PACIFIC GAS & ELECTRIC COMPANY

NUCLEAR PLANT OPERATIONS

REPORT ON DISCHARGE MONITORING AT DIABLO CANYON POWER PLANT DURING THE MONTH OF MARCH 1988

TABLE OF CONTENTS

OVERVIEW

A. During the month of March, discharges occurred from Discharge Paths 001 (once through cooling water), 001B, 001D, 001E, 001F, 001G, 001H, 001J, 001L, 001M, 001N, 001P, 002-004, and 013. No discharges occurred from Discharge Paths 001A, 001C, 001I, 001K, and 005 through 012.

B. In all cases, chemical, radiochemical, and toxicity analyses were performed in accordance with chemical analysis procedures contained in the Diablo Canyon Power Plant, Units 1 and 2 Plant Manual, Volume 8, by State approved laboratories, or laboratories meeting the requirements specified in the California Regional Water Quality Control Board Central Coast Region "Standard Provisions and Reporting Requirements" dated January 25, 1985. Receiving water monitoring was performed in accordance with approved biological and oceanographic procedures.

SUMMARY OF MONITORING PROGRAM

A. Monitoring of Plant Influent and Effluent

1. The results of the March plant influent and effluent monitoring are reported in Appendix 1.

2. A static bioassay of Discharge 001 is performed quarterly in January, April, July, and October.

B. Monitoring of Receiving Waters

1. Ecological Studies at Diablo Canyon

   Ecological studies in the vicinity of Diablo Cove, referred to as the Diablo Canyon Marine Environmental Monitoring Program (MEM) continue.

2. Sediment Analysis

   Sediment samples are collected in September.

3. Aerial Photography of Kelp Beds

   Aerial photography (infrared film type 2443) of kelp beds in the vicinity of Diablo Canyon is required in February, June, and October.

4. Surface Water Temperature

   Surface water temperatures are reported every other month.

5. Stratified Water Temperatures

   Stratified water temperatures are measured in February, June, and October.

6. pH and Dissolved Oxygen of Receiving Waters

Monitoring of pH and dissolved oxygen in the receiving waters is scheduled for February, June, and October.

7. Incident Light Measurements

Incident light measurements for the first quarter of 1988 are reported in Appendix 2.

8. In situ Bioassay

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

APPENDIX 1

Influent and Effluent Monitoring
March 1988

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
1102A LAUREL LANE
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
PAGE (M) 1

FACILITY I.D.	YEAR/ MO / DAY	YEAR/ MO /DAY	STATE CODE	NPDES PERMIT #
3 402003001	BEGINNING 88/03/01	ENDING 88/03/31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	INFLUENT TEMPERATURE DEGREES F METERED CONTINUOUS	EFFLUENT 001 TEMPERATURE DEGREES F METERED CONTINUOUS	EFFLUENT 001 FLOW MGD RECORDED DAILY	INFLUENT pH pH UNITS GRAB MONTHLY	EFFLUENT 001 pH pH UNITS GRAB MONTHLY	EFF 001P=>003 pH pH UNITS GRAB WEEKLY	EFFLUENT 002 pH pH UNITS GRAB MONTHLY	EFFLUENT 003 pH pH UNITS GRAB MONTHLY
MARCH	*	*	*	*	*	*	*	*
1	56	70.2	2490					
2	55.1	68.7	2490					
3	55.1	67.4	2240					
4	54.7	63.6	1980					
5	54	62.9	1880					
6	53.5	62.1	2450					
7	53.1	64.8	1880	7.67	7.69			
8	53.4	65.6	1870					
9	53.4	65.2	1830					
10	51.7	66.5	1280					
11	51.7	66.7	1280					8
12	52	67.2	1280					
13	52.3	67.4	1280					
14	52.7	68	1280					
15	52.2	67.2	1280				7.26	
16	52.5	67.5	1280					
17	52.5	68.3	1280					
18	53	69.5	1280					
19	53.3	69.8	1280					
20	53.7	70	1280					
21	52.8	68.9	1280					
22	52.1	67.8	1280					
23	51.3	67.9	1280					
24	50.6	68.1	1280					
25	51.1	69.7	1280					
26	52.5	71.6	1280					
27	51.4	69.6	1280					
28	50.4	69.3	1280					
29	51.3	68.8	1280					
30	51.2	68	1280					
31	51.7	69.5	1280					
MONTHLY AVG	52.7	67.7	1524.8			NO DISCHARGE		
MONTHLY HIGH	56.0	71.6	2490.0					
MONTHLY LOW	50.4	62.1	1280.0					
TIMES EXCEEDED	NO LIMIT	MAXIMUM = 0	MAX 2760 = 0	NO LIMIT	MIN 6.0 =0	MIN 6.0 =0	MIN 6.0 =0	MIN 6.0 =0
TIMES EXCEEDED		INTAKE PLUS			MAX 9.0 =0	MAX 9.0 =0	MAX 9.0 =0	MAX 9.0 =0
TIMES EXCEEDED		22 DEGREES(**)						

REMARKS: (*) Number of Samples taken during the day. (**) Except During Demusseling.

PRINCIPAL EXECUTIVE OFFICER	SIGNATURE OF AUTHORIZED AGENT	DATE
JAMES D. SHIFFER	John R. Kremayer	4/5/88

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
1102A LAUREL LANE
SAN LUIS OBISPO,CA 93401

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FACILITY I.D.	YEAR/ MO / DAY	YEAR/ MO /DAY	STATE CODE	NPDES PERMIT #
3 402003001	BEGINNING 88/03/01	ENDING 88/03/31	06	CA0003751

STATION	EFFLUENT 004		INFLUENT		EFFLUENT 001		EFFLUENT 001		EFFLUENT 001F		EFFLUENT 001N		EFF001P=>003		EFFLUENT 001N	
ANALYSIS	pH		TURBIDITY		TURBIDITY		OIL & GREASE		OIL & GREASE		OIL & GREASE		OIL & GREASE		SETTL SOLIDS	
UNITS	pH UNITS		NTU		NTU		mg/l		mg/l		mg/l		mg/l		mg/l	
SMPL TYPE	GRAB		GRAB		GRAB		GRAB		GRAB		GRAB		GRAB		GRAB	
FREQ.	MONTHLY		MONTHLY		MONTHLY		MONTHLY		MONTHLY		MONTHLY		WEEKLY		WEEKLY	
MARCH	*		*		*		*		*		*		*		*	
1																
2																
3																
4																.1
5																
6																
7				.78		1.4		<3				<3				.1
8																
9																
10																
11		7.9														
12																
13																
14																
15																
16																
17																
18																.1
19																
20																
21										<3						
22																
23																
24																.1
25																
26																
27																
28																
29																
30										<3						
31																
MONTHLY AVG										<3				NO DISCHARGE		.1
MONTHLY HIGH										<3						.1
MONTHLY LOW										<3						.1
TIMES EXCEEDED	MIN 6.0 =0		NO LIMIT		NO LIMIT		NO LIMIT		MO AVG 15 =0		MO AVG 15 =0		MO AVG 15 =0		MO AVG 1.0 =0	
TIMES EXCEEDED	MAX 9.0 =0								D MAX 20 =0		D MAX 20 =0		D MAX 20 =0		D MAX 3.0 =0	
TIMES EXCEEDED																

REMARKS: (*) Number of Samples taken during the day.

PRINCIPAL EXECUTIVE OFFICER
JAMES D. SHIFFER

SIGNATURE OF AUTHORIZED AGENT	DATE
John R. Knemeyer	4/5/88

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
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FACILITY I.D.	YEAR/ MO / DAY	YEAR/ MO /DAY	STATE CODE	NPDES PERMIT #
3 402003001	BEGINNING 88/03/01	ENDING 88/03/31	06	CA0003751

STATION ANALYSIS UNITS SMPL TYPE FREQ.	EFFLUENT 001 T NF RESIDUE mg/l 1st FLTR GRAB MONTHLY	EFFLUENT 001 T NF RESIDUE mg/l 2nd FLTR GRAB MONTHLY	EFFLUENT 001 T NF RESIDUE mg/l NET GRAB MONTHLY	EFFLUENT 001I T NF RESIDUE mg/l 1st FLTR GRAB MONTHLY	EFFLUENT 001I T NF RESIDUE mg/l 2nd FLTR GRAB MONTHLY	EFFLUENT 001I T NF RESIDUE mg/l NET GRAB MONTHLY	EFFLUENT 001C T NF RESIDUE mg/l GRAB MONTHLY	EFFLUENT 001D T NF RESIDUE mg/l GRAB MONTHLY
MARCH	‡	‡	‡	‡	‡	‡	‡	‡
1								
2								
3								
4								
5								
6								5
7	14.7	6.1	8.6					
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				NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	
TIMES EXCEEDED TIMES EXCEEDED TIMES EXCEEDED	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	NO LIMIT	MO AVG 30 =0 D MAX 100 =0	MO AVG 30 =0 D MAX 100 =0	MO AVG 30 =0 D MAX 100 =0

REMARKS: (‡) Number of Samples taken during the day.

PRINCIPAL EXECUTIVE OFFICER
JAMES D. SHIFFER

SIGNATURE OF AUTHORIZED AGENT	DATE
John R. Kremayr	4/5/88

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
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3 402003001	BEGINNING 88/03/01	ENDING	88/03/31	06	CA0003751

STATION	EFFLUENT 001F		EFFLUENT 001G		EFFLUENT 001H		EFFLUENT 001J		EFFLUENT 001K		EFFLUENT 001L		EFFLUENT 001M		EFFLUENT 001N	
ANALYSIS	T NF RESIDUE		T NF RESIDUE		T NF RESIDUE		T NF RESIDUE		T NF RESIDUE		T NF RESIDUE		T NF RESIDUE		T NF RESIDUE	
UNITS	mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		ug/l	
SMPL TYPE	GRAB		GRAB		GRAB		GRAB		GRAB		GRAB		GRAB		GRAB	
FREQ.	MONTHLY		MONTHLY		MONTHLY		MONTHLY		MONTHLY		MONTHLY		MONTHLY		MONTHLY	
MARCH	#		#		#		#		#		#		#		#	
1																
2																
3																
4								<1								14
5						11										
6																
7																
8								7				2				
9														9		
10				2												
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21		3														
22																
23																
24																
25																
26																
27																
28																
29																
30		26														
31																
MONTHLY AVG		14.5						4		NO DISCHARGE						
MONTHLY HIGH		26						7								
MONTHLY LOW		3						<1								
TIMES EXCEEDED		MO AVG 30 =0		MO AVG 30 =0		MO AVG 30 =		MO AVG 30 =0		MO AVG 30 =0		MO AVG 30 =0		MO AVG 30 =0		MO AVG 60 =0
TIMES EXCEEDED		D MAX 100 =0		D MAX 100 =0		D MAX 100 =		D MAX 100 =0		D MAX 100 =0		D MAX 100 =0		D MAX 100 =0		
TIMES EXCEEDED																

REMARKS: (#) Number of Samples taken during the day.

PRINCIPAL EXECUTIVE OFFICER
JAMES D. SHIFFER

SIGNATURE OF AUTHORIZED AGENT	DATE
John R. Kremoya	4/5/88

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL COAST REGION
1102A LAUREL LANE
SAN LUIS OBISPO,CA 93401

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3 402003001	BEGINNING 88/03/01	ENDING	88/03/31	06	CA0003751

STATION	EFFLUENT 001P	EFFLUENT 002	EFF 001P=>003	EFFLUENT 001	EFFLUENT 001	EFFLUENT 001	EFFLUENT 001
ANALYSIS	T NF RESIDUE	T NF RESIDUE	T NF RESIDUE	T CHROMIUM	COPPER	NICKEL	ZINC
UNITS	ug/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l
SMPL TYPE	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
FREQ.	MONTHLY	MONTHLY	WEEKLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY

MARCH	#		#		#		#		#		#		#		#	
1																
2																
3																
4																
5																
6																
7								<1		1		1		10		
8																
9																
10		1														
11																
12																
13																
14																
15				<1												
16																
17																
18																
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20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																

MONTHLY AVG	NO DISCHARGE						
MONTHLY HIGH							
MONTHLY LOW							
TIMES EXCEEDED	MO AVG 30 =0	MO AVG 30 =0	MO AVG 30 =0	6M-MEAN 15 =0	6M-MEAN 24 =0	6M-MEAN 148 =0	6M-MEAN 97 =0
TIMES EXCEEDED	D MAX 100 =0	D MAX 100 =0	D MAX 100 =0	D MAX 59 =0	D MAX 135 =0	D MAX 592 =0	D MAX 541 =0
TIMES EXCEEDED				I MAX 148 =0	I MAX 357 =0	I MAX 1480 =0	I MAX 1430 =0

REMARKS: (#) Number of Samples taken during the day.

PRINCIPAL EXECUTIVE OFFICER
JAMES D. SHIFFER

SIGNATURE OF AUTHORIZED AGENT	DATE
John R. Kremayr	4/5/88

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
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3 402003001	BEGINNING	88/03/01	ENDING 88/03/31	06	CA0003751

STATION	EFFLUENT 001		EFFLUENT 001		EFFLUENT 001		EFFLUENT 001		EFFLUENT 001		EFFLUENT 001D		EFFLUENT 001D		EFFLUENT 001D	
ANALYSIS	T CHLOR RES		FREE AVL CHL		CHLORINE USED		AMMONIA (N)		TITANIUM		LITHIUM		BORON		HYDRAZINE	
UNITS	ug/l		ug/l		lbs/day		mg/l		ug/l		ug/l		ug/l		ug/l	
SMPL TYPE	GRAB		GRAB		RECORDED		GRAB		GRAB		MONTHLY COMP.		MONTHLY COMP.		GRAB	
FREQ.	2 per CYCLE		2 per CYCLE		MONTHLY		MONTHLY		MONTHLY		MONTHLY		MONTHLY		MONTHLY	
MARCH	#		#		#		#		#		#		#		#	
1																
2	6	45	6	<20		187										
3																
4																
5																
6																55
7								<0.017		36						
8																
9																
10																
11																
12																
13																
14												51		141000		
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25	4	30	4	<20		42										
26																
27																
28	4	25	4	<20		42										
29																
30	4	25	4	<20		42										
31																
MONTHLY AVG		31.25		<20		78.25										
MONTHLY HIGH		45		<20		187										
MONTHLY LOW		25		<20		42										
TIMES EXCEEDED	D MAX 200 =0		30 DAY AV 200		NO LIMIT		6M-MEAN 4.44=0		NO LIMIT		NO LIMIT		NO LIMIT		NO LIMIT	
TIMES EXCEEDED	I MAX 200 =0		=0				D MAX 17.8 =0									
TIMES EXCEEDED			D MAX 500 =0				I MAX 44.4 =0									

REMARKS: (#) Number of Samples taken during the day.

PRINCIPAL EXECUTIVE OFFICER
JAMES D. SHIFFER

SIGNATURE OF AUTHORIZED AGENT	DATE
John R. Kreemayer	4/5/88

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
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3 402003001	BEGINNING 88/03/01	ENDING 88/03/31	06	CA0003751

STATION	EFF 001N=>003	EFF 001N=>003	EFF 001N=>INTK	EFF 001N=>INTK
ANALYSIS	TOTL COLIFORM	FECAL COLIFORM	TOTL COLIFORM	FECAL COLIFORM
UNITS	MPN/100ml	MPN/100ml	MPN/100ml	MPN/100ml
SMPL TYPE	GRAB	GRAB	GRAB	GRAB
FREQ.	4 TIMES/WEEK	4 TIMES/WEEK	4 TIMES/WEEK	4 TIMES/WEEK

MARCH	#		#		#		#		#		#		#		#	
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
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20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																

MONTHLY AVG	NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	NO DISCHARGE
MONTHLY HIGH				
MONTHLY LOW				

TIMES EXCEEDED	80% SMPLS>1K	MEAN>200=	80% SMPLS>1K	MEAN>200=
TIMES EXCEEDED	=	90% SMPLS>400	=	90% SMPLS>400
TIMES EXCEEDED	I MAX >10K=	=	I MAX >10K=	=

REMARKS: (#) Number of Samples taken during the day.

PRINCIPAL EXECUTIVE OFFICER
JAMES D. SHIFFER

SIGNATURE OF AUTHORIZED AGENT	DATE
John R. Kremayer	4/5/88

APPENDIX 2

Incident Light Measurements
First Quarter 1988

INCIDENT LIGHT MEASUREMENTS

Incident light measurements are reported as micro-Einsteins per meter-squared per second of incident photosynthetically active radiation (PAR). Light is measured by photosensors at three underwater stations and at a shore station. Light values are sampled synchronously every twenty minutes subtidally, and every five minutes on land, and magnetically recorded. Light values are corrected for individual calibration factors prior to reporting.

Values reported this quarter are similar to those reported the first quarter of 1987. No data is presented for Station 7-10 for January and February due to instrument failure.

MONTHLY STATISTICAL SUMMARY FOR THE TIME PERIOD OF 1 JAN 88 TO 31 MAR 88
NORTH DIABLO COVE -10 ft STATION MEASURES UNITS OF u Einsteins/m2/sec

Data for the month of JAN 1988

NO DATA FOR THIS PERIOD
****

P.G.& E. Review and Acceptance by David W. Behrens Date 4/4/88

MONTHLY STATISTICAL SUMMARY FOR THE TIME PERIOD OF 1 JAN 88 TO 31 MAR 88
NORTH DIABLO COVE -10 ft STATION MEASURES·UNITS OF u Einsteins/m2/sec

Data for the month of FEB 1988

NO DATA FOR THIS PERIOD
****

P.G.& E. Review and Acceptance by David G Behrens Date 4/11/88

MONTHLY STATISTICAL SUMMARY FOR THE TIME PERIOD OF 1 JAN 88 TO 31 MAR 88
NORTH DIABLO COVE -10 ft STATION MEASURES UNITS OF u Einsteins/m2/sec

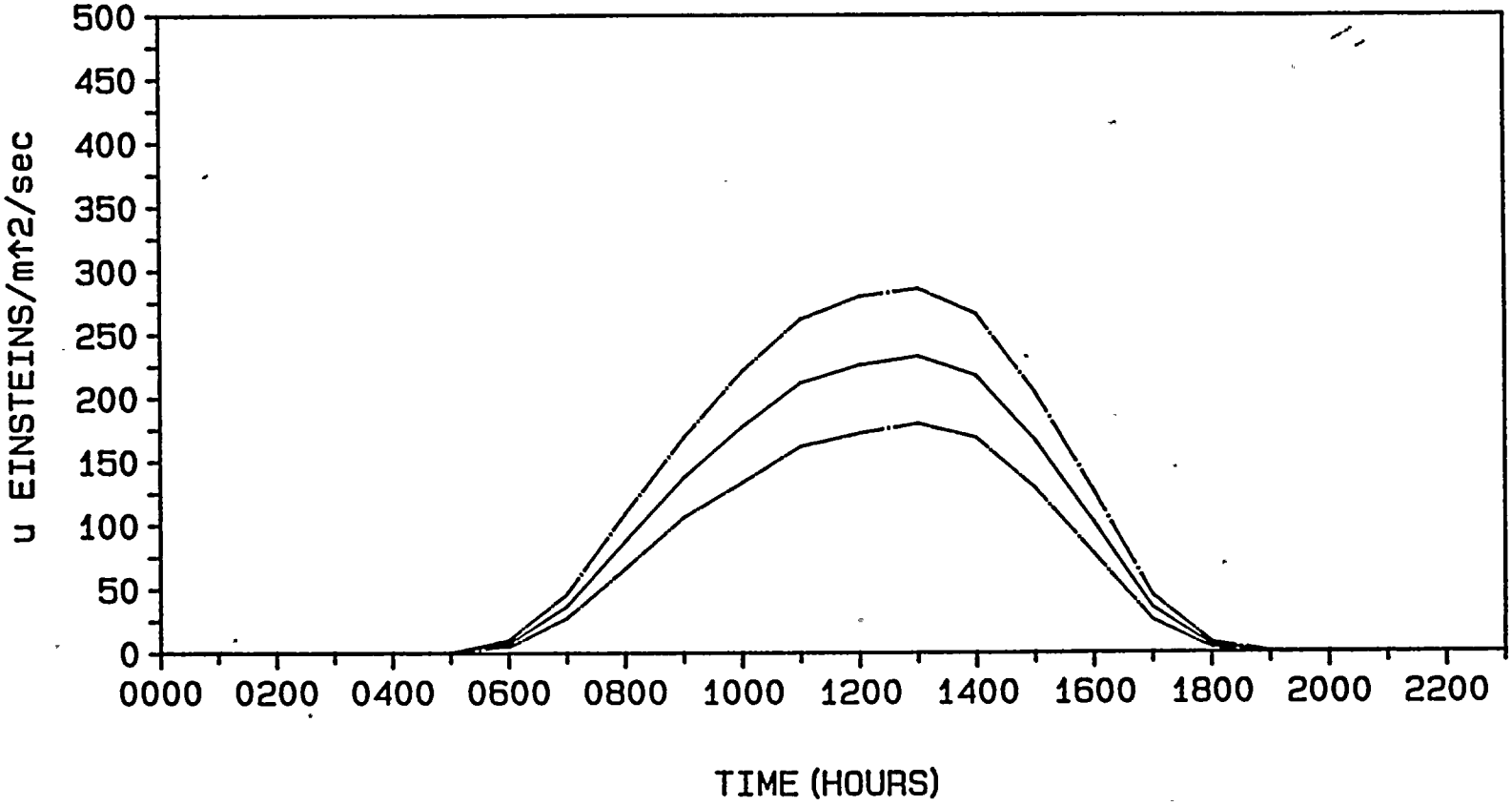
Data for the month of MAR 1988

HOUR	N	MEAN	MAX	MIN	SUM	SUM.SQ.	STD.DEV	STD.ERR	+2 STD.ERR	-2 STD.ERR
0000	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0100	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0200	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0300	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0400	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0500	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0600	28	7.3	24	1	204	2876	7.2	1.4	10.0	4.6
0700	44	36.6	135	1	1612	100154	30.9	4.7	46.0	27.3
0800	45	87.2	294	1	3925	567665	71.6	10.7	108.6	65.9
0900	45	136.9	384	1	6160	1323232	104.4	15.6	168.0	105.7
1000	45	176.6	467	17	7946	2350814	146.8	21.9	220.3	132.8
1100	47	211.3	540	10	9930	3452240	171.6	25.0	261.3	161.2
1200	48	225.3	579	12	10816	4070846	186.4	26.9	279.2	171.5
1300	48	232.2	574	17	11146	4178714	184.0	26.6	285.3	179.1
1400	48	216.5	517	15	10391	3589601	168.9	24.4	265.2	167.7
1500	48	165.9	414	8	7961	2121287	130.5	18.8	203.5	128.2
1600	48	101.5	294	3	4873	839981	85.7	12.4	126.3	76.8
1700	48	34.6	129	1	1659	108601	33.0	4.8	44.1	25.0
1800	22	5.0	15	1	110	1052	4.9	1.0	7.1	2.9
1900	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2000	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2100	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2200	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2300	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0

P.G.& E. Review and Acceptance by David G. Behrens Date 4/11/88

HOURLY MEAN SUBTIDAL LIGHT IN NORTH DIABLO COVE

(Station 07-10 ft MLLW) MARCH 1988



MONTHLY STATISTICAL SUMMARY FOR THE TIME PERIOD OF 1 JAN 88 TO 31 MAR 88
SOUTH DIABLO COVE -10 ft STATION MEASURES UNITS OF u Einsteins/m2/sec

Data for the month of JAN 1988

HOUR	N	MEAN	MAX	MIN	SUM	SUM.SQ.	STD.DEV	STD.ERR	+2 STD.ERR	-2 STD.ERR
0000	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0100	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0200	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0300	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0400	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0500	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0600	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0700	39	9.5	27	1	369	4565	5.3	0.9	11.2	7.8
0800	82	29.1	138	1	2388	115648	23.9	2.6	34.4	23.9
0900	90	70.6	280	4	6357	748549	58.0	6.1	82.9	58.4
1000	90	111.6	354	6	10046	1772188	85.5	9.0	129.7	93.6
1100	90	146.9	423	10	13223	2982355	108.1	11.4	169.7	124.1
1200	90	150.9	456	6	13584	3303180	118.6	12.5	175.9	125.9
1300	92	147.0	423	1	13525	3025017	106.7	11.1	169.3	124.8
1400	93	120.5	333	4	11202	2099026	90.3	9.4	139.2	101.7
1500	92	71.9	209	1	6612	733740	53.3	5.6	83.0	60.8
1600	87	31.1	117	1	2703	137337	24.9	2.7	36.4	25.7
1700	30	8.7	17	1	261	2653	3.6	0.7	10.0	7.4
1800	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
1900	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2000	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2100	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2200	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2300	0	0.0	0	0	0	0	0.0	0.0	0.0	0.0

P.G.& E. Review and Acceptance by David G Behren Date 4/11/88

MONTHLY STATISTICAL SUMMARY FOR THE TIME PERIOD OF 1 JAN 88 TO 31 MAR 88
SOUTH DIABLO COVE -10 ft STATION MEASURES UNITS OF u Einsteins/m2/sec

Data for the month of FEB 1988

HOUR	N	MEAN	MAX	MIN	SUM	SUM.SQ.	STD.DEV	STD.ERR	+2 STD.ERR	-2 STD.ERR
0000	12	2.0	2	2	24	48	0.0	0.0	0.0	0.0
0100	12	2.0	2	2	24	48	0.0	0.0	0.0	0.0
0200	12	2.0	2	2	24	48	0.0	0.0	0.0	0.0
0300	12	2.0	2	2	24	48	0.0	0.0	0.0	0.0
0400	12	2.0	2	2	24	48	0.0	0.0	0.0	0.0
0500	12	2.0	2	2	24	48	0.0	0.0	0.0	0.0
0600	14	2.2	6	1	31	85	1.1	0.3	2.8	1.6
0700	75	13.7	49	1	1030	21110	9.7	1.1	16.0	11.5
0800	84	53.3	171	8	4474	339296	34.9	3.8	60.9	45.6
0900	84	124.7	347	17	10471	1752133	73.4	8.0	140.7	108.6
1000	84	197.8	487	8	16612	4070456	97.3	10.6	219.0	176.5
1100	84	239.6	559	32	20124	5785754	107.8	11.8	263.1	216.0
1200	84	255.3	546	39	21448	6517266	112.0	12.2	279.8	230.9
1300	84	248.7	596	60	20889	5898911	92.1	10.1	268.8	228.6
1400	84	203.6	482	43	17099	3955081	75.6	8.2	220.1	187.1
1500	84	136.8	292	24	11494	1840882	56.8	6.2	149.2	124.4
1600	84	62.0	164	10	5212	406086	31.6	3.4	68.9	55.2
1700	75	15.4	51	1	1155	26791	11.0	1.3	17.9	12.9
1800	15	2.0	2	2	30	60	0.0	0.0	0.0	0.0
1900	15	2.0	2	2	30	60	0.0	0.0	0.0	0.0
2000	15	2.0	2	2	30	60	0.0	0.0	0.0	0.0
2100	15	2.0	2	2	30	60	0.0	0.0	0.0	0.0
2200	15	2.0	2	2	30	60	0.0	0.0	0.0	0.0
2300	15	2.0	2	2	30	60	0.0	0.0	0.0	0.0

P.G.& E. Review and Acceptance by David G. Behren Date 4/11/88

MONTHLY STATISTICAL SUMMARY FOR THE TIME PERIOD OF 1 JAN 88 TO 31 MAR 88
SOUTH DIABLO COVE -10 ft STATION MEASURES UNITS OF u Einsteins/m2/sec

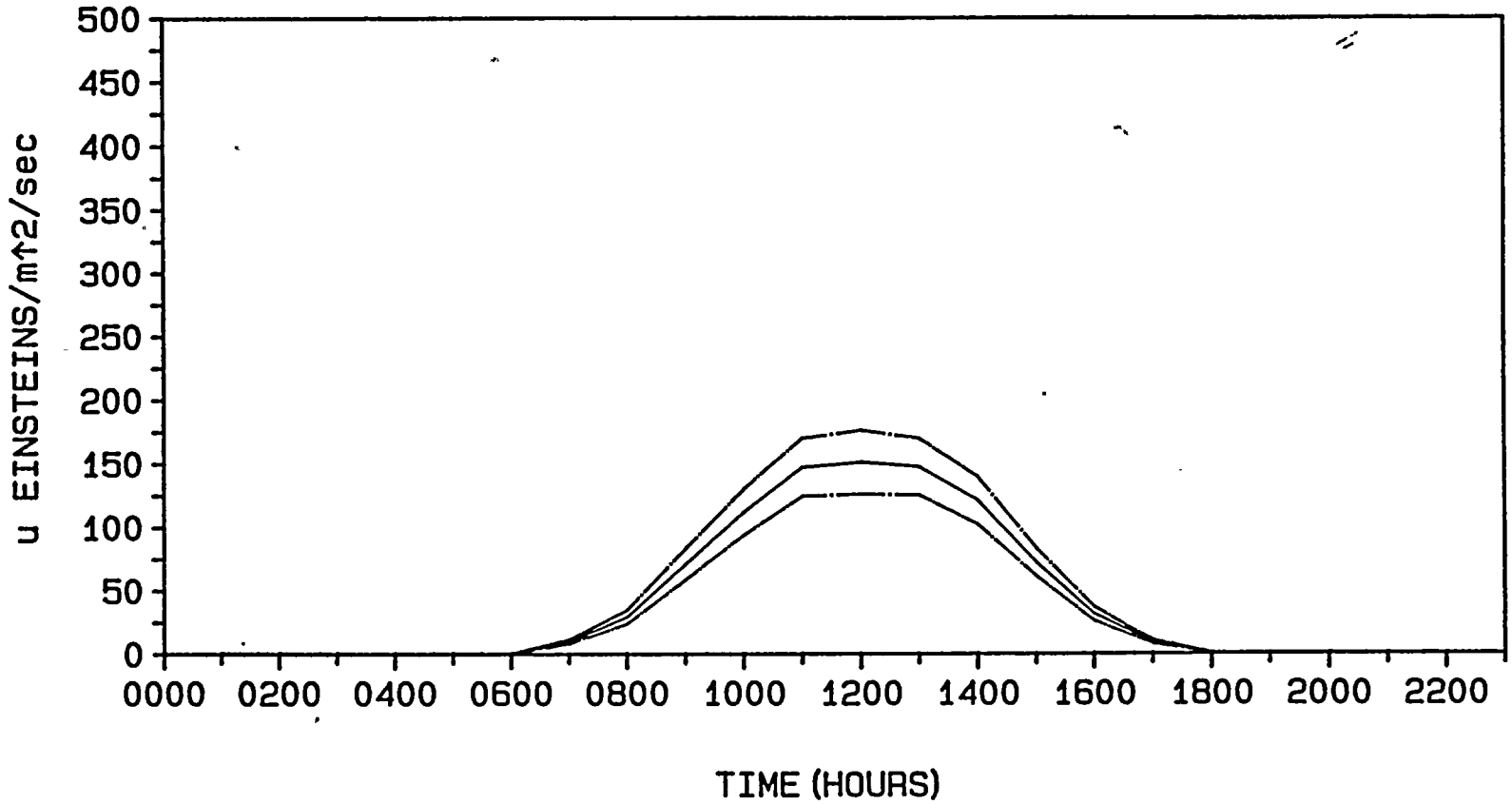
Data for the month of MAR 1988

HOUR	N	MEAN	MAX	MIN	SUM	SUM.SQ.	STD.DEV	STD.ERR	+2 STD.ERR	-2 STD.ERR
0000	93	2.0	2	2	186	372	0.0	0.0	0.0	0.0
0100	96	2.0	2	2	192	384	0.0	0.0	0.0	0.0
0200	96	2.0	2	2	192	384	0.0	0.0	0.0	0.0
0300	96	2.0	2	2	192	384	0.0	0.0	0.0	0.0
0400	95	2.0	2	2	190	380	0.0	0.0	0.0	0.0
0500	95	2.0	2	2	190	380	0.0	0.0	0.0	0.0
0600	96	4.6	19	2	445	3577	4.0	0.4	5.5	3.8
0700	96	29.3	99	2	2817	128215	21.9	2.2	33.8	24.9
0800	96	85.0	198	9	8163	889433	45.3	4.6	94.3	75.8
0900	96	154.7	367	19	14854	2963464	83.7	8.5	171.8	137.6
1000	96	223.0	439	34	21411	6000811	113.6	11.6	246.2	199.8
1100	96	278.7	589	52	26755	9045989	129.3	13.2	305.1	252.3
1200	96	314.0	633	59	30148	11381268	141.9	14.5	343.0	285.1
1300	96	298.7	708	41	28679	10368431	137.7	14.1	326.8	270.6
1400	96	236.2	568	34	22677	6496913	109.6	11.2	258.6	213.9
1500	96	168.5	392	19	16172	3287550	77.0	7.9	184.2	152.7
1600	96	89.6	195	16	8598	945614	43.0	4.4	98.3	80.8
1700	96	29.9	76	2	2869	117935	18.4	1.9	33.6	26.1
1800	95	3.0	12	2	281	1271	2.2	0.2	3.4	2.5
1900	96	2.0	2	2	192	384	0.0	0.0	0.0	0.0
2000	95	2.0	2	2	190	380	0.0	0.0	0.0	0.0
2100	96	2.0	2	2	192	384	0.0	0.0	0.0	0.0
2200	95	2.0	2	2	190	380	0.0	0.0	0.0	0.0
2300	94	2.0	2	2	188	376	0.0	0.0	0.0	0.0

P.G.& E. Review and Acceptance by David J. Behren Date 4/11/88

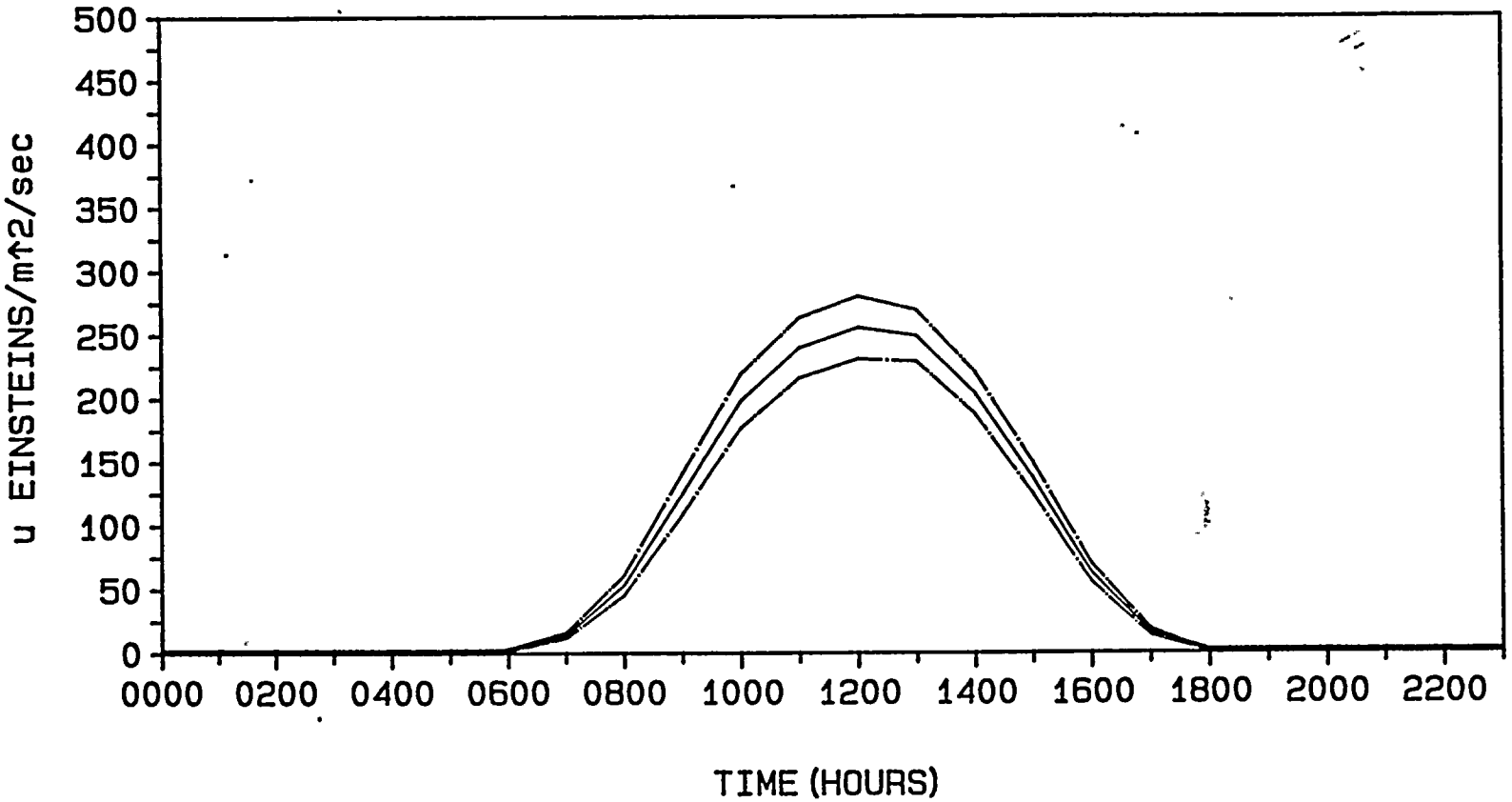
HOURLY MEAN SUBTIDAL LIGHT IN SOUTH DIABLO COVE

(Station 11-10 ft MLLW) JANUARY 1988



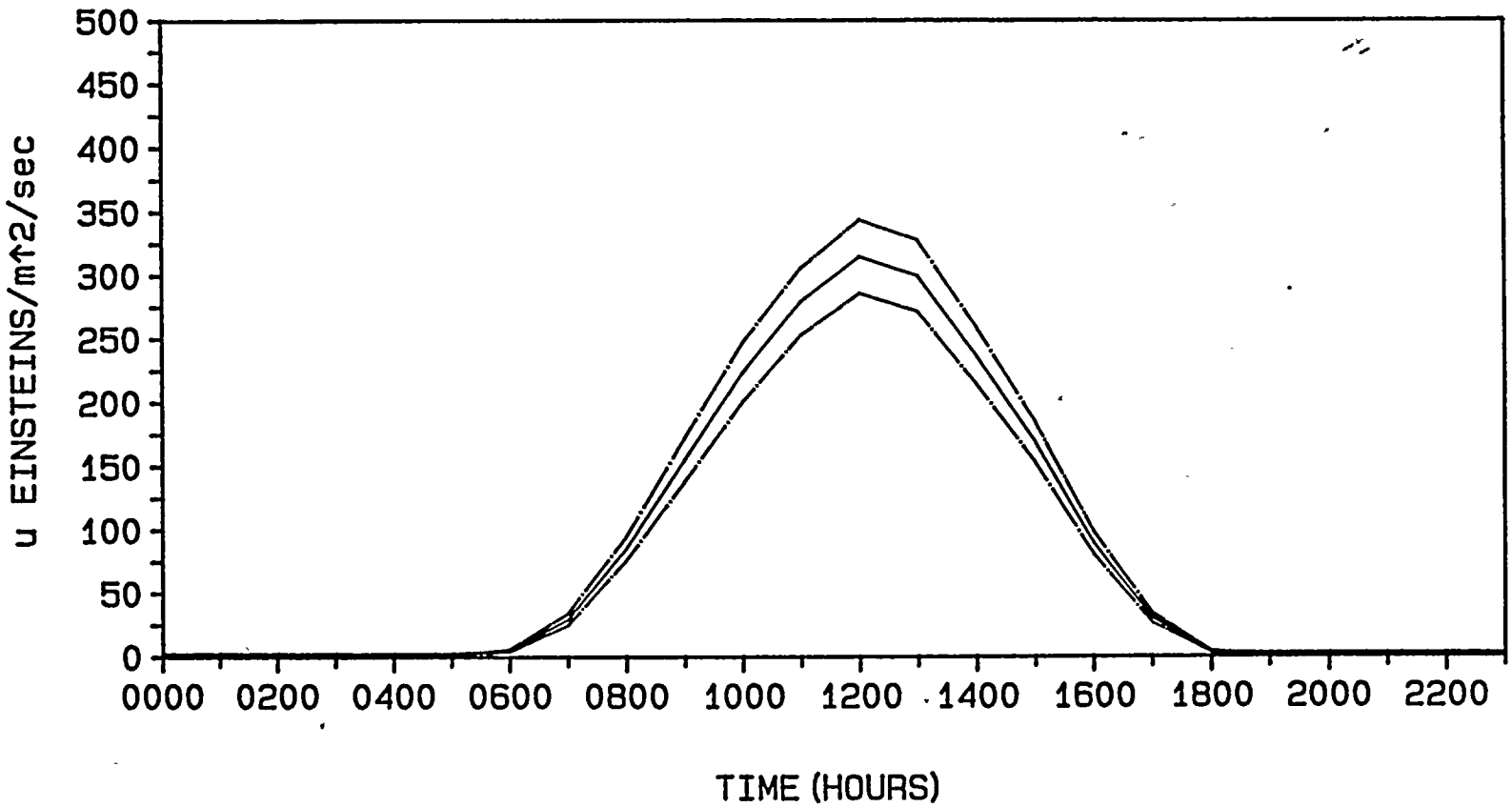
HOURLY MEAN SUBTIDAL LIGHT IN SOUTH DIABLO COVE

(Station 11-10 ft MLLW) FEBRUARY 1988



HOURLY MEAN SUBTIDAL LIGHT IN SOUTH DIABLO COVE

(Station 11-10 ft MLLW) MARCH 1988



MONTHLY STATISTICAL SUMMARY FOR THE TIME PERIOD OF 1 JAN 88 TO 31 MAR 88
SOUTH DIABLO COVE -15 ft STATION MEASURES UNITS OF u Einsteins/m2/sec

Data for the month of JAN 1988

HOUR	N	MEAN	MAX	MIN	SUM	SUM.SQ.	STD.DEV	STD.ERR	+2 STD.ERR	-2 STD.ERR
0000	93	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0100	93	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0200	93	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0300	93	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0400	93	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0500	93	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0600	93	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0700	93	2.6	18	0	242	2822	4.9	0.5	3.6	1.6
0800	93	16.0	105	0	1488	59366	19.7	2.0	20.1	11.9
0900	93	36.6	188	0	3404	280744	41.2	4.3	45.1	28.1
1000	93	61.6	241	0	5730	707002	62.0	6.4	74.5	48.7
1100	93	76.8	257	0	7141	1046075	73.6	7.6	92.0	61.5
1200	93	80.5	266	0	7491	1173073	78.7	8.2	96.9	64.2
1300	93	78.4	257	0	7288	1060548	72.9	7.6	93.5	63.2
1400	93	62.8	220	0	5842	691194	59.4	6.2	75.1	50.5
1500	93	38.2	121	0	3553	245473	34.5	3.6	45.4	31.0
1600	93	15.6	79	0	1447	46271	16.1	1.7	18.9	12.2
1700	93	1.4	16	0	131	1261	3.4	0.4	2.1	0.7
1800	93	0.0	0	0	0	0	0.0	0.0	0.0	0.0
1900	93	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2000	93	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2100	93	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2200	93	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2300	93	0.0	0	0	0	0	0.0	0.0	0.0	0.0

P.G.& E. Review and Acceptance by [signature] Date 4/11/88

MONTHLY STATISTICAL SUMMARY FOR THE TIME PERIOD OF 1 JAN 88 TO 31 MAR 88
SOUTH DIABLO COVE -15 ft STATION MEASURES UNITS OF u Einsteins/m2/sec

Data for the month of FEB 1988

HOUR	N	MEAN	MAX	MIN	SUM	SUM.SQ.	STD.DEV	STD.ERR	+2 STD.ERR	-2 STD.ERR
0000	84	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0100	84	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0200	84	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0300	84	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0400	84	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0500	84	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0600	84	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0700	84	6.9	33	0	582	8930	7.7	0.8	8.6	5.3
0800	84	29.4	109	0	2468	123520	24.8	2.7	34.8	24.0
0900	84	64.9	220	0	5453	580331	52.2	5.7	76.3	53.5
1000	84	98.1	349	0	8244	1275442	75.0	8.2	114.5	81.8
1100	84	116.9	283	0	9821	1639507	76.9	8.4	133.7	100.1
1200	84	137.8	333	0	11579	2060343	74.8	8.2	154.2	121.5
1300	84	131.6	268	0	11052	1817868	66.2	7.2	146.0	117.1
1400	84	111.2	287	0	9340	1329248	59.2	6.5	124.1	98.3
1500	84	72.4	180	0	6079	570485	39.7	4.3	81.0	63.7
1600	84	37.1	95	0	3114	161868	23.7	2.6	42.2	31.9
1700	84	9.1	39	0	763	13035	8.6	0.9	11.0	7.2
1800	84	0.0	0	0	0	0	0.0	0.0	0.0	0.0
1900	84	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2000	84	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2100	84	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2200	84	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2300	84	0.0	0	0	0	0	0.0	0.0	0.0	0.0

P.G.& E. Review and Acceptance by [signature] Date 4/11/88

MONTHLY STATISTICAL SUMMARY FOR THE TIME PERIOD OF 1 JAN 88 TO 31 MAR 88
SOUTH DIABLO COVE -15 ft STATION MEASURES UNITS OF u Einsteins/m2/sec

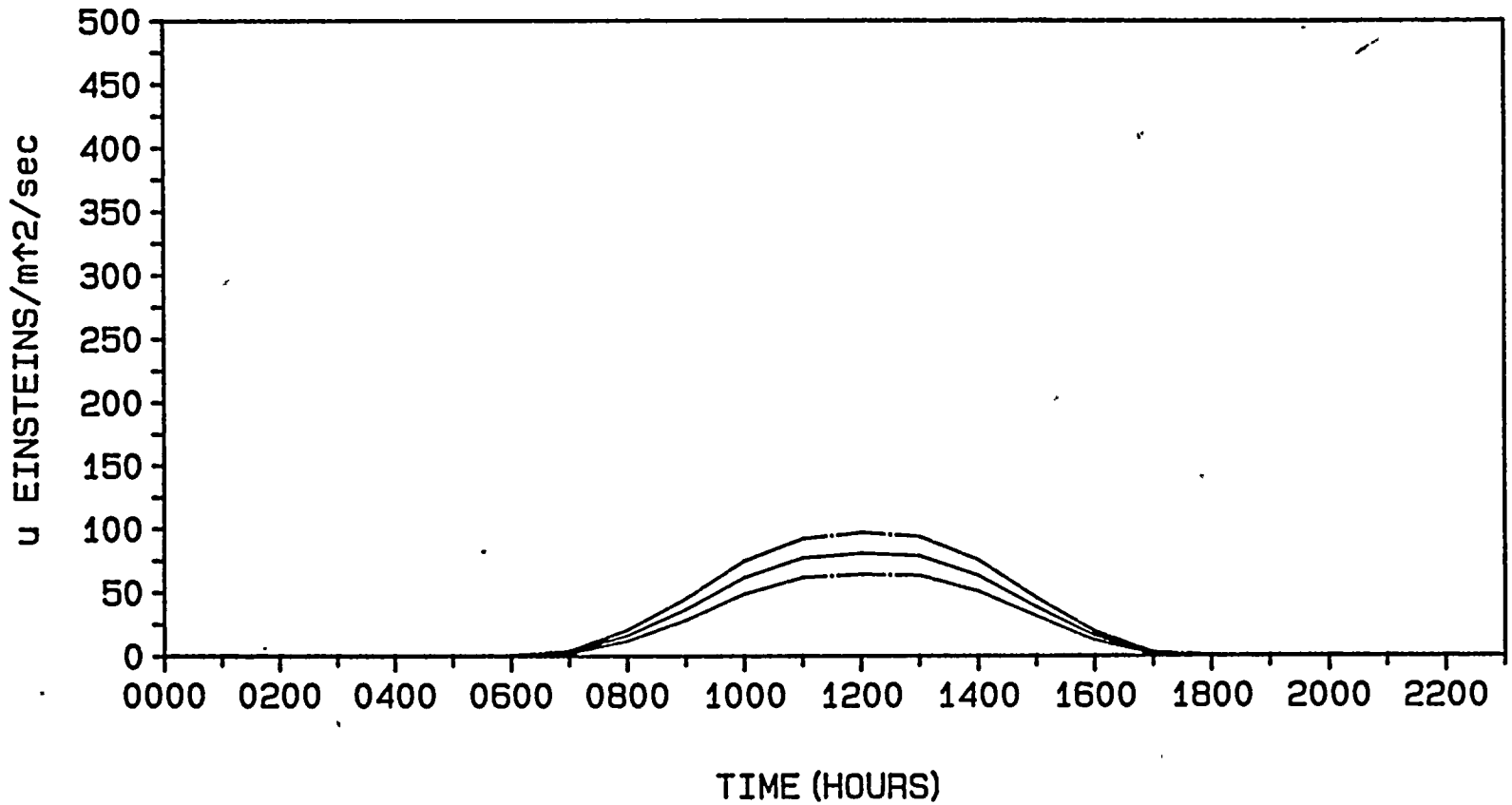
Data for the month of MAR 1988

HOUR	N	MEAN	MAX	MIN	SUM	SUM.SQ.	STD.DEV	STD.ERR	+2 STD.ERR	-2 STD.ERR
0000	51	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0100	50	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0200	48	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0300	48	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0400	48	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0500	48	0.0	0	0	0	0	0.0	0.0	0.0	0.0
0600	63	3.2	17	0	200	2054	4.8	0.6	4.4	2.0
0700	91	22.6	98	0	2055	94415	23.1	2.4	27.4	17.7
0800	93	64.7	191	0	6018	645552	52.8	5.5	75.7	53.8
0900	93	115.8	309	10	10774	1985242	89.5	9.3	134.4	97.3
1000	93	171.2	387	10	15925	4240375	128.3	13.3	197.8	144.6
1100	93	212.0	496	14	19715	6308881	152.1	15.8	243.5	180.4
1200	93	239.8	589	18	22302	7883412	166.0	17.2	274.2	205.4
1300	93	226.9	560	18	21102	6946274	153.2	15.9	258.7	195.1
1400	93	185.7	454	0	17269	4668363	126.0	13.1	211.8	159.5
1500	93	131.6	357	18	12235	2392679	92.3	9.6	150.7	112.4
1600	93	69.8	216	7	6496	708710	52.6	5.5	80.8	58.9
1700	94	23.5	86	0	2212	89522	20.1	2.1	27.7	19.4
1800	60	1.8	9	0	109	839	3.3	0.4	2.7	1.0
1900	48	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2000	48	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2100	48	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2200	48	0.0	0	0	0	0	0.0	0.0	0.0	0.0
2300	48	0.0	0	0	0	0	0.0	0.0	0.0	0.0

P.G.& E. Review and Acceptance by [signature] Date 4/11/88

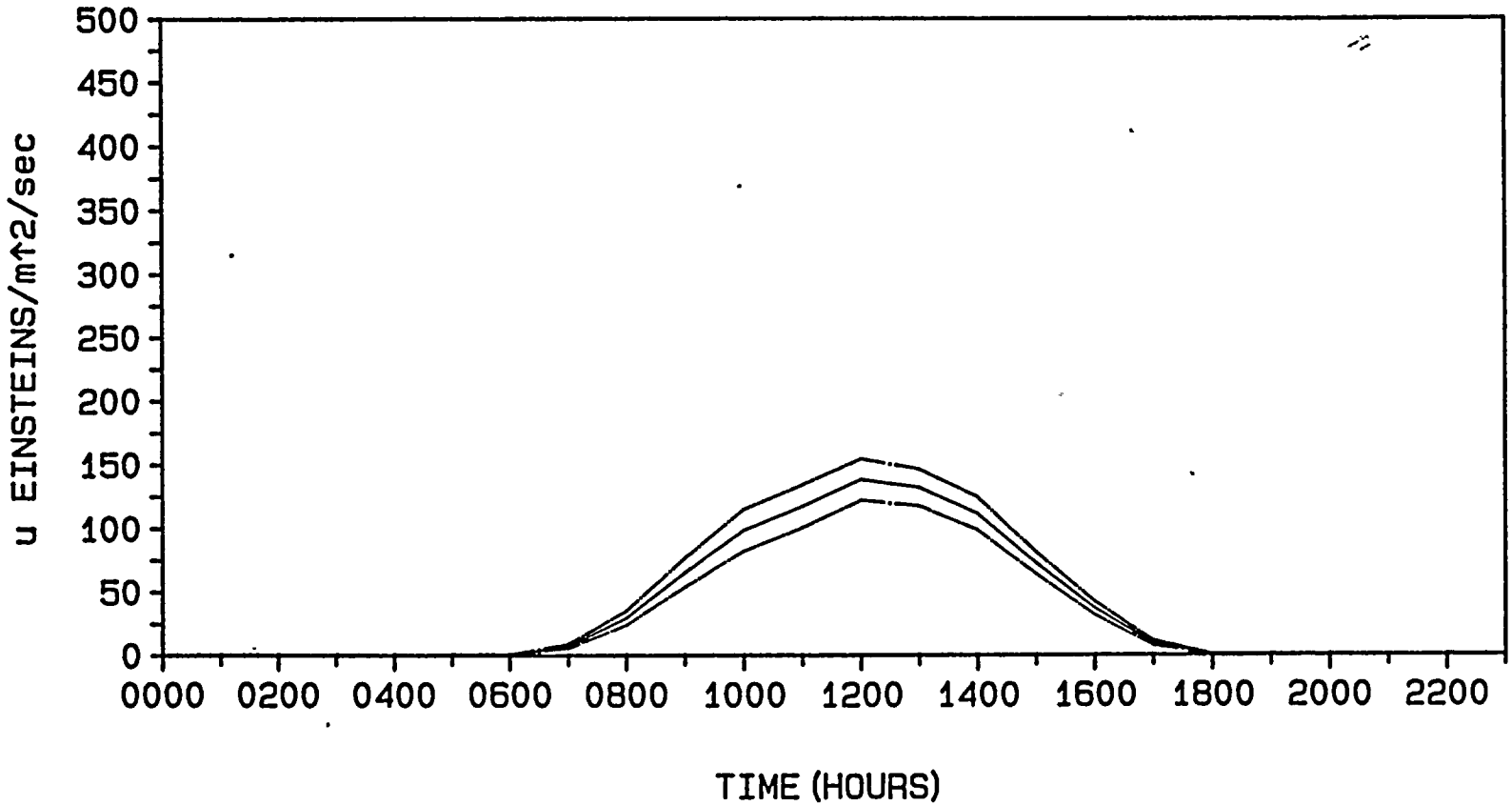
HOURLY MEAN SUBTIDAL LIGHT IN SOUTH DIABLO COVE

(Station 11-15 ft MLLW) JANUARY 1988



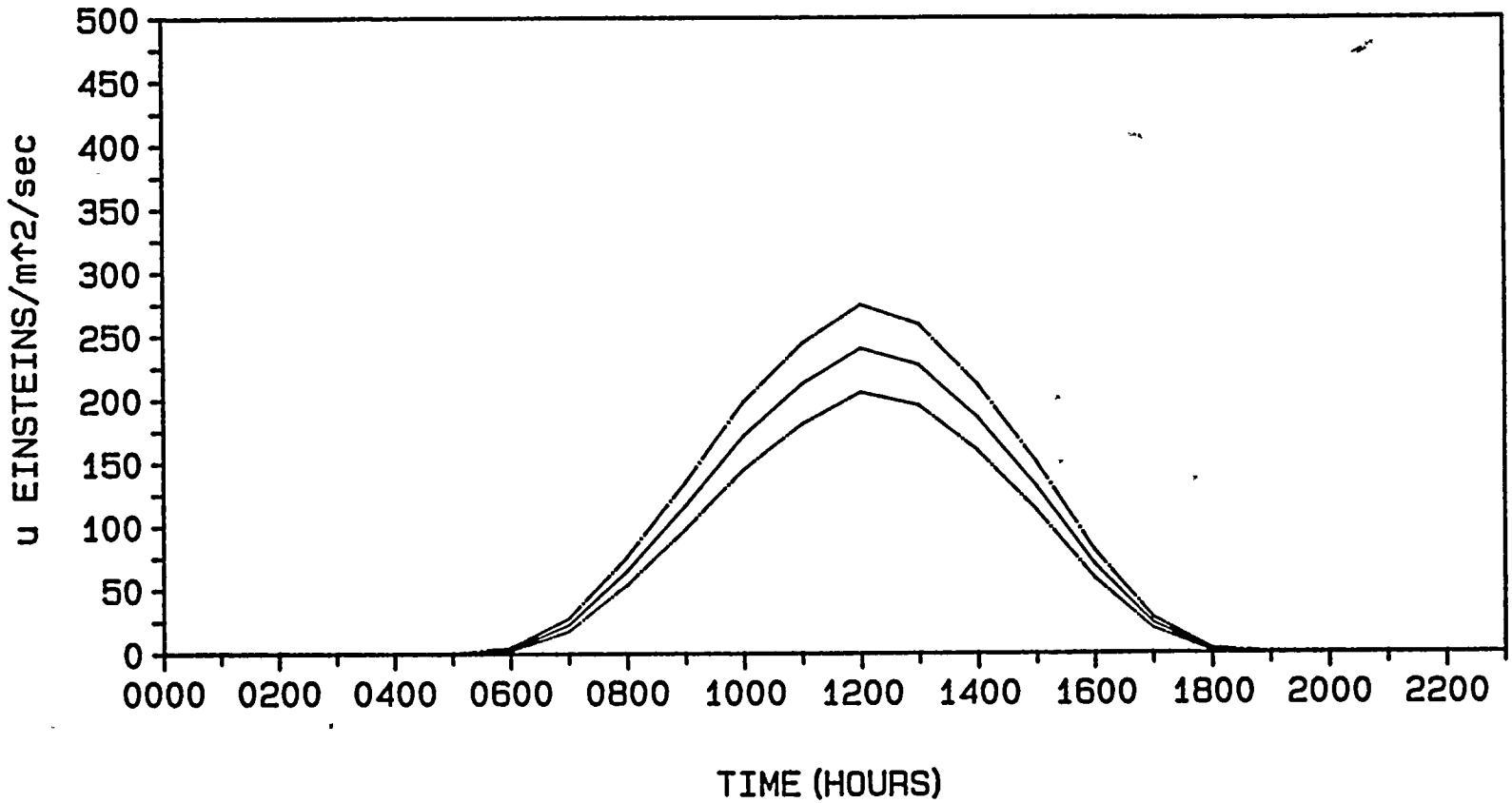
HOURLY MEAN SUBTIDAL LIGHT IN SOUTH DIABLO COVE

(Station 11-15 ft MLLW) FEBRUARY 1988



HOURLY MEAN SUBTIDAL LIGHT IN SOUTH DIABLO COVE

(Station 11-15 ft MLLW) MARCH 1988



MONTHLY STATISTICAL SUMMARY FOR THE TIME PERIOD OF 1 JAN 88 TO 31 MAR 88
SURFACE SOLAR IRRADIATION STATION MEASURES UNITS OF u Einsteins/m2/sec

Data for the month of JAN 1988

HOUR	N	MEAN	MAX	MIN	SUM	SUM.SQ.	STD.DEV	STD.ERR	+2 STD.ERR	-2 STD.ERR
0000	93	130.9	164	108	12177	1605593	11.0	1.1	133.2	128.6
0100	93	130.4	164	107	12130	1594118	11.4	1.2	132.8	128.1
0200	93	130.3	164	107	12117	1590729	11.4	1.2	132.7	127.9
0300	93	130.4	164	108	12124	1592466	11.4	1.2	132.7	128.0
0400	93	130.5	164	107	12133	1594717	11.3	1.2	132.8	128.1
0500	93	130.4	164	108	12125	1592249	11.1	1.2	132.7	128.1
0600	90	130.3	164	108	11730	1540776	11.6	1.2	132.8	127.9
0700	90	175.3	357	102	15776	3067108	58.2	6.1	187.6	163.0
0800	92	431.1	716	141	39660	18827596	137.9	14.4	459.8	402.3
0900	93	719.4	1089	187	66905	52171871	209.6	21.7	762.9	675.9
1000	90	950.8	1254	310	85572	87367046	259.8	27.4	1005.6	896.0
1100	90	1043.6	1388	267	93925	106646393	311.3	32.8	1109.2	978.0
1200	90	1026.7	1406	207	92400	104957170	336.8	35.5	1097.7	955.7
1300	90	975.6	1356	248	87807	92094563	268.7	28.3	1032.3	919.0
1400	90	771.7	1146	267	69453	58279063	229.4	24.2	820.1	723.3
1500	90	513.0	886	177	46169	26444357	176.1	18.6	550.1	475.9
1600	90	252.8	574	123	22753	6716079	104.1	11.0	274.8	230.9
1700	90	131.3	191	105	11818	1572312	15.2	1.6	134.5	128.1
1800	90	131.6	165	110	11843	1572129	12.4	1.3	134.2	129.0
1900	92	132.7	217	107	12204	1639738	15.1	1.6	135.8	129.5
2000	93	132.0	164	108	12275	1634511	12.5	1.3	134.6	129.4
2100	93	131.9	164	107	12263	1630959	12.3	1.3	134.4	129.3
2200	93	131.9	164	108	12270	1632650	12.2	1.3	134.5	129.4
2300	93	131.9	164	107	12263	1631367	12.5	1.3	134.5	129.3

P.G.& E. Review and Acceptance by David J. Belman Date 4/11/88

MONTHLY STATISTICAL SUMMARY FOR THE TIME PERIOD OF 1 JAN 88 TO 31 MAR 88
SURFACE SOLAR IRRADIATION STATION MEASURES UNITS OF u Einsteins/m2/sec

Data for the month of FEB 1988

HOUR	N	MEAN	MAX	MIN	SUM	SUM.SQ.	STD.DEV	STD.ERR	+2 STD.ERR	-2 STD.ERR
0000	78	162.7	256	129	12689	2130865	29.4	3.3	169.3	156.0
0100	78	162.5	254	129	12675	2124955	29.1	3.3	169.1	155.9
0200	78	162.7	258	130	12694	2132274	29.4	3.3	169.4	156.1
0300	78	163.0	254	129	12717	2139481	29.3	3.3	169.7	156.4
0400	78	163.2	256	129	12727	2144047	29.6	3.4	169.9	156.5
0500	77	163.5	256	130	12586	2124200	29.7	3.4	170.2	156.7
0600	75	163.9	267	130	12293	2083931	30.5	3.5	171.0	156.9
0700	77	299.5	567	144	23062	7730076	104.1	11.9	323.2	275.8
0800	81	636.2	962	176	51532	35301336	177.4	19.7	675.6	596.8
0900	81	975.3	1703	386	78997	81031439	223.3	24.8	1024.9	925.7
1000	81	1257.8	1579	325	101885	131509823	204.8	22.8	1303.3	1212.3
1100	80	1376.2	1686	474	110095	156698927	256.3	28.6	1433.5	1318.9
1200	78	1402.5	1656	421	109397	158305587	251.6	28.5	1459.5	1345.6
1300	79	1301.4	1591	396	102807	138002361	232.4	26.2	1353.7	1249.1
1400	81	1106.6	1414	438	89632	101495778	170.0	18.9	1144.3	1068.8
1500	81	800.9	1147	279	64870	54021936	160.9	17.9	836.6	765.1
1600	81	456.3	793	200	36962	18130118	125.7	14.0	484.2	428.4
1700	81	192.3	350	124	15575	3174343	47.4	5.3	202.8	181.8
1800	81	161.8	256	130	13102	2187640	29.2	3.2	168.2	155.3
1900	81	162.0	256	129	13126	2196484	29.5	3.3	168.6	155.5
2000	79	163.0	258	130	12874	2167834	29.9	3.4	169.7	156.2
2100	78	163.1	256	129	12719	2141715	29.7	3.4	169.8	156.3
2200	78	163.1	254	130	12718	2141266	29.6	3.4	169.8	156.3
2300	78	163.0	256	130	12711	2139487	29.7	3.4	169.7	156.2

P.G.& E. Review and Acceptance by [signature] Date 4/11/88

MONTHLY STATISTICAL SUMMARY FOR THE TIME PERIOD OF 1 JAN 88 TO 31 MAR 88
SURFACE SOLAR IRRADIATION STATION MEASURES UNITS OF u Einsteins/m2/sec

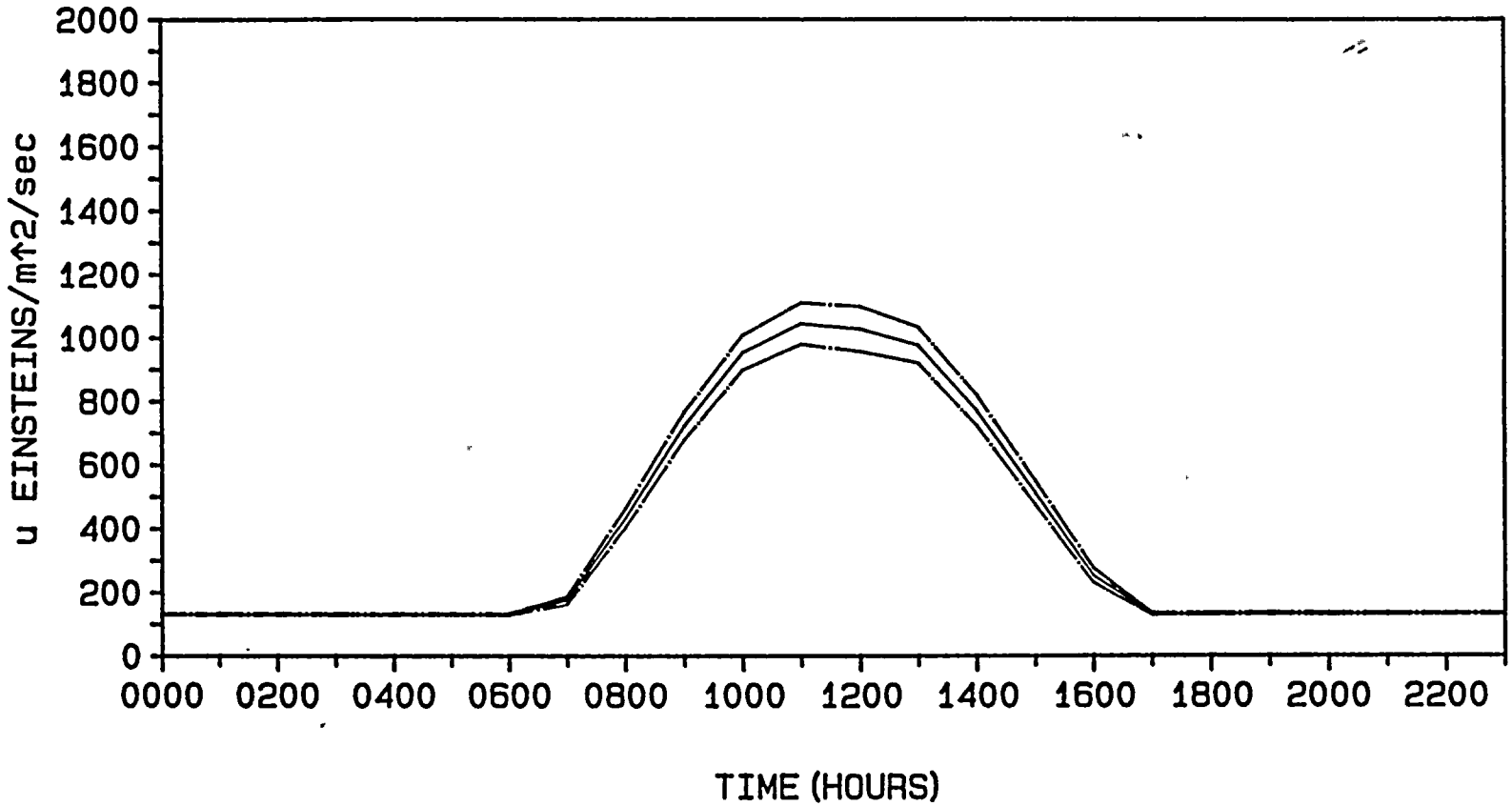
Data for the month of MAR 1988

HOUR	N	MEAN	MAX	MIN	SUM	SUM.SQ.	STD.DEV	STD.ERR	+2 STD.ERR	-2 STD.ERR
0000	83	181.9	254	141	15094	2830652	32.3	3.5	189.0	174.8
0100	93	182.6	254	137	16985	3199277	32.5	3.4	189.4	175.9
0200	93	182.8	257	139	16997	3207103	33.1	3.4	189.6	175.9
0300	93	183.0	254	137	17019	3220889	34.0	3.5	190.1	175.9
0400	91	182.6	256	139	16619	3137267	33.7	3.5	189.7	175.6
0500	82	185.2	256	139	15187	2923555	37.0	4.1	193.4	177.0
0600	83	229.4	360	159	19043	4538181	45.4	5.0	239.4	219.5
0700	90	594.0	865	160	53458	34046668	160.5	16.9	627.8	560.1
0800	90	987.7	1274	259	88895	92364645	226.4	23.9	1035.4	940.0
0900	93	1351.3	1701	402	125674	175572250	249.9	25.9	1403.2	1299.5
1000	93	1603.9	2033	378	149164	247970524	307.9	31.9	1667.8	1540.0
1100	93	1741.9	1918	581	161994	291112624	311.7	32.3	1806.5	1677.2
1200	93	1764.0	1923	413	164049	297579789	298.6	31.0	1825.9	1702.0
1300	90	1677.9	1857	543	151011	259127359	254.1	26.8	1731.5	1624.3
1400	90	1446.7	1667	399	130199	193779703	246.9	26.0	1498.7	1394.6
1500	81	1123.1	1403	378	90971	105222713	195.4	21.7	1166.5	1079.7
1600	81	725.4	968	322	58760	44569290	155.0	17.2	759.9	691.0
1700	87	343.7	538	160	29898	11193454	103.4	11.1	365.8	321.5
1800	85	183.0	256	139	15555	2931279	31.8	3.4	189.9	176.1
1900	84	180.3	254	133	15149	2837509	35.6	3.9	188.1	172.6
2000	86	180.1	257	135	15486	2893144	35.1	3.8	187.6	172.5
2100	81	183.4	254	139	14856	2817496	34.1	3.8	191.0	175.8
2200	81	182.8	254	137	14809	2799187	33.9	3.8	190.4	175.3
2300	81	179.0	254	137	14499	2678345	32.2	3.6	186.2	171.8

P.G.& E. Review and Acceptance by David G. Pelham Date 4/4/88

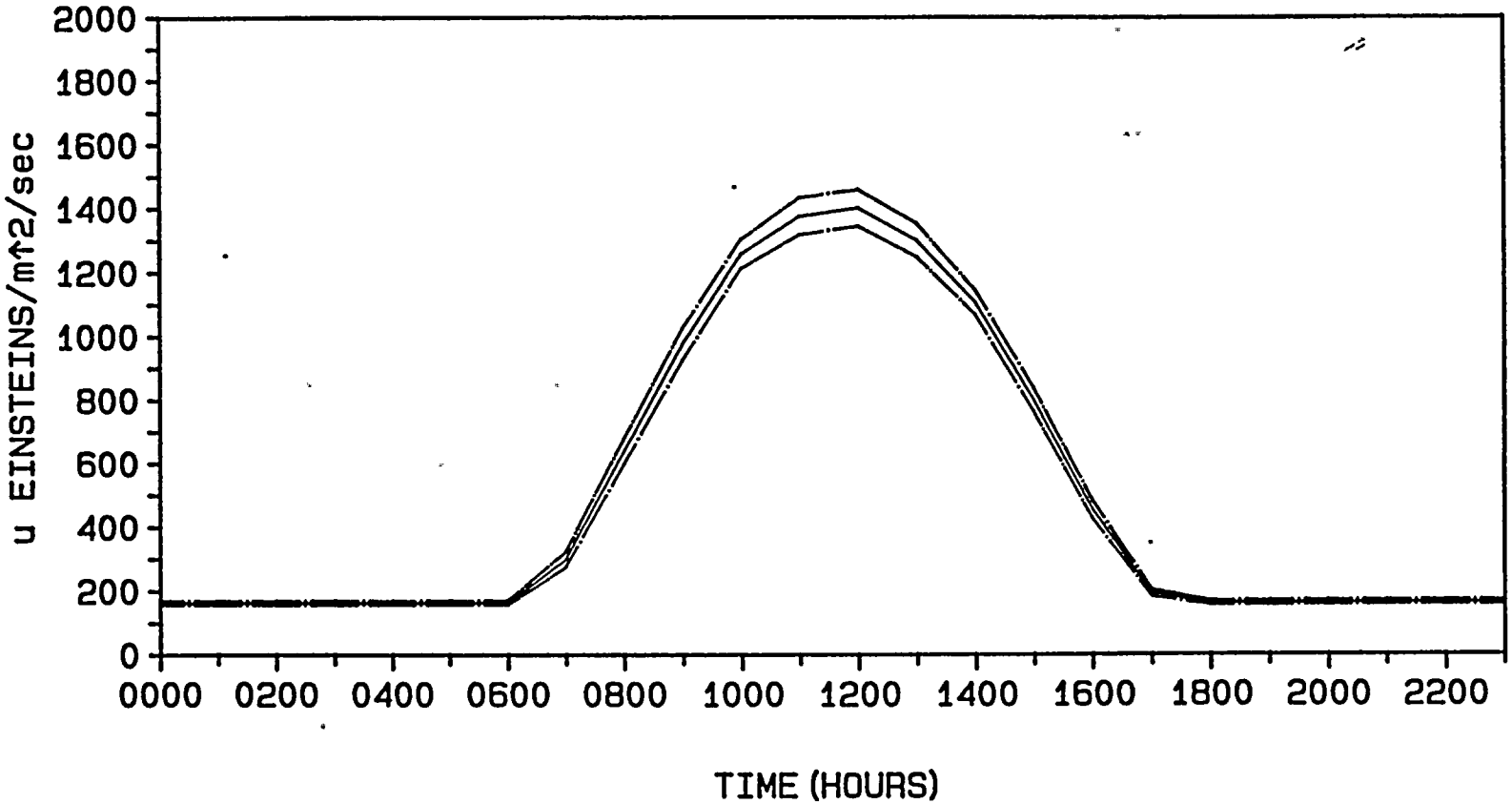
HOURLY MEAN SURFACE LIGHT AT DIABLO CANYON

(Station 99+35 - SIMS) JANUARY 1988



HOURLY MEAN SURFACE LIGHT AT DIABLO CANYON

(Station 99+35 - SIMS) FEBRUARY 1988



HOURLY MEAN SURFACE LIGHT AT DIABLO CANYON

(Station 99+35 - SIMS) MARCH 1988