0		19.7		2442								
MONTHLY AVG	55.0		72.8		17.8		2508		7.8		7.8		7.8		7.9
MONTHLY HIGH	60.1		79.3		19.8		2567		7.8		7.8		7.8		7.9
MONTHLY LOW	51.7		63.5		10.4		1851		7.8		7.8		7.7		7.9
TIMES EXCEEDED	NO LIMIT		NO LIMIT		MAX 22 = 0 (**)		MAX 2760 = 0		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT
TIMES EXCEEDED															
TIMES EXCEEDED															

REMARKS: (*) NUMBER OF SAMPLES TAKEN DURING THE DAY. (**) EXCEPT DURING DEMUSSELING.
(***) DAILY WHEN DISCHARGING CHEMICAL CLEANING WASTES FROM DISCHARGES 001D, F, I, L, AND/OR M.

RINCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
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FACILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
2003001	BEGINNING	97 / 07 / 01	ENDING	97 / 07 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 003 pH pH UNITS GRAB MONTHLY	EFFLUENT 004 pH pH UNITS GRAB MONTHLY	EFFLUENT 001N OIL & GREASE mg/l COMPOSITE WEEKLY	EFFLUENT 001P OIL & GREASE mg/l GRAB WEEKLY (**)	EFFLUENT 003 OIL & GREASE mg/l GRAB WEEKLY (***)	EFFLUENT 001F OIL & GREASE mg/l GRAB MONTHLY	EFFLUENT 001 T CHLOR RES ug/l GRAB 2 per CYCLE	EFFLUENT 001 CHLORINE USED lbs/day RECORDED MONTHLY
	*	*	*	*	*	*	*	*
1							12 34	619
2							12 25	514
3			3				10 20	423
4							12 29	581
5							12 41	634
6							12 43	634
7			< 3				12 42	634
8	7.6	7.8					12 30	634
9							12 16	740
10							12 11	864
11							12 12	864
12							12 10	864
13							12 10	864
14							12 10	885
15							12 10	907
16							12 13	907
17			< 3				12 23	907
18							12 27	850
19							12 23	792
20							12 25	792
21							12 22	792
22							12 12	792
23			< 3			< 3	12 11	792
24							12 11	792
25							12 10	792
26							12 10	792
27							12 10	792
28							12 10	792
29							12 10	790
30							11 10	742
31							12 10	849
MONTHLY AVG	7.6	7.8	< 3	No	No	< 3	19	762
MONTHLY HIGH	7.6	7.8	3	Discharge	Discharge	< 3	43	907
MONTHLY LOW	7.6	7.8	< 3			< 3	10	423
TIMES EXCEEDED	NO LIMIT	NO LIMIT	MO AVG 15 = 0 D MAX 20 = 0	MO AVG 15 = 0 D MAX 20 = 0	MO AVG 15 = 0 D MAX 20 = 0	MO AVG 15 = 0 D MAX 20 = 0	I MAX 200 = 0	NO LIMIT
TIMES EXCEEDED								
TIMES EXCEEDED								

REMARKS: (*) NUMBER OF SAMPLES TAKEN DURING THE DAY.
(**) WHEN 001N IS DISCHARGING TO 001P. (***) WHEN 001P IS DISCHARGING TO 003.

PRINCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
[redacted]2003001	BEGINNING	97 / 07 / 01	ENDING	97 / 07 / 31	06	CA0003751

STATION	EFF 001N=>003	EFF 001N=>003	EFFLUENT 001D			EFFLUENT 001F		
ANALYSIS	TOTL COLIFORM	FECAL COLIFORM	SUSPENDED SOLIDS			SUSPENDED SOLIDS		
UNITS	MPN/100ml	MPN/100ml	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET
SMPL TYPE	GRAB	GRAB		GRAB			GRAB	
FREQ.	4 TIMES/WEEK	4 TIMES/WEEK		MONTHLY			MONTHLY	

	*		*		*		*		*		*		*		*	
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11					2		1		1							
12																
13																
14																
15																
16																
17																
18																
19																
[redacted]0																
21																
22																
23												5		2		3
24																
25																
26																
27																
28																
29																
30																
31																

MONTHLY AVG	No	No			1				3
MONTHLY HIGH	Discharge	Discharge			1				3
MONTHLY LOW					1				3

TIMES EXCEEDED	80% SMPLS>1K	MEAN>200 =	NO LIMIT	NO LIMIT	MO AVG 30 = 0	NO LIMIT	NO LIMIT	MO AVG 30 = 0
TIMES EXCEEDED		90 % SMPLS>400			D MAX 100 = 0			D MAX 100 = 0
TIMES EXCEEDED	I MAX >10K							

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

[redacted]NCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	*October 17, 1997*

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CONTROL BOARD
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SAN LUIS OBISPO. CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
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STATION	EFFLUENT 001G SUSPENDED SOLIDS			EFFLUENT 001H SUSPENDED SOLIDS				
ANALYSIS	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET		
UNITS								
SMPL TYPE		GRAB			GRAB			
FREQ.		MONTHLY			MONTHLY			
	*	*	*	*	*	*	*	*
1				5	3	2		
2								
3								
4								
5								
6								
7								
8								
9								
10								
11	< 1	< 1	< 1					
12								
13								
14								
15								
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17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
MONTHLY AVG			< 1			2		
MONTHLY HIGH			< 1			2		
MONTHLY LOW			< 1			2		
TIMES EXCEEDED	NO LIMIT	NO LIMIT	MO AVG 30 = 0	NO LIMIT	NO LIMIT	MO AVG 30 = 0		
TIMES EXCEEDED			D MAX 100 = 0			D MAX 100 = 0		
TIMES EXCEEDED								

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

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DIABLO CANYON NUCLEAR POWER PLANT
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FACILITY I.D.	YEAR / MO / DAY	YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
2003001	BEGINNING 97 / 07 / 01	ENDING 97 / 07 / 31	06	CA0003751

STATION	EFFLUENT 001I			EFFLUENT 001J					
ANALYSIS	SUSPENDED SOLIDS			SUSPENDED SOLIDS					
UNITS	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET			
SMPL TYPE		GRAB			GRAB				
FREQ.		MONTHLY			MONTHLY				
	*	*	*	*	*	*	*	*	
1									
2				< 1	< 1	< 1			
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
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21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
MONTHLY AVG			No			< 1			
MONTHLY HIGH			Discharge			< 1			
MONTHLY LOW						< 1			
TIMES EXCEEDED	NO LIMIT	NO LIMIT	MO AVG 30 = 0	NO LIMIT	NO LIMIT	MO AVG 30 = 0			
TIMES EXCEEDED			MAX 100 = 0			MAX 100 = 0			
TIMES EXCEEDED									

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

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PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
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2003001	BEGINNING	97 / 07 / 01	ENDING	97 / 07 / 31	06	CA0003751

STATION	EFFLUENT 001K SUSPENDED SOLIDS			EFFLUENT 001L SUSPENDED SOLIDS		
ANALYSIS	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET
UNITS						
SMPL TYPE		GRAB			GRAB	
FREQ.		MONTHLY			MONTHLY	
	*	*	*	*	*	*
1						
2						
3						
4						
5						
6						
7						
8						
9						
10				2 < 1	2 < 1	2 < 1
11						
12						
13						
14						
15						
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19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
MONTHLY AVG			No			< 1
MONTHLY HIGH			Discharge			< 1
MONTHLY LOW						< 1
TIMES EXCEEDED	NO LIMIT	NO LIMIT	MO AVG 30 = 0	NO LIMIT	NO LIMIT	MO AVG 30 = 0
TIMES EXCEEDED			D MAX 100 = 0			D MAX 100 = 0
TIMES EXCEEDED						

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER
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PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
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FACILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
2003001	BEGINNING	97 / 07 / 01	ENDING	97 / 07 / 31	06	CA0003751

STATION	EFFLUENT 001M SUSPENDED SOLIDS			EFFLUENT 001N SUSPENDED SLDS	EFFLUENT 001P SUSPENDED SOLIDS			
ANALYSIS	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET	mg/l	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET	
UNITS								
SMPL TYPE		GRAB		COMPOSITE		GRAB		
FREQ.		MONTHLY		WEEKLY		MONTHLY		
	•	•	•	•	•	•	•	
1								
2								
3				30				
4								
5								
6								
7				< 10				
8								
9								
10								
11					11	11	< 1	
12								
13								
14								
15								
16								
17				< 10				
18								
19								
20								
21								
22								
23				26				
24								
25								
26								
27								
28								
29								
30								
31								
MONTHLY AVG			No	19			< 1	
MONTHLY HIGH			Discharge	30			< 1	
MONTHLY LOW				< 10			< 1	
TIMES EXCEEDED	NO LIMIT	NO LIMIT	MO AVG 30 = 0	MO AVG 60 = 0	NO LIMIT	NO LIMIT	MO AVG 30 = 0	
TIMES EXCEEDED			D MAX 100 = 0				D MAX 100 = 0	
TIMES EXCEEDED								

REMARKS: • NUMBER OF SAMPLES TAKEN DURING THE DAY.

NCIPAL EXECUTIVE OFFICER
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2003001	BEGINNING	97 / 07 / 01	ENDING 97 / 07 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 002 SUSPENDED SOLIDS mg/l 1st FLTR	*	mg/l 2nd FLTR GRAB MONTHLY	*	mg/l NET	EFFLUENT 003 SUSPENDED SOLIDS mg/l 1st FLTR	*	mg/l 2nd FLTR GRAB MONTHLY	*	mg/l NET
1										
2										
3										
4										
5										
6										
7										
8	2	7	2	7	2 < 1		13		13	< 1
9										
10										
11										
12										
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19										
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21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
MONTHLY AVG					< 1					< 1
MONTHLY HIGH					< 1					< 1
MONTHLY LOW					< 1					< 1
TIMES EXCEEDED	NO LIMIT		NO LIMIT		MO AVG 30 = 0	NO LIMIT		NO LIMIT		MO AVG 30 = 0
TIMES EXCEEDED					D MAX 100 = 0					D MAX 100 = 0
TIMES EXCEEDED										

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
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SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

[redacted]CILITY I.D. [redacted]003001 | YEAR/MO/DAY BEGINNING 97/07/01 | YEAR/MO/DAY ENDING 97/07/31 | STATE CODE 06 | NPDES PERMIT # CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	•	EFFLUENT 003 SUSPENDED SOLIDS mg/l 1st FLTR GRAB WEEKLY	•	mg/l 2nd FLTR	•	mg/l NET WHEN 001N & 001P => 003	•	EFFLUENT 001N SETTL SOLIDS ml/l GRAB WEEKLY	•	EFFLUENT 001 T CHROMIUM ug/l GRAB MONTHLY	•	EFFLUENT 001 COPPER ug/l GRAB MONTHLY	•	EFFLUENT 001 NICKEL ug/l GRAB MONTHLY	•	EFFLUENT 001 ZINC ug/l GRAB MONTHLY
1																
2																
3								< 0.1								
4																
5																
6																
7								< 0.1								
8																
9																
10																
11																
12																
13																
14																
15										< 5		< 3		< 3		5
16																
17								< 0.1								
18																
19																
[redacted]0																
21																
22															<	3
23								< 0.1								
24																
25																
26																
27																
28																
29																
30																
31																
MONTHLY AVG						No		< 0.1		< 5		< 3		< 3		4
MONTHLY HIGH						Discharge		< 0.1		< 5		< 3		< 3		5
MONTHLY LOW								< 0.1		< 5		< 3		< 3	<	3
TIMES EXCEEDED		NO LIMIT		NO LIMIT		MO AVG 30 = 0 D MAX 100 = 0		MO AVG 1.0 = 0 D MAX 3.0 = 0		6M-MEAN 10 = 0 D MAX 40 = 0 I MAX 100 = 0		6M-MEAN 10 = 0 D MAX 50 = 0 I MAX 140 = 0		6M-MEAN 30 = 0 D MAX 100 = 0 I MAX 260 = 0		6M-MEAN 70=0 D MAX 380 = 0 I MAX 990 = 0
TIMES EXCEEDED																
TIMES EXCEEDED																

REMARKS: • NUMBER OF SAMPLES TAKEN DURING THE DAY.

[redacted]CIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	*October 17, 1997*

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
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DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
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FACILITY I.D. 003001 | YEAR / MO / DAY BEGINNING 97 / 07 / 01 | YEAR / MO / DAY ENDING 97 / 07 / 31 | STATE CODE 06 | NPDES PERMIT # CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	INFLUENT T CHROMIUM ug/l GRAB JA/AP/JUL/OCT		INFLUENT COPPER ug/l GRAB JA/AP/JUL/OCT		INFLUENT NICKEL ug/l GRAB JA/AP/JUL/OCT		INFLUENT AMMONIA (N) ug/l GRAB JA/AP/JUL/OCT		EFFLUENT 001 AMMONIA (N) ug/l GRAB JA/AP/JUL/OCT		EFFLUENT 001D OIL & GREASE mg/l GRAB JA/AP/JUL/OCT		EFFLUENT 001G OIL & GREASE mg/l GRAB JA/AP/JUL/OCT		EFFLUENT 001H OIL & GREASE mg/l GRAB JA/AP/JUL/OCT	
	*		*		*		*		*		*		*		*	
1																
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4																
5																
6																
7																
8																
9																
10																
11												< 3		< 3		< 3
12																
13																
14																
15		< 5		< 3		< 3										
16																
17																
18																
19																
20																
21																
22																
23																
24																
25								< 82		< 82						
26																
27																
28																
29																
30																
31																
MONTHLY AVG		< 5		< 3		< 3		< 82		< 82		< 3		< 3		< 3
MONTHLY HIGH		< 5		< 3		< 3		< 82		< 82		< 3		< 3		< 3
MONTHLY LOW		< 5		< 3		< 3		< 82		< 82		< 3		< 3		< 3
TIMES EXCEEDED		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		6M-MEAN 3060 = 0		MO AVG 15 = 0		MO AVG 15 = 0		MO AVG 15 = 0
TIMES EXCEEDED										D MAX 12240 = 0		D MAX 20 = 0		D MAX 20 = 0		D MAX 20 = 0
TIMES EXCEEDED										I MAX 30600 = 0						

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
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PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
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CILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
0003001	BEGINNING	97 / 07 / 01	ENDING	97 / 07 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001I OIL & GREASE mg/l GRAB JA/AP/JUL/OCT	EFFLUENT 001J OIL & GREASE mg/l GRAB JA/AP/JUL/OCT	EFFLUENT 001K OIL & GREASE mg/l GRAB JA/AP/JUL/OCT	EFFLUENT 001L OIL & GREASE mg/l GRAB JA/AP/JUL/OCT	EFFLUENT 001M OIL & GREASE mg/l GRAB JA/AP/JUL/OCT	EFFLUENT 001P OIL & GREASE mg/l GRAB JA/AP/JUL/OCT	EFFLUENT 002 OIL & GREASE mg/l GRAB JA/AP/JUL/OCT	EFFLUENT 003 OIL & GREASE mg/l GRAB JA/AP/JUL/OCT
	*	*	*	*	*	*	*	*
1								
2		< 3						
3								
4								
5								
6								
7								
8							2 < 3	< 3
9								
10				2 < 3				
11						< 3		
12								
13								
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22								
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26								
27								
28								
29								
30								
31								
MONTHLY AVG	No Discharge	< 3	No Discharge	< 3	No Discharge	< 3	< 3	< 3
MONTHLY HIGH		< 3		< 3		< 3	< 3	< 3
MONTHLY LOW		< 3		< 3		< 3	< 3	< 3
TIMES EXCEEDED	MO AVG 15 = 0	MO AVG 15 = 0	MO AVG 15 = 0	MO AVG 15 = 0	MO AVG 15 = 0	MO AVG 15 = 0	MO AVG 15 = 0	MO AVG 15 = 0
TIMES EXCEEDED	D MAX 20 = 0	D MAX 20 = 0	D MAX 20 = 0	D MAX 20 = 0	D MAX 20 = 0	D MAX 20 = 0	D MAX 20 = 0	D MAX 20 = 0
TIMES EXCEEDED								

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

CIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

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FACILITY I.D.	YEAR / MO / DAY	YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
2003001	BEGINNING 97 / 07 / 01	ENDING 97 / 07 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 004 OIL & GREASE mg/l GRAB JA/AP/JUL/OCT		EFFLUENT 001 TOX CONCEN TU GRAB JA/AP/JUL/OCT		EFFLUENT 001D CADMIUM ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001H CADMIUM ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001L CADMIUM ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001F CADMIUM ug/l 1 WEEK COMP JA/AP/JUL/OCT		
	*		*		*		*		*		*		
1													
2													
3													
4													
5													
6													
7			**										
8	<	3											
9													
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21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													

MONTHLY AVG	< 3					
MONTHLY HIGH	< 3					
MONTHLY LOW	< 3					
TIMES EXCEEDED	MO AVG 15 = 0	6M-MEAN 0.26	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT
TIMES EXCEEDED	D MAX 20 = 0	=0				
TIMES EXCEEDED						

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.
** NO MORTALITIES.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
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CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

[illegible]CILITY I.D.	YEAR / MO / DAY	YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
[illegible]003001	BEGINNING 97 / 07 / 01	ENDING 97 / 07 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001D CHROMIUM ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001H T CHROMIUM ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001L T CHROMIUM ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001F T CHROMIUM ug/l 1 WEEK COMP JA/AP/JUL/OCT		EFFLUENT 001D COPPER ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001H COPPER ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001L COPPER ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001F COPPER ug/l 1 WEEK COMP JA/AP/JUL/OCT	
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TIMES EXCEEDED	NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT	
TIMES EXCEEDED																
TIMES EXCEEDED																

REMARKS: • NUMBER OF SAMPLES TAKEN DURING THE DAY.

[illegible]CIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

[redacted]CILITY I.D.	YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
[redacted]2003001	BEGINNING	97 / 07 / 01	ENDING 97 / 07 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001D LEAD ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001H LEAD ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001L LEAD ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001F LEAD ug/l 1 WEEK COMP JA/AP/JUL/OCT	EFFLUENT 001D MERCURY ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001H MERCURY ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001L MERCURY ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001F MERCURY ug/l 1 WEEK COMP JA/AP/JUL/OCT
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MONTHLY LOW								
TIMES EXCEEDED	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT
TIMES EXCEEDED								
TIMES EXCEEDED								

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

[redacted]NCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

[illegible]LITY I.D.	YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
[illegible]03001	BEGINNING	97 / 07 / 01	ENDING 97 / 07 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001D NICKEL ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001H NICKEL ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001L NICKEL ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001F NICKEL ug/l 1 WEEK COMP JA/AP/JUL/OCT	EFFLUENT 001D SILVER ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001H SILVER ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001L SILVER ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001F SILVER ug/l 1 WEEK COMP JA/AP/JUL/OCT
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TIMES EXCEEDED	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT
TIMES EXCEEDED								
TIMES EXCEEDED								

REMARKS: • NUMBER OF SAMPLES TAKEN DURING THE DAY.

[illegible]IPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
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81 HIGUERA
SAN LUIS OBISPO, CA 93401

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DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

ILITY I.D.	YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
003001	BEGINNING	97 / 07 / 01	ENDING 97 / 07 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001D ZINC ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001H ZINC ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001L ZINC ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001F ZINC ug/l 1 WEEK COMP JA/AP/JUL/OCT	
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TIMES EXCEEDED	NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT	
TIMES EXCEEDED								
TIMES EXCEEDED								

REMARKS: • NUMBER OF SAMPLES TAKEN DURING THE DAY.

CIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
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81 HIGUERA
SAN LUIS OBISPO, CA 93401

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DIABLO CANYON NUCLEAR POWER PLANT
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FACILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
2003001	BEGINNING	97 / 07 / 01	ENDING	97 / 07 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001D COPPER mg/l 24-HR COMP. METAL CLNG	•	EFFLUENT 001F COPPER mg/l 24-HR COMP. METAL CLNG	•	EFFLUENT 001I COPPER mg/l 24-HR COMP. METAL CLNG	•	EFFLUENT 001L COPPER mg/l 24-HR COMP. METAL CLNG	•	EFFLUENT 001M COPPER mg/l 24-HR COMP. METAL CLNG
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MONTHLY AVG									
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TIMES EXCEEDED	MO AVG 1 = 0		MO AVG 1 = 0		MO AVG 1 = 0		MO AVG 1 = 0		MO AVG 1 = 0
TIMES EXCEEDED	D MAX 1 = 0		D MAX 1 = 0		D MAX 1 = 0		D MAX 1 = 0		D MAX 1 = 0
TIMES EXCEEDED									

REMARKS: • NUMBER OF SAMPLES TAKEN DURING THE DAY.

CIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	*October 17, 1997*

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

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FACILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
2003001	BEGINNING	97 / 07 / 01	ENDING	97 / 07 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001D IRON mg/l 24-HR COMP. METAL CLNG		EFFLUENT 001F IRON mg/l 24-HR COMP. METAL CLNG		EFFLUENT 001I IRON mg/l 24-HR COMP. METAL CLNG		EFFLUENT 001L IRON mg/l 24-HR COMP. METAL CLNG		EFFLUENT 001M IRON mg/l 24-HR COMP. METAL CLNG	
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TIMES EXCEEDED	MO AVG 1 = 0		MO AVG 1 = 0		MO AVG 1 = 0		MO AVG 1 = 0		MO AVG 1 = 0	
TIMES EXCEEDED	D MAX 1 = 0		D MAX 1 = 0		D MAX 1 = 0		D MAX 1 = 0		D MAX 1 = 0	
TIMES EXCEEDED										

REMARKS: • NUMBER OF SAMPLES TAKEN DURING THE DAY.

CIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

[redacted]LITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
003001	BEGINNING	97 / 07 / 01	ENDING	97 / 07 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001 TITANIUM ug/l GRAB OCTOBER	INFLUENT ARSENIC ug/l GRAB OCTOBER	EFFLUENT ARSENIC ug/l GRAB OCTOBER	INFLUENT CADMIUM ug/l GRAB OCTOBER	EFFLUENT 001 CADMIUM ug/l GRAB OCTOBER	INFLUENT LEAD ug/l GRAB OCTOBER	EFFLUENT 001 LEAD ug/l GRAB OCTOBER	INFLUENT ZINC ug/l GRAB OCTOBER
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TIMES EXCEEDED	NO LIMIT	NO LIMIT	6M - MEAN 30 = 0	NO LIMIT	6M-MEAN 10 = 0	NO LIMIT	6M-MEAN 10 = 0	
TIMES EXCEEDED			D MAX 150 = 0		D MAX 20 = 0		D MAX 40 = 0	
TIMES EXCEEDED			I MAX 400 = 0		I MAX 50 - 0		I MAX 100 =0	

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY. (**) INFLUENT ANALYSIS PERFORMED FOR COMPARISON TO EFFLUENTS.
ALL OTHER ANNUAL ANALYSIS WILL BE PERFORMED IN OCTOBER

[redacted]CIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

[redacted]LITY I.D. 003001 | YEAR/MO/DAY BEGINNING 97/07/01 | YEAR/MO/DAY ENDING 97/07/31 | STATE CODE 06 | NPDES PERMIT # CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	INFLUENT MERCURY ug/l GRAB OCTOBER		EFFLUENT 001 MERCURY ug/l GRAB OCTOBER		INFLUENT SILVER ug/l GRAB OCTOBER		EFFLUENT 001 SILVER ug/l GRAB OCTOBER		INFLUENT CYANIDE ug/l GRAB OCTOBER		EFFLUENT 001 CYANIDE ug/l GRAB OCTOBER		INFLUENT PHENOLIC CMP ug/l (NONCL) GRAB OCTOBER		EFFLUENT 001 PHENOLIC CMP ug/l (NONCL) GRAB OCTOBER	
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TIMES EXCEEDED	NO LIMIT		6M-MEAN 0.2=0		NO LIMIT		6M-MEAN 2.9=0		NO LIMIT		6M-MEAN 30=0		NO LIMIT		6M-MEAN 150=0	
TIMES EXCEEDED			DMAX 0.8 = 0				DMAX 13.6=0				DMAX 100=0				DMAX 610= 0	
TIMES EXCEEDED			IMAX 2 = 0				IMAX 35= 0				IMAX 260=0				IMAX 1530=0	

REMARKS:
* NUMBER OF SAMPLES TAKEN DURING THE DAY.
** WHEN 001N IS DISCHARGING TO 001P.
*** WHEN 001P IS DISCHARGING TO 003.

[redacted]CIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

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PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.	YEAR / MO / DAY	YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
003001	BEGINNING 97 / 07 / 01	ENDING 97 / 07 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	INFLUENT CHLOR PHENOL ug/l GRAB OCTOBER	EFFLUENT 001 CHLOR PHENOL ug/l GRAB OCTOBER	EFFLUENT 001D LITHIUM mg/l GRAB OCTOBER	EFFLUENT 001D BORON mg/l GRAB OCTOBER	EFFLUENT 001D HYDRAZINE mg/l GRAB OCTOBER	EFFLUENT 005 OIL & GREASE mg/l GRAB OCTOBER	EFFLUENT 003 OIL & GREASE mg/l GRAB OCTOBER
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TIMES EXCEEDED	NO LIMIT	6M-MEAN 10=0	NO LIMIT	NO LIMIT	NO LIMIT	MO AVG 15=0	MO AVG 15=0
TIMES EXCEEDED		DMAX 20=0				DMAX 20=0	DMAX 20=0
TIMES EXCEEDED		IMAX 50=0					

REMARKS:
* NUMBER OF SAMPLES TAKEN DURING THE DAY.
** WHEN 001N IS DISCHARGING TO 001P.
*** WHEN 001P IS DISCHARGING TO 003.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

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FACILITY I.D.	YEAR / MO / DAY	YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
3003001	BEGINNING 97 / 07 / 01	ENDING 97 / 07 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	*	EFFLUENT 009 Oil & GREASE mg/l GRAB OCTOBER	*	EFFLUENT 013 Oil & GREASE mg/l GRAB OCTOBER	*	EFFLUENT 015 Oil & GREASE mg/l GRAB OCTOBER	*	EFFLUENT 016 Oil & GREASE mg/l GRAB OCTOBER	*	EFFLUENT 017 Oil & GREASE mg/l GRAB OCTOBER	*	INFLUENT PCB'S ug/l GRAB OCTOBER	*	EFFLUENT 001 PCB'S ug/l GRAB OCTOBER
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TIMES EXCEEDED		MO AVG 15=0		MO AVG 15=0		MO AVG 15=0		MO AVG 15=0		MO AVG 15=0		NO LIMIT		NO LIMIT
TIMES EXCEEDED		DMAX 20=0		DMAX 20=0		DMAX 20=0		DMAX 20=0		DMAX20=0				
TIMES EXCEEDED														

REMARKS:
* NUMBER OF SAMPLES TAKEN DURING THE DAY.
** WHEN 001N IS DISCHARGING TO 001P.
*** WHEN 001P IS DISCHARGING TO 003.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
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[redacted]LITY I.D.	YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
2003001	BEGINNING	97 / 07 / 01	ENDING 97 / 07 / 31	06	CA0003751

STATION	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE
ANALYSIS	MOISTURE	TOT KJLDL N	AMMONIA (N)	NITRATE (N)	TOT PHOSPHS	pH	OIL & GREASE	BORON
UNITS	%	mg/kg	mg/kg	mg/kg	mg/kg	pH units	mg/kg	mg/kg
SMPL TYPE	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
FREQ.	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER
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TIMES EXCEEDED	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT
TIMES EXCEEDED								
TIMES EXCEEDED								

REMARKS:
* NUMBER OF SAMPLES TAKEN DURING THE DAY.
** WHEN 001N IS DISCHARGING TO 001P.
*** WHEN 001P IS DISCHARGING TO 003.

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[redacted]ILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
[redacted]2003001	BEGINNING	97 / 07 / 01	ENDING	97 / 07 / 31	06	CA0003751

STATION	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE
ANALYSIS	CADMIUM	COPPER	CHROMIUM	LEAD	NICKEL	MERCURY	ZINC	VOLUME
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	tons
SMPL TYPE	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	
FREQ.	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER
*								
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
MONTHLY AVG								
MONTHLY HIGH								
MONTHLY LOW								
TIMES EXCEEDED	10xSTLC=0	10xSTLC=0	10xSTLC=0	10xSTLC=0	10xSTLC=0	10xSTLC=0	10xSTLC=0	
TIMES EXCEEDED	10 mg/kg=0	250 mg/kg=0	50 mg/kg=0	50 mg/kg=0	200 mg/kg=0	2 mg/kg=0	2500 mg/kg=0	
TIMES EXCEEDED	TTLC>100=0	TTLC>2500=0	TTLC>500=0	TTLC>1000=0	TTLC>2000=0	TTLC>20=0	TTLC>5000=0	

REMARKS:
* NUMBER OF SAMPLES TAKEN DURING THE DAY.
** WHEN 001N IS DISCHARGING TO 001P.
*** WHEN 001P IS DISCHARGING TO 003.

[redacted]NCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

PG&E | CHEMISTRY SAMPLE DATA TABULAR REPORT | DCPP

Unit: 0 NPDES
U1 DISCHARGE CHLORINE

From: 7/01/97 0:01
Through: 7/31/97 23:59

Parameter:	0000 CHLORINE	0400 CHLORINE	0800 CHLORINE	1200 CHLORINE	1600 CHLORINE	2000 CHLORINE	lbs CHLORINE INJECTE
High Limit:	89	89	89	89	89	89	
Low Limit:	10	10	10	10	10	10	
Sample Time:	ppb	ppb	PPB	PPB	PPB	PPB	LBS
7/01/97 0:01	44	44	44	52	44	44	317
7/02/97 0:01	44	52	44	17	<13	<13	317
7/03/97 0:01	13	16	15	27	25	23	317
7/04/97 0:01	19	23	17	30	44	44	317
7/05/97 0:01	48	52	44	44	48	40	317
7/06/97 0:01	48	52	44	48	52	44	317
7/07/97 0:01	52	44	52	44	48	40	317
7/08/97 0:01	44	40	40	30	33	<9	317
7/09/97 0:01	19	11	13	23	<10	10	370
7/10/97 0:01	13	17	<10	<10	<10	<10	432
7/11/97 0:01	19	19	16	<10	<10	<10	432
7/12/97 0:01	<10	<10	<10	<10	<10	<10	432
7/13/97 0:01	<10	<10	<10	<10	<10	<10	432
7/14/97 0:01	<10	<10	<10	<10	<10	<10	439
7/15/97 0:01	<10	<10	<10	<10	<10	<10	446
7/16/97 0:01	<10	<10	<10	<10	28	28	446
7/17/97 0:01	40	32	29	30	30	30	446
7/18/97 0:01	33	36	40	30	36	33	418
7/19/97 0:01	36	36	28	28	25	25	389
7/20/97 0:01	33	44	36	36	33	28	389
7/21/97 15:52	30	36	30	36	26	24	389
7/22/97 0:01	15	20	12	16	21	13	389
7/23/97 0:01	13	14	14	<10	<10	12	389
7/24/97 0:01	15	<10	12	<10	<10	<10	389
[illegible]/97 0:01	<10	<10	<10	10	<10	<10	389
[illegible]/97 0:01	<10	<10	<10	10	<10	<10	389

Unit: 0 NPDES
U1 DISCHARGE CHLORINE

From: 7/01/97 0:01
Through: 7/31/97 23:59

Parameter:	0000 CHLORINE	0400 CHLORINE	0800 CHLORINE	1200 CHLORINE	1600 CHLORINE	2000 CHLORINE	lbs CHLORINE INJECTE
High Limit:	89	89	89	89	89	89	
Low Limit:	10	10	10	10	10	10	
Sample Time:	ppb	ppb	PPB	PPB	PPB	PPB	LBS
7/27/97 0:01	<10	<10	<10	11	<10	<10	389
7/28/97 0:01	<10	<10	<10	10	<10	<10	384
7/29/97 0:01	<10	<10	<10	<10	<10	<10	372
7/30/97 0:01	<10	<10	<10	<10	<10	<10	384
7/31/97 0:01	<10	<10	<10	<10	<10	<10	403

PG&E | CHEMISTRY SAMPLE DATA TABULAR REPORT | DCPP

Unit: 0 NPDES
U2 DISCHARGE CHLORINE

From: 7/01/97 0:01
Through: 7/31/97 23:59

Parameter:	0100 CHLORINE	0500 CHLORINE	0900 CHLORINE	1300 CHLORINE	1700 CHLORINE	2100 CHLORINE	LBS OF CHLORINE
High Limit:	89	89	89	89	89	89	
Low Limit:	0	0	0	0	0	0	
Sample Time:	PPB	PPB	PPB	PPB	PPB	PPB	LBS
7/01/97 1:00	18	17	26	26	26	26	302
7/02/97 1:00	29	24	17	16	16	14	197
7/03/97 1:00			17	21	25	21	106
7/04/97 1:00	19	16	22	38	38	42	264
7/05/97 1:00	42	42	35	35	32	35	317
7/06/97 1:00	38	42	38	38	35	38	317
7/07/97 1:00	38	38	38	38	35	35	317
7/08/97 1:00	35	35	32	29	15	22	317
7/09/97 1:00	24	<10	24	22	<10	<10	370
7/10/97 1:00	12	13	<10	<10	<10	<10	432
7/11/97 1:00	<10	<10	<10	<10	<10	<10	432
7/12/97 1:00	<10	<10	<10	<10	<10	<10	432
7/13/97 1:00	<10	<10	<10	<10	<10	<10	432
7/14/97 1:00	<10	<10	<10	<10	<10	<10	446
7/15/97 1:00	<10	<10	<10	<10	<10	<10	461
7/16/97 1:00	<10	<10	<10	<10	11	11	461
7/17/97 1:00	13	<10	11	15	18	20	461
7/18/97 1:00	20	22	24	20	18	15	432
7/19/97 1:00	18	17	17	15	14	13	403
7/20/97 1:00	15	17	13	14	14	13	403
7/21/97 1:00	13	15	14	11	10	16	403
7/22/97 1:00	<8	<9	<7	<8	10	10	403
7/23/97 1:00	<10	<10	<10	<10	<10	<10	403
7/24/97 1:00	<10	<10	<10	<10	<10	<10	403
[illegible]/97 1:00	<10	<10	<10	<10	<10	<10	403
[illegible]/97 1:00	<10	<10	<10	<10	<10	<10	403

Unit: 0 NPDES
U2 DISCHARGE CHLORINE

From: 7/01/97 0:01
Through: 7/31/97 23:59

Parameter:	0100 CHLORINE	0500 CHLORINE	0900 CHLORINE	1300 CHLORINE	1700 CHLORINE	2100 CHLORINE	LBS OF CHLORINE
High Limit:	89	89	89	89	89	89	
Low Limit:	0	0	0	0	0	0	
	PPB	PPB	PPB	PPB	PPB	PPB	LBS
Sample Time:							
7/27/97 1:00	<10	<10	<10	<10	<10	<10	403
7/28/97 1:00	<10	<10	<10	<10	<10	<10	408
7/29/97 1:00	<10	<10	<10	<10	<10	<10	418
7/30/97 1:00	<10	<10	<10		<10	<10	358
7/31/97 1:00	<10	<10	<10	<10	<10	<10	446

PACIFIC GAS AND ELECTRIC - DIABLO CANYON POWER PLANT
SANITARY WASTEWATER TREATMENT SYSTEM
CONTRACT #Z78-2104-86
Rev. 1/95

ECO Resources Inc. 39899 Balentine Drive Suite 200 Newark, CA 94560	Pacific Gas & Electric Company Contacts: Joseph Higgins (805) 545-4103 Heather Rumsey (805) 545-4045

PARAMETER	UNITS	FREQ.	LIMITS		SAMPLE		RESULTS
			MONTHLY AVERAGE	DAILY MAX	DATE	TIME	
1. Oil and Grease	mg/l	Weekly	15	20	7-3	10:56	<3mg/L AVE OF 3
2	"	"	"	"	7-7	11:35	<3mg/L "
3	"	"	"	"	7-17	15:46	<3mg/L "
4	"	"	"	"	7-23	11:53	<3mg/L "
5	"	"	"	"			
1. Suspended Solids	mg/l	Weekly	60	N/A	7-3	10:30	30mg/L
2	"	"	"	"	7-7	11:19	<10mg/L
3	"	"	"	"	7-17	15:26	<10mg/L
4	"	"	"	"	7-23	11:23	26 mg/l
5	"	"	"	"			
1. Settleable Solids	ml/l	Weekly	1.0	3.0	7-3	11:00	<0.1ml/L
2	"	"	"	"	7-7	11:30	<0.1ml/L
3	"	"	"	"	7-17	15:45	<0.1 ml/L
4	"	"	"	"	7-23	12:30	<0.1 ml/L
5	"	"	"	"			

NOTES:
1. Analysis results above the monthly average shall be reported verbally within 8 hours to a PG&E contact listed above.
2. Oil & Grease and Suspended Solids samples are composites during 1 discharge cycle.
3. If ECO diagnostic analysis results indicate that the system effluent exceeds the listed limits, increase the frequency at which samples are collected and submitted to contract lab.

COMMENTS: ⑧ Oil + Grease #1 10:30AM 7/3/97 = 3 mg/L gw

SLUDGE DISPOSAL DATA			
MONTH REMOVED	VOLUME REMOVED	WEIGHT REMOVED	DISPOSAL SITE
JULY		1538 lbs.	SANTA MARIA WWTP

Data Sheet completed by: J. M. Wyatt Date: August 6th, 1997

TOTAL P.02

APPENDIX 3

DIABLO CANYON POWER PLANT

Influent and Effluent Monitoring

August 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.	YEAR / MO / DAY	YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
2003001	BEGINNING 97 / 08 / 01	ENDING 97 / 08 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	*	INFLUENT TEMPERATURE DEGREES F METERED CONTINUOUS	*	EFFLUENT 001 TEMPERATURE DEGREES F METERED CONTINUOUS	*	DELTA TEMP TEMPERATURE DEGREES F METERED CONTINUOUS	*	EFFLUENT 001 FLOW MGD RECORDED DAILY	*	INFLUENT pH pH UNITS GRAB MONTHLY	*	EFFLUENT 001 pH pH UNITS GRAB MONTHLY (***)	*	EFFLUENT 001P pH pH UNITS GRAB MONTHLY	*	EFFLUENT 002 pH pH UNITS GRAB MONTHLY
1		57.9		77.9		20.0		2558								
2		56.9		76.9		20.0		2557								
3		55.3		76.0		20.7		2558								
4		56.8		76.9		20.1		2560								
5		56.5		76.4		19.9		2560								
6		54.2		74.3		20.1		2552								
7		56.6		77.0		20.4		2561						7.7	2	8.0
8		57.9		78.2		20.3		2557								
9		58.3		78.5		20.2		2550								
10		59.3		79.9		20.6		2566								
11		58.8		79.3		20.5		2558								
12		59.0		79.3		20.3		2561								
13		59.2		79.4		20.2		2557								
14		59.0		79.2		20.2		2554		8.0		8.0				
15		59.6		79.8		20.2		2563								
16		59.9		80.2		20.3		2563								
17		59.9		80.1		20.2		2564								
18		60.2		80.4		20.2		2563								
19		61.2		81.4		20.2		2561								
20		62.4		82.5		20.1		2586								
21		62.6		83.0		20.4		2585								
22		61.4		82.2		20.8		2569								
23		58.5		78.4		19.9		2016								
24		56.5		76.0		19.5		2174								
25		57.0		76.8		19.8		2566								
26		57.3		77.1		19.8		2564								
27		57.2		77.2		20.0		2561								
28		56.9		77.0		20.1		2554								
29		56.3		76.4		20.1		2561								
30		58.3		77.9		19.6		2559								
31		59.5		79.4		19.9		2565								
MONTHLY AVG		58.4		78.5		20.1		2532		8.0		8.0		7.7		8.0
MONTHLY HIGH		62.6		83.0		20.8		2586		8.0		8.0		7.7		8.0
MONTHLY LOW		54.2		74.3		19.5		2016		8.0		8.0		7.7		8.0
TIMES EXCEEDED		NO LIMIT		NO LIMIT		MAX 22 = 0 (**)		MAX 2760 = 0		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT
TIMES EXCEEDED																
TIMES EXCEEDED																

REMARKS: (*) NUMBER OF SAMPLES TAKEN DURING THE DAY. (**) EXCEPT DURING DEMUSSELING.
(***) DAILY WHEN DISCHARGING CHEMICAL CLEANING WASTES FROM DISCHARGES 001D, F, I, L, AND/OR M.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.	YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
2003001	BEGINNING	97 / 08 / 01	ENDING 97 / 08 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 003 pH pH UNITS GRAB MONTHLY	EFFLUENT 004 pH pH UNITS GRAB MONTHLY	EFFLUENT 001N O/L & GREASE mg/l COMPOSITE WEEKLY	EFFLUENT 001P O/L & GREASE mg/l GRAB WEEKLY (**)	EFFLUENT 003 O/L & GREASE mg/l GRAB WEEKLY (***)	EFFLUENT 001F O/L & GREASE mg/l GRAB MONTHLY	EFFLUENT 001 T CHLOR RES ug/l GRAB 2 per CYCLE	EFFLUENT 001 CHLORINE USED lbs/day RECORDED MONTHLY
*		*	*	*	*	*	*	*
1			< 5				12 10	800
2							12 10	763
3							12 10	763
4							8 10	603
5							6 15	248
6							12 24	639
7		8.0				< 3	12 20	593
8			< 5				12 22	619
9							12 22	619
10							12 15	619
11							12 10	619
12							12 10	658
13							12 10	696
14	8.0		< 5				12 10	725
15							12 10	763
16							12 11	763
17							12 10	763
18							12 10	763
19							12 10	763
20			< 5				12 10	763
21							12 13	763
22							12 17	763
23							6 14	374
24							8 12	484
25							12 10	705
26			< 5				12 12	698
27							12 19	662
28							11 22	581
29							12 17	441
30							10 12	441
31							10 10	441
MONTHLY AVG	8.0	8.0	< 5	No	No	< 3	13	642
MONTHLY HIGH	8.0	8.0	< 5	Discharge	Discharge	< 3	24	800
MONTHLY LOW	8.0	8.0	< 5			< 3	10	248
TIMES EXCEEDED	NO LIMIT	NO LIMIT	MO AVG 15 = 0	MO AVG 15 = 0	MO AVG 15 = 0	MO AVG 15 = 0	I MAX 200 = 0	NO LIMIT
TIMES EXCEEDED			D MAX 20 = 0	D MAX 20 = 0	D MAX 20 = 0	D MAX 20 = 0		
TIMES EXCEEDED								

REMARKS: (*) NUMBER OF SAMPLES TAKEN DURING THE DAY.
(**) WHEN 001N IS DISCHARGING TO 001P. (***) WHEN 001P IS DISCHARGING TO 003.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.	YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
2003001	BEGINNING	97 / 08 / 01	ENDING 97 / 08 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFF 001N=>003 TOTL COLIFORM MPN/100ml GRAB 4 TIMES/WEEK	EFF 001N=>003 FECAL COLIFORM MPN/100ml GRAB 4 TIMES/WEEK	EFFLUENT 001D SUSPENDED SOLIDS mg/l 1st FLTR mg/l 2nd FLTR mg/l NET GRAB MONTHLY			EFFLUENT 001F SUSPENDED SOLIDS mg/l 1st FLTR mg/l 2nd FLTR mg/l NET GRAB MONTHLY		
	*	*	*	*	*	*	*	*
1								
2								
3								
4								
5			< 1	< 1	< 1			
6								
7						5	2	3
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
MONTHLY AVG	No	No		< 1				3
MONTHLY HIGH	Discharge	Discharge		< 1				3
MONTHLY LOW				< 1				3
TIMES EXCEEDED	80% SMPLS>1K	MEAN>200 =	NO LIMIT	NO LIMIT	MO AVG 30 = 0	NO LIMIT	NO LIMIT	MO AVG 30 = 0
TIMES EXCEEDED		90 % SMPLS>400			D MAX 100 = 0			D MAX 100 = 0
TIMES EXCEEDED	I MAX >10K							

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

CILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
02003001	BEGINNING	97 / 08 / 01	ENDING	97 / 08 / 31	06	CA0003751

STATION	EFFLUENT 001G			EFFLUENT 001H		
ANALYSIS	SUSPENDED SOLIDS			SUSPENDED SOLIDS		
UNITS	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET
SMPL TYPE	GRAB	GRAB		GRAB	GRAB	
FREQ.	MONTHLY	MONTHLY		MONTHLY	MONTHLY	
*	*	*	*	*	*	*
1						
2						
3						
4						
5						
6						
7	< 1	< 1	< 1			
8						
9						
10						
11				10	3	7
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
MONTHLY AVG			< 1			7
MONTHLY HIGH			< 1			7
MONTHLY LOW			< 1			7
TIMES EXCEEDED	NO LIMIT	NO LIMIT	MO AVG 30 = 0	NO LIMIT	NO LIMIT	MO AVG 30 = 0
TIMES EXCEEDED			D MAX 100 = 0			D MAX 100 = 0
TIMES EXCEEDED						

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

CILITY I.D.	YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
02003001	BEGINNING	97 / 08 / 01	ENDING 97 / 08 / 31	06	CA0003751

STATION	EFFLUENT 001I			EFFLUENT 001J				
ANALYSIS	SUSPENDED SOLIDS			SUSPENDED SOLIDS				
UNITS	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET		
SMPL TYPE		GRAB			GRAB			
FREQ.		MONTHLY			MONTHLY			
	*	*	*	*	*	*	*	*
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
MONTHLY AVG			No Discharge			No Discharge		
MONTHLY HIGH								
MONTHLY LOW								
TIMES EXCEEDED	NO LIMIT	NO LIMIT	MO AVG 30 = 0	NO LIMIT	NO LIMIT	MO AVG 30 = 0		
TIMES EXCEEDED			MAX 100 = 0			MAX 100 = 0		
TIMES EXCEEDED								

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.	YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
2003001	BEGINNING	97 / 08 / 01	ENDING 97 / 08 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001K SUSPENDED SOLIDS mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET	EFFLUENT 001L SUSPENDED SOLIDS mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET
	GRAB MONTHLY			GRAB MONTHLY		
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1						
2						
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4						
5				2 < 1	2 < 1	2 < 1
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30						
31						
MONTHLY AVG			No Discharge			< 1
MONTHLY HIGH						< 1
MONTHLY LOW						< 1
TIMES EXCEEDED	NO LIMIT	NO LIMIT	MO AVG 30 = 0	NO LIMIT	NO LIMIT	MO AVG 30 = 0
TIMES EXCEEDED			D MAX 100 = 0			D MAX 100 = 0
TIMES EXCEEDED						

REMARKS: • NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

CILITY I.D.	YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
003001	BEGINNING	97 / 08 / 01	ENDING 97 / 08 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001M SUSPENDED SOLIDS mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET	EFFLUENT 001N SUSPENDED SLDS mg/l COMPOSITE WEEKLY	EFFLUENT 001P SUSPENDED SOLIDS mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET
	GRAB MONTHLY				GRAB MONTHLY		
	•	•	•	•	•	•	•
1				10			
2							
3							
4							
5							
6							
7					10	9	1
8				10			
9							
10							
11							
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13							
14				< 10			
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18							
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0				< 10			
21							
22							
23							
24							
25							
26				10			
27							
28							
29							
30							
31							
MONTHLY AVG			No	10			1
MONTHLY HIGH			Discharge	10			1
MONTHLY LOW				< 10			1
TIMES EXCEEDED	NO LIMIT	NO LIMIT	MO AVG 30 = 0	MO AVG 60 = 0	NO LIMIT	NO LIMIT	MO AVG 30 = 0
TIMES EXCEEDED			D MAX 100 = 0				D MAX 100 = 0
TIMES EXCEEDED							

REMARKS: • NUMBER OF SAMPLES TAKEN DURING THE DAY.

CIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

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DIABLO CANYON NUCLEAR POWER PLANT
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AVILA BEACH, CALIF 93424

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STATION	EFFLUENT 002						EFFLUENT 003					
ANALYSIS	SUSPENDED SOLIDS						SUSPENDED SOLIDS					
UNITS	mg/l 1st FLTR		mg/l 2nd FLTR		mg/l NET		mg/l 1st FLTR		mg/l 2nd FLTR		mg/l NET	
SMPL TYPE	GRAB		GRAB				GRAB		GRAB			
FREQ.	MONTHLY		MONTHLY				MONTHLY		MONTHLY			
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30												
31												
MONTHLY AVG					< 1						2	
MONTHLY HIGH					< 1						2	
MONTHLY LOW					< 1						2	
TIMES EXCEEDED	NO LIMIT		NO LIMIT		MO AVG 30 = 0		NO LIMIT		NO LIMIT		MO AVG 30 = 0	
TIMES EXCEEDED					D MAX 100 = 0						D MAX 100 = 0	
TIMES EXCEEDED												

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

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STATION	EFFLUENT 003			EFFLUENT 001N	EFFLUENT 001	EFFLUENT 001	EFFLUENT 001	EFFLUENT 001
ANALYSIS	SUSPENDED SOLIDS			SETTL SOLIDS	T CHROMIUM	COPPER	NICKEL	ZINC
UNITS	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET	ml/l	ug/l	ug/l	ug/l	ug/l
SMPL TYPE	GRAB			GRAB	GRAB	GRAB	GRAB	GRAB
FREQ.	WEEKLY WHEN 001N & 001P => 003			WEEKLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
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8				< 0.1				
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14				< 0.1	< 5	< 3	11	< 3
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20				< 0.1				
21								
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25								
26				< 0.1				
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30								
31								
MONTHLY AVG			No	< 0.1	< 5	< 3	11	< 3
MONTHLY HIGH			Discharge	< 0.1	< 5	< 3	11	< 3
MONTHLY LOW				< 0.1	< 5	< 3	11	< 3
TIMES EXCEEDED	NO LIMIT	NO LIMIT	MO AVG 30 = 0	MO AVG 1.0 = 0	6M-MEAN 10 =0	6M-MEAN 10 =0	6M-MEAN 30 =0	6M-MEAN 70=0
TIMES EXCEEDED			D MAX 100 = 0	D MAX 3.0 = 0	D MAX 40 = 0	D MAX 50 = 0	D MAX 100 = 0	D MAX 380 = 0
TIMES EXCEEDED					I MAX 100 = 0	I MAX 140 = 0	I MAX 260 = 0	I MAX 990 = 0

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER
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R. D. Hernandez	October 17, 1997

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LITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
003001	BEGINNING	97 / 08 / 01	ENDING	97 / 08 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.		INFLUENT T CHROMIUM ug/l GRAB JA/AP/JUL/OCT		INFLUENT COPPER ug/l GRAB JA/AP/JUL/OCT		INFLUENT NICKEL ug/l GRAB JA/AP/JUL/OCT		INFLUENT AMMONIA (N) ug/l GRAB JA/AP/JUL/OCT		EFFLUENT 001 AMMONIA (N) ug/l GRAB JA/AP/JUL/OCT		EFFLUENT 001D OIL & GREASE mg/l GRAB JA/AP/JUL/OCT		EFFLUENT 001G OIL & GREASE mg/l GRAB JA/AP/JUL/OCT		EFFLUENT 001H OIL & GREASE mg/l GRAB JA/AP/JUL/OCT
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MONTHLY AVG		< 5		5		9											
MONTHLY HIGH		< 5		5		9											
MONTHLY LOW		< 5		5		9											
TIMES EXCEEDED		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		6M-MEAN 3060 = 0		MO AVG 15 = 0		MO AVG 15 = 0		MO AVG 15 = 0	
TIMES EXCEEDED										D MAX 12240 = 0		D MAX 20 = 0		D MAX 20 = 0		D MAX 20 = 0	
TIMES EXCEEDED										I MAX 30600 = 0							

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.
** Influent analysis performed for comparison to effluent. Other quarterly analysis performed in July.

CIPAL EXECUTIVE OFFICER
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R. D. Hernandez	October 17, 1997

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2003001	BEGINNING	97 / 08 / 01	ENDING 97 / 08 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001I Oil & GREASE mg/l GRAB JA/AP/JUL/OCT	*	EFFLUENT 001J Oil & GREASE mg/l GRAB JA/AP/JUL/OCT	*	EFFLUENT 001K Oil & GREASE mg/l GRAB JA/AP/JUL/OCT	*	EFFLUENT 001L Oil & GREASE mg/l GRAB JA/AP/JUL/OCT	*	EFFLUENT 001M Oil & GREASE mg/l GRAB JA/AP/JUL/OCT	*	EFFLUENT 001P Oil & GREASE mg/l GRAB JA/AP/JUL/OCT	*	EFFLUENT 002 Oil & GREASE mg/l GRAB JA/AP/JUL/OCT	*	EFFLUENT 003 Oil & GREASE mg/l GRAB JA/AP/JUL/OCT	*
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MONTHLY AVG																
MONTHLY HIGH																
MONTHLY LOW																
TIMES EXCEEDED	MO AVG 15 = 0		MO AVG 15 = 0		MO AVG 15 = 0		MO AVG 15 = 0		MO AVG 15 = 0		MO AVG 15 = 0		MO AVG 15 = 0		MO AVG 15 = 0	
TIMES EXCEEDED	D MAX 20 = 0		D MAX 20 = 0		D MAX 20 = 0		D MAX 20 = 0		D MAX 20 = 0		D MAX 20 = 0		D MAX 20 = 0		D MAX 20 = 0	
TIMES EXCEEDED																

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

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2003001	BEGINNING	97 / 08 / 01	ENDING 97 / 08 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 004 OIL & GREASE mg/l GRAB JA/AP/JUL/OCT	*	EFFLUENT 001 TOX CONCEN TU GRAB JA/AP/JUL/OCT	*	EFFLUENT 001D CADMIUM ug/l QTRLY COMP JA/AP/JUL/OCT	*	EFFLUENT 001H CADMIUM ug/l QTRLY COMP JA/AP/JUL/OCT	*	EFFLUENT 001L CADMIUM ug/l QTRLY COMP JA/AP/JUL/OCT	*	EFFLUENT 001F CADMIUM ug/l 1 WEEK COMP JA/AP/JUL/OCT	
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MONTHLY AVG												
MONTHLY HIGH												
MONTHLY LOW												
TIMES EXCEEDED	MO AVG 15 = 0		6M-MEAN 0.26		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT	
TIMES EXCEEDED	D MAX 20 = 0		=0									
TIMES EXCEEDED												

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

NCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

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R. D. Hernandez	October 17, 1997

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CILITY I.D.	YEAR / MO / DAY	YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
2003001	BEGINNING 97 / 08 / 01	ENDING 97 / 08 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001D CHROMIUM ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001H T CHROMIUM ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001L T CHROMIUM ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001F T CHROMIUM ug/l 1 W/EEK COMP JA/AP/JUL/OCT	EFFLUENT 001D COPPER ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001H COPPER ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001L COPPER ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001F COPPER ug/l 1 WEEK COMP JA/AP/JUL/OCT
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MONTHLY AVG								
MONTHLY HIGH								
MONTHLY LOW								
TIMES EXCEEDED	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT
TIMES EXCEEDED								
TIMES EXCEEDED								

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

NCIPAL EXECUTIVE OFFICER
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2003001	BEGINNING	97 / 08 / 01	ENDING 97 / 08 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001D LEAD ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001H LEAD ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001L LEAD ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001F LEAD ug/l 1 WEEK COMP JA/AP/JUL/OCT		EFFLUENT 001D MERCURY ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001H MERCURY ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001L MERCURY ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001F MERCURY ug/l 1 WEEK COMP JA/AP/JUL/OCT	
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MONTHLY LOW																
TIMES EXCEEDED	NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT	
TIMES EXCEEDED																
TIMES EXCEEDED																

REMARKS: • NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
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02003001	BEGINNING 97 / 08 / 01	ENDING 97 / 08 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	•	EFFLUENT 001D NICKEL ug/l QTRLY COMP JA/AP/JUL/OCT	•	EFFLUENT 001H NICKEL ug/l QTRLY COMP JA/AP/JUL/OCT	•	EFFLUENT 001L NICKEL ug/l QTRLY COMP JA/AP/JUL/OCT	•	EFFLUENT 001F NICKEL ug/l 1 WEEK COMP JA/AP/JUL/OCT	•	EFFLUENT 001D SILVER ug/l QTRLY COMP JA/AP/JUL/OCT	•	EFFLUENT 001H SILVER ug/l QTRLY COMP JA/AP/JUL/OCT	•	EFFLUENT 001L SILVER ug/l QTRLY COMP JA/AP/JUL/OCT	•	EFFLUENT 001F SILVER ug/l 1 WEEK COMP JA/AP/JUL/OCT
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TIMES EXCEEDED		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT
TIMES EXCEEDED																
TIMES EXCEEDED																

REMARKS: • NUMBER OF SAMPLES TAKEN DURING THE DAY.

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2003001	BEGINNING 97 / 08 / 01	ENDING 97 / 08 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001D ZINC ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001H ZINC ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001L ZINC ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001F ZINC ug/l 1 WEEK COMP JA/AP/JUL/OCT	
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MONTHLY AVG								
MONTHLY HIGH								
MONTHLY LOW								
TIMES EXCEEDED	NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT	
TIMES EXCEEDED								
TIMES EXCEEDED								

REMARKS: • NUMBER OF SAMPLES TAKEN DURING THE DAY.

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FACILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
3102003001	BEGINNING	97 / 08 / 01	ENDING	97 / 08 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001D COPPER mg/l 24-HR COMP. METAL CLNG		EFFLUENT 001F COPPER mg/l 24-HR COMP. METAL CLNG		EFFLUENT 001I COPPER mg/l 24-HR COMP. METAL CLNG		EFFLUENT 001L COPPER mg/l 24-HR COMP. METAL CLNG		EFFLUENT 001M COPPER mg/l 24-HR COMP. METAL CLNG	
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31										
MONTHLY AVG MONTHLY HIGH MONTHLY LOW										
TIMES EXCEEDED	MO AVG 1 = 0		MO AVG 1 = 0		MO AVG 1 = 0		MO AVG 1 = 0		MO AVG 1 = 0	
TIMES EXCEEDED	D MAX 1 = 0		D MAX 1 = 0		D MAX 1 = 0		D MAX 1 = 0		D MAX 1 = 0	
TIMES EXCEEDED										

REMARKS: • NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.	YEAR / MO / DAY	YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
102003001	BEGINNING 97 / 08 / 01	ENDING 97 / 08 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001D IRON mg/l 24-HR COMP. METAL CLNG	EFFLUENT 001F IRON mg/l . 24-HR COMP. METAL CLNG	EFFLUENT 001I IRON mg/l 24-HR COMP. METAL CLNG	EFFLUENT 001L IRON mg/l 24-HR COMP. METAL CLNG	EFFLUENT 001M IRON mg/l 24-HR COMP. METAL CLNG
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31					
MONTHLY AVG					
MONTHLY HIGH					
MONTHLY LOW					
TIMES EXCEEDED	MO AVG 1 = 0	MO AVG 1 = 0	MO AVG 1 = 0	MO AVG 1 = 0	MO AVG 1 = 0
TIMES EXCEEDED	D MAX 1 = 0	D MAX 1 = 0	D MAX 1 = 0	D MAX 1 = 0	D MAX 1 = 0
TIMES EXCEEDED					

REMARKS: • NUMBER OF SAMPLES TAKEN DURING THE DAY.

NCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

CILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
2003001	BEGINNING	97 / 08 / 01	ENDING	97 / 08 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001 TITANIUM ug/l GRAB OCTOBER	INFLUENT ARSENIC ug/l GRAB OCTOBER	EFFLUENT ARSENIC ug/l GRAB OCTOBER	INFLUENT CADMIUM ug/l GRAB OCTOBER	EFFLUENT 001 CADMIUM ug/l GRAB OCTOBER	INFLUENT LEAD ug/l GRAB OCTOBER	EFFLUENT 001 LEAD ug/l GRAB OCTOBER	INFLUENT ZINC ug/l GRAB OCTOBER
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31								
MONTHLY AVG								< 3
MONTHLY HIGH								< 3
MONTHLY LOW								< 3
TIMES EXCEEDED	NO LIMIT	NO LIMIT	6M - MEAN 30 = 0	NO LIMIT	6M-MEAN 10 = 0	NO LIMIT	6M-MEAN 10 = 0	
TIMES EXCEEDED			D MAX 150 = 0		D MAX 20 = 0		D MAX 40 = 0	
TIMES EXCEEDED			I MAX 400 = 0		I MAX 50 - 0		I MAX 100 = 0	

REMARKS: • NUMBER OF SAMPLES TAKEN DURING THE DAY. (**) INFLUENT ANALYSIS PERFORMED FOR COMPARISON TO EFFLUENTS.
ALL OTHER ANNUAL ANALYSIS WILL BE PERFORMED IN OCTOBER

NCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D. 2003001 | YEAR/MO/DAY BEGINNING 97/08/01 | YEAR/MO/DAY ENDING 97/08/31 | STATE CODE 06 | NPDES PERMIT # CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	*	INFLUENT MERCURY ug/l GRAB OCTOBER	*	EFFLUENT 001 MERCURY ug/l GRAB OCTOBER	*	INFLUENT SILVER ug/l GRAB OCTOBER	*	EFFLUENT 001 SILVER ug/l GRAB OCTOBER	*	INFLUENT CYANIDE ug/l GRAB OCTOBER	*	EFFLUENT 001 CYANIDE ug/l GRAB OCTOBER	*	INFLUENT PHENOLIC CMP ug/l (NONCL) GRAB OCTOBER	*	EFFLUENT 001 PHENOLIC CMP ug/l (NONCL) GRAB OCTOBER
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MONTHLY AVG																
MONTHLY HIGH																
MONTHLY LOW																
TIMES EXCEEDED		NO LIMIT		6M-MEAN 0.2=0		NO LIMIT		6M-MEAN 2.9=0		NO LIMIT		6M-MEAN 30=0		NO LIMIT		6M-MEAN 150=0
TIMES EXCEEDED				DMAX 0.8 = 0				DMAX 13.6=0				DMAX 100=0				DMAX 610= 0
TIMES EXCEEDED				IMAX 2 = 0				IMAX 35= 0				IMAX 260=0				IMAX 1530=0

REMARKS:
* NUMBER OF SAMPLES TAKEN DURING THE DAY.
** WHEN 001N IS DISCHARGING TO 001P.
*** WHEN 001P IS DISCHARGING TO 003.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.	YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
02003001	BEGINNING	97 / 08 / 01	ENDING 97 / 08 / 31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	INFLUENT CHLOR PHENOL ug/l GRAB OCTOBER		EFFLUENT 001 CHLOR PHENOL ug/l GRAB OCTOBER		EFFLUENT 001D LITHIUM mg/l GRAB OCTOBER		EFFLUENT 001D BORON mg/l GRAB OCTOBER		EFFLUENT 001D HYDRAZINE mg/l GRAB OCTOBER		EFFLUENT 005 OIL & GREASE mg/l GRAB OCTOBER		EFFLUENT 003 OIL & GREASE mg/l GRAB OCTOBER	
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MONTHLY AVG														
MONTHLY HIGH														
MONTHLY LOW														
TIMES EXCEEDED	NO LIMIT		6M-MEAN 10=0		NO LIMIT		NO LIMIT		NO LIMIT		MO AVG 15=0		MO AVG 15=0	
TIMES EXCEEDED			DMAX 20=0								DMAX 20=0		DMAX 20=0	
TIMES EXCEEDED			IMAX 50=0											

REMARKS:
- * NUMBER OF SAMPLES TAKEN DURING THE DAY.
- ** WHEN 001N IS DISCHARGING TO 001P.
- *** WHEN 001P IS DISCHARGING TO 003.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.	YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
02003001	BEGINNING	97 / 08 / 01	ENDING 97 / 08 / 31	06	CA0003751

STATION	EFFLUENT 009	EFFLUENT 013	EFFLUENT 015	EFFLUENT 016	EFFLUENT 017	INFLUENT	EFFLUENT 001
ANALYSIS	OIL & GREASE	OIL & GREASE	OIL & GREASE	OIL & GREASE	OIL & GREASE	PCB'S	PCB'S
UNITS	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l
SMPL TYPE	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
FREQ.	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER
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31							
MONTHLY AVG							
MONTHLY HIGH							
MONTHLY LOW							
TIMES EXCEEDED	MO AVG 15=0	MO AVG 15=0	MO AVG 15=0	MO AVG 15=0	MO AVG 15=0	NO LIMIT	NO LIMIT
TIMES EXCEEDED	DMAX 20=0	DMAX 20=0	DMAX 20=0	DMAX 20=0	DMAX20=0		
TIMES EXCEEDED							

REMARKS:
* NUMBER OF SAMPLES TAKEN DURING THE DAY.
** WHEN 001N IS DISCHARGING TO 001P.
*** WHEN 001P IS DISCHARGING TO 003.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
[redacted]2003001	BEGINNING	97 / 08 / 01	ENDING	97 / 08 / 31	06	CA0003751

STATION	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE
ANALYSIS	MOISTURE	TOT KJLDL N	AMMONIA (N)	NITRATE (N)	TOT PHOSPHS	pH	OIL & GREASE	BORON
UNITS	%	mg/kg	mg/kg	mg/kg	mg/kg	pH units	mg/kg	mg/kg
SMPL TYPE	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
FREQ.	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER
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30								
31								
MONTHLY AVG								
MONTHLY HIGH								
MONTHLY LOW								
TIMES EXCEEDED	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT
TIMES EXCEEDED								
TIMES EXCEEDED								

REMARKS:
* NUMBER OF SAMPLES TAKEN DURING THE DAY.
** WHEN 001N IS DISCHARGING TO 001P.
*** WHEN 001P IS DISCHARGING TO 003.

[redacted]CIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

CILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
2003001	BEGINNING	97 / 08 / 01	ENDING	97 / 08 / 31	06	CA0003751

STATION	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE
ANALYSIS	CADMIUM	COPPER	CHROMIUM	LEAD	NICKEL	MERCURY	ZINC	VOLUME
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	tons
* SMPL TYPE	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	
FREQ.	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER
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26								
27								
28								
29								
30								
31								
MONTHLY AVG								
MONTHLY HIGH								
MONTHLY LOW								
TIMES EXCEEDED	10xSTLC=0	10xSTLC=0	10xSTLC=0	10xSTLC=0	10xSTLC=0	10xSTLC=0	10xSTLC=0	
TIMES EXCEEDED	10 mg/kg=0	250 mg/kg=0	50 mg/kg=0	50 mg/kg=0	200 mg/kg=0 .	2 mg/kg=0	2500 mg/kg=0	
TIMES EXCEEDED	TTLC>100=0	TTLC>2500=0	TTLC>500=0	TTLC>1000=0	TTLC>2000=0	TTLC>20=0	TTLC>5000=0	

REMARKS:
* NUMBER OF SAMPLES TAKEN DURING THE DAY.
** WHEN 001N IS DISCHARGING TO 001P.
*** WHEN 001P IS DISCHARGING TO 003.

NCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

PG&E | CHEMISTRY SAMPLE DATA TABULAR REPORT | DCPP

Unit: 0 NPDES
U1 DISCHARGE CHLORINE

From: 8/01/97 0:01
Through: 8/31/97 23:59

Parameter:	0000 CHLORINE	0400 CHLORINE	0800 CHLORINE	1200 CHLORINE	1600 CHLORINE	2000 CHLORINE	lbs CHLORINE INJECTE
High Limit:	89	89	89	89	89	89	
Low Limit:	10	10	10	10	10	10	
	ppb	ppb	PPB	PPB	PPB	PPB	LBS
Sample Time:							
8/01/97 0:01	<10	<10	<10	<10	<10	<10	382
8/02/97 0:01	<10	<10	<10	<10	<10	<10	360
8/03/97 0:01	<10	<10	<10	<10	<10	<10	360
8/04/97 0:01	10	10	10	10			281
8/05/97 0:01				10	15	19	113
8/06/97 0:01	23	23	25	25	25	21	293
8/07/97 0:01	21	17	19	25	19	19	276
8/08/97 0:01	25	17	23	17	19	17	302
8/09/97 0:01	21	21	23	22	17	19	302
8/10/97 0:01	17	19	16	11	10	<10	302
8/11/97 0:01	<10	<10	<10	<10	<10	<10	302
8/12/97 0:01	<10	<10	<10	<10	<10	<10	322
8/13/97 0:01	<10	<10	<10	<10	<10	<10	341
8/14/97 0:01	<10	<10	<10	<10	<10	<10	355
8/15/97 0:01	<10	14	11	10	10	10	374
8/16/97 0:01	12	13	10	12	10	<10	374
8/17/97 0:01	<10	11	<10	<10	<10	<10	374
8/18/97 0:01	<10	<10	<10	<10	<10	<10	374
8/19/97 0:01	<10	<10	<10	<10	<10	<10	374
8/20/97 0:01	<10	<10	<10	<10	<10	<10	374
8/21/97 0:01	<10	<10	10	12	15	19	374
8/22/97 0:01	17	23	17	17	16	17	374
8/23/97 0:01	19	13	13	13	13	13	374
8/24/97 0:01	<13	<13	<13	<13	<13	<10	374
[illegible]97 0:01	<10	<10	<10	<10	<10	<10	374
[illegible]7 0:01	<10	<10	<10	<10	<10	15	367

Unit: 0 NPDES
U1 DISCHARGE CHLORINE

From: 8/01/97 0:01
Through: 8/31/97 23:59

Parameter:	0000 CHLORINE	0400 CHLORINE	0800 CHLORINE	1200 CHLORINE	1600 CHLORINE	2000 CHLORINE	lbs CHLORINE INJECTE	
High Limit:	89	89	89	89	89	89		
Low Limit:	10	10	10	10	10	10		
Sample Time:	ppb	ppb	PPB	PPB	PPB	PPB	LBS	
8/27/97 0:01	12	12	16	19	19	13	331	
8/28/97 0:01	19	21	25	19	12	17	331	
8/29/97 0:01	21	19	25	19	15	15	331	
8/30/97 0:01	15	15	10	<10	<10	<10	331	
8/31/97 0:01	<10	<10	<10	<10	<10	<10	331	

PG&E | CHEMISTRY SAMPLE DATA TABULAR REPORT | DCPP

Unit: 0 NPDES
U2 DISCHARGE CHLORINE

From: 8/01/97 0:01
Through: 8/31/97 23:59

Parameter:	0100 CHLORINE	0500 CHLORINE	0900 CHLORINE	1300 CHLORINE	1700 CHLORINE	2100 CHLORINE	LBS OF CHLORINE
High Limit:	89	89	89	89	89	89	
Low Limit:	0	0	0	0	0	0	
Sample Time:	PPB	PPB	PPB	PPB	PPB	PPB	LBS
8/01/97 1:00	<10	<10	<10	<10	<10	<10	418
8/02/97 1:00	<10	<10	<10	<10	<10	<10	403
8/03/97 1:00	<10	<10	<10	<10	<10	<10	403
8/04/97 1:00	10	10	10	10			322
8/05/97 1:00				11	17	20	135
8/06/97 1:00	22	24	22	26	24	22	346
8/07/97 1:00	20	17	18	24	24	22	317
8/08/97 1:00	26	24	26	24	24	20	317
8/09/97 1:00	24	24	24	22	18	24	317
8/10/97 1:00	20	22	22	14	12	<10	317
8/11/97 1:00	<10	12	<10	<10	<10	<10	317
8/12/97 1:00	<10	<10	<10	<10	<10	<10	336
8/13/97 1:00	<10	<10	<10	<10	<10	<10	355
8/14/97 1:00	<10	<10	<10	<10	<10	<10	370
8/15/97 1:00	<10	<10	<10	<10	<10	<10	389
8/16/97 1:00	<10	<10	<10	<10	<10	<10	389
8/17/97 1:00	<10	<10	<10	<10	<10	<10	389
8/18/97 1:00	<10	<10	<10	<10	<10	<10	389
8/19/97 1:00	<10	<10	<10	<10	<10	<10	389
8/20/97 1:00	<10	<10	<10	<10	<10	<10	389
8/21/97 1:00	<10	<10		17	17	17	389
8/22/97 1:00	18	18	15	15	14	12	389
8/24/97 1:00					<10	<10	110
8/25/97 1:00	<10	<10	<10	<10	<10	<10	331
8/[illegible]/97 1:00	<10	<10	<10		20	22	331
8/[illegible]/97 1:00	24	24	24	22	22	22	331

Unit: 0 NPDES
U2 DISCHARGE CHLORINE

From: 8/01/97 0:01
Through: 8/31/97 23:59

Parameter:	0100 CHLORINE	0500 CHLORINE	0900 CHLORINE	1300 CHLORINE	1700 CHLORINE	2100 CHLORINE	LBS OF CHLORINE
High Limit:	89	89	89	89	89	89	
Low Limit:	0	0	0	0	0	0	
Sample Time:	PPB	PPB	PPB	PPB	PPB	PPB	LBS
8/28/97 1:00	24	26	35	29	15		250
8/29/97 1:00	11	17		<10	15		110
8/30/97 1:00	<10	15		<10	<10		110
8/31/97 1:00	<10	<10		<10	<10		110

PACIFIC GAS AND ELECTRIC - DIABLO CANYON POWER PLANT
SANITARY WASTEWATER TREATMENT SYSTEM
CONTRACT #Z78-2104-86
Rev. 1/95

ECO Resources Inc.	Pacific Gas & Electric Company
39899 Balentine Drive Suite 200 Newark, CA 94560	Contacts: Joseph Higgins (805) 545-4103 Heather Rumsey (805) 545-4045

PARAMETER	UNITS	FREQ.	LIMITS		SAMPLE		RESULTS
			MONTHLY AVERAGE	DAILY MAX	DATE	TIME	
1. Oil and Grease	mg/l	Weekly	15	20	8-1	11:30	<5 mg/L AVE. OF 3
2	"	"	"	"	8-8	11:39	<5 mg/L
3	"	"	"	"	8-14	3:40	<5 mg/L
4	"	"	"	"	8-20	12:03	<5 mg/L
5	"	"	"	"	8-26	12:11	<5 mg/l
1. Suspended Solids	mg/l	Weekly	60	N/A	8-1	11:00	10 mg/l
2	"	"	"	"	8-8	11:21	10 mg/L
3	"	"	"	"	8-14	3:16	<10 mg/l
4	"	"	"	"	8-20	11:45	<10 mg/l
5	"	"	"	"	8-26	11:49	10 mg/L
1. Settleable Solids	ml/l	Weekly	1.0	3.0	8-1	11:30	<0.1 ml/L
2	"	"	"	"	8-8	11:50	<0.1 ml/L
3	"	"	"	"	8-14	3:36	<0.1 ml/L
4	"	"	"	"	8-20	12:15	<0.1 ml/L
5	"	"	"	"	8-26	12:05	<0.1 ml/L

NOTES:
1. Analysis results above the monthly average shall be reported verbally within 8 hours to a PG&E contact listed above.
2. Oil & Grease and Suspended Solids samples are composites during 1 discharge cycle.
3. If ECO diagnostic analysis results indicate that the system effluent exceeds the listed limits, increase the frequency at which samples are collected and submitted to contract lab.

COMMENTS: Oil + Grease results increase to 5 mg/L. Detection Limit - D.L new method EPA 1664 instead of EPA 413.1.

SLUDGE DISPOSAL DATA			
MONTH REMOVED	VOLUME REMOVED	WEIGHT REMOVED	DISPOSAL SITE
AUGUST		2207 lbs	Santa Maria WWTP

Data Sheet completed by: J. M. Wyong Date: September 8th, 1997

TOTAL P.02

APPENDIX 4

DIABLO CANYON POWER PLANT

Influent and Effluent Monitoring

September 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.	YEAR / MO / DAY	YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
402003001	BEGINNING 97 / 09 / 01	ENDING 97 / 09 / 30	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	INFLUENT TEMPERATURE DEGREES F METERED CONTINUOUS	EFFLUENT 001 TEMPERATURE DEGREES F METERED CONTINUOUS	DELTA TEMP TEMPERATURE DEGREES F METERED CONTINUOUS	EFFLUENT 001 FLOW MGD RECORDED DAILY	INFLUENT pH pH UNITS GRAB MONTHLY	EFFLUENT 001 pH pH UNITS GRAB MONTHLY (***)	EFFLUENT 001P pH pH UNITS GRAB MONTHLY	EFFLUENT 002 pH pH UNITS GRAB MONTHLY
	*	*	*	*	*	*	*	*
1	59.4	79.4	20.0	2561				
2	59.8	79.7	19.9	2554				
3	58.6	78.9	20.3	2559				
4	60.2	80.0	19.8	2574				
5	61.1	80.8	19.7	2542				
6	62.1	82.3	20.2	1930				
7	61.1	81.8	20.7	1928				
8	60.0	80.1	20.1	1980				
9	58.6	79.1	20.5	1932				
10	57.3	76.4	19.1	2518				
11	56.5	75.8	19.3	2563				
12	56.5	71.7	15.2	2555				
13	59.0	73.6	14.6	2565				
14	58.3	77.1	18.8	2558				
15	58.6	77.7	19.1	2557				
16	58.2	77.3	19.1	2559				
17	58.6	77.7	19.1	2563			7.8	8.0
18	59.5	78.6	19.1	2564				
19	59.9	79.0	19.1	2555	8.0	8.1		
20	60.7	79.8	19.1	2563				
21	61.2	80.4	19.2	2562				
22	60.5	79.8	19.3	2555				
23	61.1	80.1	19.0	2566				
24	61.0	80.1	19.1	2559				
25	60.7	79.9	19.2	2561				
26	60.3	79.6	19.3	2561				
27	59.5	78.8	19.3	2557				
28	59.7	78.9	19.2	2561				
29	61.3	80.6	19.3	2529				
30	62.3	81.5	19.2	2561				
31								
MONTHLY AVG	59.7	78.9	19.2	2475	8.0	8.1	7.8	8.0
MONTHLY HIGH	62.3	82.3	20.7	2574	8.0	8.1	7.8	8.0
MONTHLY LOW	56.5	71.7	14.6	1928	8.0	8.1	7.8	8.0
TIMES EXCEEDED	NO LIMIT	NO LIMIT	MAX 22 = 0 (**)	MAX 2760 = 0	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT
TIMES EXCEEDED								
TIMES EXCEEDED								

REMARKS: (*) NUMBER OF SAMPLES TAKEN DURING THE DAY. (**) EXCEPT DURING DEMUSSELING.
(***) DAILY WHEN DISCHARGING CHEMICAL CLEANING WASTES FROM DISCHARGES 001D, F, I, L, AND/OR M.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

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PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D. [redacted] 2003001 | YEAR / MO / DAY BEGINNING 97 / 09 / 01 | YEAR / MO / DAY ENDING 97 / 09 / 30 | STATE CODE 06 | NPDES PERMIT # CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 003 pH pH UNITS GRAB MONTHLY	EFFLUENT 004 pH pH UNITS GRAB MONTHLY	EFFLUENT 001N OIL & GREASE mg/l COMPOSITE WEEKLY	EFFLUENT 001P OIL & GREASE mg/l GRAB WEEKLY (**)	EFFLUENT 003 OIL & GREASE mg/l GRAB WEEKLY (***)	EFFLUENT 001F OIL & GREASE mg/l GRAB MONTHLY	EFFLUENT 001 T CHLOR RES ug/l GRAB 2 per CYCLE	EFFLUENT 001 CHLORINE USED lbs/day RECORDED MONTHLY
*	*	*	*	*	*	*	*	*
1							10 11	441
2							10 12	441
3							10 11	441
4							10 11	459
5			< 5				10 10	514
6							6 13	432
7							6 13	432
8							12 10	615
9							12 10	633
10							12 11	777
11			< 5				12 13	806
12							12 19	763
13							12 21	735
14							12 18	735
15							12 15	735
16							12 13	706
17		8.0	< 5				12 13	662
18							12 12	677
19							12 16	715
[redacted]20							12 15	777
21							12 14	777
22			< 5				12 12	777
23							12 11	792
24	7.9						12 15	807
25							12 16	807
26						< 3	11 21	742
27							12 24	807
28							12 22	807
29							12 15	807
30							12 12	821
31								
MONTHLY AVG	7.9	8.0	< 5	No	No	< 3	14	681
MONTHLY HIGH	7.9	8.0	< 5	Discharge	Discharge	< 3	24	821
MONTHLY LOW	7.9	8.0	< 5			< 3	10	432
TIMES EXCEEDED	NO LIMIT	NO LIMIT	MO AVG 15 = 0 D MAX 20 = 0	MO AVG 15 = 0 D MAX 20 = 0	MO AVG 15 = 0 D MAX 20 = 0	MO AVG 15 = 0 D MAX 20 = 0	I MAX 200 = 0	NO LIMIT
TIMES EXCEEDED								
TIMES EXCEEDED								

REMARKS: (*) NUMBER OF SAMPLES TAKEN DURING THE DAY.
(**) WHEN 001N IS DISCHARGING TO 001P. (***) WHEN 001P IS DISCHARGING TO 003.

[redacted]UNCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

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DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

PAGE: (M) 3

FACILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
3 02003001	BEGINNING	97 / 09 / 01	ENDING	97 / 09 / 30	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFF 001N=>003 TOTL COLIFORM MPN/100ml GRAB 4 TIMES/WEEK		EFF 001N=>003 FECAL COLIFORM MPN/100ml GRAB 4 TIMES/WEEK		EFFLUENT 001D SUSPENDED SOLIDS mg/l 1st FLTR		EFFLUENT 001D SUSPENDED SOLIDS mg/l 2nd FLTR GRAB MONTHLY		EFFLUENT 001D SUSPENDED SOLIDS mg/l NET		EFFLUENT 001F SUSPENDED SOLIDS mg/l 1st FLTR		EFFLUENT 001F SUSPENDED SOLIDS mg/l 2nd FLTR GRAB MONTHLY		EFFLUENT 001F SUSPENDED SOLIDS mg/l NET	
	*		*		*		*		*		*		*		*	
1																
2																
3																
4																
5																
6																
7																
8					1		<	1	1							
9					10		<	1	9							
10																
11																
12																
13																
14																
15																
16																
17					15		<	1	15							
18																
19																
20																
21																
22																
23																
24																
25																
26											2		2		<	1
27																
28																
29																
30																
31																
MONTHLY AVG		No		No					8						<	1
MONTHLY HIGH		Discharge		Discharge					15						<	1
MONTHLY LOW									1						<	1
TIMES EXCEEDED		80% SMPLS>1K		MEAN>200 =		NO LIMIT		NO LIMIT	MO AVG 30 = 0			NO LIMIT		NO LIMIT		MO AVG 30 = 0
TIMES EXCEEDED				90 % SMPLS>400					D MAX 100 = 0							D MAX 100 = 0
TIMES EXCEEDED		I MAX >10K														

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

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FACILITY I.D.		YEAR / MO / DAY		STATE CODE	NPDES PERMIT #
02003001	BEGINNING	97 / 09 / 01	ENDING 97 / 09 / 30	06	CA0003751

STATION	EFFLUENT 001G SUSPENDED SOLIDS			EFFLUENT 001H SUSPENDED SOLIDS		
ANALYSIS	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET
UNITS						
SMPL TYPE		GRAB			GRAB	
FREQ.		MONTHLY			MONTHLY	
*	*	*	*	*	*	*
1						
2						
3						
4						
5						
6						
7						
8				5	< 1	5
9						
10						
11						
12						
13						
14						
15						
16						
17	< 1	< 1	< 1			
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
MONTHLY AVG			< 1			5
MONTHLY HIGH			< 1			5
MONTHLY LOW			< 1			5
TIMES EXCEEDED	NO LIMIT	NO LIMIT	MO AVG 30 = 0	NO LIMIT	NO LIMIT	MO AVG 30 = 0
TIMES EXCEEDED			D MAX 100 = 0			D MAX 100 = 0
TIMES EXCEEDED						

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

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02003001	BEGINNING	97 / 09 / 01	ENDING 97 / 09 / 30	06	CA0003751

STATION	EFFLUENT 001I			EFFLUENT 001J				
ANALYSIS	SUSPENDED SOLIDS			SUSPENDED SOLIDS				
UNITS	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET		
SMPL TYPE		GRAB			GRAB			
FREQ.		MONTHLY			MONTHLY			
	*	*	*	*	*	*	*	*
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
MONTHLY AVG			No Discharge			No Discharge		
MONTHLY HIGH								
MONTHLY LOW								
TIMES EXCEEDED	NO LIMIT	NO LIMIT	MO AVG 30 = 0	NO LIMIT	NO LIMIT	MO AVG 30 = 0		
TIMES EXCEEDED			MAX 100 = 0			MAX 100 = 0		
TIMES EXCEEDED								

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
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DISCHARGE SELF MONITORING REPORT

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DIABLO CANYON NUCLEAR POWER PLANT
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02003001	BEGINNING	97 / 09 / 01	ENDING	97 / 09 / 30	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001K SUSPENDED SOLIDS mg/l 1st FLTR mg/l 2nd FLTR GRAB MONTHLY			mg/l NET		EFFLUENT 001L SUSPENDED SOLIDS mg/l 1st FLTR mg/l 2nd FLTR GRAB MONTHLY			mg/l NET		
	*		*		*		*		*		*	
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21					2	< 1		2	< 1		2	< 1
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												

MONTHLY AVG			No			< 1
MONTHLY HIGH			Discharge			< 1
MONTHLY LOW						< 1
TIMES EXCEEDED	NO LIMIT	NO LIMIT	MO AVG 30 = 0	NO LIMIT	NO LIMIT	MO AVG 30 = 0
TIMES EXCEEDED			D MAX 100 = 0			D MAX 100 = 0
TIMES EXCEEDED						

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

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02003001	BEGINNING	97 / 09 / 01	ENDING	97 / 09 / 30	06	CA0003751

STATION	EFFLUENT 001M			EFFLUENT 001N	EFFLUENT 001P		
ANALYSIS	SUSPENDED SOLIDS			SUSPENDED SLDS	SUSPENDED SOLIDS		
UNITS	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET	mg/l	mg/l 1st FLTR	mg/l 2nd FLTR	mg/l NET
SMPL TYPE		GRAB		COMPOSITE		GRAB	
FREQ.		MONTHLY		WEEKLY		MONTHLY	
	*	*	*	*	*	*	*
1							
2							
3							
4							
5				10			
6							
7							
8							
9							
10							
11				20			
12							
13							
14							
15							
16							
17				15	11	13	< 1
18	15	1	14				
19							
20	10	4	6				
21							
22				20			
23							
24							
25							
26							
27							
28							
29							
30							
31							
MONTHLY AVG			10	16			< 1
MONTHLY HIGH			14	20			< 1
MONTHLY LOW			6	10			< 1
TIMES EXCEEDED	NO LIMIT	NO LIMIT	MO AVG 30 = 0	MO AVG 60 = 0	NO LIMIT	NO LIMIT	MO AVG 30 = 0
TIMES EXCEEDED			D MAX 100 = 0				D MAX 100 = 0
TIMES EXCEEDED							

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

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FACILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
[redacted]02003001	BEGINNING	97 / 09 / 01	ENDING	97 / 09 / 30	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 002 SUSPENDED SOLIDS mg/l 1st FLTR	•	mg/l 2nd FLTR	•	mg/l NET	•	EFFLUENT 003 SUSPENDED SOLIDS mg/l 1st FLTR	•	mg/l 2nd FLTR	•	mg/l NET	•
			GRAB MONTHLY						GRAB MONTHLY			
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17	2		12	2	8	2	5					
18												
19												
20												
21												
22												
23												
24								8		2		6
25												
26												
27												
28												
29												
30												
31												
MONTHLY AVG					5						6	
MONTHLY HIGH					5						6	
MONTHLY LOW					5						6	
TIMES EXCEEDED	NO LIMIT		NO LIMIT		MO AVG 30 = 0		NO LIMIT		NO LIMIT		MO AVG 30 = 0	
TIMES EXCEEDED					D MAX 100 = 0						D MAX 100 = 0	
TIMES EXCEEDED												

REMARKS: • NUMBER OF SAMPLES TAKEN DURING THE DAY.

[redacted]RINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	*R. D. Hernandez*	*October 17, 1997*

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
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2003001	BEGINNING 97 / 09 / 01	ENDING 97 / 09 / 30	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 003 SUSPENDED SOLIDS mg/l 1st FLTR mg/l 2nd FLTR mg/l NET GRAB WEEKLY WHEN 001N & 001P => 003	EFFLUENT 001N SETTL SOLIDS ml/l GRAB WEEKLY	EFFLUENT 001 T CHROMIUM ug/l GRAB MONTHLY	EFFLUENT 001 COPPER ug/l GRAB MONTHLY	EFFLUENT 001 NICKEL ug/l GRAB MONTHLY	EFFLUENT 001 ZINC ug/l GRAB MONTHLY
	*	*	*	*	*	*
1						
2						
3						
4						
5		< 0.1				
6						
7						
8						
9						
10						
11		< 0.1				
12						
13						
14						
15						
16						
17		< 0.1				
18						
19			< 5	< 3	< 3	< 3
20						
21						
22		< 0.1				
23						
24						
25						
26						
27						
28						
29						
30						
31						
MONTHLY AVG	No	< 0.1	< 5	< 3	< 3	< 3
MONTHLY HIGH	Discharge	< 0.1	< 5	< 3	< 3	< 3
MONTHLY LOW		< 0.1	< 5	< 3	< 3	< 3
TIMES EXCEEDED	NO LIMIT NO LIMIT	MO AVG 30 = 0 D MAX 100 = 0	MO AVG 1.0 = 0 D MAX 3.0 = 0	6M-MEAN 10 = 0 D MAX 40 = 0 I MAX 100 = 0	6M-MEAN 10 = 0 D MAX 50 = 0 I MAX 140 = 0	6M-MEAN 30 = 0 D MAX 100 = 0 I MAX 260 = 0	6M-MEAN 70 = 0 D MAX 380 = 0 I MAX 990 = 0
TIMES EXCEEDED							
TIMES EXCEEDED							

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

NCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

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FACILITY I.D.	YEAR / MO / DAY	YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
2003001	BEGINNING 97 / 09 / 01	ENDING 97 / 09 / 30	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.		INFLUENT T CHROMIUM ug/l GRAB JA/AP/JUL/OCT		INFLUENT COPPER ug/l GRAB JA/AP/JUL/OCT		INFLUENT NICKEL ug/l GRAB JA/AP/JUL/OCT		INFLUENT AMMONIA (N) ug/l GRAB JA/AP/JUL/OCT		EFFLUENT 001 AMMONIA (N) ug/l GRAB JA/AP/JUL/OCT		EFFLUENT 001D OIL & GREASE mg/l GRAB JA/AP/JUL/OCT		EFFLUENT 001G OIL & GREASE mg/l GRAB JA/AP/JUL/OCT		EFFLUENT 001H OIL & GREASE mg/l GRAB JA/AP/JUL/OCT
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MONTHLY AVG		< 5		< 3		< 3						3				
MONTHLY HIGH		< 5		< 3		< 3						3				
MONTHLY LOW		< 5		< 3		< 3						< 3				
TIMES EXCEEDED		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		6M-MEAN 3060 = 0		MO AVG 15 = 0		MO AVG 15 = 0		MO AVG 15 = 0
TIMES EXCEEDED										D MAX 12240 = 0		D MAX 20 = 0		D MAX 20 = 0		D MAX 20 = 0
TIMES EXCEEDED										I MAX 30600 = 0						

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.	YEAR / MO / DAY	YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
2003001	BEGINNING 97 / 09 / 01	ENDING 97 / 09 / 30	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001I OIL & GREASE mg/l GRAB JA/AP/JUL/OCT	EFFLUENT 001J OIL & GREASE mg/l GRAB JA/AP/JUL/OCT	EFFLUENT 001K OIL & GREASE mg/l GRAB JA/AP/JUL/OCT	EFFLUENT 001L OIL & GREASE mg/l GRAB JA/AP/JUL/OCT	EFFLUENT 001M OIL & GREASE mg/l GRAB JA/AP/JUL/OCT	EFFLUENT 001P OIL & GREASE mg/l GRAB JA/AP/JUL/OCT	EFFLUENT 002 OIL & GREASE mg/l GRAB JA/AP/JUL/OCT	EFFLUENT 003 OIL & GREASE mg/l GRAB JA/AP/JUL/OCT
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MONTHLY AVG					4			
MONTHLY HIGH					4			
MONTHLY LOW					< 3			
TIMES EXCEEDED	MO AVG 15 = 0	MO AVG 15 = 0	MO AVG 15 = 0	MO AVG 15 = 0	MO AVG 15 = 0	MO AVG 15 = 0	MO AVG 15 = 0	MO AVG 15 = 0
TIMES EXCEEDED	D MAX 20 = 0	D MAX 20 = 0	D MAX 20 = 0	D MAX 20 = 0	D MAX 20 = 0	D MAX 20 = 0	D MAX 20 = 0	D MAX 20 = 0
TIMES EXCEEDED								

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

INCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	*October 17, 1997*

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.	YEAR / MO / DAY	YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
102003001	BEGINNING 97 / 09 / 01	ENDING 97 / 09 / 30	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 004 OIL & GREASE mg/l GRAB JA/AP/JUL/OCT	*	EFFLUENT 001 TOX CONCEN TU GRAB JA/AP/JUL/OCT	*	EFFLUENT 001D CADMIUM ug/l QTRLY COMP JA/AP/JUL/OCT	*	EFFLUENT 001H CADMIUM ug/l QTRLY COMP JA/AP/JUL/OCT	*	EFFLUENT 001L CADMIUM ug/l QTRLY COMP JA/AP/JUL/OCT	*	EFFLUENT 001F CADMIUM ug/l 1 WEEK COMP JA/AP/JUL/OCT
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MONTHLY AVG					< 25		< 1		< 1		< 20
MONTHLY HIGH					< 25		< 1		< 1		< 20
MONTHLY LOW					< 25		< 1		< 1		< 20
TIMES EXCEEDED	MO AVG 15 = 0		6M-MEAN 0.26		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT
TIMES EXCEEDED	D MAX 20 = 0		=0								
TIMES EXCEEDED											

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

NCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D. 102003001 | YEAR/MO/DAY BEGINNING 97/09/01 | YEAR/MO/DAY ENDING 97/09/30 | STATE CODE 06 | NPDES PERMIT # CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001D CHROMIUM ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001H T CHROMIUM ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001L T CHROMIUM ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001F T CHROMIUM ug/l 1 WEEK COMP JA/AP/JUL/OCT	EFFLUENT 001D COPPER ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001H COPPER ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001L COPPER ug/l QTRLY COMP JA/AP/JUL/OCT	EFFLUENT 001F COPPER ug/l 1 WEEK COMP JA/AP/JUL/OCT
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MONTHLY AVG	< 50	10	< 4	< 50	< 50	118	29	< 50
MONTHLY HIGH	< 50	13	< 4	< 50	< 50	150	55	< 50
MONTHLY LOW	< 50	7	< 4	< 50	< 50	86	< 2	< 50
TIMES EXCEEDED	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT
TIMES EXCEEDED								
TIMES EXCEEDED								

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D. 3402003001 | YEAR / MO / DAY BEGINNING 97/09/01 | YEAR / MO / DAY ENDING 97/09/30 | STATE CODE 06 | NPDES PERMIT # CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001D LEAD ug/l QTRLY COMP JA/AP/JUL/OCT	*	EFFLUENT 001H LEAD ug/l QTRLY COMP JA/AP/JUL/OCT	*	EFFLUENT 001L LEAD ug/l QTRLY COMP JA/AP/JUL/OCT	*	EFFLUENT 001F LEAD ug/l 1 WEEK COMP JA/AP/JUL/OCT	*	EFFLUENT 001D MERCURY ug/l QTRLY COMP JA/AP/JUL/OCT	*	EFFLUENT 001H MERCURY ug/l QTRLY COMP JA/AP/JUL/OCT	*	EFFLUENT 001L MERCURY ug/l QTRLY COMP JA/AP/JUL/OCT	*	EFFLUENT 001F MERCURY ug/l 1 WEEK COMP JA/AP/JUL/OCT
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11		2	205	2	< 1		< 50			2	< 0.5	2	< 0.5		< 0.5
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MONTHLY AVG	< 50		205		< 1		< 50		21		< 0.5		< 0.5		< 0.5
MONTHLY HIGH	< 50		250		< 1		< 50		21		< 0.5		< 0.5		< 0.5
MONTHLY LOW	< 50		160		< 1		< 50		21		< 0.5		< 0.5		< 0.5
TIMES EXCEEDED	NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT
TIMES EXCEEDED															
TIMES EXCEEDED															

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D. 02003001 | YEAR/MO/DAY BEGINNING 97/09/01 | YEAR/MO/DAY ENDING 97/09/30 | STATE CODE 06 | NPDES PERMIT # CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001D NICKEL ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001H NICKEL ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001L NICKEL ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001F NICKEL ug/l 1 WEEK COMP JA/AP/JUL/OCT		EFFLUENT 001D SILVER ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001H SILVER ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001L SILVER ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001F SILVER ug/l 1 WEEK COMP JA/AP/JUL/OCT	
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MONTHLY AVG	< 50		72		< 8		< 50		< 50		< 1		< 1		< 50	
MONTHLY HIGH	< 50		75		< 8		< 50		< 50		< 1		< 1		< 50	
MONTHLY LOW	< 50		69		< 8		< 50		< 50		< 1		< 1		< 50	
TIMES EXCEEDED	NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT	
TIMES EXCEEDED																
TIMES EXCEEDED																

REMARKS: • NUMBER OF SAMPLES TAKEN DURING THE DAY.

PRINCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.	YEAR / MO / DAY	YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
402003001	BEGINNING 97 / 09 / 01	ENDING 97 / 09 / 30	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001D ZINC ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001H ZINC ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001L ZINC ug/l QTRLY COMP JA/AP/JUL/OCT		EFFLUENT 001F ZINC ug/l 1 WEEK COMP JA/AP/JUL/OCT	
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MONTHLY AVG		300		36		2	<	100
MONTHLY HIGH		300		49		3	<	100
MONTHLY LOW		300		23	<	1	<	100
TIMES EXCEEDED		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT
TIMES EXCEEDED								
TIMES EXCEEDED								

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

INCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
02003001	BEGINNING	97 / 09 / 01	ENDING	97 / 09 / 30	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001D COPPER mg/l 24-HR COMP. METAL CLNG	*	EFFLUENT 001F COPPER mg/l 24-HR COMP. METAL CLNG	*	EFFLUENT 001I COPPER mg/l 24-HR COMP. METAL CLNG	*	EFFLUENT 001L COPPER mg/l 24-HR COMP. METAL CLNG	*	EFFLUENT 001M COPPER mg/l 24-HR COMP. METAL CLNG
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MONTHLY AVG									
MONTHLY HIGH									
MONTHLY LOW									
TIMES EXCEEDED	MO AVG 1 = 0		MO AVG 1 = 0		MO AVG 1 = 0		MO AVG 1 = 0		MO AVG 1 = 0
TIMES EXCEEDED	D MAX 1 = 0		D MAX 1 = 0		D MAX 1 = 0		D MAX 1 = 0		D MAX 1 = 0
TIMES EXCEEDED									

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY.

NCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
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DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
[redacted]02003001	BEGINNING	97 / 09 / 01	ENDING	97 / 09 / 30	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001D IRON mg/l 24-HR COMP. METAL CLNG	•	EFFLUENT 001F IRON mg/l 24-HR COMP. METAL CLNG	•	EFFLUENT 001I IRON mg/l 24-HR COMP. METAL CLNG	•	EFFLUENT 001L IRON mg/l 24-HR COMP. METAL CLNG	•	EFFLUENT 001M IRON mg/l 24-HR COMP. METAL CLNG	•
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MONTHLY AVG										
MONTHLY HIGH										
MONTHLY LOW										
TIMES EXCEEDED	MO AVG 1 = 0		MO AVG 1 = 0		MO AVG 1 = 0		MO AVG 1 = 0		MO AVG 1 = 0	
TIMES EXCEEDED	D MAX 1 = 0		D MAX 1 = 0		D MAX 1 = 0		D MAX 1 = 0		D MAX 1 = 0	
TIMES EXCEEDED										

REMARKS: • NUMBER OF SAMPLES TAKEN DURING THE DAY.

[redacted]NCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
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DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
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FACILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
2003001	BEGINNING	97 / 09 / 01	ENDING	97 / 09 / 30	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001 TITANIUM ug/l GRAB OCTOBER		INFLUENT ARSENIC ug/l GRAB OCTOBER		EFFLUENT ARSENIC ug/l GRAB OCTOBER		INFLUENT CADMIUM ug/l GRAB OCTOBER		EFFLUENT 001 CADMIUM ug/l GRAB OCTOBER		INFLUENT LEAD ug/l GRAB OCTOBER		EFFLUENT 001 LEAD ug/l GRAB OCTOBER		INFLUENT ZINC ug/l GRAB OCTOBER	
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MONTHLY AVG																13
MONTHLY HIGH																13
MONTHLY LOW																13
TIMES EXCEEDED	NO LIMIT		NO LIMIT		6M - MEAN 30 = 0		NO LIMIT		6M-MEAN 10 = 0		NO LIMIT		6M-MEAN 10 = 0			
TIMES EXCEEDED					D MAX 150 = 0				D MAX 20 = 0				D MAX 40 = 0			
TIMES EXCEEDED					I MAX 400 = 0				I MAX 50 - 0				I MAX 100 = 0			

REMARKS: * NUMBER OF SAMPLES TAKEN DURING THE DAY. (**) INFLUENT ANALYSIS PERFORMED FOR COMPARISON TO EFFLUENTS.
ALL OTHER ANNUAL ANALYSIS WILL BE PERFORMED IN OCTOBER

CIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

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FACILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
02003001	BEGINNING	97 / 09 / 01	ENDING	97 / 09 / 30	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.		INFLUENT MERCURY ug/l GRAB OCTOBER		EFFLUENT 001 MERCURY ug/l GRAB OCTOBER		INFLUENT SILVER ug/l GRAB OCTOBER		EFFLUENT 001 SILVER ug/l GRAB OCTOBER		INFLUENT CYANIDE ug/l GRAB OCTOBER		EFFLUENT 001 CYANIDE ug/l GRAB OCTOBER		INFLUENT PHENOLIC CMP ug/l (NONCL) GRAB OCTOBER		EFFLUENT 001 PHENOLIC CMP ug/l (NONCL) GRAB OCTOBER
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MONTHLY HIGH																	
MONTHLY LOW																	
TIMES EXCEEDED		NO LIMIT		6M-MEAN 0.2=0		NO LIMIT		6M-MEAN 2.9=0		NO LIMIT		6M-MEAN 30=0		NO LIMIT		6M-MEAN 150=0	
TIMES EXCEEDED				DMAX 0.8 = 0				DMAX 13.6=0				DMAX 100=0				DMAX 610= 0	
TIMES EXCEEDED				IMAX 2 = 0				IMAX 35= 0				IMAX 260=0				IMAX 1530=0	

REMARKS:
* NUMBER OF SAMPLES TAKEN DURING THE DAY.
** WHEN 001N IS DISCHARGING TO 001P.
*** WHEN 001P IS DISCHARGING TO 003.

NCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.	YEAR / MO / DAY	YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
[redacted]2003001	BEGINNING 97 / 09 / 01	ENDING 97 / 09 / 30	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	INFLUENT CHLOR PHENOL ug/l GRAB OCTOBER	EFFLUENT 001 CHLOR PHENOL ug/l GRAB OCTOBER	EFFLUENT 001D LITHIUM mg/l GRAB OCTOBER	EFFLUENT 001D BORON mg/l GRAB OCTOBER	EFFLUENT 001D HYDRAZINE mg/l GRAB OCTOBER	EFFLUENT 005 OIL & GREASE mg/l GRAB OCTOBER	EFFLUENT 003 OIL & GREASE mg/l GRAB OCTOBER
	*	*	*	*	*	*	*
1							
2							
3							
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24							
25							
26							
27							
28							
29							
30							
31							
MONTHLY AVG							
MONTHLY HIGH							
MONTHLY LOW							
TIMES EXCEEDED	NO LIMIT	6M-MEAN 10=0	NO LIMIT	NO LIMIT	NO LIMIT	MO AVG 15=0	MO AVG 15=0
TIMES EXCEEDED		DMAX 20=0				DMAX 20=0	DMAX 20=0
TIMES EXCEEDED		IMAX 50=0					

REMARKS:
* NUMBER OF SAMPLES TAKEN DURING THE DAY.
** WHEN 001N IS DISCHARGING TO 001P.
*** WHEN 001P IS DISCHARGING TO 003.

[redacted]NCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
SAN LUIS OBISPO, CA 93401

DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
02003001	BEGINNING	97 / 09 / 01	ENDING	97 / 09 / 30	06	CA0003751

STATION	EFFLUENT 009		EFFLUENT 013		EFFLUENT 015		EFFLUENT 016		EFFLUENT 017		INFLUENT		EFFLUENT 001		
ANALYSIS	OIL & GREASE		OIL & GREASE		OIL & GREASE		OIL & GREASE		OIL & GREASE		PCB'S		PCB'S		
UNITS	mg/l		mg/l		mg/l		mg/l		mg/l		ug/l		ug/l		
SMPL TYPE	GRAB		GRAB		GRAB		GRAB		GRAB		GRAB		GRAB		
FREQ.	OCTOBER		OCTOBER		OCTOBER		OCTOBER		OCTOBER		OCTOBER		OCTOBER		
	*		*		*		*		*		*		*		
1															
2															
3															
4															
5															
6															
7															
8															
9															
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21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
31															
MONTHLY AVG							No Discharge		No Discharge						
MONTHLY HIGH															
MONTHLY LOW															
TIMES EXCEEDED	MO AVG 15=0		MO AVG 15=0		MO AVG 15=0		MO AVG 15=0		MO AVG 15=0		NO LIMIT		NO LIMIT		
TIMES EXCEEDED	DMAX 20=0		DMAX 20=0		DMAX 20=0		DMAX 20=0		DMAX20=0						
TIMES EXCEEDED															

REMARKS:
* NUMBER OF SAMPLES TAKEN DURING THE DAY.
** WHEN 001N IS DISCHARGING TO 001P.
*** WHEN 001P IS DISCHARGING TO 003.

PRINCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA
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DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.	YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
02003001	BEGINNING	97 / 09 / 01	ENDING 97 / 09 / 30	06	CA0003751

STATION	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE
ANALYSIS	MOISTURE	TOT K.JLDL N	AMMONIA (N)	NITRATE (N)	TOT PHOSPHS	pH	OIL & GREASE	BORON
UNITS	%	mg/kg	mg/kg	mg/kg	mg/kg	pH units	mg/kg	mg/kg
SMPL TYPE	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
FREQ.	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER
*								
1								
2								
3								
4								
5								
6								
7								
8								
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11								
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13								
14								
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21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
MONTHLY AVG								
MONTHLY HIGH								
MONTHLY LOW								
TIMES EXCEEDED	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT
TIMES EXCEEDED								
TIMES EXCEEDED								

REMARKS:
* NUMBER OF SAMPLES TAKEN DURING THE DAY.
** WHEN 001N IS DISCHARGING TO 001P.
*** WHEN 001P IS DISCHARGING TO 003.

NCIPAL EXECUTIVE OFFICER
GREGORY M. RUEGER

SIGNATURE OF AUTHORIZED AGENT	DATE
R. D. Hernandez	October 17, 1997

CALIFORNIA REGIONAL WATER QUALITY
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DISCHARGE SELF MONITORING REPORT

PACIFIC GAS AND ELECTRIC CO.
DIABLO CANYON NUCLEAR POWER PLANT
PO BOX 56
AVILA BEACH, CALIF 93424

FACILITY I.D.		YEAR / MO / DAY		YEAR / MO / DAY	STATE CODE	NPDES PERMIT #
[redacted]2003001	BEGINNING	97 / 09 / 01	ENDING	97 / 09 / 30	06	CA0003751

STATION	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE	EFFLUENT 001N SLUDGE
ANALYSIS	CADMIUM	COPPER	CHROMIUM	LEAD	NICKEL	MERCURY	ZINC	VOLUME
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	tons
SMPL TYPE	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	
FREQ.	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER	OCTOBER
*								
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
MONTHLY AVG								
MONTHLY HIGH								
MONTHLY LOW								
TIMES EXCEEDED	10xSTLC=0	10xSTLC=0	10xSTLC=0	10xSTLC=0	10xSTLC=0	10xSTLC=0	10xSTLC=0	
TIMES EXCEEDED	10 mg/kg=0	250 mg/kg=0	50 mg/kg=0	50 mg/kg=0	200 mg/kg=0	2 mg/kg=0	2500 mg/kg=0	
TIMES EXCEEDED	TTLC>100=0	TTLC>2500=0	TTLC>500=0	TTLC>1000=0	TTLC>2000=0	TTLC>20=0	TTLC>5000=0	

REMARKS:
* NUMBER OF SAMPLES TAKEN DURING THE DAY.
** WHEN 001N IS DISCHARGING TO 001P.
*** WHEN 001P IS DISCHARGING TO 003.

[redacted]NCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
GREGORY M. RUEGER	R. D. Hernandez	October 17, 1997

PG&E | CHEMISTRY SAMPLE DATA TABULAR REPORT | DCPP

Unit: 0 NPDES
U1 DISCHARGE CHLORINE

From: 9/01/97 0:01
Through: 9/30/97 23:59

Parameter:	0000 CHLORINE	0400 CHLORINE	0800 CHLORINE	1200 CHLORINE	1600 CHLORINE	2000 CHLORINE	lbs CHLORINE INJECTE
High Limit:	89	89	89	89	89	89	
Low Limit:	10	10	10	10	10	10	
Sample Time:	ppb	ppb	PPB	PPB	PPB	PPB	LBS
9/01/97 0:01	<10	<10	<10	<10	12	17	331
9/02/97 0:01	17	19	12	11	10	11	331
9/03/97 0:01	10	17	11	<10	<10	<10	331
9/04/97 0:01	11	13	13	<10	<10	<10	346
9/05/97 0:01	10	10	10	10	10	10	394
9/06/97 0:01	13	13	13	13	13	13	432
9/07/97 0:01	13	13	13	13	13	13	432
9/08/97 0:01	<13	<13	<13	<13	<13	<13	437
9/09/97 0:01	<13	<13	<13	<13	<13	<13	446
9/10/97 0:01	<13	<10	<10	<10	<10	<10	446
9/11/97 0:01	<10	<10	<10	<10	<10	<10	446
9/12/97 0:01	<10	<10	<10	19	19	20	425
9/13/97 0:01	25	19	21	12	15	13	418
9/14/97 0:01	15	16	21	11	11	15	418
9/15/97 0:01	17	19	15	15	11	10	418
9/16/97 0:01	12	15	13	10	<10	<10	394
9/17/97 0:01	<10	10	<10	<10	16	17	350
9/18/97 0:01	13	13	11	<10	12	16	360
9/19/97 0:01	10	17	16	12	17	13	377
9/20/97 0:01	13	12	13	12	15	15	403
9/21/97 0:01	15	12	15	15	12	15	403
9/22/97 0:01	15	16	12	<10	<10	<10	403
9/23/97 0:01	10	10	<10	<10	19	16	410
9/24/97 0:01	21	23	19	21	19	16	418
[illegible]97 0:01	21	19	17	23	23	23	418
[illegible]7 0:01	28	25	25	30	25	28	418

Unit: 0 NPDES
U1 DISCHARGE CHLORINE

From: 9/01/97 0:01
Through: 9/30/97 23:59

Parameter:	0000 CHLOR INE	0400 CHLOR INE	0800 CHLOR INE	1200 CHLOR INE	1600 CHLOR INE	2000 CHLOR INE	lbs CHLORI NE INJECTE
High Limit:	89	89	89	89	89	89	
Low Limit:	10	10	10	10	10	10	
Sample Time:	ppb	ppb	PPB	PPB	PPB	PPB	LBS
9/27/97 0:01	30	28	28	28	33	33	418
9/28/97 0:01	25	30	28	28	23	21	418
9/29/97 0:01	23	21	16	16	16	12	418
9/30/97 0:01	17	13	15	15	15	10	418

PG&E | CHEMISTRY SAMPLE DATA TABULAR REPORT | DCPP

Unit: 0 NPDES
U2 DISCHARGE CHLORINE

From: 9/01/97 0:01
Through: 9/30/97 23:59

eter:	0100 CHLORINE	0500 CHLORINE	0900 CHLORINE	1300 CHLORINE	1700 CHLORINE	2100 CHLORINE	LBS OF CHLORINE
High Limit:	89	89	89	89	89	89	
Low Limit:	0	0	0	0	0	0	
Sample Time:	PPB	PPB	PPB	PPB	PPB	PPB	LBS
9/01/97 1:00	<10	<10		<10	<10		110
9/02/97 1:00	<10	<10		<10	<10		110
9/03/97 1:00	<10	<10		<10	<10		110
9/04/97 1:00	<10	<10		<10	<10		113
9/05/97 1:00	<10	<10		<10	<10		120
9/08/97 1:00	<10	<7	<7	<7	<7	<7	178
9/09/97 1:00	<7	<7	<7	<7	<7	<7	187
9/10/97 1:00	<7	13	11	<10	11	11	331
9/11/97 1:00	11	<10	12	17	24	24	360
9/12/97 1:00	24	29	26	20	22	24	338
9/13/97 1:00	29	29	24	20	20	20	317
9/14/97 1:00	24	22	24	20	17	15	317
9/15/97 1:00	18	18	14	12	12	13	317
9/16/97 1:00	14	14	15	14	14	13	312
9/17/97 1:00	14	12	13	15	15	17	312
9/18/97 1:00	12	<10	<10	<10	14	18	317
9/19/97 1:00	17	18	20	15	20	18	338
9/20/97 1:00	17	18	17	15	15	15	374
9/21/97 1:00	15	14	13	13	12	13	374
9/22/97 1:00	14	15	14	10	<10	<10	374
9/23/97 1:00	10	10	<10	10	<10	<10	382
9/24/97 1:00	13	13	<10	<10	<10	<10	389
9/25/97 1:00	<10	<10	<10	12	13	15	389
9/26/97 1:00	18	18		13	13	13	324
[illegible]97 1:00	19	19	19	16	16	16	389
[illegible]7 1:00	19	19	19	16	15	15	389

Unit: 0 NPDES
U2 DISCHARGE CHLORINE

From: 9/01/97 0:01
Through: 9/30/97 23:59

Parameter:	0100 CHLORINE	0500 CHLORINE	0900 CHLORINE	1300 CHLORINE	1700 CHLORINE	2100 CHLORINE	LBS OF CHLORINE	
High Limit:	89	89	89	89	89	89		
Low Limit:	0	0	0	0	0	0		
Sample Time:	PPB	PPB	PPB	PPB	PPB	PPB	LBS	
9/29/97 1:00	16	15	11	10	10	10	389	
9/30/97 1:00	<10	<10	<10	<10	<10	<10	403	

PACIFIC GAS AND ELECTRIC - DIABLO CANYON POWER PLANT
SANITARY WASTEWATER TREATMENT SYSTEM
CONTRACT #Z7B-2104-86
Rev. 1/95

ECO Resources Inc. 39899 Balentine Drive Suite 200 Newark, CA 94560	Pacific Gas & Electric Company Contacts: Joseph Higgins (805) 545-4103 Heather Rumsey (805) 545-4045

PARAMETER	UNITS	FREQ.	LIMITS MONTHLY AVERAGE	LIMITS DAILY MAX	SAMPLE DATE	SAMPLE TIME	RESULTS
1. Oil and Grease	mg/l	Weekly	15	20	9.5	12:41	< 5mg/l Ave of 3
2	"	"	"	"	9.11	12:42	< 5mg/l "
3	"	"	"	"	9.17	9:38	< 5mg/l "
4	"	"	"	"	9.22	1:49	< 5mg/l "
5	"	"	"	"			
1. Suspended Solids	mg/l	Weekly	60	N/A	9.5	12:27	10 mg/l
2	"	"	"	"	9.11	12:26	20 mg/l
3	"	"	"	"	9.17	9:26	15 mg/l
4	"	"	"	"	9.22	1:41	20 mg/l
5	"	"	"	"			
1. Settleable Solids	ml/l	Weekly	1.0	3.0	9.5	12:45	< 0.1 ml/l
2	"	"	"	"	9.11	12:38	< 0.1 ml/l
3	"	"	"	"	9.17	9:40	< 0.1 ml/l
4	"	"	"	"	9.22	1:45	< 0.1 ml/l
5	"	"	"	"			

NOTES:
1. Analysis results above the monthly average shall be reported verbally within 8 hours to a PG&E contact listed above.
2. Oil & Grease and Suspended Solids samples are composites during 1 discharge cycle.
3. If ECO diagnostic analysis results indicate that the system effluent exceeds the listed limits, increase the frequency at which samples are collected and submitted to contract lab.

COMMENTS: _____

SLUDGE DISPOSAL DATA			
MONTH REMOVED	VOLUME REMOVED	WEIGHT REMOVED	DISPOSAL SITE
SEPTEMBER		14881bs.	SANTAMARIA WWTP

Data Sheet completed by: J. M Wyong Date: October 9th, 1997

APPENDIX 5

DIABLO CANYON POWER PLANT

Acute Bioassay

July 7-11, 1997

Report Issued: August 6, 1997 Report LTR-420-97.09

PACIFIC GAS & ELECTRIC CORPORATION
P O BOX 56
AVILA BEACH, CA 93424

LABORATORY TEST REPORT

SUBJECT: ACUTE TOXICITY ASSESSMENT OF DISCHARGE WATER FROM DIABLO CANYON POWER PLANT, THIRD QUARTER OF 1997

Introduction:

One acute toxicity bioassay (DCPP-249) was conducted at the Diablo Canyon Biological Laboratory on water sampled on July 7, 1997, from Diablo Canyon Power Plant's discharge 001. This bioassay satisfies this quarter's requirement for acute toxicity testing in Diablo Canyon Power Plant's NPDES Permit.

Methods:

The bioassay was a standard 96-hour static acute toxicity test conducted using the guidelines in Kopperdahl (1976) and EPA (1985). The dilutions tested were 100 percent effluent and a dilution water control. Juvenile red abalone (Haliotis rufescens) were used as the test species. The bioassay was begun within twenty-four hours of sample collection.

Results & Conclusions:

Measured toxicity was 0.0 (no mortality occurred during the test). All measured chemical and physical parameters fell within accepted limits. Data sheets are attached.

SUMMARY OF RESULTS

Assay No.	Date Sampled	Location	Toxicity (TUa)
DCPP-249	July 7, 1997	Discharge 001	0.0 (no mortality)

References:

Kopperdahl, Fredric R. 1976. Guidelines for Performing Static Acute Toxicity Fish Bioassays in Municipal and Industrial Wastewaters. State Water Resources Control Board, and California Department of Fish and Game.

EPA, 1985. Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms. Third Edition. EPA/600/4-85/013

Distribution: AMJackson
RWLorenz
HRumsey
RMS Indexer

DATE: August 7, 1997
TESTED BY: [signature]
APPROVED BY: [signature]
FILE NO.: [signature]

70-327 (3/88)

PACIFIC GAS & ELECTRIC COMPANY
Technical and Ecological Services
DIABLO CANYON BIOLOGICAL LABORATORY
STATIC BIOASSAY REPORT SHEET
One Concentration

Procedure BIO C-1
Revision 0

ASSAY NO. DCPP-249

TEST ORGANISM DATA :
TEST ORGANISM : Red Abalone, *Haliotis rufescens*
SOURCE : Diablo Canyon Marine Biological Laboratory
AVERAGE LENGTH : 10.4 mm RANGE : 8 - 14 mm
ACCLIMATION TIME : 24 hrs TEMP : 15 degrees C.
WATER SOURCE : DCPP Biological Laboratory Intake Pump

TEST SOLUTION DATA :
SOURCE OF TEST SOLUTION : Diablo Canyon 001 Discharge
DATE/TIME SAMPLED : 7-7-97 @ 09:15
SAMPLED BY : CLS / GAS

DATE STARTED : 7-Jul-97
TIME STARTED : 14:12 HOURS

VOLUME/DEPTH OF TEST SOLUTION : 16 Liters / 19 cm
TYPE OF AERATION : Bio. Lab. Ring Compressor System

RENEWAL OF TEST SOLUTIONS AT : 0 Hour Intervals
ORGANISMS PER CONCENTRATION : 30
DILUTION WATER SOURCE : Control; Bio. Lab. Pump Seawater

TEST CONCENTRATIONS

	100%	CONTROL	INITIALS
0 HOURS			
TEMPERATURE (Degrees Celsius)	15.2	15.1	GAS
DISSOLVED OXYGEN (mg/Liter)	7.2	7.0	CLS
PH	7.9	7.9	CLS
SALINITY/HARDNESS	33.3	33.2	CLS
24 HOURS			
ORGANISMS SURVIVING	30	30	CLS
% SURVIVAL	100	100	CLS
TEMPERATURE (Degrees Celsius)	15.2	15.2	CLS
DISSOLVED OXYGEN (mg/Liter)	7.6	7.4	CLS
PH	7.9	8.0	GAS
48 HOURS			
ORGANISMS SURVIVING	30	30	CLS
% SURVIVAL	100	100	CLS
TEMPERATURE (Degrees Celsius)	15.3	15.2	CLS
DISSOLVED OXYGEN (mg/Liter)	7.4	7.8	CLS
PH	7.9	8.0	CLS
72 HOURS			
ORGANISMS SURVIVING	30	30	CLS
% SURVIVAL	100	100	CLS
TEMPERATURE (Degrees Celsius)	15.3	15.2	CLS
DISSOLVED OXYGEN (mg/Liter)	7.4	7.6	CLS
PH	7.9	7.7	CLS
96 HOURS			
ORGANISMS SURVIVING	30	30	GAS
% SURVIVAL	100	100	GAS
TEMPERATURE (Degrees Celsius)	15.2	15.2	GAS
DISSOLVED OXYGEN (mg/Liter)	7.4	7.8	GAS
PH	7.9	7.9	GAS
SALINITY/HARDNESS	33.4	33.5	GAS

Procedure No.	0
Temperature Probe No.	BIO C-1
Calibration Due Date	019, 066
	4/4/98

TESTED BY : CHRISTINA SANTALA
GRETCHEN SCHIEBEL

Reviewed By : Joanna L. Kelly

DCPP - 249 Acute Bioassay Average Length of Test Abalone

Shell Lengths of Test Animals in millimeters :

CONTROL	DISCHARGE
11	9
13	11
13	14
13	12
11	12
10	11
10	11
11	9
11	9
10	14
12	8
12	12
9	9
9	12
11	13
11	10
10	13
10	11
9	12
10	10
10	11
13	11
10	10
12	11
12	8
11	8
10	11
10	10
11	10
10	10
AVERAGE 10.0	10.7
STDEV. 1.17	1.64

Average Length Control and Discharge : **10.4**

Range : 8 - 14 mm

7/7/97	14:04:21	13	15.23
7/7/97	14:24:24	13	15.23
7/7/97	14:44:31	13	15.22
7/7/97	15:04:33	13	15.22
7/7/97	15:24:40	13	15.22
7/7/97	15:44:43	13	15.21
7/7/97	16:04:44	13	15.21
7/7/97	16:24:52	13	15.20
7/7/97	16:44:55	13	15.19
7/7/97	17:04:57	13	15.19
7/7/97	17:25:03	13	15.19
7/7/97	17:45:08	13	15.17
7/7/97	18:05:09	13	15.17
7/7/97	18:25:10	13	15.16
7/7/97	18:45:20	13	15.16
7/7/97	19:05:25	13	15.16
7/7/97	19:25:31	13	15.15
7/7/97	19:45:34	13	15.14
7/7/97	20:05:36	13	15.12
7/7/97	20:25:38	13	15.12
7/7/97	20:45:40	13	15.11
7/7/97	21:05:51	13	15.11
7/7/97	21:26:03	13	15.11
7/7/97	21:46:05	13	15.11
7/7/97	22:06:06	13	15.11
7/7/97	22:26:12	13	15.12
7/7/97	22:46:25	13	15.12
7/7/97	23:06:27	13	15.11
7/7/97	23:26:29	13	15.10
7/7/97	23:46:30	13	15.09
7/8/97	0:06:32	13	15.09
7/8/97	0:26:35	13	15.09
7/8/97	0:46:40	13	15.07
7/8/97	1:06:45	13	15.06
7/8/97	1:26:56	13	15.05
7/8/97	1:46:57	13	15.03
7/8/97	2:07:08	13	15.02
7/8/97	2:27:10	13	15.01
7/8/97	2:47:12	13	15.00
7/8/97	3:07:23	13	15.00
7/8/97	3:27:35	13	15.00
7/8/97	3:47:36	13	15.00
7/8/97	4:07:38	13	15.00
7/8/97	4:27:42	13	15.00
7/8/97	4:47:53	13	15.00
7/8/97	5:07:55	13	15.00
7/8/97	5:28:05	13	15.00
7/8/97	5:48:12	13	15.00
7/8/97	6:08:13	13	14.99
7/8/97	6:28:19	13	14.99
7/8/97	6:48:30	13	14.99
7/8/97	7:08:32	13	14.98
7/8/97	7:28:33	13	14.98
7/8/97	7:48:35	13	14.99
7/8/97	8:08:35	13	15.00
7/8/97	8:28:40	13	15.02
7/8/97	8:48:45	13	15.04
7/8/97	9:08:46	13	15.05
7/8/97	9:28:50	13	15.08
7/8/97	9:48:56	13	15.08
7/8/97	10:08:58	13	15.09
7/8/97	10:28:59	13	15.11
7/8/97	10:49:02	13	15.12
7/8/97	11:09:08	13	15.14
7/8/97	11:29:14	13	15.16
7/8/97	11:49:15	13	15.17
7/8/97	12:09:17	13	15.19
7/8/97	12:29:23	13	15.21
7/8/97	12:49:27	13	15.23
7/8/97	13:09:32	13	15.25
7/8/97	13:29:36	13	15.27
7/8/97	13:49:39	13	15.26
7/8/97	14:09:38	13	15.27
7/8/97	14:29:43	13	15.27
7/8/97	14:49:45	13	15.28
7/8/97	15:12:17	13	15.28
7/8/97	15:32:26	13	15.28
7/8/97	15:52:37	13	15.29
7/8/97	16:12:38	13	15.27
7/8/97	16:32:40	13	15.27
7/8/97	16:52:48	13	15.27
7/8/97	17:12:54	13	15.26
7/8/97	17:32:55	13	15.25
7/8/97	17:52:56	13	15.23
7/8/97	18:12:58	13	15.23
7/8/97	18:33:01	13	15.22
7/8/97	18:53:07	13	15.21
7/8/97	19:13:17	13	15.19
7/8/97	19:33:21	13	15.18
7/8/97	19:53:32	13	15.17
7/8/97	20:13:36	13	15.15
7/8/97	20:33:37	13	15.14
7/8/97	20:53:38	13	15.13
7/8/97	21:13:40	13	15.12
7/8/97	21:33:44	13	15.11
7/8/97	21:53:46	13	15.10
7/8/97	22:13:47	13	15.09
7/8/97	22:33:48	13	15.08
7/8/97	22:53:59	13	15.08
7/8/97	23:14:01	13	15.08
7/8/97	23:34:11	13	15.08
7/8/97	23:54:16	13	15.06
7/9/97	0:14:21	13	15.05
7/9/97	0:34:25	13	15.05
7/9/97	0:54:29	13	15.05
7/9/97	1:14:35	13	15.03
7/9/97	1:34:38	13	15.03
7/9/97	1:54:40	13	15.03
7/9/97	2:14:52	13	15.01
7/9/97	2:34:55	13	15.01
7/9/97	2:54:57	13	15.01
7/9/97	3:14:58	13	15.01
7/9/97	3:35:10	13	15.01
7/9/97	3:55:20	13	15.02
7/9/97	4:15:22	13	15.03
7/9/97	4:35:28	13	15.03
7/9/97	4:55:40	13	15.03
7/9/97	5:15:41	13	15.03
7/9/97	5:35:42	13	15.05
7/9/97	5:55:54	13	15.06
7/9/97	6:16:06	13	15.07
7/9/97	6:36:07	13	15.08
7/9/97	6:56:08	13	15.10
7/9/97	7:16:17	13	15.10
7/9/97	7:36:25	13	15.11
7/9/97	7:56:35	13	15.11
7/9/97	8:16:42	13	15.11
7/9/97	8:36:51	13	15.11
7/9/97	8:57:02	13	15.10
7/9/97	9:17:07	13	15.10
7/9/97	9:37:14	13	15.10
7/9/97	9:57:21	13	15.10
7/9/97	10:17:23	13	15.10
7/9/97	10:37:26	13	15.12
7/9/97	10:57:34	13	15.12
7/9/97	11:17:41	13	15.15
7/9/97	11:37:45	13	15.18
7/9/97	11:57:54	13	15.19
7/9/97	12:18:02	13	15.20
7/9/97	12:38:04	13	15.23
7/9/97	12:58:13	13	15.25
7/9/97	13:18:16	13	15.30
7/9/97	13:38:24	13	15.28
7/9/97	13:58:35	13	15.31
7/9/97	14:18:45	13	15.30
7/9/97	14:38:56	13	15.29
7/9/97	14:58:59	13	15.30
7/9/97	15:19:01	13	15.29
7/9/97	15:39:07	13	15.29
7/9/97	15:59:08	13	15.28

Tank 4B Channel D13 - Probe #019 Degress Celsius

7/9/97	16:19:10	13	15.25
7/9/97	16:39:11	13	15.23
7/9/97	16:59:12	13	15.24
7/9/97	17:19:15	13	15.24
7/9/97	17:39:17	13	15.23
7/9/97	17:59:18	13	15.23
7/9/97	18:19:20	13	15.23
7/9/97	18:39:22	13	15.23
7/9/97	18:59:24	13	15.21
7/9/97	19:19:27	13	15.20
7/9/97	19:39:32	13	15.16
7/9/97	19:59:33	13	15.15
7/9/97	20:19:37	13	15.13
7/9/97	20:39:43	13	15.11
7/9/97	20:59:48	13	15.11
7/9/97	21:19:49	13	15.10
7/9/97	21:39:50	13	15.09
7/9/97	22:00:01	13	15.08
7/9/97	22:20:01	13	15.07
7/9/97	22:40:13	13	15.07
7/9/97	23:00:14	13	15.07
7/9/97	23:20:15	13	15.07
7/9/97	23:40:25	13	15.07
7/10/97	0:00:26	13	15.08
7/10/97	0:20:29	13	15.09
7/10/97	0:40:41	13	15.10
7/10/97	1:00:42	13	15.11
7/10/97	1:20:47	13	15.11
7/10/97	1:40:49	13	15.11
7/10/97	2:01:02	13	15.09
7/10/97	2:21:10	13	15.08
7/10/97	2:41:13	13	15.06
7/10/97	3:01:23	13	15.05
7/10/97	3:21:26	13	15.04
7/10/97	3:41:30	13	15.03
7/10/97	4:01:40	13	15.03
7/10/97	4:21:53	13	15.03
7/10/97	4:42:05	13	15.03
7/10/97	5:02:06	13	15.03
7/10/97	5:22:08	13	15.03
7/10/97	5:42:20	13	15.04
7/10/97	6:02:33	13	15.04
7/10/97	6:22:38	13	15.03
7/10/97	6:42:40	13	15.04
7/10/97	7:02:47	13	15.03
7/10/97	7:22:49	13	15.03
7/10/97	7:42:51	13	15.04
7/10/97	8:02:54	13	15.05
7/10/97	8:23:04	13	15.07
7/10/97	8:43:06	13	15.09
7/10/97	9:03:10	13	15.11
7/10/97	9:23:12	13	15.12
7/10/97	9:43:14	13	15.12
7/10/97	10:03:16	13	15.13
7/10/97	10:23:18	13	15.15
7/10/97	10:43:20	13	15.17
7/10/97	11:03:28	13	15.17
7/10/97	11:23:34	13	15.18
7/10/97	11:43:37	13	15.19
7/10/97	12:03:40	13	15.20
7/10/97	12:23:49	13	15.22
7/10/97	12:43:50	13	15.23
7/10/97	13:03:52	13	15.25
7/10/97	13:23:56	13	15.29
7/10/97	13:43:58	13	15.29
7/10/97	14:03:59	13	15.28
7/10/97	14:24:00	13	15.27
7/10/97	14:44:04	13	15.26
7/10/97	15:04:09	13	15.25
7/10/97	15:24:14	13	15.25
7/10/97	15:44:15	13	15.25
7/10/97	16:04:24	13	15.24
7/10/97	16:24:31	13	15.24
7/10/97	16:44:36	13	15.24
7/10/97	17:04:40	13	15.24
7/10/97	17:24:43	13	15.24
7/10/97	17:44:47	13	15.23
7/10/97	18:04:52	13	15.24
7/10/97	18:24:56	13	15.24
7/10/97	18:45:00	13	15.24
7/10/97	19:05:03	13	15.24
7/10/97	19:25:09	13	15.24
7/10/97	19:45:13	13	15.22
7/10/97	20:05:18	13	15.21
7/10/97	20:25:22	13	15.20
7/10/97	20:45:27	13	15.18
7/10/97	21:05:30	13	15.16
7/10/97	21:25:34	13	15.15
7/10/97	21:45:36	13	15.13
7/10/97	22:05:40	13	15.13
7/10/97	22:25:44	13	15.11
7/10/97	22:45:45	13	15.11
7/10/97	23:05:49	13	15.10
7/10/97	23:25:51	13	15.09
7/10/97	23:45:55	13	15.08
7/11/97	0:06:01	13	15.07
7/11/97	0:26:02	13	15.06
7/11/97	0:46:05	13	15.04
7/11/97	1:06:14	13	15.03
7/11/97	1:26:19	13	15.03
7/11/97	1:46:24	13	15.02
7/11/97	2:06:29	13	15.01
7/11/97	2:26:36	13	15.00
7/11/97	2:46:40	13	15.00
7/11/97	3:06:41	13	15.00
7/11/97	3:26:46	13	14.99
7/11/97	3:46:48	13	14.99
7/11/97	4:06:52	13	14.99
7/11/97	4:26:55	13	15.00
7/11/97	4:46:58	13	15.00
7/11/97	5:07:02	13	15.00
7/11/97	5:27:04	13	15.00
7/11/97	5:47:06	13	15.00
7/11/97	6:07:08	13	15.01
7/11/97	6:27:14	13	15.01
7/11/97	6:47:16	13	15.01
7/11/97	7:07:19	13	15.01
7/11/97	7:27:20	13	15.02
7/11/97	7:47:20	13	15.03
7/11/97	8:07:24	13	15.04
7/11/97	8:27:29	13	15.05
7/11/97	8:47:33	13	15.07
7/11/97	9:07:40	13	15.08
7/11/97	9:27:42	13	15.09
7/11/97	9:47:44	13	15.11
7/11/97	10:07:49	13	15.12
7/11/97	10:27:51	13	15.15
7/11/97	10:47:54	13	15.17
7/11/97	11:07:56	13	15.18
7/11/97	11:27:57	13	15.18
7/11/97	11:48:02	13	15.18
7/11/97	12:08:03	13	15.18
7/11/97	12:28:06	13	15.20
7/11/97	12:48:10	13	15.21
7/11/97	13:08:13	13	15.22
7/11/97	13:28:20	13	15.24
7/11/97	13:48:26	13	15.23
7/11/97	14:08:28	13	15.23
7/11/97	14:28:28	13	15.23

7/7/97	14:04:21	14	15.15	7/8/97	6:48:30	14	14.96	7/8/97	23:34:12	14	15.05
7/7/97	14:24:24	14	15.16	7/8/97	7:08:32	14	14.95	7/8/97	23:54:16	14	15.04
7/7/97	14:44:32	14	15.15	7/8/97	7:28:33	14	14.95	7/9/97	0:14:22	14	15.03
7/7/97	15:04:33	14	15.15	7/8/97	7:48:36	14	14.96	7/9/97	0:34:25	14	15.02
7/7/97	15:24:41	14	15.14	7/8/97	8:08:35	14	14.97	7/9/97	0:54:29	14	15.02
7/7/97	15:44:44	14	15.14	7/8/97	8:28:40	14	15.00	7/9/97	1:14:35	14	15.01
7/7/97	16:04:44	14	15.13	7/8/97	8:48:45	14	15.02	7/9/97	1:34:38	14	15.00
7/7/97	16:24:53	14	15.13	7/8/97	9:08:46	14	15.04	7/9/97	1:54:41	14	15.00
7/7/97	16:44:55	14	15.13	7/8/97	9:28:51	14	15.06	7/9/97	2:14:53	14	15.00
7/7/97	17:04:57	14	15.13	7/8/97	9:48:56	14	15.07	7/9/97	2:34:55	14	14.99
7/7/97	17:25:04	14	15.12	7/8/97	10:08:58	14	15.07	7/9/97	2:54:58	14	14.99
7/7/97	17:45:09	14	15.11	7/8/97	10:28:59	14	15.09	7/9/97	3:14:59	14	14.98
7/7/97	18:05:09	14	15.11	7/8/97	10:49:02	14	15.10	7/9/97	3:35:10	14	14.99
7/7/97	18:25:10	14	15.11	7/8/97	11:09:08	14	15.11	7/9/97	3:55:20	14	14.99
7/7/97	18:45:20	14	15.11	7/8/97	11:29:14	14	15.13	7/9/97	4:15:23	14	15.00
7/7/97	19:05:25	14	15.11	7/8/97	11:49:15	14	15.15	7/9/97	4:35:29	14	15.01
7/7/97	19:25:32	14	15.11	7/8/97	12:09:18	14	15.16	7/9/97	4:55:41	14	15.01
7/7/97	19:45:35	14	15.10	7/8/97	12:29:23	14	15.18	7/9/97	5:15:41	14	15.01
7/7/97	20:05:37	14	15.08	7/8/97	12:49:27	14	15.19	7/9/97	5:35:43	14	15.02
7/7/97	20:25:38	14	15.07	7/8/97	13:09:33	14	15.21	7/9/97	5:55:55	14	15.04
7/7/97	20:45:40	14	15.07	7/8/97	13:29:37	14	15.22	7/9/97	6:16:06	14	15.05
7/7/97	21:05:51	14	15.07	7/8/97	13:49:39	14	15.21	7/9/97	6:36:08	14	15.06
7/7/97	21:26:04	14	15.07	7/8/97	14:09:39	14	15.21	7/9/97	6:56:09	14	15.07
7/7/97	21:46:05	14	15.07	7/8/97	14:29:43	14	15.21	7/9/97	7:16:18	14	15.08
7/7/97	22:06:06	14	15.08	7/8/97	14:49:45	14	15.21	7/9/97	7:36:26	14	15.09
7/7/97	22:26:13	14	15.08	7/8/97	15:12:17	14	15.21	7/9/97	7:56:35	14	15.09
7/7/97	22:46:25	14	15.08	7/8/97	15:32:27	14	15.21	7/9/97	8:16:42	14	15.09
7/7/97	23:06:28	14	15.07	7/8/97	15:52:37	14	15.22	7/9/97	8:36:51	14	15.08
7/7/97	23:26:29	14	15.06	7/8/97	16:12:38	14	15.21	7/9/97	8:57:02	14	15.07
7/7/97	23:46:30	14	15.05	7/8/97	16:32:40	14	15.21	7/9/97	9:17:07	14	15.07
7/8/97	0:06:32	14	15.05	7/8/97	16:52:48	14	15.21	7/9/97	9:37:15	14	15.06
7/8/97	0:26:36	14	15.04	7/8/97	17:12:55	14	15.20	7/9/97	9:57:22	14	15.07
7/8/97	0:46:41	14	15.02	7/8/97	17:32:56	14	15.19	7/9/97	10:17:24	14	15.07
7/8/97	1:06:46	14	15.00	7/8/97	17:52:57	14	15.18	7/9/97	10:37:26	14	15.08
7/8/97	1:26:57	14	14.99	7/8/97	18:12:58	14	15.18	7/9/97	10:57:34	14	15.09
7/8/97	1:46:58	14	14.97	7/8/97	18:33:01	14	15.17	7/9/97	11:17:41	14	15.10
7/8/97	2:07:09	14	14.96	7/8/97	18:53:08	14	15.16	7/9/97	11:37:46	14	15.13
7/8/97	2:27:11	14	14.95	7/8/97	19:13:18	14	15.16	7/9/97	11:57:54	14	15.15
7/8/97	2:47:12	14	14.95	7/8/97	19:33:21	14	15.15	7/9/97	12:18:02	14	15.17
7/8/97	3:07:24	14	14.96	7/8/97	19:53:32	14	15.14	7/9/97	12:38:05	14	15.18
7/8/97	3:27:36	14	14.96	7/8/97	20:13:37	14	15.12	7/9/97	12:58:13	14	15.20
7/8/97	3:47:36	14	14.96	7/8/97	20:33:37	14	15.11	7/9/97	13:18:16	14	15.25
7/8/97	4:07:39	14	14.96	7/8/97	20:53:39	14	15.10	7/9/97	13:38:25	14	15.26
7/8/97	4:27:42	14	14.96	7/8/97	21:13:41	14	15.09	7/9/97	13:58:35	14	15.27
7/8/97	4:47:54	14	14.96	7/8/97	21:33:44	14	15.07	7/9/97	14:18:46	14	15.28
7/8/97	5:07:55	14	14.96	7/8/97	21:53:46	14	15.06	7/9/97	14:38:57	14	15.29
7/8/97	5:28:05	14	14.96	7/8/97	22:13:48	14	15.05	7/9/97	14:59:00	14	15.29
7/8/97	5:48:12	14	14.96	7/8/97	22:33:48	14	15.05	7/9/97	15:19:02	14	15.28
7/8/97	6:08:13	14	14.96	7/8/97	22:54:00	14	15.05	7/9/97	15:39:08	14	15.28
7/8/97	6:28:20	14	14.96	7/8/97	23:14:01	14	15.05	7/9/97	15:59:09	14	15.27

7/9/97	16:19:10	14	15.25
7/9/97	16:39:11	14	15.23
7/9/97	16:59:13	14	15.22
7/9/97	17:19:15	14	15.22
7/9/97	17:39:18	14	15.22
7/9/97	17:59:18	14	15.22
7/9/97	18:19:21	14	15.21
7/9/97	18:39:22	14	15.20
7/9/97	18:59:24	14	15.19
7/9/97	19:19:27	14	15.17
7/9/97	19:39:33	14	15.15
7/9/97	19:59:34	14	15.13
7/9/97	20:19:38	14	15.11
7/9/97	20:39:44	14	15.09
7/9/97	20:59:48	14	15.08
7/9/97	21:19:50	14	15.07
7/9/97	21:39:50	14	15.06
7/9/97	22:00:01	14	15.06
7/9/97	22:20:02	14	15.05
7/9/97	22:40:13	14	15.04
7/9/97	23:00:14	14	15.04
7/9/97	23:20:15	14	15.04
7/9/97	23:40:26	14	15.05
7/10/97	0:00:27	14	15.05
7/10/97	0:20:30	14	15.06
7/10/97	0:40:42	14	15.08
7/10/97	1:00:43	14	15.09
7/10/97	1:20:48	14	15.10
7/10/97	1:40:49	14	15.09
7/10/97	2:01:03	14	15.07
7/10/97	2:21:11	14	15.06
7/10/97	2:41:13	14	15.04
7/10/97	3:01:23	14	15.03
7/10/97	3:21:27	14	15.02
7/10/97	3:41:30	14	15.01
7/10/97	4:01:41	14	15.01
7/10/97	4:21:53	14	15.01
7/10/97	4:42:05	14	15.01
7/10/97	5:02:06	14	15.01
7/10/97	5:22:09	14	15.01
7/10/97	5:42:21	14	15.02
7/10/97	6:02:33	14	15.02
7/10/97	6:22:39	14	15.02
7/10/97	6:42:40	14	15.02
7/10/97	7:02:47	14	15.02
7/10/97	7:22:50	14	15.01
7/10/97	7:42:51	14	15.02
7/10/97	8:02:54	14	15.03
7/10/97	8:23:04	14	15.05
7/10/97	8:43:07	14	15.08
7/10/97	9:03:10	14	15.10
7/10/97	9:23:13	14	15.11
7/10/97	9:43:15	14	15.11
7/10/97	10:03:17	14	15.12
7/10/97	10:23:18	14	15.14
7/10/97	10:43:21	14	15.15
7/10/97	11:03:28	14	15.16
7/10/97	11:23:35	14	15.17
7/10/97	11:43:37	14	15.17
7/10/97	12:03:40	14	15.17
7/10/97	12:23:49	14	15.19
7/10/97	12:43:51	14	15.21
7/10/97	13:03:53	14	15.22
7/10/97	13:23:57	14	15.24
7/10/97	13:43:58	14	15.22
7/10/97	14:03:59	14	15.21
7/10/97	14:24:00	14	15.20
7/10/97	14:44:05	14	15.19
7/10/97	15:04:09	14	15.18
7/10/97	15:24:14	14	15.18
7/10/97	15:44:16	14	15.18
7/10/97	16:04:24	14	15.17
7/10/97	16:24:31	14	15.17
7/10/97	16:44:36	14	15.17
7/10/97	17:04:40	14	15.18
7/10/97	17:24:43	14	15.17
7/10/97	17:44:47	14	15.17
7/10/97	18:04:52	14	15.17
7/10/97	18:24:56	14	15.18
7/10/97	18:45:00	14	15.19
7/10/97	19:05:03	14	15.20
7/10/97	19:25:09	14	15.19
7/10/97	19:45:14	14	15.18
7/10/97	20:05:18	14	15.17
7/10/97	20:25:22	14	15.15
7/10/97	20:45:27	14	15.13
7/10/97	21:05:30	14	15.11
7/10/97	21:25:34	14	15.10
7/10/97	21:45:36	14	15.09
7/10/97	22:05:40	14	15.08
7/10/97	22:25:45	14	15.07
7/10/97	22:45:48	14	15.07
7/10/97	23:05:49	14	15.06
7/10/97	23:25:51	14	15.05
7/10/97	23:45:56	14	15.04
7/11/97	0:06:01	14	15.03
7/11/97	0:26:02	14	15.02
7/11/97	0:46:06	14	15.00
7/11/97	1:06:15	14	14.99
7/11/97	1:26:19	14	14.99
7/11/97	1:46:24	14	14.98
7/11/97	2:06:29	14	14.97
7/11/97	2:26:37	14	14.97
7/11/97	2:46:41	14	14.97
7/11/97	3:06:42	14	14.97
7/11/97	3:26:47	14	14.96
7/11/97	3:46:48	14	14.97
7/11/97	4:06:53	14	14.97
7/11/97	4:26:56	14	14.97
7/11/97	4:46:58	14	14.97
7/11/97	5:07:02	14	14.97
7/11/97	5:27:05	14	14.97
7/11/97	5:47:06	14	14.98
7/11/97	6:07:08	14	14.98
7/11/97	6:27:14	14	14.98
7/11/97	6:47:17	14	14.98
7/11/97	7:07:19	14	14.98
7/11/97	7:27:20	14	14.99
7/11/97	7:47:21	14	15.00
7/11/97	8:07:25	14	15.01
7/11/97	8:27:30	14	15.03
7/11/97	8:47:34	14	15.04
7/11/97	9:07:41	14	15.06
7/11/97	9:27:42	14	15.07
7/11/97	9:47:45	14	15.08
7/11/97	10:07:49	14	15.10
7/11/97	10:27:51	14	15.12
7/11/97	10:47:54	14	15.14
7/11/97	11:07:56	14	15.14
7/11/97	11:27:58	14	15.13
7/11/97	11:48:02	14	15.13
7/11/97	12:08:04	14	15.14
7/11/97	12:28:06	14	15.16
7/11/97	12:48:10	14	15.16
7/11/97	13:08:13	14	15.18
7/11/97	13:28:20	14	15.19
7/11/97	13:48:26	14	15.19
7/11/97	14:08:29	14	15.18
7/11/97	14:28:28	14	15.18

Tank 4B Channel D14 - Probe #068 ' Degrees Celsius

APPENDIX 6

DIABLO CANYON POWER PLANT

Chronic Bioassay

July 16-18, 1997
and
September 10-12, 1997

Report Issued: October 14, 1997 Report TLR-420-97.10

PACIFIC GAS & ELECTRIC CORPORATION
P O BOX 56
AVILA BEACH, CA 93424

LABORATORY TEST REPORT

SUBJECT: CHRONIC TOXICITY ASSESSMENT OF DISCHARGE WATER FROM DIABLO CANYON POWER PLANT, THIRD QUARTER OF 1997

Introduction:

Two chronic toxicity bioassays (DCPP-250 and DCPP-251) were conducted at the Diablo Canyon Biological Laboratory on water sampled July 14-15 and September 8-9, 1997, from Diablo Canyon Power Plant's discharge 001. Reference toxicant tests (DCPP-250Z and DCPP-251Z) using zinc sulfate were conducted concurrently with the effluent sample tests. The second test was conducted since some of the data entries in the first test were questionable. These bioassays were conducted to comply with the requirement for periodic chronic toxicity testing in the 1990 California Ocean Plan.

Methods:

The bioassays were 48 hour chronic toxicity tests conducted using EPA's Chronic Bioassay Methods and a State approved protocol developed by the Water Resources Control Board. Larval red abalone (Haliotis rufescens) were used as the test organism. The bioassays were begun within thirty-six hours of sample collection.

Results:

In both effluent tests the highest concentration that was not significantly different from the Control was the 100% concentration (No Observed Effect Concentration (NOEC) = 100%). Toxicity (TUc) = 100/NOEC = 1.0. A toxicity of 1.0 indicates no chronic toxicity in the discharge sample. Data were analyzed using ANOVA with Dunnet's Test. The effluent test and the reference toxicant test met all test acceptance criteria. Data sheets and statistical analysis results are attached.

SUMMARY OF RESULTS

Test Solution	Assay No.	Date Sampled	Toxicity (TUc)
Discharge 001	DCPP-250	July 14-15, 1997	1.0 (NOEC = 100%)
Reference Toxicant	DCPP-250Z	July 16, 1997	5.56 (NOEC = 18 ug/l)
Discharge 001	DCPP-251	September 8-9, 1997	1.0 (NOEC = 100%)
Reference Toxicant	DCPP-251Z	September 10, 1997	3.13 (NOEC = 32 ug/l)

References:

State of California. October 1990. Procedures Manual for Conducting Toxicity Tests Developed by the Marine Bioassay Project. Water Resources Control Board.

US EPA. August 1995. Chronic Bioassay Methods.

Distribution: AMJackson
RWLorenz
HRumsey
RMS Indexer

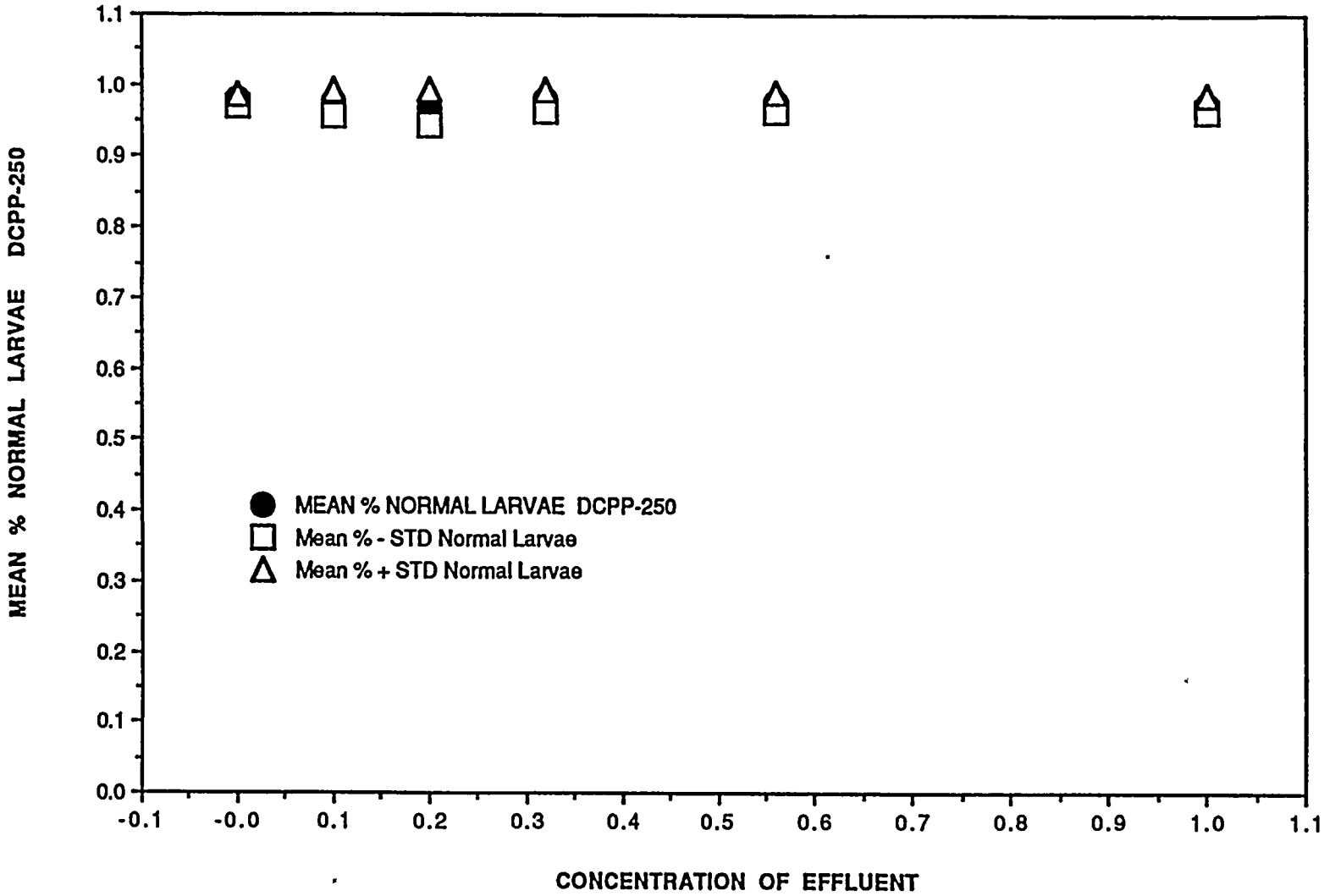
DATE: October 14, 1997
TESTED BY:
APPROVED BY:
FILE NO.:

DCPP - 250 Chronic Larval Abalone Bioassay Diablo Canyon Po[illegible]t Unit 1 and Unit 2 Discharge Effluent 24 Hour Composite Sample

Test Container Number	Effluent Concentration Percent	Number Abnormal Larvae	Number Normal Larvae	Percentage of Normal Larvae	Mean % Normal Larvae	Standard Deviation Normal L.	Mean less Standard Deviation	Mean plus Standard Deviation	Percentage of Abnormal Larvae	Mean % Abnormal Larvae
7	0.0%	3	197	98.50%	0.978	0.008	0.970	0.986	1.50%	0.022
17	Control 0.45 um	6	194	97.00%					3.00%	
31	Filtered Seawater	6	194	97.00%					3.00%	
36		3	197	98.50%					1.50%	
44		4	196	98.00%					2.00%	
1	10.0%	10	190	95.00%	0.976	0.018	0.958	0.994	5.00%	0.024
3		5	195	97.50%					2.50%	
11		1	199	99.50%					0.50%	
30		2	198	99.00%					1.00%	
34		6	194	97.00%					3.00%	
4	20.0%	3	197	98.50%	0.968	0.024	0.944	0.992	1.50%	0.032
23		6	194	97.00%					3.00%	
24		2	198	99.00%					1.00%	
39		14	186	93.00%					7.00%	
42		7	193	96.50%					3.50%	
16	32.0%	5	195	97.50%	0.978	0.015	0.963	0.993	2.50%	0.022
29		3	197	98.50%					1.50%	
33		1	199	99.50%					0.50%	
38		9	191	95.50%					4.50%	
43		4	196	98.00%					2.00%	
8	56.0%	6	194	97.00%	0.976	0.013	0.963	0.989	3.00%	0.024
10		6	194	97.00%					3.00%	
13		2	198	99.00%					1.00%	
18		2	198	99.00%					1.00%	
40		8	192	96.00%					4.00%	
2	100.0%	5	195	97.50%	0.974	0.011	0.963	0.985	2.50%	0.026
5		2	198	99.00%					1.00%	
6		6	194	97.00%					3.00%	
12		8	192	96.00%					4.00%	
35		5	195	97.50%					2.50%	

48 Hour Static Test July 16-18, 1997 @ 1430

DCPP - 250 Chronic Larval Abalone Bioassay July 16 - 18, 1997 diablo Canyon Power Plant Unit 1&2 Discharge Effluent



Diablo Canyon Biological Laboratory

Test Date: 7/16/97
Sample Date: 7/14/97
Species: Haliotis rufescens
Test Type: Chronic

Test Number: DCPP-250
Test Material: Effluent - Power Plant %
Source: CA0003751
RWQCB Discharge permit
Diablo Canyon Power Plant

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Normal		Arc sine sqrt w/out adj.							
			X	0.000	D	5	1.42	.026	
			X	10.000	D	5	1.42	.061	
			X	20.000	D	5	1.40	.065	
			X	32.000	D	5	1.43	.052	
			X	56.000	D	5	1.42	.047	
			X	100.000	D	5	1.41	.037	
Proportion Normal		No transformation							
				0.000	D	5	.98	.008	
				10.000	D	5	.98	.018	
				20.000	D	5	.97	.024	
				32.000	D	5	.98	.015	
				56.000	D	5	.98	.013	
				100.000	D	5	.97	.011	

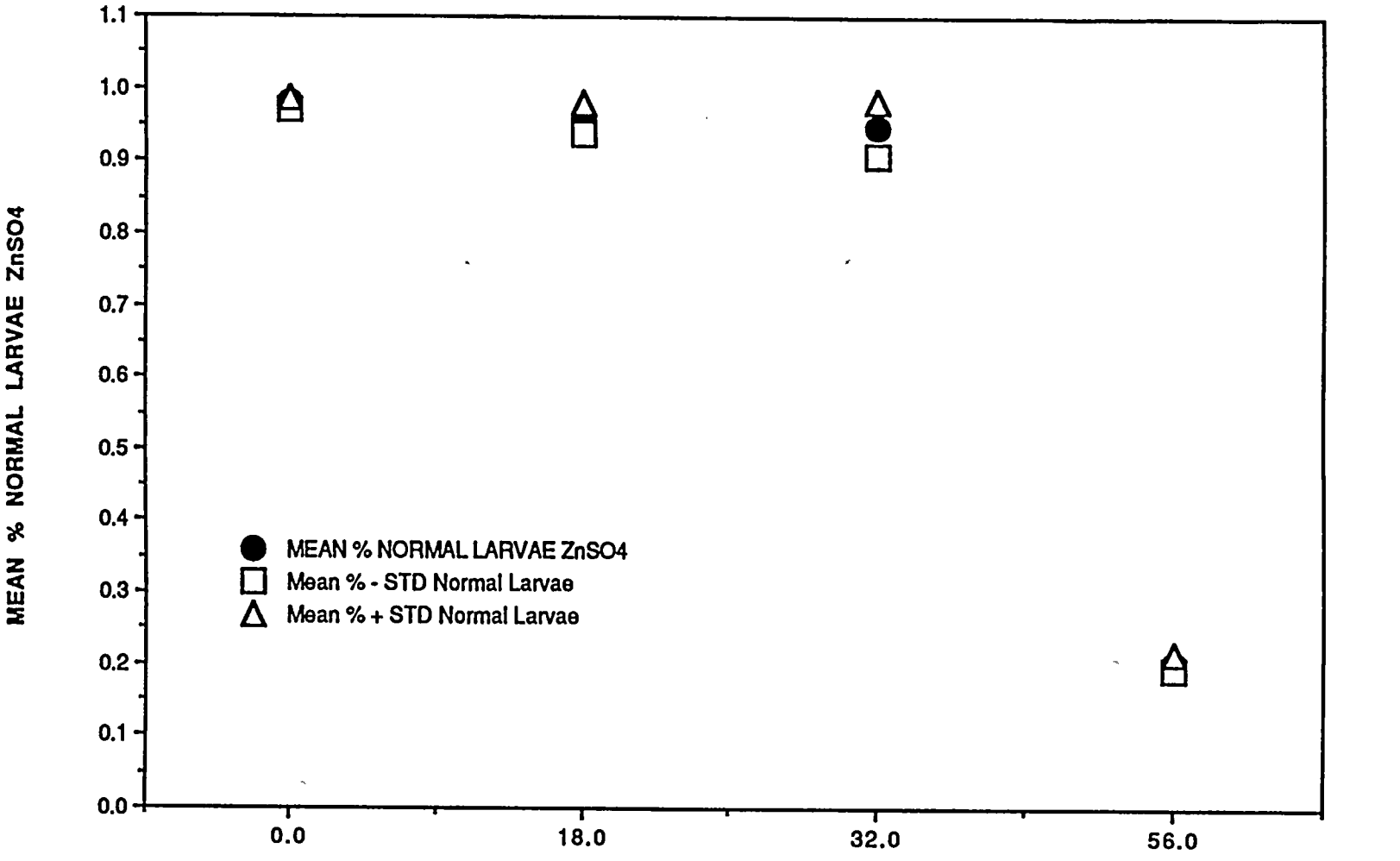
X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Normal		Arc sine sqrt w/out adj.					
		Dunnett	>100.000	>100.000	< 1.00	.002	.027

Test Container Number	Toxicant Concentration ug per Liter	Number Abnormal Larvae	Number Normal Larvae	Percentage of Normal Larvae	Mean % Normal Larvae	Standard Deviation Normal L.	Mean less Standard Deviation	Mean plus Standard Deviation	Percentage of Abnormal Larvae	Mean % Abnormal Larvae
7	0.0%	3	197	98.50%	0.978	0.008	0.970	0.986	1.50%	0.022
17	Control 0.45 um	6	194	97.00%					3.00%	
31	Filtered Seawater	6	194	97.00%					3.00%	
36		3	197	98.50%					1.50%	
44		4	196	98.00%					2.00%	
21	18.0	7	193	96.50%	0.957	0.021	0.936	0.978	3.50%	0.043
22		14	186	93.00%					7.00%	
26		6	194	97.00%					3.00%	
32		4	196	98.00%					2.00%	
45		12	188	94.00%					6.00%	
9	32.0	10	190	95.00%	0.945	0.037	0.908	0.982	5.00%	0.055
19		12	188	94.00%					6.00%	
25		6	194	97.00%					3.00%	
27		4	196	98.00%					2.00%	
41		23	177	88.50%					11.50%	
14	56.0	160	40	20.00%	0.204	0.010	0.194	0.214	80.00%	0.796
15		158	42	21.00%					79.00%	
20		157	43	21.50%					78.50%	
28		162	38	19.00%					81.00%	
37		159	41	20.50%					79.50%	

DCPP - 250 Chronic Larval Abalone Bioassay July 16 - 18, 1997 Zinc Sulfate Reference Toxicant Preparations



Diablo Canyon Biological Laboratory

Test Date: 7/16/97
Sample Date: 7/16/97
Species: Haliotis rufescens
Test Type: Chronic

Test Number: DCPP-250Z
Test Material: Zinc sulfate ug/L
Source: REF
Reference Toxicant

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Normal		Arc sine sqrt w/out adj.							
			X	0.000	D	5	1.42	.026	
			X	18.000	D	5	1.37	.052	
			X	32.000	D	5	1.34	.078	
			X	56.000	D	5	.47	.012	
Proportion Normal		No transformation							
				0.000	D	5	.98	.008	
				18.000	D	5	.96	.021	
				32.000	D	5	.95	.037	
				56.000	D	5	.20	.010	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Normal		Arc sine sqrt w/out adj.					
		Dunnett	18.000	32.000		.002	.025

- PROPORTION POINT ESTIMATE -

End Point	Day	Method	P	Conc	95% CI	TU
Proportion Normal		Graphical Interpolation				
			EC 15	34.869	-	
			EC 25	37.542	-	
			EC 40	41.941	-	
			EC 50	45.156	-	

PHYSICAL and CHEMICAL MEASUREMENTS

Larval Red Abalone Chronic Bioassay
Diablo Canyon Biological Laboratory

Test Start Date/Time : 16 July 1997 @ 1430

Test Finish Date/Time : 18 July 1997 @ 1430

Bioassay Number (s) : DCPP-250

Collection Date (s) : July 14 - 15, 1997 @ 0820

Test Organism : *Haliotis rufescens*

	MEASUREMENTS AT START OF ASSAY			MEASUREMENTS AT FINISH OF ASSAY			
	PH	D. OXYGEN	SALINITY	CONTAINER	PH	D. OXYGEN	SALINITY
CONTROL	7.7	5.3	33.4	31	8.2	5.7	33.8

REFERENCE TOXICANT : ZnSO4

18ug / L	7.9	5.8	33.4	26	8.2	5.7	34.1
32ug / L	8.0	5.5	33.3	25	8.2	5.6	34.0
56ug / L	8.0	5.5	33.2	15	8.2	5.6	33.6

Effluent Source: Diablo Canyon Power Plant 001 Discharge Collection Date/Time: July 14 - 15 , 1997 @ 0820

10%	7.8	5.6	33.4	34	8.2	5.7	33.8
20%	7.9	5.8	33.3	24	8.2	5.6	34.0
32%	7.9	5.8	33.4	38	8.2	5.6	34.4
56%	7.9	5.8	33.2	8	8.1	5.7	34.3
100%	7.9	6.4	33.2	2	8.2	5.6	33.8

Concerns with low D.O. values

Hourly Temperature Data

Hour 01	Hour 13	Hour 25	Hour 37
15.14	15.01	15.18	15.00
15.05	15.01	15.07	15.00
15.07	15.00	15.06	15.00
15.07	14.99	15.06	15.01
15.05	15.09	15.07	15.10
15.05	15.09	15.05	15.11
15.06	15.07	15.05	15.08
15.08	15.08	15.04	15.08
15.06	15.08	15.03	15.09
15.04	15.10	15.01	15.10
15.04	15.11	15.01	15.13
15.02	15.12	15.00	15.63
Hour 12	Hour 24	Hour 36	Hour 48

Mean Temperature 48 Hour Static Test

15.07 Degrees Celsius

Standard Deviation Hourly Temperature

0.09

Analyzed By : Christina Santala

Date Analyzed : July 16 & 18, 1997

Reviewed by : James L. Kelly

Date Reviewed : 7/30/97

ABALONE SPAWN and FERTILIZATION WORKSHEET

Larval Red Abalone Chronic Bioassay
Diablo Canyon Biological Laboratory

Test Start Date/Time : 16 July 1997 @ 1430 Bioassay Number(s) : DCPP-250

Test Finish Date/Time : 18 July 1997 @ 1430 Effluent Source (s) : DCPP Discharge 001

Test Organism : Haliotis rufescens Collection Date/Time : July 14-15, 1997 @ 0820

	Males Used	Gonad Index	Date Last Used		Females Used	Gonad Index	Date Last Used
1	Unmarked	4	No Prior Use	1	Unmarked	4	No Prior Use
2	Unmarked	4	No Prior Use	2	Unmarked	4	No Prior Use
3	Unmarked	4	No Prior Use	3	Unmarked	4	No Prior Use
4	Unmarked	3	No Prior Use	4	Unmarked	4	No Prior Use

Method of spawning : (X) Peroxide ( ) UV irradiated seawater ( ) Other _____

Start of spawning treatment : Male 09:55 Female 09:55 Peroxide Solution Flushed From Spawn Tanks :

First Male spawns : 12:20 Male : 12:10 | 12:15 Female : 12:25

First Female spawns : 12:25 Comments:

Multiple spawners : Male : 12:35 Female : 12:35

Condition of spawn : Males : ( ) light ( ) moderate (X) heavy : Females : ( ) light ( ) moderate (X) heavy

Sperm added to egg container : 13:00 Time fertilization complete : 13:30 ← not initialed by investigator

Determination of embryo density. Counts of 1 ml samples taken from beaker of condensed fertilized eggs :

1: 180 2 : 164 3 : 198 4 : 168 5 : 168

Mean : 176 STD : 13.9

Addition of 1000 embryos to each test container :
Pipette the volume calculated below from the well-mixed beaker sampled above.

Too much embryo water added.

(1000 embryos/test container) / (176 #embryos/ml) = 5.0 ml/test container

Temperature of embryos : 15.10 Celsius Temperature of test containers : 14.85 Celsius

Time all containers in incubator : 14:30

Comments : To insure adequate spawn success, additional Male and additional Female abalone, gonad Index 3 - 4 , will be used in the Hydrogen Peroxide spawn induction procedure.

Prepared By : Christina Santella Reviewed By : James L. Kelly

Date Prepared : 16 July 1997 Date Reviewed : 7/30/97

Randomization and Dilution Data Sheet
Red Abalone Chronic Bioassay
Diablo Canyon Biological Laboratory

Test Start Date/Time: 16 July 1997 @ 1430

Bioassay Number: DCPP - 250

Test Finish Date/Time: 18 July 1997 @ 1430

Test Organism : **Haliotis rufescens**

Control Solution: 0.45um Filtered Seawater

Corresponding Container Numbers				
36	(31)	44	17	7

Reference Toxicant : ZnSO4
Stock Solution 0.0440g in 1 liter Distilled Water
Dilution source : Filtered Seawater

2.16 ml in 1200 ml total volume	18ug/l	32	45	22	(26)	21
3.84 ml in 1200 ml total volume	32ug/l	27	(25)	19	41	9
6.72 ml in 1200 ml total volume	56ug/l	28	20	37	(15)	14

Effluent : 100% Effluent is the stock solution
Dilution source : Filtered Seawater

Effluent Source: DCPP Discharge 001
Collection Date/Time: July 14-15, 1997 @ 0820

120 ml in 1200 ml total volume	10%	3	(34)	30	11	1
240 ml in 1200 ml total volume	20%	(24)	4	39	23	42
384 ml in 1200 ml total volume	32%	33	43	29	16	(38)
672 ml in 1200 ml total volume	56%	10	18	(8)	40	13
1200 ml in 1200 ml total volume	100%	12	(2)	6	5	35

Prepared By: Christine Santala

Date Prepared: 7/15/97

LARVAL DEVELOPMENT DATA SHEET

Larval Red Abalone Chronic Bioassay
Diablo Canyon Biological Laboratory

Test Start Date/Time : 16 July 1997 @ 1430

Test Finish Date/Time : 18 July 1997 @ 1430

REFERENCE TOXICANT : $ZnSO_4 * 7H_2O$

Bioassay Number : DCPP-250

Effluent Source : DCPP Discharge 001

Collection Date : July 14-15, 1997

Vial Number	Test Container Number	Number of Abnormal Larvae	Number of Normal Larvae	Vial Number	Test Container Number	Number of Abnormal Larvae	Number of Normal Larvae
1	1	10	190	24	24	2	198
2	2	5	195	25	25	6	194
3	3	5	195	26	26	6	194
4	4	3	197	27	27	4	196
5	5	2	198	28	28	162	38
6	6	6	194	29	29	3	197
7	7	3	197	30	30	2	198
8	8	6	194	31	31	6	194
9	9	10	190	32	32	4	196
10	10	6	194	33	33	1	199
11	11	1	199	34	34	6	194
12	12	8	192	35	35	5	195
13	13	2	198	36	36	3	197
14	14	160	40	37	37	159	41
15	15	158	42	38	38	9	191
16	16	5~~7~~ CLS	19~~5~~4 CLS	39	39	14	186
17	17	6	194	40	40	8	192
18	18	2	198	41	41	23	177
19	19	12	188	42	42	7	193
20	20	157	44	43	43	4	196
21	21	7	193	44	44	4	196
22	22	14	186	45	45	12	188
23	23	6	194				

JAH 7.22.97

CLS 7/22/97

JAH 7.22.97

JAH 7.22.97

CLS 7/23/97

Analyzed by : Christina Santalo

Date Analyzed : July 22-23, 1997

Reviewed by : James L. Kyle

Date Reviewed : 7/30/97

7/16/97	14:03:57	113	14.84
7/16/97	14:24:05	113	14.86
7/16/97	14:44:13	113	15.15
7/16/97	15:04:22	113	15.16
7/16/97	15:24:24	113	15.14
7/16/97	15:44:27	113	15.09
7/16/97	16:01:09	113	15.08
7/16/97	16:06:17	113	15.06
7/16/97	16:10:14	113	15.07
7/16/97	16:30:22	113	15.05
7/16/97	16:50:31	113	15.06
7/16/97	17:10:31	113	15.06
7/16/97	17:30:40	113	15.07
7/16/97	17:50:46	113	15.06
7/16/97	18:10:48	113	15.07
7/16/97	18:30:55	113	15.07
7/16/97	18:51:02	113	15.06
7/16/97	19:11:04	113	15.06
7/16/97	19:31:06	113	15.05
7/16/97	19:51:12	113	15.06
7/16/97	20:11:15	113	15.05
7/16/97	20:31:18	113	15.05
7/16/97	20:33:18	113	15.04
7/16/97	20:53:19	113	15.05
7/16/97	21:13:28	113	15.05
7/16/97	21:33:30	113	15.06
7/16/97	21:53:41	113	15.06
7/16/97	22:13:44	113	15.07
7/16/97	22:33:50	113	15.08
7/16/97	22:53:56	113	15.07
7/16/97	23:14:02	113	15.07
7/16/97	23:34:06	113	15.06
7/16/97	23:54:16	113	15.06
7/17/97	0:14:23	113	15.06
7/17/97	0:34:31	113	15.04
7/17/97	0:54:34	113	15.04
7/17/97	1:14:39	113	15.05
7/17/97	1:34:44	113	15.04
7/17/97	1:54:52	113	15.04
7/17/97	2:14:57	113	15.03
7/17/97	2:35:02	113	15.02
7/17/97	2:55:05	113	15.02
7/17/97	3:15:11	113	15.01
7/17/97	3:35:13	113	15.01
7/17/97	3:55:17	113	15.01
7/17/97	4:15:21	113	15.01
7/17/97	4:35:23	113	15.01
7/17/97	4:55:26	113	15.01
7/17/97	5:15:30	113	15.00
7/17/97	5:35:32	113	15.00
7/17/97	5:55:38	113	15.00
7/17/97	6:15:44	113	14.99
7/17/97	6:35:50	113	14.99
7/17/97	6:55:56	113	15.02
7/17/97	7:16:02	113	15.07
7/17/97	7:26:32	113	15.09
7/17/97	7:46:42	113	15.09
7/17/97	8:06:44	113	15.08
7/17/97	8:26:50	113	15.09
7/17/97	8:46:51	113	15.09
7/17/97	9:06:56	113	15.08
7/17/97	9:26:59	113	15.07
7/17/97	9:47:02	113	15.07
7/17/97	10:07:05	113	15.07
7/17/97	10:27:09	113	15.08
7/17/97	10:47:13	113	15.08
7/17/97	11:07:14	113	15.08
7/17/97	11:27:20	113	15.08
7/17/97	11:47:25	113	15.09
7/17/97	12:07:35	113	15.10
7/17/97	12:27:31	113	15.10
7/17/97	12:47:48	113	15.10
7/17/97	13:07:49	113	15.11
7/17/97	13:27:52	113	15.11
7/17/97	13:47:52	113	15.12
7/17/97	14:08:08	113	15.13
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7/17/97	15:08:23	113	15.24
7/17/97	15:28:22	113	15.18
7/17/97	15:40:32	113	15.15
7/17/97	16:00:44	113	15.11
7/17/97	16:20:46	113	15.07
7/17/97	16:40:50	113	15.08
7/17/97	17:00:52	113	15.06
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7/17/97	17:40:57	113	15.06
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7/17/97	18:41:15	113	15.06
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7/17/97	19:21:33	113	15.07
7/17/97	19:41:41	113	15.06
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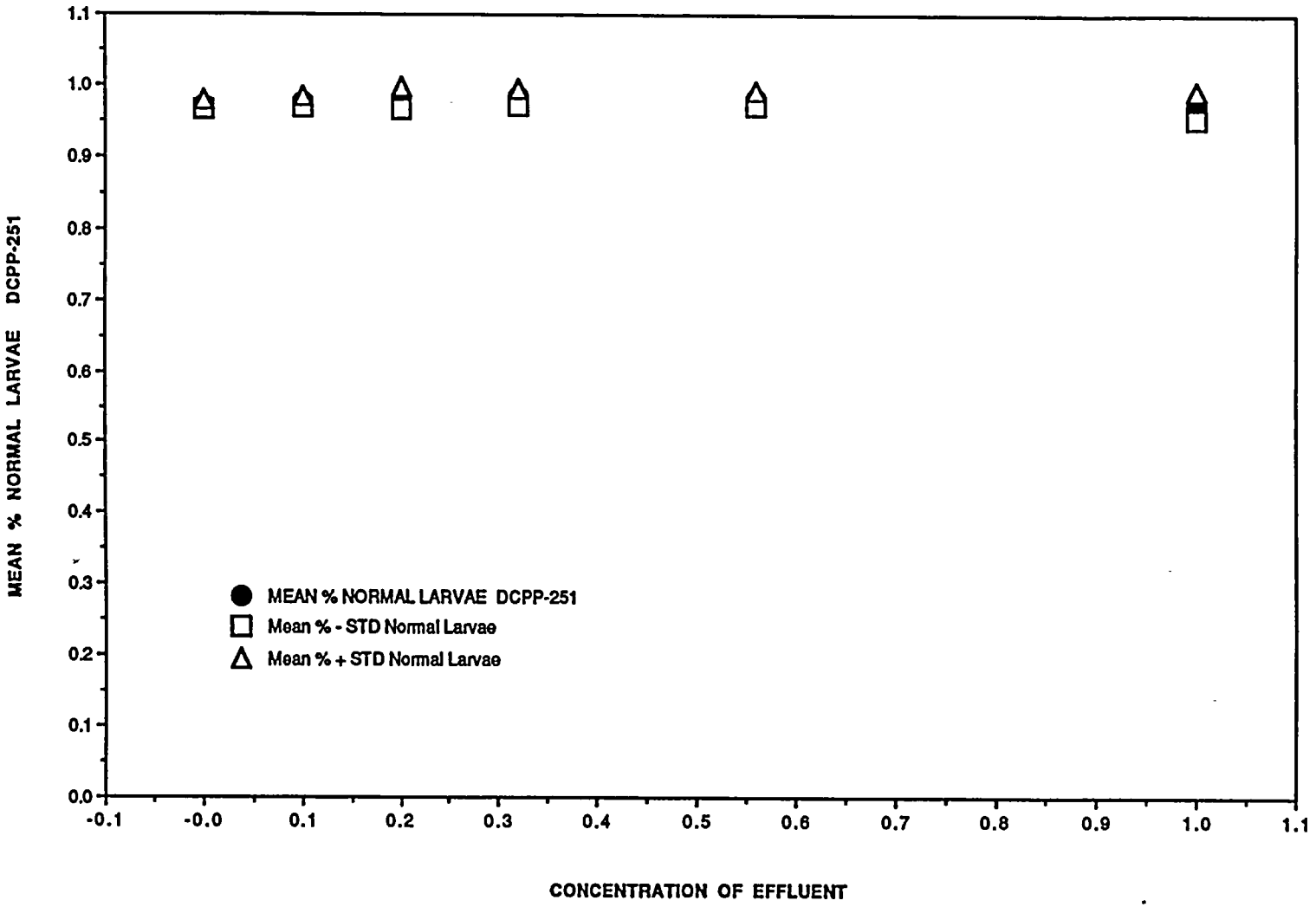
7/17/97	20:21:57	113	15.05
7/17/97	20:42:07	113	15.05
7/17/97	21:02:14	113	15.05
7/17/97	21:22:23	113	15.05
7/17/97	21:42:32	113	15.05
7/17/97	22:02:42	113	15.04
7/17/97	22:22:51	113	15.04
7/17/97	22:43:02	113	15.04
7/17/97	23:03:11	113	15.03
7/17/97	23:23:22	113	15.03
7/17/97	23:43:31	113	15.01
7/18/97	0:03:40	113	15.01
7/18/97	0:23:42	113	15.01
7/18/97	0:43:45	113	15.01
7/18/97	1:03:47	113	15.01
7/18/97	1:23:49	113	15.01
7/18/97	1:43:52	113	15.00
7/18/97	2:03:54	113	15.00
7/18/97	2:23:56	113	15.00
7/18/97	2:43:59	113	15.00
7/18/97	3:04:01	113	14.99
7/18/97	3:24:03	113	15.00
7/18/97	3:44:06	113	15.00
7/18/97	4:04:08	113	14.99
7/18/97	4:24:10	113	15.00
7/18/97	4:44:13	113	14.99
7/18/97	5:04:15	113	15.01
7/18/97	5:24:17	113	15.00
7/18/97	5:44:20	113	15.01
7/18/97	6:04:22	113	15.00
7/18/97	6:24:24	113	15.01
7/18/97	6:44:26	113	15.00
7/18/97	7:04:28	113	15.07
7/18/97	7:24:30	113	15.10
7/18/97	7:32:26	113	15.11
7/18/97	7:52:33	113	15.12
7/18/97	8:12:42	113	15.12
7/18/97	8:32:52	113	15.11
7/18/97	8:53:02	113	15.11
7/18/97	9:13:12	113	15.09
7/18/97	9:33:22	113	15.08
7/18/97	9:37:14	113	15.08
7/18/97	9:57:16	113	15.08
7/18/97	10:17:19	113	15.08
7/18/97	10:37:21	113	15.08
7/18/97	10:57:23	113	15.09
7/18/97	11:07:07	113	15.09
7/18/97	11:27:19	113	15.09
7/18/97	11:47:28	113	15.10
7/18/97	12:07:30	113	15.10
7/18/97	12:27:40	113	15.10
7/18/97	12:47:51	113	15.11
7/18/97	13:08:00	113	15.12
7/18/97	13:28:11	113	15.13
7/18/97	13:48:19	113	15.35
7/18/97	14:08:31	113	15.53
7/18/97	14:28:41	113	15.62
7/18/97	14:48:52	113	15.66

DCPP - 251 Chronic Larval Abalone Bioassay Diablo Canyon Power Plant Unit 1 and Unit 2 Discharge Effluent 24 Hour Composite Sam

Test Container Number	Effluent Concentration Percent	Number Abnormal Larvae	Number Normal Larvae	Percentage of Normal Larvae	Mean % Normal Larvae	Standard Deviation Normal L.	Mean less Standard Deviation	Mean plus Standard Deviation	Percentage of Abnormal Larvae	Mean % Abnormal Larvae
6	0.0%	6	194	97.00%	0.972	0.006	0.966	0.978	3.00%	0.028
27	Control 0.45 um	6	194	97.00%					3.00%	
34	Filtered Seawater	5	195	97.50%					2.50%	
41		4	196	98.00%					2.00%	
70		7	193	96.50%					3.50%	
9	10.0%	3	197	98.50%	0.977	0.008	0.969	0.985	1.50%	0.023
46		7	193	96.50%					3.50%	
50		4	196	98.00%					2.00%	
65		4	196	98.00%					2.00%	
74		5	195	97.50%					2.50%	
13	20.0%	5	195	97.50%	0.981	0.015	0.966	0.996	2.50%	0.019
15		2	198	99.00%					1.00%	
64		0	200	100.00%					0.00%	
71		4	196	98.00%					2.00%	
81		8	192	96.00%					4.00%	
7	32.0%	4	196	98.00%	0.983	0.012	0.971	0.995	2.00%	0.017
38		2	198	99.00%					1.00%	
51		5	195	97.50%					2.50%	
59		0	200	100.00%					0.00%	
76		6	194	97.00%					3.00%	
33	56.0%	4	196	98.00%	0.982	0.010	0.972	0.992	2.00%	0.018
77		2	198	99.00%					1.00%	
78		7	193	96.50%					3.50%	
86		3	197	98.50%					1.50%	
93		2	198	99.00%					1.00%	
1	100.0%	5	195	97.50%	0.972	0.020	0.952	0.992	2.50%	0.028
20		12	188	94.00%					6.00%	
39		6	194	97.00%					3.00%	
42		3	197	98.50%					1.50%	
53		2	198	99.00%					1.00%	

48 Hour Static Test September 10 - 12 , 1997 @ 17:49

DCPP - 251 Chronic Larval Abalone Bioassay September 10 - 12 , 1997 Diablo Canyon Power Plant 001 Discharge



Diablo Canyon Biological Laboratory

Test Date: 9/10/97
Sample Date: 9/08/97
Species: Haliotis rufescens
Test Type: Chronic

Test Number: DCPP-251
Test Material: Effluent - Power Plant %
Source: CA0003751
RWQCB Discharge permit
Diablo Canyon Power Plant

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Normal		Arc sine sqrt w/out adj.							
			X	0.000	D	5	1.40	.018	
			X	10.000	D	5	1.42	.025	
			X	20.000	D	5	1.45	.076	
			X	32.000	D	5	1.46	.070	
			X	56.000	D	5	1.44	.037	
			X	100.000	D	5	1.41	.057	
Proportion Normal		No transformation							
				0.000	D	5	.97	.006	
				10.000	D	5	.98	.008	
				20.000	D	5	.98	.015	
				32.000	D	5	.98	.012	
				56.000	D	5	.98	.010	
				100.000	D	5	.97	.020	

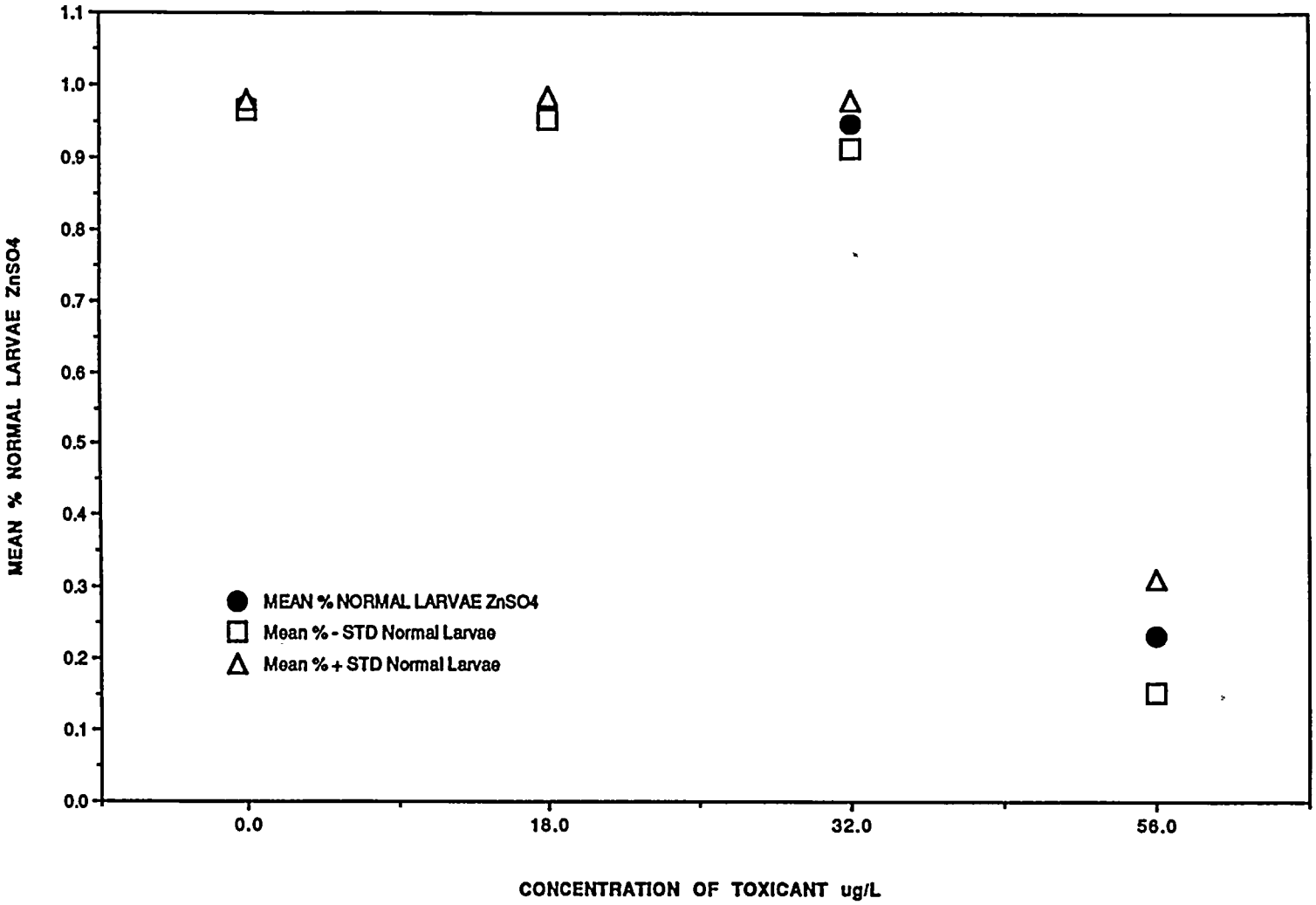
X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Normal		Arc sine sqrt w/out adj.					
		Dunnett	>100.000	>100.000	< 1.00	.003	.031

Test Container Number	Toxicant Concentration ug per Liter	Number Abnormal Larvae	Number Normal Larvae	Percentage of Normal Larvae	Mean % Normal Larvae	Standard Deviation Normal L.	Mean less Standard Deviation	Mean plus Standard Deviation	Percentage of Abnormal Larvae	Mean % Abnormal Larvae
6	0.0%	6	194	97.00%	0.972	0.006	0.966	0.978	3.00%	0.028
27	Control 0.45 um	6	194	97.00%					3.00%	
34	Filtered Seawater	5	195	97.50%					2.50%	
41		4	196	98.00%					2.00%	
70		7	193	96.50%					3.50%	
10	18.0	8	192	96.00%	0.969	0.016	0.953	0.985	4.00%	0.031
11		6	194	97.00%					3.00%	
21		9	191	95.50%					4.50%	
25		7	193	96.50%					3.50%	
92		1	199	99.50%					0.50%	
24	32.0	4	196	98.00%	0.946	0.032	0.914	0.978	2.00%	0.054
67		15	185	92.50%					7.50%	
68		19	181	90.50%					9.50%	
85		11	189	94.50%					5.50%	
88		5	195	97.50%					2.50%	
43	56.0	161	39	19.50%	0.232	0.080	0.152	0.312	80.50%	0.768
69		126	74	37.00%					63.00%	
72		165	35	17.50%					82.50%	
79		153	47	23.50%					76.50%	
90		163	37	18.50%					81.50%	

DCPP - 251 - Z Chronic Larval Abalone Bioassay September 10 - 12 , 1997 Zinc Sulfate Reference Toxicant Preparations



Diablo Canyon Biological Laboratory

Test Date: 9/10/97
Sample Date: 9/10/97
Species: Haliotis rufescens
Test Type: Chronic

Test Number: DCPP-251Z
Test Material: Zinc sulfate ug/L
Source: REF
Reference Toxicant

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Normal		Arc sine sqrt w/out adj.							
			X	0.000	D	5	1.40	.018	
			X	18.000	D	5	1.40	.057	
			X	32.000	D	5	1.35	.074	
			X	56.000	D	5	.50	.091	
Proportion Normal		No transformation							
				0.000	D	5	.97	.006	
				18.000	D	5	.97	.016	
				32.000	D	5	.95	.032	
				56.000	D	5	.23	.080	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Normal		Arc sine sqrt w/out adj.					
		Dunnett	32.000	56.000		.004	.039

- PROPORTION POINT ESTIMATE -

End Point	Day	Method	P	Conc	95% CI	TU
Proportion Normal		Graphical Interpolation				
			EC 15	35.150	-	
			EC 25	37.933	-	
			EC 40	42.525	-	
			EC 50	45.891	-	

PHYSICAL and CHEMICAL MEASUREMENTS

Larval Red Abalone Chronic Bioassay
Diablo Canyon Biological Laboratory

Test Start Date/Time : 10 September 1997 @ 17:49
Test Finish Date/Time : 12 September 1997 @ 17:49

Bioassay Number (s) : DCPP - 251
Collection Date (s) : September 08-09, 1997 @ 09:35

Test Organism : *Haliotis rufescens*

	MEASUREMENTS AT START OF ASSAY			MEASUREMENTS AT FINISH OF ASSAY			
	PH	D. OXYGEN	SALINITY	CONTAINER	PH	D. OXYGEN	SALINITY
CONTROL	8.1	7.5	33.3	6	8.0	6.8	33.9
REFERENCE TOXICANT : ZnSO4							
18ug / L	8.1	7.7	33.2	21	8.0	6.9	33.6
32ug / L	8.1	7.6	33.1	68	8.1	7.3	33.4
56ug / L	8.1	7.7	33.1	72	8.1	7.1	33.5
Effluent Source: Diablo Canyon Power Plant 001 Discharge				Collection Date/Time: September 08-09, 1997 @ 09:35			
10%	8.1	7.9	33.3	9	8.0	7.2	33.7
20%	8.1	7.7	33.3	64	8.0	6.9	33.6
32%	8.1	7.8	33.2	59	8.0	7.0	33.9
56%	8.0	7.6	33.2	33	8.0	6.9	33.7
100%	8.0	7.4	33.2	53	8.0	6.9	33.7

Hourly Temperature Data

Hour 01	Hour 13	Hour 25	Hour 37
14.99	15.63	14.67	14.90
14.88	15.54	14.77	14.90
14.82	15.38	14.81	14.91
14.79	15.23	14.84	14.98
14.75	15.17	14.85	15.01
14.71	14.83	14.87	15.05
14.76	14.67	14.87	15.08
14.75	14.64	14.87	15.10
15.42	14.56	14.89	15.11
15.43	14.57	14.90	15.11
15.40	14.50	14.90	15.13
15.61	14.57	14.90	15.27
Hour 12	Hour 24	Hour 36	Hour 48

Mean Temperature 48 Hour Static Test

14.96 Degrees Celsius

Standard Deviation Hourly Temperature

0.28

Analyzed By : Bryan K. Cunningham
Date Analyzed : 10 September 1997 / 12 September 1997

Reviewed by : James K. Kelly
Date Reviewed : October 14, 1997

ABALONE SPAWN and FERTILIZATION WORKSHEET

Larval Red Abalone Chronic Bioassay
Diablo Canyon Biological Laboratory

Test Start Date/Time : 10 September 1997 @ 1749 Bioassay Number(s) : DCPP - 251

Test Finish Date/Time : 12 September 1997 @ 1749 Effluent Source (s) : Diablo Canyon PP 001 Discharge

Test Organism : Haliotis rufescens Collection Date/Time : Sept. 08-09 , 1997 @ 09:35

	Males Used	Gonad Index	Date Last Used		Females Used	Gonad Index	Date Last Used
1	Unmarked	4	No Prior Use	1	Unmarked	4	No Prior Use
2	Unmarked	4	No Prior Use	2	Unmarked	4	No Prior Use
3	Unmarked	4	No Prior Use	3	Unmarked	4	No Prior Use
4	Unmarked	4	No Prior Use	4	Unmarked	4	No Prior Use

Method of spawning : (=) Peroxide ( ) UV irradiated seawater ( ) Other _____

Start of spawning treatment : Male 1415 Female 1345 Peroxide Solution Flushed From Spawn Tanks :

First Male spawns : 1603 Male : 1600 Female : 1540

First Female spawns : 1615 Comments:

Multiple spawners : Male : 1607 Female : 1605

Condition of spawn : Males : ( ) light (=) moderate ( ) heavy : Females : ( ) light ( ) moderate (=) heavy

Sperm added to egg container : 1640 Time fertilization complete : 1658

Determination of embryo density. Counts of 1 ml samples taken from beaker of condensed fertilized eggs :

1: 279 2 : 344 3 : 312 4 : 337 5 : 299

Mean : 312 STD : 27.4

Addition of 1000 embryos to each test container :
Pipette the volume calculated below from the well-mixed beaker sampled above.

(1000 embryos/test container) / (312 #embryos/ml) = 3.21 ml/test container

Temperature of embryos : 15.0° Celsius Temperature of test containers : 14.9° Celsius

Time all containers in incubator : 1749

Comments : To insure adequate spawn success, 7 additional Male and 6 additional Female abalone, gonad Index 3 - 4 , will be used in the Hydrogen Peroxide spawn induction procedure.

Prepared By : Bryan K. Cunningham Reviewed By : James L. Kay

Date Prepared : 10 September 1997 Date Reviewed: October 14, 1997

9/10/97	16:03:34	113	15.30	9/11/97	8:47:10	113	15.38	9/12/97	1:28:09	113	14.88
9/10/97	16:23:38	113	15.17	9/11/97	9:07:14	113	15.31	9/12/97	1:48:09	113	14.87
9/10/97	16:43:48	113	15.04	9/11/97	9:27:17	113	15.32	9/12/97	2:08:19	113	14.89
9/10/97	17:03:45	113	14.94	9/11/97	9:47:20	113	15.23	9/12/97	2:28:21	113	14.90
9/10/97	17:24:00	113	14.89	9/11/97	10:07:27	113	15.16	9/12/97	2:48:25	113	14.89
9/10/97	17:44:08	113	15.13	9/11/97	10:27:27	113	15.20	9/12/97	3:08:29	113	14.90
9/10/97	18:04:12	113	15.24	9/11/97	10:47:28	113	15.17	9/12/97	3:28:33	113	14.89
9/10/97	18:24:13	113	15.10	9/11/97	11:07:31	113	15.11	9/12/97	3:48:36	113	14.90
9/10/97	18:44:15	113	14.99	9/11/97	11:27:31	113	15.09	9/12/97	4:08:40	113	14.88
9/10/97	19:04:18	113	14.90	9/11/97	11:47:32	113	14.83	9/12/97	4:28:44	113	14.87
9/10/97	19:24:20	113	14.89	9/11/97	12:07:35	113	14.80	9/12/97	4:48:48	113	14.90
9/10/97	19:44:22	113	14.88	9/11/97	12:25:48	113	14.73	9/12/97	5:08:51	113	14.90
9/10/97	20:04:26	113	14.87	9/11/97	12:45:48	113	14.67	9/12/97	5:28:54	113	14.90
9/10/97	20:24:28	113	14.86	9/11/97	13:06:03	113	14.64	9/12/97	5:48:58	113	14.90
9/10/97	20:44:29	113	14.82	9/11/97	13:26:15	113	14.64	9/12/97	6:09:01	113	14.90
9/10/97	21:04:32	113	14.81	9/11/97	13:46:15	113	14.64	9/12/97	6:29:04	113	14.90
9/10/97	21:24:32	113	14.81	9/11/97	14:06:28	113	14.57	9/12/97	6:49:07	113	14.90
9/10/97	21:44:33	113	14.79	9/11/97	14:26:29	113	14.55	9/12/97	7:09:10	113	14.89
9/10/97	22:04:36	113	14.78	9/11/97	14:46:30	113	14.56	9/12/97	7:29:13	113	14.91
9/10/97	22:24:47	113	14.75	9/11/97	15:06:33	113	14.58	9/12/97	7:49:16	113	14.90
9/10/97	22:44:59	113	14.75	9/11/97	15:26:31	113	14.58	9/12/97	8:09:19	113	14.90
9/10/97	23:05:00	113	14.74	9/11/97	15:46:33	113	14.57	9/12/97	8:29:22	113	14.90
9/10/97	23:25:12	113	14.74	9/11/97	16:06:41	113	14.56	9/12/97	8:49:23	113	14.91
9/10/97	23:45:13	113	14.71	9/11/97	16:26:51	113	14.53	9/12/97	9:09:33	113	14.94
9/11/97	0:05:14	113	14.70	9/11/97	16:46:53	113	14.50	9/12/97	9:29:35	113	14.96
9/11/97	0:25:27	113	14.74	9/11/97	17:07:00	113	14.48	9/12/97	9:49:35	113	14.98
9/11/97	0:45:28	113	14.76	9/11/97	17:27:10	113	14.55	9/12/97	10:09:41	113	15.00
9/11/97	1:05:29	113	14.76	9/11/97	17:47:12	113	14.57	9/12/97	10:29:43	113	15.01
9/11/97	1:25:30	113	14.76	9/11/97	18:07:09	113	14.57	9/12/97	10:49:53	113	15.01
9/11/97	1:45:38	113	14.75	9/11/97	18:27:22	113	14.63	9/12/97	11:10:02	113	15.04
9/11/97	2:05:46	113	14.88	9/11/97	18:47:24	113	14.67	9/12/97	11:30:03	113	15.05
9/11/97	2:25:49	113	15.15	9/11/97	19:07:25	113	14.71	9/12/97	11:50:04	113	15.05
9/11/97	2:45:53	113	15.42	9/11/97	19:27:26	113	14.73	9/12/97	12:10:06	113	15.07
9/11/97	3:05:58	113	15.46	9/11/97	19:47:29	113	14.77	9/12/97	12:30:07	113	15.07
9/11/97	3:26:01	113	15.45	9/11/97	20:07:30	113	14.78	9/12/97	12:50:08	113	15.08
9/11/97	3:46:05	113	15.43	9/11/97	20:27:31	113	14.79	9/12/97	13:10:21	113	15.08
9/11/97	4:06:09	113	15.37	9/11/97	20:47:33	113	14.81	9/12/97	13:30:32	113	15.09
9/11/97	4:26:13	113	15.40	9/11/97	21:07:34	113	14.81	9/12/97	13:50:36	113	15.10
9/11/97	4:46:17	113	15.40	9/11/97	21:27:36	113	14.82	9/12/97	14:10:40	113	15.09
9/11/97	5:06:21	113	15.48	9/11/97	21:47:38	113	14.84	9/12/97	14:30:41	113	15.10
9/11/97	5:26:25	113	15.56	9/11/97	22:07:39	113	14.85	9/12/97	14:50:52	113	15.11
9/11/97	5:46:28	113	15.61	9/11/97	22:27:40	113	14.84	9/12/97	15:11:02	113	15.10
9/11/97	6:06:32	113	15.66	9/11/97	22:47:42	113	14.85	9/12/97	15:31:05	113	15.12
9/11/97	6:26:36	113	15.61	9/11/97	23:07:43	113	14.86	9/12/97	15:51:05	113	15.11
9/11/97	6:46:40	113	15.63	9/11/97	23:27:44	113	14.86	9/12/97	16:11:17	113	15.12
9/11/97	7:06:45	113	15.68	9/11/97	23:47:56	113	14.87	9/12/97	16:31:19	113	15.12
9/11/97	7:26:50	113	15.52	9/12/97	0:07:57	113	14.86	9/12/97	16:51:20	113	15.13
9/11/97	7:46:56	113	15.54	9/12/97	0:27:58	113	14.87	9/12/97	17:11:32	113	15.14
9/11/97	8:07:00	113	15.56	9/12/97	0:47:59	113	14.87	9/12/97	17:31:34	113	15.12
9/11/97	8:27:06	113	15.47	9/12/97	1:08:07	113	14.87	9/12/97	17:51:45	113	15.27

APPENDIX 7

DIABLO CANYON POWER PLANT

Revetment Construction Monitoring Project

March - April 1997

Diablo Canyon Power Plant
Revetment Construction Monitoring Project
March-April, 1997

Background

As part of the rerouting of the Auxiliary Seawater supply piping, the rip-rap rock along the south side of the Diablo Canyon intake structure was strengthened by tying the rock together with a series of concrete pours. The concrete was applied in a gridwork pattern by pumping a grout mixture into the interstitial spaces between the adjoining rocks. This construction activity was authorized under Nationwide Permit NW13(Federal Register, Dec. 13, 1996). Specific Terms and Conditions of the Permit included a requirement to monitor water quality, maintain a watch for sea otters to ensure their well being, and provide color photographs of the work activities to document compliance. This report presents the results of water quality monitoring and sea otter observations. Color photographs were previously submitted to the Army Corps of Engineers within 15 days of completion of the project.

Water Quality Monitoring

Prior to beginning the grouting phase of construction, a floating absorbent boom was placed seaward of the work area. This was to contain any floating material which might result from placement of the grout at the waters edge. Water quality parameters were measured at locations inside the boom, and at five stations outside the boom, encircling the construction site (Figure 1).

Water quality measurements consisted of pH, dissolved oxygen, and turbidity. Both pH and dissolved oxygen were measured *in situ*, using a Sea-bird CTD. Data were recorded on the instrument's onboard RAM memory and downloaded in the laboratory. Turbidity was quantified by standardized Secchi Disc depth readings. Periodic grab samples of the grout mixture and the adjacent water were taken to the laboratory and pH was measured on a Fisher pH meter. All of the instruments used were calibrated prior to use, the calibrations are traceable to the U.S. Bureau of Standards.

pH

Results of *in situ* pH measurements are presented in Table 1. During the construction period, tidal elevations varied over approximately 5 ft. (from about -1 to +4 ft., MLLW). Thus the actual water depth at the time of measurement varied greatly at the shallower station locations. The data in Table 1 represent surface, middepth, and bottom readings at the time the samples were taken. The

nominal depth of each station is given in the header to the table, the depth at the time of sampling is presented for reference.

Ambient seawater pH (taken at Station 01) varied from 7.8 to 8.3. Elevated pH readings were recorded at Stations 03 through 05. This appeared to be due to water movement in a southerly direction along the revetment caused by a combination of swell and wind activity. Surface pH readings taken inside the boom, adjacent to the grout were also elevated above ambient, ranging from 9.7 to 10.1. Readings taken at the same locations 24 hours after the grout had been placed had returned to ambient (8.2-8.4). A sample of the concrete mixture, diluted 50% with seawater, yielded a pH of 12.1.

Turbidity

Secchi Disc depths (in feet) measured at the five monitoring stations are presented in Table 2. Water clarity during the construction activities was very clear, exceeding 21 feet on each occasion. The Secchi Disc was visible on the bottom at the shallower station locations on almost every measurement. The turbid plume extended to Station 04 on one occasion on March 21, causing the only recorded depression in water clarity. Turbidity was generally limited to the area inside the floating boom on occasions when the grout was being placed below the water level.

Dissolved Oxygen

Results of dissolved oxygen measurements are presented in Table 3. Grout placement did not depress dissolved oxygen, and on several occasions seemed to result in elevated readings. This may have been due to chemical reactions associated with the hardening process of the concrete. Elevated readings were transient, returning to ambient conditions following the grouting activities.

Sea Otter Observations

The otter population inside the intake cove was observed continuously throughout the revetment construction. At no time did the construction activities appear to affect the normal behavior of the otters. As many as 13 otters were observed within close proximity of the construction site. Their behavior did not indicate any awareness of the construction activities. In fact, on two occasions an adult male otter was observed "hauled out" on one of the exposed rocks near the revetment site. This behavior is rarely observed in the Southern Sea Otter, and is indicative of the lack of any perceived threat on the part of the individual.

TABLE 1. pH Measurements

Date	Time	Depth	01	02	03	04	05
	Station No.						
3/14/97	1400	surface	7.8	8.1	8.0	8.2	8.2
		middepth	7.8	8.1	8.0	8.2	8.2
		bottom	7.8	8.1	8.0	8.2	8.2
		depth (ft.)	28.8	13.7	5.8	5.0	4.6
3/17/97	1000	surface	8.1	8.0	8.2	NS	NS
		middepth	8.1	8.1	8.2	NS	NS
		bottom	8.0	8.1	8.2	NS	NS
		depth (ft.)	28.0	12.9	5.0	4.2	3.8
3/21/97	1600	surface	8.1	8.1	8.6	9.4	8.8
		middepth	8.2	8.8	8.6	9.4	8.8
		bottom	8.2	9.6	8.6	9.5	8.8
		depth (ft.)	27.9	12.8	4.9	4.1	3.7
3/22/97	1000	surface	7.9	7.8	7.8	8.2	8.3
		middepth	8.0	8.1	8.0	8.2	8.3
		bottom	8.0	8.1	8.2	8.2	8.3
		depth (ft.)	28.8	13.7	5.8	5.0	4.6
3/22/97	1600	surface	8.2	8.2	8.8	9.2	9.3
3/24/97	1100	surface	8.1	8.1	ND	ND	ND
		middepth	8.1	8.1	ND	ND	ND
		bottom	8.1	8.2	ND	ND	ND
		depth (ft.)	29.8	14.7	6.8	6.0	5.6
3/25/97	1600	surface	8.1	8.1	8.4	8.3	8.5
		middepth	8.2	8.2	8.4	8.3	8.5
		bottom	8.2	8.2	8.4	8.3	8.5
		depth (ft.)	29.8	14.7	6.8	6.0	5.6
3/27/97	1000	surface	8.1	8.2	8.3	8.3	8.3

ND Instrument Failure, data memory overload
NS Not Sampled

TABLE 2. Secchi Disc Depths (ft)

Station No.		01	02	03	04	05
Depth Below MLLW		25.8	10.7	2.8	2	1.6
Date	Time					
3/17/97	1000	28.0	bottom	bottom	bottom	bottom
3/19/97	1000	24.0	bottom	bottom	bottom	bottom
3/21/97	900	bottom	bottom	bottom	bottom	bottom
3/21/97	1320	21.0	bottom	bottom	1.0	bottom
3/21/97	1530	21.0	bottom	bottom	bottom	bottom
3/22/97	1100	21.0	bottom	bottom	bottom	bottom
3/22/97	1600	21.0	bottom	bottom	bottom	bottom
3/24/97	1000	21.0	bottom	bottom	bottom	bottom
3/25/97	1000	bottom	bottom	bottom	bottom	bottom
3/27/97	900	NS	bottom	bottom	bottom	bottom

NS Not Sampled
bottom Disc visible on bottom

TABLE 3. Dissolved Oxygen Measurements (ppt)

Date	Station No. / Time		01	02	03	04	05
3/14/97	1400	surface	5.3	7.1	5.7	7.4	7.4
		middepth	5.3	7.4	5.9	7.8	7.9
		bottom	5.3	7.3	5.9	7.7	7.7
		depth (ft.)	28.8	13.7	5.8	5.0	4.6
3/17/97	1000	surface	5.4	7.9	5.7	NS	NS
		middepth	5.7	8.4	6.4	NS	NS
		bottom	5.7	5.2	6.2	NS	NS
		depth (ft.)	28.0	12.9	5.0	4.2	3.8
3/21/97	1600	surface	6.2	5.8	6.9	6.9	7.8
		middepth	6.3	6.2	8.0	ND*	8.5
		bottom	6.3	6.4	ND*	ND*	ND*
		depth (ft.)	27.9	12.8	4.9	4.1	3.7
3/22/97	1000	surface	5.8	5.5	7.3	5.1	5.7
		middepth	6.2	6.0	6.5	6.2	5.9
		bottom	6.1	6.1	5.8	6.1	6.0
		depth (ft.)	28.8	13.7	5.8	5.0	4.6
3/24/97	1100	surface	4.7	5.3	ND**	ND**	ND**
		middepth	5.6	5.5	ND**	ND**	ND**
		bottom	5.5	5.5	ND**	ND**	ND**
		depth (ft.)	29.8	14.7	6.8	6.0	5.6
3/25/97	1600	surface	5.8	5.5	5.9	6.0	6.0
		middepth	5.9	5.8	5.9	ND*	ND*
		bottom	5.9	5.8	ND*	ND*	ND*
		depth (ft.)	29.8	14.7	6.8	6.0	5.6

NS Not Sampled
ND* DO Sensor location on skid unable to sample this depth
ND** Instrument Failure, data memory overflow

Figure 1. Location of water quality sampling stations.

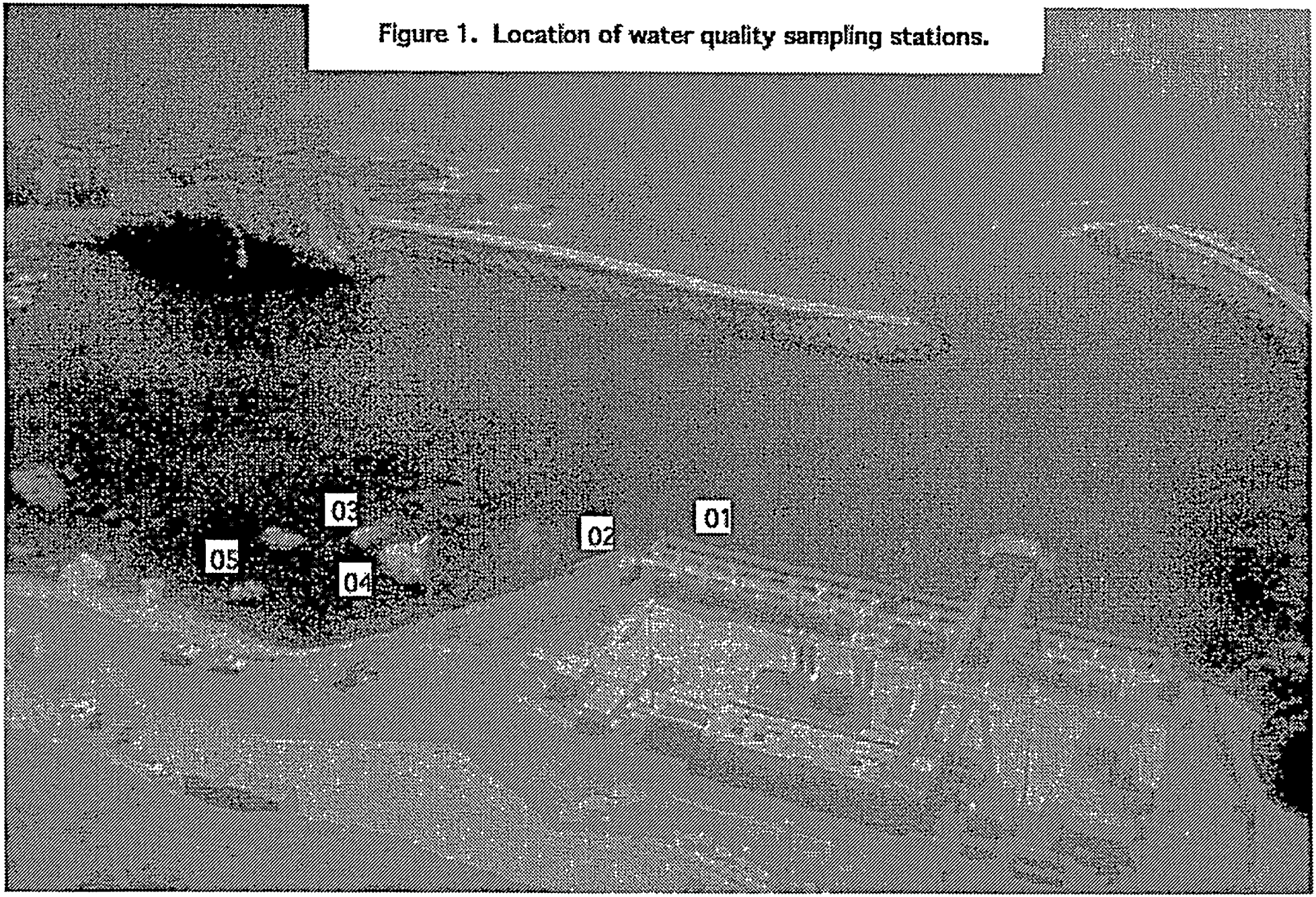
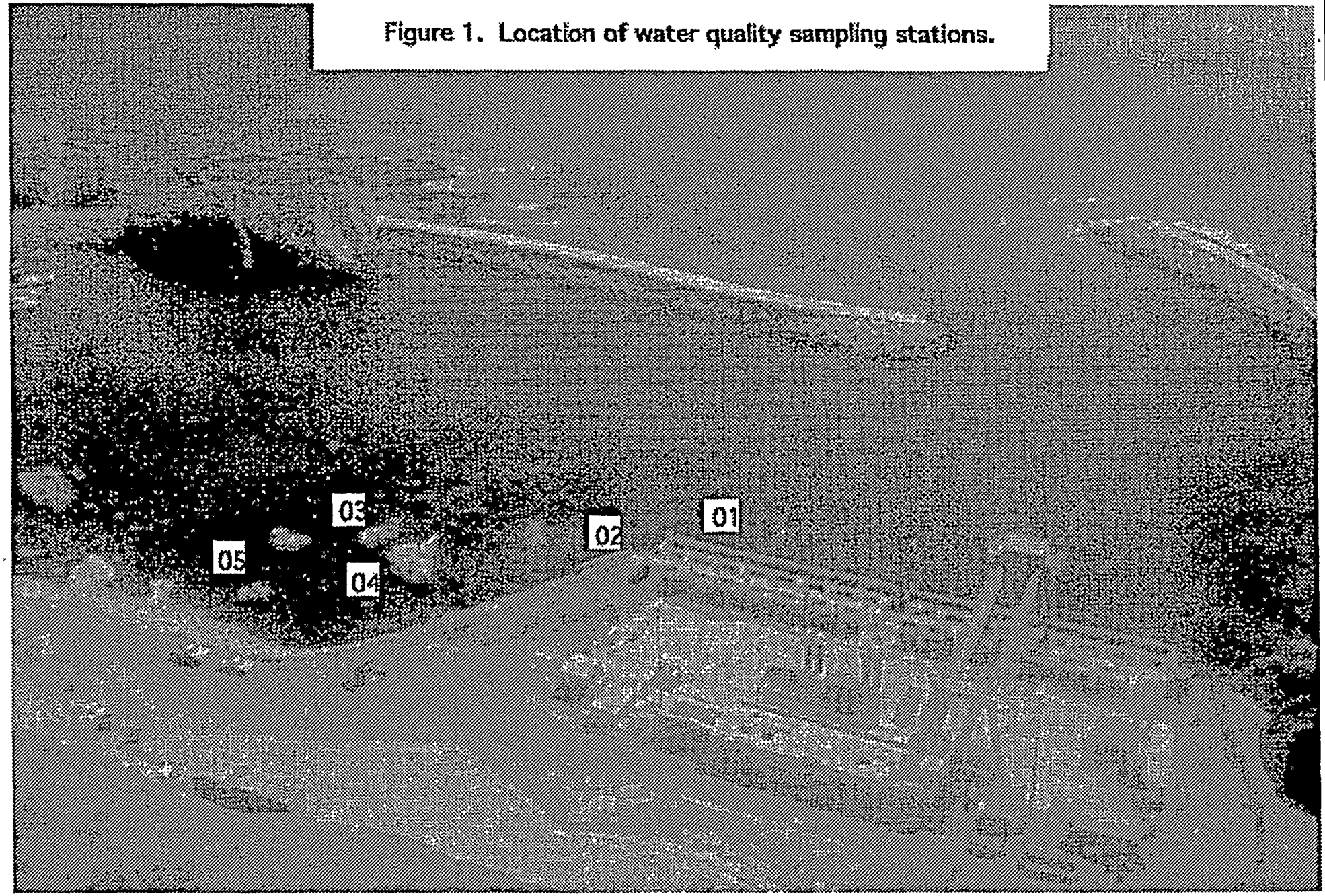



Figure 1. Location of water quality sampling stations.