

COPY

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Lanow Building - Room 1209
Washington, D. C. 20555

Re: Dockets 50-275-OL
50-323-OL

Dear Mrs. Bowers:

Enclosed is a copy of the Waste Discharge
Monitoring Program Report for the month of February
1976.

Very truly yours,

Philip A. Crane, Jr.

Enclosure
CC w/enc.: ASLB
Parties



PACIFIC GAS AND ELECTRIC COMPANY

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R. S. BAIN
MANAGER
STATION CONSTRUCTION DEPARTMENT
GENERAL CONSTRUCTION

March 15, 1976

Mr. Kenneth R. Jones, Executive Officer
California Regional Water Quality Control Board
1122A Laurel Lane
San Luis Obispo, California 93401

Diablo Canyon Project
Waste Discharge Monitoring Program

Gentlemen:

The February 1976 report of the Diablo Canyon Project Waste Discharge Monitoring Program is enclosed.

Sincerely,



DWBehrens:jk

cc: MARINE RESOURCES REGION
California Dept. of Fish and Game
350 Golden Shore
Long Beach, CA 90802

Regional Administrator
Environmental Protection Agency
Region IX
100 California Street
San Francisco, CA 94111



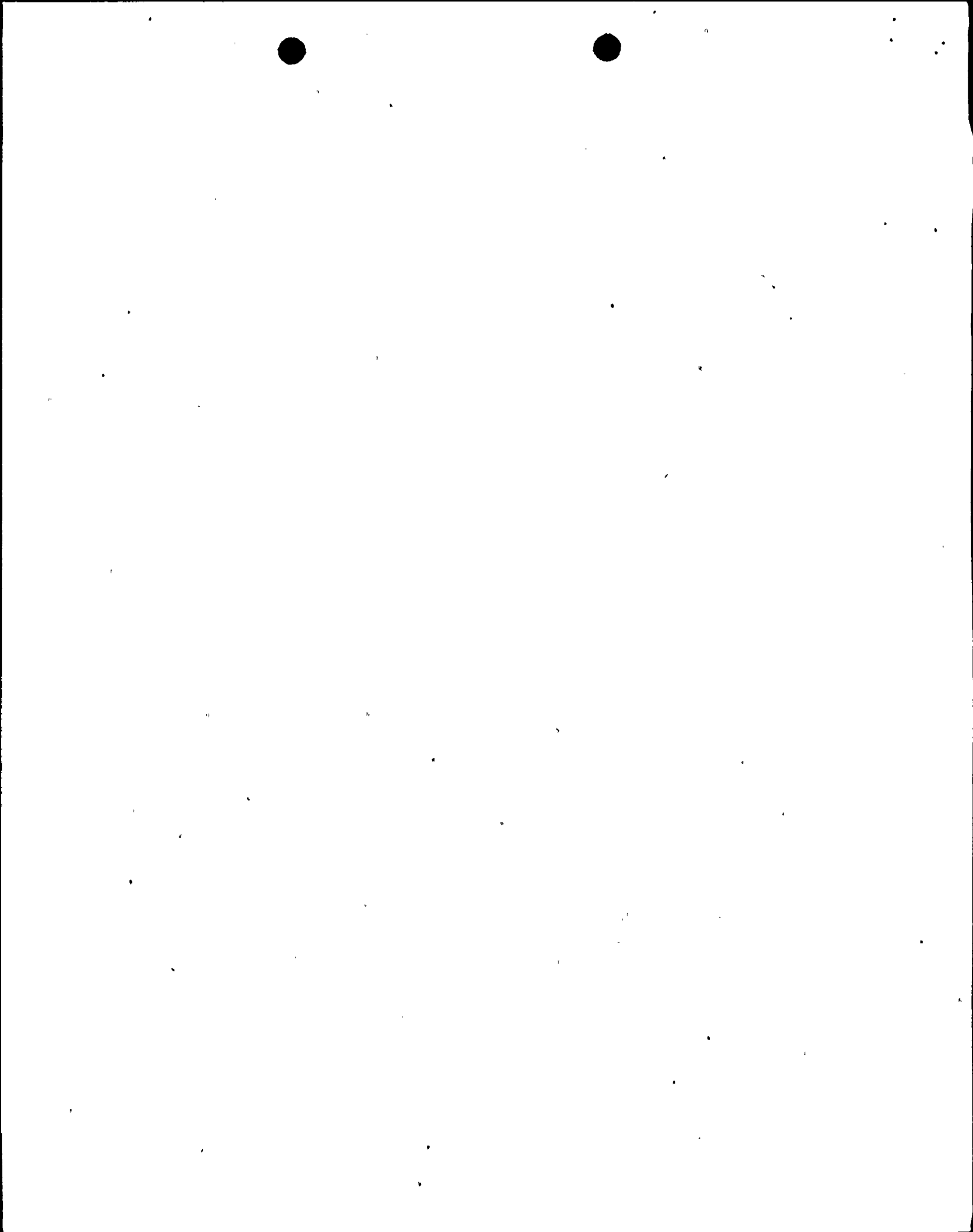
PACIFIC GAS AND ELECTRIC COMPANY
STATION CONSTRUCTION DEPARTMENT

REPORT ON
WASTE DISCHARGE MONITORING AT
DIABLO CANYON POWER PLANT SITE
DURING THE MONTH OF FEBRUARY 1976



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MONTHLY OVERVIEW

The Auxiliary Salt Water and Circulating Water Systems were operated continuously during February with the exception of two periods during which one Circulating Pump was idle. Circulating Water Pump 1-1 was started on February 10, 1976 after being down for 12 days. With the concurrence of the Regional Board Staff, the heavy metal concentrations in the discharge were sampled periodically during the first hour. No appreciable heavy metal concentration was noted. On February 25, 1976 Pump 1-2 was shut down and on March 1, 1976 Pump 1-1 was shut down. Both pumps will remain out of service for an extended period.

In addition, the Intake Screen Wash System was in service during this month with a frequency of pump operation of 15 minutes every 2 hours daily.

The Unit I Functional Testing program that began on November 27, 1975 was completed February 11, 1976. Table 2 shows there was no significant increase in discharge temperature attributable to this testing.

No discharges were made of materials originating on site during the month of February.

All of the testing performed on each system startup indicated compliance with the Discharge Permit requirements and, unless otherwise shown, the methodologies for chemical analysis were performed in accordance with chemical analysis procedures contained in the Diablo Canyon Site, Units I and II Plant Manual, Volume 3.

I. Monitoring of Plant Discharge

A. Volume of Waste Discharge

Daily discharges from the various systems are provided in Table I, Page 4.

B. Oil Content of Discharge

No measurement of the oil content of the discharge was made. This is quarterly measurement.

C. pH of Discharge

As there was no chemical cleaning of equipment in February, no pH measurements are reported.

D. Temperature of Cooling Water at Intake and Discharge Structures

Water temperatures measured at the Intake and Discharge Structures are provided in Table 2, Page 5.

E. Static Bioassay (96) TLm

There were no bioassay results required or reported in this report.



F. Concentration of Radioactivity in Discharge

This measurement is not scheduled until plant operation begins.

G. Concentration of Heavy Metals in Discharge

Table 3, Page 6, provides the results of heavy metal analysis of the startup of February 10, 1976. The mass emission in pounds followed by the maximum allowable emission (in parenthesis) was as follows: Copper - 8.3 (2490), Nickel - less than 8.3 (1660), Chromium - less than 8.3 (83), Iron - 174 (NA), Zinc - 55.6 (4151) and Lead - less than 8.3 (1660). These emission figures are computed on the average of 12 grab samples taken that day.

The computed monthly mass emission in pounds followed by the maximum allowable emission (in parenthesis) was as follows: Copper - 440 (48148), Nickel - 525 (24092), Chromium - less than 235 (1205), Iron - 3052 (NA), Zinc - 2725 (72276) and Lead - less than 320 (24092).

II. Monitoring of Receiving Waters

A. Radiological Waste Monitoring Program

Reported quarterly under a separate cover entitled "Environmental Radiation Study in the Vicinity of Diablo Canyon, California," prepared by Pacific Gas and Electric Company's Department of Engineering Research.

B. Ecological Studies of Diablo Canyon

To be reported following receipt of studies from the California Department of Fish and Game.

C. Ecological Studies Outside of Diablo Cove

To be reported following receipt of studies from the California Department of Fish and Game.

D. Aerial Photography of Kelp Beds

Aerial photography of the kelp beds in the vicinity of Diablo Canyon were not scheduled this month.

E. Surface Water Temperatures

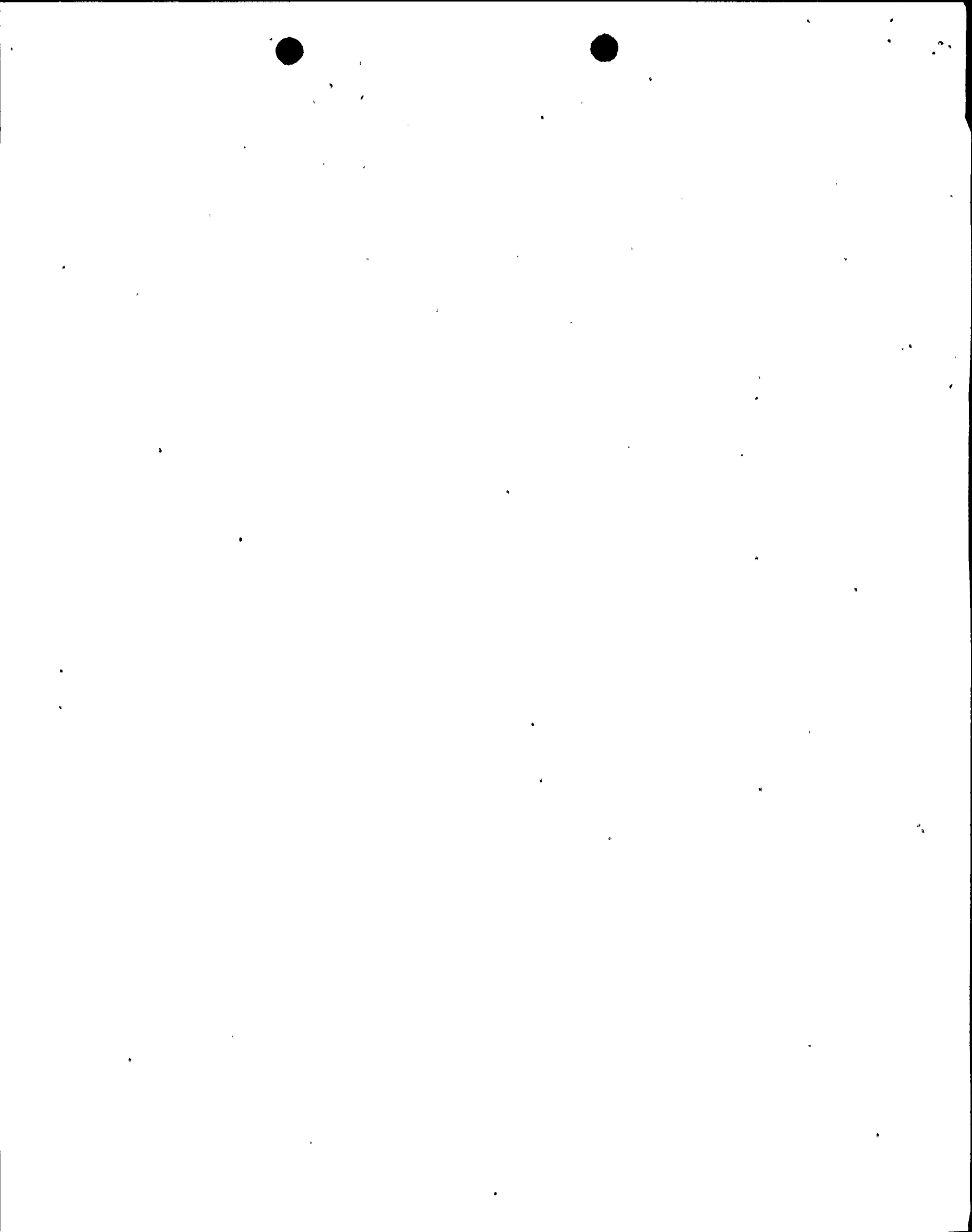
Not scheduled for monitoring until after plant operation begins.

F. Stratified Water Temperatures

Not scheduled for monitoring until after plant operation begins.

G. Intertidal Photographic Record

Intertidal photography has been postponed pending anticipated request to the Board from the California Department of Fish and Game to drop this requirement from the program.

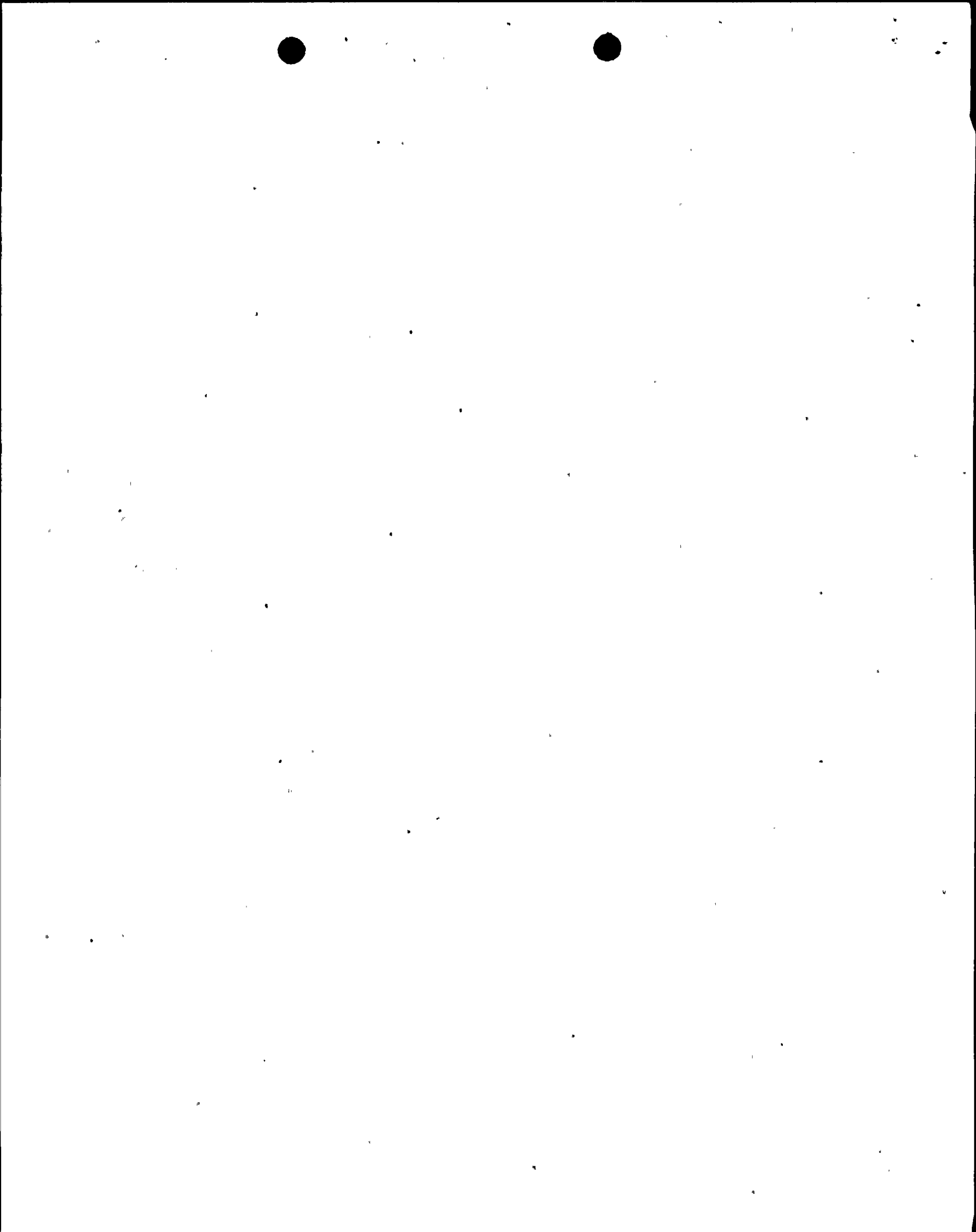


H. pH and Dissolved Oxygen of Receiving Waters

Not scheduled for monitoring until after plant operation begins.

I. Subsurface Light Movements

Subsurface light measurements using a transmissometer are provided in Table 4, Page 7. The stations at which the measurements were taken are shown in Figure 1, Page 8, Transmissometer measurements provide an index of water clarity.



NUCLEAR GENERATING STATION - DIABLO CANYON SITE - UNIT - I

VOLUME OF DISCHARGES

MONTH FEB 76

VOLUMES IN MILLION GALLONS

DAY	CIRCULATING WATER PUMPS	AUX. SALT-WATER PUMPS	IN-PLANT GENERATED WASTE WATER	INTAKE SCREEN WASH SYSTEM	DAILY TOTAL
1	625.5	15.84		1.404	642.7
2	625.5	15.84		1.404	642.7
3	625.5	15.84		1.404	642.7
4	625.5	15.84		1.404	642.7
5	625.5	15.84		1.404	642.7
6	625.5	15.84		1.404	642.7
7	625.5	15.84		1.404	642.7
8	625.5	15.84		1.404	642.7
9	625.5	15.84		1.404	642.7
10	950.6	15.84		1.404	967.8
11	1251.0	15.84		1.404	1268.2
12	1251.0	15.84		1.404	1268.2
13	1251.0	15.84		1.404	1268.2
14	1251.0	15.84		1.404	1268.2
15	1251.0	15.84		1.404	1268.2
16	1251.0	15.84		1.404	1268.2
17	1251.0	15.84		1.404	1268.2
18	1251.0	15.84		1.404	1268.2
19	1251.0	15.84		1.404	1268.2
20	1251.0	15.84		1.404	1268.2
21	1251.0	15.84		1.404	1268.2
22	1251.0	15.84		1.404	1268.2
23	1251.0	15.84		1.404	1268.2
24	1251.0	15.84		1.404	1268.2
25	997.0	15.84		1.404	1014.2
26	624.0	15.84		1.404	641.2
27	624.0	15.84		1.404	641.2
28	624.0	15.84		1.404	641.2
29	624.0	15.84		1.404	641.2
TOTAL	27,587.1	459.4	0.0	40.7	28,087.2

Approved By: JPT/DWB/TCW



NUCLEAR GENERATING STATION—DIABLO CANYON SITE—UNIT-ITEMPERATURE OF SEA WATER AT INTAKE AND DISCHARGEMONTH FEB 76

DAY	TIME	INTAKE TEMPERATURE—°F	DISCHARGE TEMPERATURE—°F
1	1200 hrs	54	55
2	"	55	55
3	"	55	55
4	"	55	55
5	"	55	55
6	"	55	55
7	"	55	55
8	"	55	55
9	"	55	56
10	"	55	56
11	"	55	56
12	"	55	56
13	"	55	56
14	"	55	55
15	"	55	56
16	"	55	55
17	"	54	54
18	"	53	54
19	"	52	53
20	"	52	53
21	"	53	54
22	"	53	54
23	"	53	54
24	"	54	54
25	"	53	54
26	"	53	54
27	"	53	53
28	"	52	53
29	"	52	52

Approved By: DWB /rcw



NUCLEAR GENERATING STATION—DIABLO CANYON SITE—UNIT-1

CONCENTRATION OF HEAVY METALS IN DISCHARGE

MONTH FEB 76

SYSTEM	DATE OF COLLECTION	TIME OF COLLECTION	METAL (µg/ml)						
			Cu	Ni	Cr	Fe	Zn	Pb	
Circ. Water	10	1045	.002	.001	<.001	.023	.011	<.001	
		1047	.001	.001	<.001	.036	.007	<.001	
		1049	.001	.001	<.001	.020	.007	<.001	
		1051	.001	.001	<.001	.025	.007	<.001	
		1057	.001	<.001	<.001	.016	.007	<.001	
		1101	.001	<.001	<.001	.017	.007	<.001	
		1129	.001	<.001	<.001	.023	.008	<.001	
		1131	.001	<.001	<.001	.020	.007	<.001	
		1133	.001	.001	.001	.019	.007	<.001	
		1137	.001	<.001	<.001	.018	.007	<.001	
		1141	.001	<.001	<.001	.016	.007	<.001	
		1145	.001	<.001	<.001	.024	.009	<.001	

Approved By: JVB/WLOH/TCW



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NUCLEAR GENERATING STATION — DIABLO CANYON SITE-UNIT-I

SUBSURFACE LIGHT MEASUREMENTS

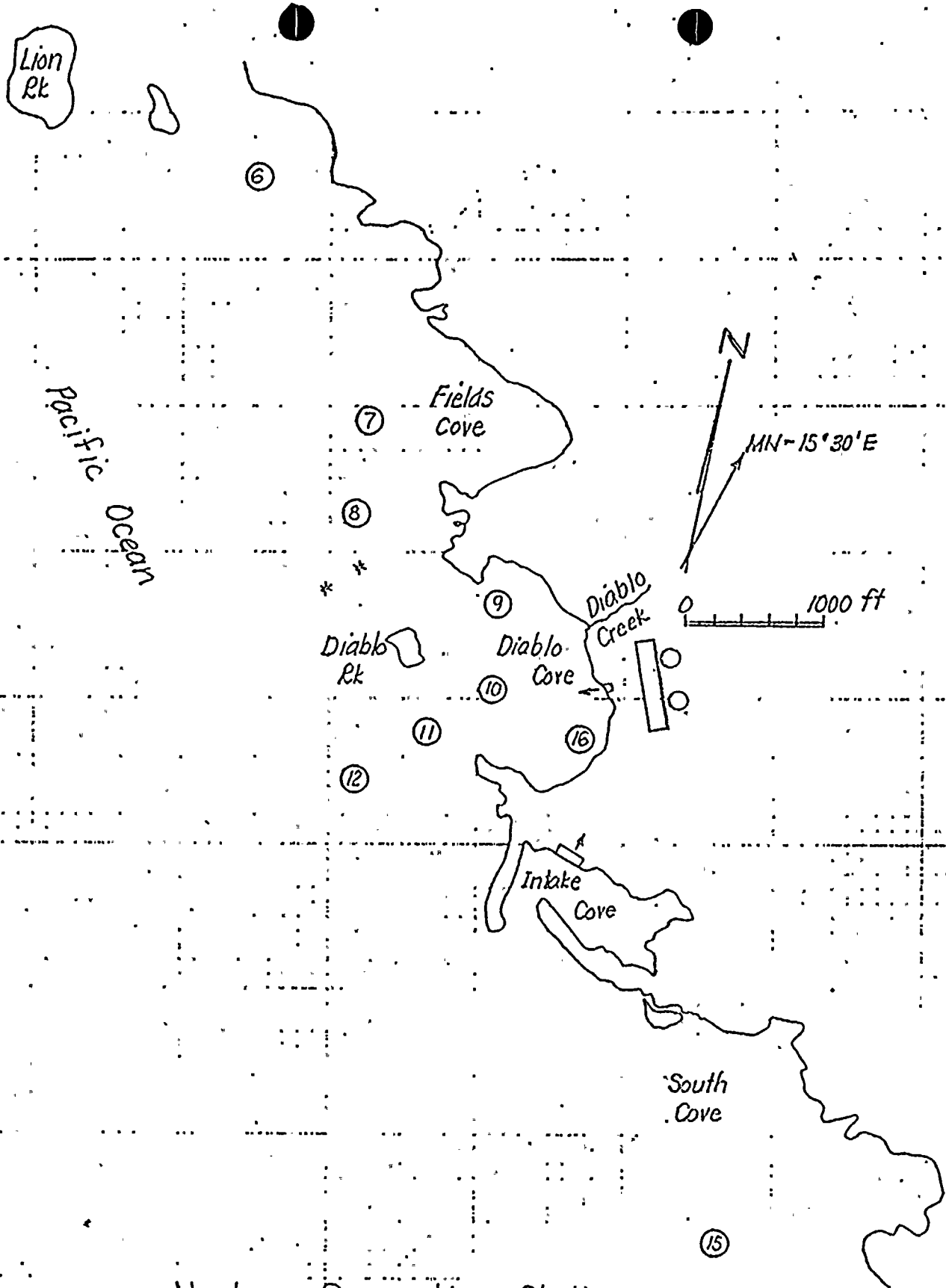
MONTH FEB 76

PERCENT LIGHT TRANSMISSION OVER ONE METER PATH LENGTH

STATION	DATE	TIME	DEPTH IN METERS	PERCENT TRANSMISSIBILITY
6	26	1055	0	63.0
			3	63.5
			6	63.0
			9	61.5
7		1125	0	40.0
			3	47.5
			6	52.5
			9	49.0
16		1150	0	30.0
			1.2	33.0
			2.5	33.0
ALL OTHER STATIONS INACCESSIBLE DUE TO SEA STATE				

Approved By: MJD/DWB/TCW





Nuclear Generating Station -
Diablo Canyon Site - Unit 1
Offshore Monitoring Stations

Figure 1

