

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL AND CHEMICAL DATA

CalCOFI Cruise 6907
10-29 July 1969

CalCOFI Cruise 6908
6 August-8 September 1969

and

CalCOFI Cruise 6909
11 September-7 October 1969

SIO Reference 79-7
15 May 1979

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CalCOFI Cruise 6907
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6 August-8 September 1969

and

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11 September-7 October 1969

Sponsored by

Marine Research Committee

SIO Reference 79-7

Approved for distribution:

W. A. Nierenberg
W. A. Nierenberg, Director

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INTRODUCTION

The data in this report was collected during cruises 6907*, 6908 and 6909 of the California Cooperative Oceanic Fisheries Investigations (CalCOFI) program aboard the RV David Starr Jordan, of the Bureau of Commercial Fisheries (now National Marine Fisheries Service), and the RV Alexander Agassiz, of the Scripps Institution of Oceanography. The report preceding this one in the series was SIO Ref. 77-22 which included data for April, May and June 1969.

This data was collected in part and processed completely by personnel of the Data Collection and Processing Group (DCPG, MLR)**, Scripps Institution of Oceanography.

STANDARD PROCEDURES

Hydrographic Cast Data

The hydrographic casts consisted of 12 to 18 Nansen bottles. At most stations the maximum sampling depth was 600 meters, bottom depth permitting. Temperature, oxygen, and nutrients were determined for all depths on each station, but samples from only five selected depths were used to determine salinity for comparison with the STD.

On STD lowerings where hydrographic casts were not made, a Nansen bottle was usually placed on the wire a few meters above the STD and another bottle was lowered to a depth of approximately 10 meters. Temperature, salinity, and nutrients were determined for most of the 10 meter samples. On the RV David Starr Jordan water samples at some stations were collected with a Niskin rosette lowered on the STD cable. Thermometers were used on the deepest Niskin sampler to record the temperature.

In general, paired protected reversing thermometers were used to determine temperatures which were recorded to hundredths of a Celsius degree. Surface temperatures from "bucket" thermometers and temperatures determined using unprotected (pressure) thermometers were recorded to tenths of a degree. Sample bottles used below 100 meters were equipped with unprotected thermometers for depth determination.

*The first two digits represent the year and the second two digits the month of the cruise. The CalCOFI station designations have been in use for over twenty years. The first part specifies a line normal to the general trend of the coast line (CalCOFI line). The second part specifies a station position relative to the coast on the CalCOFI line.

**Now the Physical and Chemical Oceanographic Data Facility (PACODF)

All salinity samples for Cruise 6907 were analyzed using Bissett Berman (now Grundy Environmental Systems Inc.) inductive salinometers. Both an Australian Autolab inductive salinometer and a Washington conductive bridge were used on the Agassiz during 6908. Problems were encountered with both salinometers and all salinities were tabulated in hundredths. The Autolab was used again for 6909 without the difficulties of the northern half of the cruise.

The salinity values were recorded and are reported to three decimal places, provided accepted standards were met. If only one determination per sample was obtained, or there was doubt concerning the accuracy of the analytical results, the salinities are reported to two decimal places. All STD salinities are tabulated to hundredths.

Dissolved oxygen was determined by the Winkler method as modified by Carpenter (1965), using the equipment and procedure outlined by Anderson (1971).

Phosphate, silicate, nitrite and nitrate were determined using a first generation Technicon^R AutoAnalyzer^R and methods developed at the Bureau of Commercial Fisheries based on the methodologies of Strickland (1968).

Phytoplankton pigment and production data resulting from these cruises has been reported earlier by Owen (1974).

Most of the sample bottle data could not be evaluated using standard DCPG techniques (Klein, 1973) due to the sparsity of salinity data. However, when it was apparent the STD had malfunctioned, salinity samples were determined from all sample bottles and the standard techniques carried out. All oxygen and nutrients were plotted against depth for evaluation.

In Situ Salinity/Temperature/Depth Recorder (STD) data

A Bissett Berman Model 9006 STD was used by each ship for lowerings during all three cruises. Both ships also used a digital data logger (DDL) Model 8114 for data recording.

The STD and DDL used on the Jordan during 6907 worked well except for extensive "spiking" through the thermocline. No temperature correction and only a slight off-set correction to salinity were determined from comparison with sample bottle data. On the Agassiz one STD and one DDL were used during all three cruises included in this report. The DDL malfunctioned intermittently on the three cruises but when no data could be recovered from the tape, the analogs were digitized at standard levels of depth. Comparison of DDL and analog data with sample bottle observations resulted in average corrections for each cruise, the largest for temperature being -0.05° and for salinity, $-0.06^{\circ}/\text{oo}$.

The time reported is Greenwich Mean Time. For STD lowerings it is the "start down" time and for bottle casts it is the time of messenger release. When more than one cast was lowered on a station, the messenger times for the first and last casts are given. Multiple casts, excluding the surface cast, are indicated by a footnote letter following the observed depth.

Bottom depths, determined acoustically, have been corrected using Matthews (1939) tables and are reported in meters. The weather and dominant waves are coded using the National Oceanographic Data Center (NODC) method.

Data for all cruises presented in this report was obtained by bottle casts and by the STD, and appear in two forms:

- 1.) Data from the sample bottle casts is tabulated with the observed levels of depth on the left of a page. When salinity samples were collected and analyzed for all observed levels, interpolated and computed values at standard levels of depth appear on the right of the page.
- 2.) For each STD lowering, temperature and salinity values are read only at standard levels of depth and appear with computed values of DT and DD on the right of the page. Corrections have been applied to the temperature and salinity values as discussed previously in this report. Nutrient data from samples collected with a Niskin rosette is tabulated at observed levels of depth to the left of the STD data.

The same parameters have been tabulated in this report as in previous reports. The decimal has been omitted from the CalCOFI station number so station 90.65 appears in the tabulated data as 90065. The column headings are to be interpreted as follows:

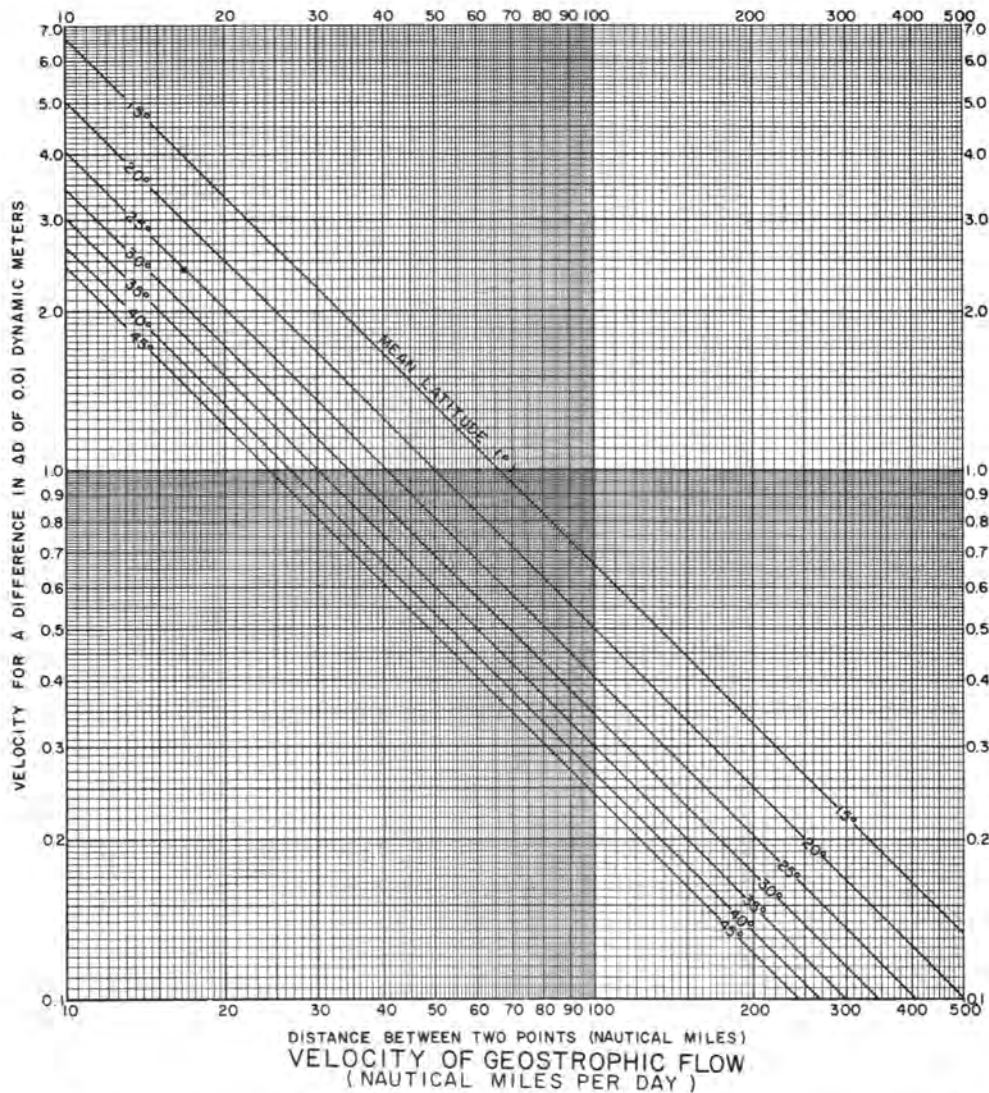
Z	Depth	Meters
T	Temperature	°C
S	Salinity	‰
O2	Dissolved oxygen	ml/L
PO4	"Reactive" inorganic phosphate-phosphorus	µg at/L
SiO3	"Reactive" inorganic silicate-silicon	µg at/L
NO2	"Reactive" inorganic nitrite-nitrogen	µg at/L
NO3	"Reactive" inorganic nitrate-nitrogen	µg at/L
DT	δ_T Thermosteric anomaly	cl/ton
SIGT	$\sigma_t = (\rho_{s,t,0} - 1)10^3$ where $\rho_{s,t,0}$ is the density the parcel would have if moved isothermally to the sea surface.	g/L
DD	Geopotential anomaly, referred to the sea surface.	dyn. meters

FOOTNOTES

Data which appears to be in error without obvious reason is reported, but flagged uncertain with a U. Such data was not used in the determination of data at standard depths. Footnotes are used to indicate data which has required special porcessing.

REFERENCES

- Anderson, G.C., compiler, 1971, "Oxygen Analysis", Marine Technician's Handbook, SIO Ref. No. 71-10, Sea Grant Pub. No. 11.
- Autolab Ind. Pty. Ltd., Sydney, 1960. Inductively Coupled Salinometer MK 111, Model 601, Operating Inst. and Ills. Parts List.
- Bissett Berman Marine Division, 1967. Operation and Maintenance Manual, Laboratory Salinometer Model 6220.
- Brown, N.L., and B.V. Hamon, 1961. An Inductive Salinometer. Deep Sea Research, 8: 65-75.
- Carpenter, J.H., 1965. The Chesapeake Bay Institute technique for Winkler dissolved oxygen method. Limnol. and Oceanogr., 10: 141-143.
- In situ Salinity/Temperature/Depth Monitoring and Recording System, Model 9006, Tech. Rep. No. 102, Hytech Marine Products, The Bissett Berman Corporation (Now Grundy Environmental Systems Inc.).
- Klein, Hans T., 1973. A new technique for processing physical oceanographic data. SIO Ref. No. 73-14.
- Matthews, D.J., 1939. Tables of the velocity of sound in pure water and seawater for use in echo-sounding and sound-ranging. Second Edition. Hydrographic Department, Admiralty, London, H.D. 282: 52pp.
- Owen, R.W. Jr., and C.K. Sanchez, 1974. Phytoplankton Pigment and Production Measurements in the California Current Region, 1969-72. U.S. Dept. of Commerce, Nov. 1974. Data Rep. 91.
- Strickland, J.D.H., and T.R. Parsons, 1968. A practical handbook of seawater analysis. Fish. Res. Board of Canada, Bull. No. 167: 311pp.
- University of Washington, 1960. Univ. of Wash. Dept. of Oceanography, Oct. 1960. Tech. Rep. UW Ref. No. 60-18.



cm/sec	0	1	2	3	4	5	6	7	8	9
0	<i>KNOTS</i> 0.02 <i>NM/DAY</i>	0.02 0.47	0.04 0.93	0.06 1.40	0.08 1.86	0.10 2.33	0.12 2.80	0.14 3.26	0.16 3.73	0.17 4.20
10	0.19 4.66	0.21 5.13	0.23 5.59	0.25 6.06	0.27 6.53	0.29 6.99	0.31 7.46	0.33 7.93	0.35 8.39	0.37 8.86
20	0.39 9.32	0.41 9.79	0.43 10.26	0.45 10.72	0.47 11.19	0.49 11.66	0.51 12.12	0.52 12.59	0.54 13.05	0.56 13.52
30	0.58 13.99	0.60 14.45	0.62 14.92	0.64 15.38	0.66 15.85	0.68 16.32	0.70 16.78	0.72 17.25	0.74 17.72	0.76 18.18
40	0.78 18.65	0.80 19.11	0.82 19.58	0.84 20.05	0.85 20.51	0.87 20.98	0.89 21.45	0.91 21.91	0.93 22.38	0.95 22.84
50	0.97 23.31	0.99 23.78	1.01 24.24	1.03 24.71	1.05 25.17	1.07 25.64	1.09 26.11	1.11 26.57	1.13 27.04	1.15 27.51
60	1.17 27.98	1.18 28.44	1.20 28.90	1.22 29.37	1.24 29.84	1.26 30.30	1.28 30.77	1.30 31.24	1.32 31.70	1.34 32.17
70	1.36 32.63	1.38 33.10	1.40 33.57	1.42 34.03	1.44 34.50	1.46 34.96	1.48 35.43	1.50 35.90	1.52 36.36	1.53 36.83
80	1.55 37.30	1.57 37.76	1.59 38.23	1.61 38.69	1.63 39.16	1.65 39.63	1.67 40.09	1.69 40.56	1.71 41.03	1.73 41.49
90	1.75 41.96	1.77 42.42	1.79 42.89	1.81 43.36	1.83 43.82	1.85 44.29	1.86 44.76	1.88 45.22	1.90 45.69	1.92 46.15
100	1.94 46.62	1.96 47.09	1.98 47.55	2.00 48.02	2.02 48.48	2.04 48.95	2.06 49.42	2.08 49.88	2.10 50.35	2.12 50.82

CONVERSION TABLE
(CENTIMETERS / SECOND - KNOTS - NAUTICAL MILES / DAY)

1 cm/sec = 0.019 kts = 0.466 NAUTICAL MILES / DAY
 1 kt = 24 NAUTICAL MILES / DAY = 51.48 cm/sec
 1 NAUTICAL MILE / DAY = 0.042 kts = 2.14 cm/sec

FIGURES

Cruise 6908

1. CalCOFI Cruise 6908, station positions
2. Horizontal distribution of dynamic height anomaly (0 over 500 d-bar)
3. Horizontal distribution of dynamic height anomaly (200 over 500 d-bar)
4. Horizontal distribution of temperature at 10 meters
5. Horizontal distribution of salinity at 10 meters
6. Horizontal distribution of thermosteric anomaly at 10 meters
7. Horizontal distribution of temperature at 200 meters
8. Horizontal distribution of salinity at 200 meters
9. Horizontal distribution of thermosteric anomaly at 200 meters

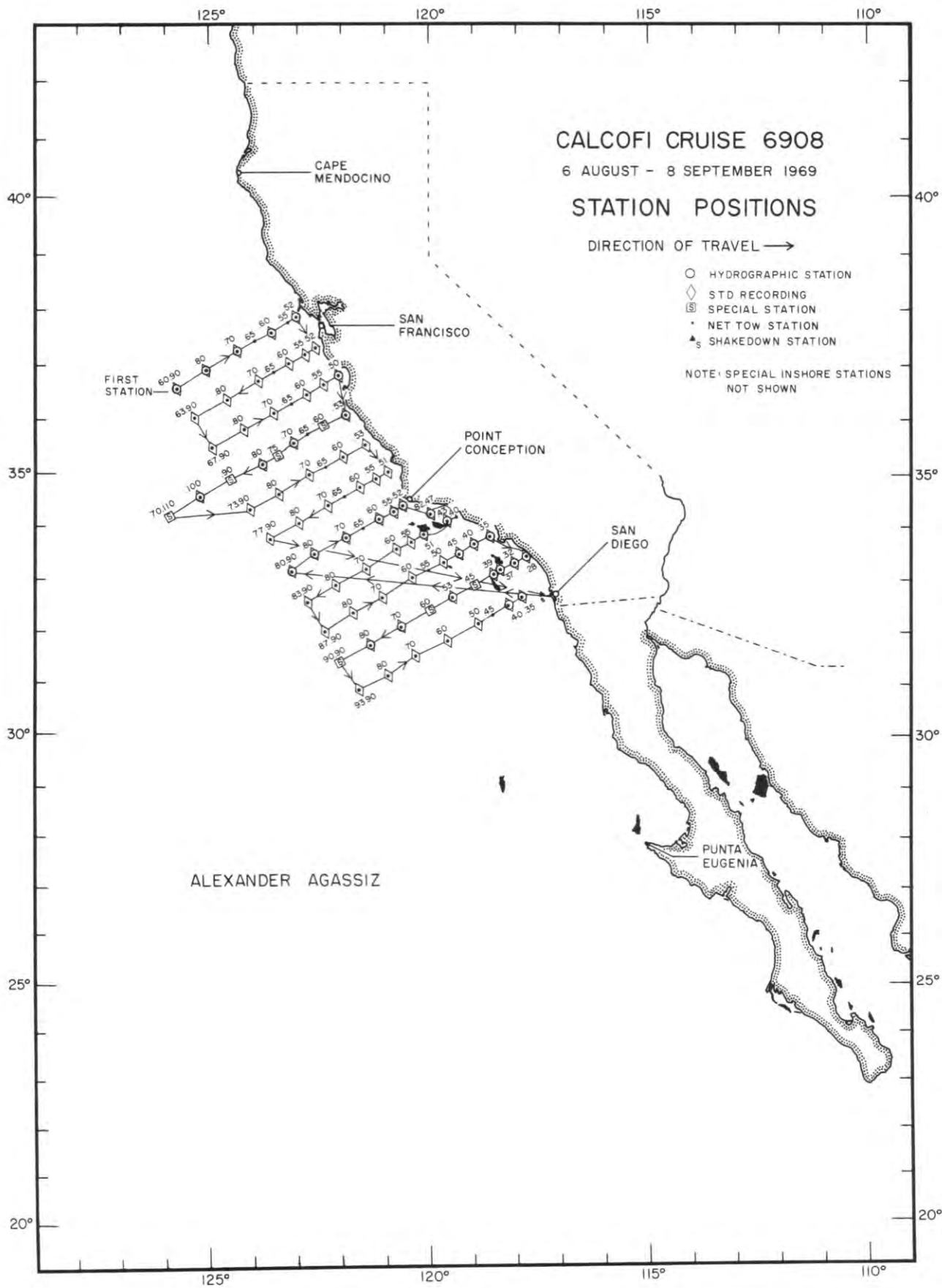


FIGURE 1

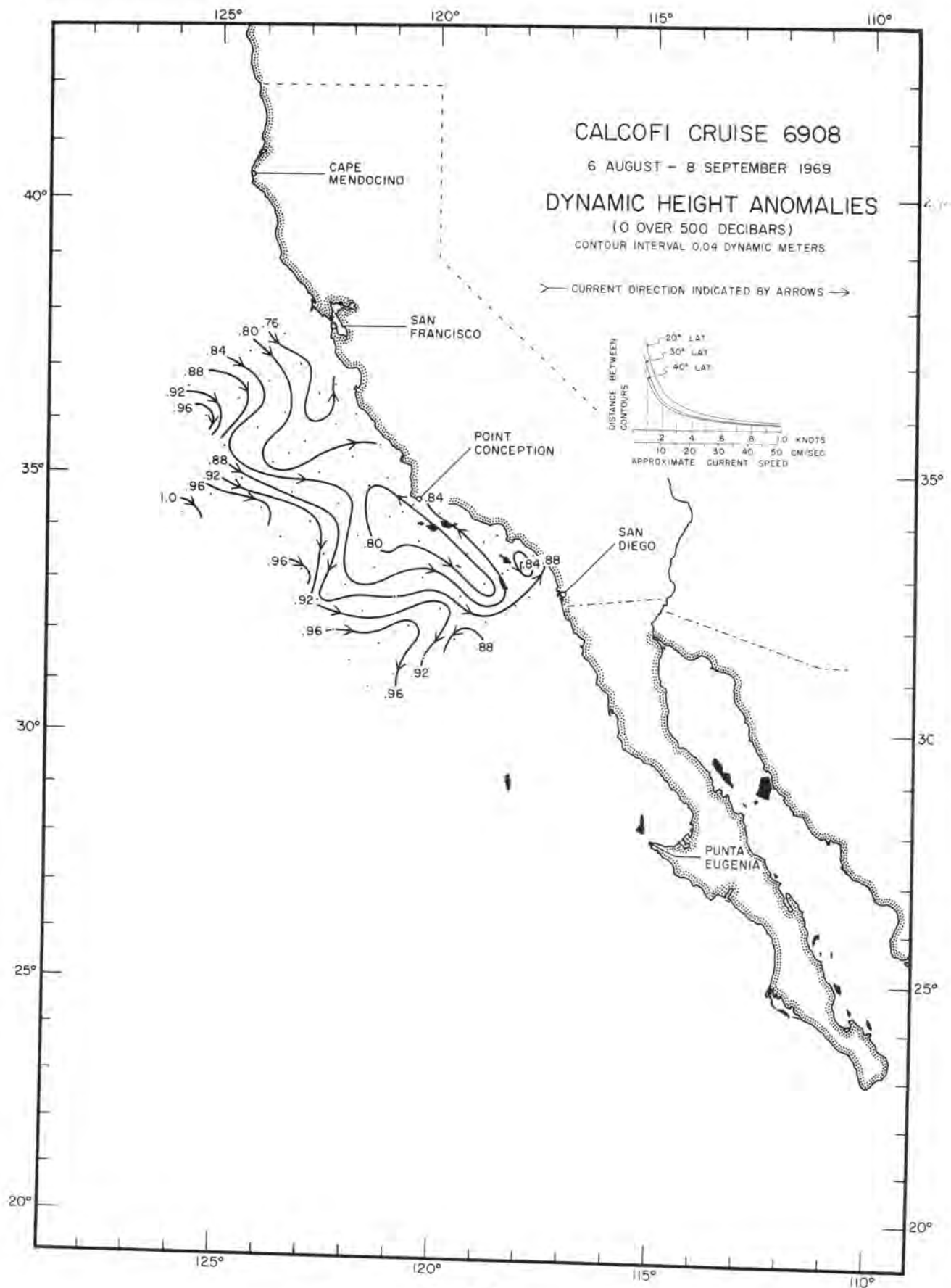


FIGURE 2

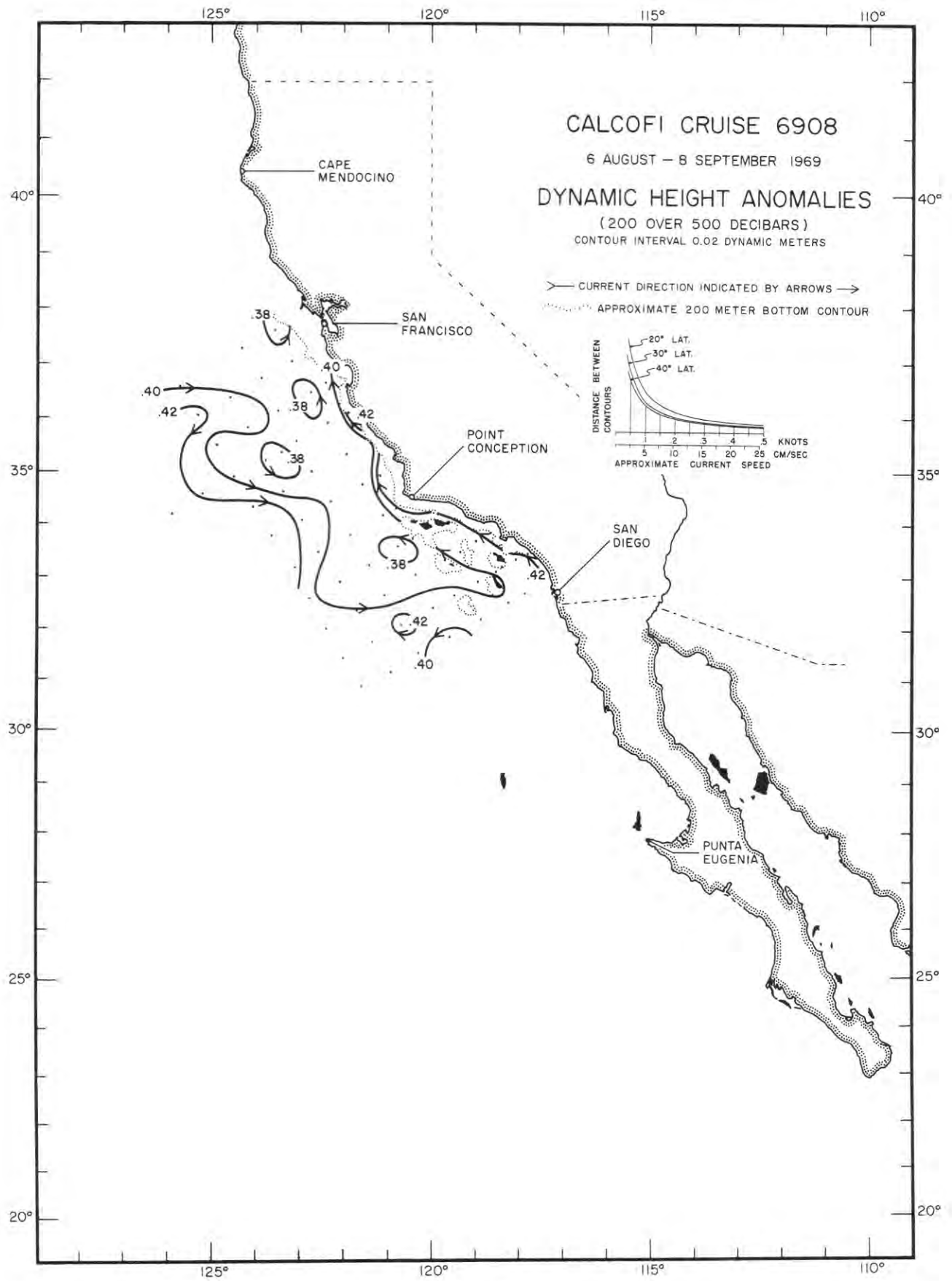


FIGURE 3

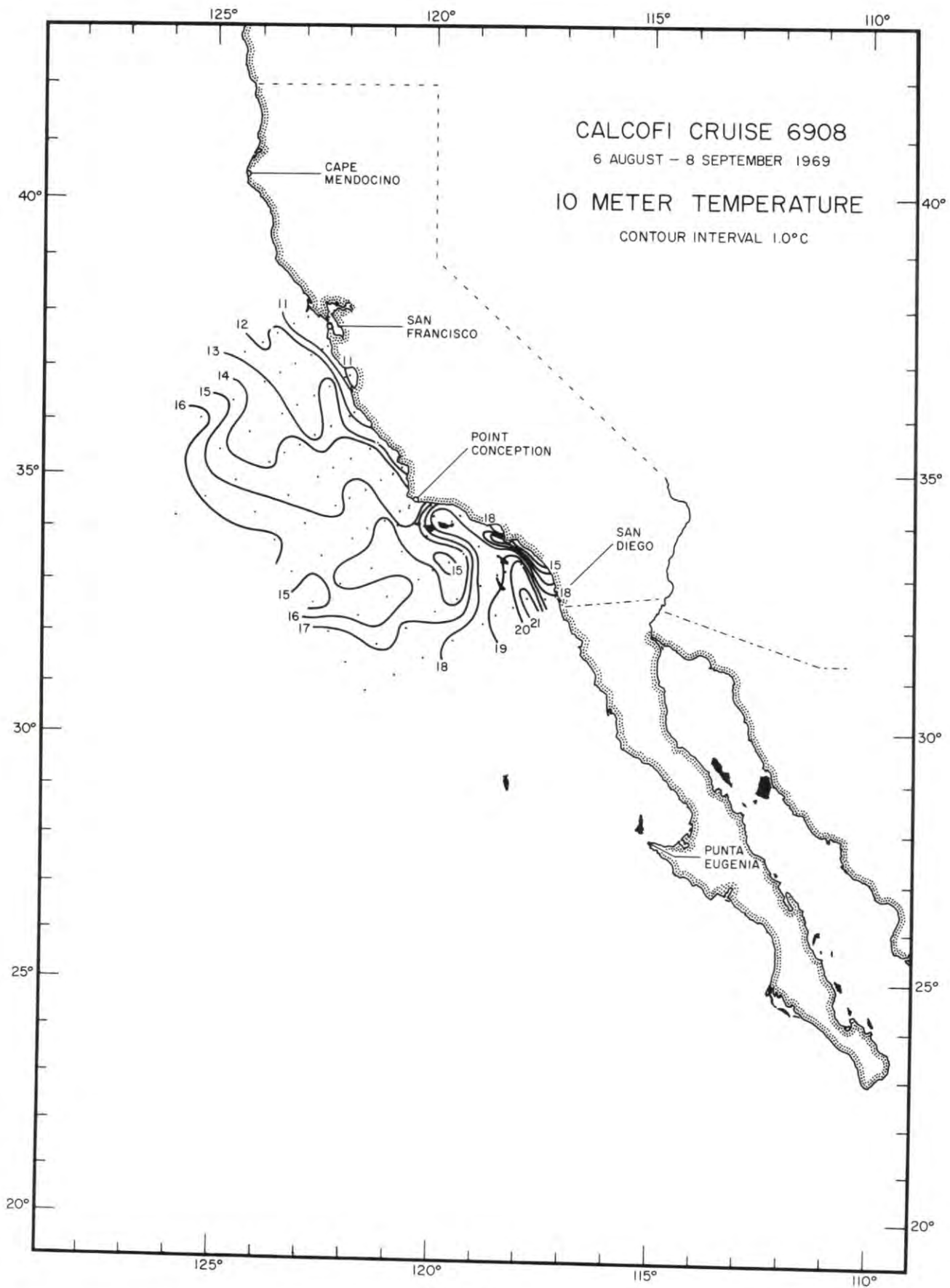


FIGURE 4

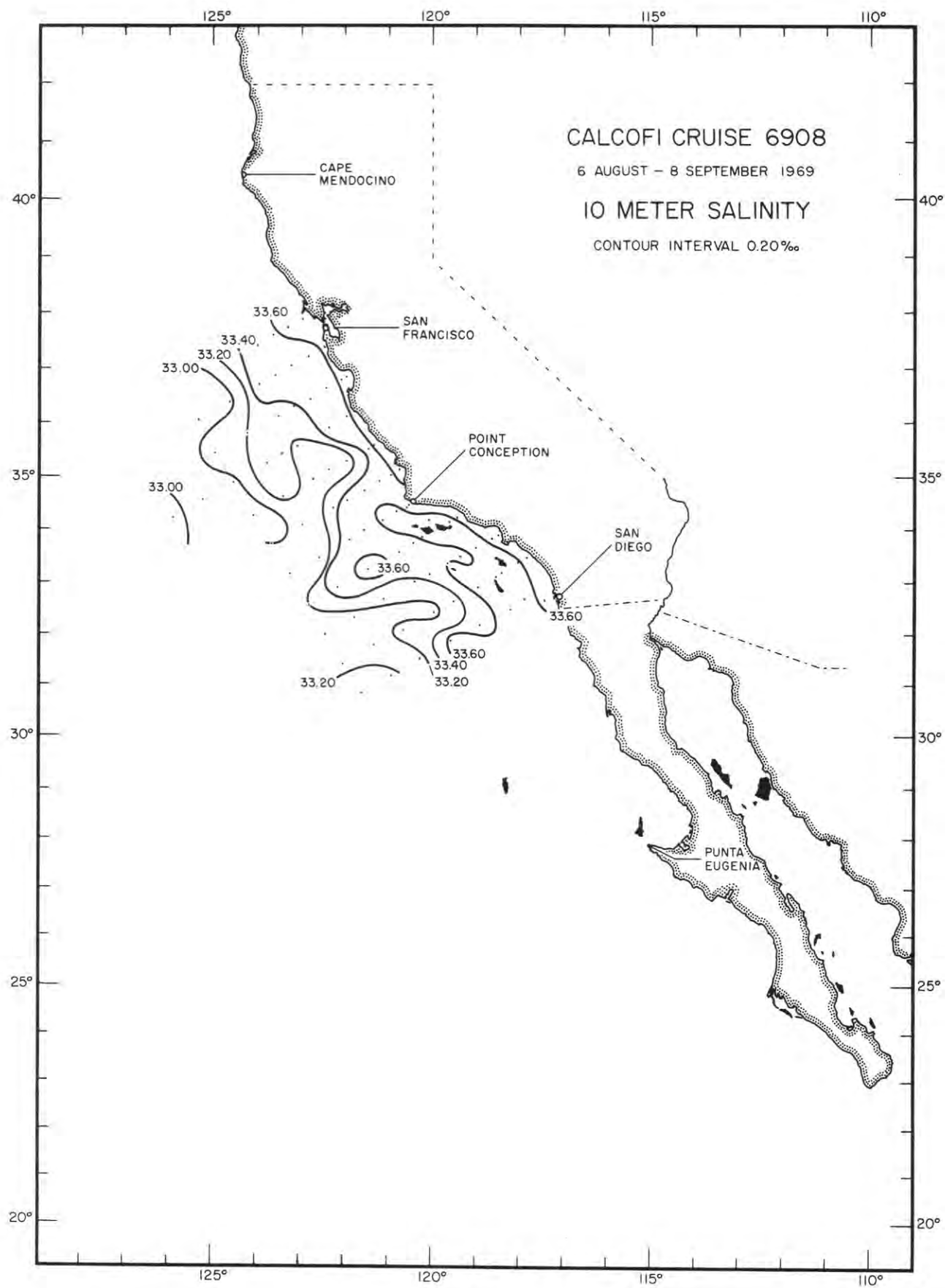


FIGURE 5

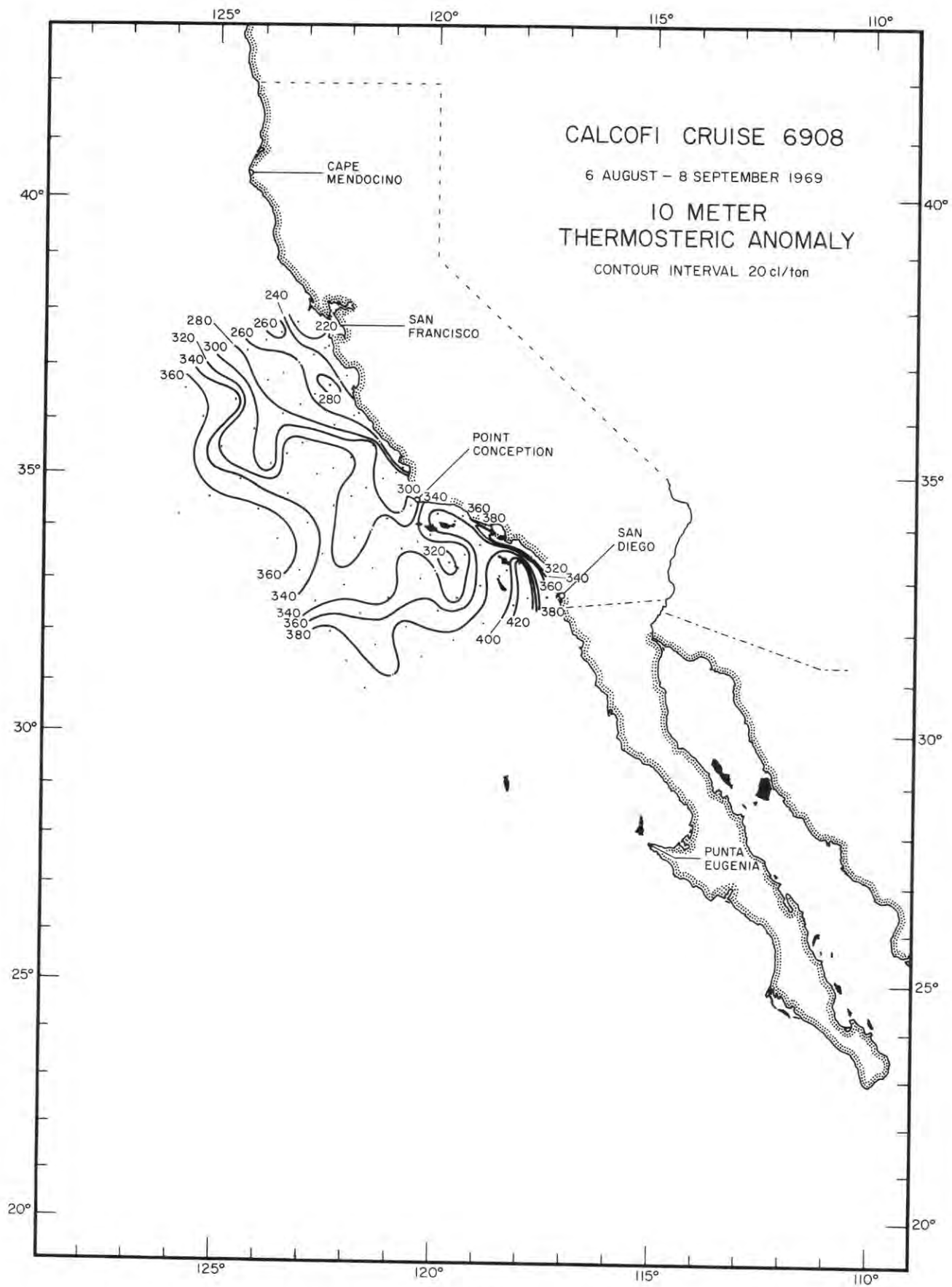


FIGURE 6

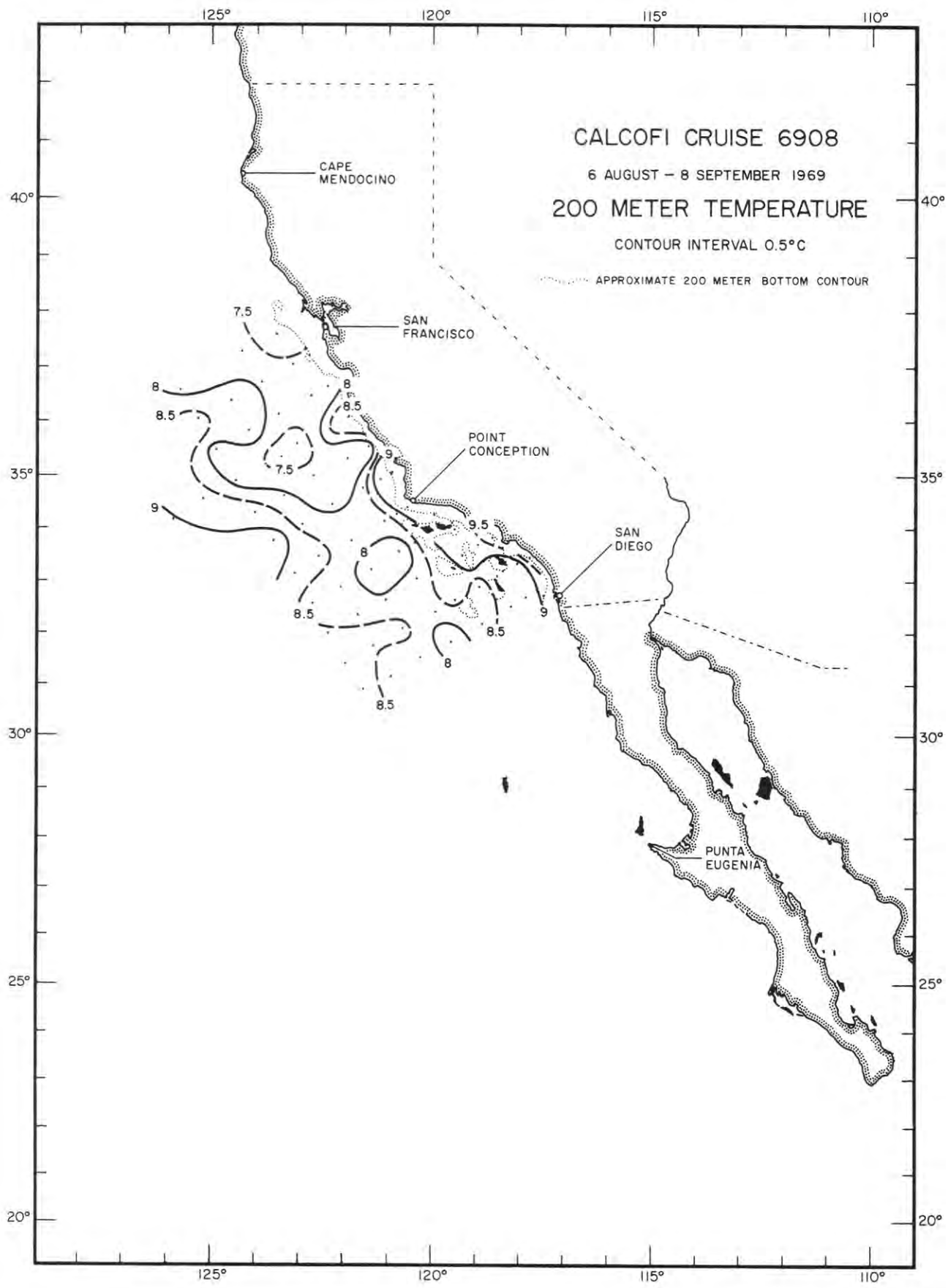


FIGURE 7

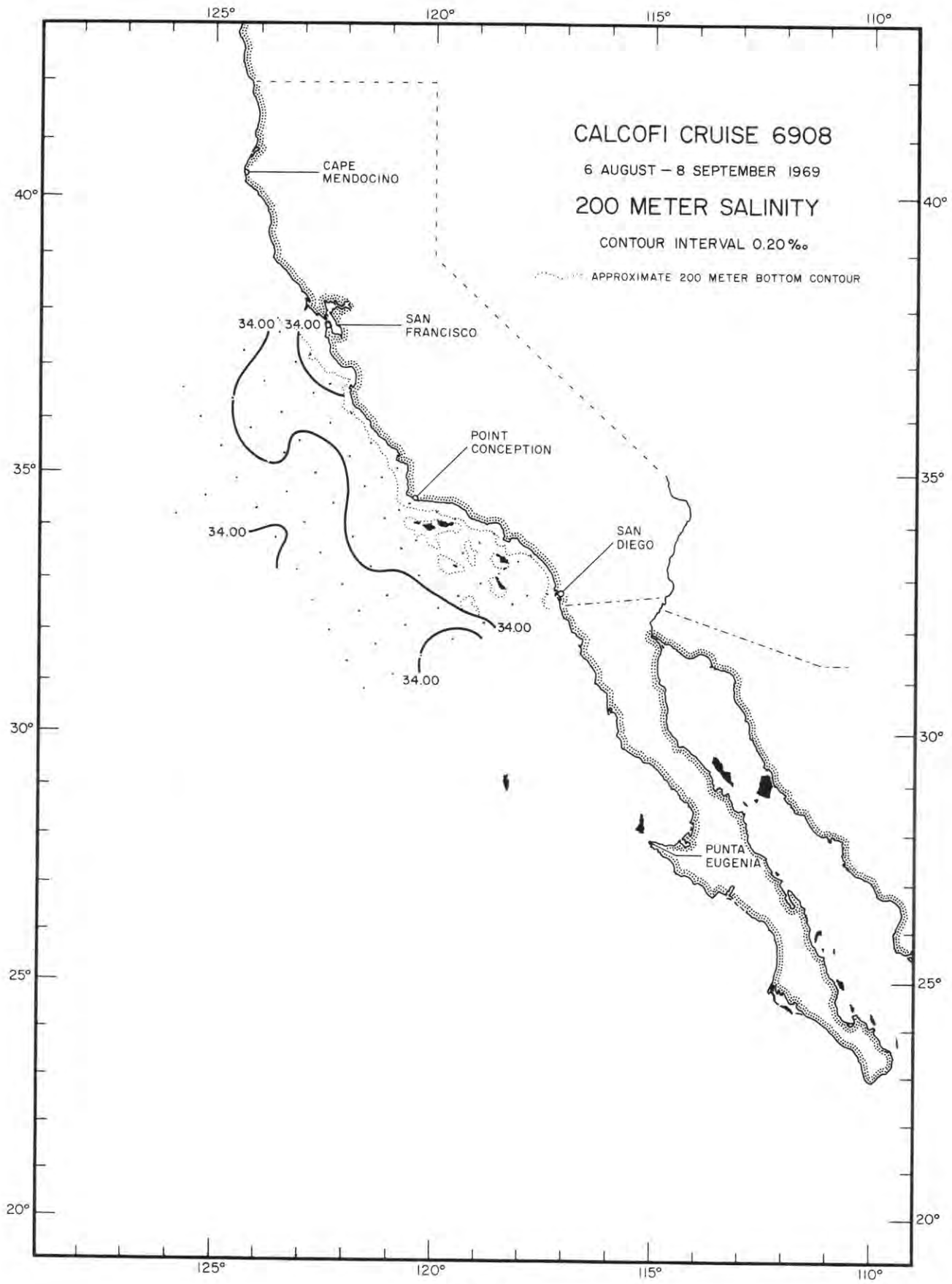


FIGURE 8

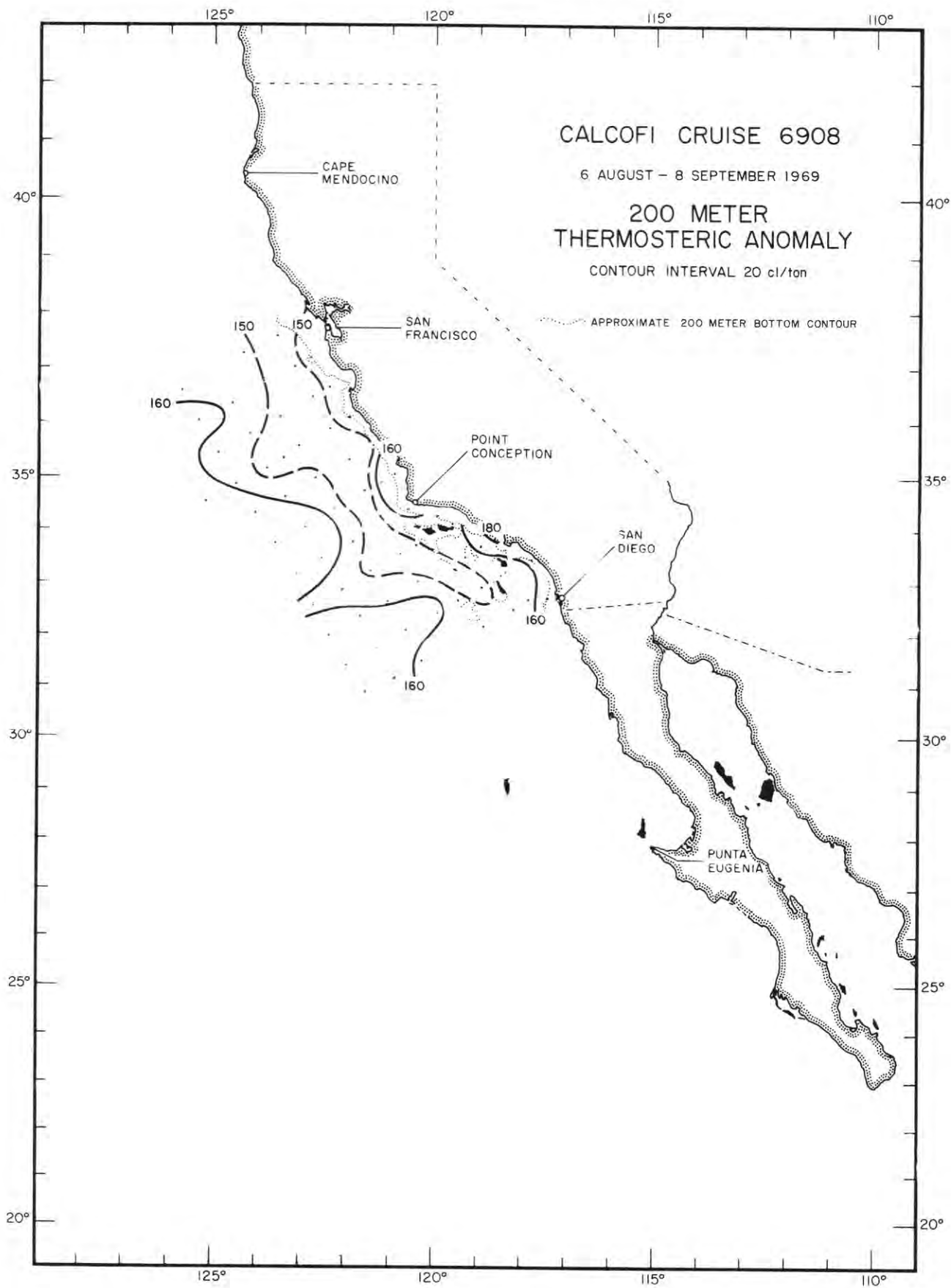


FIGURE 9

PERSONNEL

Cruise 6908 (North)

SHIP'S CAPTAIN

Davis, Laurence E., RV Alexander Agassiz

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV Alexander Agassiz:

Mead, Richard V., Marine Technician (in charge San Diego to Monterey) SIO
Hester, Arthur W., Marine Technician (in charge Monterey to San Diego) SIO
Bradley, Douglas C., Electronic Technician SIO
Brehm, Peter, Biological Technician BCF*
Bryan, Walter R., Marine Technician SIO
Ferris, Clayton A., Student Trainee SIO
Hearn, Gregory, Student Trainee SIO
Holts, David B., Biological Technician BCF*
Kimura, Makoto, Fishery Biologist BCF*
McMaster, Michael, Biological Technician BCF*
Metoyer, Jack D., Biological Technician BCF*
Palmer, Don H., Marine Technician SIO
Paloma, Pedro A., Fishery Biologist BCF*
Shor, Alexander, Student Trainee SIO
Thomas, James E., Marine Technician SIO
Tont, Sargun, Marine Technician SIO
Wirthington, Paul, Student Trainee SIO
Wooster, Daniel, Student Trainee SIO

*Bureau of Commercial Fisheries
now National Marine Fisheries Service
Southwest Fisheries Center

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

60052

Z	LATITUDE			MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND			WEATHER	DOMINANT WAVES		
	T	S	02		PO4	SI03	NO2	NO3		DT	Z	T		S	02	SIGT
	37	53.5N	123	08/10/69	1044				93M	330		1				
1	10.68	33.79	5.20					210.0	0	10.68	33.79	5.20	25.912	210.0	0	
10	10.31	33.81	4.90					202.4	10	10.31	33.81	4.90	25.992	202.4	.021	
19	9.09		2.85						20	9.07	33.82	2.80	26.205	182.1	.040	
29	8.94	33.89	2.34					174.9	30	8.93	33.89	2.34	26.283	174.7	.058	
49	8.85	33.93	2.26					170.6	50	8.85	33.93	2.26	26.326	170.6	.092	
73	8.76	33.93	2.08					169.3	75	8.72	33.94	2.05	26.354	168.0	.135	

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

60060

Z	LATITUDE			MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND			WEATHER	DOMINANT WAVES		
	T	S	02		PO4	SI03	NO2	NO3		DT	Z	T		S	02	SIGT
	37	37.0N	123	08/10/69	0356				3201M	340		1				
0									0	12.72	33.50		25.308	267.4	0	
10									10	12.72	33.51		25.316	266.6	.027	
20									20	12.62	33.51		25.335	264.8	.053	
30									30	9.83	33.64		25.941	207.2	.077	
50									50	9.04	33.69		26.108	191.3	.117	
75									75	8.93	33.83		26.235	179.2	.164	
100									100	8.59	33.90		26.343	169.0	.208	
125									125	8.27	33.96		26.439	159.9	.249	
150									150	8.04	34.01		26.512	152.9	.289	
200									200	7.26	34.02		26.633	141.5	.364	
250									250	6.79	34.07		26.737	131.6	.434	
300									300	6.46	34.12		26.821	123.7	.500	
400									400	6.09	34.20		26.932	113.2	.623	
500									500	5.63	34.26		27.036	103.2	.737	

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

60060

Z	LATITUDE			MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND			WEATHER	DOMINANT WAVES		
	T	S	02		PO4	SI03	NO2	NO3		DT	Z	T		S	02	SIGT
	37	37.0N	123	08/10/69	0514				3201M	340		1				
1	12.65	33.50	5.94					266.1								
11	12.65	33.51	5.96					265.3								
30	12.48		5.87													
53	9.31		3.57													
86	8.68		3.32													
115	8.43	33.96	2.93					162.2								
159	7.79		2.64													
212	7.22		2.22													
265	6.76		1.57													
319	6.39		1.20													
427	6.04	34.22	.66													
537	5.48	34.27	.53													

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

60070

Z	LATITUDE			MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND			WEATHER	DOMINANT WAVES		
	T	S	02		PO4	SI03	NO2	NO3		DT	Z	T		S	02	SIGT
	37	16.5N	124	08/09/69	1940				4493M	360		2				
0									0	12.77	33.41		25.229	274.9	0	
10									10	12.78	33.41		25.227	275.1	.028	
20									20	12.74	33.41		25.235	274.3	.055	
30									30	12.59	33.42		25.272	270.8	.082	
50									50	11.98	33.44		25.404	258.3	.135	
75									75	9.84	33.57		25.885	212.5	.195	
100									100	9.33	33.69		26.062	195.7	.246	
125									125	8.86	33.86		26.270	176.0	.293	
150									150	8.57	33.91		26.354	168.0	.337	
200									200	7.79	33.97		26.518	152.4	.418	
250									250	6.87	33.96		26.640	140.8	.493	
300									300	6.36	33.99		26.731	132.2	.564	
400									400	6.26	34.17		26.886	117.5	.693	
500									500	5.45	34.20		27.011	105.6	.811	

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6908 60070

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
37 16.5N		124 22.0W		08/09/69	2032 GMT				4493M	360	30KT	2	010 14 06		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	12.77	33.43	6.23		1.	.10	9.0	273.4							
10	12.74	33.39	6.11		0.	.09	8.8								
29	12.66		6.12		1.	.10	9.1								
53	12.23		5.90		4.	.03	11.6								
87	9.78		4.65		22.	.00	24.0								
116	9.16	33.68	3.91		26.	.01	26.5	193.8							
160	8.54		2.91		32.	.00	29.5								
215	7.56		2.68		42.	.00	32.0								
269	6.60		2.32												
323	6.17		1.85												
430	5.84	34.07	1.09												
540A	5.36	34.26	.77					100.1							

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6908 60090

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
36 36.5N		125 47.0W		08/09/69	0520 GMT				4569M	360	27KT	1	010 14 05		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0									0	15.69	32.80		24.149	377.7	0
10									10	15.69	32.80		24.149	377.7	.038
20									20	15.70	32.80		24.147	377.9	.076
30									30	15.69	32.81		24.157	377.0	.113
50									50	15.59	32.84		24.202	372.7	.189
75									75	11.47	32.92		25.095	287.6	.272
100									100	9.62	33.34		25.742	226.1	.336
125									125	9.05	33.68		26.099	192.2	.389
150									150	8.51	33.85		26.316	171.5	.435

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6908 60090

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
36 36.5N		125 47.0W		08/09/69	0608 GMT				4569M	360	27KT	1	010 14 05		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	15.67	32.83	5.75		2.	.02	.0	375.1	0	15.67	32.83	5.75	24.177	375.1	0
10	15.68	32.83	5.88		2.	.00	.0	375.3	10	15.68	32.83	5.88	24.174	375.3	.038
29	15.67	32.83	5.85		2.	.00	.1	375.1	20	15.67	32.83	5.86	24.176	375.2	.075
52	15.40	32.85	5.92		2.	.00	.0	368.0	30	15.66	32.83	5.85	24.180	374.8	.113
86	9.47	33.11	5.20		24.	.02	11.7	240.8	50	15.42	32.85	5.91	24.245	368.6	.187
114	9.13	33.65	3.72		27.	.01	25.1	195.6	75	11.42	32.94	5.55	25.121	285.2	.269
156	8.43	33.90	3.41		33.	.00	27.1	166.7	100	9.30	33.44	4.45	25.874	213.5	.332
209	7.80	34.01	2.61		43.	.00	30.8	149.6	125	8.95	33.76	3.64	26.173	185.1	.382
263	7.32	34.05	2.00					140.0	150	8.53	33.89	3.45	26.343	169.0	.427
316	6.74	34.08	1.51					130.2	200	7.89	34.00	2.75	26.528	151.4	.509
423	5.98	34.15	.93					115.6	250	7.43	34.04	2.13	26.628	142.0	.584
531	5.05	34.16	.74					104.2	300	6.91	34.07	1.65	26.721	133.1	.655
									400	6.13	34.14	1.02	26.877	118.3	.786
									500	5.33	34.16	.79	26.995	107.1	.904

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6908 63052

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
37 19.0N		122 36.0W		08/10/69	1835 GMT				84M	260	08KT	4	270 03 03		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	12.51	33.37						273.0	0	12.51	33.37		25.248	273.0	0
11	11.41	33.65						232.7	10	11.51	33.63		25.641	235.7	.025
21	10.54	33.67						216.5	20	10.61	33.67		25.832	217.5	.048
31	10.00	33.74						202.5	30	10.04	33.73		25.977	203.8	.069
50	9.30	33.82						185.6	50	9.30	33.82		26.168	185.6	.108
74	8.92														

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6908 63052

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
37 19.0N		122 36.0W		08/10/69	1905 GMT				84M	260	08KT	4	270 03 03		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0									0	11.96	33.52		25.469	252.0	0
10									10	10.96	33.53		25.660	233.9	.024
20									20	10.46	33.54		25.756	224.8	.047
30									30	9.84	33.54		25.861	214.8	.069
50									50	9.28	33.67		26.054	196.4	.111

A) THE DEPTH FOR THE LAST NANSEN BOTTLE WAS DETERMINED FROM AN EXTRAPOLATED DEPTH CURVE DUE TO MALFUNCTIONING OF THE UNPROTECTED THERMOMETER.

RV ALEXANDER AGASSIZ										CALCOPI CRUISE 6908					63055		
LATITUDE		LCNGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
37 12.5N		122 50.0W	08/10/69	2050 GMT			260M	340	13KT	2	300 10 08						
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD		
									0	12.56	33.52		25.355	262.9	0		
									10	12.44	33.52		25.378	260.7	.026		
									20	12.26	33.52		25.412	257.4	.052		
									30	11.49	33.53		25.564	243.0	.077		
									50	10.83	33.54		25.691	230.9	.125		
									75	9.72	33.64		25.959	205.5	.180		
									100	9.23	33.68		26.070	194.9	.230		
									125	8.55	33.82		26.287	174.4	.277		
									150	8.25	33.87		26.371	166.3	.320		
									200	7.52	33.94		26.534	150.9	.401		

RV ALEXANDER AGASSIZ										CALCOPI CRUISE 6908					63060		
LATITUDE		LCNGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
37 02.5N		123 11.0W	08/11/69	0038 GMT			1905M	330	19KT	2	300 10 06						
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD		
									0	12.64	33.58		25.385	260.0	0		
									10	12.63	33.58		25.387	259.8	.026		
									20	12.11	33.53		25.449	254.0	.052		
									30	10.42	33.20		25.499	249.2	.077		
									50	9.53	33.50		25.881	212.9	.123		
									75	9.55	33.88		26.174	185.0	.173		
									100	9.22	33.94		26.275	175.5	.219		
									125	8.68	33.99		26.399	163.7	.262		
									150	8.53	34.08		26.493	154.8	.302		
									200	8.00	34.05		26.550	149.4	.380		
									250	7.25	34.06		26.666	138.4	.454		
									300	6.90	34.08		26.730	132.3	.523		
									400	6.21	34.14		26.869	119.1	.654		
									500	5.78	34.25		27.010	105.7	.772		

RV ALEXANDER AGASSIZ										CALCOPI CRUISE 6908					63070		
LATITUDE		LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
36 42.0N		123 54.0W	08/11/69	0642 GMT			3918M		25KT		13 05						
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD		
									0	13.00	33.45		25.214	276.3	0		
									10	13.01	33.45		25.212	276.5	.028		
									20	13.00	33.45		25.214	276.3	.055		
									30	12.99	33.45		25.216	276.1	.083		
									50	10.52	33.00		25.326	265.7	.137		
									75	9.73	33.50		25.852	215.7	.198		
									100	9.23	33.72		26.102	191.9	.249		
									125	8.87	33.81		26.237	179.0	.296		
									150	8.47	33.91		26.376	165.9	.340		
									200	7.91	34.03		26.545	149.9	.420		
									300	6.82	34.08		26.660	138.9	.494		
									400	6.07	34.15		26.743	131.1	.564		
									500	5.28	34.18		26.893	116.9	.693		
													27.014	105.3	.809		

RV ALEXANDER AGASSIZ										CALCOPI CRUISE 6908					63080		
LATITUDE		LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
36 21.5N		124 36.5W	08/11/69	1230 GMT			4493M	350	30KT		350 16 06						
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD		
									0	14.82	32.97		24.469	347.2	0		
									10	14.81	32.97		24.471	347.0	.035		
									20	14.81	32.97		24.472	347.0	.069		
									30	14.81	32.97		24.472	347.0	.104		
									50	13.78	32.96		24.679	327.2	.172		
									75	11.05	33.16		25.357	262.7	.246		
									100	9.91	33.42		25.759	224.5	.307		
									125	9.47	33.62		25.982	203.2	.361		
									150	9.11	33.79		26.176	184.9	.411		
									200	8.45	34.00		26.444	159.4	.498		
									250	7.73	34.02		26.568	147.7	.577		
									300	6.99	34.03		26.680	137.0	.650		
									400	5.91	34.08		26.861	119.9	.784		
									500	5.07	34.15		27.016	105.1	.901		

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

63090

Z	LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND		SPEED	WEATHER		DOMINANT WAVES		
	T	S	O2	P04	SIO3	NO2	NO3	DT	4593M	Z	T	S	02	SIGT	DT	DD		
1	16.31	32.86	U							0	16.31	32.83		24.033	388.8	0		
11	16.30	32.83						388.6		10	16.30	32.83		24.035	388.6	.039		
45	16.25	32.87						384.6		20	16.29	32.84		24.046	387.5	.078		
69	12.28	32.98						297.5		30	16.27	32.85		24.058	386.4	.117		
98	10.88	33.00						271.6		50	15.45	32.88		24.263	366.9	.192		
128	9.63	33.40						221.8		75	11.83	32.98		25.075	289.5	.274		
178	8.90	33.80						181.0		100	10.78	33.02		25.297	268.4	.345		
238	7.99	33.95						156.7		125	9.74	33.35		25.734	226.9	.407		
298	7.02	33.94						144.3		150	9.21	33.61		26.022	199.5	.461		
358	6.31	33.96						133.8		200	8.57	33.89		26.334	169.8	.555		
473	5.88	34.16						113.6		250	7.79	33.95		26.505	153.6	.638		
597	4.81	34.20						98.6		300	6.99	33.94		26.608	143.9	.714		
										400	6.11	34.03		26.795	126.1	.854		
										500	5.65	34.18		26.970	109.5	.978		
										600	4.79	34.20		27.088	98.4	1.088		

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

67050

Z	LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND		SPEED	WEATHER		DOMINANT WAVES		
	T	S	O2	P04	SIO3	NO2	NO3	DT	103M	Z	T	S	02	SIGT	DT	DD		
										0	11.98	33.70		25.605	239.1	0		
										10	10.86	33.67		25.787	221.8	.023		
										20	9.76	33.76		26.046	197.2	.044		
										30	9.40	33.84		26.168	185.7	.063		
										50	9.17	33.93		26.275	175.5	.100		
										75	9.12	33.94		26.291	174.0	.143		

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

67050

Z	LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND		SPEED	WEATHER		DOMINANT WAVES		
	T	S	O2	P04	SIO3	NO2	NO3	DT	103M	Z	T	S	02	SIGT	DT	DD		
1	12.16	33.70	7.31	.64	15.	.04	.6	242.4		0	12.16	33.70	7.31	25.571	242.4	0		
11	11.68	33.71	6.27	.84	17.	.10	5.1	233.1		10	11.76	33.71	6.41	25.652	234.6	.024		
21	10.52	33.76	4.39	1.30	24.	.24	15.9	209.5		20	10.64	33.75	4.58	25.890	212.0	.046		
31	9.75	33.80	3.47	1.58	30.	.20	20.5	194.1		30	9.81	33.80	3.53	26.066	195.3	.067		
51	9.33	33.89	2.90	1.73	33.	.75	24.6	180.9		50	9.35	33.89	2.91	26.215	181.2	.104		
76	9.16	33.95	2.48	1.68	38.	.22	24.7	173.8		75	9.17	33.95	2.49	26.291	173.9	.149		

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

67055

Z	LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND		SPEED	WEATHER		DOMINANT WAVES		
	T	S	O2	P04	SIO3	NO2	NO3	DT	2037M	Z	T	S	02	SIGT	DT	DD		
										0	13.26	33.40		25.124	284.9	0		
										10	13.18	33.41		25.148	282.6	.028		
										20	11.50	33.40		25.462	252.7	.055		
										30	10.87	33.70		25.808	219.8	.079		
										50	9.86	33.72		25.998	201.8	.121		
										75	9.15	33.81		26.185	184.0	.170		
										100	8.90	33.89		26.287	174.3	.215		
										125	8.71	33.93		26.348	168.6	.258		
										150	8.48	33.98		26.422	161.5	.300		
										200	7.77	33.99		26.537	150.6	.380		
										250	7.33	34.06		26.655	139.4	.454		
										300	7.21	34.11		26.711	134.1	.525		
										400	6.72	34.16		26.817	124.0	.659		
										500	5.65	34.26		27.034	103.5	.779		

RV ALEXANDER AGASSIZ CALCOPI CRUISE 6908 67060

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
36 29.0N		122 48.0W		08/12/69		1758 GMT			2917M	360	21KT	0	340 15 06		
Z	T	S	O2	P04	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	13.05	33.51		25.251	272.8	0
									10	12.45	33.57		25.415	257.2	.027
									20	10.93	33.70		25.798	220.8	.050
									30	10.22	33.72		25.937	207.6	.072
									50	9.67	33.78		26.076	194.3	.112
									75	9.22	33.87		26.220	180.7	.159
									100	8.82	33.95		26.346	168.7	.204
									125	8.33	34.03		26.484	155.6	.245
									150	7.98	34.06		26.561	148.4	.283
									200	7.73	34.12		26.644	140.4	.357
									250	7.50	34.18		26.725	132.8	.427
									300	6.82	34.16		26.804	125.3	.494
									400	5.98	34.16		26.914	114.8	.619
									500	5.67	34.26		27.031	103.7	.734

RV ALEXANDER AGASSIZ CALCOPI CRUISE 6908 67070

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
36 07.5N		123 31.0W		08/12/69		1015 GMT			3588M	300	30KT	0	300 18 08		
Z	T	S	O2	P04	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	13.28	33.35		25.081	288.9	0
									10	13.28	33.35		25.081	288.9	.029
									20	13.29	33.36		25.087	288.4	.058
									30	13.21	33.36		25.103	286.9	.087
									50	10.06	33.40		25.715	228.6	.138
									75	9.42	33.60		25.977	203.7	.193
									100	8.97	33.78		26.190	183.6	.242
									125	8.55	33.83		26.294	173.6	.287
									150	8.18	33.89		26.398	163.8	.329
									200	7.75	34.01		26.555	148.9	.409
									250	7.38	34.04		26.632	141.6	.484
									300	7.03	34.10		26.728	132.5	.554
									400	6.30	34.16		26.873	118.7	.685
									500	5.45	34.17		26.987	107.9	.804

RV ALEXANDER AGASSIZ CALCOPI CRUISE 6908 67080

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
35 47.5N		124 12.5W		08/12/69		0440 GMT			4683M	330	25KT	0	300 18 08		
Z	T	S	O2	P04	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	13.33	33.18		24.940	302.4	0
									10	13.32	33.18		24.942	302.2	.030
									20	13.33	33.18		24.940	302.4	.061
									30	13.33	33.18		24.940	302.4	.091
									50	10.36	33.24		25.540	245.3	.146
									75	9.70	33.64		25.962	205.1	.202
									100	9.35	33.83		26.168	185.6	.252
									125	9.07	33.91		26.275	175.4	.297
									150	8.83	33.97		26.360	167.4	.341
									200	8.28	34.04		26.500	154.1	.423
									250	7.81	34.09		26.609	143.8	.499
									300	7.55	34.12		26.670	137.9	.572
									400	6.63	34.17		26.837	122.1	.707
									500	5.83	34.19		26.956	110.8	.830

RV ALEXANDER AGASSIZ CALCOPI CRUISE 6908 67090

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
35 29.0N		124 56.0W		08/11/69		2250 GMT			4593M	360	22KT	0	300 14 05		
Z	T	S	O2	P04	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	14.18	33.15		24.751	320.3	0
									10	14.05	33.15		24.770	318.5	.032
									20	13.98	33.17		24.800	315.7	.064
									30	13.98	33.17		24.800	315.7	.095
									50	13.41	33.34		25.048	292.1	.156
									75	9.76	33.46		25.812	219.4	.221
									100	9.18	33.74		26.125	189.7	.272
									125	8.96	33.90		26.285	174.5	.318
									150	8.70	33.95		26.365	166.9	.362
									200	7.91	33.95		26.485	155.6	.444
									250	7.08	33.99		26.635	141.3	.520
									300	6.61	34.03		26.730	132.3	.590
									400	5.73	34.08		26.882	117.9	.720
									500	5.15	34.15		27.007	106.0	.837

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

70053

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
36 06.5N		121 54.0W		08/15/69		0305 GMT			1077M	340	13KT	4	300 05 07		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	12.09	33.60		25.507	248.5	0
									10	12.02	33.59		25.512	247.9	.025
									20	11.62	33.59		25.587	240.8	.049
									30	11.49	33.61		25.626	237.1	.073
									50	9.76	33.60		25.921	209.1	.118
									75	9.60	33.87		26.158	186.6	.168
									100	9.31	34.00		26.307	172.4	.213
									125	9.02	34.06		26.400	163.6	.256
									150	8.88	34.09		26.446	159.2	.297
									200	8.74	34.14		26.507	153.4	.376
									250	8.49	34.17		26.569	147.5	.454
									300	8.17	34.18		26.626	142.1	.529
									400	6.98	34.13		26.758	129.6	.670
									500	5.58	34.11		26.924	113.9	.798

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

70053

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
36 06.5N		121 54.0W		08/15/69		0400 GMT			1077M	340	13KT	4	300 05 07		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	12.08	33.60	5.82		6.			248.3							
11	11.95	33.61	5.79	.57	5.	.00		245.2							
30	11.52		5.39	.55	9.	.00									
49	9.85		4.27	.80	14.	.04									
78	9.40		3.42	.76	19.	.00									
106	9.39	33.98	2.72	1.19	23.	.00		175.1							
119A	9.14		2.85	1.35	25.	.00									
158A	8.93		2.12	1.54	35.	.00									

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

70060

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
35 54.0N		122 24.5W		08/15/69		1415 GMT			3078M	340	16KT	0	300 08 05		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	13.69	33.58		25.176	280.0	0
									10	13.48	33.60		25.234	274.4	.028
									20	13.17	33.59		25.289	269.2	.055
									30	10.74	33.58		25.738	226.5	.080
									50	9.74	33.75		26.041	197.6	.122
									75	9.30	33.87		26.207	181.9	.170
									100	9.17	34.02		26.345	168.8	.214
									125	9.04	34.07		26.405	163.1	.256
									150	8.86	34.12		26.473	156.7	.297
									200	8.59	34.17		26.562	148.2	.375
									250	7.02	34.02		26.666	138.3	.448
									300	6.73	34.08		26.753	130.1	.518
									400	6.10	34.16		26.899	116.3	.646
									500	5.26	34.18		27.018	105.0	.762

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

70060

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
35 54.0N		122 24.5W		08/15/69		1510 GMT			3078M	340	16KT	0	300 08 05		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	13.94	33.58	5.93	.66	7.	.00		284.9							
10	13.59	33.60	6.31	.62	3.	.01		276.6							
30	11.86	33.62	5.23	1.00	11.	.32		242.9							
40	10.31		3.86	1.39	22.	.26									
50	9.86		3.61	1.56	26.	.66									
64	9.45		3.12	1.60	31.	.16									
79	9.24		2.83	1.78	34.	.03									
99	9.22		2.43	1.87		.16									
124	9.11	34.10	2.07	1.87		.11		162.0							
144	8.91		1.94	1.93		.00									
174	8.74		1.78	2.05	46.	.09									
205	8.35		1.70	1.95	50.	.03									
235	7.56		2.10												
274	6.82		1.77												
334	6.57		1.30												
409	6.11		.93												
483	5.29	34.16	.82					106.8							
564	5.02	34.28	.49					94.9							

A) THESE NANSEN BOTTLES POSTTRIPPED CAUSING THE DEPTHS TO BE SLIGHTLY UNCERTAIN.

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

70070

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD		
									0	14.59	33.17		24.672	327.9	0		
									10	14.59	33.17		24.672	327.9	.033		
									20	14.59	33.17		24.672	327.9	.066		
									30	12.11	33.18		25.178	279.7	.096		
									50	9.79	33.62		25.932	208.0	.145		
									75	9.34	33.79		26.138	188.4	.195		
									100	8.99	33.85		26.241	178.7	.241		
									125	8.32	33.87		26.361	167.3	.285		
									150	7.97	33.94		26.468	157.1	.326		
									200	7.37	33.98		26.586	145.9	.403		
									250	6.96	34.03		26.683	136.8	.476		
									300	6.27	34.03		26.774	128.1	.544		
									400	5.75	34.14		26.927	113.6	.669		
									500	5.50	34.24		27.036	103.2	.783		

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

70070

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD		
									35 33.5N	123 06.5W	08/16/69	0327 GMT	3918M	330	21KT	1	330 08 06
1	14.56		5.80	.88	2.	.03	1.9										
11	14.56		5.83	.98	2.	.02	2.3										
30	14.56		5.98	.90	2.	.02	2.1										
53	9.79		3.97	1.84	26.	.26	22.5										
87	9.15		3.22	2.520	44.0	.00	32.30										
115	8.48	33.91	3.27	2.16	43.	.00	28.7	166.7									
160	7.95		2.83	2.41	53.	.01	33.5										
213	7.31		2.48	2.35	56.	.02	31.7										
267	6.64		1.86														
321	5.98		1.64														
431	5.98	34.22	.92					110.4									
541	5.21	34.28	.75					97.0									

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

70075

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD		
									35 20.5N	123 27.0W	08/16/69	1440 GMT	3768M	300	25KT	1	300 10 06
									0	14.55	33.21		24.711	324.1	0		
									10	14.54	33.21		24.714	323.9	.032		
									20	12.23	33.49		25.395	259.1	.062		
									30	11.66	33.52		25.525	246.7	.087		
									50	9.94	33.61		25.899	211.2	.133		
									75	9.27	33.72		26.095	192.5	.184		
									100	9.01	33.86		26.246	178.2	.230		
									125	8.67	33.93		26.354	168.0	.274		
									150	8.24	33.94		26.428	161.0	.316		
									200	7.48	34.01		26.594	145.2	.394		
									250	6.82	34.03		26.702	135.0	.466		
									300	6.29	34.07		26.803	125.3	.533		
									400	5.71	34.15		26.940	112.4	.656		
									500	5.32	34.25		27.066	100.4	.768		

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

70075

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD		
									35 20.5N	123 27.0W	08/16/69	1532 GMT	3768M	300	25KT	1	300 10 06
1	14.54	33.24	6.05	.55	2.	.01	1.7	322.8									
11	14.56	33.25	6.07	.98	9.	.15	8.4	321.4									
31	12.41	33.52	6.11	1.08	12.	.20	10.3	260.2									
41	11.39		5.52	1.23		.83	12.9										
50	10.30		4.85	1.42		.36	17.9										
64	9.84		4.04	1.71	25.	.14	22.7										
79	9.42		3.56	1.78	33.	.39	22.2										
99	9.05		3.21	1.93	36.	.21	25.6										
124	8.77	33.95	2.92		38.	.00	26.9	168.0									
145	8.55		2.68		40.	.01	25.3										
174	7.87		3.16		47.	.08	27.4										
205	7.48		2.58		54.	.00	29.8										
234	7.19		2.17														
274	6.66		1.87														
335	6.18		1.44														
410	5.67		.89														
483	5.50	34.26	.57					101.7									
563	5.06	34.31	.26					93.0									

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

70080

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
35 11.0N		123 48.0W		08/17/69		1243 GMT			4116M	350	20KT				
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	14.03	33.34		24.921	304.2	0
									10	13.93	33.40		24.987	297.9	.030
									20	13.75	33.40		25.025	294.3	.060
									30	12.11	33.45		25.387	259.9	.088
									50	9.92	33.56		25.863	214.5	.135
									75	9.21	33.63		26.035	198.3	.187
									100	8.93	33.83		26.235	179.2	.235
									125	8.53	33.92		26.368	166.6	.278
									150	8.23	33.98		26.461	157.9	.320
									200	7.50	34.00		26.583	146.2	.397
									250	6.89	34.02		26.684	136.6	.470
									300	6.35	34.05		26.780	127.6	.538
									400	5.85	34.16		26.930	113.3	.663
									500	5.49	34.25		27.045	102.4	.776

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

70080

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
35 11.0N		123 48.0W		08/17/69		1325 GMT			4116M	350	20KT				
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	14.03	33.36	A	.88	4.	.03	4.6	302.8							
11	14.00	33.35	A	.84	4.	.06	4.7	302.9							
30	13.45			6.71	.94	6.	.05	6.7							
55	10.07			A	1.69	20.	.60	19.6							
90	9.05			4.02	1.65	23.	.00	20.6							
120	8.79	33.90		A	1.92	33.	.00	25.5	172.0						
165	8.18			2.54	2.02	41.	.00	29.2							
220	7.29			A	2.19	51.	.00	31.6							
275	6.82				1.74										
330	6.28				1.39										
439	5.77	34.19			.66				110.1						
548	5.26	34.27			.38				98.1						

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

70090

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 51.5N		124 31.0W		08/17/69		1825 GMT			4317M	300	14KT	2	300 08 05		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	14.76	32.97		24.482	346.0	0
									10	14.76	32.97		24.482	346.0	.035
									20	14.64	33.00		24.531	341.3	.069
									30	14.07	32.94		24.604	334.3	.103
									50	12.14	32.87		24.933	303.1	.167
									75	10.95	32.91		25.181	279.4	.240
									100	10.30	33.48		25.737	226.6	.304
									125	9.17	33.61		26.025	199.2	.357
									150	8.86	33.80		26.223	180.4	.406
									200	7.93	33.91		26.450	158.8	.492
									250	7.36	33.99		26.595	145.0	.570
									300	6.55	33.99		26.706	134.5	.642
									400	5.86	34.08		26.866	119.4	.773
									500	5.41	34.17		26.992	107.4	.892

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

70090

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 51.5N		124 31.0W		08/17/69		1920 GMT			4317M	300	14KT	2	300 08 05		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	14.82	32.98	6.03	.51	2.	.00	.3	346.5							
11	14.77	32.97	6.05	.51	2.	.00	.2	346.2							
31	14.11	32.95	6.12	.53	2.	.02	.8	334.4							
41	12.64			6.41	.38	2.	.00	.0							
49	12.17			6.29	.42	2.	.00	.0							
64	11.38			6.19	.45	4.	.00	.0							
79	10.59			5.94	.57	4.	.18	1.9							
98	10.31			4.76	1.30	15.	.64	15.0							
123	9.16	33.64		4.84	1.17	15.	.12	15.0	196.8						
144	8.88			3.96	1.48	26.	.02	19.9							
174	8.45			3.02	1.85	36.	.16	26.7							
204	7.99			3.60	1.78	36.	.13	26.2							
234	7.47				3.43										
273	7.30				2.20										
333	6.60				1.65										
408	5.92				1.13										
482	5.48	34.15			.75				109.7						
561	5.32	34.28			.32				98.2						

A) THESE OXYGEN SAMPLES WERE LOST DUE TO EQUIPMENT MALFUNCTIONING.

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6908					70100		
LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 33.5N			125 12.0W			08/19/69		0121 GMT			4688M	010	15KT	2	350 05 05		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD		
									0	16.06	32.85		24.105	382.0	0		
									10	15.97	32.87		24.140	378.6	.038		
									20	15.85	32.85		24.152	377.5	.076		
									30	15.41	32.88		24.272	366.0	.113		
									50	14.44	33.04		24.604	334.4	.183		
									75	12.23	32.89		24.931	303.2	.263		
									100	11.28	33.26		25.393	259.2	.334		
									125	10.68	33.50		25.686	231.4	.396		
									150	9.79	33.68		25.979	203.6	.451		
									200	8.54	33.87		26.327	170.5	.546		
									250	7.72	33.94		26.505	153.7	.629		
									300	7.13	34.00		26.636	141.2	.705		
									400	6.02	34.06		26.830	122.8	.842		
									500	5.42	34.13		26.959	110.5	.965		

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6908					70100		
LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 33.5N			125 12.0W			08/19/69		0204 GMT			4688M	010	15KT	2	350 05 05		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD		
1	16.03	32.86	5.78		2.	.00	.1	380.6									
11	16.03	32.85	5.79		2.	.00	.1	381.3									
31	15.54		5.87		1.	.00	.0										
56	14.37		6.02		3.	.23	1.5										
91	11.64		6.26		3.	.01	.0										
120	10.85	33.25	5.40		10.	.54	9.4										
150A	9.84		4.77		26.	.25	24.0										
234A	7.87		3.48														
394A	6.17	34.07	1.50					123.9									
544A	5.25	34.17	.62					105.6									

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6908					70110		
LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 12.5N			125 53.5W			08/19/69		2305 GMT			4688M	010	17KT	2	350 06 05		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD		
									0	16.71	33.12		24.163	376.4	0		
									10	16.67	33.11		24.164	376.3	.038		
									20	16.58	33.11		24.185	374.3	.075		
									30	16.55	33.12		24.200	372.9	.113		
									50	16.49	33.11		24.206	372.3	.187		
									75	12.87	32.98		24.877	308.4	.273		
									100	12.03	33.24		25.239	273.9	.346		
									125	11.63	33.35		25.399	258.7	.413		
									150	9.90	33.55		25.859	215.0	.473		
									200	8.99	33.86		26.249	177.9	.573		
									250	8.43	33.97		26.422	161.5	.660		
									300	7.77	34.02		26.560	148.4	.740		
									400	6.51	34.04		26.751	130.3	.885		
									500	5.93	34.18		26.936	112.7	1.012		

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6908					70110		
LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 12.5N			125 53.5W			08/20/69		0005 GMT			4688M	010	17KT	2	350 06 05		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD		
1	16.73	33.11	5.70	.42	1.	.01	.0	377.6									
11	16.67	33.11	5.67	.45	1.	.00	.0	376.3									
31	16.58	33.11	5.77	.42	1.	.00	.0	374.3									
41	16.53		5.70	.42	1.	.00	.1										
51	16.51		5.69		1.	.02	.2										
65	16.49		5.71	.42	1.	.00	.2										
80	13.03			.51	2.	.01	.2										
100	12.71		5.65	.42	2.	.00	.2										
123	11.68	33.25	5.60	.76	6.	.09	6.7	266.9									
144	10.69		5.02	.94	9.	.05	11.3										
173	9.47		4.27	1.35	19.	.02	20.3										
203	9.03		3.81	1.56	26.	.02	24.5										
232	8.63		3.13														
272	8.24		2.51														
332	7.42		2.08														
405	6.56		1.41														
479	5.82	34.14	.90					114.4									
560	5.66	34.24	.44					105.1									

A) THESE NANSSEN BOTTLES POSTSTRIPPED CAUSING THE DEPTHS TO BE SLIGHTLY UNCERTAIN.

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

73053

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
35 32.0N		121 29.0W		08/21/69		1307 GMT			741M	340	04KT	4	300 03 06		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
									0	14.88	33.52		24.879	308.2	0
									10	14.64	33.50		24.915	304.7	.031
									20	14.58	33.50		24.928	303.5	.061
									30	13.08	33.46		25.206	277.0	.090
									50	10.92	33.62		25.725	227.7	.141
									75	9.70	33.79		26.079	194.0	.194
									100	9.34	33.91		26.232	179.6	.241
									125	8.80	33.94		26.342	169.1	.285
									150	8.41	33.95		26.410	162.7	.327
									200	7.79	34.02		26.557	148.7	.407
									250	7.38	34.06		26.648	140.1	.481
									300	7.72	34.22		26.724	132.8	.551
									400	6.18	34.16		26.888	117.3	.681
									500	5.87	34.24		26.991	107.5	.800

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

73060

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
35 18.5N		121 58.0W		08/21/69		0924 GMT			2576M	300	08KT		330 04 06		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
									0	14.64	33.08		24.592	335.5	0
									10	14.64	33.08		24.592	335.5	.034
									20	13.41	32.97		24.762	319.3	.066
									30	11.10	32.92		25.162	281.2	.096
									50	10.31	33.12		25.455	253.4	.150
									75	9.44	33.56		25.943	207.0	.208
									100	8.96	33.73		26.152	187.1	.258
									125	8.66	33.85		26.293	173.7	.303
									150	8.40	33.93		26.396	164.0	.346
									200	7.62	34.01		26.574	147.1	.425
									250	7.22	34.07		26.678	137.2	.498
									300	6.93	34.14		26.773	128.2	.567
									400	5.75	34.10		26.895	116.6	.694
									500	5.31	34.20		27.028	104.1	.810

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

73070

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
35 00.0N		122 41.5W		08/21/69		0317 GMT			4110M	330	18KT		330 05 06		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
									0	14.88	33.18		24.618	333.1	0
									10	14.88	33.18		24.618	333.1	.033
									20	14.60	33.30		24.770	318.6	.066
									30	14.54	33.30		24.783	317.4	.098
									50	12.27	33.24		25.194	278.2	.158
									75	9.70	33.57		25.908	210.3	.219
									100	9.11	33.75		26.144	187.9	.269
									125	8.90	33.87		26.271	175.8	.315
									150	8.41	33.91		26.378	165.6	.358
									200	7.86	33.98		26.516	152.6	.440
									250	7.30	34.04		26.643	140.5	.515
									300	6.84	34.07		26.730	132.2	.585
									400	5.88	34.12		26.895	116.6	.714
									500	5.47	34.25		27.048	102.1	.829

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

73080

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 36.5N		123 24.0W		08/20/69		2210 GMT			4116M	340	18KT	2	350 06 08		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
									0	14.86	33.21		24.645	330.5	0
									10	14.83	33.21		24.652	329.8	.033
									20	14.83	33.21		24.652	329.8	.066
									30	14.79	33.24		24.683	326.8	.099
									50	14.19	33.15		24.741	321.3	.164
									75	10.97	33.14		25.356	262.8	.237
									100	9.69	33.54		25.886	212.4	.297
									125	9.13	33.66		26.071	194.9	.349
									150	8.78	33.79		26.228	180.0	.396
									200	8.07	33.94		26.462	157.7	.482
									250	7.30	34.01		26.620	142.7	.559
									300	7.06	34.10		26.724	132.9	.630
									400	5.78	34.09		26.884	117.7	.760
									500	5.59	34.21		27.002	106.5	.878

RV ALEXANDER AGASSIZ										CALCOPI CRUISE 6908				73090			
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
34 19.0N		124 02.0W		08/20/69		1705 GMT		4021M		010		14KT		2		350 06 05	
Z	T	S	OZ	P04	SI03	NO2	NO3	DT	Z	T	S	OZ	SIGT	DT	DD		
									0	15.73	32.83		24.163	376.4	0		
									10	15.70	32.86		24.193	373.5	.038		
									20	15.54	32.89		24.251	368.0	.075		
									30	15.23	32.90		24.327	360.8	.111		
									50	14.43	32.99		24.568	337.8	.181		
									75	14.15	33.53		25.042	292.7	.260		
									100	13.14	33.48		25.210	276.7	.332		
									125	11.14	33.52		25.620	237.7	.397		
									150	9.80	33.55		25.869	214.0	.454		
									200	8.83	33.88		26.290	174.0	.553		
									250	7.82	33.96		26.506	153.6	.637		
									300	7.20	33.98		26.610	143.7	.713		
									400	6.11	34.02		26.787	126.9	.854		
									500	5.48	34.11		26.936	112.7	.979		

RV ALEXANDER AGASSIZ										CALCOPI CRUISE 6908				77051			
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
35 02.0N		120 56.5W		08/21/69		2150 GMT		307M		340		10KT		2		340 04 06	
Z	T	S	OZ	P04	SI03	NO2	NO3	DT	Z	T	S	OZ	SIGT	DT	DD		
									0	14.57	33.58		24.992	297.5	0		
									10	14.42	33.58		25.023	294.4	.030		
									20	12.89	33.56		25.321	266.1	.058		
									30	12.30	33.55		25.420	256.7	.084		
									50	10.80	33.66		25.790	221.6	.132		
									75	10.13	33.70		25.937	207.6	.186		
									100	9.77	33.86		26.122	190.0	.236		
									125	9.53	33.94		26.224	180.3	.283		
									150	9.36	33.98		26.283	174.7	.328		
									200	9.09	34.07		26.397	163.9	.414		
									250	8.86	34.13		26.481	156.0	.496		

RV ALEXANDER AGASSIZ										CALCOPI CRUISE 6908				77055			
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
34 54.5N		121 12.5W		08/22/69		0029 GMT		556M		320		11KT		2		310 04 05	
Z	T	S	OZ	P04	SI03	NO2	NO3	DT	Z	T	S	OZ	SIGT	DT	DD		
									0	14.90	33.58		24.921	304.2	0		
									10	14.20	33.58		25.070	290.0	.030		
									20	12.15	33.68		25.557	243.7	.056		
									30	11.43	33.74		25.738	226.5	.080		
									50	10.28	33.76		25.958	205.6	.123		
									75	9.90	33.83		26.077	194.3	.174		
									100	9.71	33.88		26.148	187.5	.222		
									125	9.52	33.96		26.241	178.6	.268		
									150	9.42	34.00		26.289	174.1	.313		
									200	9.15	34.08		26.395	164.0	.399		
									250	8.79	34.15		26.507	153.4	.481		
									300	8.43	34.20		26.602	144.4	.558		
									400	7.10	34.14		26.750	130.4	.701		
									500	6.04	34.24		26.969	109.6	.827		

RV ALEXANDER AGASSIZ										CALCOPI CRUISE 6908				77060			
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
34 44.5N		121 35.0W		08/22/69		0349 GMT		966M		300		10KT		2		300 05	
Z	T	S	OZ	P04	SI03	NO2	NO3	DT	Z	T	S	OZ	SIGT	DT	DD		
									0	15.17	33.52		24.816	314.2	0		
									10	15.17	33.52		24.816	314.2	.031		
									20	11.59	33.49		25.127	284.6	.061		
									30	12.46	33.38		25.266	271.4	.089		
									50	10.54	33.50		25.711	229.0	.139		
									75	9.93	33.68		25.955	205.8	.194		
									100	9.69	33.84		26.120	190.2	.244		
									125	9.28	33.92		26.249	177.9	.291		
									150	8.76	34.02		26.410	162.6	.334		
									200	8.17	34.14		26.595	145.1	.412		
									250	7.87	34.21		26.694	135.7	.485		
									300	6.60	34.06		26.755	129.9	.553		
									400	6.05	34.14		26.889	117.2	.681		
									500	5.80	34.23		26.992	107.5	.800		

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

77070

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 25.0N		122 17.0W		08/22/69		0915 GMT				3976M	020	16KT				
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0									0	15.19	33.06		24.459	348.2	0	
10									10	14.87	33.25		24.674	327.7	.034	
20									20	14.54	33.33		24.806	315.2	.066	
30									30	14.50	33.35		24.830	312.9	.097	
50									50	12.31	32.96		24.970	299.5	.159	
75									75	10.45	33.28		25.556	243.8	.227	
100									100	9.68	33.54		25.888	212.2	.285	
125									125	9.25	33.70		26.083	193.7	.336	
150									150	8.70	33.86		26.295	173.6	.382	
200									200	7.98	33.94		26.467	157.3	.467	
250									250	7.18	33.96		26.597	144.9	.544	
300									300	6.57	34.00		26.712	134.0	.616	
400									400	5.65	34.05		26.868	119.2	.747	
500									500	5.58	34.25		27.039	102.9	.864	

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

77080

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 04.0N		122 58.0W		08/22/69		1419 GMT				4135M	340	20KT	2	360 06 05		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0									0	15.27	33.04		24.434	350.5	0	
10									10	15.20	33.04		24.441	349.9	.035	
20									20	15.10	33.04		24.443	349.7	.070	
30									30	15.17	33.04		24.448	349.3	.105	
50									50	13.27	32.93		24.770	318.6	.172	
75									75	11.10	32.86		25.101	287.0	.248	
100									100	12.27	33.68		25.544	244.9	.315	
125									125	11.01	33.55		25.667	233.2	.376	
150									150	9.50	33.66		26.004	201.2	.431	
200									200	8.46	33.89		26.355	167.9	.524	
250									250	7.77	33.97		26.524	151.8	.606	
300									300	6.96	33.97		26.635	141.3	.682	
400									400	5.96	34.04		26.822	123.6	.819	
500									500	5.77	34.17		26.954	111.0	.942	

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

77090

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 46.0N		123 38.0W		08/22/69		1933 GMT				4250M	340	21KT	2	360 08 06		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0									0	16.02	32.99		24.221	370.9	0	
10									10	16.01	33.00		24.231	369.9	.037	
20									20	16.00	33.03		24.256	367.5	.074	
30									30	16.00	33.04		24.264	366.8	.111	
50									50	13.52	33.06		24.810	314.8	.179	
75									75	12.47	33.22		25.140	283.3	.254	
100									100	10.52	33.45		25.676	232.4	.319	
125									125	9.89	33.66		25.946	206.7	.375	
150									150	9.58	33.98		26.247	178.1	.423	
200									200	9.10	34.09		26.405	163.2	.511	
250									250	8.80	34.17		26.521	152.1	.591	
300									300	8.53	34.19		26.579	146.6	.669	
400									400	7.77	34.21		26.709	134.3	.815	
500									500	6.69	34.20		26.853	120.6	.950	

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

80052

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 25.0N		120 37.0W		08/30/69		1208 GMT				257M	320	04KT	4	03		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0									0	14.93	33.58		24.914	304.8	0	
10									10	14.92	33.58		24.916	304.6	.030	
20									20	14.81	33.58		24.940	302.4	.061	
30									30	12.72	33.54		25.339	264.4	.089	
50									50	10.61	33.70		25.854	215.4	.137	
75									75	10.26	33.78		25.977	203.8	.190	
100									100	10.03	33.84		26.063	195.6	.241	
125									125	9.81	33.91		26.154	186.9	.289	
150									150	9.59	34.00		26.261	176.8	.335	
200									200	9.50	34.02		26.285	174.5	.425	

RV ALEXANDER AGASSIZ										CALCOPI CRUISE 6908					80052		
LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 25.0N			120 37.0W			08/30/69		1251 GMT			257M	320	04KT	4	03		
Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD		
1	14.95	33.56	5.71	.66	5.	.04	1.6	306.7									
11	14.89	33.58	5.90	.62	5.	.05	1.7	304.0									
31	13.88		5.42	.84	8.	.19	5.8										
41	11.51		4.50	1.24	14.	.22	12.6										
55	10.50		3.67	1.58	21.	.15	18.7										
69	10.28	33.79	3.47	1.65	23.	.06	19.6	203.4									
83	10.12		3.29	1.71	25.	.07	20.9										
102	10.00		3.06	1.82	27.	.05	22.0										
127	9.77	33.90	2.79	1.84	29.	.03	22.3	187.0									
152	9.60	33.97	2.51	1.87	31.	.02	24.2	179.2									

RV ALEXANDER AGASSIZ										CALCOPI CRUISE 6908					80055		
LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 18.5N			120 48.5W			08/30/69		0854 GMT			741M	300	09KT	2	03		
Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD		
									0	15.21	33.65		24.907	305.5	0		
									10	14.81	33.62		24.971	299.4	.030		
									20	11.15	33.64		25.712	229.0	.057		
									30	10.56	33.74		25.894	211.7	.079		
									50	9.84	33.88		26.126	189.6	.119		
									75	9.74	33.91		26.166	185.8	.166		
									100	9.47	34.02		26.296	173.4	.212		
									125	9.43	34.04		26.319	171.3	.255		
									150	9.34	34.07		26.357	167.7	.298		
									200	8.98	34.11		26.446	159.2	.382		
									250	8.46	34.18		26.582	146.3	.460		
									300	7.68	34.11		26.644	140.5	.534		
									400	6.72	34.11		26.778	127.7	.674		
									500	5.97	34.18		26.931	113.2	.801		

RV ALEXANDER AGASSIZ										CALCOPI CRUISE 6908					80055		
LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 18.5N			120 48.5W			08/30/69		0946 GMT			741M	300	09KT	2	03		
Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD		
1	15.27	33.64	6.86	.38	0.	.00	.0	307.5									
10	14.85	33.64	6.61	.40	0.	.00	.0	298.8									
29	10.59		3.67	1.51	20.	.12	20.0										
47	10.03		3.15	1.71	25.	.04	22.9										
74	9.64		2.75	1.88	30.	.02	24.6										
101	9.46		2.39	1.92	33.	.03	26.3										
142	9.39		2.25	2.06	35.	.00	27.5										
186	9.11		2.24	2.03	38.	.05	27.5										
232	8.63	34.19	1.65	2.18	44.	.04	29.6	148.1									
282	8.43	34.21	1.44					143.7									
376	6.72		1.75														
479	6.06	34.16	1.02					115.8									

RV ALEXANDER AGASSIZ										CALCOPI CRUISE 6908					80060		
LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 09.0N			121 09.0W			08/30/69		0457 GMT			2148M	320	15KT		06		
Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD		
									0	16.16	33.65		24.695	325.7	0		
									10	16.16	33.65		24.695	325.7	.033		
									20	15.01	33.53		24.858	310.1	.064		
									30	11.46	33.66		25.671	232.9	.092		
									50	9.99	33.77		26.015	200.1	.135		
									75	9.72	33.89		26.154	187.0	.184		
									100	9.35	33.99		26.293	173.8	.229		
									125	9.15	34.02		26.348	168.5	.273		
									150	8.75	34.02		26.412	162.5	.315		
									200	8.40	34.11		26.536	150.7	.395		
									250	8.11	34.22		26.666	138.3	.469		
									300	7.57	34.24		26.762	129.3	.538		
									400	6.55	34.26		26.919	114.4	.665		
									500	5.90	34.25		26.995	107.2	.782		

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

80060

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER		DOMINANT WAVES		
34 09.0N		121 09.0W		08/30/69		0544 GMT			2148M	320	15KT			06		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0	16.11	33.64	5.60	.36	0.	.00	.1	325.4								
10	16.12	33.64	5.84	.34	0.	.00	.1	325.6								
30	12.34		4.72	1.00	12.	.27	12.1									
50	10.44		3.80	1.33	19.	.17	20.4									
80	9.81		3.16	1.60	24.	.03	25.2									
110	9.35	33.99	2.58	1.78	31.	.01	28.7	173.8								
154	8.89		2.46	1.87	35.	.01	30.9									
204	8.48		2.14	2.03	40.	.01	33.5									
254	7.98		1.10													
310	7.41	34.25	.84					126.4								
409	6.52	34.25	.63					114.7								
513	5.82		.46													

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

80070

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER		DOMINANT WAVES		
33 48.5N		121 51.5W		08/29/69		2140 GMT			3699M	020	16KT	2		330 08 08		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0									0	15.15	33.50		24.805	315.2	0	
10									10	15.14	33.50		24.807	315.0	.032	
20									20	15.11	33.49		24.806	315.1	.063	
30									30	14.97	33.48		24.829	313.0	.095	
50									50	11.28	33.47		25.556	243.8	.150	
75									75	9.64	33.41		25.793	221.2	.209	
100									100	9.30	33.65		26.036	198.2	.262	
125									125	8.99	33.78		26.187	183.9	.310	
150									150	8.69	33.90		26.327	170.5	.355	
200									200	8.24	34.03		26.498	154.3	.438	
250									250	7.99	34.14		26.622	142.6	.514	
300									300	7.56	34.21		26.740	131.4	.585	
400									400	5.96	34.13		26.893	116.8	.714	
500									500	5.55	34.22		27.015	105.3	.831	

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

80070

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER		DOMINANT WAVES		
33 48.5N		121 51.5W		08/29/69		2230 GMT			3699M	020	16KT	2		330 08 08		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0	15.13	33.51	5.91	.49	3.	.04	.5	314.1								
10	15.13	33.50	5.93	.49	2.	.03	.5	314.8								
29	15.07		5.93	.47	2.	.03	.6									
49	14.86		5.91	.49	2.	.04	.6									
77	11.20		5.44	.70	6.	.13	5.8									
106	9.39		4.21	1.37	19.	.03	19.3									
151	8.90	33.86	3.27	1.73	29.	.01	26.1	176.6								
199	8.23		2.47	1.96	40.	.02	30.2									
249	8.00		1.59													
303	7.61		1.07													
402	5.88	34.15	.89					114.4								
507	5.45	34.26	.41					101.2								

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

80080

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER		DOMINANT WAVES		
33 29.0N		122 37.0W		08/29/69		1408 GMT			4498M	340	20KT	1		330 08 08		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0									0	15.09	33.16		24.557	338.8	0	
10									10	15.09	33.16		24.557	338.8	.034	
20									20	15.09	33.16		24.557	338.8	.068	
30									30	15.09	33.16		24.557	338.8	.102	
50									50	13.46	32.99		24.768	318.8	.168	
75									75	11.67	33.01		25.129	284.4	.244	
100									100	10.65	33.27		25.513	247.9	.311	
125									125	10.09	33.54		25.819	218.8	.369	
150									150	9.23	33.66		26.055	196.4	.422	
200									200	8.60	33.88		26.326	170.6	.515	
250									250	8.02	34.00		26.508	153.4	.598	
300									300	6.66	34.04		26.731	132.2	.672	
400									400	5.58	34.06		26.885	117.6	.801	
500									500	5.46	34.19		27.002	106.5	.919	

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

80080

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 29.0N		122 37.0W		08/29/69		1512 GMT			4498M	340	20KT	1	330 08 08		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
2	15.06	33.17	5.83	.51	1.	.00	.9	337.5							
11	15.07	33.17	5.83	.51	1.	.02	1.0	337.7							
45	15.07		5.77	.49	1.	.02	1.2								
69	11.73		6.16	.51	2.	.01	.3								
98	10.87		5.71	.96	9.	.24	10.3								
128	10.10	33.58	4.97	.92	9.	.13	11.4	216.0							
176	8.89		3.97	1.49	23.	.02	23.1								
234	8.26		2.81	1.87	35.	.05	30.0								
293	6.64		1.64												
351	6.12		1.51												
464	5.65	34.18	.65					109.4							
588	5.01	34.28	.34					94.7							

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

80090

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 09.0N		123 07.0W		08/29/69		0633 GMT			4498M	340	25KT	0	340 10 10		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	15.52	33.02		24.355	358.1	0
									10	15.51	33.03		24.365	357.1	.036
									20	15.48	33.05		24.387	355.0	.071
									30	15.20	33.15		24.525	341.9	.106
									50	14.98	33.21		24.619	332.9	.174
									75	12.80	33.15		25.022	294.6	.253
									100	11.49	33.24		25.340	264.3	.323
									125	10.42	33.32		25.592	240.4	.387
									150	9.65	33.59		25.932	208.1	.444
									200	8.65	33.86		26.302	172.9	.541
									250	8.23	33.99		26.468	157.1	.625
									300	7.52	34.05		26.620	142.7	.702
									400	6.47	34.12		26.819	123.8	.841
									500	6.00	34.22		26.959	110.6	.964

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

80090

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 09.0N		123 07.0W		08/29/69		0730 GMT			4498M	340	25KT	0	340 10 10		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	15.46	33.02		.49	0.	.03	.3	356.8							
10	15.50	33.02		.49	0.	.00	.3	357.6							
28	15.48			.49	0.	.02	.3								
50	15.07			.59	0.	.03	1.1								
80	12.70			.49	1.	.06	.3								
106	11.37	33.28		.72	6.	.12	6.1	259.3							

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

82047

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 15.0N		119 59.0W		08/30/69		1925 GMT			556M	270	07KT	4	280 03 07		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	18.60	33.65		24.112	381.2	0
									10	18.22	33.64		24.199	373.0	.038
									20	17.35	33.65		24.417	352.2	.074
									30	16.68	33.60		24.537	340.8	.109
									50	14.35	33.56		25.023	294.5	.173
									75	11.34	33.70		25.724	227.8	.238
									100	9.57	34.01		26.272	175.7	.289
									125	9.41	34.07		26.345	168.8	.333
									150	9.20	34.11		26.411	162.6	.375
									200	9.02	34.15		26.471	156.9	.456
									250	8.74	34.19		26.546	149.7	.535
									300	8.19	34.21		26.647	140.2	.610
									400	7.26	34.23		26.798	125.8	.749
									500	6.64	34.25		26.899	116.3	.877

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

82047

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 15.0N		119 59.0W		08/30/69	2045 GMT				556M	270	07KT	4	280 03 07		
Z	T	S	O2	P04	SIO3	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
0	18.65	33.63	5.97	.29	0.	.01	.0	383.9							
10	18.38	33.63	2.88	.27	0.	.00	.0	377.5							
30	16.50		5.64	.47	2.	.02	.3								
54	14.07		5.04	.80	8.	.24	6.3								
89	10.27		3.34	1.60	24.	.12	19.9								
119	9.44	34.05	2.36	1.87	36.	.02	26.3	170.7							
164	9.16		2.12	2.09	38.	.03	27.6								
219	8.97		1.79	2.09	42.	.04	28.3								
274	8.48		1.13												
329	7.93		.94												
438	7.02	34.23	.45					122.7							
548	6.50	34.26	.13					113.7							

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

83043

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 08.0N		119 34.5W		08/31/69	0305 GMT				242M	300	05KT		270 03 07		
Z	T	S	O2	P04	SIO3	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
0	18.39	33.62											24.142	378.4	0
10	18.26	33.61											24.166	376.1	.038
20	17.10	33.57											24.415	352.3	.074
30	16.08	33.58											24.659	329.1	.108
50	11.86	33.62											25.565	242.9	.166
75	10.43	33.76											25.932	208.0	.222
100	9.77	33.92											26.169	185.5	.272
125	9.46	34.05											26.321	171.0	.317
150	9.23	34.11											26.406	163.0	.360
200	9.00	34.18											26.497	154.4	.441

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

83043

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 08.0N		119 34.5W		08/31/69	0345 GMT				242M	300	05KT		270 03 07		
Z	T	S	O2	P04	SIO3	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
1	18.38	33.60	6.25	.47	0.	.00	.1	379.7							
11	18.39	33.61	6.28	.29	0.	.00	.1	379.2							
31	16.46		5.82	.72	3.	.00	.5								
46	12.26		4.59	1.46	17.	.07	14.3								
55	11.52		4.10		28.0	.17	24.00								
71	10.52	33.76	3.44	1.48	22.	.00	18.3	209.5							
85	9.95		2.81	1.74	26.	.00	22.6								
105	9.66		2.53	1.92	31.	.00	25.7								
130	9.28		2.19	2.02	35.	.00	28.2								
149	9.13		2.03	2.780	56.0	.01	42.80								
180	9.00	34.15	1.54	2.70	57.	.09	39.3	156.6							
205	8.89	34.17	1.45	2.67	58.	.01	38.3	153.4							

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

83051

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 52.0N		120 08.0W		08/31/69	0850 GMT				142M						
Z	T	S	O2	P04	SIO3	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
0	17.98	33.65											24.265	366.7	0
10	16.79	33.62											24.526	341.8	.035
20	14.56	33.52											24.948	301.7	.068
30	12.90	33.58											25.334	264.8	.096
50	10.98	33.67											25.765	223.9	.145
75	10.26	33.77											25.969	204.5	.199
100	9.67	33.93											26.193	183.2	.248
125	9.48	34.02											26.295	173.6	.293

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

83051

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 52.0N		120 08.0W		08/31/69	0915 GMT				142M						
Z	T	S	O2	P04	SIO3	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
0	17.82		6.21	.38	0.	.00	.0								
10	15.03	33.61	5.88	.80	6.	.07	3.7	304.7							
29	11.70	33.64	4.36	1.17	15.	.22	13.4	238.6							
39	10.91		3.88	1.69	22.	.34	20.4								
54	10.27		3.36	1.61	23.	.14	20.6								
69	10.11		3.20	1.65	24.	.13	21.3								
83	9.85		2.93	1.74	27.	.06	23.0								
103	9.74	33.90	2.80	1.76	28.	.11	23.0	186.5							
123	9.65	33.95	2.65		35.	.12	26.6	181.4							

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

83055

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
33 44.0N		120 24.5W		08/31/69	1127	GMT	1012M								
Z	T	S	O2	P04	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.47	33.61		24.593	335.4	0
									10	15.97	33.54		24.653	329.7	.033
									20	12.86	33.56		25.405	258.1	.063
									30	11.04	33.58		25.685	231.5	.087
									50	10.43	33.61		25.815	219.1	.132
									75	9.88	33.87		26.112	191.0	.184
									100	9.37	33.99		26.289	174.1	.230
									125	9.10	34.08		26.403	163.3	.273
									150	8.93	34.13		26.469	157.0	.314
									200	8.44	34.21		26.608	143.8	.390
									250	8.14	34.22		26.662	138.7	.463
									300	7.84	34.23		26.714	133.8	.534
									400	7.03	34.26		26.854	120.6	.666
									500	6.03	34.30		27.018	105.0	.786

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

83060

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
33 34.5N		120 45.0W		08/31/69	1412	GMT	1553M	300	04KT	2		310	05	08	
Z	T	S	O2	P04	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.09	33.49		24.588	335.9	0
									10	16.09	33.49		24.588	335.9	.034
									20	16.09	33.49		24.588	335.9	.067
									30	15.46	33.49		24.729	322.5	.100
									50	11.25	33.54		25.616	238.1	.156
									75	10.01	33.69		25.950	206.4	.212
									100	9.48	33.76		26.092	192.8	.263
									125	9.15	33.87		26.231	179.6	.310
									150	8.62	33.97		26.393	164.3	.353
									200	7.77	34.02		26.560	148.4	.433
									250	6.85	34.03		26.698	135.4	.506
									300	6.44	34.09		26.800	125.7	.573
									400	5.86	34.18		26.945	111.9	.697
									500	5.30	34.26		27.076	99.5	.808

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

83070

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
33 12.5N		121 25.0W		08/31/69	1920	GMT	3832M	300	07KT	2		300	05	08	
Z	T	S	O2	P04	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.63	33.63		24.571	337.5	0
									10	16.55	33.63		24.590	335.7	.034
									20	16.53	33.62		24.587	336.0	.067
									30	15.71	33.51		24.689	326.3	.100
									50	10.93	33.54		25.673	232.6	.157
									75	9.72	33.75		26.045	197.3	.211
									100	9.19	33.85		26.209	181.7	.258
									125	8.98	33.97		26.337	169.6	.303
									150	8.39	33.97		26.428	160.9	.345
									200	7.55	34.01		26.584	146.1	.423
									250	7.21	34.08		26.687	136.3	.495
									300	6.70	34.10		26.773	128.2	.564
									400	6.11	34.19		26.921	114.2	.690
									500	5.64	34.27		27.043	102.6	.804

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

83080

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
32 51.0N		122 07.5W		09/01/69	0104	GMT	3926M	300	10KT	2		300	05	08	
Z	T	S	O2	P04	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.18	33.59		24.644	330.6	0
									10	16.09	33.58		24.657	329.3	.033
									20	15.94	33.58		24.691	326.1	.066
									30	15.92	33.58		24.695	325.7	.098
									50	11.48	33.21		25.318	266.4	.158
									75	9.89	33.52		25.837	217.0	.219
									100	9.46	33.68		26.033	198.4	.271
									125	9.03	33.81		26.204	182.2	.319
									150	8.79	33.88		26.296	173.4	.364
									200	8.36	33.99		26.449	159.0	.449
									250	7.75	34.08		26.610	143.7	.527
									300	7.03	34.11		26.736	131.7	.598
									400	5.86	34.11		26.890	117.1	.727
									500	5.63	34.24		27.021	104.7	.843

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

83090

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 34.0N		122 47.5W		09/01/69		0533 GMT			402M	300	08KT	2	300 05 08		
Z	T	S	OZ	P04	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0									0	14.87	33.20		24.635	331.4	0
10									10	14.68	33.20		24.676	327.5	.033
20									20	14.60	33.20		24.693	325.9	.066
30									30	14.49	33.25		24.755	320.0	.098
50									50	14.47	33.25		24.759	319.6	.162
75									75	11.03	33.10		25.314	266.8	.236
100									100	9.83	33.51		25.840	216.8	.297
125									125	9.39	33.75		26.099	192.2	.348
150									150	9.04	33.84		26.226	180.2	.396
200									200	8.06	33.98		26.486	155.4	.481
250									250	7.81	34.05		26.578	146.7	.559
300									300	6.97	34.05		26.697	135.4	.631
400									400	6.36	34.17		26.873	118.7	.763
500									500	5.61	34.21		26.999	106.7	.882

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

87035

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 50.0N		118 37.5W		09/02/69		1714 GMT			482M	020	12KT	4	300 02 03		
Z	T	S	OZ	P04	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0									0	18.13	33.50		24.114	381.1	0
10									10	15.11	33.46		24.783	317.3	.035
20									20	12.76	33.38		25.208	276.9	.065
30									30	12.08	33.41		25.362	262.3	.092
50									50	11.56	33.51		25.536	245.7	.143
75									75	10.52	33.67		25.846	216.2	.201
100									100	10.37	33.74		25.927	208.5	.254
125									125	10.13	33.83		26.038	198.0	.306
150									150	10.00	33.87		26.091	192.9	.355
200									200	9.89	34.00		26.211	181.5	.451
250									250	9.03	34.14		26.461	157.8	.538
300									300	8.27	34.22		26.642	140.6	.615
400									400	7.36	34.27		26.815	124.2	.753
500									500	6.70	34.31		26.938	112.6	.878

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

87035

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 50.0N		118 37.5W		09/02/69		1807 GMT			482M	020	12KT	4	300 02 03		
Z	T	S	OZ	P04	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	18.19	33.52	6.30	.16	0.	.00	.0	381.0							
10	15.44	33.47	6.13	.38	3.	.00	.0	323.5							
15	15.00		5.96	.51	3.	.00	.0								
30	12.25		4.61	1.28U	10.	.25	7.3								
50	11.54		4.59	1.11	12.	.40	12.7								
78	10.52	33.68	3.62	1.44	20.	.04	20.7	215.4							
108	10.28		3.16	1.61	24.	.00	24.0								
149	9.99		2.89	1.74	28.	.00	26.4								
199	9.53		2.26	1.96	35.	.03	30.6								
288	8.47		1.53												
378	7.73	34.31	.89					126.3							
468	6.82	34.30	.42					114.8							

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

87040

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 40.0N		118 58.5W		09/02/69		1335 GMT			898M	100	10KT	1	280 02 06		
Z	T	S	OZ	P04	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0									0	19.67	33.69		23.871	404.2	0
10									10	18.46	33.63		24.132	379.4	.039
20									20	15.73	33.48		24.661	328.9	.075
30									30	12.29	33.44		25.345	263.9	.104
50									50	11.24	33.50		25.587	240.9	.155
75									75	10.13	33.70		25.937	207.6	.211
100									100	9.88	33.86		26.104	191.7	.262
125									125	9.69	33.99		26.237	179.1	.309
150									150	9.50	34.10		26.354	168.0	.353
200									200	9.44	34.18		26.426	161.1	.437
250									250	9.18	34.24		26.515	152.7	.517
300									300	8.49	34.22		26.609	143.8	.594
400									400	7.14	34.27		26.846	121.3	.733
500									500	6.46	34.31		26.970	109.5	.855

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6908 87040

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 40.0N		118 58.5W		09/02/69	1418 GMT				898M	100	10KT	1	280 02 06		
Z	T	S	O2	P04	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	19.60	33.66	5.80	.20	0.	.00	.1	404.7							
10	19.61	33.66	5.81	.16	0.	.00	.1	404.9							
30	12.26		5.61	.72	4.	.08	6.5								
50	11.28		4.62	1.11	12.	.19	13.9								
78	10.09		3.38	1.58	23.	.00	24.0								
108	9.85	33.93	2.64	1.85	30.	.00	28.5	186.1							
153	9.49		2.19		36.	.00	31.4								
204	9.42		1.85	2.15	39.	.00	32.6								
253	9.16		1.55												
308	8.31		1.27												
408	7.07	34.28	.61					119.6							
512	6.26	34.32	.33					106.3							

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6908 87045

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 29.5N		119 19.5W		09/02/69	0932 GMT				1664M	280	14KT		290 03 07		
Z	T	S	O2	P04	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.51	33.54		24.530	341.4	0
									10	15.99	33.52		24.634	331.6	.034
									20	12.03	33.53		25.464	252.5	.063
									30	11.34	33.54		25.600	239.6	.088
									50	10.40	33.72		25.906	210.5	.133
									75	10.12	33.81		26.024	199.3	.184
									100	9.99	33.86		26.085	193.5	.234
									125	9.76	33.94		26.186	183.9	.282
									150	9.57	34.03		26.288	174.2	.327
									200	9.09	34.15		26.460	157.9	.412
									250	8.76	34.18		26.535	150.8	.491
									300	8.43	34.22		26.618	142.9	.567
									400	7.38	34.28		26.820	123.7	.706
									500	6.53	34.29		26.945	111.9	.831

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6908 87045

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 29.5N		119 19.5W		09/02/69	1025 GMT				1664M	280	14KT		290 03 07		
Z	T	S	O2	P04	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	16.39	33.54	4.89	.32	2.	.00	.0	338.8							
9	15.64	33.55	4.91	.47	4.	.00	1.3	321.9							
27	12.32		4.65	.90	9.	.24	8.0								
42	11.18		4.04	1.17	14.	.16	14.2								
66	10.33		3.26	1.54	22.	.00	21.2								
90	10.05	33.85	2.72	1.63	26.	.00	23.1	195.2							
126	9.80		2.58	1.84	30.	.00	27.0								
166	9.40		2.27	2.09	36.	.00	30.4								
206	9.16		1.96	2.06	38.	.00	31.3								
250	8.63		1.87												
335	8.03	34.23	1.00					136.4							
431	7.14	34.28	.63					120.5							

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6908 87050

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 19.5N		119 39.5W		09/02/69	0653 GMT				76M	300	15KT		300 03 07		
Z	T	S	O2	P04	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	15.68	33.62		24.780	317.6	0
									10	14.91	33.60		24.934	303.0	.031
									20	14.20	33.58		25.070	290.0	.061
									30	11.24	33.54		25.618	237.9	.087
									50	10.05	33.65		25.912	210.0	.132

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

87060

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME					BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 02.0N		120 21.5W		09/02/69	0033					929M	300	18KT	2	300 04 08		
Z	T	S	02	P04	SIO3	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD	
0	16.26	33.39											24.473	346.9	0	
10	16.25	33.39											24.475	346.7	.035	
20	16.07	33.46											24.570	337.7	.069	
30	15.99	33.44											24.572	337.4	.103	
50	12.59	33.20											25.102	287.0	.165	
75	11.12	33.34											25.484	250.6	.233	
100	9.82	33.57											25.888	212.2	.291	
125	9.29	33.71											26.084	193.6	.343	
150	8.82	33.87											26.284	174.6	.389	
200	8.15	34.04											26.520	152.3	.473	
250	7.76	34.12											26.640	140.8	.548	
300	7.06	34.10											26.724	132.9	.618	
400	6.15	34.16											26.892	116.9	.748	
500	5.67	34.26											27.031	103.7	.864	

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

87070

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME					BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 38.0N		121 03.0W		09/01/69	1946					388M	320	12KT	2	300 03 06		
Z	T	S	02	P04	SIO3	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD	
0	15.46	33.27											24.560	338.5	0	
10	15.37	33.36											24.649	330.1	.033	
20	15.33	33.37											24.666	328.5	.066	
30	14.89	33.31											24.715	323.8	.099	
50	13.12	33.11											24.928	303.5	.162	
75	11.54	33.24											25.331	265.2	.233	
100	10.15	33.48											25.762	224.2	.295	
125	9.56	33.75											26.071	194.8	.348	
150	9.04	33.84											26.226	180.2	.396	
200	8.06	33.93											26.447	159.1	.482	
250	7.16	33.99											26.624	142.4	.559	
300	6.95	34.06											26.708	134.4	.630	
400	6.00	34.15											26.904	115.8	.760	
500	5.44	34.23											27.036	103.3	.876	

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

87080

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME					BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 21.0N		121 42.5W		09/01/69	1503					4068M	360	08KT	2	300 03 06		
Z	T	S	02	P04	SIO3	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD	
0	15.89	33.15											24.373	356.4	0	
10	15.90	33.15											24.370	356.6	.036	
20	15.64	33.11											24.398	354.0	.071	
30	15.43	33.11											24.444	349.6	.106	
50	13.54	32.95											24.721	323.3	.174	
75	12.30	33.14											25.111	286.1	.251	
100	10.43	33.47											25.707	229.5	.315	
125	9.70	33.74											26.040	197.7	.369	
150	9.15	33.87											26.231	179.6	.417	
200	8.22	33.93											26.423	161.4	.504	
250	7.35	33.99											26.597	144.9	.583	
300	6.88	34.06											26.717	133.5	.654	
400	6.34	34.18											26.883	117.7	.785	
500	5.90	34.24											26.987	107.9	.904	

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

87090

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME					BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 00.0N		122 25.0W		09/01/69	1014					4116M	310	07KT	2	300 03 06		
Z	T	S	02	P04	SIO3	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD	
0	17.10	33.17											24.110	381.5	0	
10	17.11	33.17											24.107	381.7	.038	
20	17.11	33.17											24.107	381.7	.076	
30	17.09	33.17											24.112	381.3	.115	
50	14.83	33.15											24.606	334.2	.186	
75	13.76	33.14											24.822	313.6	.268	
100	12.55	33.41											25.272	270.8	.341	
125	10.59	33.42											25.640	235.8	.405	
150	9.76	33.61											25.929	208.3	.462	
200	8.56	33.89											26.340	169.3	.558	
250	7.74	33.97											26.525	151.7	.640	
300	7.08	34.04											26.674	137.6	.714	
400	6.35	34.15											26.859	120.1	.848	
500	5.63	34.21											26.997	107.0	.968	

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

90028

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 28.5N		117 47.0W		09/03/69		0212 GMT			593M	320	10KT	0	300 02 03		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.84	33.50											24.185	374.3	0
10	14.96	33.46											24.816	314.2	.034
20	12.78	33.43											25.242	273.6	.064
30	12.01	33.44											25.398	258.8	.091
50	11.03	33.50											25.624	237.3	.140
75	10.44	33.72											25.899	211.2	.197
100	10.35	33.78											25.961	205.2	.249
125	10.09	33.94											26.130	189.2	.299
150	9.98	33.97											26.173	185.2	.347
200	9.75	34.11											26.320	171.2	.438
250	8.88	34.13											26.477	156.3	.522
300	8.43	34.23											26.626	142.2	.599
400	7.14	34.26											26.838	122.0	.737
500	6.35	34.31											26.985	108.1	.858

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

90028

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 28.5N		117 47.0W		09/03/69		0310 GMT			593M	320	10KT	0	300 02 03		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.82	33.46	6.64	.49	2.	.00	.0	376.8							
11	16.01	33.46	6.83	.32	2.	.00	.0	336.4							
31	11.88		5.43	.84	7.	.17	8.8								
50	11.08		4.56	1.13	13.	.16	14.1								
80	10.18		3.68	1.49	20.	.08	20.5								
110	10.25	33.87	2.87	1.71	25.	.09	22.9	197.0							
155	9.97		2.59	1.85	30.	.03	25.7								
204	9.57		2.24	1.96	35.	.08	28.1								
253	8.72		1.94												
309	8.30	34.25	1.34					138.8							
408	7.05		.86												
513	6.31	34.30	.44					108.4							

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

90032

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 21.0N		118 01.5W		09/03/69		0511 GMT			741M	310	11KT	0	300 03 05		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	20.42	33.63											23.629	427.3	0
10	20.32	33.63											23.656	424.8	.043
20	19.51	33.63											23.867	404.7	.084
30	13.23	33.43											25.153	282.1	.119
50	11.21	33.66											25.716	228.5	.170
75	9.73	33.82											26.098	192.3	.223
100	9.39	33.92											26.232	179.6	.270
125	9.05	33.99											26.341	169.2	.314
150	8.84	34.06											26.429	160.8	.356
200	8.53	34.16											26.556	148.8	.435
250	8.05	34.17											26.636	141.2	.509
300	7.92	34.22											26.695	135.6	.581
400	6.88	34.24											26.859	120.1	.714
500	6.28	34.28											26.970	109.5	.836

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

90032

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 21.0N		118 01.5W		09/03/69		0552 GMT			741M	310	11KT	0	300 03 05		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	20.35	33.62	5.62	.25	0.	.00	.1	426.3							
11	20.30	33.59	5.67	.25	0.	.01	.1	427.2							
30	14.89		6.49	.34	3.	.04	.8								
48	11.28		4.50	1.23	16.	.38	14.8								
75	9.69		3.09	1.78	28.	.05	24.6								
104	9.32		2.81	1.88	32.	.03	25.5								
149	9.00		2.38	2.09	38.	.01	27.7								
190	8.67		1.93	2.16	44.	.04	28.8								
236	8.37		1.58												
286	7.92	34.23	1.37					134.9							
380	7.09		1.27												
481	6.35	34.30	.65					108.9							

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 690H

90037

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 11.0N		118 23.0W		09/03/69		0850 GMT			1184M	280	12KT		270 03 05		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0									0	19.04	33.64		23.994	392.5	0
10									10	19.03	33.64		23.997	392.3	.039
20									20	18.40	33.64		24.154	377.2	.078
30									30	15.09	33.48		24.803	315.5	.112
50									50	12.22	33.44		25.358	262.6	.170
75									75	10.79	33.62		25.760	224.4	.232
100									100	9.74	33.84		26.112	191.0	.284
125									125	9.28	33.95		26.273	175.7	.330
150									150	9.10	33.99		26.333	170.0	.374
200									200	8.78	34.09		26.462	157.7	.458
250									250	8.49	34.15		26.554	149.0	.537
300									300	8.29	34.20		26.624	142.4	.612
400									400	7.12	34.23		26.818	124.0	.751
500									500	6.13	34.30		27.005	106.2	.873

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 690B

90037

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 11.0N		118 23.0W		09/03/69		0941 GMT			1184M	280	12KT		270 03 05		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	19.03	33.66	5.42	.16	0.	.00	.0	390.8							
11	18.99	33.66	5.150	.14	0.	.00	.1	389.8							
30	14.70		5.69	.36	3.	.00	.0								
55	11.63		4.90	.59	10.	.03	4.8								
90	10.23		3.46	1.11	22.	.00	15.2								
119	9.38	33.97	2.67	1.41	32.	.03	19.8	175.7							
164	9.04		2.37	1.78	36.	.00	25.6								
220	8.68		1.87	1.84	43.	.03	25.4								
275	8.43		1.61												
329	7.80		1.13												
439	6.74	34.30	.54					113.8							
548	5.94	34.34	.34					100.9							

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 690B

90039

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 07.0N		118 30.5W		09/03/69		1109 GMT			1295M	250	13KT		260 03 05		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0									0	18.73	33.61		24.049	387.2	0
10									10	18.73	33.61		24.049	387.2	.039
20									20	18.25	33.64		24.191	373.7	.077
30									30	15.38	33.45		24.716	323.7	.112
50									50	11.42	33.45		25.515	247.7	.169
75									75	10.61	33.59		25.769	223.6	.228
100									100	9.83	33.83		26.089	193.1	.281
125									125	9.52	34.02		26.288	174.2	.327
150									150	9.18	34.09		26.398	163.8	.370
200									200	8.88	34.15		26.493	154.8	.452
250									250	8.65	34.20		26.568	147.6	.529
300									300	7.85	34.21		26.697	135.4	.603
400									400	7.10	34.24		26.828	123.0	.737
500									500	6.45	34.28		26.948	111.6	.861

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 690B

90039

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
33 07.0N		118 30.5W		09/03/69		1206 GMT			1295M	250	13KT		260 03 05		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	18.48	33.58	5.61	.23	1.	.00	.0	383.5							
11	18.49	33.59	5.36	.23	0.	.00	.0	383.0							
48	12.08		5.14	.72	7.	.15	5.6								
66	11.08		4.36	.86	13.	.09	8.4								
85	10.16		3.46	1.35	22.	.00	15.5								
120	9.56	34.01	2.52	1.66	32.	.00	19.9	175.6							
148	9.15		2.18	1.90	37.	.01	21.6								
197	8.84		1.85	2.08	43.	.02	25.0								
242	8.67		1.60	2.12	46.	.02	25.4								
293	7.97		1.23												
389	7.08	34.27	.70					120.5							
493	6.48	34.30	.49					110.5							

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

90045

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 54.0N		118 56.0W		09/03/69		2250 GMT			1756M	280	11KT	1	260 03 05		
Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	18.61	33.80		24.224	370.6	0
									10	18.53	33.79		24.236	369.4	.037
									20	15.42	33.72		24.914	304.8	.071
									30	11.33	33.65		25.687	231.4	.098
									50	9.97	33.75		26.003	201.3	.141
									75	9.58	33.86		26.154	187.0	.190
									100	9.14	33.98		26.319	171.3	.235
									125	8.92	34.03		26.393	164.3	.278
									150	8.61	34.09		26.488	155.2	.318
									200	8.16	34.16		26.612	143.5	.394
									250	7.80	34.20		26.697	135.4	.466
									300	7.48	34.22		26.759	129.5	.535
									400	6.68	34.26		26.901	116.0	.663
									500	6.13	34.29		26.997	106.9	.781

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

90045

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 54.0N		118 56.0W		09/03/69		2355 GMT			1756M	280	11KT	1	260 03 05		
Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	18.64	33.82	5.82	.34	2.	.00		369.8							
11	18.34	33.81	5.02	.36	2.	.00		363.5							
30	11.32	33.70	4.27	1.19	17.	.21		227.5							
40	10.37		3.27	1.49	22.	.16									
49	9.97		2.98	1.61	25.	.11									
63	9.65		2.16	1.71	28.	.14									
78	9.36		2.63	1.85	31.	.01									
97	9.17		2.06	1.88	34.	.07									
122	8.97	34.04	2.13	1.93	37.	.07		164.3							
142	8.78		2.21	2.02	40.	.03									
172	8.54		1.86	2.12	43.	.02									
201	8.27		1.26	2.27	50.	.02									
230	8.06		1.25	2.31	54.	.01									
269	7.70		1.06												
327	7.26		.72												
399	6.84		.50												
474	6.21	34.30	.40					107.2							
553	5.91	34.32	.33					102.0							

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

90053

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 39.0N		119 28.5W		09/04/69		1403 GMT			1710M	310	05KT	2	310 03 08		
Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	15.62	33.39		24.617	333.1	0
									10	15.62	33.39		24.617	333.1	.033
									20	15.49	33.38		24.638	331.1	.067
									30	14.35	33.27		24.800	315.7	.099
									50	11.85	33.14		25.196	278.0	.159
									75	10.67	33.35		25.572	242.3	.224
									100	9.52	33.58		25.945	206.8	.281
									125	9.13	33.78		26.164	186.0	.330
									150	9.01	33.96		26.324	170.8	.375
									200	8.75	34.07		26.451	158.8	.459
									250	8.56	34.14		26.535	150.8	.539
									300	7.96	34.20		26.673	137.7	.613
									400	6.86	34.24		26.861	119.8	.748
									500	6.29	34.28		26.969	109.6	.869

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

90053

Z	LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER		DOMINANT WAVES		
	T	S	O2	PO4	SI03	NO2	NO3	DT	1504 GMT	1710M				310	05KT	2	O2	SIGT
1A	15.79	33.40	5.83	.42	1.	.00	.0	336.0										
9A	15.77	33.39	5.81	.42	1.	.00	.0	336.3										
27A			5.84	.40	1.	.00	.0											
35A	15.14		5.87	.40	1.	.00	.0											
43A	13.73		6.00	.42	2.	.01	.0											
55A	12.24		5.82	.40	4.	.06	.5											
68A	11.00		5.36	.49	7.	.05	3.9											
85	9.80		4.54	1.06	16.	.07	14.1											
106	9.45	33.62	4.15	1.23	21.	.06	17.0	202.7										
123	9.16		3.43	1.46	29.	.03	20.7											
148	8.99		2.65	1.60	38.	.05	23.3											
175	8.82		2.41	1.68	42.	.02	24.5											
201	8.87		2.15	1.85	43.	.02	27.4											
235	8.65		1.78	2.11	48.	.02	28.4											
288	7.96		1.25															
356	7.21		.82															
425	6.76	34.27	.64					116.3										
500	6.31	34.29	.54					109.1										

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

90060

Z	LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER		DOMINANT WAVES		
	T	S	O2	PO4	SI03	NO2	NO3	DT	1925 GMT	290				08KT	1	O2	SIGT	DT
0										966M						24.212	371.8	0
10																24.263	366.9	.037
20																24.423	351.6	.073
30																24.437	350.3	.108
50																24.639	331.0	.176
75																25.134	283.9	.254
100																25.579	241.6	.320
125																25.898	211.3	.377
150																26.133	188.9	.428
200																26.381	165.4	.518
250																26.558	148.6	.598
300																26.661	138.8	.672
400																26.820	123.7	.809
500																27.002	106.5	.929

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

90060

Z	LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER		DOMINANT WAVES		
	T	S	O2	PO4	SI03	NO2	NO3	DT	2012 GMT	290				08KT	1	O2	SIGT	DT
1	16.89	33.16	5.86	.45	2.	.00	.0	377.5										
11	16.35	33.17	5.92	.45	1.	.00	.0	364.9										
31	15.88	33.24	6.01	.45	1.	.00	.0	349.6										
41	15.67		6.04	.47	1.	.00	.0											
49	15.13		6.11	.47	1.	.00	.0											
64	13.41		6.17	.49	3.	.01	.0											
79	12.16		5.77	.66	5.	.39	3.5											
99	10.69		5.34	.88	9.	.00	8.6											
123	9.62	33.30	4.61	1.30	18.	.00	16.4											
144	9.41		4.41	1.37	21.	.00	18.0											
174	8.57		3.55	1.71	35.	.00	24.5											
204	8.08		3.22	1.85	42.	.00	26.9											
234	7.69		2.88	1.96	48.	.00	30.0											
274	7.35		2.84															
334	6.66		1.85															
409	6.09		1.35															
477B	5.87	34.18	.86					112.0										
557B	5.47	34.27	.52					100.6										

- A) POOR ARRANGEMENT OF THE MANSSEN BOTTLES TOGETHER WITH A 30 DEGREE WIRE ANGLE CAUSED THESE DEPTHS AND TEMPERATURES TO BE QUESTIONABLE.
 B) THESE MANSSEN BOTTLES POSTTRIPPED CAUSING THE DEPTHS TO BE SLIGHTLY UNCERTAIN.

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

90070

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 05.0N		120 39.5W		09/06/69		0137 GMT			3926M	290	12KT	1	310 04 07		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.43	33.21		24.062	386.0	0
									10	17.31	33.22		24.098	382.6	.038
									20	17.09	33.22		24.150	377.6	.076
									30	16.98	33.22		24.176	375.1	.114
									50	16.13	33.22		24.372	356.5	.188
									75	12.99	33.15		24.985	298.1	.270
									100	11.74	33.26		25.309	267.3	.341
									125	10.55	33.36		25.600	239.6	.405
									150	9.47	33.65		26.008	200.8	.461
									200	8.74	33.92		26.335	169.7	.555
									250	8.16	34.01		26.495	154.6	.638
									300	7.81	34.09		26.609	143.8	.715
									400	6.40	34.08		26.797	125.9	.855
									500	5.53	34.15		26.962	110.3	.979

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

90070

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 05.0N		120 39.5W		09/06/69		0215 GMT			3926M	290	12KT	1	310 04 07		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.49	33.23	5.60	.40	1.	.00	.0	385.9							
11	17.14	33.23	5.61	.40	1.	.00	.0	378.0							
31	17.00		5.63	.42	1.	.00	.0								
55	13.84		6.18	.42	2.	.00	.0								
90	12.24		5.63	.66	4.	.07	3.1								
119	10.79	33.35	5.18	.96	9.	.01	8.6	244.3							
164	9.26		3.67	1.60	24.	.01	20.4								
218	8.63		3.13	1.81	33.	.00	24.4								
271	7.97		2.39												
325	7.45		1.72												
434	5.96	34.13	1.17					116.8							
543	5.43	34.24	.44					102.4							

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

90080

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
31 44.5N		121 19.5W		09/06/69		0713 GMT			3775M	300	03KT		310 04 08		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.27	33.12		24.031	388.9	0
									10	16.86	33.13		24.135	379.0	.038
									20	16.99	33.20		24.158	376.8	.076
									30	16.74	33.15		24.179	374.9	.114
									50	13.75	33.13		24.817	314.1	.183
									75	12.66	33.11		25.019	294.9	.260
									100	11.64	33.30		25.359	262.5	.330
									125	10.39	33.39		25.651	234.7	.393
									150	9.34	33.61		25.998	201.8	.448
									200	8.52	33.90		26.354	168.0	.542
									250	7.98	33.99		26.506	153.6	.624
									300	7.53	34.05		26.618	142.9	.701
									400	6.20	34.10		26.839	122.0	.838
									500	5.70	34.19		26.973	109.3	.960

RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

90080

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
31 44.5N		121 19.5W		09/06/69		0822 GMT			3775M	300	03KT		310 04 08		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	17.00	33.14	5.42	.76	2.	.21	.0	381.4							
11	16.82	33.13	5.64	.82	3.	.01	.0	378.1							
31	16.68		5.66	1.02	3.	.06	.0								
56	14.24		6.08	.70	3.	.07	.0								
90	12.16		5.67	.78	5.	.07	2.4								
120	10.99	33.37	4.98	1.21	13.	.00	8.8	246.2							
166	9.13		3.71	1.49	26.	.01	18.8								
220	8.27		2.67	2.24	49.	.01	30.2								
275	7.68		2.03												
329	7.00		1.69												
438	6.03	34.15	.94					116.2							
548	5.53	34.25	.48					102.8							

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

90090

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
31 24.0N		122 01.0W		09/06/69		2215 GMT			4116M	290	06KT	1	320 07 10		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	18.32	33.19		23.831	408.0	0
									10	17.61	33.19		24.004	391.6	.040
									20	17.55	33.20		24.026	389.5	.079
									30	17.52	33.20		24.033	388.8	.118
									50	16.24	33.29		24.401	353.7	.193
									75	14.18	33.30		24.859	310.1	.276
									100	12.67	33.22		25.102	287.0	.351
									125	11.45	33.27		25.370	261.4	.420
									150	9.91	33.46		25.787	221.8	.482
									200	8.73	33.87		26.298	173.3	.582
									250	7.93	33.97		26.497	154.3	.666
									300	7.24	34.02		26.636	141.2	.742
									400	6.20	34.09		26.831	122.7	.879
									500	5.68	34.20		26.983	108.3	1.000

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

90090

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
31 24.0N		122 01.0W		09/06/69		2310 GMT			4116M	290	06KT	1	320 07 10		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	18.18	33.20	5.35	.45		.00	.0	404.0							
11	17.63	33.20	5.41	.38		.00	.0	391.3							
31	17.54	33.20	5.60	.45		.00	.0	389.3							
41	17.49		5.360	.45		.01	.0								
48	16.68		5.85	.45		.00	.0								
63	14.77		6.09	.40		.00	.0								
77	13.77		6.00	.51		.02	.0								
97	12.51		5.87	.51		.07	1.1								
122	10.85	33.34	5.22	.90		.04	9.7	246.0							
142	9.97		4.63	1.24		.03	16.8								
172	9.31		3.85	1.56		.04	24.1								
202	8.75		4.15	1.71		.00	28.3								
232	8.15		3.13	1.85		.03	30.4								
272	7.53		2.59												
332	6.97		1.80												
405	6.10		1.31												
481	5.79	34.21	.57					108.8							
561	5.29	34.27	.29					98.6							

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

93035

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 41.5N		117 52.0W		09/08/69		1948 GMT			643M	310	15KT	1	320 05 08		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	21.10	33.76		23.546	435.3	0
									10	21.08	33.76		23.551	434.8	.044
									20	18.99	33.55		23.938	397.8	.085
									30	16.13	33.41		24.518	342.6	.122
									50	12.27	33.52		25.411	257.6	.183
									75	10.69	33.59		25.755	224.9	.243
									100	10.12	33.72		25.954	205.9	.298
									125	9.71	33.86		26.132	189.0	.347
									150	9.33	33.98		26.288	174.2	.394
									200	8.93	34.10		26.446	159.2	.479
									250	8.63	34.21		26.579	146.6	.557
									300	7.99	34.18		26.653	139.6	.631
									400	7.00	34.25		26.850	120.9	.767
									500	6.39	34.27		26.948	111.6	.890

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

93035

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 41.5N		117 52.0W		09/08/69		2035 GMT			643M	310	15KT	1	320 05 08		
Z	T	S	O2	P04	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	21.19	33.78	5.50	.23	0.	.00	.0	436.2							
11	21.15	33.78	5.52	.23	0.	.00	.0	435.1							
30	15.39		6.57	.36	2.	.00	.0								
51	11.21		4.63	1.04	14.	.13	10.2								
83	10.48		3.80	1.37	21.	.00	15.0								
110	10.01	33.87	3.14	1.61	27.	.00		193.1							
153	9.33		2.92	1.74	34.	.00									
204	8.80		2.39	1.93	42.	.00									
256	8.37		1.64	2.15	51.	.00									
309	7.85		1.26												
416	6.86	34.28	.74					116.8							
527	6.28	34.31	.58					107.3							

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

93040

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 30.5N		118 11.5W		09/08/69	1556 GMT				1802M	310	11KT	2	320 04 08		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	19.41	33.62		23.885	402.9	0
									10	19.40	33.62		23.887	402.7	.040
									20	18.92	33.56		23.964	395.4	.080
									30	16.78	33.43		24.383	355.4	.118
									50	13.37	33.36		25.071	289.9	.183
									75	11.03	33.46		25.593	240.2	.249
									100	10.13	33.70		25.937	207.6	.306
									125	9.67	33.84		26.123	189.9	.356
									150	9.43	33.96		26.256	177.2	.403
									200	8.79	34.08		26.452	158.6	.488
									250	8.42	34.16		26.572	147.2	.567
									300	8.07	34.19		26.649	140.0	.641
									400	7.27	34.24		26.804	125.2	.779
									500	6.41	34.29		26.961	110.4	.904

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

93040

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 30.5N		118 11.5W		09/08/69	1644 GMT				1802M	310	11KT	2	320 04 08		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	19.41	33.63	5.49	.34	0.	.00	.0	402.2							
11	19.38	33.63	5.51	.32	0.	.00	.0	401.5							
31	16.37		6.00	.42	1.	.00	.0								
55	12.46		5.69	.72	4.	.12	2.7								
90	10.35		3.85	1.41	19.	.03	13.1								
120	9.76	33.84	3.11	1.65	27.	.03	16.6	191.3							
165	9.36		2.49	1.88	35.	.04									
219	9.00		1.83		43.	.01									
275	8.15		1.49												
329	8.15		.97												
438	7.01	34.28	.63					118.8							
548	6.12	34.34	.31					103.1							

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

93050

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 10.0N		118 52.5W		09/08/69	1009 GMT				1572M	330	12KT		320 06 06		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	18.46	33.56		24.079	384.5	0
									10	18.46	33.56		24.079	384.5	.038
									20	18.36	33.54		24.088	383.5	.077
									30	16.08	33.38		24.506	343.7	.113
									50	13.23	33.36		25.099	287.2	.177
									75	11.35	33.36		25.458	253.1	.245
									100	10.42	33.52		25.747	225.6	.305
									125	9.55	33.71		26.042	197.6	.358
									150	8.99	33.88		26.265	176.4	.406
									200	8.34	33.99		26.452	158.7	.491
									250	7.90	34.07		26.580	146.5	.569
									300	7.66	34.18		26.702	135.0	.642
									400	7.00	34.25		26.850	120.9	.776
									500	6.25	34.28		26.974	109.1	.897

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

93060

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
31 50.0N		119 34.0W		09/08/69	0425 GMT				3225M	310	12KT		320 05 06		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	18.51	33.63		24.119	380.5	0
									10	18.52	33.63		24.117	380.8	.038
									20	18.50	33.63		24.122	380.3	.076
									30	18.02	33.63		24.142	378.4	.114
									50	12.32	33.45		25.347	263.7	.179
									75	10.54	33.55		25.750	225.4	.240
									100	9.53	33.73		26.061	195.8	.293
									125	8.84	33.84		26.257	177.2	.340
									150	8.71	34.00		26.403	163.4	.384
									200	7.74	34.01		26.557	148.7	.463
									250	7.49	34.12		26.679	137.1	.536
									300	7.37	34.22		26.775	128.1	.605
									400	6.76	34.27		26.898	116.3	.733
									500	6.11	34.30		27.008	105.9	.850

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

93070

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
31 32.0N		120 17.0W		09/07/69		2305 GMT				3964M	330	09KT	0	330 04 06		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
									0	17.40	33.17		24.039	388.2	0	
									10	17.23	33.17		24.079	384.4	.039	
									20	16.57	33.23		24.279	365.3	.076	
									30	15.85	33.34		24.527	341.7	.112	
									50	14.12	33.25		24.833	312.6	.177	
									75	12.41	33.23		25.160	281.5	.252	
									100	10.90	33.32		25.508	248.3	.319	
									125	9.69	33.56		25.902	210.9	.377	
									150	9.28	33.74		26.109	191.2	.428	
									200	8.41	34.00		26.449	159.0	.517	
									250	7.41	34.09		26.594	145.1	.595	
									300	7.57	34.17		26.707	134.5	.667	
									400	6.99	34.25		26.851	120.8	.800	
									500	6.15	34.30		27.003	106.4	.920	

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CALCOFI CRUISE 6908

93080

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
31 09.0N		120 55.5W		09/07/69		1800 GMT				3737M	310	12KT	1	330 04 07		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
									0	17.30	33.22		24.101	382.3	0	
									10	17.20	33.23		24.123	380.3	.038	
									20	16.86	33.24		24.219	371.0	.076	
									30	16.60	33.27		24.303	363.1	.113	
									50	14.94	33.24		24.651	329.9	.182	
									75	13.36	33.23		24.973	299.3	.261	
									100	11.69	33.27		25.326	265.6	.332	
									125	10.41	33.39		25.648	235.0	.395	
									150	9.61	33.62		25.962	205.2	.451	
									200	8.48	33.89		26.352	168.1	.546	
									250	8.18	34.08		26.546	149.7	.628	
									300	8.11	34.22		26.666	138.3	.702	
									400	7.15	34.26		26.837	122.1	.838	
									500	6.20	34.29		26.983	108.3	.960	

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

93090

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
30 52.5N		121 36.5W		09/07/69		1255 GMT				4021M	290	08KT	2	280 05 08		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
									0	17.61	33.24		24.042	387.9	0	
									10	17.61	33.24		24.042	387.9	.039	
									20	17.15	33.20		24.121	380.4	.077	
									30	16.97	33.20		24.163	376.4	.115	
									50	14.99	33.20		24.609	333.9	.186	
									75	13.36	33.17		24.927	303.7	.267	
									100	11.92	33.22		25.245	273.4	.339	
									125	10.45	33.37		25.626	237.2	.404	
									150	9.37	33.60		25.985	203.0	.459	
									200	8.60	33.96		26.388	164.7	.553	
									250	8.20	34.09		26.545	149.8	.634	
									300	7.73	34.15		26.668	138.2	.708	
									400	6.90	34.23		26.848	121.1	.843	
									500	6.21	34.28		26.979	108.7	.964	

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CALCOFI CRUISE 6908

94030

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 42.5N			117 25.5W			08/06/69		2145 GMT		473M	210	03KT	1	00		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
									0A	19.44	33.61		23.869	404.4	0	
									10	18.14	33.53		24.135	379.1	.039	
									20	16.95	33.54		24.428	351.2	.076	
									30	12.87	33.36		25.171	280.4	.107	
									50	11.19	33.50		25.596	240.0	.160	
									75	10.29	33.68		25.894	211.6	.216	
									100	9.95	33.87		26.100	192.1	.267	
									125	9.62	33.99		26.248	178.0	.314	
									150	9.57	34.06		26.311	172.0	.359	
									200	9.39	34.11		26.380	165.5	.445	

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

94030

LATITUDE			LONGITUDE			MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 42.5N			117 25.5W			08/06/69		2250 GMT		473M	210	03KT	1	00		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0A	21.54		5.58	.20	2.	.00	.0									
10	19.17	33.63	5.68	.20	2.	.00	.0	396.4								
30	16.23	33.54	6.20	.26	3.	.03	.0	335.3								
45	12.11		5.41	.84	3.	.08	6.1									
54	11.20		4.52	.98	14.	.16	12.2									
70	10.68	33.66	3.75	.98	20.	.12	17.1	219.6								
84	10.48		3.70	1.17	22.	.03	18.4									
104	10.14		3.14	1.48	26.	.00	21.5									
129	9.75		2.75	1.68	32.	.00	25.1									
149	9.64		2.51	1.84	35.	.00	27.3									
179	9.55	34.07	2.46	1.84	36.	.00	28.0	171.0								
204	9.44	34.10	2.39	1.88	36.	.00	28.1	167.0								

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RV ALEXANDER AGASSIZ

CALCOPI CRUISE 6908

TEN METER DATA

					Z	T	S	02	PO4	SI03	NO2	NO3	DT
67.090	08/11/69	2320GMT	35 29.0N	124 56.0W	10	14.18	33.15		.49	2.	.02	1.4	321.2
		BOTTOM	4588M	WIND 360 22KT									
		DOMINANT WAVES	300 14 05	WEATHER 0									
70.051	08/15/69	0155GMT	36 10.5N	121 45.5W	10	11.96			.92	11.	.23		
		BOTTOM	399M	WIND 300 12KT									
		DOMINANT WAVES	280 03 04	WEATHER 0									
70.065	08/16/69	0000GMT	35 42.0N	122 46.0W	10	12.74			1.39	7.	.15	6.4	
		BOTTOM	2785M	WIND 330 24KT									
		DOMINANT WAVES	330 08 06	WEATHER 0									
73.050	08/21/69	1605GMT	35 37.0N	121 17.0W	10	12.68	33.68						253.5
		BOTTOM	187M	WIND 110 04KT									
		DOMINANT WAVES	300 02 06	WEATHER 4									
73.065	08/21/69	0622GMT	35 09.0N	122 20.5W	10	14.86	33.13		.47	1.	.00	.0	336.4
		BOTTOM	3844M	WIND 280 10KT									
		DOMINANT WAVES	330 05 06	WEATHER									
73.090	08/20/69	1740GMT	34 19.0N	124 02.0W	10	15.67	32.89						370.9
		BOTTOM	4022M	WIND 010 14KT									
		DOMINANT WAVES	350 06 05	WEATHER 2									
77.048	08/21/69	1956GMT	35 08.0N	120 43.5W	10	12.30	33.73						242.8
		BOTTOM	32M	WIND 270 11KT									
		DOMINANT WAVES	270 03 03	WEATHER 4									
77.051	08/21/69	2210GMT	35 02.0N	120 56.5W	10	14.47	33.6^						294.1
		BOTTOM	307M	WIND 340 10KT									
		DOMINANT WAVES	340 04 06	WEATHER 2									
77.055	08/22/69	0100GMT	34 54.5N	121 12.5W	10	14.20	33.56						291.6
		BOTTOM	556M	WIND 320 11KT									
		DOMINANT WAVES	310 04 05	WEATHER 2									
77.065	08/22/69	0640GMT	34 34.0N	121 55.0W	10	15.18	33.57		.45	2.	.02	.2	310.8
		BOTTOM	3731M	WIND 360 15KT									
		DOMINANT WAVES		WEATHER									
80.051	08/30/69	1450GMT	34 26.0N	120 32.5W	10	14.12	33.56						290.0
		BOTTOM	84M	WIND 320 04KT									
		DOMINANT WAVES	300 04 08	WEATHER 4									
80.065	08/30/69	0215GMT	33 59.0N	121 30.0W	10	15.23	33.53		.47	1.	.01	.1	314.8
		BOTTOM	3373M	WIND KT									
		DOMINANT WAVES		WEATHER									
83.040	08/31/69	0130GMT	34 13.5N	119 21.5W	10	17.26	33.58						355.3
		BOTTOM	28M	WIND 300 09KT									
		DOMINANT WAVES	270 03 07	WEATHER 4									

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6908

TEN METER DATA

			Z	T	S	O2	PO4	SI03	NO2	NO3	DT
83.080	09/01/69	0130GMT	32	51.0N	122	07.5W					
	BOTTOM	3926M									328.8
	DOMINANT WAVES	300 05 08	10	16.13	33.60						
87.033	09/02/69	1950GMT	33	54.0N	118	29.5W					
	BOTTOM	56M									386.5
	DOMINANT WAVES	350 01 03	10	18.42	33.52						
87.055	09/02/69	0410GMT	33	10.0N	120	00.0W					
	BOTTOM	1184M									342.5
	DOMINANT WAVES	300 04 07	10	16.22	33.40						
93.045	09/08/69	1330GMT	32	20.0N	118	31.5W					
	BOTTOM	1664M									
	DOMINANT WAVES	320 04 08	10	19.40		.25	1.	.14	.0		

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