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No. 1156

**Observations of Seawater Temperature and
Salinity at British Columbia Shore Stations
1970**

by
H. J. Hollister

**Pacific Environment Institute
West Vancouver, B.C.**

September, 1971

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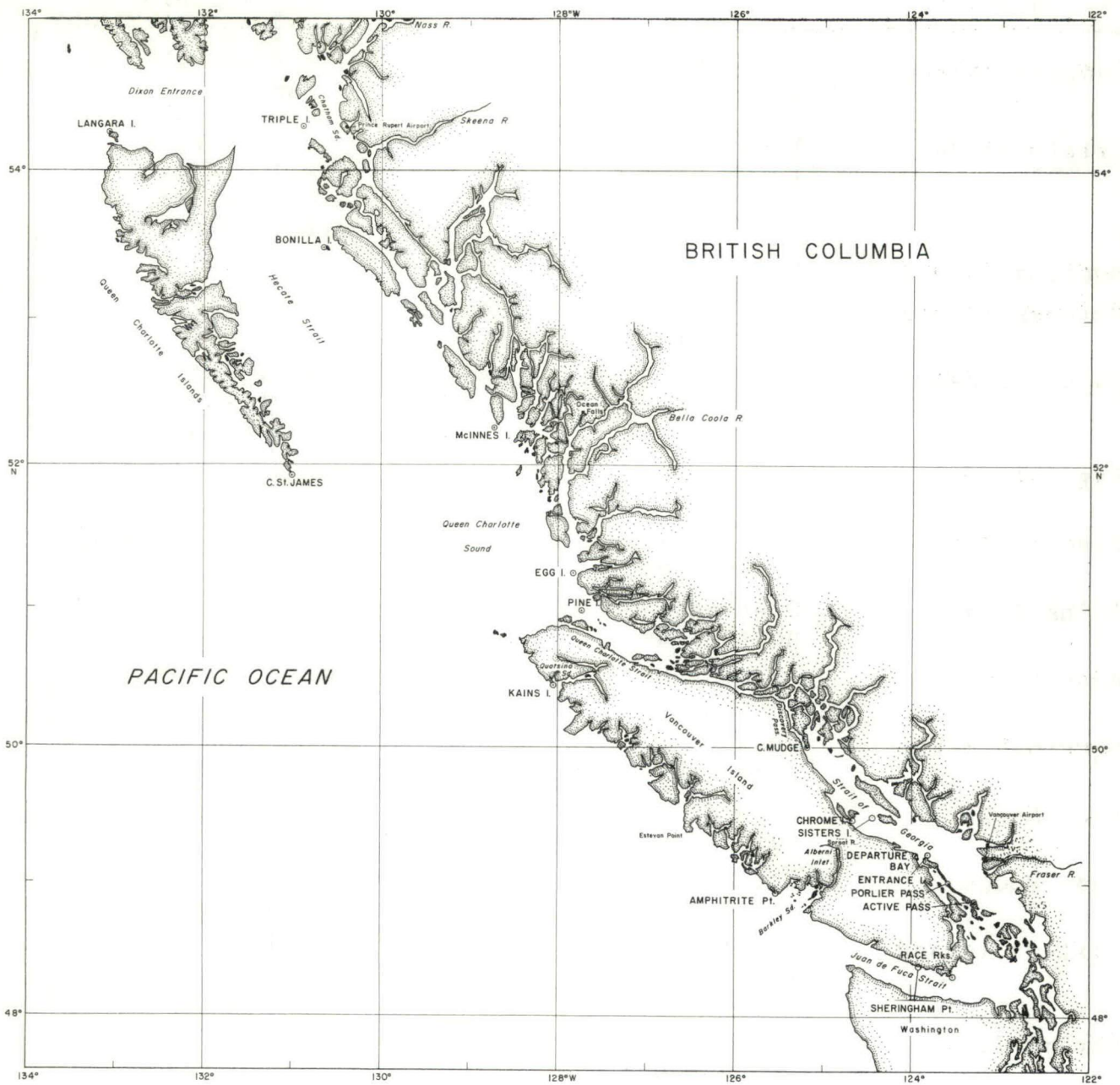


Fig. 1. Locations of shore stations making daily oceanographic observations in 1970.

Table 1. List of stations making oceanographic observations in 1970, locations, and names of observers.

Station	Location	Observers
Langara Island	Dixon Entrance, south side	G. C. Wilks D. Smith
Triple Island	Brown Passage, entrance to Chatham Sound	D.H. Franklin L.M. Clifford G.C. Nickolichuk R.B. Russell
Bonilla Island	Hecate Strait, north	H.J. MacArthur
McInnes Island	Milbanke Sound entrance, north side	W.F. McIlroy
Cape St. James	Queen Charlotte Islands, southern end	R.W. Pigott M.A. Fisher R.J. Bourque
Egg Island	Smith Sound, southern entrance	E.R. Carson
Pine Island	Queen Charlotte Strait, western entrance	M.I. Nelson (Mrs)
Kains Island	Quatsino Sound entrance, north side	L.C. Collins (Mrs)
Amphitrite Point	Barkley Sound, western entrance	O.A. Edwards
Sheringham Point	Juan de Fuca Strait, northern shore	E. Bruton (Mrs)
Race Rocks	Juan de Fuca Strait, eastern end	F.B. Anderson (Mrs)
Cape Mudge	Strait of Georgia, northern entrance	R.A. Cook C.W.A. Egg
Sisters Island	Strait of Georgia, central	W. Milne I.G. McNeil C.H. Schwarz
Chrome Island	Strait of Georgia, central western shore	L.E. Gardner (Mrs)
Entrance Island	Strait of Georgia, central western shore	E. Cehak (Mrs)
Departure Bay	Strait of Georgia, central western shore	F.R.B. Personnel
Porlier Pass	Strait of Georgia, southwestern shore	R.H. Noble
Active Pass	Strait of Georgia, southwestern shore	J.E. Ruck

Observations of Seawater Temperature and Salinity at British Columbia Shore Stations in 1970.

by

H. J. Hollister

Introduction

Daily observations of sea surface temperatures and collection of seawater samples for salinity determination have been made since the early 1930's at numerous locations, along the British Columbia coast. During 1970, observations were made at 18 shore stations (Fig. 1). Table 1 lists the stations, their general locations, and the names of the observers. This report presents the daily temperature and salinity data and such statistics as the monthly and annual means, maximum and minimum daily values in each month, and standard deviations based on daily observations. Also included are graph plots of a 7-day, normally weighted, running mean of temperature and salinity for each station. A general assessment of the temperature and salinity conditions observed in 1970 is presented. Observations in earlier years have been published, and the data records are listed in the reference section.

Most of the stations are at lightstations, and the voluntary services of the lightkeepers as observers have been obtained through arrangement with the Marine Transportation division of the Ministry of Transport. The Cape St. James station is a combined radiobeacon and meteorological station, and the services of the meteorological staff are obtained by permission of the Regional Director, Air Services. The observers receive a payment from the Fisheries Research Board for their work.

Observation procedures

The daily observation is made within one hour prior to the time of the daytime high tide, or as close as possible to this time, depending upon weather conditions and lightkeeping schedules. There are two locations where the observation time is determined in a different manner. At Porlier Pass and Active Pass lightstations, the observations are made twice-daily, at the times of low- and highwater slack in each pass, as determined from the Tide Tables (Canadian Hydrographic Service 1970).

The oceanographic observations are made at a depth of 3 feet (1 m). The seawater temperatures are measured with a mercury thermometer graduated in 0.5 F intervals, from 30 to 85 F, and are read to 0.1 degrees. The thermometer has a backing in the glass stem which reflects the mercury column as a red band. It is compared with a calibrated thermometer to check the accuracy. The maximum allowable index scale error is ± 0.3 F (± 0.2 C). The thermometer is mounted in a protective case of 1-inch diameter aluminum pipe. At most stations, where hydrometers are now used to measure seawater density, a 26-oz (738 cc) glass bottle is used to collect the seawater sample. At several stations, a 32-oz (909 cc) unbreakable polyethylene bottle is used because the rough seas frequently broke the glass bottles. At the stations still taking seawater samples for salinity determinations, the usual 2-oz (57 cc) glass bottle with plastic-lined screw cap was used. The thermometer case and the sample-bottle holder are attached to a pole made of aluminum pipe, sometimes 20-feet long. This length is necessary because in some locations the observations are made from rocky ledges or steep shorelines. The time of observation, seawater temperature, and hydrometer reading are recorded on a monthly record sheet, which is mailed to West Vancouver every two months.

The 1970 sea temperature and salinity data

Sea temperatures are listed as reported by the observer. Data were deleted only when it was found that a faulty thermometer had been used. The expected accuracy of the individual readings is ± 0.3 F (± 0.2 C). Most of the salinity data for 1970, except at two stations, have been obtained by hydrometer readings. The observed readings are reduced to densities at the standard temperature of 15 C, using the tables in the U.S.C. & G.S. publication "Sea Water Temperature and Density Reduction Tables" (Zerbe and Taylor 1953). The reduced density data are converted to salinity values, after hydrometer calibration corrections have been applied. The salinity data obtained by hydrometers are considered to have an accuracy of ± 0.3 ppt. Only the most anomalous salinity values have been eliminated from the data, when they were obviously due to incorrect hydrometer readings. Seawater samples for salinity analyses were collected for the whole year at Cape St. James and Egg Island stations, and for a few months at several stations where field checks were being made of the accuracy of the hydrometer procedures. The salinities for the two aforementioned stations and for Sheringham Point are listed in the data record to 2 decimal places. For the other stations, the few months of salinometer-determined salinities have been listed as 1-decimal values to conform with the hydrometer-determined data for the remainder of the year.

Observations were terminated at Triple Island on December 16 because it became difficult to maintain good liaison with a temporary observer. Termination of the observations at Triple Island had already been contemplated because hazardous observing conditions had caused equipment losses and disrupted the continuity of the observations. The two regular observers have often taken considerable personal risks in stormy weather to make the observations. There are 30 years of surface oceanographic data from Triple Island.

The collection of salinity samples at Sheringham Point ended on March 31. It was decided not to make hydrometer observations because there is little variation in the daily salinities, and the data from Race Rocks, 15 miles eastward, are sufficient to describe the salinity conditions of the surface waters in this sector of the Strait. The sea temperature observations are continuing.

Observations at low-water slack at Active Pass were discontinued after February 28 because there was no further requirement for this information in the studies of the movements of the Fraser River plume of brackish surface water. Observations at high water slack are continuing.

The station data tabulated in the report are arranged in a general north to south order, the same as in Table 1. The position coordinates of each sampling location are listed alongside the station name as degrees, minutes and seconds of north latitude and west longitude. The temperature and salinity graph plots in the second section of the report are similarly arranged.

Machine processing of the data

The daily temperature and salinity data are processed by computer at the Canadian Oceanographic Centre in Ottawa, Ontario, using a program developed for use with an IBM 1620 computer, and later revised for use with a CDC 3100 computer (Somers 1965). The pages in this report are direct-image copies of the C.O.D.C. computer printout.

A 7-day normally-weighted, running mean of the daily data is calculated (Holloway, Jr. 1958). An automatic plot of these running means is made on a Calcomp 563 plotter at the Data Centre. The graphs presented in this report are a direct-image copy of the automatic plots reduced to page size. A Celsius temperature scale has been added to the Fahrenheit temperature plot. So that the running mean will be reasonably continuous, interpolated values are inserted in the 1- and 2-day missed periods. These interpolated values are indicated in the daily data tabulations by an asterisk preceding the

number. Periods of more than 2 days of missed data are indicated by a "*0" entry in the tabulations. The running mean computations are interrupted by this entry and there is a break in the graph plot. Invalid days such as April 31 are indicated in the tabulations by a "0" entry.

For each month's data, the monthly mean temperature and salinity and the standard deviation based on the daily observations are computed. The monthly means are rounded off to the reported decimal place. The "OBSVNS" line lists the number of true observed data in each month's tabulations. The maximum and minimum daily values in each month are next listed. The standard deviation (STD DEV) values have been truncated to the second decimal place. Annual mean temperature and salinity are listed on the October-November-December page in the "YRLY MEANS" line.

The G20106 computing program was revised to input 1-decimal salinity data derived from hydrometer readings. Somehow, the computations of the monthly and annual means of both the temperature and the salinity were printed out as 2-decimal values. Users of the data should round them off to the first place to be consistent with the 1-decimal input. The original programming functioned correctly for the 2-decimal salinity data input for Cape St. James, Egg Island, and Sheringham Point.

A summary of sea temperature and salinity conditions in 1970.

Temperature

Along such an extensive coastline as British Columbia's the variation in surface inshore conditions is considerable. This variety can be noted in the different annual patterns of seasonal temperature change shown in the shore station data. Superimposed on these regular seasonal trends are numerous short-term fluctuations caused by reactions to changes in the effective environmental forces. But similar anomalous sea temperature conditions do occur in a regional and sometimes coastwise scope. This has been defined as station-to-station coherence in the reaction to significant climatological changes (Robinson 1960).

Several instances of coherence are recognized in the 1970 sea temperature observations. At most stations, normal January mean temperatures were followed by a 2-month period of above-normal temperatures. Regional oceanographic differences became apparent in the spring and early summer, when the temperature anomalies were small plus or minus differences

within the limits of normal conditions. Below-normal temperatures occurred in July at a number of stations both on the open coast and in the Strait of Georgia. This below-normal trend continued to the end of the year, with only single-month interruptions. At 2 stations, Pine and Kains Islands, the below-normal temperature conditions prevailed for 6 months continuously.

At the 2 north coast stations of Triple and Bonilla Islands, normal sea temperatures in January were followed by 2 months of above-normal mean temperatures. Spring and summer temperatures were near normal, but Triple Island temperatures dropped to below-normal levels in July and continued through to November. At Bonilla Island, the September, October, and December temperatures were below normal. The annual range of mean temperature at this stations was from 54.0 F (12.2 C) in July to 43.1 F (6.2 C) in December. Langara Island's mean temperatures were also above normal in February and March, close to normal during April to August and below normal in September and October. Temperatures at McInnes Island were near normal during the first 6 months of the year, except for an above-normal March. July to September temperatures were below normal, as was December's. The annual temperature range at McInnes was from 55.4 F (13.0 C) in August to 43.8 F (6.6 C) in December. At the exposed ocean location of Cape St. James there was a 3-month period of above-normal temperatures from February to April. During the remainder of the year temperatures were close to normal, with the exception of below-normal August. Monthly mean temperatures ranged from 46.4 F (8.0 C) in February (and December) to 53.2 F (11.8 C) in August.

At the new station Egg Island, monthly mean temperatures ranged from 54.2 F (12.3 C) in August to 41.3 F (5.2 C) in December. Temperatures during the period May to August were 2 to 5F (1 to 3 C) higher than at Pine Island, only 16 miles farther south. Pine Island temperatures had the smallest annual range of all stations, 4.4 F (2.4 C). February and March temperatures were above normal, followed by a brief 3-month period of normal conditions. Commencing in July, there was a continuous 6-month period of below-normal temperatures. The same deficient temperature conditions were observed at Kains Island, but extending from June. Temperatures here were normal for the first 5 months. At Amphitrite Point the usual above-normal trend was noted in the February and March temperatures. The rest of the year was normal, except for below-normal August and September temperatures. The annual temperature range was from a maximum of 54.5 F (12.5 C) in July and August to a minimum of 46.2 F (7.9 C) in December. Monthly mean temperatures at Race Rocks were at a minimum of 45.6 F (7.6 C) in January and December, and reached a maximum of 50.5 F (10.3 C) in July and August. Following above-normal temperatures in

February and March, below-normal temperatures soon became apparent in May, 2 months earlier than the majority of stations. The deficient temperature conditions prevailed for the next 6 months to October. Normal temperatures were observed in November and December. The monthly mean temperatures at Sheringham Point were always warmer than at Race Rocks, by as much as 1.0 F (0.6 C) in the 3 months June to August.

In the Strait of Georgia region, 4 of the 7 stations have sufficient data history (9 to 30 years) to permit comparisons with a statistical norm. These are Cape Mudge, Chrome Island, Entrance Island and Departure Bay. The latter 2 stations had above-normal February temperatures; all 4 had above-normal March temperatures. The spring and early summer was a transitional period when mean temperature anomalies were generally within the normal limits. Chrome Island's mean May temperature was below normal, while Entrance Island's June temperature was above normal. Below-normal temperatures were more prevalent after June, but not to the extent observed at the open coast stations. At Cape Mudge, the below-normal July temperature was followed by normal temperatures to the end of the year. Chrome Island had below-normal temperatures in September and November. At Entrance Island, below-normal mean temperatures occurred in July and September; the other months had normal temperatures. The minimum monthly mean temperature was 44.5 F (6.9 C) in January, and the maximum was 62.4 F (16.9 C) in August. Temperatures at Sisters Island had exactly the same range. Departure Bay observed below-normal mean temperatures in July, November, and December. The highwater mean temperatures at Porlier Pass were at a minimum of 45.2 F (7.3 C) in January and reached a maximum of 58.5 F (14.7 C) in July. Active Pass summer temperatures were 2 F (1 C) higher than at Porlier, and were generally similar during the other months of the year.

Salinity

The majority of the 1970 salinity data were obtained from hydrometer readings and have a general accuracy of ± 0.3 ppt. The limits of normalcy of salinity conditions at the shore stations are derived from 10 to 30 years of data that have an overall accuracy of ± 0.05 ppt. So, small differences between 1970 salinities and the long-term normals would not be significant because of the lower accuracy of the 1970 data. But anomalies that exceed the 0.3 ppt accuracy limitation can be considered indicative of abnormal salinity conditions. The lower accuracy of the hydrometer data seriously limits the use of the data obtained at those stations which have a small range in daily salinity variations (less than 0.3 ppt).

The salinity data from 18 widely scattered shore stations will show a large variety of short-term variations because of the diversity in the effects of the causative environmental factors. But 3 general patterns of seasonal trends in the yearly data can be easily recognized (Pickard and McLeod 1953). These patterns are: (1) salinity increasing to a maximum in summer, (2) salinity decreasing to a minimum in summer, and (3) salinity substantially constant throughout the year. Coherence in salinity anomalies sometimes occurs between those stations in similar groups (Robinson 1960).

Coherence was apparent in 1970 in the winter salinity conditions at the 2 northern coast stations, Langara Island and Bonilla Island (group 3). Mean January and February salinities were below normal; November and December salinities were above normal. In the intervening months, salinities at Langara were above normal in the period April to July, and below in August. At Bonilla Island the below-normal salinities continued from February until April. Monthly mean salinities at Langara Island ranged from a low of 31.6 ppt in February to a high of 32.9 ppt in June and July. Bonilla Island salinities were lower, ranging from 30.7 ppt in January to 31.6 ppt in December. Triple Island mean salinities were below normal in March and September and above normal in May. There were only 3 months of abnormal salinity conditions at McInnes Island during 1970. The May salinity was below normal; the November and December salinities were above normal, similar to the conditions at Langara and Bonilla. The salinity conditions at Cape St. James were near normal for the whole year, with a positive anomaly of 0.21 ppt in November and December being the largest deviation. The annual range was from 32.43 ppt in December to 31.96 ppt in July and August.

Another indication of coherence in salinity anomalies was noted in the data from the 4 stations: Pine Island, Race Rocks (group 3), and Kains Island, Amphitrite Point (group 2). They frequently had above-normal mean salinities during the latter 6 months of the year. During the first 6 months, the monthly mean salinities were close to normal, with the exception of a sub-normal March at Pine Island and an above-normal May at Race Rocks. The annual range at Pine Island was from 31.0 ppt in March to 32.3 ppt in October. At Amphitrite Point the range was from 29.7 ppt in February to 32.1 ppt in June. Monthly mean salinities at Egg Island were lowest during the summer months, reaching a minimum of 28.33 ppt in June and a maximum of 31.79 ppt in December. This summer minimum is caused by increased fresh water runoff from Rivers Inlet.

During the first 6 months of the year, the 3 stations in the central Strait of Georgia region, Chrome Island, Entrance Island, and Departure Bay, had monthly mean salinities that showed minor positive anomalies, but still within the range of normal conditions. In the latter half of the year, there were frequent

occurrences of above-normal conditions. These higher salinities were the combined result of below-average summer Fraser River discharge and periods of deficient precipitation amounts. At Cape Mudge, the mean salinities were close to normal all year except for an above-normal October. Chrome Island salinities showed large positive anomalies for the months of July, September, October, and November. Above-normal mean salinities occurred in July and September at Entrance Island. Departure Bay salinities were above-normal for the 4 months, July, September, October, and November. Observations at Sisters Island showed that the 1970 salinities were 2 to 3 ppt higher than in the previous two years. The annual salinity range was from a minimum of 26.9 ppt in July to a maximum of 29.8 ppt in November and December. Highwater salinities at Porlier Pass and Active Pass were generally 2 to 3 ppt higher than those observed in the 3 years 1967 to 1969. Summer highwater salinities at Porlier Pass were usually slightly higher than at Entrance Island, probably because of the mixing upward of deep, saltier water in the 4 to 9 knot tidal current. Low-water salinities at Porlier Pass during the summer were about 1 ppt lower than the high-water values. Highwater mean salinities at Active Pass were considerably lower (2 to 7 ppt) than at Porlier during May to September, indicating that the brackish Fraser River plume is predominant in the Strait south of the 49th parallel. Monthly mean salinities at Active Pass ranged from 20.0 ppt in August to 29.5 ppt in December.

Acknowledgements

I am grateful to the observers who took these observations and maintained such a remarkable continuity in the data, despite stormy weather and often hazardous conditions at the sampling locations. Excellent assistance and cooperation have been received from the District Managers and staffs of the Marine Transportation divisions, Ministry of Transport, in Victoria and Prince Rupert, as well as from the M.O.T. Radio Branch, who transmitted numerous messages concerning the observations program. The staff of the Canadian Oceanographic Data Centre, under the supervision of Mr. Charles J. Glennie, processed the computations and the graph plots.

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Fig. 2. An aerial view of Egg Island. The arrow indicates where the oceanographic observations are taken. Scale: approx. 1/2 mi. per in. (B.C. Gov't Air Photo 1428:23, Sept. 21, 1951).



Fig. 3. The landing cove at Egg Island. The observations are taken at the foot of the loading derrick. The wooden plank ramps lead to the lightstation.

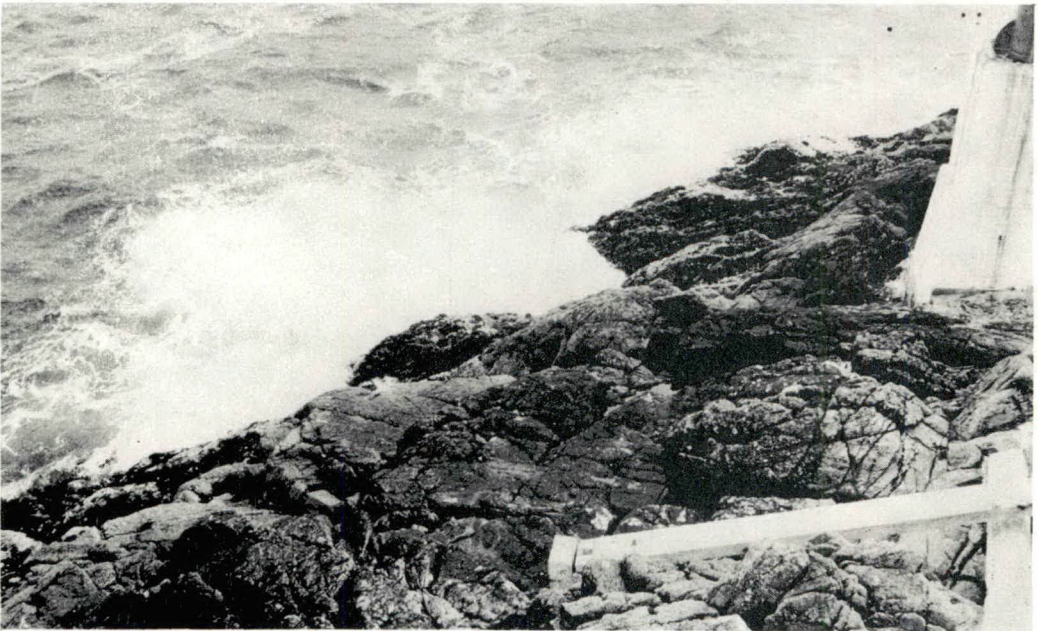


Fig. 4. A closer view of the rocky shore at the foot of the derrick. The observer, Mr. E.R. Carson, walks down the narrow plank to the water's edge to take the observation.



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Tabulations of Daily Sea Surface
Temperature and Salinity

1970

TEMP: Temperature F

SAL: Salinity ppt

LANGARA ISLAND

54 15 19 N

133 03 30 W

JANUARY

FEBRUARY

MARCH

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	46.0	31.6	44.1	31.8	44.5	32.5
2	46.4	31.8	44.5	31.5	44.4	32.3
3	46.2	31.2	44.0	31.2	44.7	32.0
4	46.0	32.3	44.4	30.8	45.0	32.3
5	45.8	32.1	44.5	31.1	45.1	32.3
6	45.0	32.3	* 44.6	* 31.1	45.3	32.5
7	44.8	31.4	44.7	31.1	44.4	32.8
8	44.8	32.1	44.8	31.4	45.3	32.5
9	44.6	31.6	45.5	31.5	45.2	32.4
10	44.0	31.8	44.9	31.4	45.1	32.5
11	41.5	31.8	44.8	31.6	45.2	32.3
12	40.8	31.9	44.5	31.5	45.0	32.4
13	41.3	31.8	45.0	31.6	45.5	32.7
14	42.5	32.1	45.0	31.4	45.4	32.5
15	42.0	31.8	44.7	31.4	45.0	32.5
16	41.5	32.3	44.8	31.2	45.6	32.5
17	41.8	32.1	44.6	31.2	45.4	32.0
18	43.0	32.1	44.7	31.2	45.0	32.5
19	42.8	32.0	45.0	31.5	45.1	32.1
20	44.2	32.1	45.3	31.5	45.0	32.3
21	43.4	32.5	46.0	31.5	45.0	32.0
22	44.0	32.1	46.2	32.1	* 45.0	* 32.0
23	44.4	32.1	45.8	32.3	* 44.9	* 32.0
24	44.0	32.3	45.2	32.0	44.8	32.0
25	43.6	31.6	45.7	32.1	45.6	32.3
26	44.0	31.9	45.0	32.3	45.0	31.8
27	43.6	32.3	44.7	32.1	45.2	32.3
28	44.0	32.0	* 44.6	* 32.3	45.6	32.3
29	44.2	32.0	0	0	45.6	32.3
30	44.3	31.5	0	0	45.2	32.5
31	43.9	31.9	0	0	45.4	32.1
MEANS	43.82	31.95	44.94	31.55	45.12	32.33
OBSVNS.	31	31	26	26	29	29
MAXIMUM	46.4	32.5	46.2	32.3	45.6	32.8
MINIMUM	40.8	31.2	44.0	30.8	44.4	31.8
STD.DEV.	1.51	.30	.54	.39	.34	.23

LANGARA ISLAND

54 15 19 N

133 03 30 W

APRIL

MAY

JUNE

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	45.6	32.1	45.4	32.7	* 48.1	* 0
2	45.6	32.4	45.5	31.9	48.4	32.7
3	45.4	32.3	45.5	32.1	48.2	33.2
4	44.6	32.1	45.4	32.0	48.5	32.7
5	* 44.5	* 32.4	45.5	32.5	49.2	33.3
6	44.4	32.7	46.0	32.9	48.2	33.2
7	44.6	* 32.8	45.6	32.7	48.8	32.7
8	44.8	32.8	46.0	32.7	49.0	32.5
9	45.0	33.0	47.2	33.0	49.3	33.2
10	44.9	* 32.8	46.5	32.8	48.3	33.0
11	45.0	32.7	46.7	32.3	48.7	33.2
12	44.9	32.7	46.9	32.4	48.5	32.9
13	44.8	32.8	46.5	32.8	49.2	33.3
14	45.0	32.7	47.2	32.7	50.4	31.9
15	45.1	32.5	46.5	32.5	49.6	32.8
16	45.0	32.4	46.5	32.9	50.0	32.7
17	45.5	32.5	46.8	32.9	48.8	33.2
18	45.2	32.5	47.1	32.8	48.9	32.9
19	45.0	32.1	47.4	32.8	48.4	33.3
20	45.3	33.0	47.0	32.9	48.5	* 33.3
21	45.5	32.8	47.2	32.9	48.8	33.3
22	45.5	32.8	47.0	32.8	47.9	33.0
23	45.2	32.8	47.1	32.8	48.3	33.0
24	45.5	32.8	47.2	33.0	48.6	32.4
25	45.4	32.9	47.3	32.7	48.6	32.7
26	45.6	32.5	47.5	33.0	48.8	32.9
27	45.5	32.8	47.8	* 33.1	48.7	32.8
28	45.6	32.7	47.6	33.2	49.0	32.5
29	45.4	32.3	47.5	* 0	49.5	32.7
30	45.5	32.5	47.6	* 0	50.0	32.4
31	0	0	* 47.8	* 0	0	0
MEANS	45.19	32.60	46.70	32.69	48.87	32.87
OBSVNS.	29	27	30	27	29	28
MAXIMUM	45.6	33.0	47.8	33.2	50.4	33.3
MINIMUM	44.4	32.1	45.4	31.9	47.9	31.9
STD.DEV.	.35	.26	.76	.32	.59	.34

LANGARA ISLAND

54 15 19 N

133 03 30 W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	50.3	32.8	53.4	32.8	51.4	31.2
2	49.8	32.7	51.8	32.7	51.2	31.5
3	50.6	32.8	51.4	32.7	51.6	32.0
4	50.4	32.4	50.3	32.1	50.4	31.9
5	50.1	32.4	52.0	32.8	* 51.1	* 31.8
6	50.0	32.7	52.0	32.5	51.6	31.8
7	50.8	* 32.6	52.3	32.4	51.8	31.8
8	51.8	* 32.5	53.2	32.5	50.9	31.5
9	52.3	32.4	53.6	32.0	50.8	31.4
10	52.8	32.7	* 53.8	* 31.9	50.2	31.6
11	52.2	32.8	54.0	31.8	50.4	31.2
12	51.2	32.1	53.8	32.1	50.3	31.6
13	51.5	* 0	54.0	32.8	49.5	32.4
14	52.0	* 0	53.8	32.3	49.4	32.3
15	51.8	* 0	53.8	31.6	50.4	32.5
16	51.2	* 0	53.9	32.3	48.8	32.8
17	52.0	* 0	53.5	32.1	48.5	32.3
18	51.9	* 0	52.8	32.1	49.8	31.8
19	51.8	33.0	52.7	32.3	49.9	32.3
20	51.7	32.8	52.5	32.1	51.5	32.3
21	52.0	32.5	53.3	32.5	51.4	32.3
22	51.9	* 0	* 53.9	* 31.4	50.2	31.9
23	51.8	* 0	54.4	30.3	50.3	32.1
24	51.4	33.0	53.0	31.0	49.5	31.8
25	51.5	* 0	53.0	30.2	51.0	31.5
26	51.8	* 0	52.2	30.6	50.8	32.0
27	51.4	* 0	52.4	30.6	50.8	32.4
28	51.6	* 0	50.5	30.7	50.3	32.4
29	52.0	32.8	53.7	30.2	50.4	32.3
30	52.6	32.7	52.5	30.3	49.5	31.9
31	52.4	32.7	51.4	30.8	0	0
MEANS	51.50	32.66	52.80	31.77	50.43	31.96
OBSVNS.	31	17	29	29	29	29
MAXIMUM	52.8	33.0	54.4	32.8	51.8	32.8
MINIMUM	49.8	32.1	50.3	30.2	48.5	31.2
STD.DEV.	.77	.23	1.05	.91	.85	.41

LANGARA ISLAND

54 15 19 N

133 03 30 W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL,	DATE	TEMP	SAL,	TEMP	SAL,
1	52.0	32.3		49.6	32.4	42.3	32.8
2	51.9	32.3		49.5	32.5	42.7	* 32.9
3	51.2	32.1		49.2	32.0	42.7	33.0
4	50.2	32.1		48.6	32.3	42.9	* 33.0
5	49.9	32.4		49.0	32.0	42.9	32.9
6	49.6	32.1		48.5	32.1	43.8	* 32.7
7	50.0	31.8		48.0	32.7	43.6	* 32.5
8	50.0	31.8		48.2	32.4	44.0	32.3
9	49.6	32.1		48.1	32.3	43.8	32.8
10	49.6	32.1	* 48.3	* 32.5	43.7	33.0	
11	48.2	31.9		48.5	32.7	43.8	* 32.9
12	49.0	31.8		48.3	32.7	44.0	32.8
13	48.5	32.1		47.8	32.7	43.7	32.5
14	48.0	32.7		48.3	32.5	43.5	* 32.7
15	* 47.2	* 32.6		47.8	32.5	43.4	32.8
16	46.5	32.5		48.5	32.1	43.6	32.8
17	47.0	32.5		46.3	32.7	44.0	* 32.9
18	* 47.6	* 32.4		45.8	32.3	43.9	33.0
19	48.2	32.3		46.2	32.0	43.7	33.0
20	47.9	32.1		45.5	32.4	42.5	* 32.9
21	47.0	32.0		44.5	32.0	43.2	32.9
22	* 0	* 0		43.9	32.3	43.1	32.8
23	* 0	* 0		44.0	32.0	43.5	* 32.8
24	* 0	* 0		43.6	32.3	43.6	32.8
25	48.0	31.9		43.8	32.3	43.8	32.8
26	47.2	32.3		43.3	32.3	44.3	33.0
27	47.6	32.4		43.2	32.4	43.9	32.1
28	48.8	32.1		43.5	32.8	42.2	* 32.1
29	48.9	32.0		43.6	32.8	* 42.2	* 32.0
30	48.5	32.0		43.8	32.9	42.3	32.0
31	49.5	32.4		0	0	* 0	* 0
MEANS	48.95	32.16		46.51	32.39	43.39	32.74
OBSVNS.	26	26		29	29	29	19
YRLY. MEANS.....						47.36	32.28
MAXIMUM	52.0	32.7		49.6	32.9	44.3	33.0
MINIMUM	46.5	31.8		43.2	32.0	42.2	32.0
STD.DEV.	1.45	.24		2.29	.27	.59	.30

TRIPLE ISLAND

54 17 36 N

133 52 40 W

JANUARY

FEBRUARY

MARCH

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	46.5	* 30.3	44.3	31.5	45.3	31.5
2	46.4	* 30.5	45.0	31.7	44.8	31.4
3	46.7	30.6	44.0	31.5	44.4	31.0
4	46.6	30.6	45.2	* 0	44.2	31.2
5	47.6	30.9	44.8	* 0	44.5	31.2
6	46.5	31.0	44.9	* 0	45.0	31.6
7	45.5	31.1	44.9	31.4	45.2	31.1
8	46.5	31.1	45.3	31.4	45.0	31.2
9	45.8	31.2	45.5	31.5	45.5	31.4
10	44.8	30.9	45.5	31.6	45.0	31.6
11	42.4	31.0	45.5	31.4	45.6	31.1
12	41.0	31.2	45.3	31.4	45.1	31.1
13	* 38.8	* 31.2	45.3	31.4	45.5	31.4
14	36.6	31.3	45.0	31.4	45.5	31.5
15	36.0	31.2	45.2	31.4	45.0	31.4
16	38.0	31.3	45.0	31.5	45.0	31.6
17	40.0	31.2	45.2	31.5	45.4	31.2
18	42.0	31.4	45.0	31.4	45.4	31.4
19	43.0	31.3	45.6	31.7	45.5	31.2
20	44.0	31.5	45.6	31.7	45.5	31.2
21	45.1	31.5	45.7	31.6	45.4	31.1
22	45.0	31.6	45.6	31.5	45.5	31.2
23	45.0	31.4	45.5	31.5	45.0	31.2
24	45.0	31.4	45.5	31.4	45.1	31.0
25	44.8	31.6	45.7	31.4	45.4	31.4
26	44.5	31.4	45.7	31.5	45.6	31.2
27	44.8	31.6	45.2	31.0	45.5	31.5
28	44.5	31.4	45.3	31.4	45.0	31.2
29	44.9	31.6	0	0	45.5	31.2
30	44.5	31.6	0	0	45.5	31.4
31	44.0	31.6	0	0	45.5	31.4
MEANS	43.93	31.27	45.22	31.47	45.21	31.29
OBSVNS.	30	28	28	25	31	31
MAXIMUM	47.6	31.6	45.7	31.7	45.6	31.6
MINIMUM	36.0	30.6	44.0	31.0	44.2	31.0
STD.DEV.	2.95	.29	.41	.14	.36	.17

January 1 to March 31: Salinity data from salinometer analyses.

TRIPLE ISLAND

54 17 36 N 133 52 40 W

APRIL

MAY

JUNE

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	45.1	31.2	46.0	31.6	49.0	31.9
2	45.0	31.0	46.0	31.8	49.0	31.6
3	44.5	31.1	46.3	31.8	49.5	31.9
4	45.0	31.4	46.3	31.8	49.0	31.9
5	45.0	31.1	46.4	32.0	51.9	24.7
6	44.7	31.5	46.0	32.0	51.9	26.9
7	44.5	31.5	46.2	32.1	50.0	30.6
8	45.1	31.5	47.0	31.8	49.7	31.1
9	45.2	31.9	46.5	31.8	49.8	31.1
10	45.1	31.6	47.0	31.9	49.9	31.4
11	45.3	31.5	47.5	31.8	52.8	24.7
12	45.6	31.6	47.2	31.9	53.6	23.4
13	45.5	31.8	47.1	31.6	51.8	22.6
14	45.2	31.6	46.5	31.6	52.0	25.6
15	45.5	31.5	47.0	31.9	52.4	23.8
16	45.6	31.5	47.0	31.6	53.6	23.4
17	46.0	31.5	45.5	31.5	54.2	25.0
18	45.8	31.4	47.2	31.5	53.9	26.9
19	45.8	31.6	47.5	31.5	54.0	26.0
20	45.8	31.8	48.0	31.9	50.0	30.2
21	46.0	31.5	47.0	31.6	52.0	26.7
22	45.3	31.5	48.0	31.9	52.5	26.7
23	45.4	31.5	48.0	31.6	51.3	30.2
24	* 45.4	* 31.5	48.0	31.8	51.0	30.4
25	45.5	31.5	47.8	31.9	51.1	31.1
26	46.1	31.5	48.2	31.6	51.1	31.0
27	46.3	31.8	48.7	31.8	50.6	30.8
28	45.8	31.6	48.0	31.9	51.4	30.4
29	45.8	31.8	48.5	31.9	52.0	27.1
30	45.6	31.8	48.5	31.0	51.7	30.7
31	0	0	48.5	31.9	0	0
MEANS	45.42	31.52	47.21	31.75	51.42	28.33
OBSVNS.	29	29	31	31	30	30
MAXIMUM	46.3	31.9	48.7	32.1	54.2	31.9
MINIMUM	44.5	31.0	45.5	31.0	49.0	22.6
STD.DEV.	.46	.22	.89	.21	1.55	3.13

TRIPLE ISLAND

54 17 36 N

133 52 40 W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	51.2	31.4	56.0	25.6	53.5	28.8
2	53.5	31.5	54.5	28.1	51.9	30.4
3	52.8	31.2	54.0	27.8	52.1	31.1
4	52.7	31.6	54.2	29.7	52.1	31.0
5	52.4	31.5	53.9	29.4	52.2	31.2
6	52.5	31.6	53.2	30.6	52.0	31.5
7	52.5	31.5	53.8	30.2	52.0	30.4
8	53.5	31.5	53.0	30.2	52.2	29.9
9	54.0	* 31.4	52.5	31.0	52.2	29.8
10	54.8	31.4	53.5	31.0	51.8	28.1
11	54.4	29.3	53.5	30.7	51.5	27.7
12	54.9	30.6	52.6	31.1	51.5	27.4
13	51.5	30.2	53.0	30.6	50.6	27.4
14	52.0	28.9	52.5	30.4	51.0	27.2
15	53.0	30.4	52.6	31.1	50.8	28.0
16	54.5	29.4	52.7	30.7	50.2	29.3
17	52.0	29.7	53.4	31.4	50.1	29.9
18	52.3	30.3	53.1	31.5	50.1	29.7
19	52.0	30.3	53.0	31.6	50.5	29.9
20	51.7	30.6	53.3	31.2	51.6	30.4
21	54.0	29.4	52.4	30.8	50.8	29.9
22	52.2	29.1	51.5	27.7	50.5	30.2
23	53.5	28.1	53.8	* 0	49.8	30.2
24	52.3	28.9	56.0	* 0	49.5	29.9
25	53.4	29.3	55.1	* 0	49.8	29.9
26	54.0	29.3	53.0	* 0	50.1	30.7
27	53.0	29.3	54.4	27.4	50.4	31.0
28	53.0	26.8	53.6	28.2	51.0	31.5
29	53.2	27.8	53.2	31.1	51.0	31.2
30	54.0	23.0	53.0	30.8	51.0	30.7
31	55.0	21.6	56.0	25.4	0	0
MEANS	53.09	29.52	53.56	29.83	51.13	29.81
OBSVNS.	31	30	31	27	30	30
MAXIMUM	55.0	31.6	56.0	31.6	53.5	31.5
MINIMUM	51.2	21.6	51.5	25.4	49.5	27.2
STD.DEV.	1.04	2.33	1.08	1.76	.95	1.28

TRIPLE ISLAND

54 17 36 N 133 52 40 W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	50.8	30.4	48.8	32.0	40.5	31.5
2	51.2	32.3	49.0	32.1	* 40.5	31.6
3	51.5	31.0	49.0	32.5	* 40.5	31.5
4	50.6	30.7	48.9	32.5	40.5	31.6
5	50.9	31.2	48.7	32.7	43.0	31.1
6	49.5	30.7	49.0	32.7	* 44.0	* 31.6
7	49.0	30.4	49.2	* 31.2	45.0	32.0
8	49.4	30.7	42.2	30.7	45.2	32.0
9	49.5	29.9	42.5	31.0	44.5	32.3
10	49.4	31.2	48.0	31.1	44.6	32.3
11	* 49.2	* 30.7	48.2	31.6	44.4	32.1
12	48.9	30.2	47.8	31.6	44.9	32.0
13	49.4	31.1	47.5	31.2	* 44.6	* 32.0
14	49.3	30.7	48.0	31.9	44.4	32.0
15	48.8	30.8	47.5	31.5	45.1	32.0
16	45.9	30.8	47.5	31.0	44.6	32.0
17	46.8	30.7	47.4	31.2	* 0	* 0
18	48.0	31.5	47.8	31.1	* 0	* 0
19	49.0	31.5	47.5	32.0	* 0	* 0
20	48.4	31.8	46.5	31.4	* 0	* 0
21	48.1	31.5	46.1	31.1	* 0	* 0
22	* 48.0	* 31.7	45.0	31.5	* 0	* 0
23	47.9	31.9	42.5	31.4	* 0	* 0
24	* 48.2	* 31.8	44.8	31.4	* 0	* 0
25	48.5	31.8	44.5	31.5	* 0	* 0
26	47.6	31.5	44.2	31.6	* 0	* 0
27	48.0	31.5	44.0	31.6	* 0	* 0
28	48.3	31.9	44.2	31.8	* 0	* 0
29	* 48.9	* 32.0	45.6	31.8	* 0	* 0
30	49.5	32.0	45.5	31.6	* 0	* 0
31	49.4	32.1	0	0	* 0	* 0
MEANS	49.02	31.18	46.58	31.62	43.89	31.86
OBSVNS.	27	27	30	29	12	14
YRLY. MEANS.....					48.22	30.73
MAXIMUM	51.5	32.3	49.2	32.7	45.2	32.3
MINIMUM	45.9	29.9	42.2	30.7	40.5	31.1
STD.DEV.	1.29	.63	2.16	.52	1.68	.34

Observations terminated December 16, 1970.

BONILLA ISLAND

53 29 39 N

130 38 40 W

JANUARY

FEBRUARY

MARCH

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	* 46.0	* 30.6	44.4	31.1	43.7	31.0
2	45.8	30.6	44.3	30.7	43.1	31.2
3	45.3	30.6	44.0	30.7	43.0	31.0
4	42.9	30.8	44.2	30.8	43.7	31.0
5	* 42.5	* 30.4	43.6	30.7	43.7	31.0
6	42.1	29.9	44.6	30.8	44.8	31.1
7	45.0	30.2	45.3	31.2	45.6	31.0
8	45.2	30.2	45.7	31.4	44.9	31.0
9	45.6	30.7	46.4	31.2	46.2	31.1
10	45.0	30.8	46.8	31.1	46.7	31.0
11	44.8	30.7	46.2	31.0	45.3	31.1
12	41.8	30.4	* 45.5	* 31.2	44.8	31.1
13	41.8	30.7	44.8	31.4	45.0	30.8
14	41.6	30.8	45.2	31.4	45.2	31.1
15	* 42.0	* 30.9	44.8	30.8	* 44.9	* 31.1
16	42.3	31.0	44.6	30.7	44.6	31.1
17	39.9	30.6	45.0	31.2	45.3	31.0
18	43.4	30.7	44.6	30.7	45.2	31.1
19	42.9	30.6	45.4	30.8	45.0	30.8
20	43.8	30.3	45.6	31.0	45.6	31.4
21	44.0	30.6	46.3	30.8	46.1	31.0
22	44.5	30.8	45.3	30.8	45.3	31.5
23	44.9	31.1	45.8	30.8	45.8	31.1
24	44.0	30.7	45.4	30.8	46.2	31.2
25	45.0	30.8	44.8	30.8	45.6	31.1
26	44.3	30.8	45.4	31.0	46.8	31.2
27	44.4	30.8	46.6	30.8	46.3	31.4
28	44.3	31.0	44.8	30.7	46.4	31.2
29	43.2	31.0	0	0	46.3	31.4
30	* 44.0	* 31.2	0	0	47.6	31.4
31	44.8	31.4	0	0	45.3	31.1
MEANS	43.80	30.69	45.18	30.93	45.30	31.12
OBSVNS.	27	27	27	27	30	30
MAXIMUM	45.8	31.4	46.8	31.4	47.6	31.5
MINIMUM	39.9	29.9	43.6	30.7	43.0	30.8
STD.DEV.	1.46	.31	.82	.24	1.09	.17

BONILLA ISLAND

53 29 39 N

130 38 40 W

APRIL

MAY

JUNE

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	44.5	31.2	46.4	30.8	49.4	31.1
2	44.9	31.1	48.0	31.2	* 50.1	* 31.2
3	45.3	31.0	47.7	31.6	50.8	31.4
4	45.8	31.0	46.8	31.4	52.1	31.2
5	45.6	31.0	* 48.0	* 31.4	51.2	31.5
6	45.6	31.2	49.3	31.5	53.6	31.6
7	45.2	31.0	47.2	30.6	51.6	31.6
8	46.8	31.2	48.5	31.2	50.6	31.5
9	47.3	31.0	48.7	31.2	51.6	31.5
10	43.6	31.0	49.2	31.4	51.6	31.5
11	45.6	31.1	50.4	31.6	53.4	31.8
12	45.3	31.1	48.5	31.2	55.4	31.6
13	46.2	31.0	47.6	31.1	53.9	31.8
14	46.3	31.0	47.7	31.2	50.4	31.2
15	45.6	31.2	46.4	31.2	50.2	31.0
16	46.3	31.0	48.0	31.6	53.3	31.2
17	46.4	31.2	48.7	31.2	54.0	30.7
18	46.3	31.0	47.6	31.1	56.4	31.0
19	46.7	31.2	50.2	31.4	54.4	31.2
20	46.4	31.4	49.6	31.4	* 53.9	* 31.4
21	47.2	31.8	48.4	31.6	53.3	31.5
22	45.4	31.4	51.3	31.4	52.3	31.2
23	45.1	31.2	50.8	31.5	54.5	31.0
24	46.2	31.0	48.7	31.0	52.5	31.1
25	46.6	31.4	49.0	31.2	54.4	31.4
26	47.5	31.4	49.9	31.4	53.8	31.2
27	50.6	31.5	52.1	31.5	54.2	31.5
28	46.6	31.0	50.8	31.5	52.6	31.4
29	47.8	31.5	50.0	31.5	52.5	30.8
30	47.2	31.1	49.6	31.5	51.8	31.4
31	0	0	49.3	30.2	0	0
MEANS	46.20	31.17	48.88	31.27	52.71	31.32
OBSVNS.	30	30	30	30	28	28
MAXIMUM	50.6	31.8	52.1	31.6	56.4	31.8
MINIMUM	43.6	31.0	46.4	30.2	49.4	30.7
STD.DEV.	1.25	.20	1.43	.31	1.68	.28

BONILLA ISLAND

53 29 39 N

130 38 40 W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	52.6	31.5	54.2	31.4	53.6	30.7
2	55.2	31.1	54.3	31.5	52.3	30.2
3	53.8	30.0	52.7	31.6	53.8	31.0
4	53.4	31.2	55.4	31.1	51.9	29.8
5	54.8	31.4	56.8	31.5	52.9	31.0
6	52.7	30.3	55.3	31.4	52.0	31.2
7	55.2	31.5	55.3	31.4	52.7	31.1
8	57.4	31.2	55.2	31.4	52.7	31.1
9	57.6	31.0	54.0	31.1	52.9	31.5
10	56.2	30.6	53.9	31.1	* 52.4	* 31.5
11	54.9	31.1	53.2	31.0	52.0	31.5
12	54.2	31.0	53.6	31.1	51.7	31.8
13	52.7	31.1	54.8	30.8	50.6	32.0
14	52.7	30.2	53.6	30.7	50.2	32.1
15	53.8	30.4	54.1	30.4	49.7	32.0
16	52.2	31.0	54.7	30.8	49.6	32.0
17	52.3	31.0	53.5	30.8	50.7	31.9
18	53.4	31.0	53.6	31.2	51.4	31.5
19	55.6	31.4	53.3	31.2	52.4	31.5
20	55.8	31.0	53.2	31.4	52.8	31.8
21	53.0	31.1	53.6	31.6	51.4	30.8
22	52.2	31.2	51.8	31.5	50.9	31.2
23	54.8	31.2	51.3	31.9	50.6	31.5
24	51.8	31.4	51.0	31.9	49.6	31.8
25	53.3	31.4	* 50.8	* 31.6	50.4	31.2
26	54.6	31.5	50.6	31.4	51.0	31.1
27	53.8	31.5	51.9	31.0	51.9	31.4
28	52.3	31.2	52.8	31.1	53.4	31.1
29	54.2	31.1	53.6	30.0	51.4	31.1
30	54.7	31.4	54.6	30.0	53.1	31.2
31	54.0	31.2	51.8	31.5	0	0
MEANS	54.04	31.07	53.59	31.16	51.71	31.31
OBSVNS.	31	31	30	30	29	29
MAXIMUM	57.6	31.5	56.8	31.9	53.8	32.1
MINIMUM	51.8	30.0	50.6	30.0	49.6	29.8
STD.DEV.	1.50	.39	1.43	.46	1.22	.53

BONILLA ISLAND

53 29 39 N

130 38 40 W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL.	TEMP	SAL.	TEMP	SAL.
1	51.4	31.2	50.0	31.5	43.2	31.4
2	51.1	31.1	49.4	31.4	42.4	31.4
3	51.7	31.8	49.6	31.6	43.1	31.6
4	50.6	31.1	49.0	31.6	40.5	32.0
5	50.0	31.6	49.1	31.4	43.2	31.2
6	50.3	31.8	48.9	31.5	43.4	31.0
7	49.3	31.6	48.6	31.4	43.4	31.4
8	50.7	31.2	48.3	31.6	43.6	31.4
9	49.3	31.6	48.0	31.4	43.8	31.8
10	51.2	31.9	48.1	31.1	44.6	31.2
11	49.8	31.6	48.5	31.0	43.8	31.6
12	49.6	31.6	48.4	31.5	44.4	31.2
13	49.8	31.2	47.9	30.7	44.3	31.4
14	49.4	31.2	47.8	30.8	44.6	31.4
15	49.4	31.6	47.9	31.4	44.8	31.4
16	49.4	31.4	48.3	31.5	45.2	31.5
17	49.2	30.8	47.9	31.4	43.4	31.9
18	49.2	30.8	48.0	31.4	43.3	31.9
19	49.5	31.5	47.6	31.5	39.7	31.6
20	48.8	31.2	46.4	31.5	41.7	31.6
21	49.1	31.6	45.9	31.8	40.3	31.5
22	48.7	31.1	45.4	31.4	* 41.8	* 31.8
23	49.1	30.6	45.7	31.5	43.2	32.0
24	48.4	31.1	44.9	31.5	43.6	32.1
25	48.2	31.4	44.1	31.4	43.3	32.0
26	48.6	31.5	42.5	31.2	43.3	31.6
27	48.6	30.8	* 43.7	* 31.3	42.7	31.6
28	48.8	31.4	44.8	31.4	42.6	31.8
29	49.1	31.6	44.7	31.5	42.8	31.9
30	49.3	31.6	43.2	31.1	42.8	31.8
31	49.6	31.6	0	0	42.3	32.1
MEANS	49.59	31.36	47.20	31.38	43.11	31.61
OBSVNS.	31	31	29	29	30	30
YRLY. MEANS	.....				48.50	31.20
MAXIMUM	51.7	31.9	50.0	31.8	45.2	32.1
MINIMUM	48.2	30.6	42.5	30.7	39.7	31.0
STD. DEV.	.90	.33	2.01	.24	1.27	.29

MC INNES ISLAND

52 15 48 N

128 43 10 W

JANUARY

FEBRUARY

MARCH

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	45.8	29.4	* 45.2	* 30.9	44.5	30.7
2	45.5	29.3	45.0	30.8	44.0	30.4
3	45.0	29.3	* 45.0	* 30.8	44.0	30.4
4	45.0	29.5	45.0	30.8	44.2	30.8
5	45.8	29.5	44.8	30.7	44.2	30.8
6	45.5	30.0	45.0	30.7	* 44.6	* 30.9
7	45.8	30.2	44.5	30.7	45.0	31.0
8	45.2	29.8	44.2	30.2	45.2	31.4
9	44.8	29.5	44.5	30.4	45.0	31.1
10	43.8	29.5	44.6	30.2	45.5	31.1
11	43.8	29.3	45.0	30.4	45.5	31.1
12	44.5	29.8	44.8	30.4	45.2	30.8
13	44.8	30.2	44.8	30.2	45.8	31.1
14	44.3	30.2	44.5	30.2	45.8	30.8
15	44.0	29.9	* 44.7	* 30.4	46.0	31.1
16	42.5	30.0	44.8	30.6	45.8	31.0
17	43.3	30.2	44.8	30.4	* 45.6	* 31.0
18	44.0	30.3	* 45.1	* 30.6	45.5	31.0
19	44.0	30.4	* 45.1	* 30.9	45.8	30.8
20	* 44.2	* 30.5	45.8	31.1	45.8	31.0
21	44.5	30.6	45.0	30.7	45.8	30.8
22	44.5	30.4	44.8	30.4	45.8	30.8
23	* 44.6	* 30.5	44.8	30.6	* 45.9	* 30.9
24	44.8	30.7	45.0	30.2	46.0	31.0
25	44.5	30.6	45.0	30.6	46.3	31.1
26	44.5	30.4	45.0	30.4	46.0	30.6
27	44.5	30.6	45.0	30.6	46.0	31.0
28	44.3	30.6	44.8	30.7	45.5	30.6
29	* 44.7	* 30.7	0	0	46.0	30.6
30	* 45.1	* 30.9	0	0	* 45.8	* 30.6
31	45.5	31.0	0	0	45.7	30.6
MEANS	44.61	30.04	44.85	30.52	45.40	30.87
OBSVNS.	27	27	23	23	27	27
MAXIMUM	45.8	31.0	45.8	31.1	46.3	31.4
MINIMUM	42.5	29.3	44.2	30.2	44.0	30.4
STD.DEV.	.79	.50	.30	.24	.68	.24

MC INNES ISLAND

52 15 48 N

128 43 10 W

APRIL

MAY

JUNE

1970

DATE	TEMP	SAL.	TEMP	SAL.	TEMP	SAL.
1	45.8	30.6	46.3	30.6	48.7	29.8
2	45.5	30.2	46.5	30.6	51.5	29.4
3	* 45.6	* 30.4	47.5	30.0	51.0	29.5
4	45.8	30.7	47.2	30.0	50.5	30.2
5	46.2	30.8	47.0	30.3	51.2	29.4
6	* 46.1	* 30.9	47.2	30.3	52.0	29.7
7	46.0	31.1	47.0	30.3	51.0	29.8
8	* 45.9	* 31.2	47.4	30.6	51.2	29.7
9	45.8	31.2	47.6	30.0	51.2	30.4
10	46.0	31.5	48.0	30.0	49.8	30.0
11	46.2	30.8	48.5	30.6	50.0	30.3
12	46.0	30.8	48.5	30.0	51.0	29.9
13	46.5	29.8	48.8	29.7	52.2	29.5
14	45.5	29.8	48.2	30.0	51.5	30.2
15	45.5	29.8	48.5	30.0	49.8	30.2
16	46.0	29.5	47.5	30.0	50.5	29.9
17	46.0	29.5	48.0	30.7	52.0	29.4
18	46.2	30.0	48.2	30.0	52.8	29.4
19	46.2	30.0	* 48.4	* 29.6	53.5	29.8
20	46.5	30.3	48.6	29.3	53.0	29.8
21	47.0	30.4	48.7	29.5	52.5	30.2
22	46.5	30.6	48.7	29.8	53.0	30.3
23	46.2	30.8	49.0	29.3	51.8	30.2
24	46.0	31.1	49.8	29.0	51.6	30.4
25	46.0	31.2	49.3	29.8	53.0	30.6
26	46.0	31.0	47.9	30.0	52.5	30.6
27	46.5	30.8	49.0	30.0	52.8	30.4
28	46.2	30.8	49.6	30.0	53.0	30.6
29	46.8	31.1	51.2	29.3	52.8	30.6
30	46.5	30.8	49.0	29.8	52.5	30.2
31	0	0	49.2	30.3	0	0
MEANS	46.13	30.56	48.26	29.99	51.66	30.01
OBSVNS.	27	27	30	30	30	30
MAXIMUM	47.0	31.5	51.2	30.7	53.5	30.6
MINIMUM	45.5	29.5	46.3	29.0	48.7	29.4
STD.DEV.	.37	.56	1.06	.42	1.18	.40

MC INNES ISLAND

52 15 48 N

128 43 10 W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	52.5	30.4	55.8	29.8	54.2	29.7
2	54.0	30.3	55.6	29.8	54.0	29.5
3	54.8	29.5	56.0	29.8	54.0	30.3
4	55.2	30.4	56.5	30.2	54.5	30.8
5	56.0	30.8	57.0	30.6	54.2	30.8
6	55.5	30.8	56.7	30.2	53.2	30.6
7	54.4	31.1	57.1	29.8	54.0	30.3
8	54.8	30.6	56.3	30.8	54.8	30.6
9	54.5	30.4	56.1	31.4	55.2	30.7
10	53.9	30.8	56.3	31.1	55.2	29.8
11	54.0	30.8	55.2	30.8	55.5	26.1
12	53.8	30.6	54.8	31.1	54.5	26.9
13	54.4	30.3	55.3	30.8	54.0	28.8
14	54.5	30.4	55.1	30.4	53.8	29.0
15	54.5	30.6	55.2	30.3	53.6	29.4
16	54.6	30.3	55.3	29.8	53.5	30.3
17	54.0	30.6	56.1	29.5	53.6	30.6
18	54.2	30.2	57.2	28.8	53.0	31.2
19	54.6	30.4	55.0	28.8	53.5	30.8
20	54.9	30.3	55.8	29.9	53.6	30.6
21	53.5	30.3	55.8	29.7	* 53.2	* 30.6
22	53.0	30.4	55.0	29.8	52.8	30.7
23	53.2	30.3	* 54.8	* 29.6	52.6	30.3
24	51.7	30.6	54.5	29.5	52.8	30.4
25	51.8	30.4	54.2	29.7	* 52.6	* 30.4
26	52.5	30.4	54.5	29.4	52.5	30.4
27	54.4	30.0	53.0	30.3	53.2	28.5
28	54.2	30.0	54.0	29.5	53.2	27.7
29	54.9	28.6	54.8	29.3	53.2	28.0
30	55.3	28.8	55.0	29.5	52.8	29.9
31	55.5	28.5	54.5	30.0	0	0
MEANS	54.16	30.25	55.46	30.01	53.75	29.74
OBSVNS.	31	31	30	30	28	28
MAXIMUM	56.0	31.1	57.2	31.4	55.5	31.2
MINIMUM	51.7	28.5	53.0	28.8	52.5	26.1
STD.DEV.	1.04	.61	.98	.65	.81	1.28

MC INNES ISLAND

52 15 48 N 128 43 10 W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL.	TEMP	SAL.	TEMP	SAL.	
1	53.5	28.9	48.6	30.0	42.2	30.8	
2	53.5	28.1	48.6	29.5	42.5	31.1	
3	53.8	27.6	48.5	29.8	41.8	31.1	
4	53.0	29.7	48.5	30.0	42.4	31.1	
5	52.0	29.5	48.2	30.0	43.2	31.0	
6	51.5	29.9	48.3	30.2	44.0	31.4	
7	51.2	29.9	48.0	29.8	44.5	31.6	
8	52.0	29.9	47.8	29.9	44.8	31.6	
9	50.5	30.2	48.0	30.2	44.5	31.6	
10	50.5	29.9	47.5	30.2	45.0	31.4	
11	50.0	30.2	* 47.6	* 30.0	44.5	31.4	
12	50.0	29.8	* 47.8	* 29.8	45.2	31.9	
13	50.2	30.2	48.0	29.7	45.0	31.6	
14	50.5	29.9	47.5	29.9	45.0	31.8	
15	50.2	29.8	47.5	30.6	45.0	31.9	
16	50.0	30.2	47.5	30.5	44.5	31.1	
17	50.2	30.0	47.5	30.6	43.8	30.7	
18	51.0	31.2	47.2	30.3	43.4	30.7	
19	50.4	31.1	46.8	30.7	43.4	30.8	
20	49.6	30.0	46.0	30.6	43.3	31.2	
21	49.6	30.3	45.5	30.4	43.3	31.2	
22	* 49.6	* 30.6	43.5	30.4	43.5	31.5	
23	49.5	31.0	44.5	30.4	43.5	31.5	
24	* 49.2	* 30.6	43.8	30.4	43.2	31.0	
25	48.8	30.2	42.8	30.4	43.2	31.1	
26	48.5	30.2	42.8	30.7	43.5	31.2	
27	* 48.6	* 30.4	42.5	30.7	43.5	31.4	
28	48.8	30.6	43.0	30.6	43.5	31.8	
29	49.0	29.8	43.5	30.6	44.0	31.6	
30	48.6	30.0	43.8	30.6	44.5	31.9	
31	48.9	30.3	0	0	44.2	31.9	
MEANS	50.55	29.95	46.28	30.28	43.80	31.35	
OBSVNS.	28	28	28	28	31	31	
YRLY. MEANS					48.89	30.30
MAXIMUM	53.8	31.2	48.6	30.7	45.2	31.9	
MINIMUM	48.5	27.8	42.5	29.5	41.8	30.7	
STD. DEV.	1.53	.73	2.19	.34	.89	.37	

CAPE ST JAMES

51 56 18 N

131 00 50 W

JANUARY

FEBRUARY

MARCH

1970

DATE	TEMP	SAL	TEMP	SAL	TEMP	SAL
1	47.5	31.98	46.2	31.92	46.0	32.00
2	* 47.3	* 31.97	46.7	31.96	45.7	31.93
3	47.1	31.96	46.1	32.13	46.0	32.06
4	46.8	31.87	46.3	31.99	46.0	32.04
5	47.2	31.97	46.2	32.01	46.1	32.03
6	47.5	32.07	46.3	* 31.98	* 46.4	* 32.14
7	47.2	32.10	46.6	31.96	46.6	32.26
8	47.1	32.15	46.6	32.02	46.5	32.20
9	46.8	32.13	46.5	32.00	47.0	32.13
10	46.9	32.11	46.3	32.06	47.0	32.09
11	46.7	32.07	46.3	32.06	47.2	* 32.08
12	46.6	31.99	46.5	32.08	47.3	32.06
13	46.6	32.05	46.6	32.05	47.3	32.07
14	* 46.1	* 31.97	* 46.4	* 32.10	47.1	32.06
15	45.6	31.89	46.2	32.14	46.8	31.99
16	45.3	32.04	46.3	32.04	46.2	32.05
17	44.8	31.88	46.5	32.10	46.8	31.97
18	46.1	31.92	46.4	32.00	46.9	31.97
19	46.3	32.06	46.6	32.14	47.1	32.02
20	46.6	32.26	46.6	32.19	46.7	31.97
21	46.6	32.29	46.7	32.07	46.6	31.97
22	46.7	32.09	46.5	32.21	47.3	31.96
23	46.8	32.14	46.5	32.18	46.5	32.11
24	46.9	31.98	46.8	32.27	46.8	32.08
25	46.9	32.03	46.7	32.20	47.0	32.07
26	* 46.6	* 32.04	46.5	32.06	47.1	32.08
27	46.2	32.04	46.2	32.04	47.2	32.12
28	46.2	31.87	46.2	32.01	46.5	32.07
29	46.6	31.99	0	0	47.2	32.06
30	46.5	32.06	0	0	47.2	32.00
31	46.4	31.98	0	0	46.4	32.03
MEANS	46.6	32.03	46.4	32.07	46.7	32.05
OBSVNS.	28	28	27	26	30	29
MAXIMUM	47.5	32.29	46.8	32.27	47.3	32.26
MINIMUM	44.8	31.87	46.1	31.92	45.7	31.93
STD.DEV.	.61	.11	.19	.09	.46	.07

All salinity data obtained by salinometer analyses.

CAPE ST JAMES

51 56 18 N

131 00 50 W

APRIL

MAY

JUNE

1970

DATE	TEMP	SAL	TEMP	SAL	TEMP	SAL
1	46.3	32.06	46.6	32.16	49.4	32.24
2	46.5	32.04	47.4	32.22	49.8	32.16
3	46.8	31.96	47.4	32.01	49.7	32.23
4	46.2	32.28	47.4	32.13	48.4	32.29
5	46.5	32.22	48.0	32.26	49.8	32.30
6	45.8	32.39	* 47.8	* 32.21	50.3	32.25
7	46.0	32.30	47.5	32.16	50.4	32.20
8	46.3	32.39	47.1	32.35	49.5	32.12
9	* 46.2	* 32.40	48.6	32.27	49.2	32.18
10	46.2	32.42	48.3	32.24	48.3	32.30
11	46.5	32.49	48.4	32.27	48.6	32.32
12	46.3	32.18	48.3	32.15	50.2	32.26
13	46.5	32.17	47.2	32.14	49.6	32.08
14	45.8	32.11	47.8	32.13	50.4	31.93
15	46.1	32.11	48.3	32.12	50.7	31.98
16	46.4	32.05	47.8	32.14	51.9	31.87
17	46.8	32.02	47.5	32.18	51.7	31.94
18	46.7	32.04	47.9	32.27	49.9	32.12
19	46.5	32.17	48.8	32.24	52.0	31.95
20	46.8	32.08	48.2	32.18	51.4	31.99
21	46.7	32.13	47.5	32.21	51.7	32.02
22	46.5	32.05	48.3	32.37	50.6	31.95
23	* 46.3	* 32.19	48.5	31.99	50.4	32.12
24	46.1	32.32	48.2	32.23	50.2	31.94
25	46.9	32.23	48.3	32.26	50.8	32.11
26	47.4	32.17	47.6	32.40	50.3	32.12
27	46.8	32.18	48.4	* 32.33	50.2	31.96
28	46.7	32.14	47.5	32.27	50.4	31.96
29	46.5	32.12	47.8	32.22	51.4	31.90
30	46.7	32.07	48.3	32.17	* 51.0	* 32.00
31	0	0	48.7	31.98	0	0
MEANS	46.5	32.17	47.9	32.20	50.2	32.10
OBSVNS.	28	28	30	29	29	29
MAXIMUM	47.4	32.49	48.8	32.40	52.0	32.32
MINIMUM	45.8	31.96	46.6	31.98	48.3	31.87
STD.DEV.	.35	.13	.53	.10	.98	.14

CAPE ST JAMES

51 56 18 N

131 00 50 W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL	TEMP	SAL	TEMP	SAL
1	50.5	32.10	53.7	31.80	54.6	31.94
2	50.8	31.98	53.3	31.81	53.6	31.96
3	51.0	31.98	51.7	31.95	52.7	32.09
4	50.8	32.28	53.3	31.76	52.5	32.08
5	50.6	32.23	53.4	31.87	51.8	32.08
6	50.3	32.19	52.8	31.96	52.1	32.12
7	51.1	32.30	53.0	31.96	52.8	32.04
8	51.3	32.29	54.3	31.90	52.5	32.06
9	52.3	32.28	53.7	31.85	53.4	31.88
10	52.4	32.19	* 53.2	* 31.69	53.1	31.90
11	53.5	31.74	52.7	31.52	53.8	31.67
12	52.0	31.90	53.2	31.92	53.8	31.68
13	53.2	31.73	52.4	32.04	53.8	31.72
14	51.7	31.89	53.2	31.95	53.7	31.92
15	51.4	31.92	52.4	32.18	53.6	32.02
16	52.9	31.92	53.0	32.07	52.9	32.01
17	52.4	32.04	53.0	32.05	52.3	32.18
18	51.6	31.87	53.2	32.17	51.7	32.21
19	53.2	32.13	52.1	32.36	51.7	32.20
20	53.6	32.00	52.3	32.21	51.4	32.30
21	52.5	32.08	51.4	32.30	51.4	31.89
22	52.6	31.92	53.4	32.17	51.2	32.21
23	52.0	32.18	54.1	32.03	51.2	32.08
24	52.4	31.84	54.6	31.81	51.7	31.79
25	53.2	31.57	54.3	31.84	51.7	31.87
26	52.4	31.86	54.1	31.81	52.0	31.97
27	53.1	31.71	54.3	31.75	51.4	32.03
28	54.1	31.49	54.3	31.85	52.6	31.99
29	54.3	31.64	53.8	31.88	51.6	32.20
30	53.9	31.65	54.1	31.97	50.6	32.18
31	54.0	31.76	54.4	31.97	0	0
MEANS	52.3	31.96	53.3	31.96	52.4	32.01
OBSVNS.	31	31	30	30	30	30
MAXIMUM	54.3	32.30	54.6	32.36	54.6	32.30
MINIMUM	50.3	31.49	51.4	31.52	50.6	31.67
STD.DEV.	1.15	.23	.84	.18	1.01	.16

CAPE ST JAMES

51 56 18 N 131 00 50 W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL	TEMP	SAL	TEMP	SAL
1	50.8	32.27	47.6	32.76	46.2	32.51
2	50.7	32.32	48.1	32.69	45.8	32.45
3	50.8	32.34	49.0	32.40	45.6	32.47
4	50.4	32.32	49.4	32.30	46.8	32.43
5	50.0	32.36	49.4	32.32	46.7	32.29
6	50.9	32.13	49.6	32.32	46.7	31.76
7	51.2	32.18	49.3	32.34	45.6	* 32.14
8	50.7	32.21	48.9	32.25	46.7	32.52
9	52.4	31.86	49.1	32.38	46.7	32.49
10	50.6	32.28	* 48.8	* 32.47	47.3	32.40
11	50.7	32.15	48.5	32.56	46.8	32.42
12	50.6	32.24	48.3	32.52	47.3	32.54
13	50.3	32.31	49.3	32.50	47.3	32.54
14	50.6	32.21	49.0	32.58	46.9	32.58
15	51.2	32.12	48.8	32.39	46.4	32.30
16	50.5	32.22	48.5	32.46	46.8	32.48
17	50.0	32.30	48.9	32.48	46.7	32.49
18	49.3	32.28	48.5	32.48	46.5	32.48
19	49.0	32.47	48.3	32.43	46.2	32.36
20	49.0	32.35	48.3	32.41	45.3	32.44
21	49.3	32.43	46.3	32.40	46.1	32.42
22	49.1	32.40	46.5	32.40	46.3	32.45
23	49.2	32.48	47.5	32.39	46.2	32.48
24	48.1	32.36	48.3	32.36	46.4	32.46
25	49.1	32.29	48.7	32.45	46.2	32.45
26	49.3	32.54	48.7	32.45	45.4	32.42
27	47.7	32.58	47.6	32.48	45.5	32.48
28	49.2	32.79	45.6	32.46	45.1	32.19
29	47.7	32.82	45.0	32.48	45.8	32.51
30	47.3	32.89	* 45.6	* 32.50	46.2	32.59
31	* 47.4	* 32.82	0	0	45.3	32.49
MEANS	49.9	32.35	48.2	32.44	46.3	32.43
OBSVNS.	30	30	28	28	31	30
YRLY. MEANS.....					49.0	32.15
MAXIMUM	52.4	32.89	49.6	32.76	47.3	32.59
MINIMUM	47.3	31.86	45.0	32.25	45.1	31.76
STD.DEV.	1.19	.21	1.16	.11	.62	.15

EGG ISLAND

51 15 06 N

127 49 53 W

JANUARY

FEBRUARY

MARCH

1970

DATE	TEMP	SAL	TEMP	SAL	TEMP	SAL
1	*	0	*	0	*	0
2	*	0	*	0	*	0
3	*	0	*	0	*	0
4	*	0	*	0	*	0
5	*	0	*	0	*	0
6	*	0	*	0	*	0
7	*	0	*	0	*	0
8	*	0	*	0	*	0
9	*	0	*	0	*	0
10	*	0	*	0	46.1	31.03
11	*	0	*	0	46.5	31.04
12	*	0	*	0	46.1	31.00
13	*	0	*	0	46.4	31.02
14	*	0	*	0	46.3	31.00
15	*	0	*	0	46.3	30.95
16	*	0	*	0	46.2	30.97
17	*	0	*	0	46.3	30.95
18	*	0	*	0	46.4	30.95
19	*	0	*	0	46.5	30.84
20	*	0	*	0	* 46.6	* 30.54
21	*	0	*	0	46.8	30.24
22	*	0	*	0	46.7	30.90
23	*	0	*	0	46.6	30.85
24	*	0	*	0	46.8	31.08
25	*	0	*	0	46.7	30.83
26	*	0	*	0	46.7	30.76
27	*	0	*	0	46.9	30.50
28	*	0	*	0	46.4	30.68
29	*	0	*	0	46.5	30.70
30	*	0	*	0	46.9	30.64
31	*	0	*	0	46.8	30.66
MEANS		0		0	46.5	30.84
OBSVNS.		0		0	21	21
MAXIMUM		0		0	46.9	31.08
MINIMUM		0		0	46.1	30.24
STD.DEV.		0		0	.25	.21

All salinity data obtained by salinometer analyses.

EGG ISLAND

51 15 06 N

127 49 53 W

APRIL

MAY

JUNE

1970

DATE	TEMP	SAL	TEMP	SAL	TEMP	SAL
1	46.6	30.18	47.0	30.51	53.7	26.32
2	46.2	30.79	47.3	30.92	55.1	26.86
3	* 46.0	* 30.72	49.9	28.99	* 54.0	* 27.70
4	45.9	30.64	48.1	30.64	* 52.9	* 28.54
5	46.2	30.78	48.1	30.42	51.9	29.37
6	46.3	31.11	* 48.0	* 30.42	53.6	26.33
7	46.1	31.10	47.9	30.43	* 53.6	* 27.03
8	45.9	31.23	47.4	30.65	53.5	27.73
9	46.1	31.11	47.4	31.08	52.2	27.82
10	46.0	31.25	48.5	30.90	51.1	29.34
11	* 46.2	* 29.96	50.1	29.74	50.8	29.49
12	46.5	29.68	50.8	29.84	52.2	28.90
13	46.7	30.38	49.8	30.11	51.0	29.13
14	47.4	29.81	47.3	31.08	51.4	29.12
15	46.6	30.62	47.2	31.21	49.9	29.61
16	46.4	30.72	47.3	31.22	52.4	28.69
17	47.0	29.61	47.7	31.12	54.5	27.39
18	* 46.9	* 30.02	49.2	30.30	53.3	29.56
19	46.8	30.41	50.6	29.02	51.4	28.00
20	46.5	30.88	50.6	28.10	51.8	28.06
21	46.9	31.04	49.0	29.93	* 53.0	* 28.84
22	46.9	30.88	49.2	29.83	54.3	29.61
23	46.4	30.65	52.3	28.00	52.4	29.79
24	46.3	31.00	51.3	28.38	53.0	28.82
25	46.2	31.03	49.7	27.95	51.3	27.33
26	47.5	29.68	50.8	26.36	53.3	27.02
27	47.4	30.31	51.9	27.20	54.9	26.54
28	47.3	30.26	53.7	26.08	52.5	27.98
29	46.9	30.55	51.2	27.10	54.6	28.18
30	47.6	29.81	49.8	28.21	53.3	29.47
31	0	0	50.8	27.32	0	0
MEANS	46.6	30.57	49.4	29.42	52.7	28.33
OBSVNS.	27	27	30	30	26	26
MAXIMUM	47.6	31.25	53.7	31.22	55.1	29.79
MINIMUM	45.9	29.61	47.0	26.08	49.9	26.32
STD.DEV.	.50	.51	1.77	1.57	1.39	1.12

EGG ISLAND

51 15 06 N

127 49 53 W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL		TEMP	SAL	TEMP	SAL
1	50.0	31.17	*	56.4	* 28.45	53.1	30.04
2	51.1	30.58		56.5	28.33	50.5	31.13
3	50.6	31.55	*	56.6	* 27.74	50.1	31.41
4	50.2	29.68		59.8	27.14	49.2	31.61
5	54.3	28.12		56.5	29.13	51.3	31.31
6	54.5	28.23		58.1	28.49	49.5	31.37
7	53.5	29.52		56.8	28.91	50.1	31.30
8	51.1	30.55		55.5	29.45	51.5	30.59
9	51.0	30.98		54.9	29.81	52.1	30.57
10	51.3	29.47		52.4	30.46	51.7	29.62
11	* 51.2	* 29.46		52.9	30.31	51.8	29.70
12	51.2	29.46		53.0	30.31	55.5	29.69
13	51.9	30.72		54.3	30.48	51.8	29.65
14	53.3	29.92	*	54.8	* 30.23	51.7	30.36
15	55.0	29.65		55.2	29.98	52.0	29.63
16	53.5	30.57		54.5	28.22	52.2	29.89
17	* 54.7	* 29.58	*	54.0	* 27.44	49.7	31.29
18	55.9	28.59		53.6	26.67	48.7	31.64
19	56.9	28.69		53.9	29.79	49.6	31.21
20	52.4	30.83		53.5	29.70	50.7	30.98
21	52.3	30.09		54.6	29.50	47.8	31.75
22	53.4	28.84		52.8	30.44	49.6	31.90
23	57.2	28.85		54.0	29.53	49.0	31.35
24	54.2	29.35		52.0	30.74	49.0	31.10
25	52.1	30.50		51.8	30.49	49.4	31.61
26	53.1	30.74		52.6	29.20	49.2	31.29
27	54.1	29.89		51.0	31.01	49.8	31.32
28	53.5	30.91		54.9	29.64	50.9	31.03
29	54.0	30.89		52.5	31.38	53.0	27.99
30	54.6	* 29.73		53.8	30.48	49.6	31.33
31	56.4	28.57		51.3	31.03	0	0
MEANS	53.2	29.89		54.2	29.65	50.7	30.79
OBSVNS.	29	28		27	27	30	30
MAXIMUM	57.2	31.55		59.8	31.38	55.5	31.90
MINIMUM	50.0	28.12		51.0	26.67	47.8	27.99
STD.DEV.	1.98	.97		2.08	1.14	1.63	.90

EGG ISLAND

51 15 06 N

127 49 53 W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL	TEMP	SAL	TEMP	SAL
1	49.5	31.24	47.6	31.79	* 45.6	* 31.91
2	49.1	31.24	47.5	31.72	44.9	31.91
3	48.9	31.30	47.1	31.65	45.1	31.83
4	48.9	31.78	47.0	31.63	44.5	31.93
5	49.0	31.39	47.5	31.67	45.4	32.01
6	* 48.9	* 31.42	47.5	31.73	45.7	32.02
7	48.8	31.44	47.2	31.64	45.1	31.84
8	48.7	29.55	47.0	31.64	44.5	31.82
9	49.4	29.54	46.9	31.68	44.8	31.82
10	49.1	29.80	47.5	31.71	44.4	31.86
11	49.1	30.36	47.3	31.77	45.0	31.84
12	48.4	30.94	47.4	31.90	43.6	31.86
13	49.0	30.58	47.4	31.88	42.8	31.89
14	48.9	30.73	45.9	31.88	44.6	32.03
15	49.0	30.63	47.0	31.88	44.8	32.21
16	48.9	31.15	46.9	31.93	44.9	31.69
17	47.9	31.93	46.5	31.72	45.0	31.75
18	47.3	31.94	46.6	31.70	44.5	31.60
19	46.9	32.14	46.9	31.72	44.3	31.68
20	46.8	32.08	45.7	31.70	42.1	31.70
21	47.3	32.06	46.5	31.69	43.5	31.69
22	* 47.2	* 32.08	44.5	31.56	43.8	31.65
23	47.2	32.11	45.0	31.55	44.1	31.63
24	47.1	32.04	44.6	31.22	44.0	31.59
25	47.0	31.93	44.6	31.33	44.0	31.51
26	47.3	31.83	45.2	31.58	44.1	31.56
27	47.7	31.91	46.0	31.55	44.0	32.05
28	48.3	31.97	45.5	31.76	44.1	31.67
29	48.3	31.93	46.4	31.86	44.1	31.74
30	47.9	31.86	46.3	31.91	44.0	31.73
31	48.1	31.82	0	0	43.9	31.70
MEANS	48.3	31.35	46.5	31.70	44.3	31.79
OBSVNS.	29	29	30	30	30	30
YRLY. MEANS	.....				49.2	30.46
MAXIMUM	49.5	32.14	47.6	31.93	45.7	32.21
MINIMUM	46.8	29.54	44.5	31.22	42.1	31.51
STD. DEV.	.85	.79	.97	.16	.74	.16

PINE ISLAND

50 58 33 N

127 43 35 W

JANUARY

FEBRUARY

MARCH

1970

DATE	TEMP	SAL.	TEMP	SAL.	TEMP	SAL.
1	46.5	31.4	46.2	30.7	46.2	31.0
2	46.2	31.0	46.2	30.7	45.6	31.1
3	46.2	31.1	46.5	31.2	45.5	31.0
4	45.6	30.8	46.4	31.2	45.6	31.1
5	45.6	31.1	46.2	31.2	45.5	31.1
6	45.5	30.8	46.0	31.5	46.0	31.1
7	45.8	31.1	46.0	31.4	46.4	31.4
8	45.8	31.4	46.2	31.4	46.5	31.0
9	45.8	31.1	46.2	31.2	46.5	31.2
10	45.9	31.5	46.5	31.4	47.0	31.1
11	45.6	31.2	46.4	31.2	46.6	31.0
12	45.6	30.7	46.2	31.0	46.6	31.1
13	45.8	31.2	46.4	31.2	47.0	31.0
14	45.6	31.0	46.2	30.8	* 0	* 0
15	45.5	31.0	46.0	31.0	* 0	* 0
16	45.0	31.0	45.8	31.4	* 0	* 0
17	45.0	31.2	46.0	31.2	* 0	* 0
18	45.2	31.2	46.4	31.0	47.0	30.7
19	45.5	31.1	46.8	31.0	46.5	30.8
20	45.4	31.2	46.8	31.0	46.4	30.7
21	45.6	31.2	46.8	31.2	46.4	31.0
22	* 45.7	* 31.2	46.6	31.0	46.0	30.8
23	45.8	31.1	46.5	31.0	46.2	31.0
24	46.0	31.2	46.5	31.2	46.8	31.1
25	46.5	31.2	46.5	30.8	46.4	30.7
26	46.2	31.2	46.4	30.8	46.4	31.0
27	46.2	31.4	47.0	31.0	46.6	31.0
28	45.8	31.1	46.6	30.7	46.5	31.4
29	45.6	31.2	0	0	46.5	31.2
30	45.6	31.4	0	0	46.8	31.0
31	45.6	31.2	0	0	46.5	31.0
MEANS	45.73	31.14	46.37	31.09	46.37	31.02
OBSVNS.	30	30	28	28	27	27
MAXIMUM	46.5	31.5	47.0	31.5	47.0	31.4
MINIMUM	45.0	30.7	45.8	30.7	45.5	30.7
STD.DEV.	.37	.18	.29	.23	.43	.18

PINE ISLAND

50 58 33 N

127 43 35 W

APRIL

MAY

JUNE

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	46.2	31.0	* 46.4	* 31.8	* 0	* 0
2	46.2	31.2	46.4	31.8	* 0	* 0
3	46.2	31.0	46.6	31.8	* 0	* 0
4	46.0	30.7	46.7	31.6	48.2	32.1
5	46.2	32.0	* 46.8	* 31.2	48.3	32.1
6	45.8	31.8	47.0	30.8	48.4	32.0
7	45.8	31.5	46.8	32.3	48.2	31.9
8	46.0	31.2	46.5	32.3	47.6	32.0
9	46.0	31.5	46.2	32.5	48.0	31.8
10	* 46.1	* 31.6	* 46.3	* 32.2	47.4	31.9
11	46.2	31.8	46.5	31.8	47.7	31.9
12	46.4	31.4	47.2	32.1	48.7	31.8
13	46.4	31.6	* 47.1	* 31.9	49.2	32.0
14	46.5	31.8	* 46.9	* 31.7	47.5	31.8
15	46.5	31.4	46.8	31.5	48.8	32.0
16	46.3	31.5	47.4	31.5	48.6	31.9
17	46.4	31.4	48.2	31.5	49.5	32.0
18	46.7	31.2	47.0	31.5	49.4	32.1
19	46.5	31.5	47.6	31.6	49.5	32.3
20	46.5	31.8	47.6	31.2	49.4	32.1
21	* 46.5	* 31.7	47.5	31.6	49.4	32.1
22	* 46.4	* 31.6	47.4	31.8	49.6	31.8
23	46.4	31.5	47.4	32.0	48.2	31.9
24	45.6	31.5	46.9	32.0	48.4	31.8
25	45.8	31.8	46.8	32.1	48.2	31.8
26	46.2	31.8	47.2	32.1	48.1	31.9
27	46.3	32.0	47.7	32.1	49.0	31.8
28	46.7	31.8	48.2	32.0	48.1	31.8
29	46.9	31.8	47.9	32.0	48.6	31.8
30	46.4	31.8	47.5	32.1	* 48.5	* 31.8
31	0	0	47.8	31.8	0	0
MEANS	46.26	31.53	47.18	31.82	48.54	31.94
OBSVNS.	27	27	26	26	26	26
MAXIMUM	46.9	32.0	48.2	32.5	49.6	32.3
MINIMUM	45.6	30.7	46.2	30.8	47.4	31.8
STD.DEV.	.31	.32	.55	.37	.67	.14

PINE ISLAND

50 58 33 N

127 43 35 W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	48.4	31.8	49.6	31.6	49.4	31.9
2	48.0	31.9	50.2	31.5	46.4	32.1
3	48.2	31.8	* 50.0	* 31.6	46.3	32.4
4	48.0	31.9	49.8	31.8	47.4	32.5
5	47.8	31.8	49.8	31.5	47.5	31.6
6	48.8	31.8	49.4	32.0	47.5	31.9
7	47.7	32.3	49.6	32.1	46.0	31.9
8	* 48.2	* 32.2	49.2	31.8	49.0	31.9
9	48.6	32.1	49.8	32.1	49.4	31.5
10	49.4	32.1	50.4	32.1	48.4	31.9
11	48.2	32.0	49.6	32.1	48.2	31.6
12	49.4	32.0	49.6	31.8	48.2	31.6
13	50.1	31.8	49.4	32.1	48.6	31.4
14	48.4	31.8	49.4	31.9	48.4	31.9
15	48.2	32.1	49.0	31.5	47.8	32.0
16	* 48.9	* 31.6	* 49.2	* 31.6	47.4	32.1
17	49.6	31.0	49.5	31.8	47.7	32.4
18	48.6	31.9	49.5	32.3	* 47.6	* 32.6
19	* 48.8	* 32.0	48.9	32.0	47.4	32.7
20	* 49.0	* 32.2	48.4	32.3	48.5	32.7
21	49.2	32.3	49.0	32.4	50.0	32.3
22	49.0	32.5	46.0	32.4	51.0	32.4
23	48.8	32.4	47.0	32.3	* 50.2	* 32.4
24	48.4	32.1	49.0	32.3	49.4	32.4
25	48.4	32.0	49.4	32.1	* 49.3	* 32.2
26	49.0	32.1	* 49.4	* 32.2	49.2	32.1
27	48.8	32.0	49.5	32.3	49.2	32.1
28	49.2	32.1	48.5	32.0	48.9	32.1
29	49.0	32.1	49.6	31.9	48.4	31.9
30	49.2	32.0	48.5	32.4	48.5	32.0
31	49.2	31.9	48.5	32.1	0	0
MEANS	48.73	31.99	49.15	32.02	48.30	32.05
OBSVNS.	27	27	28	28	27	27
MAXIMUM	50.1	32.5	50.4	32.4	51.0	32.7
MINIMUM	47.7	31.0	46.0	31.5	46.0	31.4
STD.DEV.	.59	.27	.90	.28	1.14	.35

PINE ISLAND

50 58 33 N 127 43 35 W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	48.5	32.5	47.6	32.0	45.0	32.1
2	48.4	32.5	47.6	32.0	45.0	32.3
3	48.8	32.1	47.5	32.1	44.5	31.9
4	49.0	32.4	47.2	32.1	45.0	31.9
5	48.8	32.1	47.6	32.0	44.8	32.3
6	48.5	32.1	47.1	32.1	* 44.6	* 32.2
7	48.2	32.1	47.5	32.1	44.5	32.1
8	47.8	30.4	47.4	31.9	44.6	32.1
9	48.0	31.9	47.5	32.1	44.2	32.4
10	47.6	31.9	* 47.5	* 32.0	44.5	32.1
11	* 47.5	* 31.9	47.5	31.9	44.8	32.5
12	* 47.4	* 32.0	* 47.7	* 31.9	44.8	32.4
13	47.3	32.1	* 48.0	* 31.9	44.8	32.4
14	46.8	32.7	48.2	31.9	45.0	32.0
15	47.2	32.5	48.4	32.3	45.2	32.0
16	47.2	32.5	48.2	32.1	45.4	32.1
17	46.8	32.7	* 47.8	* 32.0	44.6	31.8
18	47.0	32.5	47.5	32.0	44.2	31.9
19	47.8	32.3	47.2	32.0	44.3	31.8
20	48.8	32.3	* 47.1	* 31.8	44.4	32.0
21	48.6	32.7	47.0	31.5	44.6	32.0
22	48.8	32.5	45.2	32.0	44.5	32.0
23	* 48.9	* 32.5	44.8	31.5	45.0	31.9
24	* 49.1	* 32.6	45.8	31.8	45.0	32.0
25	49.2	32.7	46.0	31.9	44.2	32.0
26	48.0	32.5	45.5	32.0	44.6	31.9
27	47.4	32.3	* 45.6	* 31.8	44.5	31.8
28	47.5	32.3	45.7	31.6	* 0	* 0
29	47.6	32.1	46.0	31.9	* 0	* 0
30	47.6	32.1	45.4	32.0	* 0	* 0
31	47.4	32.1	0	0	* 0	* 0
MEANS	47.95	32.26	46.89	31.95	44.69	32.07
OBSVNS.	27	27	24	24	26	26
YRLY. MEANS	.....				47.18	31.73
MAXIMUM	49.2	32.7	48.4	32.3	45.4	32.5
MINIMUM	46.8	30.4	44.8	31.5	44.2	31.8
STD. DEV.	.71	.44	1.05	.19	.32	.20

KAINS ISLAND

50 26 39 N

128 01 47 W

JANUARY

FEBRUARY

MARCH

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	46.2	28.4	46.1	29.7	45.3	29.8
2	46.2	29.2	46.1	30.6	44.6	29.8
3	46.0	29.3	45.0	30.2	44.8	29.9
4	45.8	29.7	45.1	29.1	45.5	29.9
5	45.6	30.1	44.9	29.1	45.6	29.8
6	46.0	29.9	45.0	29.3	46.6	30.0
7	45.0	29.7	46.6	29.7	46.7	30.2
8	45.1	29.7	46.2	29.4	46.0	29.9
9	44.4	29.3	46.2	29.8	46.3	29.9
10	45.0	29.8	46.3	29.9	46.2	30.0
11	45.4	30.3	46.4	29.9	46.7	29.9
12	45.1	30.0	46.5	30.0	46.7	29.9
13	45.3	30.2	46.6	29.7	46.8	30.0
14	45.0	29.6	46.6	29.9	47.2	29.4
15	44.5	29.8	45.9	29.7	46.8	30.0
16	43.8	30.2	46.4	30.2	45.8	29.5
17	44.2	30.4	45.8	29.5	45.9	29.1
18	46.0	30.4	45.2	29.0	* 46.2	* 29.0
19	45.6	30.5	46.5	29.5	46.6	29.0
20	46.2	30.8	45.8	29.7	46.4	29.0
21	46.3	30.5	45.7	29.5	46.8	29.1
22	45.8	29.6	46.4	29.5	46.7	29.8
23	46.5	31.0	46.6	29.5	46.8	28.2
24	45.0	28.1	46.5	29.8	47.8	29.1
25	45.1	27.2	46.0	29.8	47.4	29.4
26	44.8	29.0	46.2	29.5	47.9	29.4
27	45.4	29.2	46.0	29.8	47.7	30.0
28	45.2	28.8	45.1	29.5	47.2	30.3
29	45.8	29.5	0	0	47.5	30.2
30	46.2	30.1	0	0	47.9	30.4
31	45.8	30.0	0	0	47.8	30.7
MEANS	45.43	29.69	45.99	29.67	46.60	29.72
OBSVNS.	31	31	28	28	30	30
MAXIMUM	46.5	31.0	46.6	30.6	47.9	30.7
MINIMUM	43.8	27.2	44.9	29.0	44.6	28.2
STD.DEV.	.67	.80	.56	.35	.89	.51

January 1 to 31: Salinity data obtained by salinometer analyses.

KAINS ISLAND

50 26 39 N

128 01 47 W

APRIL

MAY

JUNE

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	46.8	30.3	47.6	31.1	51.1	31.1
2	47.0	30.6	48.0	30.7	51.4	31.2
3	46.8	30.8	48.8	30.3	50.4	31.5
4	47.4	30.7	48.2	30.6	50.7	31.6
5	47.3	30.8	47.8	30.4	52.2	31.4
6	46.5	31.9	48.3	30.6	51.6	31.5
7	45.8	31.0	47.8	31.1	51.3	31.6
8	46.0	30.8	48.0	30.6	51.0	31.8
9	46.8	30.6	47.8	31.4	50.8	31.8
10	46.8	30.4	48.6	30.3	49.9	32.0
11	45.8	28.9	49.4	30.0	51.0	31.9
12	46.9	29.4	50.0	30.2	54.6	31.2
13	46.8	29.4	49.3	31.0	54.6	31.8
14	48.4	29.8	48.2	31.5	53.6	31.9
15	47.2	30.0	48.8	30.7	50.0	31.9
16	47.1	30.2	48.9	29.3	49.8	32.1
17	47.4	30.3	49.8	29.7	50.3	31.9
18	47.5	29.9	49.8	29.0	51.0	31.9
19	46.9	30.7	49.3	30.2	51.5	32.3
20	47.2	30.4	49.3	30.7	51.5	32.3
21	47.0	30.6	48.8	30.7	51.7	32.4
22	47.0	30.4	49.9	29.8	51.0	32.5
23	46.8	30.4	50.3	29.9	50.3	32.5
24	46.1	31.6	50.0	30.7	51.0	32.5
25	46.7	30.4	49.7	30.7	51.7	32.7
26	45.0	29.3	49.1	31.2	51.4	32.5
27	47.0	29.8	48.4	30.7	50.0	32.7
28	47.6	30.3	50.5	30.7	50.9	32.3
29	49.0	30.7	49.8	31.1	51.3	32.5
30	48.2	31.0	49.7	31.0	50.0	32.8
31	0	0	50.0	31.1	0	0
MEANS	46.96	30.38	49.03	30.55	51.25	32.00
OBSVNS.	30	30	31	31	30	30
MAXIMUM	49.0	31.9	50.5	31.5	54.6	32.8
MINIMUM	45.0	28.9	47.6	29.0	49.8	31.1
STD.DEV.	.78	.64	.85	.58	1.20	.48

KAINS ISLAND

50 26 39 N

128 01 47 W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	49.8	32.7	55.4	31.9	52.7	33.0
2	51.3	32.4	54.8	32.3	51.0	33.0
3	52.2	32.4	55.5	32.5	51.4	32.9
4	53.0	32.5	54.7	32.5	51.9	33.0
5	53.7	32.3	53.6	32.5	51.7	33.0
6	53.8	32.4	54.9	32.3	51.8	32.1
7	52.7	32.7	55.7	31.0	52.4	32.3
8	53.1	32.7	55.0	32.1	52.8	32.3
9	54.6	32.5	56.2	32.0	52.7	32.1
10	54.2	32.8	57.5	32.3	52.3	32.3
11	54.9	32.7	55.2	32.7	52.5	32.8
12	54.5	32.8	56.1	32.0	51.8	32.8
13	51.5	32.8	56.0	31.8	51.2	32.7
14	51.1	32.9	55.8	31.2	53.6	32.7
15	52.1	32.8	55.1	32.1	51.7	32.7
16	51.3	32.7	54.8	32.3	51.9	32.7
17	51.5	32.8	53.4	32.8	53.5	32.7
18	51.7	32.8	54.5	32.4	53.2	32.7
19	51.8	32.9	54.2	32.8	53.8	32.1
20	52.0	33.0	53.4	32.7	54.4	32.0
21	52.3	33.2	52.4	33.2	53.3	31.9
22	51.1	33.3	53.3	32.9	53.4	31.9
23	51.0	33.3	52.0	32.9	52.2	31.9
24	51.0	33.2	52.7	32.9	51.0	30.6
25	50.6	33.2	49.8	33.0	53.2	31.9
26	55.1	32.5	50.9	33.0	53.0	31.8
27	55.0	32.3	52.1	32.9	53.2	30.8
28	53.5	32.3	52.3	32.9	53.8	31.8
29	55.2	30.7	52.1	32.9	53.5	32.1
30	56.1	31.8	52.4	32.5	53.8	32.0
31	55.0	31.5	52.0	33.0	0	0
MEANS	52.80	32.61	53.99	32.46	52.62	32.29
OBSVNS.	31	31	31	31	30	30
MAXIMUM	56.1	33.3	57.5	33.2	54.4	33.0
MINIMUM	49.8	30.7	49.8	31.0	51.0	30.6
STD.DEV.	1.68	.53	1.79	.52	.93	.60

KAINS ISLAND

50 26 39 N

128 01 47 W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	54.8	32.0	48.8	31.4	42.8	31.0
2	54.0	32.0	48.3	31.8	42.3	31.4
3	55.0	32.4	48.2	31.6	42.0	31.5
4	53.6	32.5	47.9	31.9	43.2	31.6
5	52.4	32.0	48.4	31.9	45.1	31.8
6	51.7	32.5	47.8	31.4	46.6	31.9
7	50.6	32.4	48.0	31.6	43.8	31.4
8	50.5	32.3	48.3	31.9	43.4	30.7
9	51.4	30.8	47.8	31.6	44.1	30.8
10	50.7	31.8	48.5	32.1	44.9	30.8
11	50.6	31.6	48.3	31.8	43.7	29.9
12	50.4	31.8	47.8	31.1	44.4	30.4
13	50.7	32.1	47.8	31.8	44.5	30.3
14	49.5	32.3	47.3	30.7	44.5	30.4
15	49.5	32.3	47.2	31.0	43.6	30.3
16	48.6	32.3	47.3	30.6	44.0	29.8
17	48.8	32.5	47.0	30.8	44.0	30.0
18	49.8	32.7	46.8	30.6	43.6	29.9
19	49.7	32.4	46.8	30.7	42.3	29.9
20	48.7	32.5	45.2	31.1	43.1	30.4
21	48.7	32.5	44.2	31.2	41.5	30.2
22	47.2	31.2	44.8	31.6	42.3	30.4
23	48.7	32.0	46.0	31.5	42.7	30.4
24	47.7	30.6	44.7	31.5	42.6	30.0
25	46.9	29.9	42.8	30.4	43.0	30.2
26	47.8	30.7	45.1	31.4	43.8	30.6
27	46.8	30.3	48.3	30.8	43.6	30.8
28	47.4	30.3	47.9	30.3	43.2	30.6
29	47.3	30.6	44.8	31.2	43.2	30.8
30	47.6	30.8	43.3	31.0	44.5	31.2
31	48.8	32.0	0	0	44.0	31.1
MEANS	49.87	31.75	46.85	31.28	43.56	30.66
OBSVNS.	31	31	30	30	31	31
YRLY. MEANS.....					48.77	31.10
MAXIMUM	55.0	32.7	48.8	32.1	46.6	31.9
MINIMUM	46.8	29.9	42.8	30.3	41.5	29.8
STD. DEV.	2.29	.82	1.69	.50	1.04	.59

AMPHITRITE POINT 48 55 16 N 125 32 17 W

JANUARY

FEBRUARY

MARCH

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	48.0	28.6	* 46.9	* 26.2	47.4	28.1
2	47.9	28.8	46.7	27.2	47.4	28.8
3	47.5	28.5	47.4	30.0	47.3	28.1
4	45.7	28.2	47.1	29.6	47.0	28.2
5	* 46.2	* 28.8	45.0	27.0	47.4	28.1
6	46.8	29.5	46.4	28.2	47.4	27.7
7	46.2	29.0	47.4	28.0	47.9	30.4
8	47.3	30.2	47.6	28.5	47.9	28.9
9	47.5	29.6	47.3	27.9	47.9	28.0
10	47.3	30.1	47.2	27.5	47.7	28.1
11	47.6	30.5	47.5	27.8	47.6	28.9
12	47.3	29.6	* 47.6	* 28.1	* 47.7	* 0
13	47.4	30.9	47.6	28.4	* 47.9	* 0
14	* 47.1	* 30.8	47.8	28.0	48.1	* 0
15	46.8	30.7	47.8	28.3	48.4	24.0
16	46.0	30.5	48.0	* 28.4	48.3	29.5
17	46.0	30.4	47.9	28.4	48.5	29.5
18	* 46.2	* 30.5	48.4	27.6	48.3	29.1
19	* 46.5	* 30.7	49.1	27.1	48.7	29.4
20	46.8	30.8	49.1	27.8	49.0	28.9
21	46.9	29.2	49.0	27.9	48.9	29.0
22	46.7	28.8	49.0	28.5	49.0	29.8
23	47.5	30.6	49.2	27.6	49.1	29.5
24	47.7	30.0	49.4	27.3	49.3	29.4
25	47.5	28.9	49.3	27.4	49.1	29.7
26	47.2	27.6	48.6	27.8	49.7	29.3
27	47.5	29.4	48.7	27.3	49.3	29.4
28	46.4	28.3	47.7	28.0	48.8	30.6
29	* 46.5	* 28.6	0	0	49.6	30.2
30	46.6	28.9	0	0	48.9	29.4
31	47.1	25.3	0	0	49.3	30.2
MEANS	47.05	29.34	47.93	27.96	48.39	28.94
OBSVNS.	26	26	26	25	29	28
MAXIMUM	48.0	30.9	49.4	30.0	49.7	30.6
MINIMUM	45.7	25.3	45.0	27.0	47.0	24.0
STD.DEV.	.61	1.23	1.04	.71	.78	1.24

January 1 to February 22: Salinity data obtained by salinometer analyses.

AMPHITRITE POINT 48 55 16 N 125 32 17 W

	APRIL		MAY		JUNE		1970
DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,	
1	49.3	30.7	50.9	31.0	55.7	31.2	
2	48.6	31.2	50.5	31.8	53.4	31.4	
3	48.9	31.0	52.0	31.0	* 51.8	* 31.6	
4	48.8	26.9	51.6	30.6	50.1	31.9	
5	48.9	25.1	51.0	31.2	51.4	32.0	
6	49.6	30.3	50.5	31.6	52.6	31.8	
7	49.6	30.0	49.4	30.7	50.9	32.5	
8	48.9	29.8	48.9	25.8	52.4	32.9	
9	48.4	30.6	50.1	29.4	51.7	31.8	
10	48.6	31.2	50.7	30.7	51.3	31.9	
11	48.4	31.1	50.9	31.1	50.3	32.3	
12	48.2	30.4	50.2	30.3	51.3	32.4	
13	47.6	28.2	51.7	29.5	52.1	32.0	
14	48.6	30.0	51.8	29.5	54.2	31.8	
15	48.4	30.4	52.0	30.4	54.4	32.0	
16	48.8	30.2	50.2	30.2	54.9	31.5	
17	48.9	30.8	* 50.3	* 29.8	53.6	32.1	
18	48.9	31.2	50.4	29.5	55.0	31.9	
19	49.1	32.0	50.1	30.8	55.2	31.5	
20	49.7	32.0	50.5	31.2	52.6	31.9	
21	50.3	31.2	51.2	31.6	50.5	32.1	
22	50.0	31.5	50.3	30.2	52.5	32.0	
23	49.5	31.2	49.9	30.0	51.4	32.5	
24	49.6	31.5	50.2	31.9	52.5	32.0	
25	49.4	31.1	49.0	32.0	52.6	32.5	
26	49.8	30.8	50.0	32.0	49.6	32.1	
27	49.4	31.6	48.5	32.1	50.4	32.7	
28	49.6	30.7	48.5	31.9	50.4	32.5	
29	49.2	29.8	49.2	31.9	50.2	32.3	
30	50.1	31.2	49.0	32.1	51.0	32.5	
31	0	0	51.7	32.1	0	0	
MEANS	49.10	30.46	50.36	30.80	52.21	32.07	
OBSVNS.	30	30	30	30	29	29	
MAXIMUM	50.3	32.0	52.0	32.1	55.7	32.9	
MINIMUM	47.6	25.1	48.5	25.8	49.6	31.2	
STD.DEV.	.62	1.45	1.02	1.29	1.73	.40	

AMPHITRITE POINT 48 55 16 N 125 32 17 W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	52.4	31.4	56.3	31.2	55.1	31.8
2	52.8	30.7	55.6	31.6	55.6	30.8
3	53.0	31.5	55.0	31.8	55.1	30.6
4	53.4	31.5	55.1	31.6	55.7	32.7
5	54.2	31.9	56.4	31.5	53.6	29.4
6	53.4	32.1	56.5	30.7	54.1	32.4
7	52.3	32.5	56.8	30.4	54.5	33.3
8	52.4	32.3	57.3	31.0	54.1	31.8
9	53.3	32.3	56.3	31.2	55.1	33.4
10	54.6	32.5	55.2	31.4	54.9	33.0
11	53.8	32.0	54.1	31.8	53.5	32.0
12	55.5	32.3	53.0	31.8	53.7	32.0
13	54.6	31.8	53.3	31.8	54.9	32.7
14	54.9	31.6	54.4	31.6	52.8	32.4
15	55.3	31.9	52.4	31.8	54.5	32.3
16	54.0	32.4	52.5	31.8	55.0	32.5
17	54.1	31.8	52.7	32.3	55.1	30.8
18	57.1	31.9	52.3	32.3	53.9	32.8
19	* 54.7	* 31.9	53.0	32.0	54.5	32.7
20	54.3	31.9	54.6	31.8	55.0	33.0
21	57.7	31.9	54.3	32.0	53.8	32.7
22	59.2	31.6	53.7	32.3	52.5	30.4
23	55.2	31.8	54.4	31.9	52.2	29.4
24	55.1	31.1	56.2	31.6	52.1	30.0
25	55.1	30.7	52.7	32.1	53.2	31.0
26	53.1	31.2	52.7	32.0	53.0	30.8
27	54.2	31.5	52.8	32.1	53.0	30.8
28	55.2	31.5	53.3	31.8	55.6	29.9
29	54.0	28.8	54.5	31.9	55.2	30.3
30	54.3	30.4	54.6	31.9	55.7	30.7
31	54.8	31.8	56.3	31.6	0	0
MEANS	54.44	31.62	54.46	31.70	54.23	31.61
OBSVNS.	30	30	31	31	30	30
MAXIMUM	59.2	32.5	57.3	32.3	55.7	33.4
MINIMUM	52.3	28.8	52.3	30.4	52.1	29.4
STD.DEV.	1.54	.75	1.52	.44	1.08	1.21

AMPHITRITE POINT 48 55 16 N 125 32 17 W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	55.0	31.6	50.7	31.2	46.6	29.3
2	55.5	30.4	50.4	30.2	46.6	28.4
3	55.3	30.3	50.4	29.7	46.0	29.4
4	52.4	31.6	50.0	29.1	45.7	30.6
5	51.5	32.0	50.7	30.3	46.3	29.7
6	52.6	31.5	50.4	28.4	* 46.4	* 29.8
7	51.8	31.5	50.6	30.4	* 46.6	* 29.9
8	51.4	31.8	50.6	30.2	46.7	30.0
9	51.2	31.6	50.4	30.4	45.3	29.1
10	52.3	31.2	49.8	28.4	* 46.3	* 29.5
11	52.2	31.5	50.3	29.7	47.3	29.9
12	50.8	31.6	50.3	31.5	45.1	26.8
13	51.5	31.2	50.5	30.8	* 45.6	* 27.4
14	51.8	31.2	50.4	30.6	46.2	28.0
15	50.8	31.4	49.6	28.8	47.6	29.8
16	50.5	31.6	51.0	30.0	48.1	30.0
17	50.7	31.0	50.6	29.0	47.8	29.8
18	* 50.6	* 30.0	50.4	30.0	46.8	27.8
19	50.4	29.1	50.1	30.3	46.4	27.7
20	49.6	30.3	49.6	31.0	46.3	27.2
21	* 49.6	* 30.2	47.1	30.7	46.4	28.5
22	* 49.5	* 30.0	46.4	30.8	43.8	25.5
23	49.5	29.9	48.6	31.2	45.4	28.0
24	49.1	31.6	48.7	31.2	45.1	28.4
25	49.2	30.0	47.6	30.6	44.3	27.6
26	48.4	28.5	46.7	29.3	44.7	28.4
27	48.3	28.6	46.3	28.4	* 45.4	* 28.7
28	48.6	29.4	47.0	29.3	* 46.1	* 29.0
29	49.0	28.6	47.1	29.7	46.8	29.3
30	49.1	28.6	46.8	30.2	47.1	29.4
31	49.7	29.1	0	0	46.8	30.4
MEANS	51.01	30.60	49.30	30.05	46.21	28.76
OBSVNS.	28	28	30	30	25	25
YRLY. MEANS.....					50.53	30.40
MAXIMUM	55.5	32.0	51.0	31.5	48.1	30.6
MINIMUM	48.3	28.5	46.3	28.4	43.8	25.5
STD. DEV.	1.98	1.17	1.59	.89	1.07	1.24

SHERINGHAM POINT 48 22 40 N 123 55 10 W

	JANUARY		FEBRUARY		MARCH		1970
DATE	TEMP	SAL	TEMP	SAL	TEMP	SAL	
1	46.5	31.16	46.5	30.74	45.5	30.62	
2	46.5	31.16	46.0	30.53	45.5	30.69	
3	46.0	31.15	46.0	30.72	44.0	30.63	
4	45.5	30.93	44.5	30.62	45.0	30.65	
5	44.5	30.76	44.0	30.58	45.5	30.73	
6	44.5	30.86	45.3	30.55	45.5	30.80	
7	44.5	31.01	47.0	30.36	46.2	30.97	
8	44.5	31.15	46.5	30.93	46.6	31.27	
9	44.8	31.70	46.6	30.93	47.1	31.40	
10	45.2	31.71	46.6	31.27	46.8	31.19	
11	45.0	31.71	46.5	31.29	46.8	31.41	
12	45.0	31.53	46.4	30.85	47.2	31.46	
13	45.6	31.52	46.8	30.87	47.5	31.35	
14	45.4	31.58	* 46.8	* 30.76	47.5	31.35	
15	45.5	31.60	* 46.9	* 30.65	* 47.5	* 31.20	
16	44.5	31.42	47.0	30.54	47.5	31.06	
17	45.0	31.18	47.0	30.17	46.0	30.92	
18	45.0	31.19	47.0	30.13	48.0	30.58	
19	46.0	30.82	46.0	27.96	47.5	30.14	
20	46.5	30.80	47.5	27.92	47.0	30.66	
21	47.5	30.74	47.8	29.08	47.0	30.78	
22	47.5	30.73	47.6	29.10	47.4	31.04	
23	46.2	29.90	47.4	30.16	47.4	31.07	
24	47.5	30.63	47.4	30.23	47.6	31.25	
25	46.2	30.33	47.6	30.54	47.4	31.22	
26	46.8	29.36	47.5	30.54	47.5	31.17	
27	46.4	30.04	* 47.0	* 30.58	47.4	31.17	
28	46.2	29.81	46.4	30.63	47.8	31.18	
29	46.4	29.79	0	0	* 47.8	* 31.16	
30	46.4	30.00	0	0	47.8	31.15	
31	46.6	30.01	0	0	47.6	31.18	
MEANS	45.8	30.85	46.6	30.29	46.8	31.00	
OBSVNS.	31	31	25	25	29	29	
MAXIMUM	47.5	31.71	47.8	31.29	48.0	31.46	
MINIMUM	44.5	29.36	44.0	27.92	44.0	30.14	
STD.DEV.	.93	.66	.94	.88	1.00	.32	

January 1 to March 31: Salinity data obtained by salinometer analyses.

SHERINGHAM POINT 48 22 40 N 123 55 10 W

APRIL

MAY

JUNE

1970

DATE	TEMP	SAL	TEMP	SAL	TEMP	SAL
1	47.8	* 0	46.5	* 0	50.7	* 0
2	47.5	* 0	47.0	* 0	51.4	* 0
3	47.5	* 0	47.0	* 0	49.2	* 0
4	47.0	* 0	47.2	* 0	49.4	* 0
5	47.4	* 0	47.4	* 0	49.4	* 0
6	47.5	* 0	47.2	* 0	49.4	* 0
7	47.8	* 0	47.2	* 0	49.5	* 0
8	46.6	* 0	47.5	* 0	49.2	* 0
9	46.8	* 0	47.2	* 0	49.5	* 0
10	47.2	* 0	47.5	* 0	49.5	* 0
11	47.8	* 0	47.3	* 0	49.0	* 0
12	47.8	* 0	47.5	* 0	49.8	* 0
13	47.6	* 0	48.5	* 0	49.7	* 0
14	47.5	* 0	48.7	* 0	50.0	* 0
15	47.8	* 0	49.2	* 0	* 50.2	* 0
16	47.5	* 0	49.5	* 0	50.5	* 0
17	47.5	* 0	49.5	* 0	50.8	* 0
18	47.2	* 0	49.0	* 0	51.5	* 0
19	46.5	* 0	49.5	* 0	52.0	* 0
20	47.6	* 0	49.7	* 0	51.9	* 0
21	47.8	* 0	49.2	* 0	52.5	* 0
22	47.2	* 0	48.7	* 0	52.2	* 0
23	46.5	* 0	47.8	* 0	52.5	* 0
24	46.5	* 0	47.8	* 0	51.0	* 0
25	47.0	* 0	47.8	* 0	49.5	* 0
26	46.8	* 0	48.4	* 0	48.5	* 0
27	47.0	* 0	48.2	* 0	48.7	* 0
28	47.2	* 0	47.5	* 0	49.4	* 0
29	47.0	* 0	47.5	* 0	49.5	* 0
30	46.5	* 0	48.0	* 0	50.5	* 0
31	0	0	49.0	* 0	0	0
MEANS	47.2	0	48.1	0	50.2	0
OBSVNS.	30	0	31	0	29	0
MAXIMUM	47.8	0	49.7	0	52.5	0
MINIMUM	46.5	0	46.5	0	48.5	0
STD.DEV.	.45	0	.91	0	1.18	0

April 1: Collection of seawater samples discontinued.

SHERINGHAM POINT

48 22 40 N

123 55 10 W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL	TEMP	SAL	TEMP	SAL
1	54.0	*	53.9	*	51.2	*
2	54.0	*	54.0	*	51.4	*
3	52.5	*	54.1	*	51.2	*
4	51.3	*	54.1	*	51.0	*
5	50.5	*	54.0	*	51.2	*
6	50.5	*	54.4	*	51.2	*
7	50.0	*	52.5	*	51.2	*
8	51.0	*	52.2	*	51.4	*
9	51.0	*	50.4	*	51.0	*
10	* 50.2	*	51.6	*	51.2	*
11	49.5	*	52.4	*	50.7	*
12	50.7	*	51.8	*	51.2	*
13	51.8	*	51.8	*	50.8	*
14	54.5	*	51.4	*	50.6	*
15	54.3	*	51.4	*	50.8	*
16	53.2	*	51.6	*	51.0	*
17	55.0	*	50.8	*	49.4	*
18	54.1	*	50.2	*	49.0	*
19	51.2	*	50.2	*	48.2	*
20	50.5	*	50.4	*	48.2	*
21	50.5	*	49.5	*	48.5	*
22	50.1	*	49.8	*	48.2	*
23	49.7	*	49.5	*	* 48.7	*
24	49.5	*	49.4	*	49.2	*
25	48.8	*	49.5	*	49.8	*
26	49.6	*	51.7	*	49.4	*
27	50.3	*	51.6	*	49.8	*
28	51.3	*	52.2	*	50.7	*
29	50.3	*	51.8	*	51.2	*
30	54.5	*	51.5	*	50.0	*
31	* 54.2	*	51.2	*	0	*
MEANS	51.5	0	51.6	0	50.3	0
OBSVNS.	29	0	31	0	29	0
MAXIMUM	55.0	0	54.4	0	51.4	0
MINIMUM	48.8	0	49.4	0	48.2	0
STD.DEV.	1.85	0	1.51	0	1.08	0

SHERINGHAM POINT 48 22 40 N 123 55 10 W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL	TEMP	SAL	TEMP	SAL
1	50.0	* 0	47.8	* 0	45.8	* 0
2	50.5	* 0	47.8	* 0	46.4	* 0
3	50.2	* 0	47.6	* 0	46.6	* 0
4	50.2	* 0	47.8	* 0	46.6	* 0
5	49.4	* 0	47.6	* 0	46.4	* 0
6	49.5	* 0	47.8	* 0	46.2	* 0
7	49.5	* 0	47.8	* 0	46.4	* 0
8	49.2	* 0	47.5	* 0	46.0	* 0
9	49.8	* 0	47.7	* 0	45.8	* 0
10	48.6	* 0	47.4	* 0	46.6	* 0
11	48.8	* 0	49.9	* 0	46.5	* 0
12	48.8	* 0	* 48.9	* 0	46.6	* 0
13	48.7	* 0	47.9	* 0	46.4	* 0
14	48.6	* 0	49.2	* 0	46.2	* 0
15	48.8	* 0	49.7	* 0	46.8	* 0
16	47.8	* 0	49.4	* 0	46.8	* 0
17	48.2	* 0	48.5	* 0	46.4	* 0
18	48.2	* 0	48.6	* 0	46.4	* 0
19	47.8	* 0	48.4	* 0	46.6	* 0
20	47.8	* 0	47.4	* 0	46.4	* 0
21	47.5	* 0	46.8	* 0	46.6	* 0
22	47.4	* 0	45.0	* 0	45.7	* 0
23	47.3	* 0	46.5	* 0	45.8	* 0
24	47.2	* 0	46.6	* 0	45.6	* 0
25	47.6	* 0	46.8	* 0	45.2	* 0
26	49.8	* 0	46.7	* 0	45.4	* 0
27	* 49.2	* 0	46.8	* 0	45.3	* 0
28	48.6	* 0	45.8	* 0	45.4	* 0
29	48.2	* 0	45.8	* 0	45.4	* 0
30	48.4	* 0	46.4	* 0	45.6	* 0
31	47.9	* 0	0	0	45.8	* 0
MEANS	48.7	0	47.6	0	46.1	0
OBSVNS.	30	0	29	0	31	0
YRLY. MEANS.....					48.4	30.74
MAXIMUM	50.5	0	49.9	0	46.8	0
MINIMUM	47.2	0	45.0	0	45.2	0
STD.DEV.	.95	0	1.16	0	.49	0

RACE ROCKS

48 17 57 N

123 31 48 W

JANUARY

FEBRUARY

MARCH

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	46.1	31.0	45.6	31.0	45.5	30.6
2	46.3	30.8	45.5	30.7	45.0	30.6
3	45.8	30.6	45.3	30.7	45.2	30.6
4	46.0	30.5	45.5	30.7	45.5	30.6
5	45.6	30.7	45.2	30.8	45.6	30.6
6	45.8	30.8	45.6	30.7	46.0	31.0
7	45.8	30.9	46.0	30.8	46.3	31.5
8	45.9	31.2	46.2	31.3	46.7	31.2
9	46.0	31.3	46.0	31.0	46.6	31.6
10	45.7	31.3	46.2	31.4	46.5	31.6
11	45.9	31.3	45.8	31.2	45.4	31.5
12	45.7	31.6	45.7	30.8	45.5	31.6
13	45.7	31.8	45.7	30.6	46.2	31.4
14	46.0	31.7	45.9	30.8	46.7	31.1
15	45.0	31.3	45.8	30.5	46.5	31.0
16	45.1	31.1	45.5	30.4	46.2	30.9
17	45.2	30.9	45.8	30.7	46.2	30.8
18	45.3	30.9	45.8	30.7	46.3	30.8
19	45.4	30.8	46.2	30.4	46.6	30.8
20	45.6	31.0	46.3	30.6	47.0	30.8
21	46.0	31.0	46.4	30.6	47.1	30.9
22	45.6	30.9	46.4	30.6	47.0	31.1
23	46.0	31.0	46.7	30.5	46.7	31.2
24	45.8	31.0	46.8	30.9	47.3	31.3
25	46.2	30.4	46.9	30.6	47.0	31.1
26	45.2	30.9	46.7	30.6	46.8	30.8
27	45.5	31.0	46.3	30.5	47.1	31.1
28	45.4	30.9	45.9	30.5	46.9	31.2
29	45.5	30.8	0	0	46.7	31.2
30	45.2	30.9	0	0	47.0	31.2
31	45.4	30.8	0	0	47.2	30.8
MEANS	45.67	31.00	45.99	30.74	46.40	31.05
OBSVNS.	31	31	28	28	31	31
MAXIMUM	46.3	31.8	46.9	31.4	47.3	31.6
MINIMUM	45.0	30.4	45.2	30.4	45.0	30.6
STD.DEV.	.34	.32	.46	.25	.65	.32

January 1 to March 31: Salinity data obtained by salinometer analyses.

RACE ROCKS

48 17 57 N

123 31 48 W

APRIL

MAY

JUNE

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	46.7	31.1	47.1	31.5	49.9	31.2
2	47.0	31.0	47.6	32.1	50.0	30.8
3	46.9	31.0	48.1	31.6	48.6	31.8
4	46.8	31.2	47.7	31.8	48.5	31.6
5	46.7	31.9	47.0	31.8	48.7	31.8
6	46.3	31.6	46.8	32.3	48.5	31.8
7	46.6	31.9	47.1	32.1	48.5	31.6
8	46.4	32.0	46.7	32.0	48.6	31.4
9	46.1	32.0	47.0	32.0	48.3	31.5
10	46.0	31.8	46.8	32.1	48.7	31.1
11	45.9	32.0	47.0	31.5	49.2	31.0
12	46.1	32.0	47.3	31.8	49.6	31.2
13	* 46.2	* 31.8	47.9	31.5	50.6	31.1
14	46.3	31.5	47.7	31.5	50.7	30.8
15	46.8	31.4	48.3	31.5	51.3	30.3
16	46.9	31.0	48.5	31.8	51.1	30.4
17	47.2	31.2	48.8	31.2	51.7	30.6
18	47.3	31.4	49.2	31.5	50.0	30.8
19	47.2	31.4	48.9	31.8	49.0	31.4
20	47.4	31.5	47.9	31.6	48.8	31.4
21	47.6	31.1	47.7	31.5	48.5	31.5
22	46.8	31.2	47.8	31.5	48.0	31.6
23	46.5	31.2	47.4	31.5	47.7	31.8
24	45.7	31.4	48.0	31.5	48.0	31.6
25	46.0	31.6	47.1	31.6	48.8	31.2
26	46.1	31.6	47.3	31.9	49.0	31.4
27	46.4	31.5	47.4	31.9	49.2	31.2
28	* 46.4	* 31.5	48.0	31.5	* 49.9	* 31.2
29	46.3	31.5	47.7	31.8	50.6	31.2
30	46.3	31.6	49.2	31.8	50.5	31.0
31	0	0	50.0	31.4	0	0
MEANS	46.58	31.49	47.77	31.71	49.33	31.24
OBSVNS.	28	28	31	31	29	29
MAXIMUM	47.6	32.0	50.0	32.3	51.7	31.8
MINIMUM	45.7	31.0	46.7	31.2	47.7	30.3
STD.DEV.	.49	.33	.80	.26	1.09	.41

RACE ROCKS

48 17 57 N

123 31 48 W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	50.4	31.1	49.8	31.6	50.8	31.2
2	51.3	31.1	49.7	31.6	50.8	31.5
3	50.8	31.1	49.6	31.8	50.8	31.4
4	49.9	31.1	50.1	31.8	50.7	31.2
5	49.3	31.5	50.8	31.6	50.7	31.1
6	49.2	31.8	50.3	31.8	* 51.0	* 31.2
7	49.1	31.4	50.4	31.6	51.2	31.4
8	49.8	31.2	50.2	31.6	50.7	31.5
9	49.7	31.2	51.0	31.6	51.3	31.6
10	50.0	31.2	51.6	31.6	51.2	31.6
11	50.3	31.0	* 51.6	* 31.5	50.7	32.1
12	52.0	30.8	51.5	31.4	50.3	32.1
13	51.7	30.3	50.7	32.1	50.4	31.6
14	* 52.6	* 30.0	51.4	31.8	50.5	31.8
15	53.4	29.7	50.5	31.8	50.0	32.0
16	50.3	30.8	50.6	31.2	49.5	32.3
17	51.2	30.7	50.2	31.9	49.2	32.0
18	51.1	31.2	49.2	32.3	49.0	32.1
19	50.0	31.5	50.0	31.5	49.0	32.4
20	49.8	31.6	49.8	32.0	48.2	32.1
21	49.6	31.8	49.3	31.9	49.2	32.1
22	49.7	31.8	50.0	31.9	49.4	31.9
23	49.8	31.9	50.2	31.9	49.4	32.3
24	48.7	31.5	51.0	32.0	49.5	32.1
25	49.6	31.6	51.0	31.5	49.6	32.7
26	50.1	31.5	50.8	31.4	49.8	31.8
27	50.8	31.2	50.3	31.4	50.2	31.6
28	50.6	31.1	51.2	31.5	51.1	31.5
29	50.7	31.2	51.3	31.4	50.3	31.8
30	51.0	31.5	51.3	31.1	50.2	31.6
31	52.3	31.5	51.1	31.0	0	0
MEANS	50.41	31.23	50.50	31.65	50.13	31.81
OBSVNS.	30	30	30	30	29	29
MAXIMUM	53.4	31.9	51.6	32.3	51.3	32.7
MINIMUM	48.7	29.7	49.2	31.0	48.2	31.1
STD.DEV.	1.03	.46	.66	.29	.80	.39

RACE ROCKS

48 17 57 N 123 31 48 W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,	
1	49.4	32.1	* 47.8	* 32.2	45.9	31.8	
2	49.0	32.0	47.7	31.9	46.1	31.8	
3	49.3	31.8	47.8	32.1	45.8	31.9	
4	49.8	31.4	47.7	32.3	45.7	31.9	
5	49.3	31.9	47.6	32.8	45.4	31.6	
6	49.1	31.9	47.5	32.0	46.0	31.8	
7	49.0	31.9	47.8	31.8	46.0	31.8	
8	48.7	31.9	47.7	31.9	45.7	32.5	
9	49.0	31.8	47.5	32.3	45.5	31.8	
10	48.8	32.3	47.3	32.1	45.6	31.5	
11	49.4	32.3	48.0	31.6	45.8	32.0	
12	49.2	31.6	47.8	32.0	45.8	31.5	
13	48.8	31.8	48.0	31.8	46.0	31.5	
14	48.4	32.3	47.5	31.9	46.0	31.5	
15	47.5	32.8	47.5	31.9	* 46.0	* 31.3	
16	48.0	32.1	47.8	31.9	46.0	31.1	
17	47.2	32.5	47.5	31.9	45.8	31.5	
18	48.0	32.1	47.3	32.1	45.6	31.5	
19	47.7	32.1	47.3	31.9	45.8	31.2	
20	47.4	32.5	46.8	32.5	* 45.6	* 31.3	
21	* 47.4	* 32.3	45.8	32.1	45.4	31.4	
22	47.5	32.1	46.0	31.8	45.0	30.8	
23	47.9	31.6	46.3	31.6	45.2	30.8	
24	47.6	32.0	46.5	31.2	45.2	31.2	
25	47.4	32.7	46.3	31.1	45.7	30.8	
26	47.7	32.4	46.1	31.2	45.3	30.8	
27	47.6	32.3	46.0	31.1	45.4	31.5	
28	47.9	32.3	45.7	31.6	45.3	31.1	
29	48.1	31.9	45.9	31.2	45.4	31.1	
30	47.8	32.0	46.1	31.4	45.6	30.8	
31	48.0	32.4	0	0	* 45.5	* 31.0	
MEANS	48.35	32.09	47.06	31.83	45.64	31.45	
OBSVNS.	30	30	29	29	28	28	
YRLY. MEANS					47.83	31.44
MAXIMUM	49.8	32.8	48.0	32.8	46.1	32.5	
MINIMUM	47.2	31.4	45.7	31.1	45.0	30.8	
STD. DEV.	.76	.32	.78	.41	.29	.43	

CAPE MUDGE

49 59 56 N

125 11 38 W

JANUARY

FEBRUARY

MARCH

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	46.5	28.4	46.0	29.3	44.0	29.7
2	46.5	28.5	* 46.5	* 29.3	46.0	29.8
3	46.5	28.2	47.0	29.3	44.0	29.4
4	43.0	27.8	46.0	29.5	47.5	29.9
5	* 44.8	* 28.6	* 46.0	* 29.5	46.0	29.5
6	46.5	29.3	46.0	29.5	* 46.8	* 29.6
7	47.0	29.1	46.0	29.8	47.5	29.7
8	47.0	29.1	46.5	29.4	47.5	29.4
9	46.0	29.3	45.0	30.0	48.0	29.3
10	43.5	29.0	45.0	29.1	47.5	29.7
11	45.0	29.0	45.0	29.5	47.5	29.1
12	45.0	28.9	46.0	29.3	* 47.2	* 29.5
13	45.0	29.0	46.0	29.5	47.0	29.8
14	45.5	29.1	46.0	29.4	47.0	29.1
15	45.0	29.0	47.0	29.8	47.0	29.1
16	44.5	29.3	47.0	28.2	46.5	28.9
17	44.5	29.5	47.5	29.3	48.0	29.4
18	44.0	29.3	47.0	29.8	48.0	28.9
19	45.5	29.8	47.0	29.8	48.0	29.1
20	46.0	28.9	47.5	29.7	50.5	29.7
21	46.0	28.8	47.0	29.7	50.0	29.5
22	46.5	28.9	47.0	29.8	50.0	29.5
23	47.0	29.9	47.0	29.7	50.0	29.5
24	46.5	29.7	45.0	29.4	48.0	29.4
25	45.5	30.3	45.0	29.8	48.5	29.5
26	43.0	29.5	46.0	29.5	48.5	29.7
27	44.0	29.1	44.5	29.7	47.0	29.5
28	44.0	29.4	44.5	29.8	46.0	29.7
29	45.0	29.5	0	0	46.0	29.4
30	45.5	29.4	0	0	47.0	29.4
31	45.0	29.5	0	0	47.5	29.5

MEANS	45.35	29.15	46.13	29.52	47.45	29.45
OBSVNS.	30	30	26	26	29	29
MAXIMUM	47.0	30.3	47.5	30.0	50.5	29.9
MINIMUM	43.0	27.8	44.5	28.2	44.0	28.9
STD.DEV.	1.17	.51	.93	.35	1.54	.27

CAPE MUDGE

49 59 56 N

125 11 38 W

APRIL

MAY

JUNE

1970

DATE	TEMP	SAL,	DATE	TEMP	SAL,	DATE	TEMP	SAL,
1	49.5	29.7		50.0	29.5		55.0	29.3
2	48.0	29.4		51.0	29.8		55.0	29.7
3	* 48.0	* 29.4		53.0	29.8		54.0	29.1
4	48.0	29.4		51.5	29.4		61.0	27.7
5	48.5	29.4		52.0	29.7		57.0	28.5
6	47.5	29.5		54.0	29.5		55.0	29.3
7	* 48.3	* 29.6		50.5	29.3		54.0	28.9
8	* 49.2	* 29.7		48.5	29.3		52.0	29.5
9	50.0	29.8		48.5	29.5		51.0	30.0
10	47.0	29.5		49.5	29.1		51.0	29.3
11	47.0	29.8		49.5	29.1		54.0	29.3
12	46.0	29.4		49.0	29.4		54.5	29.0
13	47.0	29.4		49.5	29.4		56.5	29.0
14	48.0	29.3		50.0	29.0		54.5	28.2
15	50.0	29.7		54.0	29.4		59.0	28.2
16	49.5	29.4		50.0	29.3		57.5	28.0
17	50.5	29.3		54.0	29.4		60.0	28.6
18	48.0	29.3		53.0	29.3		56.5	29.1
19	50.0	29.3		54.0	29.4		62.0	28.8
20	50.5	29.4		55.0	29.5		53.0	29.1
21	50.0	29.4		50.5	29.3		57.5	28.6
22	51.0	29.4		52.0	29.4		57.5	28.4
23	* 49.8	* 29.4		53.0	29.0		52.0	29.0
24	48.5	29.4		52.0	29.1		52.0	28.5
25	47.5	29.5		51.5	29.0		52.5	29.1
26	47.0	29.6		52.0	29.1		51.0	29.0
27	48.0	29.7		50.0	29.5		54.0	29.0
28	48.0	29.7		52.0	29.8		55.5	28.1
29	48.0	29.7		53.0	29.5		59.5	28.8
30	52.0	29.3		52.0	29.4	* 56.6	* 28.8	
31	0	0		54.0	29.5	0	0	
MEANS	48.65	29.50		51.56	29.38		55.31	28.87
OBSVNS.	26	26		31	31		29	29
MAXIMUM	52.0	29.8		55.0	29.8		62.0	30.0
MINIMUM	46.0	29.3		48.5	29.0		51.0	27.7
STD.DEV.	1.50	.18		1.84	.22		3.05	.52

CAPE MUDGE

49 59 56 N

125 11 38 W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	53.7	28.9	60.5	28.0	57.0	27.4
2	53.4	28.9	62.5	28.1	* 56.0	* 28.2
3	57.5	28.4	60.6	28.0	55.0	28.9
4	59.5	28.5	60.0	27.7	55.0	28.5
5	56.0	28.4	55.9	28.6	54.7	28.5
6	57.5	28.4	* 56.8	* 28.2	54.9	28.0
7	52.5	29.5	57.6	27.7	55.2	28.5
8	54.5	28.8	60.5	27.6	56.7	28.2
9	53.2	28.9	60.0	27.6	57.2	27.7
10	53.5	29.0	63.4	27.2	57.0	28.0
11	54.0	29.0	59.5	27.2	54.5	29.0
12	55.0	28.9	65.5	24.8	54.1	28.8
13	55.0	28.4	63.8	25.4	52.6	28.5
14	57.4	28.4	57.0	27.4	55.5	28.6
15	57.6	28.4	63.6	27.4	51.4	29.5
16	56.8	28.4	56.9	28.1	52.0	29.3
17	53.6	29.4	53.5	28.6	* 52.1	* 29.3
18	56.0	28.4	55.3	28.9	52.2	29.3
19	54.6	28.9	54.4	29.8	50.8	29.3
20	56.5	28.6	53.0	29.5	51.5	28.9
21	55.5	28.9	53.2	29.0	52.0	28.6
22	54.0	29.0	51.2	29.5	52.8	28.8
23	53.0	29.5	52.1	29.5	54.5	28.8
24	54.0	29.1	55.5	28.6	55.5	28.6
25	* 55.0	* 29.0	55.2	28.1	55.4	28.8
26	56.1	28.9	55.5	28.1	56.0	28.6
27	58.5	28.2	56.4	27.3	55.5	28.8
28	57.5	28.2	56.3	28.5	53.0	28.9
29	58.5	27.8	59.5	28.1	54.0	29.1
30	60.5	28.1	59.3	28.0	52.5	28.8
31	60.7	28.5	58.5	28.0	0	0
MEANS	55.87	28.69	57.87	28.01	54.23	28.67
OBSVNS.	30	30	30	30	28	28
MAXIMUM	60.7	29.5	65.5	29.8	57.2	29.5
MINIMUM	52.5	27.8	51.2	24.8	50.8	27.4
STD.DEV.	2.28	.41	3.74	1.07	1.86	.48

CAPE MUDGE

49 59 56 N

125 11 38 W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	53.0	29.5	49.0	29.9	42.0	29.1
2	52.0	29.3	49.0	29.9	43.3	29.4
3	53.0	29.1	47.0	29.3	* 42.8	* 29.4
4	52.0	29.5	45.1	28.8	42.2	29.5
5	50.5	29.3	48.6	29.0	* 44.2	* 29.4
6	50.0	29.5	49.0	29.5	46.1	29.4
7	50.5	29.7	48.5	29.5	* 46.5	* 29.4
8	51.0	29.1	49.1	29.5	46.9	29.5
9	53.0	30.0	49.6	29.8	* 46.8	* 29.5
10	50.5	29.9	* 49.7	* 29.8	* 46.6	* 29.5
11	51.5	29.9	* 49.9	* 29.9	46.5	29.5
12	50.5	29.8	50.0	30.0	* 46.6	* 29.6
13	51.5	30.0	48.2	29.9	46.6	29.7
14	49.8	30.0	49.0	30.0	* 46.2	* 29.4
15	50.0	30.3	47.9	29.8	45.8	29.0
16	49.0	30.0	47.9	29.1	45.9	29.1
17	* 49.0	* 30.2	47.6	29.7	46.0	29.1
18	49.0	30.3	47.0	30.0	45.1	28.2
19	* 49.0	* 30.1	46.8	29.9	45.5	29.0
20	49.0	29.9	46.9	29.7	45.0	28.5
21	* 0	* 0	46.5	29.7	44.5	28.8
22	* 0	* 0	43.9	29.0	* 45.0	* 28.9
23	* 0	* 0	* 45.7	* 29.0	45.5	29.0
24	50.0	29.7	47.5	29.1	45.6	29.5
25	50.5	29.4	46.5	29.0	45.9	29.4
26	* 49.8	* 29.4	* 46.5	* 29.0	* 0	* 0
27	49.0	29.5	46.5	29.0	* 0	* 0
28	49.5	29.8	46.4	29.5	* 0	* 0
29	49.5	29.9	* 44.8	* 29.4	* 0	* 0
30	49.0	29.5	43.1	29.4	46.1	29.5
31	49.5	30.0	0	0	44.0	29.4
MEANS	50.51	29.72	47.46	29.52	45.18	29.19
OBSVNS.	25	25	25	25	19	19
YRLY. MEANS.....					50.74	29.12
MAXIMUM	53.0	30.3	50.0	30.0	46.9	29.7
MINIMUM	49.0	29.1	43.1	28.8	42.0	28.2
STD. DEV.	1.31	.33	1.69	.38	1.40	.38

SISTERS ISLAND

49 29 13 N

124 26 00 W

	JANUARY		FEBRUARY		MARCH		1970
DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,	
1	45.0	28.3	45.3	28.9	44.5	28.6	
2	45.0	28.4	44.6	28.7	44.5	28.6	
3	45.0	28.5	45.0	28.9	44.0	28.6	
4	45.0	28.6	44.5	28.7	45.0	28.6	
5	45.2	28.7	44.5	28.9	44.9	28.8	
6	45.0	28.6	45.0	29.0	45.0	28.8	
7	45.0	28.4	45.0	28.8	45.5	28.8	
8	44.5	28.4	44.5	28.7	45.5	28.8	
9	45.0	28.6	44.5	28.8	46.0	28.8	
10	45.0	28.9	44.5	28.8	45.0	28.6	
11	44.0	28.4	44.5	28.8	45.4	28.8	
12	44.3	28.6	44.5	28.6	45.5	28.6	
13	44.5	28.7	45.0	28.8	45.5	28.6	
14	43.3	28.4	45.0	28.6	45.7	28.8	
15	43.0	28.4	45.1	28.7	46.1	28.6	
16	43.6	28.5	45.5	28.9	45.9	28.6	
17	43.8	28.7	45.2	28.8	46.1	28.8	
18	43.8	28.6	44.8	28.4	46.5	28.9	
19	44.3	28.6	45.2	28.6	47.2	28.9	
20	44.3	28.6	45.6	28.7	47.0	29.0	
21	45.4	28.7	45.8	28.6	47.6	28.6	
22	45.0	28.6	45.5	28.1	46.1	28.8	
23	45.0	28.6	44.5	27.5	46.9	28.5	
24	44.4	28.5	44.6	28.1	46.4	28.6	
25	44.8	28.5	45.0	28.7	46.4	28.9	
26	44.5	28.4	45.0	28.7	46.3	28.8	
27	44.5	28.6	45.0	28.8	46.6	28.9	
28	44.4	28.7	45.0	28.9	46.7	28.9	
29	44.8	28.8	0	0	47.2	29.0	
30	44.5	28.7	0	0	46.6	29.1	
31	45.0	28.9	0	0	46.9	29.1	
MEANS	44.55	28.58	44.94	28.66	45.95	28.77	
OBSVNS.	31	31	28	28	31	31	
MAXIMUM	45.4	28.9	45.8	29.0	47.6	29.1	
MINIMUM	43.0	28.3	44.5	27.5	44.0	28.5	
STD.DEV.	.58	.15	.38	.31	.90	.16	

January 1 to February 28: Salinity data obtained by salinometer analyses.

SISTERS ISLAND

49 29 13 N 124 26 00 W

APRIL

MAY

JUNE

1970

DATE	TEMP	SAL.	TEMP	SAL.	TEMP	SAL.
1	47.9	28.9	50.0	29.3	60.3	30.6
2	46.8	29.4	54.0	29.0	61.1	29.9
3	47.1	29.3	53.5	28.9	60.1	28.9
4	46.8	29.1	50.5	29.3	53.3	29.4
5	46.7	29.3	50.8	29.2	57.0	28.9
6	46.3	29.3	52.8	29.0	59.8	29.4
7	46.3	29.5	50.0	29.2	60.1	28.9
8	46.7	29.5	49.8	29.2	58.5	28.9
9	46.6	29.3	49.5	29.2	53.2	29.0
10	46.4	29.1	49.0	29.3	54.6	29.4
11	46.5	29.1	49.5	29.3	55.1	29.3
12	46.5	29.0	50.3	29.2	56.3	28.8
13	46.7	29.1	50.5	29.3	58.4	* 0
14	46.8	29.1	50.9	29.1	58.3	* 0
15	47.5	29.1	51.1	29.2	60.1	* 0
16	49.5	29.0	50.2	29.3	60.4	27.9
17	50.0	29.3	52.6	29.8	62.0	28.1
18	48.0	29.3	53.5	29.4	62.0	28.2
19	48.4	29.3	55.2	29.5	65.0	27.9
20	49.8	29.4	53.9	29.4	65.8	25.9
21	51.0	29.3	53.6	29.3	* 63.9	* 26.7
22	* 50.3	* 29.3	53.0	29.1	62.0	27.5
23	49.6	29.3	55.5	29.5	62.0	26.4
24	46.5	29.4	56.2	29.7	60.5	27.2
25	47.5	29.3	55.6	29.3	63.2	26.8
26	47.0	29.3	53.2	29.1	61.5	27.5
27	47.0	29.3	54.4	29.3	60.0	28.1
28	48.8	28.9	53.7	29.1	59.5	27.7
29	48.8	29.1	53.4	29.3	61.5	28.1
30	52.5	28.7	56.0	29.4	58.5	27.9
31	0	0	58.4	29.5	0	0
MEANS	47.79	29.21	52.60	29.28	59.66	28.33
OBSVNS.	29	29	31	31	29	26
MAXIMUM	52.5	29.5	58.4	29.8	65.8	30.6
MINIMUM	46.3	28.7	49.0	28.9	53.2	25.9
STD.DEV.	1.60	.19	2.42	.19	3.08	1.09

April 17 to May 17: Salinity data obtained by salinometer analyses.

SISTERS ISLAND

49 29 13 N

124 26 00 W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	60.0	27.5	65.3	26.0	61.7	28.2
2	60.2	26.9	62.9	26.4	60.3	28.4
3	61.8	27.1	61.6	26.1	59.5	28.4
4	63.0	25.6	62.3	26.5	59.2	28.4
5	63.8	25.0	61.9	27.2	58.4	28.1
6	62.8	25.2	61.8	27.1	57.6	28.2
7	64.3	24.3	60.6	26.9	57.6	28.2
8	62.5	25.2	62.3	27.4	57.3	28.0
9	62.0	27.0	60.9	27.6	58.0	28.5
10	60.0	27.1	63.3	26.1	58.0	28.5
11	58.4	27.6	65.5	24.6	57.0	28.1
12	58.5	28.3	64.2	26.7	58.0	28.2
13	59.8	28.0	63.3	27.4	58.0	27.7
14	64.4	27.3	63.8	26.7	57.5	28.5
15	65.0	28.3	64.2	27.2	58.0	28.2
16	61.5	28.4	62.4	27.3	57.0	28.4
17	63.2	27.5	62.3	27.3	55.5	28.8
18	62.0	27.9	63.2	27.6	55.0	28.5
19	62.4	27.9	62.1	27.4	55.0	28.6
20	62.5	28.0	59.3	27.7	55.3	28.5
21	59.0	28.5	60.4	27.6	55.8	28.0
22	60.6	28.2	61.3	28.2	54.6	28.1
23	61.5	27.6	60.3	27.8	54.5	28.8
24	62.3	27.2	62.7	27.6	54.9	28.4
25	61.0	27.6	62.5	27.8	55.3	28.4
26	61.3	27.1	62.1	28.1	56.3	28.5
27	60.0	27.4	61.8	27.8	57.2	28.5
28	60.8	26.0	62.0	27.7	57.6	28.5
29	60.5	24.7	62.5	27.4	57.0	28.5
30	63.6	24.4	64.4	27.7	56.3	28.5
31	63.3	25.2	62.8	28.1	0	0
MEANS	61.68	26.90	62.45	27.19	57.11	28.35
OBSVNS.	31	31	31	31	30	30
MAXIMUM	65.0	28.5	65.5	28.2	61.7	28.8
MINIMUM	58.4	24.3	59.3	24.6	54.5	27.7
STD.DEV.	1.73	1.29	1.41	.77	1.73	.24

July 1 to 22: Salinity data obtained by salinometer analyses.

SISTERS ISLAND

49 29 13 N

124 26 00 W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	56.7	28.6	49.5	28.9	46.4	29.8
2	56.3	28.6	48.9	29.4	45.6	29.9
3	56.1	28.6	48.0	29.4	46.4	29.8
4	56.0	28.5	49.0	30.3	45.7	29.9
5	52.5	29.4	49.0	30.2	46.1	29.9
6	53.7	28.5	49.0	30.3	46.3	29.7
7	55.5	29.0	49.0	30.4	46.7	29.9
8	54.0	28.9	49.5	30.2	46.4	29.9
9	53.7	29.0	49.5	30.3	45.8	29.5
10	53.5	28.9	49.0	30.0	46.7	29.9
11	53.5	28.9	49.0	30.0	42.2	29.8
12	52.2	28.9	49.3	29.9	46.8	29.4
13	52.0	28.6	48.8	29.8	46.0	29.9
14	51.8	28.6	48.0	29.7	46.5	29.9
15	51.8	28.6	48.6	29.4	46.7	29.9
16	51.8	28.6	48.8	29.5	46.3	30.0
17	51.5	29.3	48.5	29.5	46.0	29.9
18	51.0	29.4	48.4	29.7	45.7	29.7
19	50.0	29.4	48.3	29.7	45.2	29.3
20	50.4	29.4	47.0	29.8	45.2	29.5
21	* 49.8	* 29.6	48.0	29.7	45.0	29.7
22	49.3	29.7	47.5	29.4	44.8	29.7
23	49.4	28.6	47.0	29.5	45.2	29.7
24	49.5	29.7	47.2	29.7	44.8	29.5
25	49.8	28.8	47.0	29.5	44.8	29.7
26	50.0	28.8	46.8	29.7	44.9	29.7
27	49.5	29.1	45.8	29.7	* 45.0	* 29.8
28	49.5	28.9	46.3	29.8	45.0	29.8
29	49.3	29.4	46.2	29.8	45.0	29.7
30	49.0	29.0	46.4	29.8	45.4	29.8
31	49.5	29.7	0	0	45.5	29.9
MEANS	51.96	28.98	48.11	29.77	45.64	29.76
OBSVNS.	30	30	30	30	30	30
YRLY. MEANS.....					51.92	28.64
MAXIMUM	56.7	29.7	49.5	30.4	46.8	30.0
MINIMUM	49.0	28.5	45.8	28.9	42.2	29.3
STD. DEV.	2.44	.38	1.11	.34	.93	.17

CHROME ISLAND

49 28 20 N

124 40 57 W

JANUARY

FEBRUARY

MARCH

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	44.3	27.7	44.0	28.2	43.8	27.8
2	44.4	26.9	45.8	28.6	43.6	28.0
3	44.5	28.0	45.3	28.6	45.0	28.2
4	43.5	27.2	45.2	28.8	44.6	28.4
5	45.6	28.2	45.0	28.9	44.9	28.4
6	45.4	* 28.5	45.3	29.2	45.2	28.4
7	44.6	28.8	45.7	29.1	46.6	28.4
8	44.3	28.8	45.7	29.0	46.5	28.4
9	45.0	28.8	45.5	29.0	46.3	28.4
10	44.0	28.6	45.0	29.0	45.7	28.5
11	44.3	28.8	44.4	28.8	45.5	28.6
12	44.3	28.7	44.5	28.6	45.8	28.6
13	44.2	28.8	45.0	28.6	45.7	28.9
14	44.9	28.9	45.2	28.8	46.2	28.9
15	43.8	28.7	45.3	29.1	46.5	28.9
16	43.0	28.8	46.0	29.0	45.9	28.6
17	42.3	28.7	45.6	29.0	46.0	26.0
18	43.5	28.6	45.7	29.1	47.0	27.3
19	43.6	28.6	46.0	29.0	47.3	28.2
20	44.1	28.6	46.1	28.6	47.7	28.2
21	44.8	28.6	45.5	28.0	47.8	28.1
22	45.2	28.8	45.5	28.6	47.4	28.2
23	45.8	28.9	45.6	28.8	47.0	28.5
24	45.3	28.1	44.8	28.8	47.2	28.4
25	45.3	28.2	44.1	28.7	47.3	28.2
26	45.0	28.2	44.2	28.7	46.0	28.4
27	44.7	28.0	44.0	28.5	46.3	28.6
28	43.5	28.2	44.2	28.4	46.4	28.6
29	45.0	28.5	0	0	46.5	28.5
30	44.0	28.2	0	0	46.7	28.5
31	45.2	28.0	0	0	46.9	28.2
MEANS	44.43	28.40	45.15	28.77	46.17	28.30
OBSVNS.	31	30	28	28	31	31
MAXIMUM	45.8	28.9	46.1	29.2	47.8	28.9
MINIMUM	42.3	26.9	44.0	28.0	43.6	26.0
STD.DEV.	.80	.49	.65	.28	1.04	.53

January 6 to February 28: Salinity data obtained by salinometer analyses.

CHROME ISLAND

49 28 20 N 124 40 57 W

APRIL

MAY

JUNE

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	48.1	28.2	51.2	29.1	58.0	28.6
2	48.3	28.1	54.1	29.1	56.3	29.3
3	47.5	28.1	53.7	28.9	54.0	28.9
4	47.2	28.2	50.4	28.4	55.7	28.9
5	46.8	28.5	51.2	29.1	60.0	28.4
6	47.0	28.9	53.7	29.4	58.0	28.8
7	46.7	28.9	50.2	29.3	57.8	28.5
8	46.7	28.9	49.0	29.1	57.0	28.2
9	46.6	29.0	47.8	29.0	52.0	28.6
10	46.3	28.6	47.6	28.9	52.5	28.9
11	46.3	28.2	47.6	28.8	54.2	28.8
12	44.3	24.6	47.5	28.5	58.1	28.6
13	46.5	26.9	49.4	28.6	58.7	28.2
14	48.2	27.3	49.5	29.0	61.0	27.6
15	49.0	28.4	49.8	29.1	61.1	28.0
16	49.4	28.9	50.2	29.1	60.0	28.4
17	50.6	28.9	53.0	29.0	62.3	29.0
18	47.4	28.6	52.8	29.1	62.0	29.0
19	48.0	28.5	53.1	28.6	68.0	28.8
20	48.7	28.6	54.9	28.4	60.2	28.9
21	50.4	28.6	52.4	28.9	61.0	28.6
22	49.8	28.8	53.0	29.1	62.9	27.4
23	47.7	28.9	54.9	29.3	63.0	26.9
24	47.0	29.1	53.0	29.1	63.0	26.9
25	46.7	29.1	55.0	28.8	64.0	27.4
26	45.8	28.5	53.7	28.2	63.2	27.3
27	47.2	28.6	53.6	28.9	64.0	27.2
28	48.0	28.5	54.3	28.8	62.4	27.3
29	48.1	28.9	54.0	29.3	62.8	27.4
30	50.0	29.1	56.0	28.8	57.2	28.1
31	0	0	52.8	29.0	0	0
MEANS	47.68	28.41	51.92	28.93	59.68	28.23
OBSVNS.	30	30	31	31	30	30
MAXIMUM	50.6	29.1	56.0	29.4	68.0	29.3
MINIMUM	44.3	24.6	47.5	28.2	52.0	26.9
STD.DEV.	1.43	.87	2.49	.29	3.77	.71

CHROME ISLAND

49 28 20 N

124 40 57 W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	58.8	28.2	64.0	27.1	60.7	28.6
2	54.6	28.8	61.4	27.2	57.2	28.6
3	60.1	28.8	62.0	28.9	54.5	28.9
4	62.8	27.4	62.7	27.6	56.4	28.8
5	63.8	27.3	57.0	27.8	55.3	28.8
6	62.0	27.6	59.5	27.4	55.0	28.9
7	62.6	26.9	57.9	28.1	54.5	28.8
8	62.5	27.2	57.5	28.0	55.6	28.8
9	63.2	26.4	55.4	28.8	57.5	28.2
10	63.4	26.8	62.6	27.3	57.0	28.1
11	64.6	26.0	64.8	27.2	57.5	28.2
12	65.9	26.9	62.4	27.7	57.8	28.2
13	65.8	27.3	62.5	27.6	57.8	28.4
14	64.8	27.4	62.8	27.6	57.7	28.4
15	65.3	27.4	64.5	27.3	57.8	28.2
16	60.3	28.6	64.0	27.2	56.1	28.2
17	60.5	28.5	61.8	27.6	55.0	28.5
18	60.6	28.5	63.9	28.0	54.5	28.5
19	59.4	28.9	61.3	27.8	53.3	28.6
20	57.5	28.8	62.0	27.4	53.3	28.9
21	61.1	28.2	61.9	27.4	53.8	28.6
22	60.1	28.2	62.2	27.7	53.0	28.9
23	61.1	28.2	62.8	28.0	52.5	28.9
24	61.1	28.9	62.0	28.1	54.6	28.0
25	59.0	28.4	60.0	28.2	55.2	28.2
26	57.5	28.4	61.5	27.7	55.0	28.2
27	57.7	28.5	61.0	27.8	56.0	28.6
28	57.2	28.6	60.2	28.2	56.4	28.4
29	57.0	28.6	63.5	28.0	56.4	28.4
30	57.5	28.6	63.8	28.0	56.2	28.4
31	61.1	28.5	60.4	28.1	0	0
MEANS	60.93	27.96	61.59	27.77	55.79	28.51
OBSVNS.	31	31	31	31	30	30
MAXIMUM	65.9	28.9	64.8	28.9	60.7	28.9
MINIMUM	54.6	26.0	55.4	27.1	52.5	28.0
STD.DEV.	2.91	.81	2.25	.44	1.80	.28

CHROME ISLAND

49 28 20 N

124 40 57 W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	54.7	28.8	48.9	28.8	46.0	29.3
2	57.0	28.2	48.3	28.8	45.7	29.4
3	56.0	28.6	47.5	29.0	46.0	29.3
4	54.4	28.2	47.3	29.3	45.0	29.3
5	53.2	28.8	48.3	29.0	46.0	29.3
6	53.1	28.9	48.2	28.6	46.2	29.5
7	53.6	28.5	48.8	29.1	46.5	29.4
8	54.0	28.4	49.0	29.5	46.0	29.4
9	53.8	28.5	48.8	29.4	45.6	29.3
10	53.4	28.6	48.8	29.4	46.5	29.7
11	53.3	28.6	48.7	29.8	46.0	25.9
12	52.5	28.9	48.8	29.5	46.0	29.5
13	52.3	28.8	48.5	29.1	45.7	28.9
14	53.2	28.6	48.4	29.7	46.5	29.7
15	53.0	28.8	48.2	29.5	46.3	29.4
16	51.8	28.8	48.4	29.1	46.3	29.8
17	51.2	28.9	47.4	29.0	45.8	29.3
18	50.8	28.9	47.8	29.5	45.5	29.4
19	50.2	29.0	47.2	29.0	44.4	28.6
20	49.2	29.5	47.3	29.0	45.2	29.3
21	49.0	30.0	46.7	29.0	44.2	29.3
22	48.5	29.9	47.0	29.3	44.3	29.0
23	48.5	29.9	46.5	29.0	44.0	29.3
24	48.8	30.0	47.1	29.3	43.4	29.1
25	49.1	29.8	46.4	29.3	44.1	29.3
26	48.5	28.8	46.4	29.3	45.3	29.5
27	48.5	29.3	46.5	29.1	45.4	29.5
28	48.9	29.1	43.7	28.2	45.7	29.7
29	48.5	29.1	45.9	29.0	45.0	29.3
30	48.0	28.8	45.8	29.3	45.2	29.5
31	48.9	29.0	0	0	45.0	29.4
MEANS	51.48	28.97	47.55	29.16	45.45	29.25
OBSVNS.	31	31	30	30	31	31
YRLY. MEANS.....					51.52	28.55
MAXIMUM	57.0	30.0	49.0	29.8	46.5	29.8
MINIMUM	48.0	28.2	43.7	28.2	43.4	25.9
STD. DEV.	2.59	.51	1.22	.33	.82	.66

ENTRANCE ISLAND

49 12 34 N

123 48 27 W

JANUARY

FEBRUARY

MARCH

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	44.5	26.7	46.0	29.0	45.0	28.0
2	44.6	26.9	45.3	28.8	44.5	27.8
3	45.3	27.3	45.8	28.8	44.4	27.3
4	44.3	27.3	44.8	28.4	45.3	28.1
5	46.4	29.1	45.6	28.8	45.0	27.6
6	* 45.4	* 28.4	46.5	29.5	46.0	28.6
7	44.4	27.6	46.9	29.9	46.4	29.3
8	44.2	27.6	44.0	26.4	46.7	29.3
9	44.0	27.7	44.9	28.9	* 46.4	* 28.9
10	43.6	26.9	44.0	27.8	46.2	28.5
11	43.8	27.2	44.0	27.4	45.8	28.6
12	43.5	27.6	44.1	27.2	46.2	28.9
13	44.3	28.4	44.4	27.7	46.5	30.0
14	43.4	27.7	44.9	28.6	46.9	30.0
15	43.0	27.3	45.7	28.9	46.0	25.5
16	42.7	27.4	46.0	28.8	46.4	29.0
17	42.3	27.8	45.9	29.0	46.5	29.4
18	43.5	28.2	45.6	27.2	48.2	28.2
19	44.8	28.4	46.9	28.9	48.5	27.7
20	44.3	28.4	46.3	27.6	48.3	28.2
21	44.2	28.0	45.7	25.6	47.2	28.8
22	45.2	28.6	45.6	25.6	47.2	28.6
23	46.4	29.4	46.1	25.4	47.6	28.4
24	43.7	26.5	* 45.6	* 25.9	47.0	28.4
25	46.3	29.1	45.0	26.4	47.2	28.9
26	45.8	28.4	45.3	26.1	47.0	28.5
27	46.2	28.9	45.4	26.3	47.1	28.4
28	44.4	28.1	44.9	26.7	46.7	28.6
29	44.5	28.9	0	0	46.8	28.6
30	44.4	29.0	0	0	46.9	29.0
31	45.9	29.3	0	0	47.4	28.9
MEANS	44.46	27.99	45.39	27.77	46.56	28.50
OBSVNS.	30	30	27	27	30	30
MAXIMUM	46.4	29.4	46.9	29.9	48.5	30.0
MINIMUM	42.3	26.5	44.0	25.4	44.4	25.5
STD.DEV.	1.09	.82	.84	1.32	1.02	.85

ENTRANCE ISLAND 49 12 34 N 123 48 27 W

APRIL

MAY

JUNE

1970

DATE	TEMP	SAL.	TEMP	SAL.	TEMP	SAL.
1	48.5	29.0	52.8	27.6	64.5	* 26.8
2	47.8	29.0	53.8	27.7	60.5	* 27.1
3	47.5	29.0	59.4	25.0	57.0	27.4
4	47.2	29.3	52.0	28.5	60.0	* 0
5	47.2	29.7	52.2	27.6	60.0	* 0
6	47.3	28.9	54.0	27.4	61.5	* 0
7	46.7	29.4	50.8	28.1	60.0	* 0
8	46.8	29.5	49.0	28.8	56.0	27.7
9	47.1	28.4	48.8	28.6	56.0	27.7
10	46.9	29.4	49.5	28.1	57.5	27.1
11	47.0	29.0	54.2	26.3	56.2	23.0
12	46.6	28.2	52.2	26.3	58.5	20.8
13	47.2	28.4	50.7	27.4	60.0	25.2
14	47.5	28.1	50.5	28.2	60.5	25.0
15	47.7	28.0	50.5	28.4	60.5	25.8
16	49.4	28.2	51.3	28.9	59.0	27.8
17	50.2	28.1	55.0	27.2	61.5	27.8
18	48.2	28.9	54.5	27.1	66.0	27.1
19	49.2	29.1	55.0	27.8	69.5	26.3
20	49.8	28.2	55.6	27.6	65.0	26.0
21	50.0	28.2	52.3	28.0	65.0	23.1
22	50.0	28.9	52.5	28.4	65.0	22.6
23	48.5	28.6	57.0	27.7	63.7	22.5
24	48.0	28.5	57.8	27.1	63.5	25.4
25	47.7	28.6	57.2	26.8	63.4	25.8
26	48.0	28.8	55.5	27.1	63.0	24.8
27	49.0	28.6	54.6	27.2	62.0	24.3
28	49.5	25.6	56.0	27.1	61.8	26.0
29	49.6	28.1	55.5	27.2	62.5	25.8
30	51.2	28.2	55.5	26.9	60.7	26.1
31	0	0	61.5	26.5	0	0
MEANS	48.24	28.60	53.78	27.50	61.34	25.46
OBSVNS.	30	30	31	31	30	24
MAXIMUM	51.2	29.7	61.5	28.9	69.5	27.8
MINIMUM	46.6	25.6	48.8	25.0	56.0	20.8
STD.DEV.	1.25	.74	3.03	.84	3.21	1.92

ENTRANCE ISLAND

49 12 34 N

123 48 27 W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	58.7	27.4	64.5	22.0	61.6	25.9
2	58.1	27.4	61.8	26.0	60.1	26.4
3	62.1	23.5	60.4	27.2	53.2	28.4
4	64.5	20.4	60.1	28.0	53.6	28.8
5	65.0	22.2	56.6	28.5	59.1	27.2
6	62.5	25.2	56.4	28.8	56.5	27.8
7	61.5	25.8	58.5	28.0	57.4	27.4
8	60.1	26.4	60.9	23.1	58.2	25.9
9	62.5	22.9	62.7	21.4	59.0	26.5
10	63.5	22.9	64.8	24.6	58.7	27.1
11	63.1	25.8	67.1	23.1	58.6	27.4
12	62.0	28.0	65.6	23.7	57.0	27.4
13	62.5	27.7	63.1	25.6	58.5	28.1
14	64.4	25.9	64.2	25.4	57.9	28.0
15	64.9	25.9	65.4	25.0	57.7	28.6
16	64.0	25.2	63.5	26.5	56.4	28.6
17	54.0	28.9	63.3	26.7	56.1	28.4
18	60.1	28.8	62.0	27.3	53.4	29.0
19	57.7	28.4	63.2	25.0	53.0	28.9
20	61.1	27.3	64.8	24.6	53.1	28.8
21	62.1	24.2	62.1	25.2	54.4	28.6
22	63.1	25.1	63.0	24.7	50.6	29.1
23	62.0	25.0	63.3	25.0	52.6	28.8
24	61.2	25.6	* 61.8	* 25.8	55.4	28.2
25	60.2	25.6	60.2	26.7	56.5	27.4
26	57.5	27.8	61.0	27.6	55.7	28.2
27	57.2	28.2	61.4	28.4	56.7	28.4
28	56.2	29.3	62.5	25.9	57.6	28.4
29	54.2	29.1	62.5	26.4	55.6	28.1
30	59.8	28.5	63.5	26.1	54.2	28.4
31	62.4	26.9	64.0	25.1	0	0

MEANS	60.91	26.17	62.41	25.72	56.28	27.94
OBSVNS.	31	31	30	30	30	30
MAXIMUM	65.0	29.3	67.1	28.8	61.6	29.1
MINIMUM	54.0	20.4	56.4	21.4	50.6	25.9
STD.DEV.	2.98	2.22	2.45	1.88	2.54	.90

ENTRANCE ISLAND 49 12 34 N 123 48 27 W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	54.5	28.5	48.8	28.4	47.2	29.5
2	57.4	28.4	48.5	28.5	47.0	29.5
3	57.4	27.7	48.3	28.4	47.0	29.5
4	56.0	28.5	48.3	28.6	45.6	29.1
5	53.8	28.1	48.6	28.6	46.0	29.3
6	54.0	28.5	48.7	28.6	47.3	29.4
7	54.1	28.4	49.0	27.4	47.6	29.7
8	54.0	28.6	49.0	29.3	46.5	28.6
9	53.6	28.6	49.8	29.0	45.8	28.2
10	53.5	28.5	48.7	29.4	47.0	29.7
11	53.0	28.8	48.7	29.7	45.0	28.4
12	53.2	28.1	49.2	27.6	46.5	29.5
13	52.8	28.2	48.7	28.9	45.5	28.9
14	52.8	27.8	48.3	28.8	47.0	29.4
15	52.2	28.2	48.0	28.8	47.0	29.4
16	51.9	28.4	48.5	28.8	46.3	29.3
17	51.6	28.2	48.3	28.8	45.6	29.1
18	51.4	28.9	48.1	28.5	44.2	28.2
19	* 50.4	* 29.3	47.6	28.2	44.0	28.1
20	49.3	29.7	46.6	28.5	44.2	28.6
21	* 49.1	* 29.8	45.8	28.8	44.0	28.5
22	48.9	30.0	47.0	28.5	42.3	28.2
23	49.0	29.8	47.6	29.1	43.5	28.0
24	49.8	28.4	47.6	29.1	44.3	28.8
25	49.0	28.5	* 47.0	* 29.0	45.5	29.1
26	48.8	27.7	46.5	28.9	45.5	29.3
27	49.0	28.6	47.1	29.4	45.6	29.4
28	49.3	28.2	46.1	29.0	46.3	29.5
29	49.2	28.4	45.7	28.9	45.9	29.4
30	49.0	28.6	46.6	29.3	46.5	29.7
31	45.5	28.4	0	0	44.7	29.1
MEANS	51.86	28.51	47.92	28.75	45.69	29.05
OBSVNS.	29	29	29	29	31	31
YRLY. MEANS.....	.....	.....	.....	.....	52.15	27.69
MAXIMUM	57.4	30.0	49.8	29.7	47.6	29.7
MINIMUM	45.5	27.7	45.7	27.4	42.3	28.0
STD. DEV.	2.87	.54	1.08	.49	1.29	.53

DEPARTURE BAY

49 12 38 N

123 57 17W

JANUARY

FEBRUARY

MARCH

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	* 45.0	* 27.0	* 0	* 0	* 0	* 0
2	45.1	27.4	45.0	28.1	47.4	28.0
3	* 0	* 0	44.6	28.3	49.7	27.7
4	* 0	* 0	44.5	28.6	46.1	28.5
5	42.9	26.8	44.9	28.6	45.0	28.1
6	43.9	25.9	44.1	27.0	45.1	27.8
7	44.8	28.2	* 0	* 0	* 0	* 0
8	43.0	26.5	* 0	* 0	* 0	* 0
9	45.5	28.3	44.6	28.5	45.9	29.1
10	* 0	* 0	43.8	27.2	* 45.4	* 28.4
11	* 0	* 0	44.1	27.4	45.0	27.7
12	43.6	27.6	44.5	27.0	45.3	27.1
13	42.8	27.2	44.7	25.0	46.1	27.2
14	45.0	28.2	* 0	* 0	* 0	* 0
15	43.9	28.1	* 0	* 0	* 0	* 0
16	43.2	28.1	45.6	24.9	46.3	26.8
17	* 0	* 0	45.3	21.0	46.0	28.4
18	* 0	* 0	45.1	23.6	47.5	28.6
19	42.0	25.3	46.3	28.0	48.0	27.8
20	43.6	25.4	46.3	26.4	* 0	* 0
21	44.1	24.6	* 0	* 0	* 0	* 0
22	44.8	20.4	* 0	* 0	48.0	28.2
23	46.0	24.2	44.1	24.6	46.2	28.6
24	* 0	* 0	45.0	25.0	46.7	28.8
25	* 0	* 0	45.0	25.2	46.5	28.9
26	46.0	27.9	44.2	25.2	* 0	* 0
27	45.6	28.7	45.0	26.8	* 0	* 0
28	43.9	28.2	* 0	* 0	* 0	* 0
29	42.3	25.1	0	0	* 0	* 0
30	* 0	* 0	0	0	* 0	* 0
31	* 0	* 0	0	0	46.9	29.0

MEANS	44.10	26.61	44.83	26.32	46.54	28.13
OBSVNS.	20	20	20	20	18	18
MAXIMUM	46.0	28.7	46.3	28.6	49.7	29.1
MINIMUM	42.0	20.4	43.8	21.0	45.0	26.8
STD.DEV.	1.21	2.02	.68	1.98	1.23	.67

No observations on weekends or holidays.

January 2 to February 27: Salinity data obtained by salinometer analyses.

DEPARTURE BAY

49 12 38 N

123 57 17W

APRIL

MAY

JUNE

1970

DATE	TEMP	SAL.	TEMP	SAL.	TEMP	SAL.
1	47.6	28.8	52.8	28.0	60.1	27.2
2	48.0	29.1	* 0	* 0	64.5	27.3
3	47.8	28.9	* 0	* 0	54.9	* 27.2
4	* 0	* 0	54.1	27.8	56.9	27.0
5	* 0	* 0	52.5	28.4	59.2	25.4
6	48.2	27.9	52.1	28.5	* 0	* 0
7	46.5	29.3	52.2	28.2	* 0	* 0
8	46.4	28.1	52.0	27.4	60.2	25.6
9	47.2	26.2	* 0	* 0	59.0	26.1
10	46.8	29.0	* 0	* 0	54.9	28.5
11	* 0	* 0	48.9	28.5	54.0	28.9
12	* 0	* 0	50.0	28.5	60.0	25.3
13	47.5	28.1	50.1	28.5	* 0	* 0
14	47.7	28.3	51.3	26.7	* 0	* 0
15	47.5	28.2	52.8	28.6	60.0	26.1
16	50.7	27.9	* 0	* 0	59.6	25.7
17	49.4	28.2	* 0	* 0	60.6	26.9
18	* 0	* 0	* 0	* 0	62.0	27.2
19	* 0	* 0	55.6	27.4	61.2	27.5
20	49.5	28.9	54.9	27.4	* 0	* 0
21	49.8	28.8	55.9	27.3	* 0	* 0
22	49.8	28.9	54.1	27.2	64.5	20.3
23	49.5	28.6	* 0	* 0	65.1	21.0
24	49.0	28.9	* 0	* 0	63.1	23.2
25	* 0	* 0	58.5	25.1	64.0	25.4
26	* 0	* 0	55.8	26.8	62.5	23.3
27	48.2	28.9	55.5	26.5	* 0	* 0
28	49.1	28.0	56.2	26.7	* 0	* 0
29	49.6	26.9	56.1	26.4	63.1	25.8
30	* 0	* 0	* 0	* 0	62.5	25.7
31	0	0	* 0	* 0	0	0
MEANS	48.37	28.38	53.57	27.49	60.54	25.69
OBSVNS.	21	21	20	20	22	21
MAXIMUM	50.7	29.3	58.5	28.6	65.1	28.9
MINIMUM	46.4	26.2	48.9	25.1	54.0	20.3
STD.DEV.	1.22	.75	2.50	.94	3.19	2.18

April 1 to 29:

June 1 to 30: Salinity data obtained by salinometer analyses.

DEPARTURE BAY

49 12 38 N

123 57 17W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	* 0	* 0	* 0	* 0	63.1	25.6
2	57.6	27.8	* 0	* 0	60.7	26.8
3	63.4	22.9	* 0	* 0	59.7	27.7
4	* 0	* 0	60.6	25.9	58.7	29.3
5	* 0	* 0	61.0	26.3	58.6	26.3
6	62.9	23.0	58.5	27.6	54.9	28.8
7	62.5	23.5	58.4	27.4	56.8	27.2
8	60.4	26.4	* 0	* 0	58.4	27.2
9	62.7	22.7	* 0	* 0	59.2	26.8
10	* 0	* 0	65.1	23.8	60.4	27.4
11	* 0	* 0	66.7	23.5	60.4	28.2
12	* 0	* 0	64.0	24.6	59.0	27.7
13	64.1	25.4	63.4	26.3	58.4	28.5
14	64.2	26.4	63.8	26.0	58.5	28.1
15	63.1	26.8	* 0	* 0	58.0	28.1
16	66.2	25.6	* 0	* 0	58.4	29.0
17	65.4	25.9	62.1	26.0	57.4	28.6
18	* 0	* 0	63.0	26.5	* 55.0	* 29.0
19	* 0	* 0	62.3	26.5	52.5	29.5
20	58.9	27.4	62.3	25.8	52.2	29.3
21	61.5	23.9	63.2	25.6	53.4	29.4
22	* 0	* 0	64.2	24.4	53.3	29.8
23	* 0	* 0	63.7	24.4	52.8	30.2
24	61.8	24.6	65.7	24.8	54.7	29.1
25	* 0	* 0	60.8	26.7	53.2	29.3
26	* 0	* 0	62.9	26.9	60.4	30.2
27	56.1	28.5	62.2	26.8	60.1	28.1
28	56.0	28.6	62.4	26.5	58.2	* 28.1
29	55.9	28.0	65.3	28.0	60.5	28.1
30	56.8	28.8	64.5	25.4	55.4	27.8
31	61.7	26.3	64.5	25.6	0	0
MEANS	61.12	25.92	62.94	25.89	57.49	28.29
OBSVNS.	19	19	24	24	29	28
MAXIMUM	66.2	28.8	66.7	28.0	63.1	30.2
MINIMUM	55.9	22.7	58.4	23.5	52.2	25.6
STD.DEV.	3.29	2.02	2.06	1.17	2.97	1.17

DEPARTURE BAY

49 12 38 N 123 57 17W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	* 55.2	* 28.0	49.0	29.3	40.8	27.7
2	55.0	28.2	47.4	29.3	43.0	28.0
3	58.0	27.3	47.8	29.1	44.8	28.1
4	56.4	28.2	48.2	28.8	35.5	28.9
5	54.2	28.4	45.6	29.0	40.3	28.0
6	54.2	28.1	45.8	28.8	40.9	28.5
7	54.2	29.0	45.9	28.1	45.2	24.0
8	54.3	28.1	50.2	28.2	45.2	28.5
9	54.5	28.8	45.8	28.2	* 43.0	* 27.2
10	54.0	28.6	45.2	28.0	40.8	25.9
11	54.5	28.9	45.0	25.0	* 42.2	* 25.4
12	53.6	29.0	50.2	29.5	43.6	24.8
13	55.6	28.5	47.8	28.0	44.0	23.5
14	55.2	29.0	48.5	28.6	44.6	24.2
15	55.0	29.0	47.1	28.2	44.3	24.6
16	53.8	28.4	48.6	28.8	45.0	24.7
17	52.1	28.4	48.2	29.0	44.2	20.9
18	51.0	28.8	48.0	28.8	45.0	23.8
19	50.8	28.6	48.2	28.8	* 42.8	* 21.6
20	* 49.9	* 29.2	45.0	28.5	40.6	19.5
21	49.0	29.7	40.4	28.6	45.3	29.7
22	48.0	29.0	40.2	29.1	40.3	27.8
23	50.2	29.3	40.6	28.9	40.9	29.7
24	50.0	29.5	45.5	29.3	44.6	28.0
25	50.4	29.3	45.4	29.3	44.2	28.0
26	50.2	28.1	45.1	29.0	42.6	24.6
27	45.6	28.6	44.6	27.1	44.6	28.6
28	50.2	29.0	47.0	27.8	44.2	28.9
29	50.5	29.4	45.5	29.0	45.0	29.3
30	48.0	28.9	45.0	29.0	45.0	29.1
31	50.5	29.8	0	0	40.5	28.0
MEANS	52.49	28.76	46.23	28.57	43.04	26.62
OBSVNS.	29	29	30	30	28	28
YRLY. MEANS.....					51.75	27.31
MAXIMUM	58.0	29.8	50.2	29.5	45.3	29.7
MINIMUM	45.6	27.3	40.2	25.0	35.5	19.5
STD.DEV.	2.91	.55	2.54	.86	2.36	2.70

Full daily observation routine established.

PORLIER PASS HW

49 00 48 N

123 35 05 W

JANUARY

FEBRUARY

MARCH

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	46.2	27.6	45.2	28.1	45.0	27.1
2	46.0	27.6	45.3	27.8	44.7	26.7
3	45.8	27.3	45.8	28.4	44.7	26.9
4	45.4	27.6	45.7	28.2	45.9	28.1
5	46.2	28.2	45.3	28.2	45.7	27.8
6	46.6	28.2	46.2	28.5	45.8	28.2
7	45.4	27.7	46.3	28.4	46.7	28.1
8	45.2	27.6	45.6	28.0	46.6	28.1
9	45.7	27.8	45.3	28.1	46.2	28.4
10	45.2	28.0	45.5	28.2	46.0	28.2
11	45.3	28.0	45.0	28.1	46.2	28.5
12	45.2	28.0	45.3	28.1	46.2	28.4
13	45.4	28.2	45.3	28.1	46.0	28.2
14	45.0	27.8	* 45.6	* 28.1	46.3	28.1
15	44.0	27.3	* 46.0	* 28.2	45.8	28.1
16	43.4	27.2	46.4	28.2	46.5	28.2
17	43.0	27.3	46.3	27.8	46.8	28.0
18	43.4	27.3	46.3	27.7	47.0	27.8
19	45.6	28.1	46.7	28.1	47.5	27.7
20	46.0	28.5	46.6	28.4	47.2	28.2
21	46.2	28.4	46.3	28.2	47.8	27.7
22	45.7	28.2	46.2	28.0	47.0	28.0
23	46.0	28.1	46.1	28.0	47.2	28.2
24	45.0	27.6	45.7	28.1	47.2	28.1
25	45.3	27.7	45.8	28.1	46.5	28.2
26	45.0	28.0	45.8	27.8	46.8	28.1
27	44.5	26.9	45.7	27.8	46.8	28.2
28	43.8	26.8	45.4	27.8	46.8	28.2
29	45.0	27.8	0	0	46.3	28.2
30	45.2	27.8	0	0	46.8	28.2
31	45.8	28.0	0	0	47.0	28.1
MEANS	45.21	27.76	45.81	28.08	46.42	28.00
OBSVNS.	31	31	26	26	31	31
MAXIMUM	46.6	28.5	46.7	28.5	47.8	28.5
MINIMUM	43.0	26.8	45.0	27.7	44.7	26.7
STD.DEV.	.89	.42	.48	.21	.75	.41

PORLIER PASS HW 49 00 48 N 123 35 05 W

APRIL

MAY

JUNE

1970

DATE	TEMP	SAL.	TEMP	SAL.	TEMP	SAL.
1	47.5	28.2	49.5	28.6	54.1	28.2
2	47.5	28.1	47.9	28.8	53.3	28.2
3	47.5	28.2	49.8	28.5	50.7	28.4
4	47.4	28.4	49.3	28.5	55.0	26.5
5	47.5	28.6	49.4	28.4	55.6	27.2
6	47.2	28.5	49.8	28.6	53.9	28.2
7	47.2	28.4	49.5	28.8	54.7	28.0
8	47.4	28.6	48.5	28.6	53.3	28.5
9	47.3	28.6	48.2	28.8	55.4	27.8
10	47.3	28.4	48.0	28.6	56.5	27.7
11	47.4	28.1	47.7	27.4	53.8	27.4
12	46.7	27.4	49.2	28.0	55.0	17.6
13	46.8	27.1	49.6	27.7	55.1	24.4
14	47.7	27.6	49.4	28.6	53.7	27.8
15	48.3	27.8	51.2	29.0	55.3	27.1
16	49.2	28.2	51.2	28.9	54.8	27.1
17	49.4	28.8	51.7	28.8	56.5	27.3
18	48.0	28.5	49.8	28.8	55.4	27.8
19	47.8	28.4	50.8	28.5	56.8	28.0
20	48.8	28.4	50.2	28.5	56.6	28.4
21	48.7	28.6	50.0	28.5	59.0	23.7
22	48.7	28.4	50.8	28.8	58.7	25.4
23	48.0	28.4	51.0	28.6	56.5	25.6
24	48.0	28.5	50.8	28.8	58.6	24.7
25	47.4	28.5	50.0	28.5	57.6	24.8
26	47.8	28.6	51.2	25.8	58.8	24.7
27	47.6	28.5	52.1	27.8	59.5	25.0
28	48.2	27.6	52.7	28.0	58.7	25.5
29	48.5	28.5	51.0	28.1	58.7	25.8
30	49.0	28.2	50.2	28.5	56.8	26.1
31	0	0	50.2	28.8	0	0
MEANS	47.86	28.27	50.02	28.41	55.95	26.43
OBSVNS.	30	30	31	31	30	30
MAXIMUM	49.4	28.8	52.7	29.0	59.5	28.5
MINIMUM	46.7	27.1	47.7	25.8	50.7	17.6
STD.DEV.	.69	.40	1.22	.61	2.12	2.20

PORLIER PASS HW

49 00 48 N

123 35 05 W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	58.5	26.8	56.7	23.7	57.3	28.1
2	59.8	26.9	57.2	27.7	55.2	28.4
3	57.8	25.4	56.2	28.2	52.7	29.1
4	56.8	26.5	54.8	28.4	56.8	28.0
5	57.0	26.0	55.8	28.1	53.8	28.5
6	59.3	25.4	56.2	28.2	55.5	28.0
7	61.6	25.4	56.2	28.4	53.3	27.8
8	59.8	23.8	57.7	27.8	54.2	28.0
9	60.6	24.4	55.7	28.0	55.2	27.8
10	59.3	25.0	55.2	28.4	56.2	27.4
11	58.8	25.5	57.8	27.7	56.2	28.1
12	60.0	25.2	57.0	27.6	55.7	28.0
13	60.8	25.6	60.6	25.4	55.0	28.4
14	60.6	25.6	58.5	27.7	55.0	28.1
15	62.2	25.9	58.2	27.6	55.6	28.1
16	60.6	26.1	60.9	26.0	55.2	28.1
17	61.0	26.1	59.2	27.8	55.2	28.5
18	63.1	26.7	58.0	28.0	55.3	28.5
19	61.4	27.2	57.3	27.8	55.7	28.1
20	56.7	27.4	58.0	27.6	54.8	28.4
21	55.0	28.1	56.8	27.6	54.2	28.1
22	55.8	27.8	58.6	27.6	53.2	28.5
23	56.8	27.6	60.0	25.8	53.7	28.5
24	57.6	27.2	59.8	27.2	53.2	28.4
25	55.5	27.7	60.0	27.4	53.6	28.5
26	54.6	28.1	60.0	27.6	53.7	28.4
27	58.3	27.7	58.8	27.2	53.4	28.8
28	58.3	27.6	59.2	27.6	53.7	28.9
29	53.5	28.5	57.9	27.7	53.7	28.6
30	57.7	28.0	58.5	27.1	53.2	28.6
31	55.4	28.0	58.2	27.6	0	0
MEANS	58.52	26.55	57.90	27.44	54.65	28.29
OBSVNS.	31	31	31	31	30	30
MAXIMUM	63.1	28.5	60.9	28.4	57.3	29.1
MINIMUM	53.5	23.8	54.8	23.7	52.7	27.4
STD.DEV.	2.42	1.23	1.61	.98	1.20	.36

PORLIER PASS HW

49 00 48 N

123 35 05 W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	53.2	28.8	49.8	28.5	46.8	29.1
2	54.0	28.4	49.7	28.4	46.6	29.1
3	54.0	28.1	48.8	28.2	46.8	29.3
4	53.0	28.1	48.8	28.9	46.2	29.1
5	52.0	28.4	48.7	28.9	45.7	28.9
6	52.2	28.5	49.2	28.9	46.8	29.0
7	52.6	28.1	49.3	28.9	46.8	29.1
8	52.0	28.4	49.5	28.9	46.4	29.3
9	52.2	28.5	49.8	29.0	45.7	28.6
10	52.1	28.6	49.1	28.9	46.5	28.6
11	52.2	28.6	48.8	29.7	47.2	29.3
12	52.5	28.5	49.4	29.1	46.5	29.1
13	52.2	28.5	48.9	29.0	46.7	29.1
14	52.3	28.5	48.8	28.5	46.9	29.3
15	52.0	28.4	48.7	28.4	46.7	29.4
16	51.8	28.4	48.8	28.2	46.8	29.5
17	51.0	28.5	48.6	28.2	45.8	29.1
18	51.2	28.6	48.2	28.8	45.8	29.3
19	51.0	28.5	48.2	28.9	45.7	29.0
20	50.5	28.8	47.8	28.9	45.0	29.0
21	50.5	28.6	47.0	28.8	44.7	28.6
22	50.2	28.9	47.5	28.9	44.2	28.4
23	50.3	29.0	46.8	28.8	44.0	28.1
24	50.7	28.9	48.2	28.9	44.5	28.5
25	50.2	28.9	46.8	28.6	45.0	28.6
26	51.8	28.8	46.7	28.6	45.3	28.9
27	50.1	28.9	46.5	28.9	45.6	29.3
28	50.0	29.0	47.2	28.2	45.7	29.3
29	50.0	28.5	46.5	28.6	45.3	29.1
30	49.5	28.5	46.7	29.0	45.8	29.4
31	49.6	28.8	0	0	45.7	29.3
MEANS	51.51	28.58	48.29	28.75	45.91	29.02
OBSVNS.	31	31	30	30	31	31
YRLY. MEANS.....					50.73	27.96
MAXIMUM	54.0	29.0	49.8	29.7	47.2	29.5
MINIMUM	49.5	28.1	46.5	28.2	44.0	28.1
STD. DEV.	1.24	.25	1.07	.33	.86	.34

PORLIER PASS LW

49 00 48 N

123 35 05 W

JANUARY

FEBRUARY

MARCH

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	45.3	26.1	45.9	28.1	45.8	27.1
2	45.7	27.4	45.4	27.8	44.8	27.1
3	44.3	26.7	46.5	28.9	45.2	27.6
4	44.6	26.9	46.2	28.6	45.0	27.8
5	46.8	28.4	46.3	28.8	45.0	27.6
6	46.8	28.5	46.6	28.9	46.1	28.5
7	46.5	28.4	46.6	28.9	46.5	28.8
8	46.5	28.1	45.3	27.2	46.8	28.9
9	46.7	28.2	44.2	26.0	46.4	28.4
10	45.9	27.8	45.3	27.3	46.5	28.6
11	46.5	28.2	45.7	27.2	46.5	29.0
12	46.0	28.2	45.5	27.4	46.7	28.6
13	45.8	28.1	* 45.7	* 27.7	46.8	28.8
14	44.8	27.6	* 46.0	* 28.1	46.9	29.3
15	43.7	27.4	46.2	28.5	46.8	28.0
16	44.3	27.4	46.4	28.5	46.3	28.9
17	43.8	27.4	46.5	28.8	45.9	27.7
18	44.8	27.7	46.2	28.6	45.8	26.1
19	45.5	28.1	46.5	28.6	45.8	25.5
20	46.3	28.2	46.2	28.4	46.7	28.8
21	46.8	28.5	46.2	26.9	46.7	27.7
22	46.5	28.6	46.7	28.6	47.3	27.7
23	46.8	29.0	46.5	28.5	46.7	28.2
24	45.2	27.6	45.7	26.0	46.7	27.8
25	46.7	29.0	46.4	27.3	46.8	28.1
26	46.7	29.0	46.3	27.2	47.2	27.8
27	44.6	26.5	46.2	26.7	46.7	28.0
28	45.2	27.3	46.0	27.1	47.2	28.1
29	46.0	28.1	0	0	47.2	28.0
30	45.1	27.6	0	0	47.7	28.0
31	47.0	28.8	0	0	47.2	28.1
MEANS	45.72	27.90	46.06	27.88	46.44	28.02
OBSVNS.	31	31	26	26	31	31
MAXIMUM	47.0	29.0	46.7	28.9	47.7	29.3
MINIMUM	43.7	26.1	44.2	26.0	44.8	25.5
STD.DEV.	.99	.73	.56	.91	.73	.81

PORLIER PASS LW

49 00 48 N

123 35 05 W

APRIL

MAY

JUNE

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	47.0	28.2	47.8	29.1	55.0	21.3
2	46.6	28.0	47.5	28.8	52.8	26.1
3	47.1	28.2	49.9	28.4	51.4	27.4
4	47.0	28.4	50.0	28.1	54.8	21.2
5	47.0	28.8	50.8	27.6	57.3	24.7
6	46.9	28.9	52.2	26.5	57.8	26.8
7	47.0	28.9	49.5	28.4	57.6	24.8
8	47.2	29.0	48.3	28.6	53.5	28.2
9	47.6	28.9	48.3	28.9	54.7	28.0
10	47.7	29.1	48.2	28.9	52.3	28.0
11	47.5	28.2	50.5	27.7	54.8	23.8
12	47.8	26.9	48.8	28.4	57.8	16.3
13	47.8	27.3	51.6	27.6	57.7	23.1
14	48.2	27.6	49.0	28.8	53.8	27.4
15	47.8	28.4	49.3	28.8	55.7	27.2
16	47.4	28.4	48.2	29.0	55.2	27.6
17	46.9	28.4	47.8	28.9	51.8	28.2
18	47.1	28.6	53.2	22.5	52.5	28.4
19	47.0	28.5	51.0	27.7	52.0	28.5
20	48.2	28.4	52.7	27.7	53.0	28.8
21	47.8	28.4	50.6	28.1	58.3	23.1
22	48.0	28.5	48.6	28.5	62.8	23.0
23	47.6	28.6	52.4	25.2	60.3	24.2
24	47.2	28.8	52.6	26.7	60.8	23.0
25	47.6	28.9	49.8	28.8	56.8	27.8
26	48.1	28.6	53.0	27.8	58.4	27.3
27	49.0	28.4	54.3	27.1	61.2	24.2
28	49.2	28.5	53.7	27.2	* 59.6	* 25.6
29	47.6	28.6	51.2	28.2	58.0	26.9
30	49.2	28.2	54.2	26.9	56.7	26.9
31	0	0	52.8	27.7	0	0
MEANS	47.60	28.42	50.57	27.83	56.03	25.59
OBSVNS.	30	30	31	31	29	29
MAXIMUM	49.2	29.1	54.3	29.1	62.8	28.8
MINIMUM	46.6	26.9	47.5	22.5	51.4	16.3
STD.DEV.	.67	.48	2.09	1.33	3.06	2.91

PORLIER PASS LW

49 00 48 N

123 35 05 W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	57.4	26.7	54.8	26.1	53.4	28.4
2	55.2	27.2	58.3	25.4	54.4	28.4
3	56.7	21.7	53.0	28.5	51.4	29.0
4	56.2	23.7	53.8	28.5	54.2	28.1
5	57.3	23.3	55.3	28.1	52.5	28.6
6	* 56.6	* 25.4	51.8	28.8	51.8	28.9
7	55.8	27.1	53.7	28.5	54.5	27.3
8	61.7	21.0	52.7	28.9	57.2	27.1
9	61.2	24.6	54.8	27.8	57.3	26.8
10	62.8	23.9	58.5	24.4	57.0	27.4
11	62.2	24.4	60.4	24.6	55.7	27.4
12	62.8	24.4	60.0	24.8	57.2	27.2
13	62.5	24.4	59.8	24.7	56.8	26.9
14	62.5	24.7	60.7	25.4	56.2	27.7
15	60.6	23.1	60.9	24.4	54.4	28.1
16	62.0	23.7	61.7	25.4	53.2	28.5
17	56.7	28.0	60.0	25.9	54.6	28.1
18	58.4	27.6	60.6	25.4	51.5	29.3
19	52.2	29.3	61.3	24.2	51.8	29.3
20	54.5	28.1	61.4	24.6	54.8	27.2
21	57.3	26.7	61.3	25.8	54.5	27.3
22	57.4	26.7	62.4	25.4	51.3	29.0
23	56.2	27.2	62.7	24.4	53.0	27.7
24	59.2	26.7	61.2	26.0	53.2	27.7
25	55.0	28.0	54.8	28.2	53.3	27.6
26	52.8	28.6	58.5	23.3	53.0	27.6
27	52.0	28.8	57.9	24.0	53.5	27.6
28	52.1	28.2	56.7	27.3	53.3	27.6
29	* 53.2	* 27.8	57.1	25.2	53.6	27.4
30	54.3	27.3	57.8	23.1	51.2	28.9
31	54.2	23.3	60.8	25.5	0	0
MEANS	57.56	25.81	58.22	25.89	53.99	27.94
OBSVNS.	29	29	31	31	30	30
MAXIMUM	62.8	29.3	62.7	28.9	57.3	29.3
MINIMUM	52.0	21.0	51.8	23.1	51.2	26.8
STD.DEV.	3.55	2.27	3.23	1.72	1.88	.73

PORLIER PASS LW

49 00 48 N

123 35 05 W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	51.8	28.9	50.0	29.1	47.8	29.3
2	53.7	27.7	50.3	29.3	47.3	29.3
3	54.8	27.6	50.0	27.2	48.2	29.5
4	53.4	27.8	48.7	26.0	45.3	28.1
5	53.7	28.0	48.8	27.7	47.8	29.1
6	53.7	28.0	49.1	29.0	48.0	29.7
7	52.8	27.8	49.2	29.0	47.7	29.5
8	51.8	28.5	48.8	29.1	46.8	29.3
9	51.4	28.6	48.8	29.1	47.5	29.3
10	51.2	28.6	48.8	29.1	46.5	29.1
11	51.6	28.5	48.8	29.4	47.3	29.4
12	52.2	28.2	48.8	29.4	47.6	29.3
13	51.7	27.7	48.7	28.5	47.7	29.4
14	52.7	27.6	48.5	28.6	47.4	29.4
15	52.6	27.4	48.5	28.1	46.8	29.5
16	51.8	27.8	49.3	28.4	* 46.4	* 29.0
17	50.2	28.8	48.8	28.5	* 46.0	* 28.5
18	51.3	28.4	48.0	28.0	45.6	28.1
19	50.8	28.4	48.2	28.5	45.4	28.4
20	50.8	28.5	47.8	28.4	45.5	28.6
21	49.3	29.4	46.3	28.2	45.4	28.5
22	49.2	29.8	47.2	28.5	44.7	28.4
23	49.5	29.8	46.7	28.5	43.0	27.8
24	49.0	29.5	47.0	28.6	42.7	27.8
25	49.2	29.5	47.2	28.8	45.9	29.0
26	49.0	29.4	47.0	28.6	45.6	29.0
27	48.8	29.4	47.6	28.8	46.6	29.5
28	48.8	29.3	44.2	25.4	46.8	28.4
29	48.3	26.4	47.2	28.8	47.7	29.5
30	48.2	26.0	47.5	29.0	47.5	29.8
31	50.2	28.1	0	0	47.8	29.7
MEANS	51.08	28.37	48.19	28.45	46.55	29.02
OBSVNS.	31	31	30	30	29	29
YRLY. MEANS	.....				50.69	27.60
MAXIMUM	54.8	29.8	50.3	29.4	48.2	29.8
MINIMUM	48.2	26.0	44.2	25.4	42.7	27.8
STD. DEV.	1.83	.92	1.26	.90	1.42	.59

ACTIVE PASS HW

48 52 26 N

123 17 23 W

JANUARY

FEBRUARY

MARCH

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	44.1	25.1	44.2	28.1	44.2	25.6
2	43.4	25.4	44.3	27.4	44.4	26.1
3	42.6	23.5	45.3	27.7	43.8	26.5
4	42.2	26.0	44.7	28.6	45.2	27.3
5	45.2	28.6	44.3	28.6	45.7	27.7
6	45.1	28.8	45.7	28.8	45.8	28.2
7	45.6	28.6	45.6	28.5	46.0	28.4
8	44.3	27.8	44.7	27.2	46.4	28.0
9	* 43.8	* 27.4	44.3	26.3	46.4	27.8
10	43.4	27.1	43.2	24.8	46.2	27.8
11	44.8	28.5	43.6	26.3	46.6	28.9
12	43.8	26.1	43.5	27.2	45.8	28.8
13	43.0	26.3	45.1	27.7	45.8	29.0
14	43.6	26.8	45.2	28.1	46.2	28.5
15	41.8	26.0	45.4	28.8	46.3	28.8
16	42.2	27.1	46.1	28.8	45.8	27.7
17	43.6	27.6	46.8	29.1	46.8	27.6
18	43.3	27.8	46.4	28.9	47.2	25.9
19	44.7	27.7	46.3	28.4	47.3	27.7
20	45.7	29.0	45.7	28.0	48.6	26.7
21	45.8	28.6	45.5	27.6	48.0	26.8
22	44.6	28.2	45.5	27.1	47.8	25.9
23	46.1	28.6	46.3	27.4	47.4	28.5
24	45.3	28.4	45.6	24.2	47.6	27.7
25	45.6	29.0	45.4	26.1	46.8	28.9
26	45.1	29.7	44.4	27.4	47.4	27.7
27	44.6	27.3	45.3	24.7	46.2	28.2
28	42.6	24.6	44.8	24.7	* 46.2	* 27.1
29	42.6	26.0	0	0	* 46.3	* 26.0
30	42.7	27.3	0	0	46.3	25.0
31	44.8	28.6	0	0	47.6	27.7
MEANS	44.07	27.34	45.11	27.38	46.40	27.57
OBSVNS.	30	30	28	28	29	29
MAXIMUM	46.1	29.7	46.8	29.1	48.6	29.0
MINIMUM	41.8	23.5	43.2	24.2	43.8	25.0
STD.DEV.	1.25	1.49	.91	1.41	1.12	1.09

ACTIVE PASS HW

48 52 26 N

123 17 23 W

APRIL

MAY

JUNE

1970

DATE	TEMP	SAL.	TEMP	SAL.	TEMP	SAL.
1	47.7	28.9	50.0	29.5	60.3	24.4
2	48.2	25.8	50.4	29.1	57.8	28.2
3	47.9	28.9	54.6	27.7	53.4	28.9
4	47.8	28.4	51.3	29.0	58.2	17.3
5	47.7	28.9	52.6	24.8	59.3	22.2
6	47.8	29.3	50.4	28.8	56.7	26.0
7	47.4	29.0	48.8	29.9	54.3	28.5
8	47.7	29.4	48.4	29.9	52.8	28.6
9	47.8	29.7	50.1	29.7	52.2	29.4
10	46.6	30.0	49.4	29.4	52.2	29.1
11	46.2	30.0	48.8	28.2	57.0	15.4
12	47.0	24.4	48.9	28.4	58.2	10.1
13	* 47.4	* 24.8	51.8	23.7	59.3	17.4
14	47.8	25.1	50.7	28.2	58.8	25.8
15	48.7	24.2	53.6	28.0	56.8	27.2
16	50.6	27.8	52.3	27.3	57.8	27.3
17	51.2	28.4	53.7	23.0	56.2	29.4
18	48.0	28.2	55.2	22.1	58.8	27.6
19	48.8	28.2	57.3	24.2	56.4	29.0
20	50.4	28.2	52.4	28.6	61.4	26.1
21	50.8	28.5	51.0	28.6	65.2	14.1
22	49.9	28.6	49.8	29.7	62.3	22.5
23	48.6	29.1	51.0	29.5	61.0	25.1
24	47.8	29.4	51.6	28.8	58.6	24.4
25	47.4	29.3	52.8	27.1	60.4	24.7
26	46.8	28.9	54.8	22.0	63.3	15.8
27	48.2	28.6	54.2	23.9	59.6	25.6
28	49.3	24.6	53.3	26.5	61.2	26.0
29	48.8	28.6	53.2	27.3	61.0	17.0
30	50.5	29.0	56.6	23.5	60.4	26.8
31	0	0	58.4	25.6	0	0
MEANS	48.39	28.19	52.17	27.16	58.36	24.00
OBSVNS.	29	29	31	31	30	30
MAXIMUM	51.2	30.0	58.4	29.9	65.2	29.4
MINIMUM	46.2	24.2	48.4	22.0	52.2	10.1
STD.DEV.	1.32	1.67	2.59	2.50	3.21	5.35

ACTIVE PASS HW

48 52 26 N

123 17 23 W

JULY

AUGUST

SEPTEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	56.3	28.1	63.4	17.1	56.0	16.6
2	57.8	27.6	57.4	27.4	54.8	16.3
3	61.6	19.5	55.4	29.4	54.0	16.5
4	61.8	20.4	57.5	29.4	54.2	16.3
5	63.7	23.1	56.0	29.4	53.7	16.5
6	* 60.3	* 26.3	55.8	29.0	52.2	16.3
7	56.9	29.5	57.0	29.5	56.0	19.1
8	62.2	22.2	58.4	24.8	57.2	20.4
9	63.4	17.8	64.0	12.0	56.0	26.7
10	61.8	19.1	66.4	9.8	58.0	22.1
11	63.0	13.1	58.7	28.0	58.0	27.2
12	63.7	20.8	64.8	19.9	57.3	26.9
13	66.3	17.9	60.4	23.0	58.0	16.5
14	63.2	27.4	62.5	25.8	57.6	27.7
15	68.0	14.2	63.8	17.1	56.8	28.6
16	60.8	27.3	65.0	17.4	57.2	28.9
17	57.8	29.3	63.4	17.1	56.0	28.5
18	58.2	29.3	61.0	16.9	53.1	29.0
19	57.2	29.9	61.2	16.6	51.7	29.8
20	57.7	26.9	64.0	17.1	52.1	29.3
21	57.8	26.9	61.0	16.9	53.0	29.4
22	56.3	28.6	61.2	17.0	54.6	29.4
23	56.1	27.8	63.0	16.6	55.2	24.8
24	* 55.8	* 28.0	60.0	16.9	55.5	27.6
25	55.4	28.2	58.7	16.6	56.2	28.0
26	55.2	29.3	60.2	16.9	56.2	27.4
27	56.1	29.4	57.8	16.6	56.5	27.4
28	55.7	29.3	58.0	16.3	56.4	26.4
29	53.4	29.5	62.0	16.6	56.2	27.8
30	53.8	29.5	64.2	16.3	56.2	28.6
31	57.2	29.0	60.2	16.6	0	0
MEANS	59.26	25.20	60.72	20.00	55.53	24.53
OBSVNS.	29	29	31	31	30	30
MAXIMUM	68.0	29.9	66.4	29.5	58.0	29.8
MINIMUM	53.4	13.1	55.4	9.8	51.7	16.3
STD.DEV.	3.83	5.12	3.03	5.70	1.82	5.18

ACTIVE PASS HW

48 52 26 N

123 17 23 W

OCTOBER

NOVEMBER

DECEMBER 1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	54.8	28.4	47.7	28.4	44.3	30.0
2	54.3	28.0	47.8	26.7	46.0	30.6
3	53.3	26.8	48.2	26.3	46.3	30.6
4	52.2	28.8	48.3	27.2	45.2	30.2
5	* 52.6	* 28.6	48.4	28.2	45.4	29.8
6	53.0	28.4	49.2	28.4	47.6	30.2
7	53.0	27.8	49.6	27.8	47.7	30.4
8	53.2	28.5	49.6	29.3	45.4	29.0
9	53.7	28.2	49.3	28.5	46.2	29.4
10	53.5	28.5	48.8	28.6	46.5	29.3
11	53.2	28.0	48.7	29.4	46.6	29.4
12	53.2	26.9	49.3	29.1	45.8	29.1
13	* 53.0	* 26.9	48.5	29.0	45.3	28.6
14	52.8	26.9	48.6	28.8	46.8	30.2
15	51.8	28.2	48.7	28.1	46.3	30.3
16	51.0	28.8	48.8	29.1	46.5	30.0
17	49.4	28.4	48.3	28.5	46.7	30.3
18	50.3	29.1	* 48.0	* 28.6	45.7	29.8
19	50.3	29.1	47.7	28.8	46.3	29.8
20	49.7	30.3	47.2	29.1	45.6	28.2
21	49.5	30.3	44.7	28.5	43.0	27.6
22	49.4	30.3	44.6	28.8	42.8	28.4
23	49.2	30.4	45.6	28.9	* 42.8	* 28.0
24	48.9	30.6	47.0	28.9	42.8	27.6
25	49.1	31.0	46.1	29.0	43.2	27.8
26	49.0	29.1	43.8	27.7	43.1	27.8
27	48.9	28.8	46.1	28.9	44.7	28.8
28	48.6	26.5	45.4	29.7	46.3	30.0
29	48.0	24.3	45.3	29.1	46.0	29.9
30	48.7	27.7	46.0	29.1	45.9	30.4
31	48.8	27.1	0	0	44.6	30.3
MEANS	51.06	28.46	47.49	28.55	45.49	29.46
OBSVNS.	29	29	29	29	30	30
YRLY. MEANS.....	.....				51.25	26.45
MAXIMUM	54.8	31.0	49.6	29.7	47.7	30.6
MINIMUM	48.0	24.3	43.8	26.3	42.8	27.6
STD. DEV.	2.13	1.45	1.68	.78	1.37	.95

ACTIVE PASS LW

48 52 26 N

123 17 23 W

JANUARY

FEBRUARY

MARCH

1970

DATE	TEMP	SAL,	TEMP	SAL,	TEMP	SAL,
1	43.8	20.9	45.0	28.6	*	0
2	44.0	26.1	44.6	28.5	*	0
3	* 43.2	* 25.8	44.9	28.9	*	0
4	42.4	25.4	44.4	28.5	*	0
5	44.2	28.5	44.0	27.3	*	0
6	44.6	28.8	46.1	28.9	*	0
7	45.7	28.6	46.2	28.9	*	0
8	44.8	28.1	45.0	27.8	*	0
9	* 44.0	* 27.5	44.4	24.7	*	0
10	43.3	26.9	44.6	25.1	*	0
11	43.6	25.3	44.6	26.1	*	0
12	44.1	27.1	44.5	24.8	*	0
13	43.6	26.4	45.7	28.1	*	0
14	42.6	26.4	45.7	28.4	*	0
15	42.2	26.9	46.1	28.4	*	0
16	42.3	27.3	46.2	27.7	*	0
17	43.1	27.2	46.6	28.8	*	0
18	43.2	28.0	45.7	28.6	*	0
19	44.5	28.4	46.1	28.8	*	0
20	45.4	28.6	45.6	28.6	*	0
21	45.5	29.1	45.5	27.6	*	0
22	45.1	28.8	45.7	26.9	*	0
23	46.2	28.9	46.8	26.3	*	0
24	45.0	28.6	45.6	23.5	*	0
25	45.8	29.1	45.9	24.6	*	0
26	45.6	29.1	47.1	25.1	*	0
27	43.5	24.4	46.7	25.2	*	0
28	43.0	24.3	45.7	25.1	*	0
29	43.4	26.3	0	0	*	0
30	44.2	27.4	0	0	*	0
31	45.0	28.5	0	0	*	0
MEANS	44.13	27.26	45.54	27.14	0	0
OBSVNS.	29	29	28	28	0	0
MAXIMUM	46.2	29.1	47.1	28.9	0	0
MINIMUM	42.2	20.9	44.0	23.5	0	0
STD.DEV.	1.14	1.84	.82	1.71	0	0

Low water observations terminated February 28.

WEST VANCOUVER 49 20.4 N 123 13.9 W

OCTOBER			NOVEMBER		DECEMBER		1970
DATE	TEMP	SAL	TEMP	SAL	TEMP	SAL	
1					46.2	28.2	
2			48.3	26.5	44.5	27.2	
3			49.1	28.5	45.0	28.0	
4					44.8	27.9	
5							
6					46.5	25.6	
7							
8							
9			50.0	24.8	41.0	22.6	
10			49.4	26.3	46.0	27.4	
11					45.1	26.4	
12			51.2	28.0			
13			49.9	25.8			
14					44.1	25.6	
15					44.6	26.4	
16	50.9	26.7	49.1	26.8	45.0	26.6	
17			48.7	26.3	45.5	26.5	
18			48.0	26.6	45.8	28.0	
19	51.3	26.0	48.9	28.3			
20			47.0	23.0			
21	50.4	26.9			44.5	27.3	
22					42.4	25.7	
23	49.8	25.4	43.2	25.0	39.9	24.4	
24			47.3	28.0			
25			45.4	26.8			
26	50.1	26.3					
27	48.9	25.9	45.9	26.3			
28	48.5	22.0					
29	48.5	24.2			43.5	27.3	
30	45.9	23.5	45.5	27.8	44.0	27.7	
31					44.6	28.2	
MEANS	-	-	48.6	26.6	44.4	26.7	
OBSVNS	9	9	16	16	19	19	

Nov. 18 to Dec. 31: Salinity data obtained by salinometer analyses.

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Annual Graph Plots of the 7-day
Normally-Weighted, Running Means

Temperature

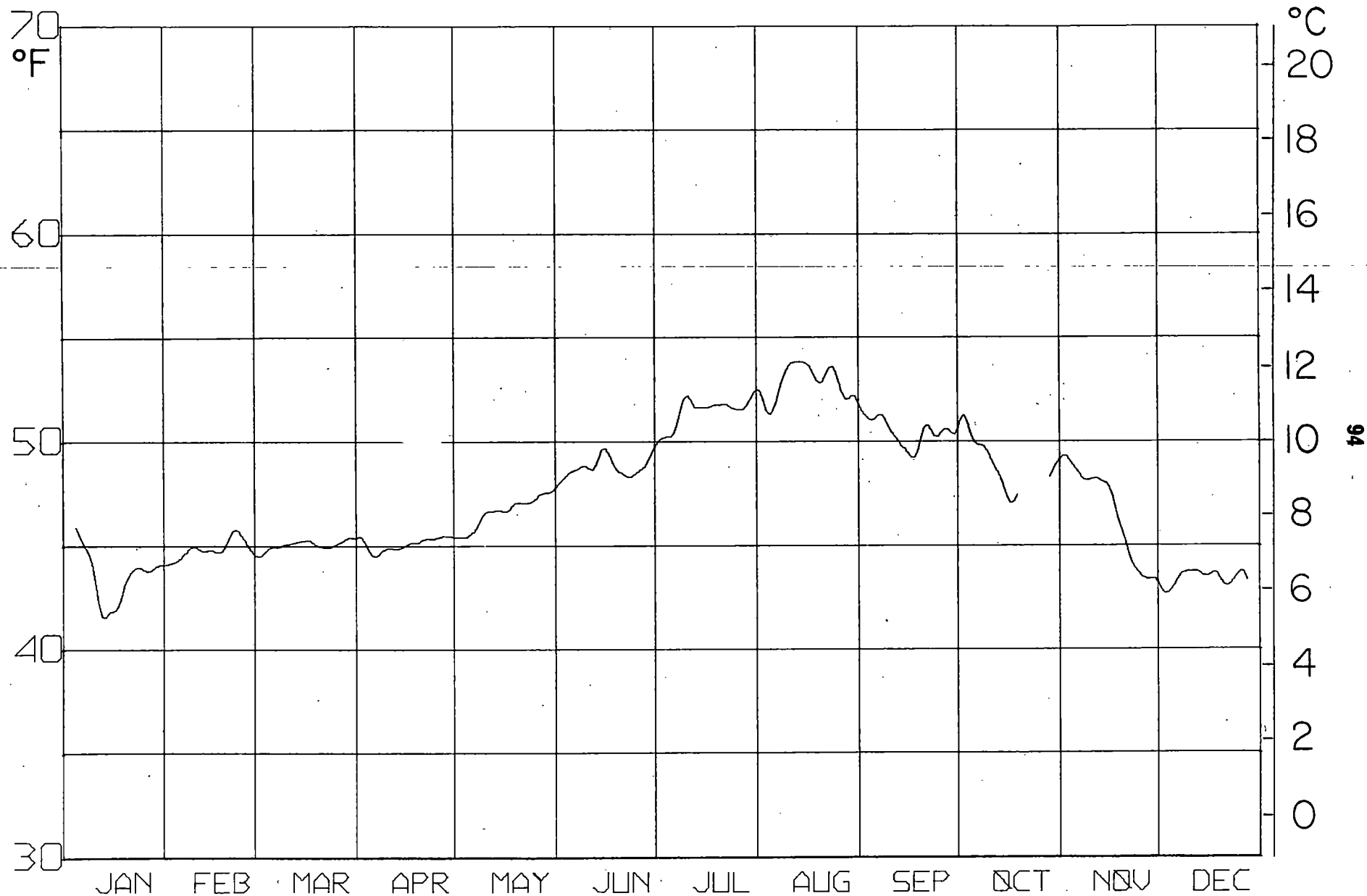
and

Salinity

1970

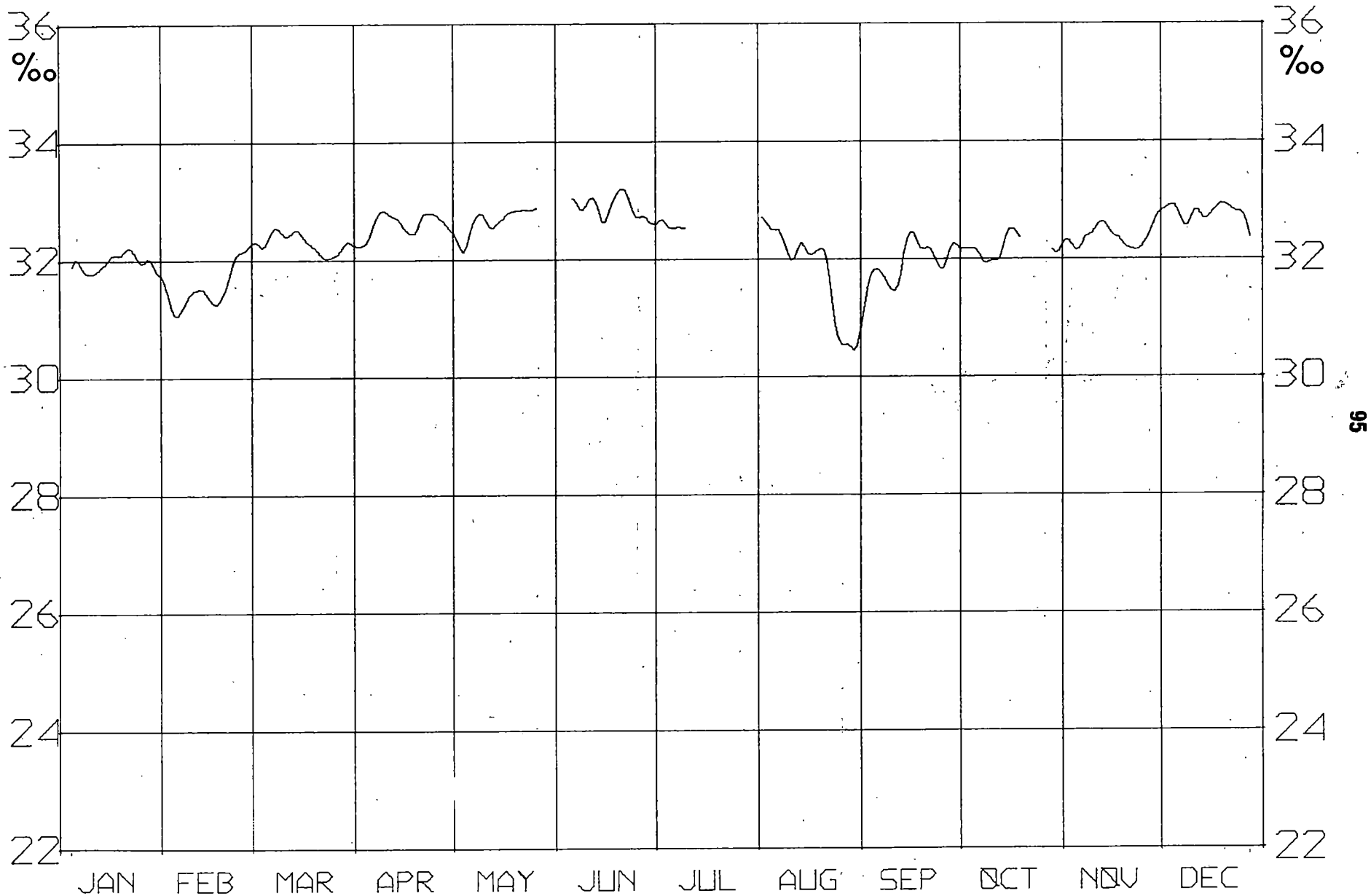
LANGARA ISLAND

1970 TEMPERATURES



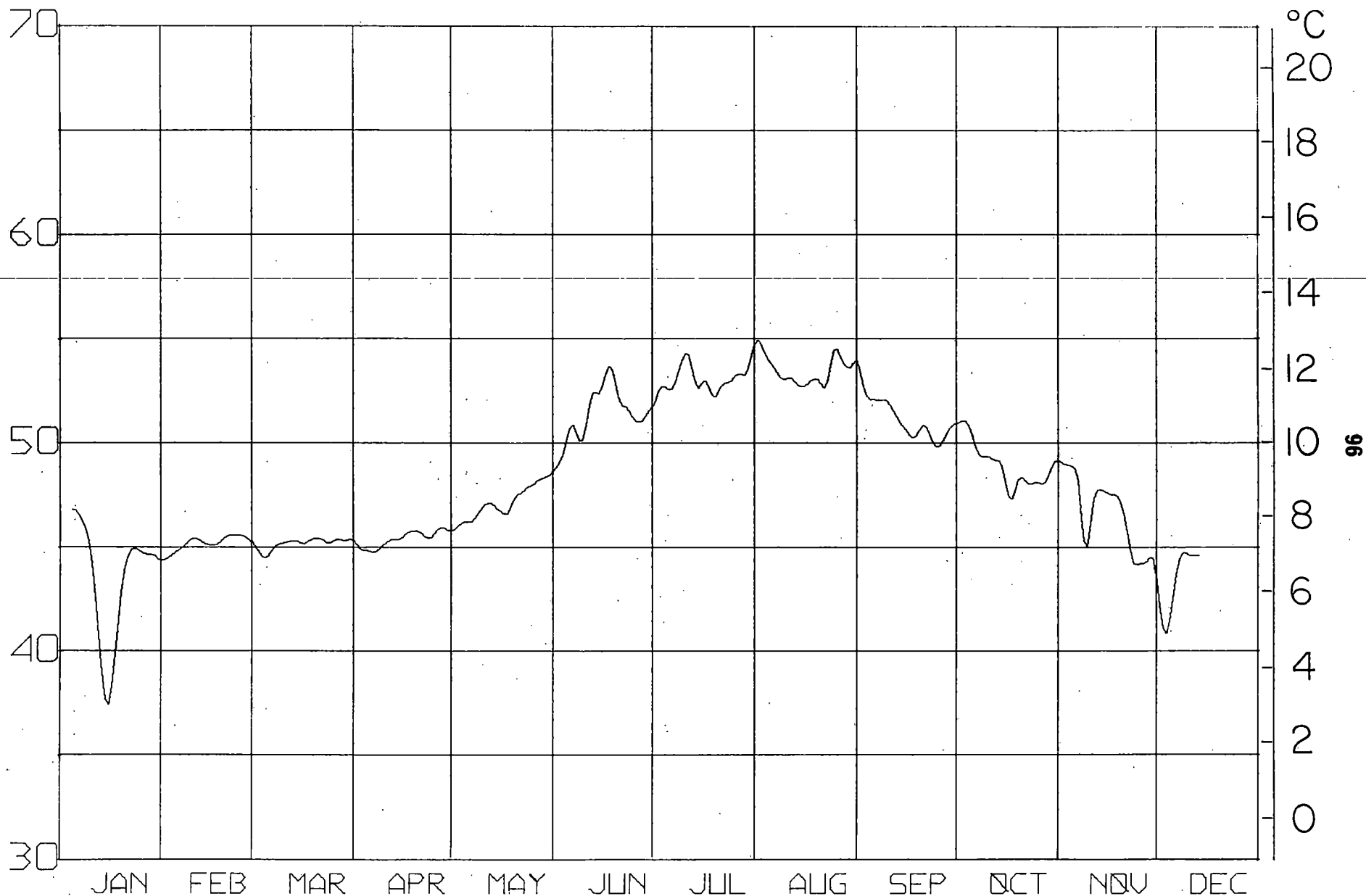
LANGARA ISLAND

1970 SALINITIES



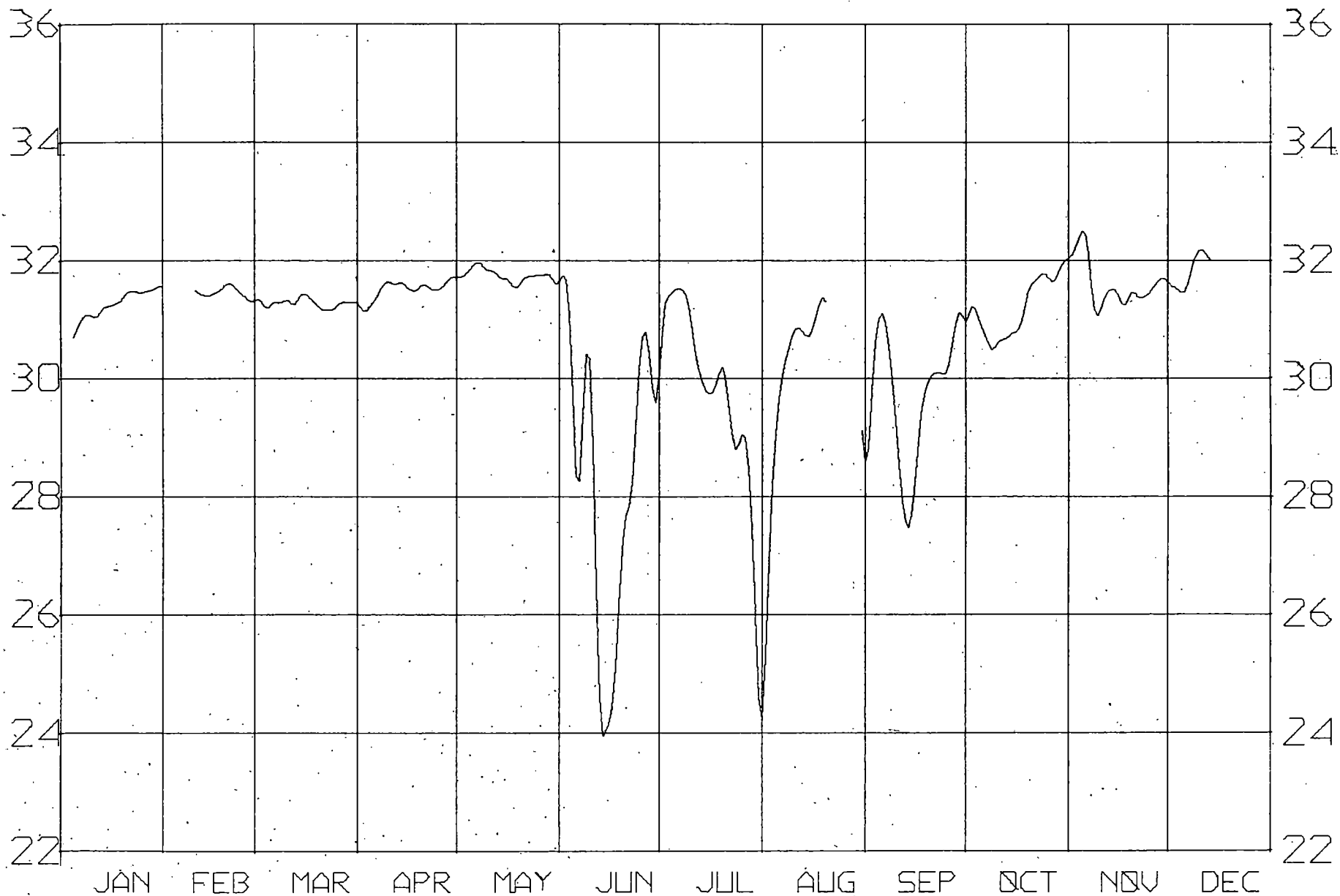
TRIPLE ISLAND

1970 TEMPERATURES



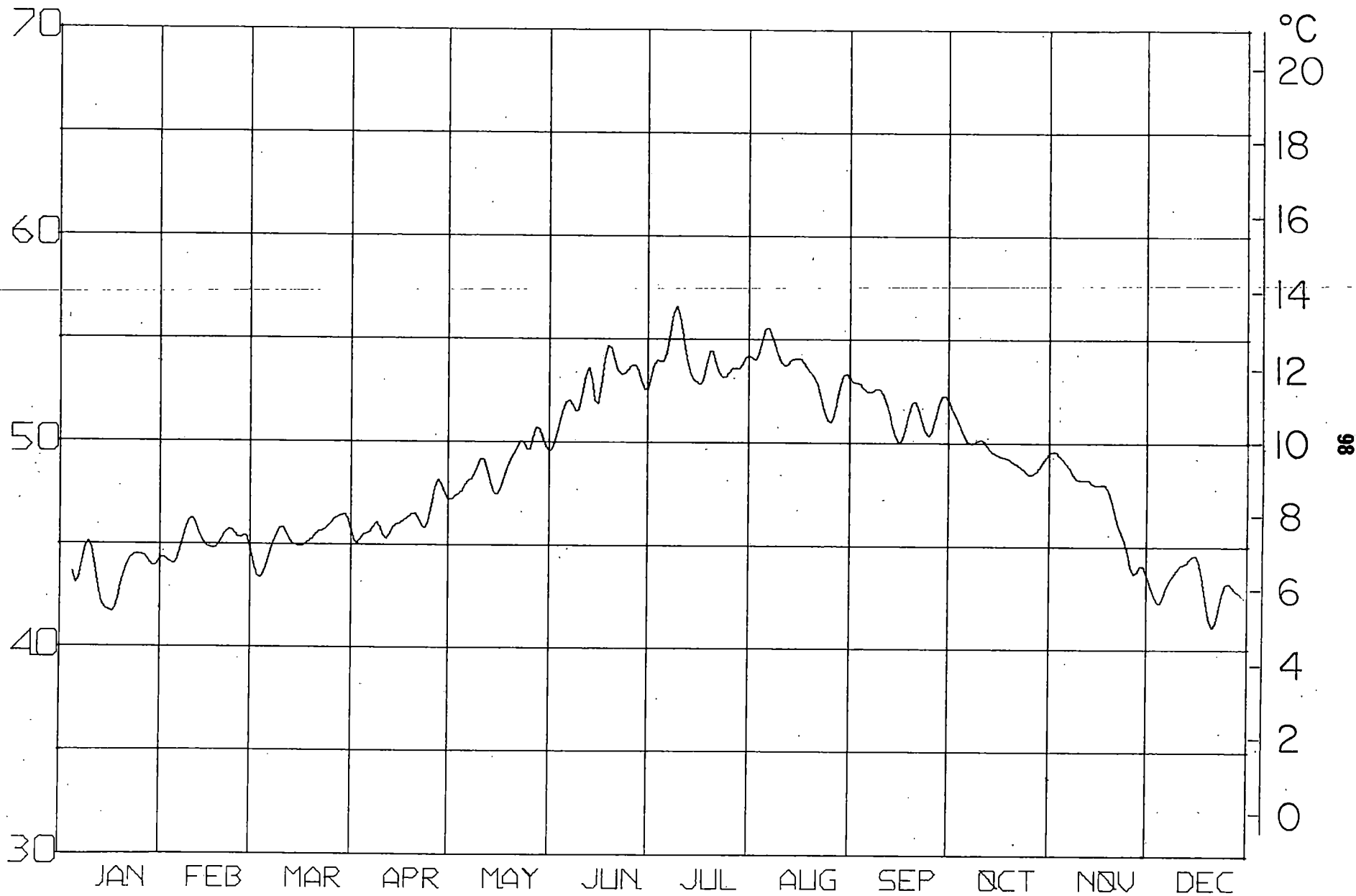
TRIPLE ISLAND

1970 SALINITIES



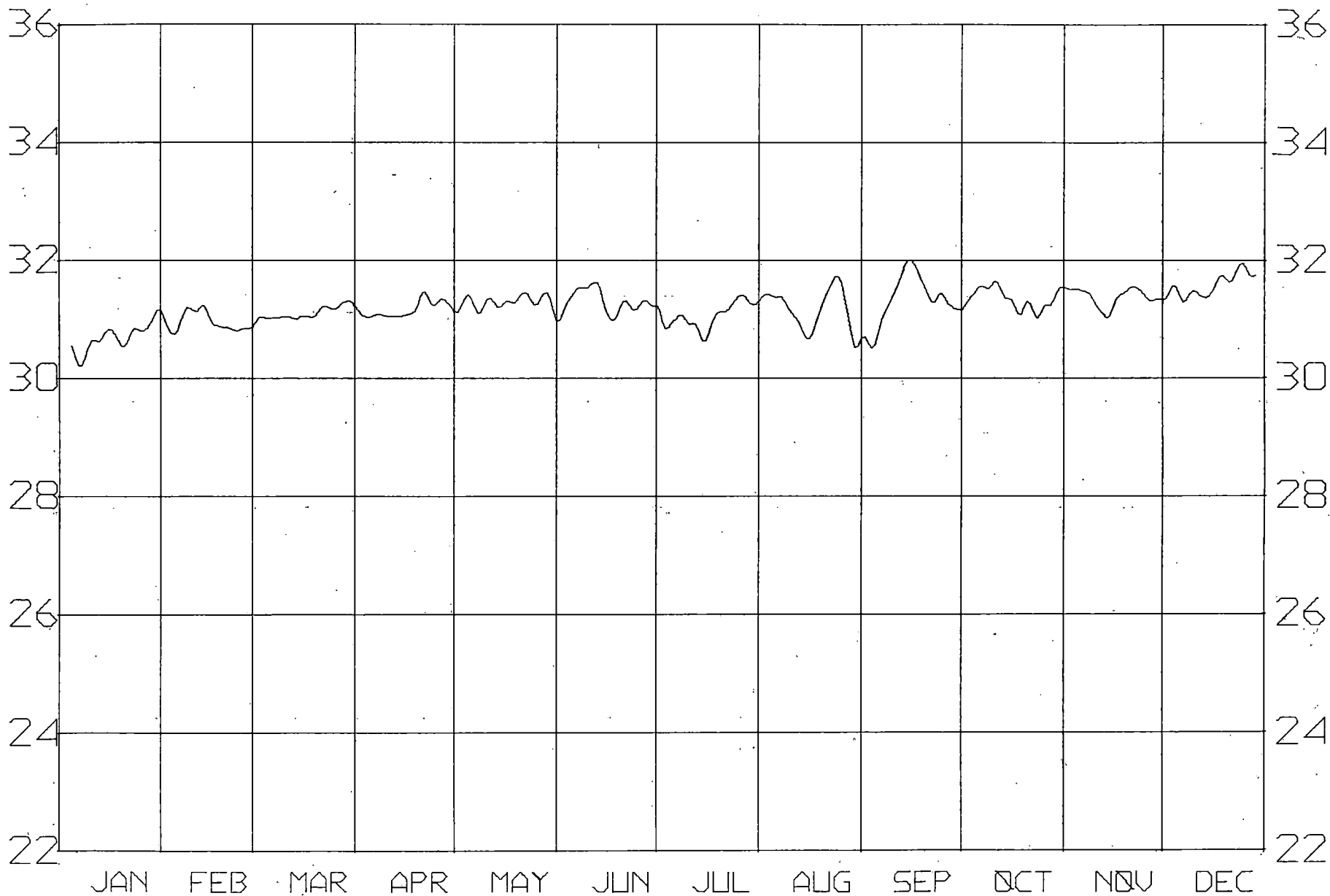
BONILLA ISLAND

1970 TEMPERATURES



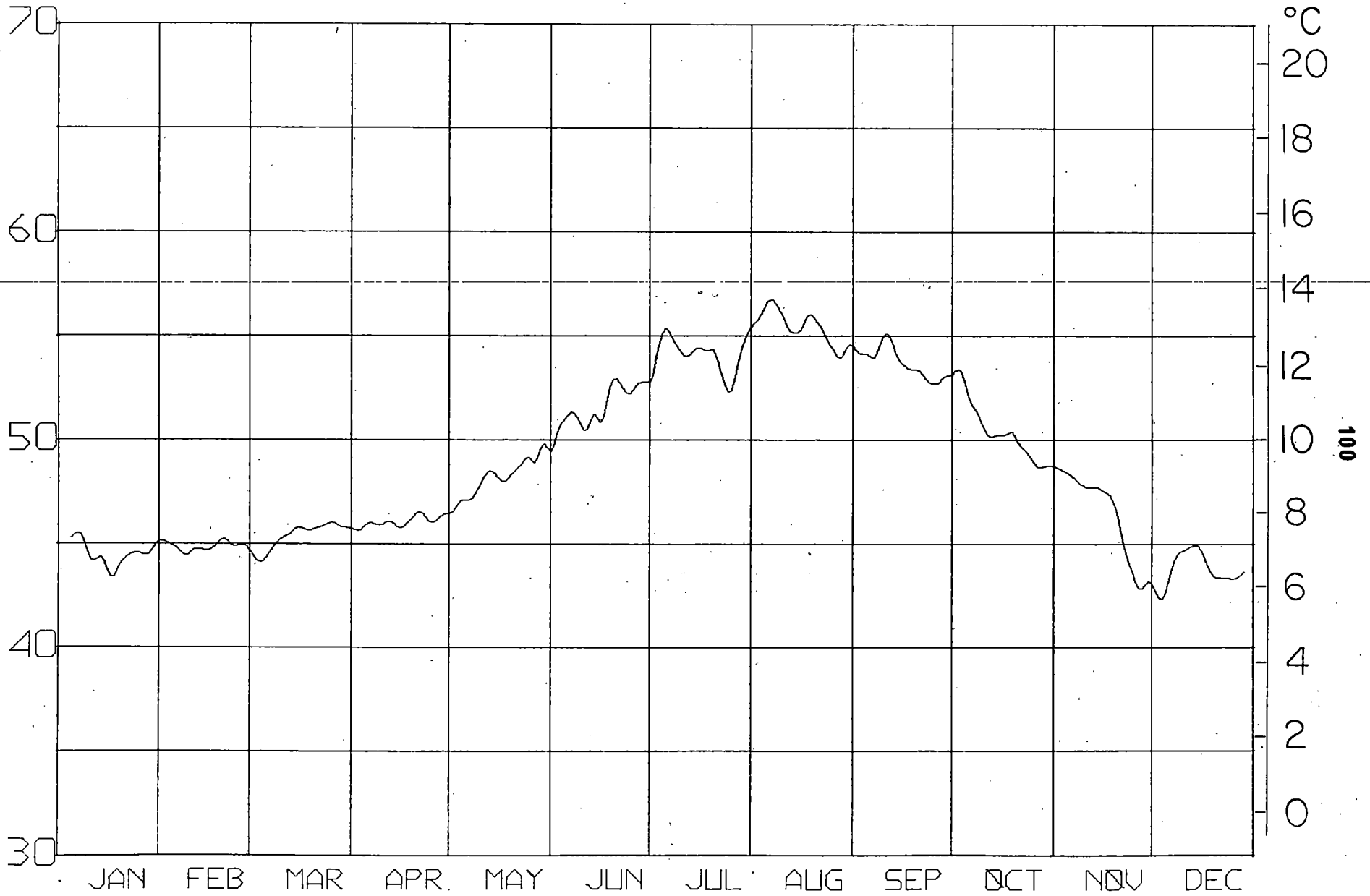
BONILLA ISLAND

1970 SALINITIES



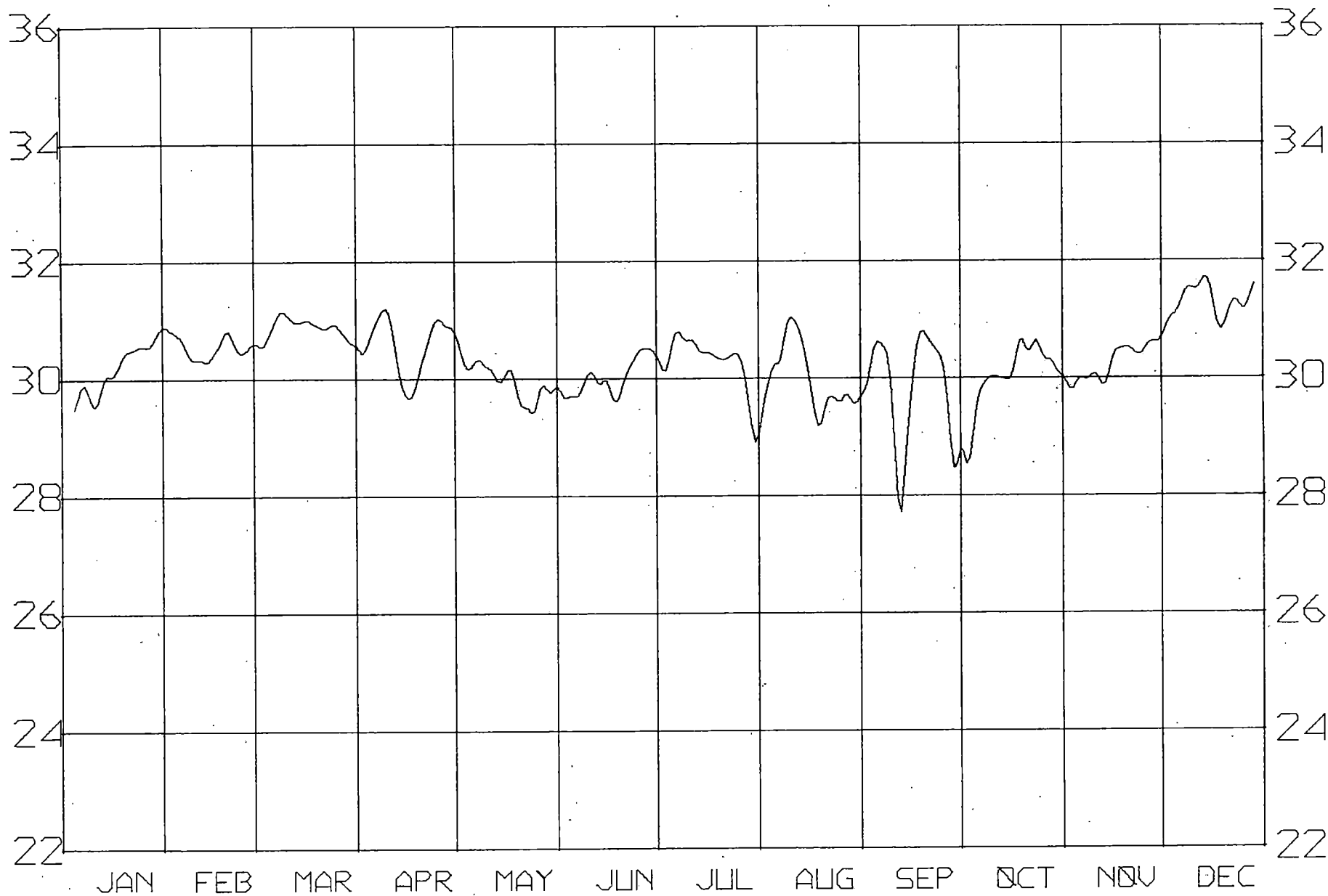
MC INNES ISLAND

1970 TEMPERATURES



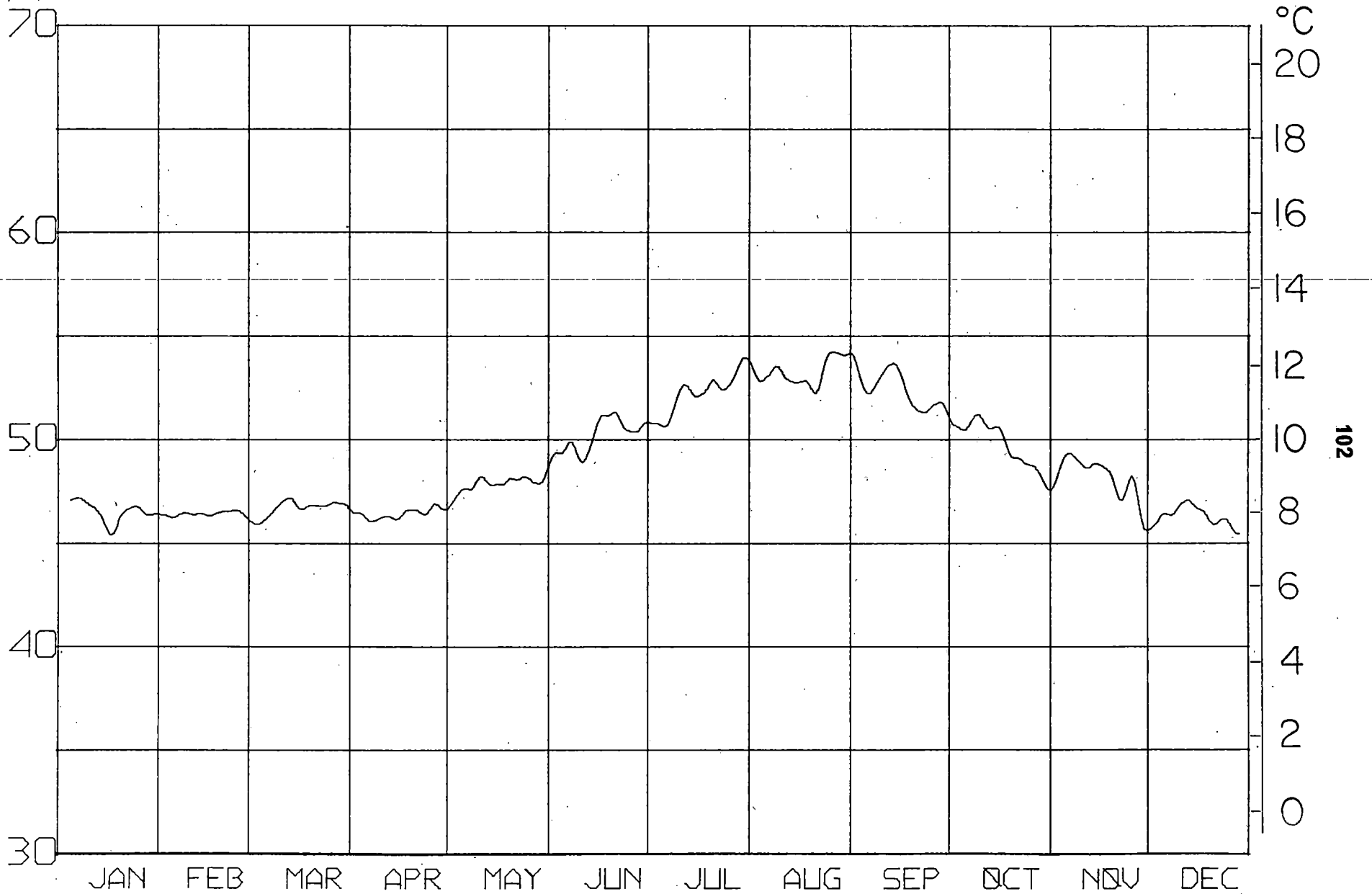
MC INNES ISLAND

1970 SALINITIES



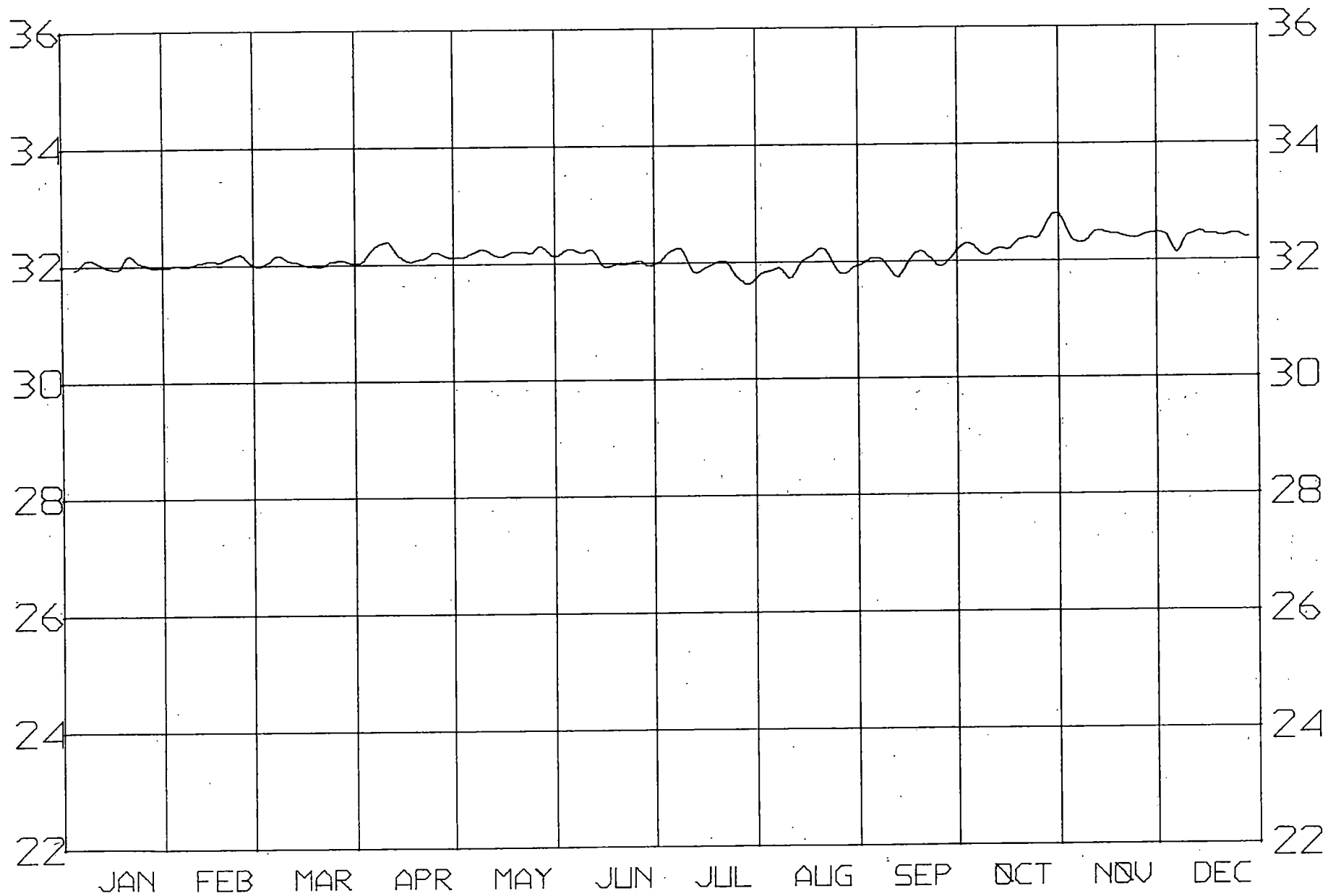
CAPE ST JAMES

1970 TEMPERATURES



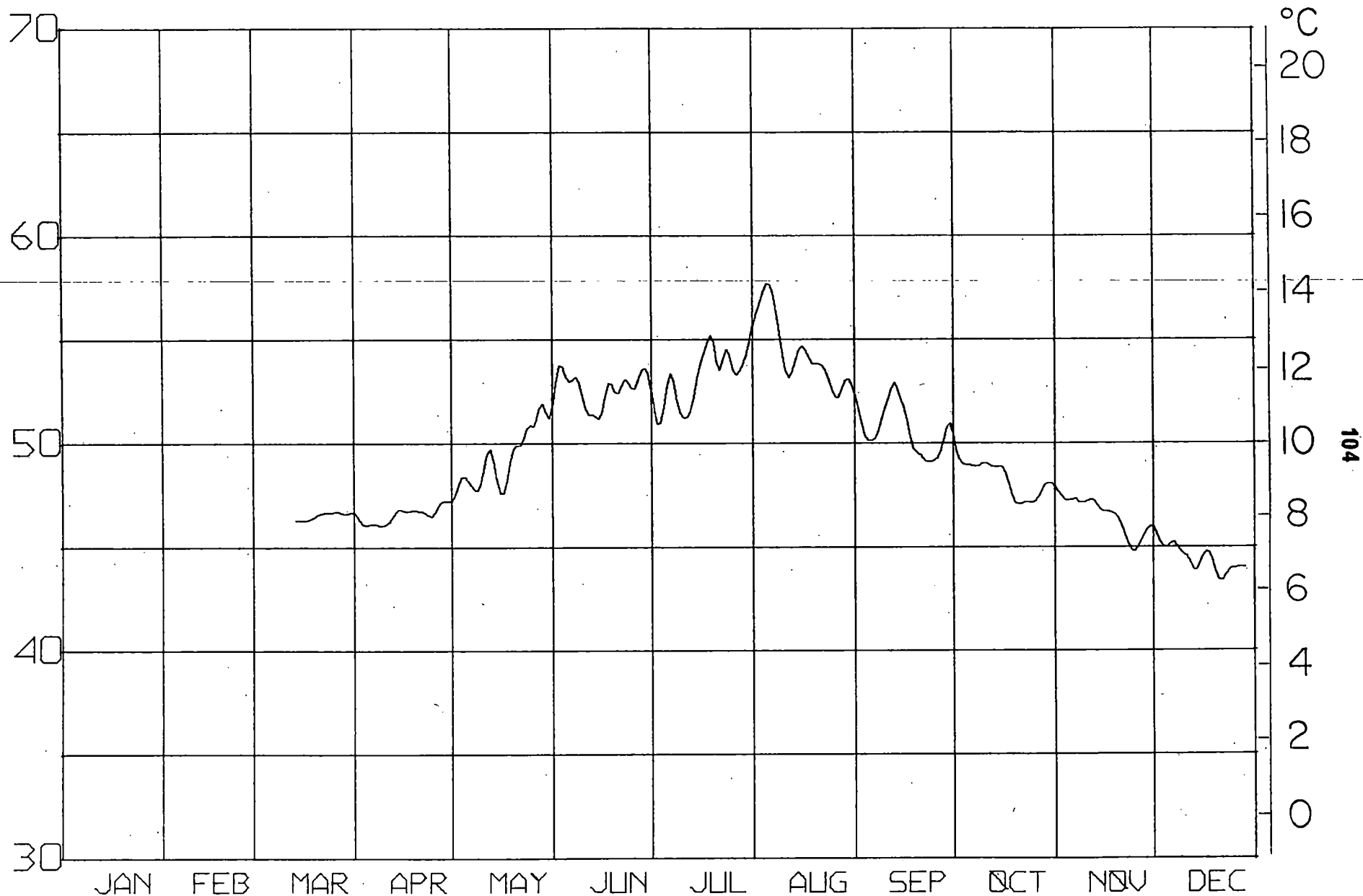
CAPE ST JAMES

1970 SALINITIES



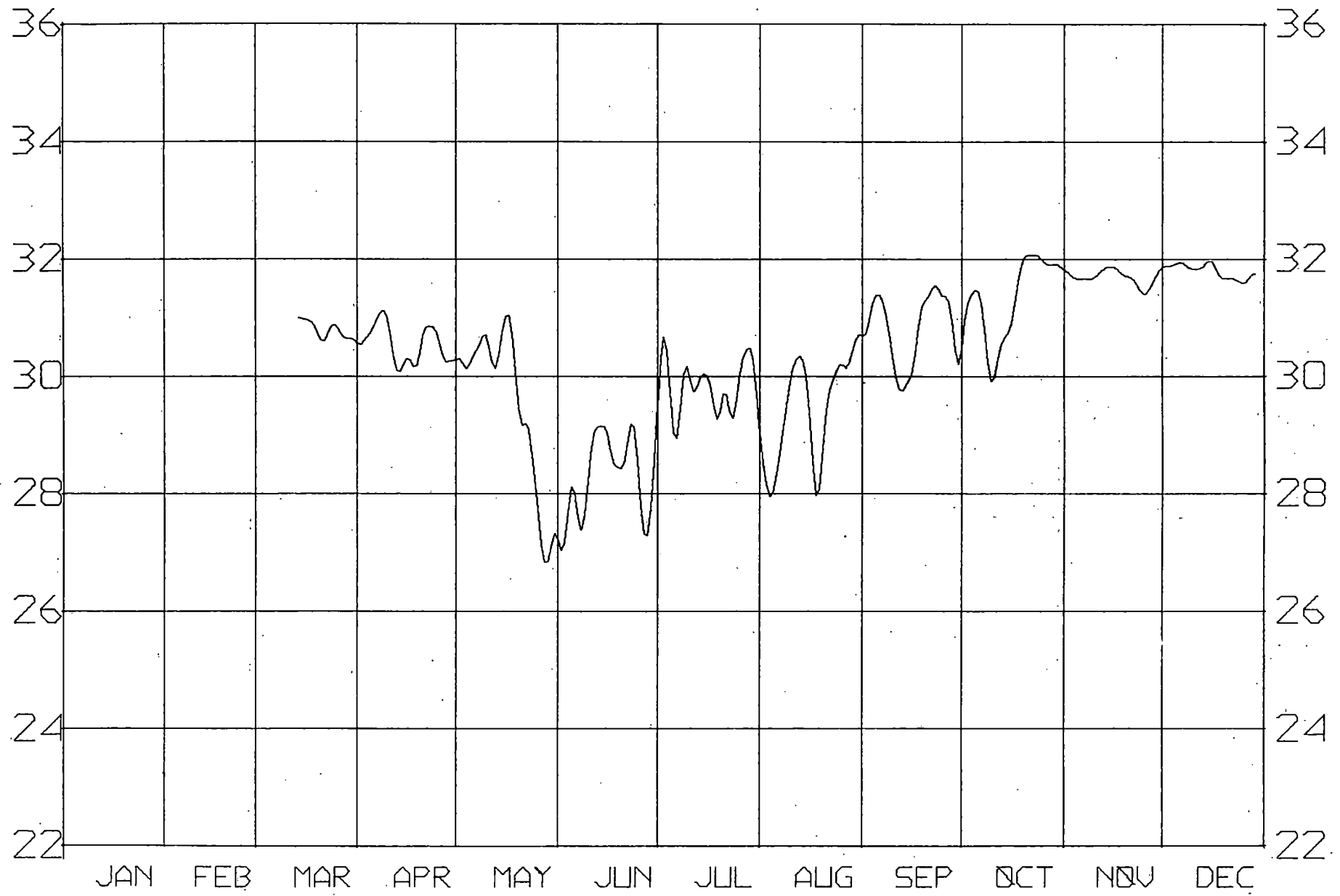
EGG ISLAND

1970 TEMPERATURES



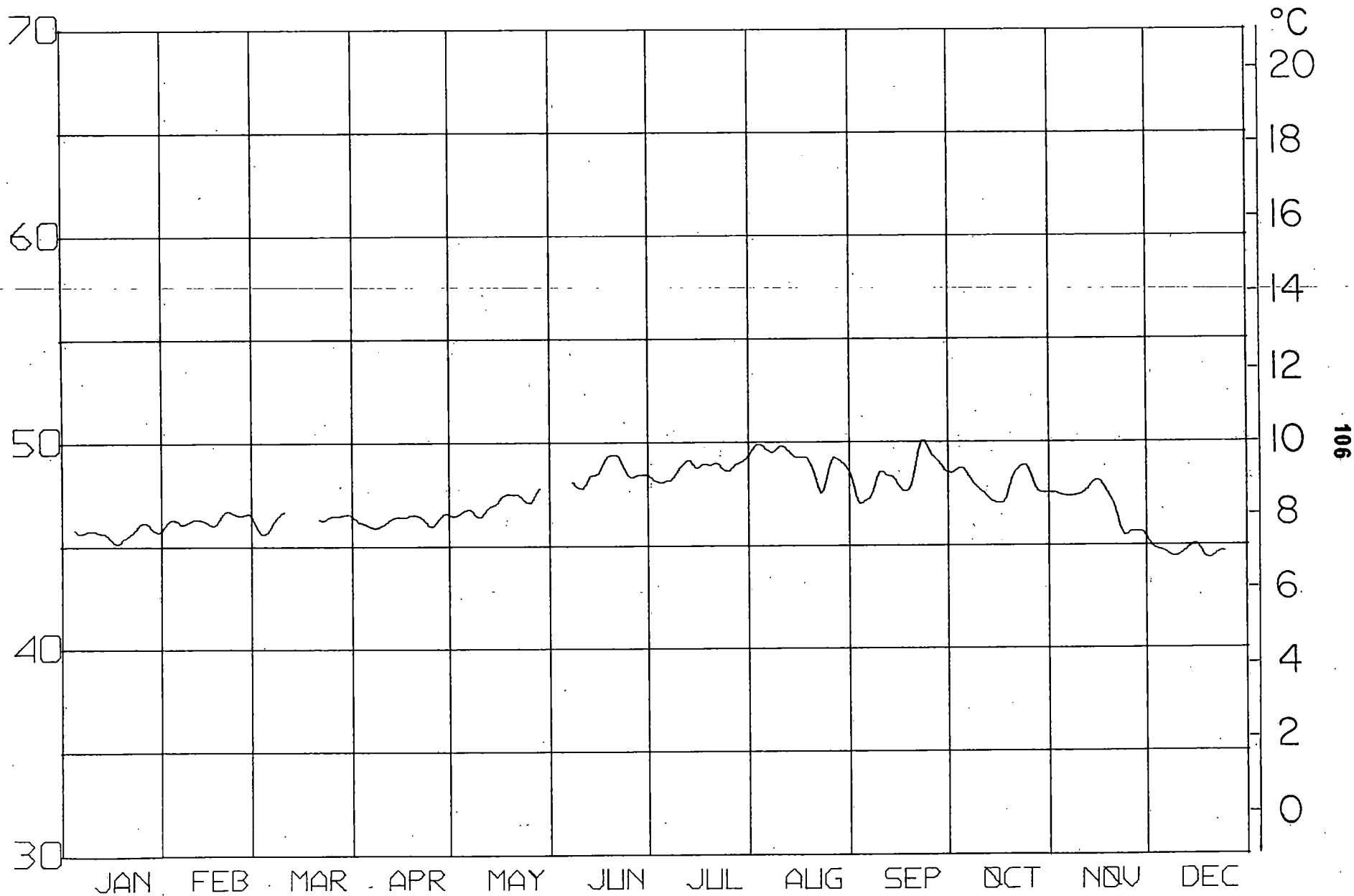
EGG ISLAND

1970 SALINITIES



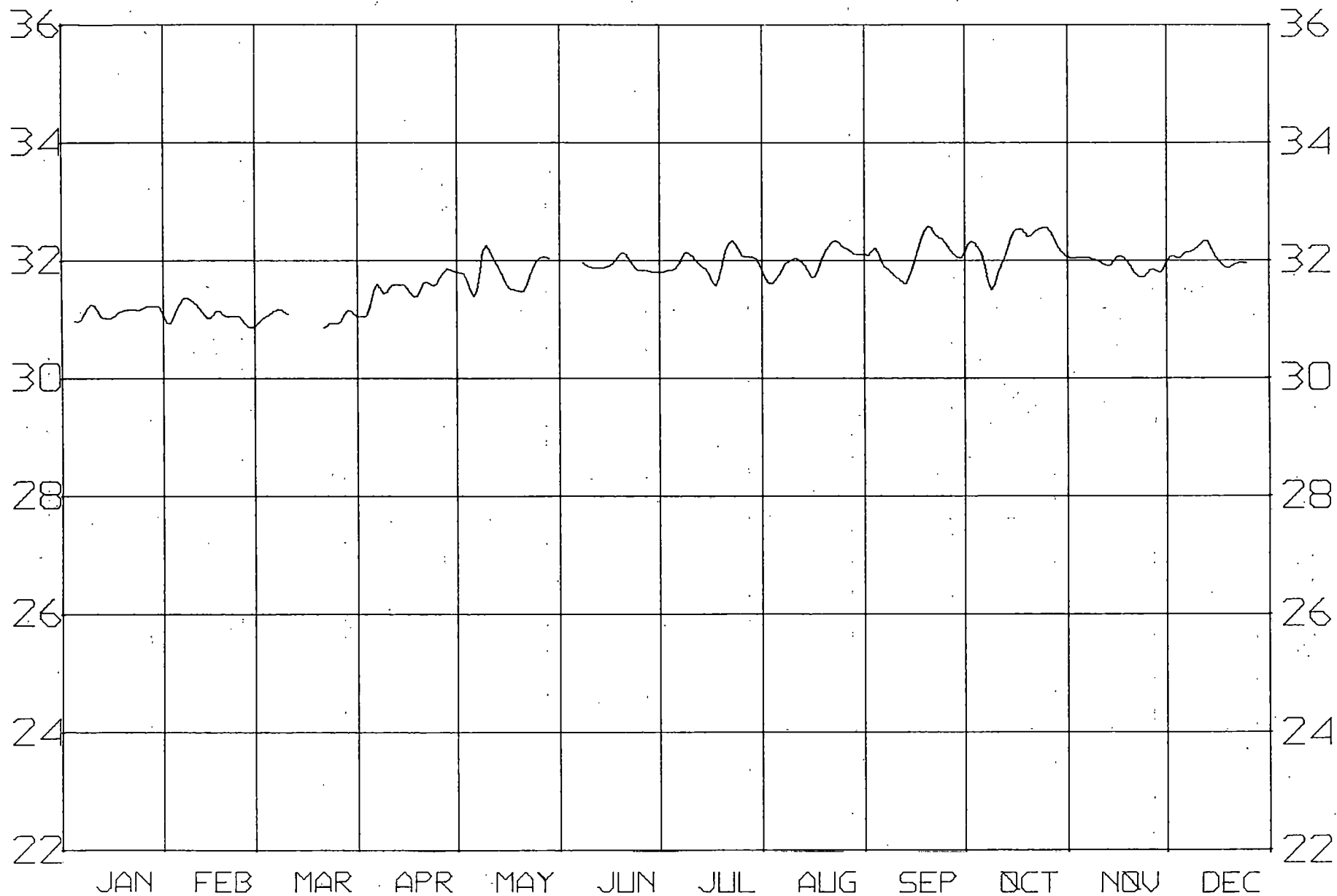
PINE ISLAND

1970 TEMPERATURES



PINE ISLAND

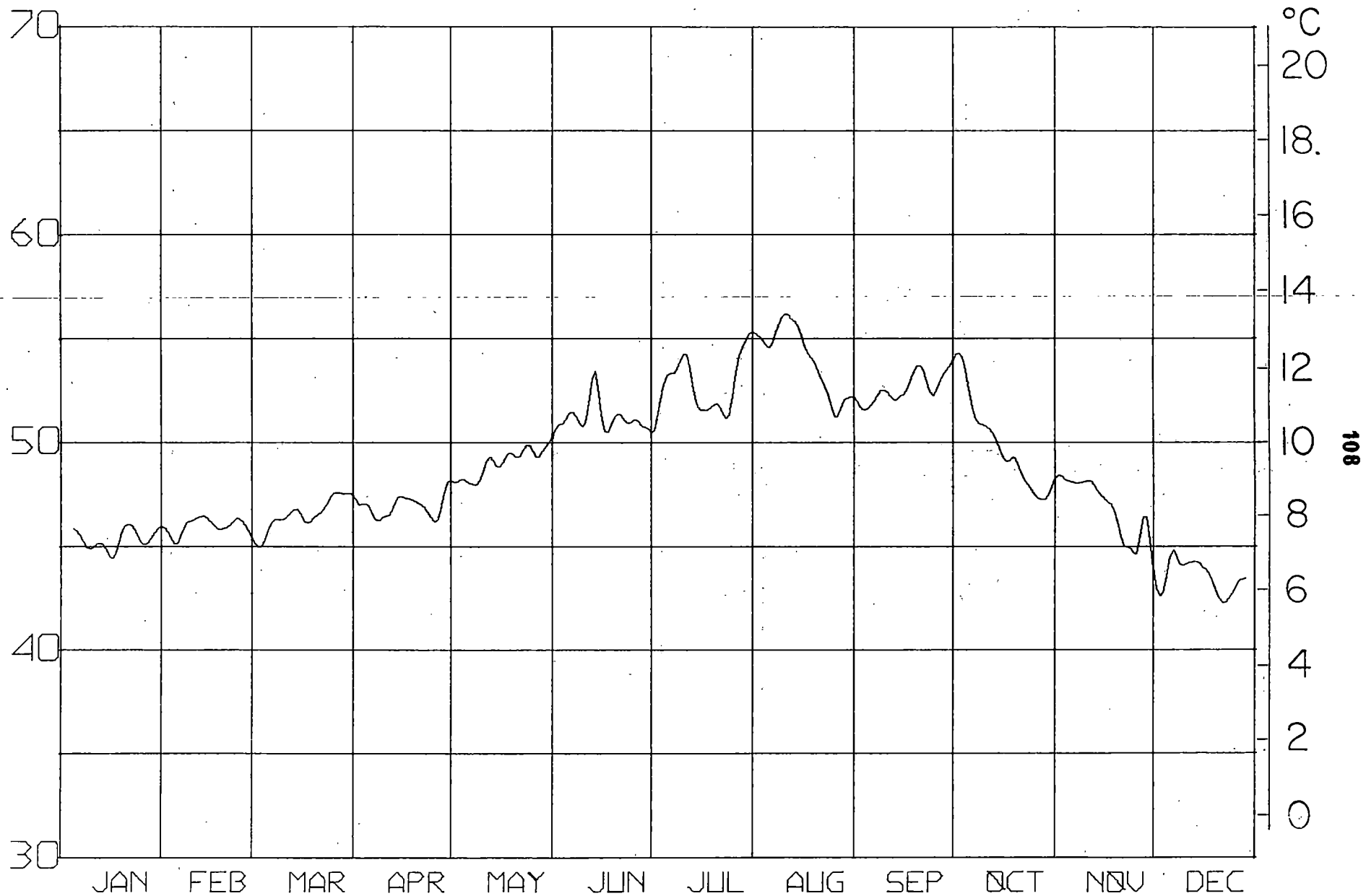
1970 SALINITIES



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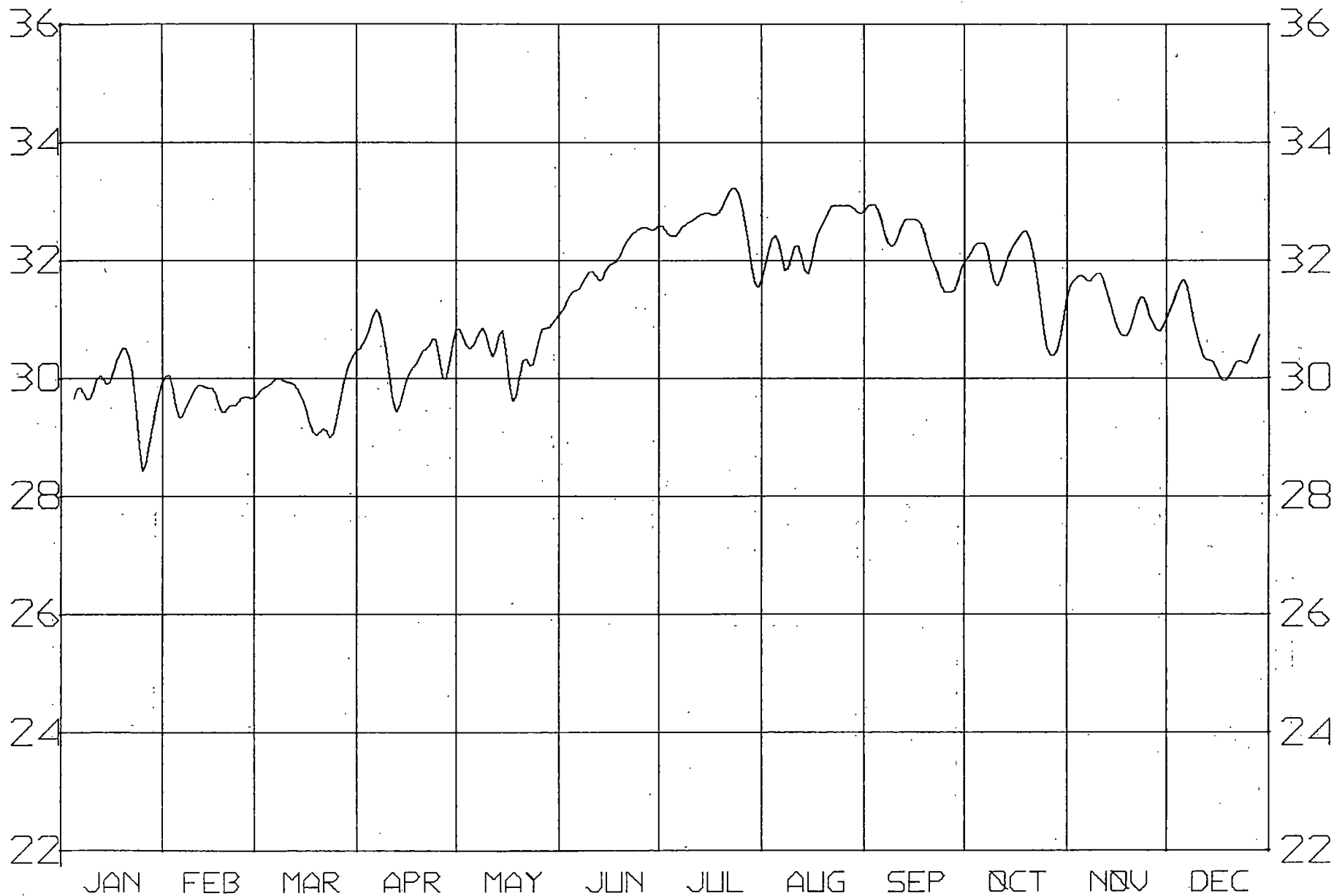
KAINS ISLAND

1970 TEMPERATURES



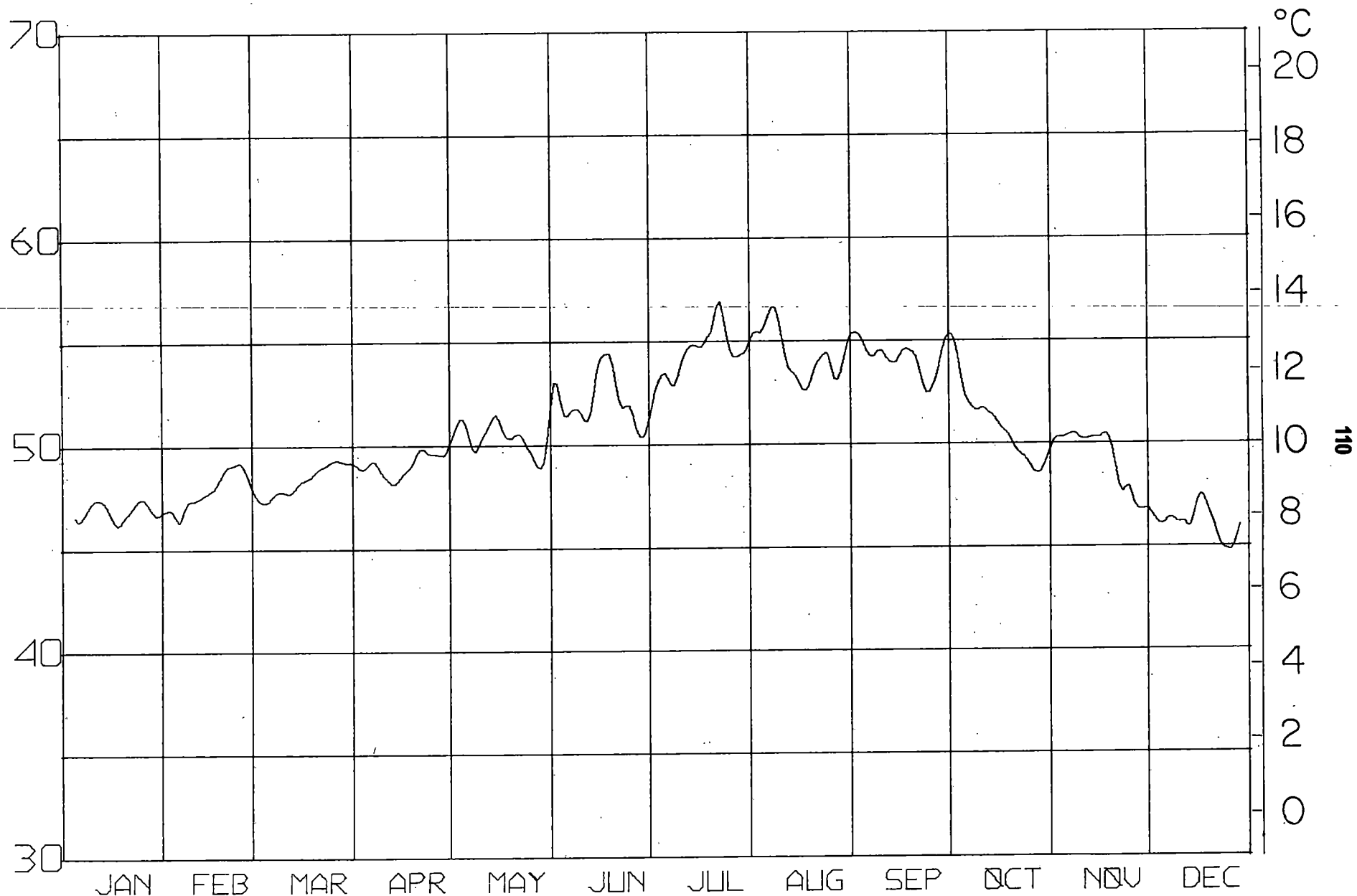
KAINS ISLAND

1970 SALINITIES



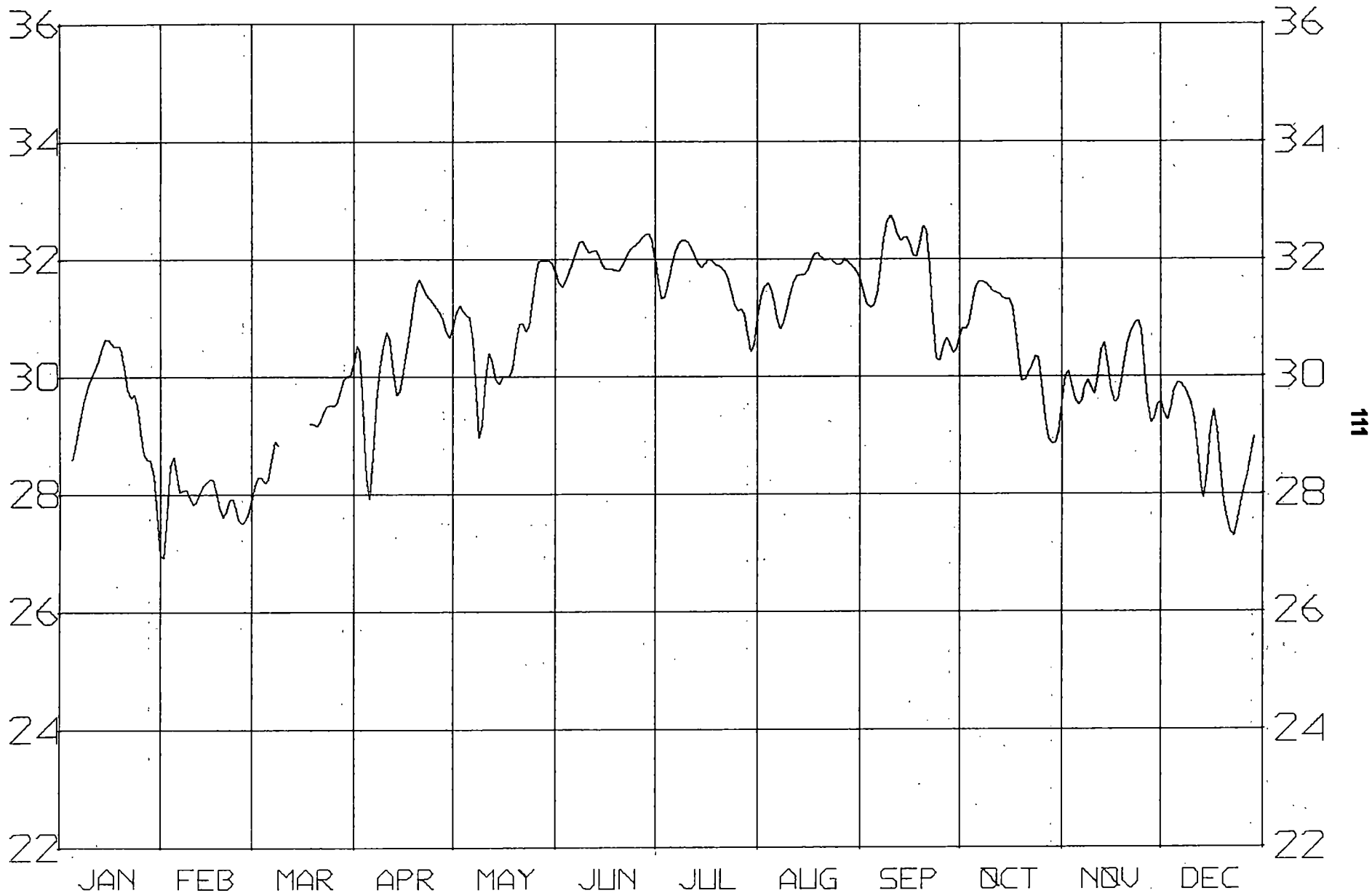
AMPHITRITE POINT

1970 TEMPERATURES



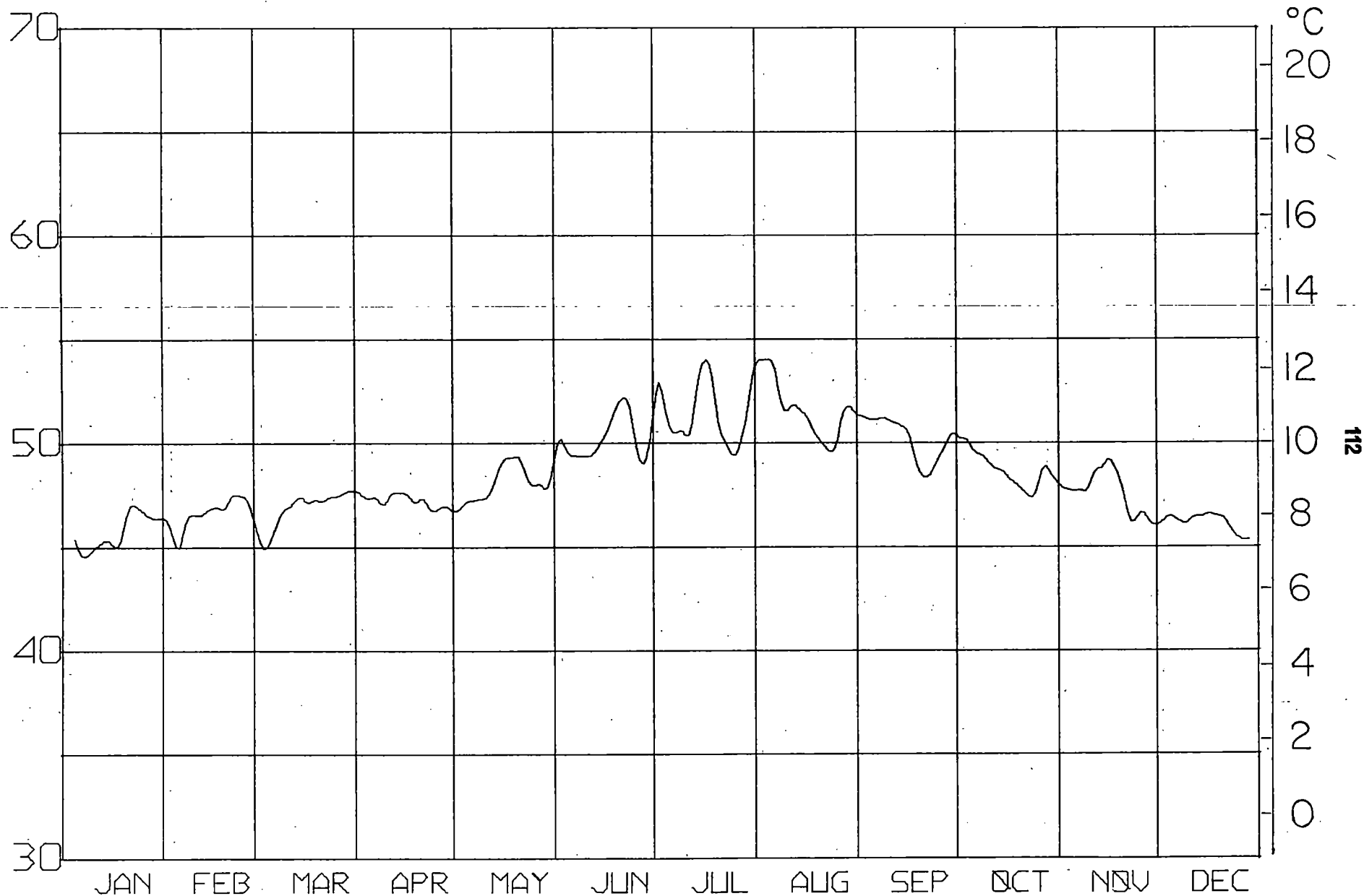
AMPHITRITE POINT

1970 SALINITIES



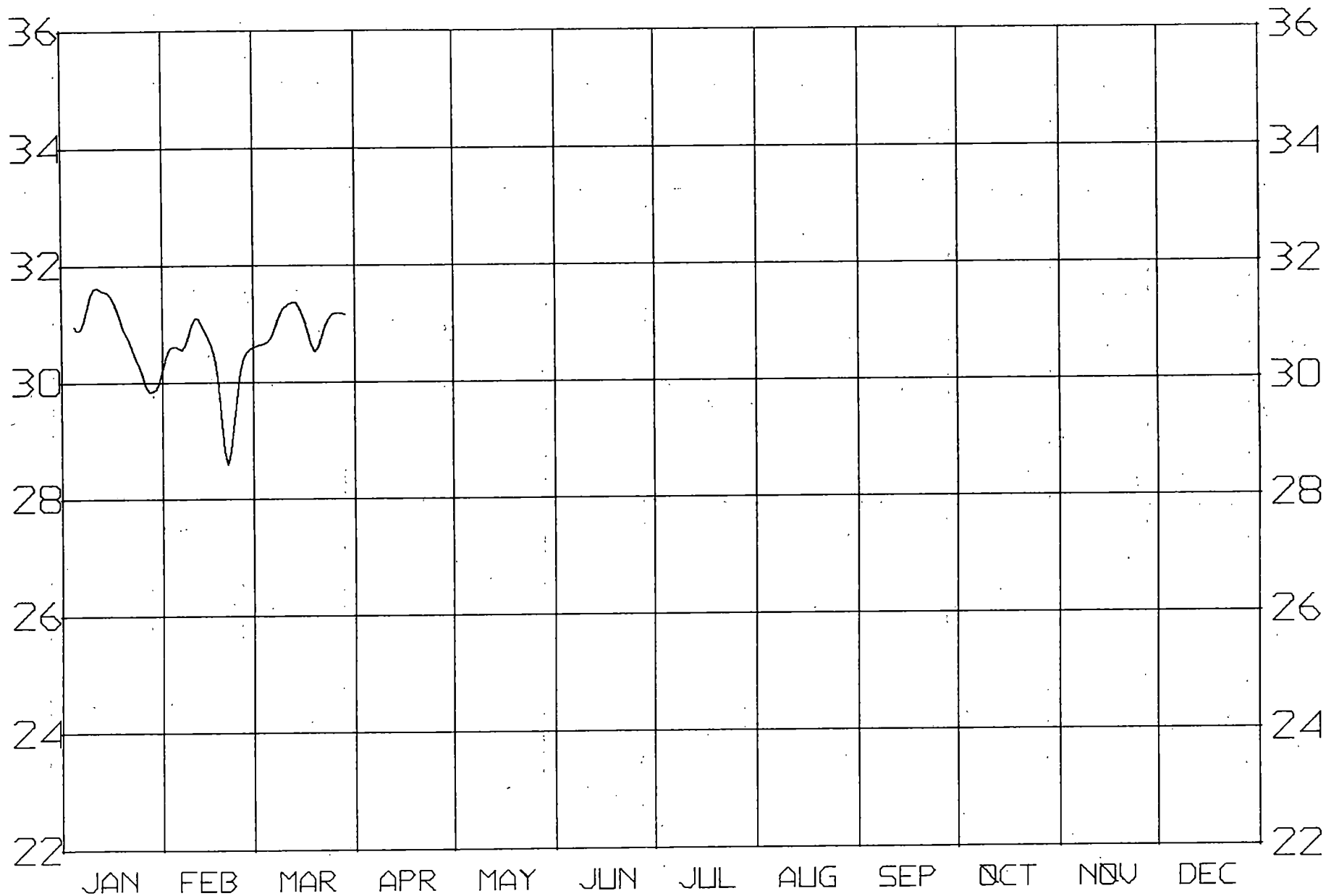
SHERINGHAM POINT

1970 TEMPERATURES



SHERINGHAM POINT

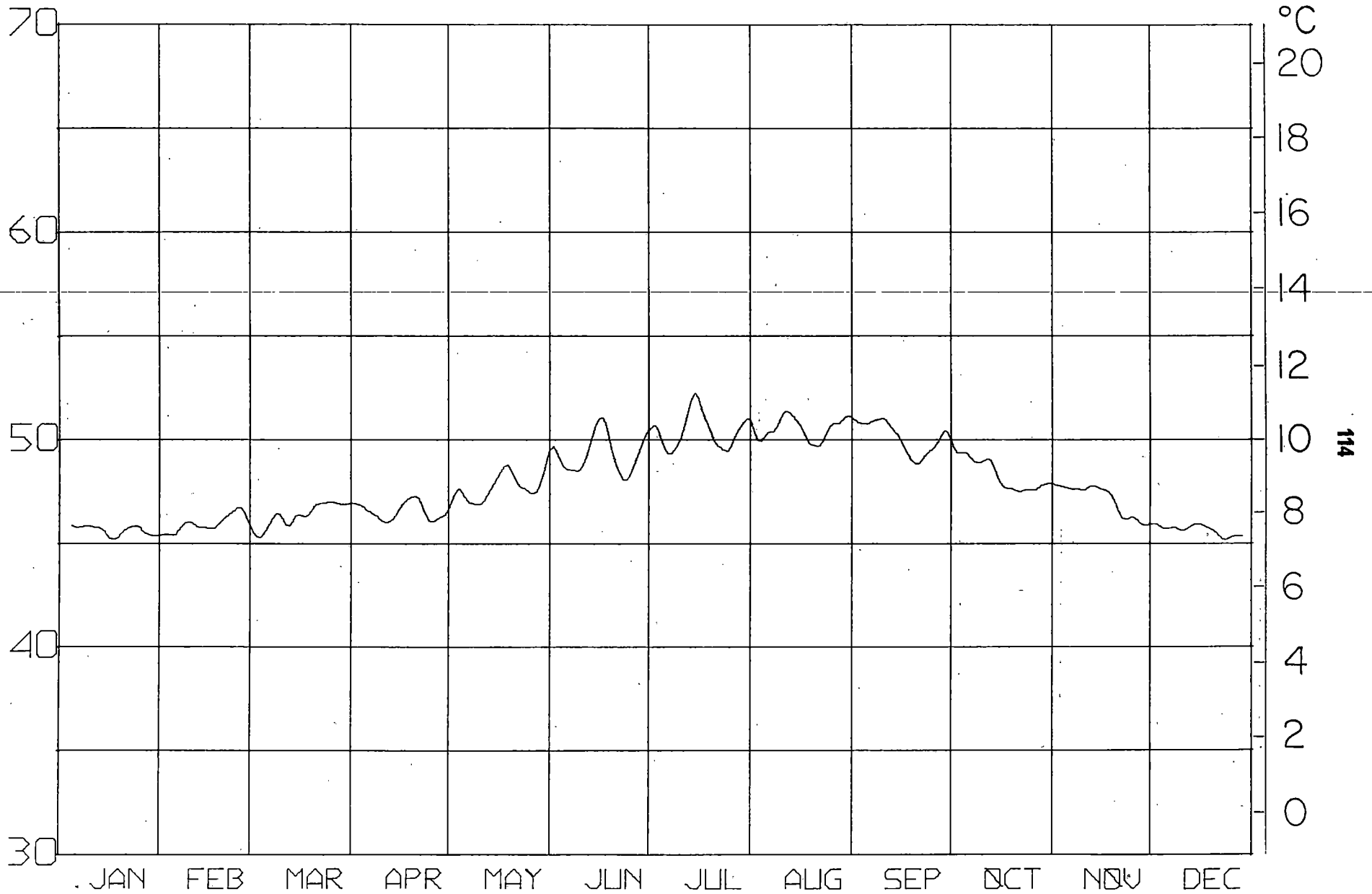
1970 SALINITIES



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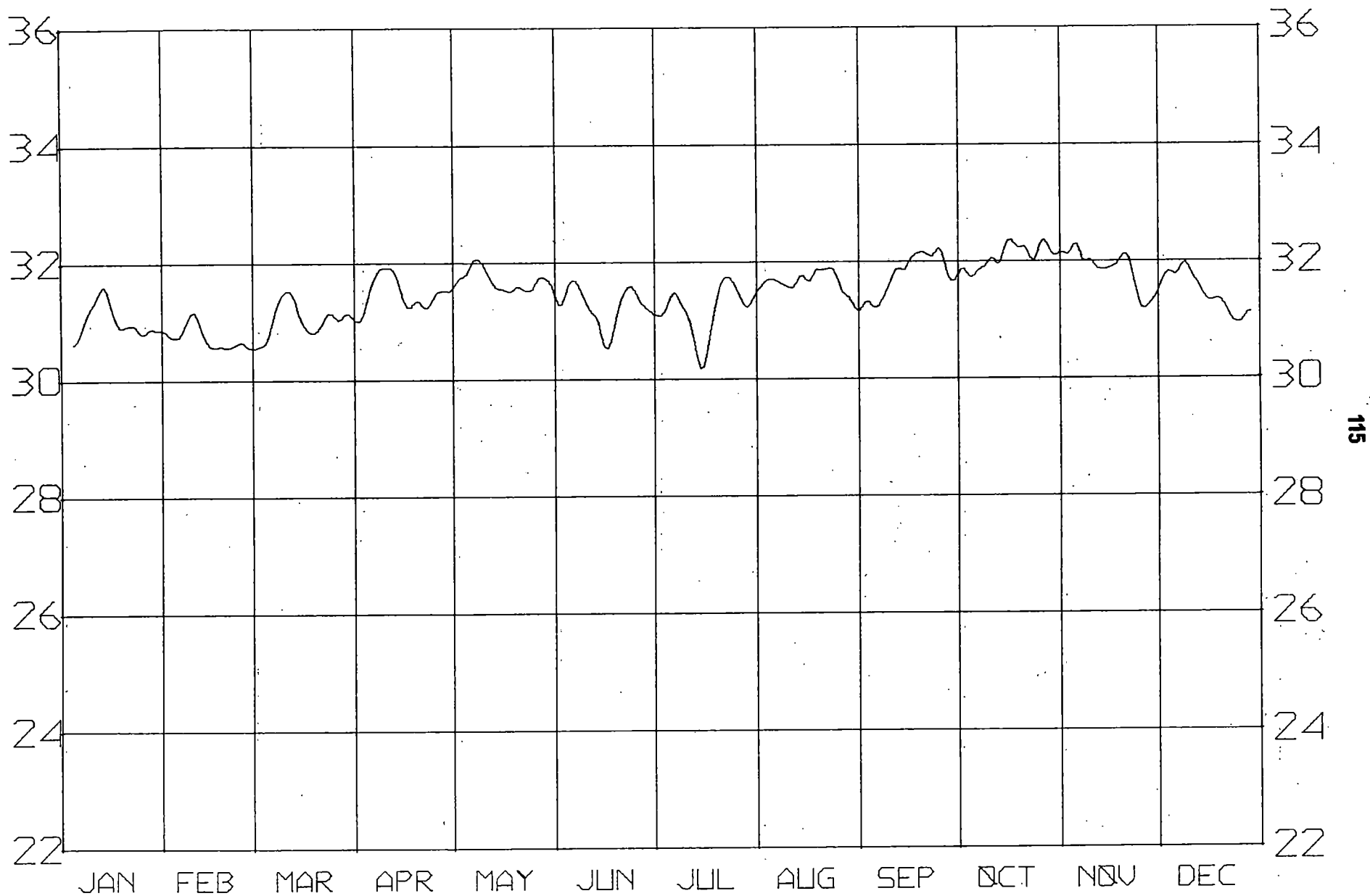
RACE ROCKS

1970 TEMPERATURES



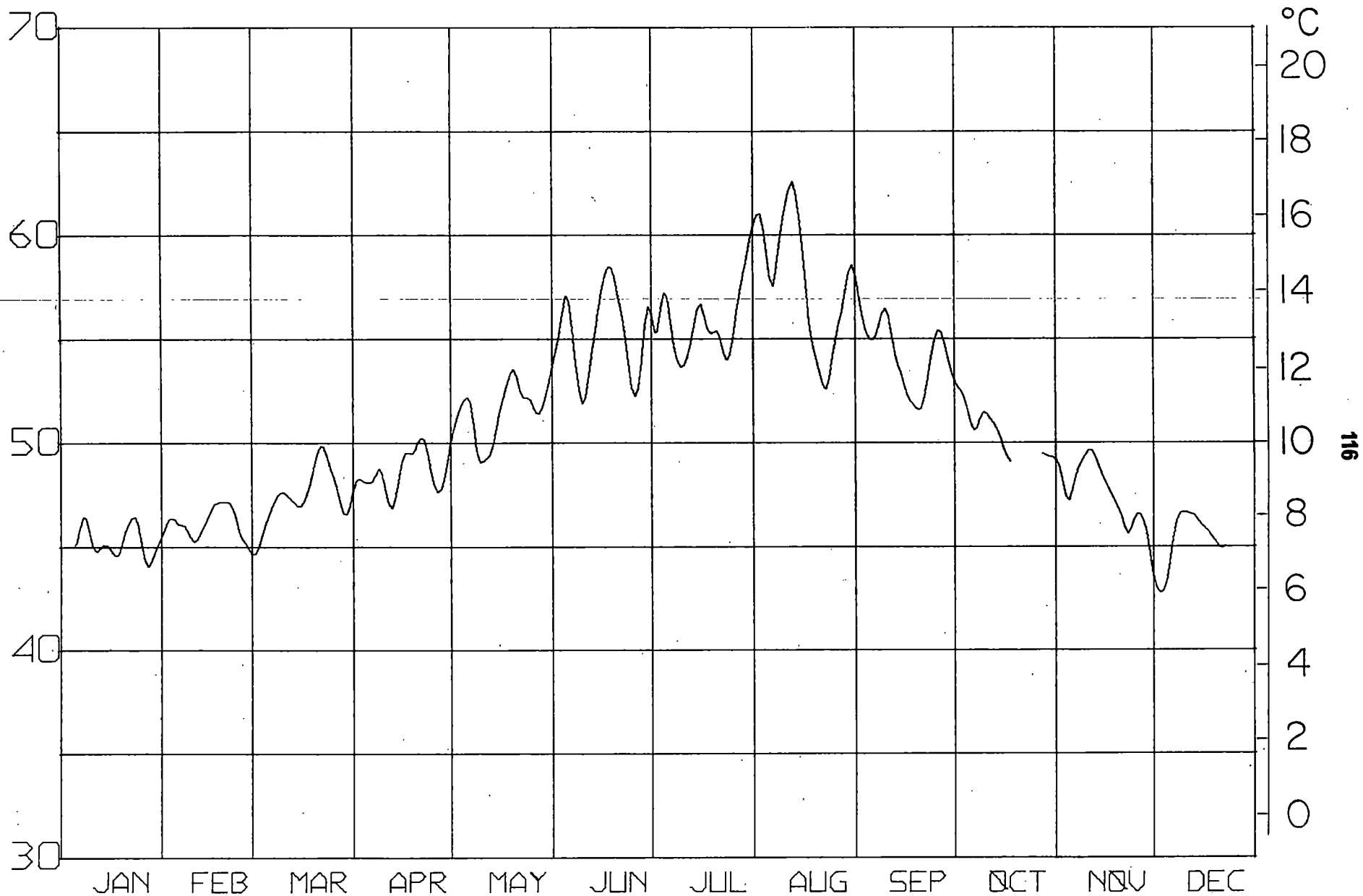
RACE ROCKS

1970 SALINITIES



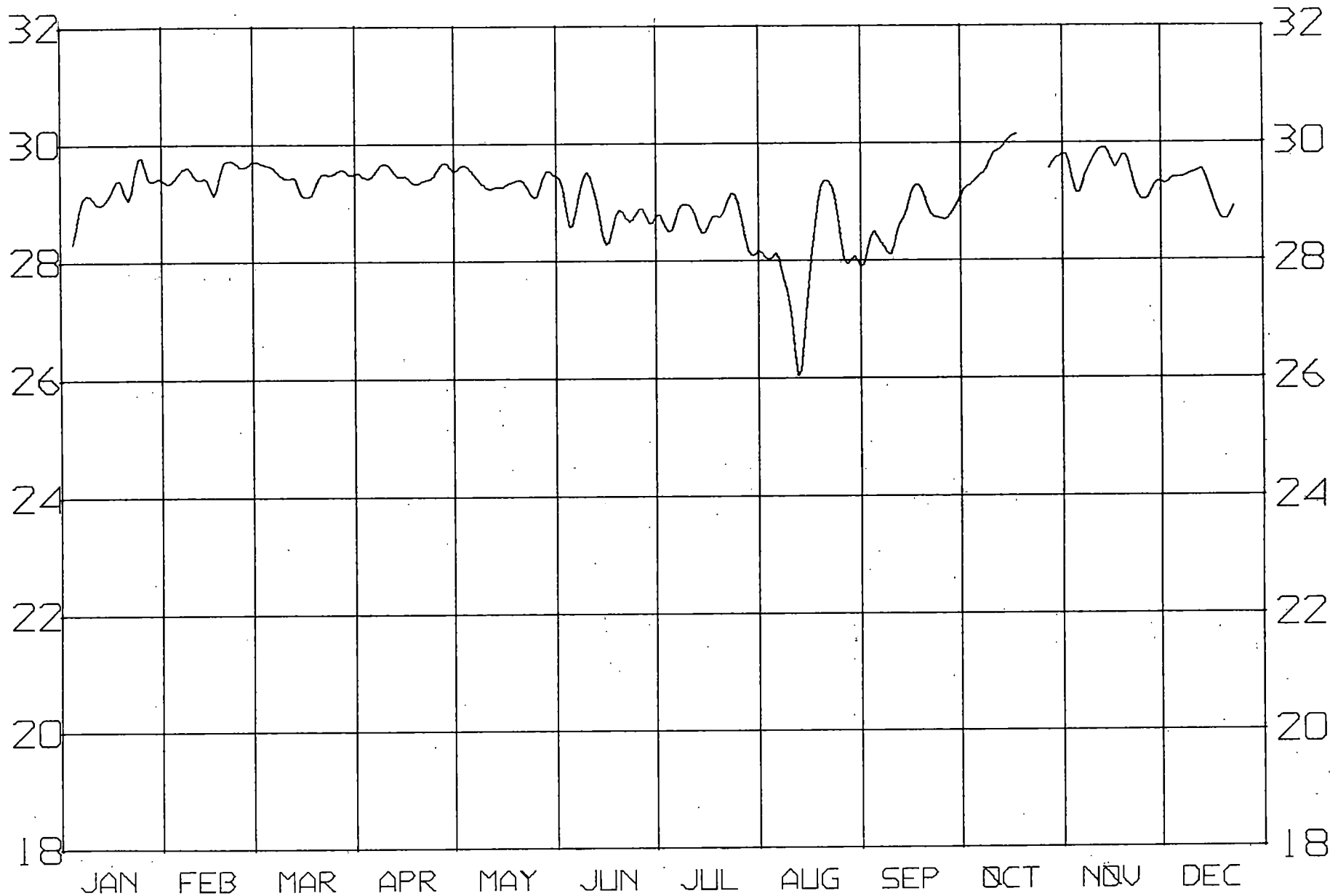
CAPE MUDGE

1970 TEMPERATURES



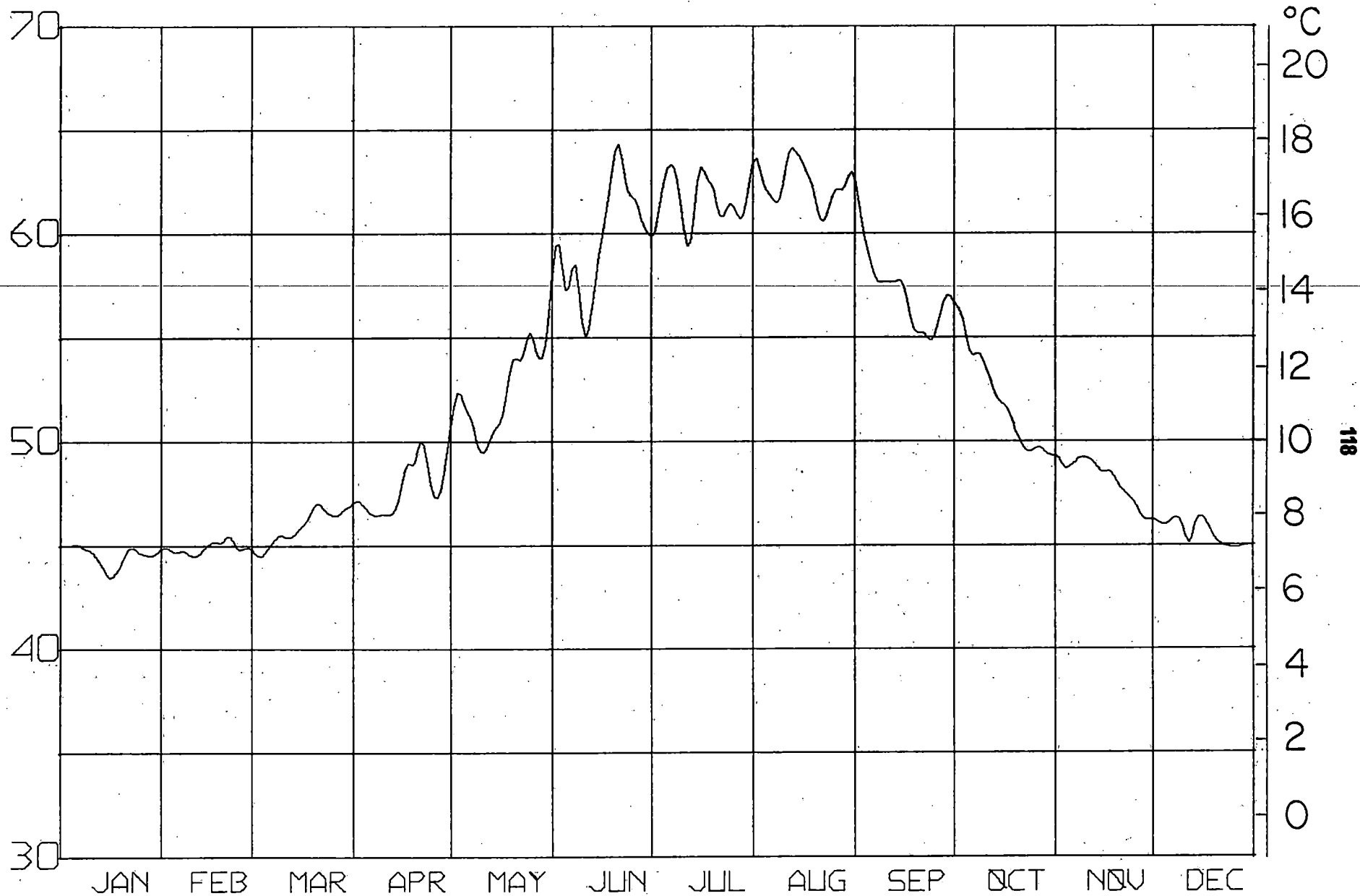
CAPE MUDGE

1970 SALINITIES



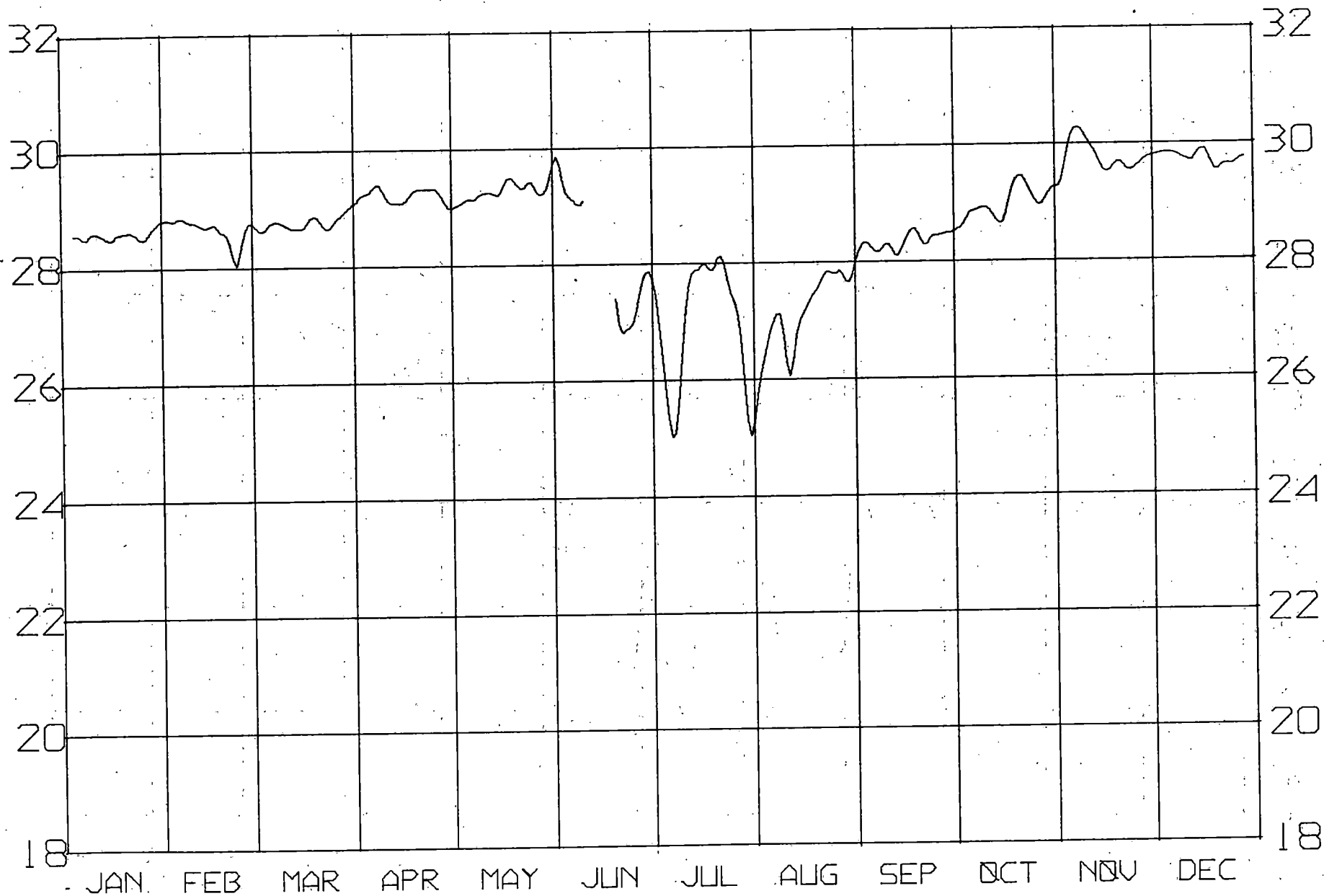
SISTERS ISLAND

1970 TEMPERATURES



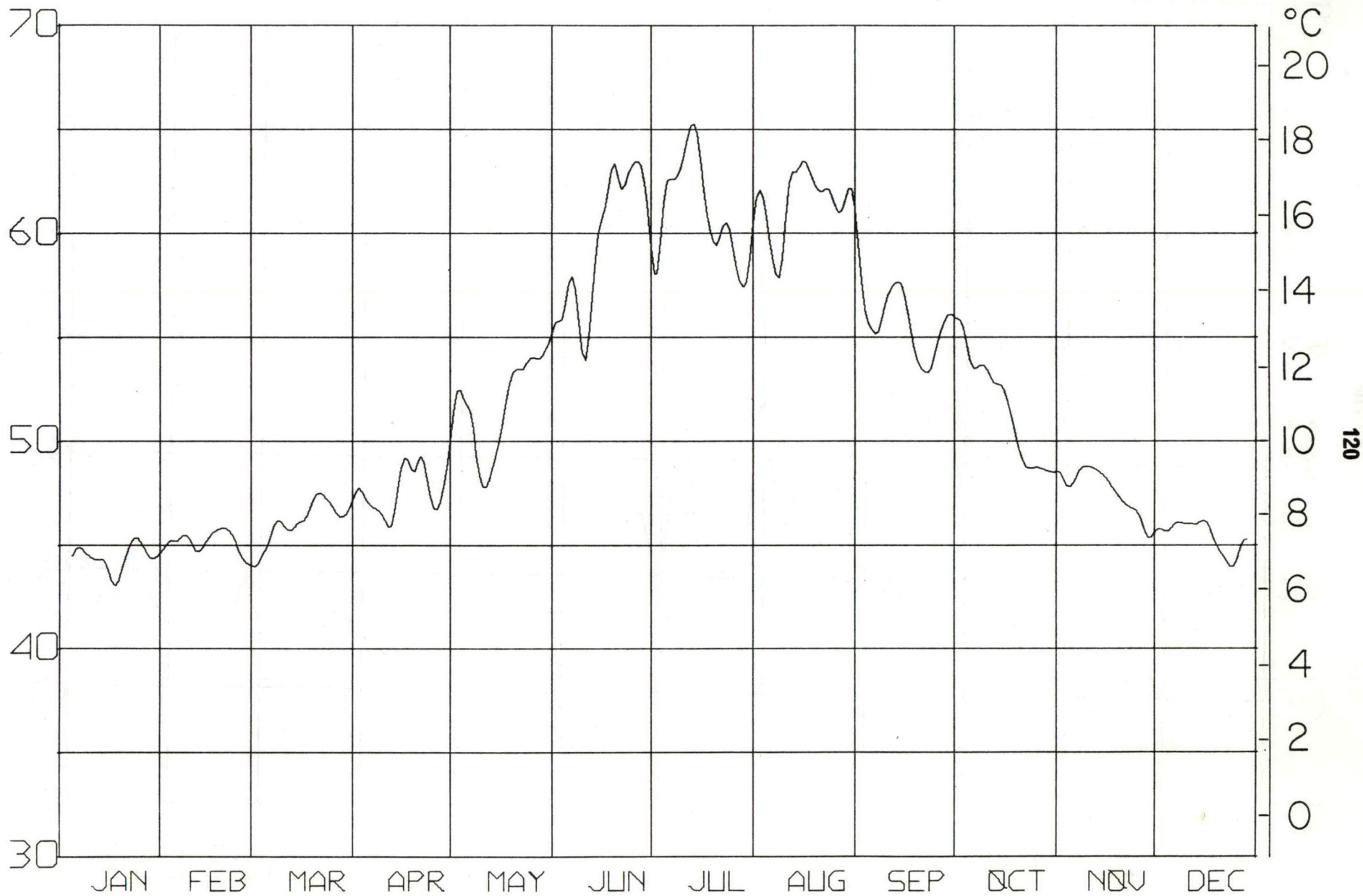
SISTERS ISLAND

1970 SALINITIES



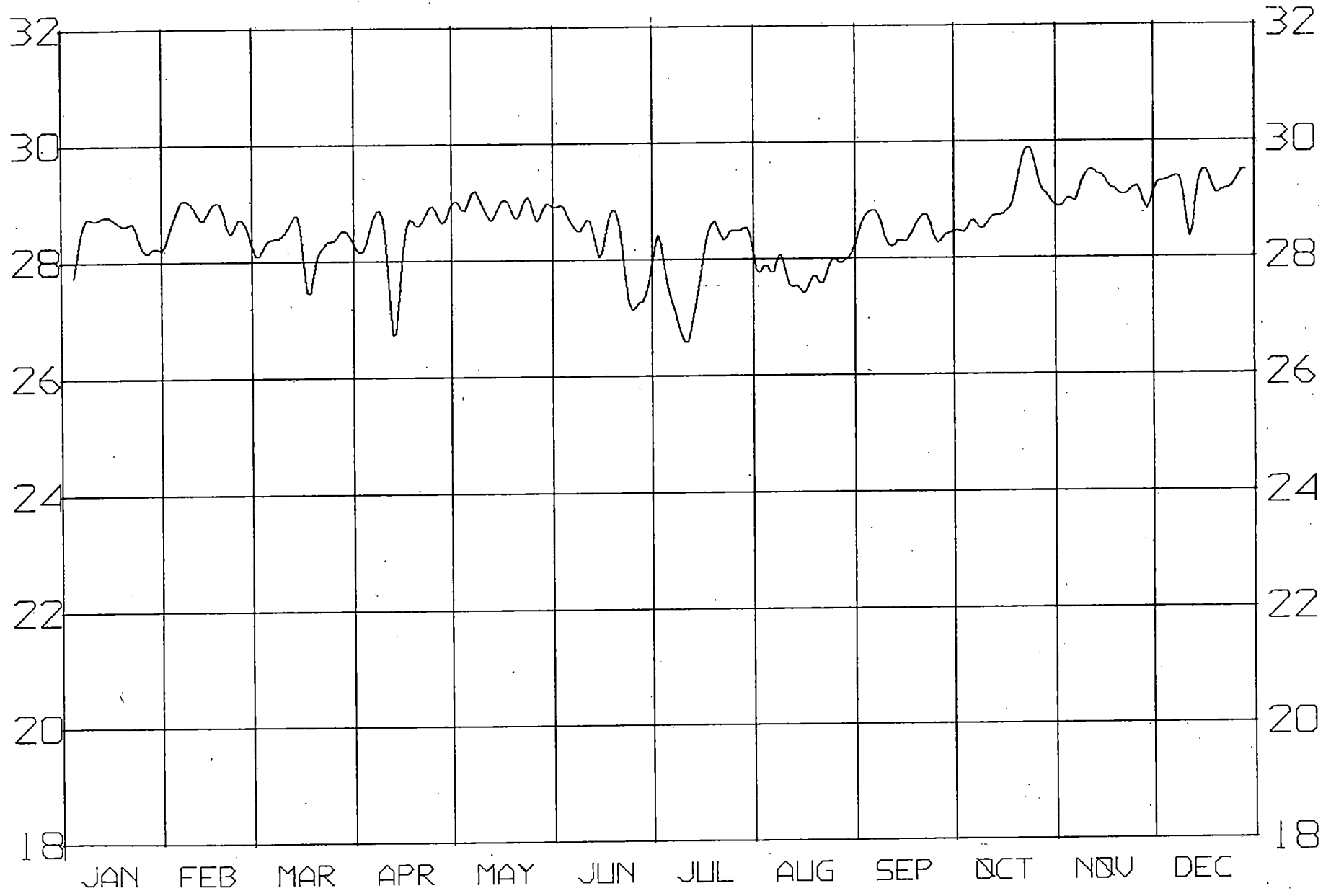
CHROME ISLAND

1970 TEMPERATURES



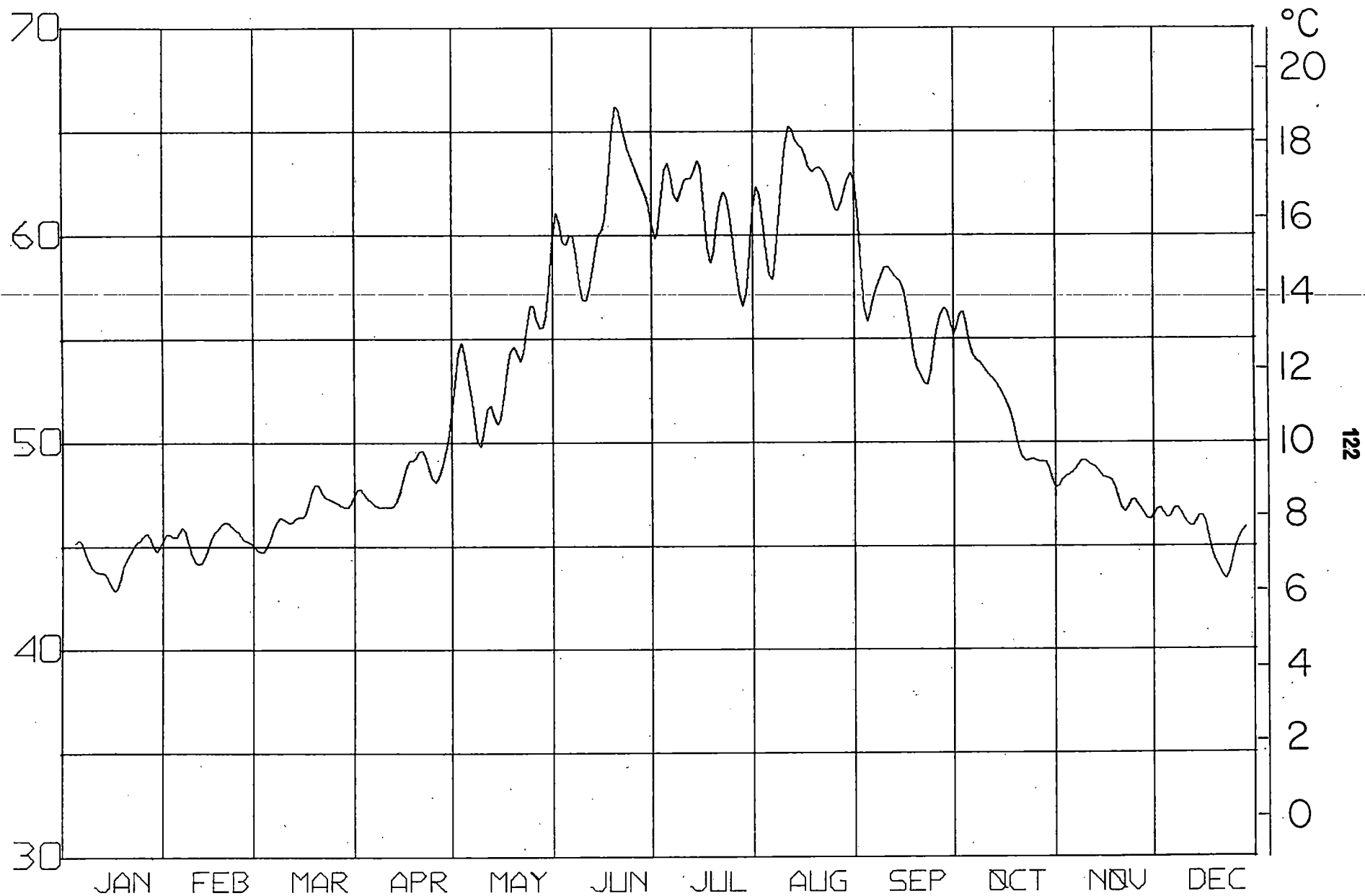
CHROME ISLAND

1970 SALINITIES



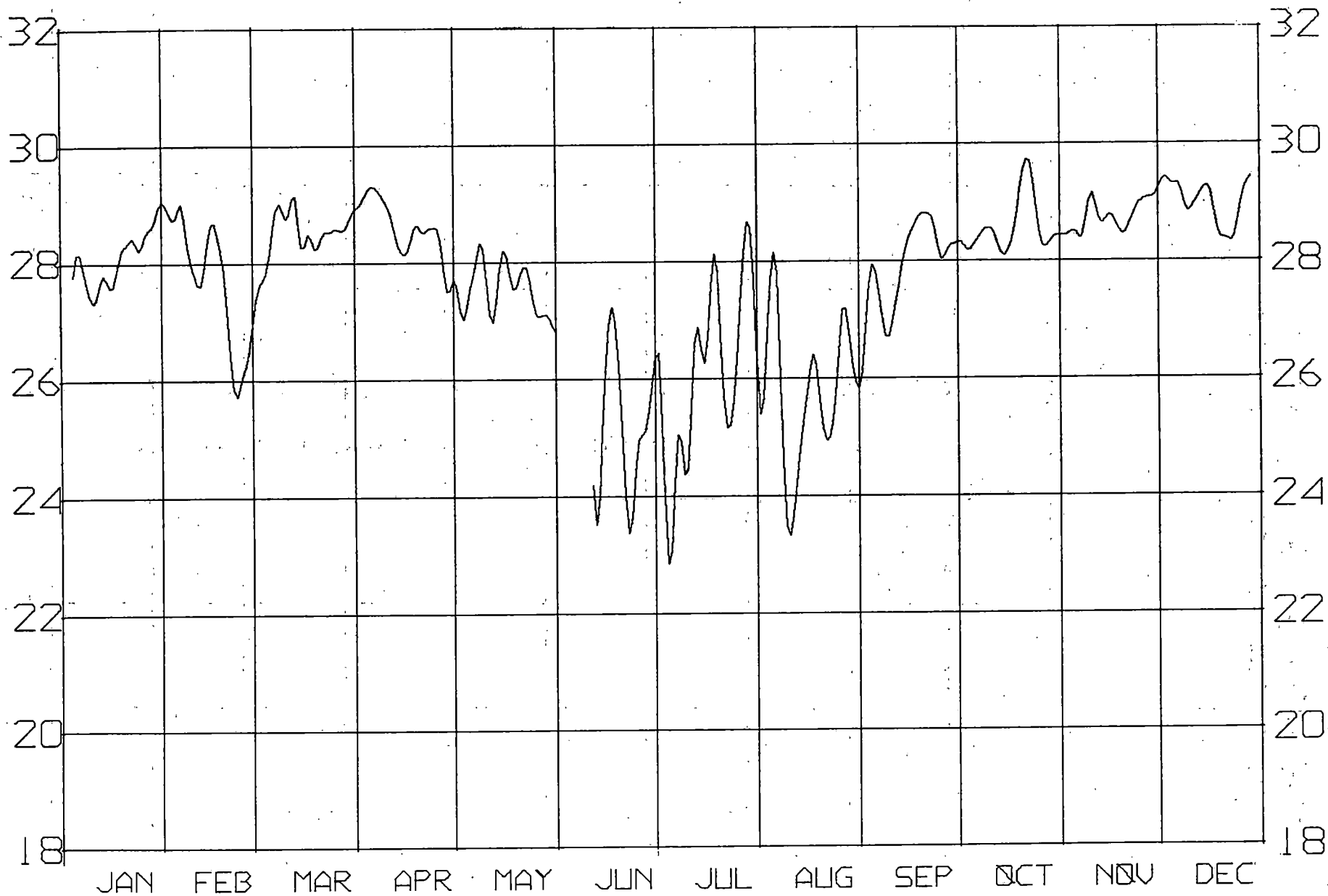
ENTRANCE ISLAND

1970 TEMPERATURES



ENTRANCE ISLAND

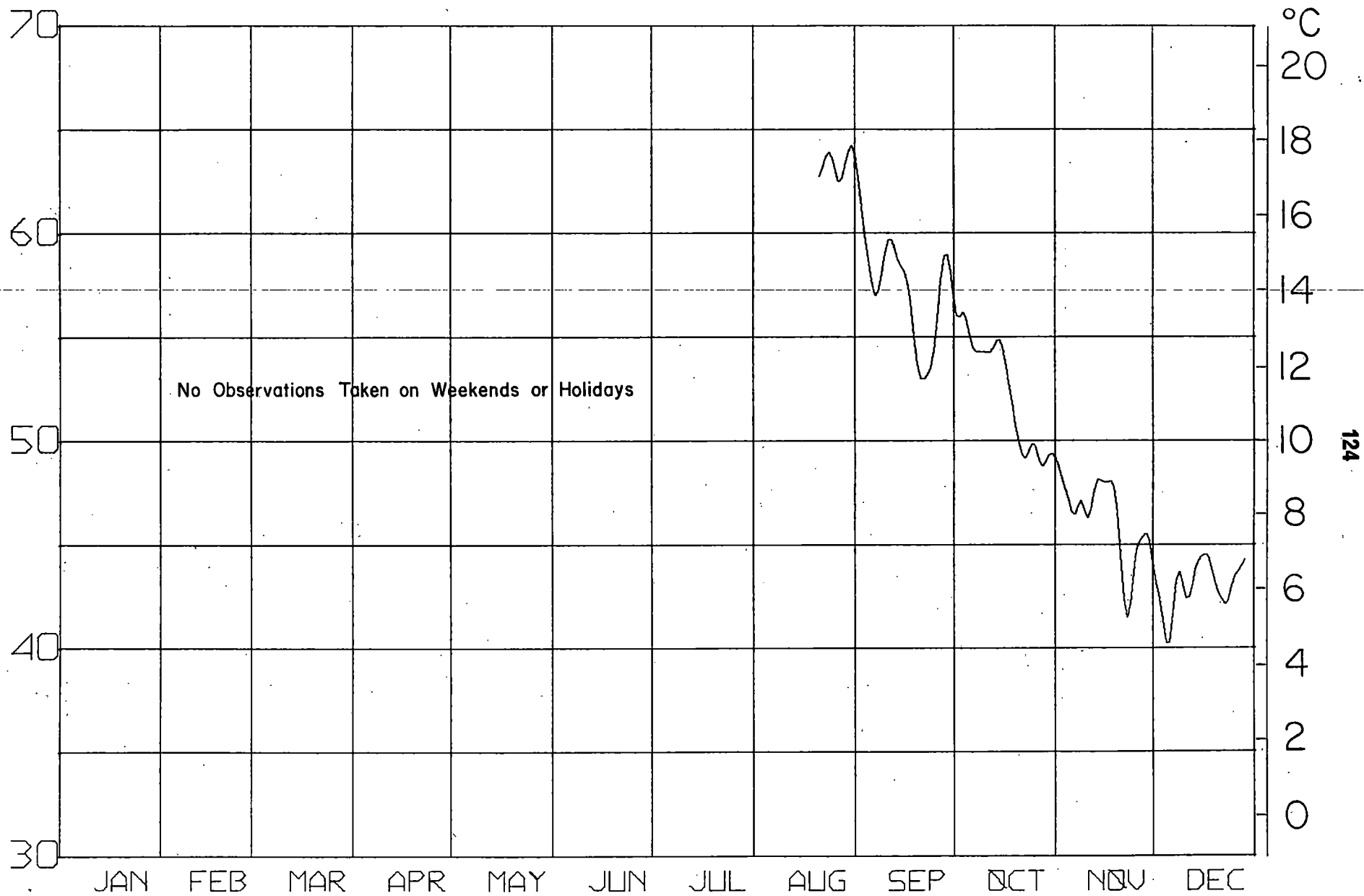
1970 SALINITIES



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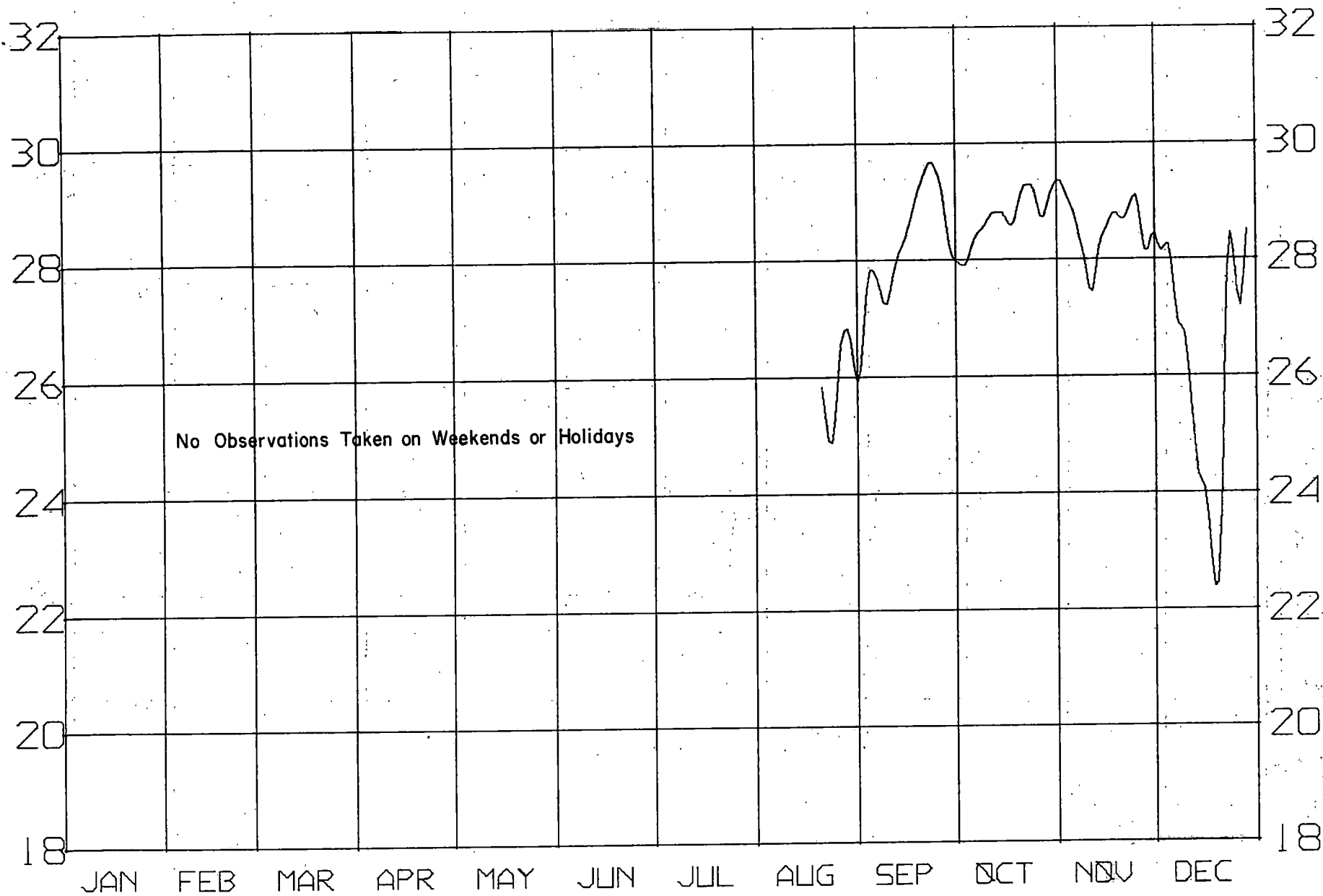
DEPARTURE BAY

1970 TEMPERATURES



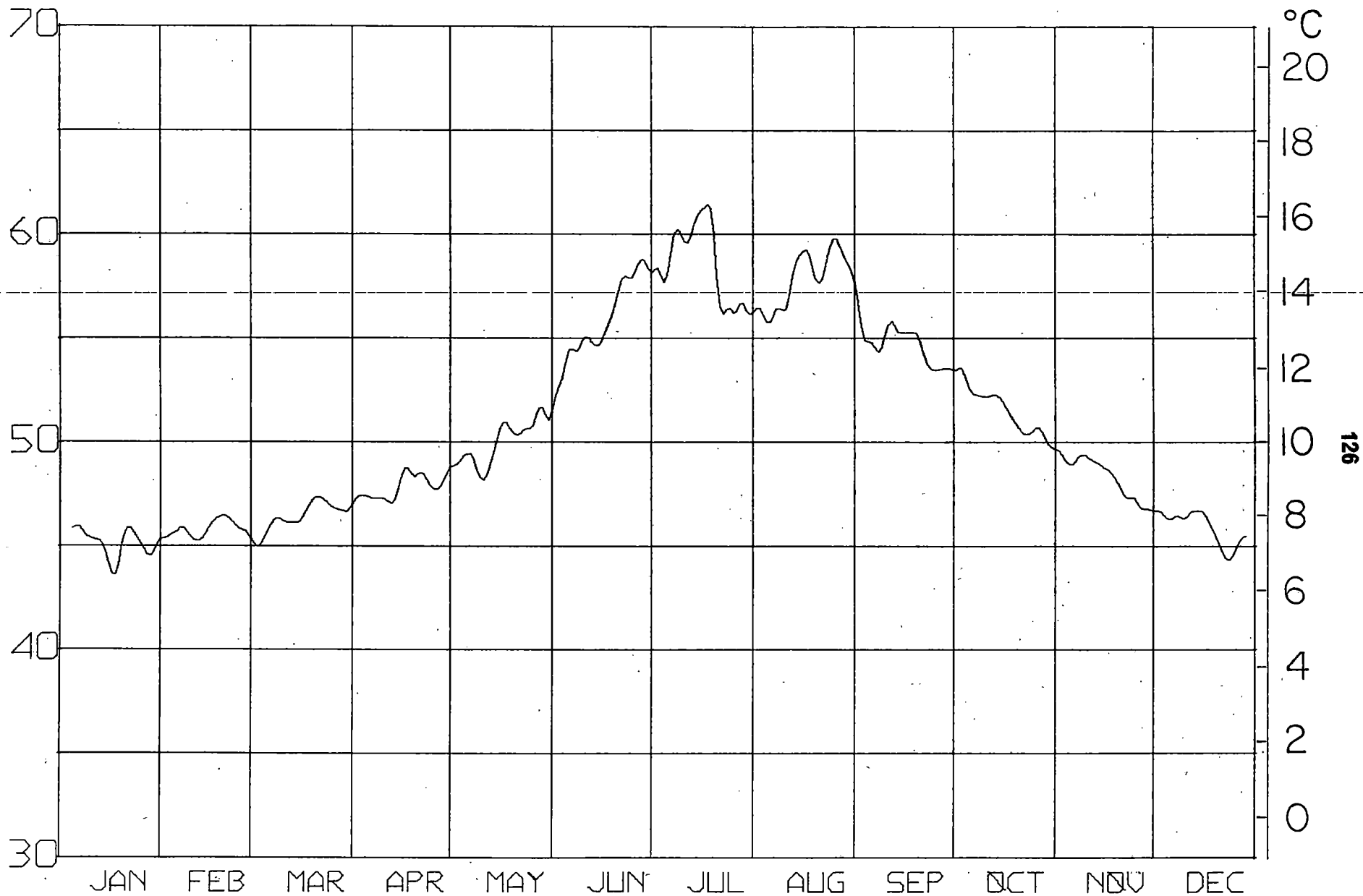
DEPARTURE BAY

1970 SALINITIES



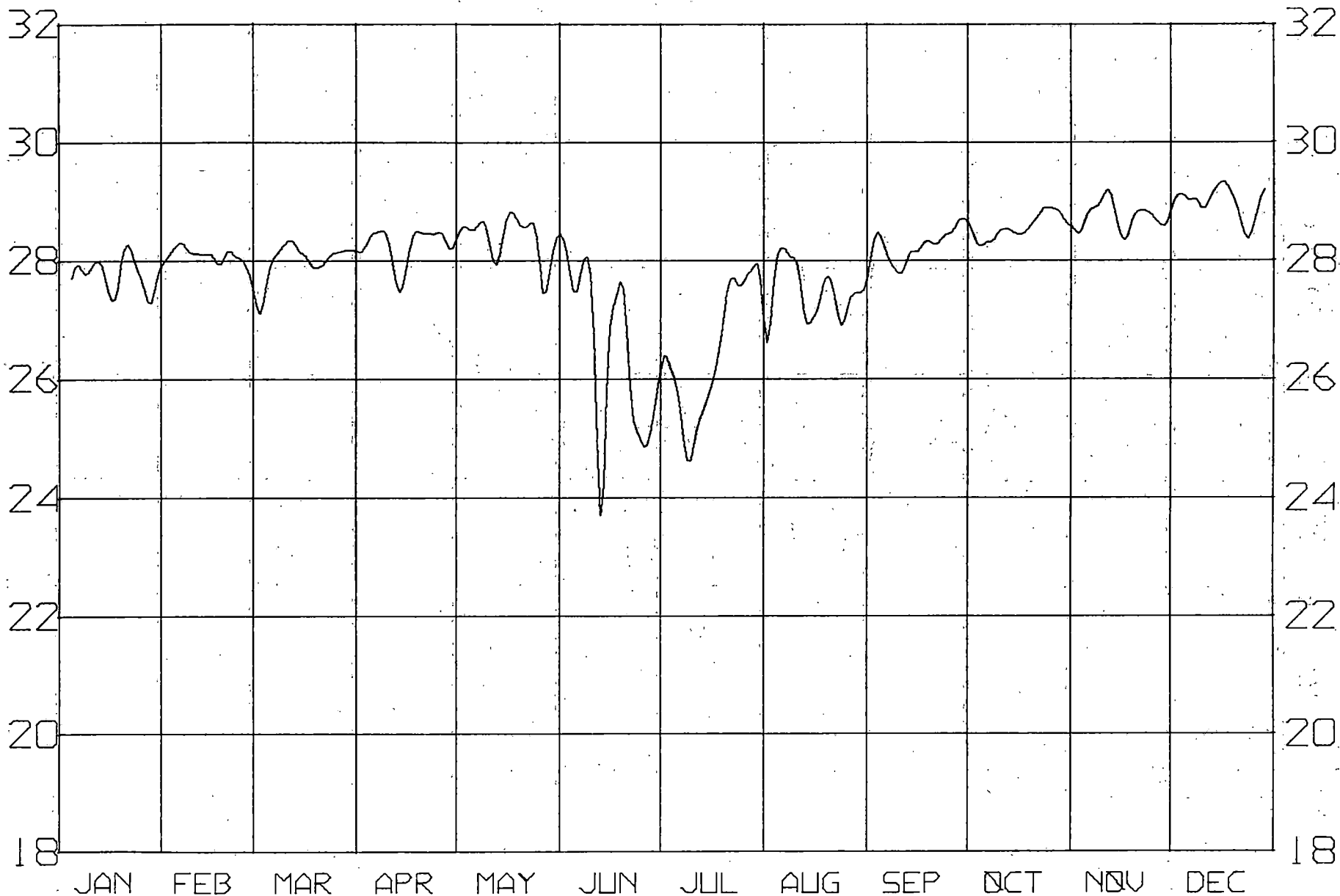
PORLIER PASS HW

1970 TEMPERATURES



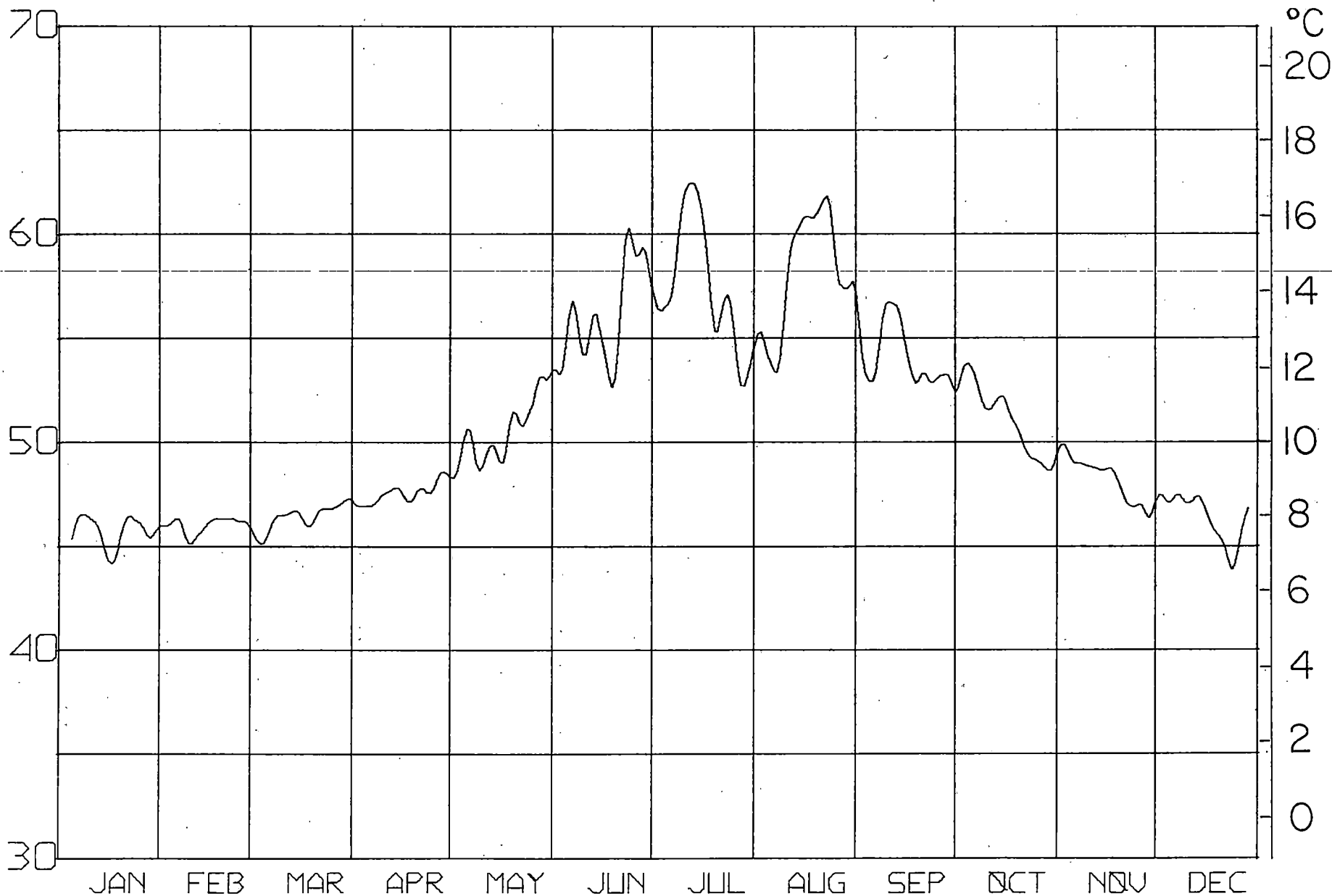
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1970 SALINITIES



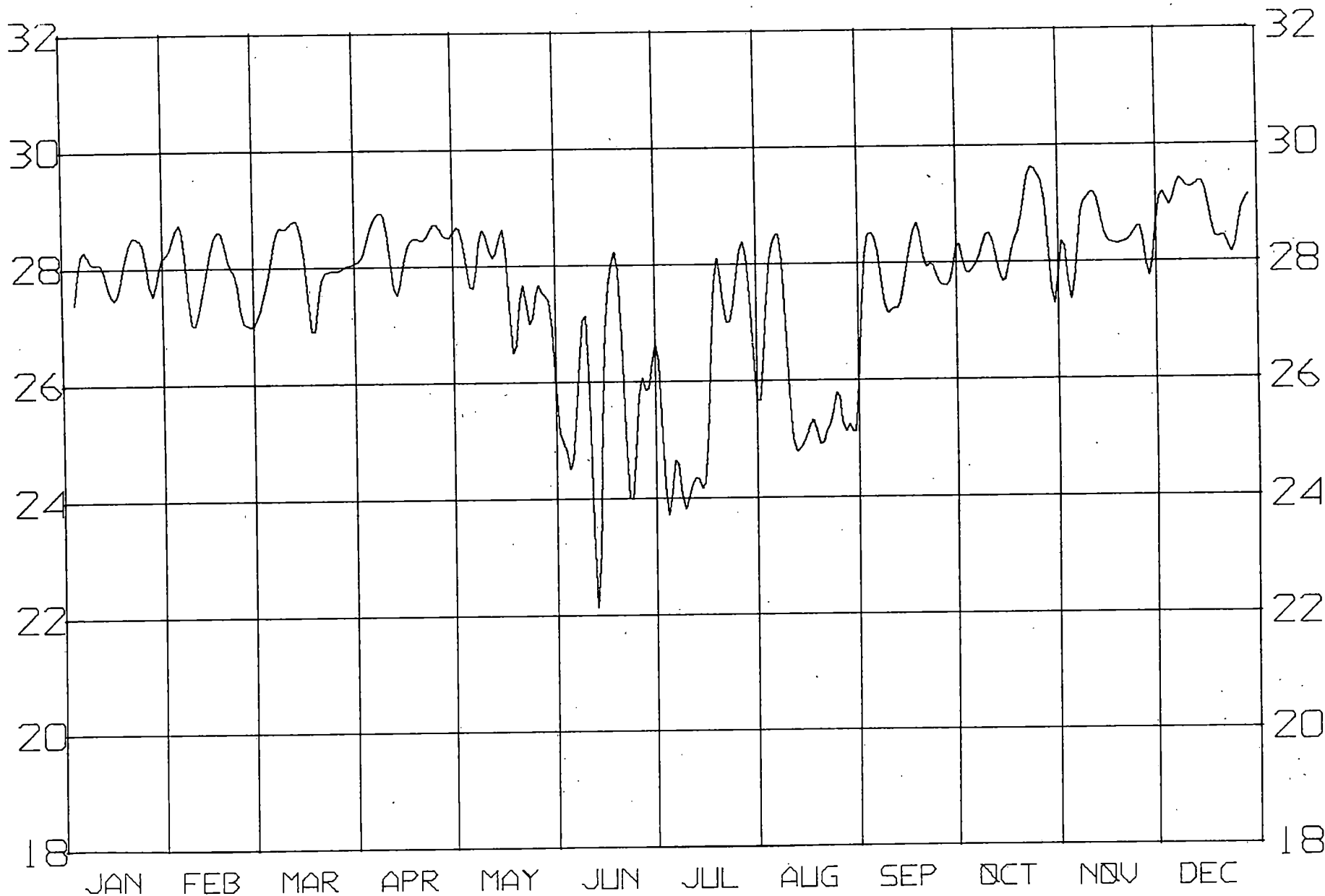
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1970 TEMPERATURES



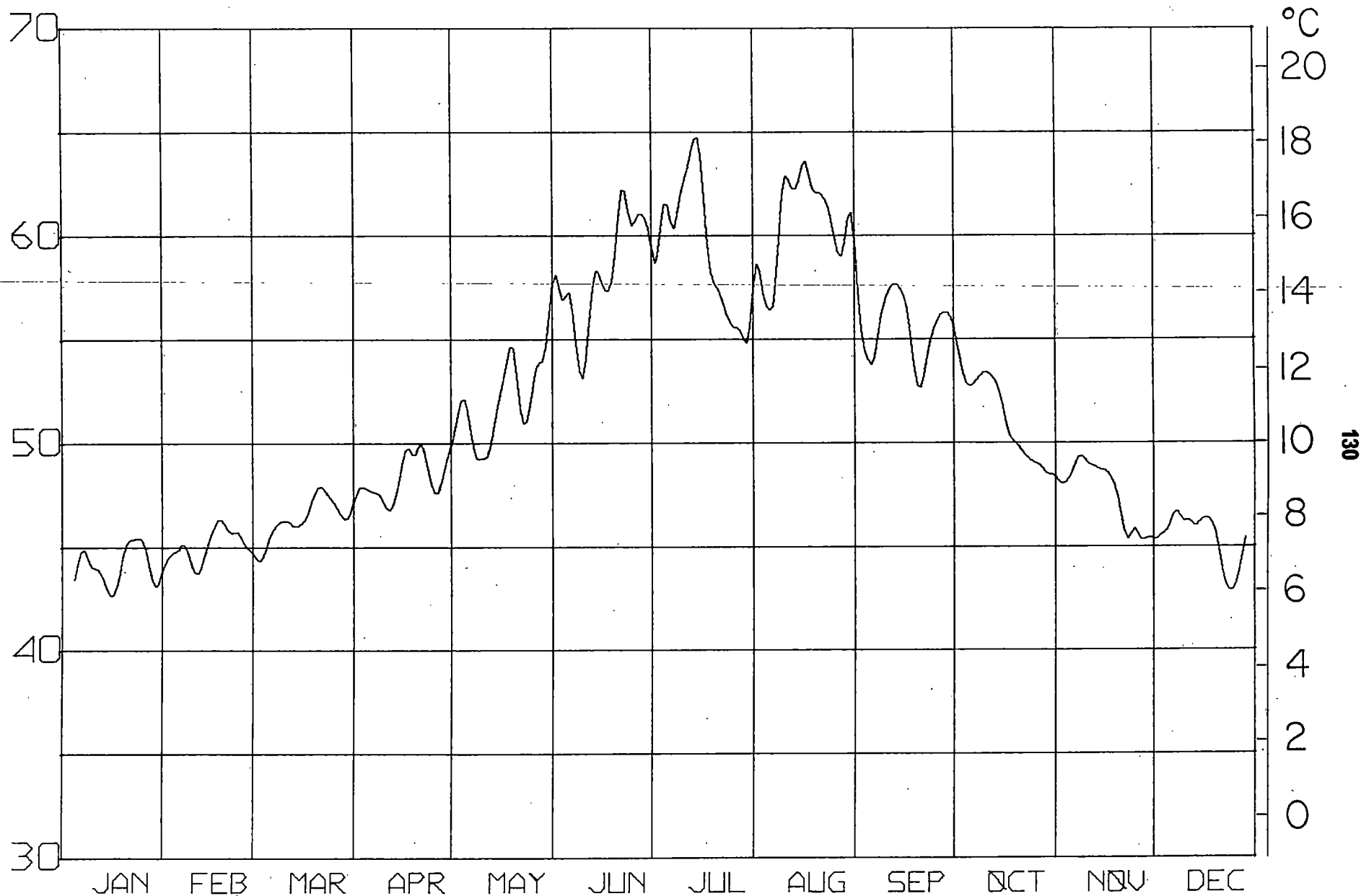
PORLIER PASS LW

1970 SALINITIES



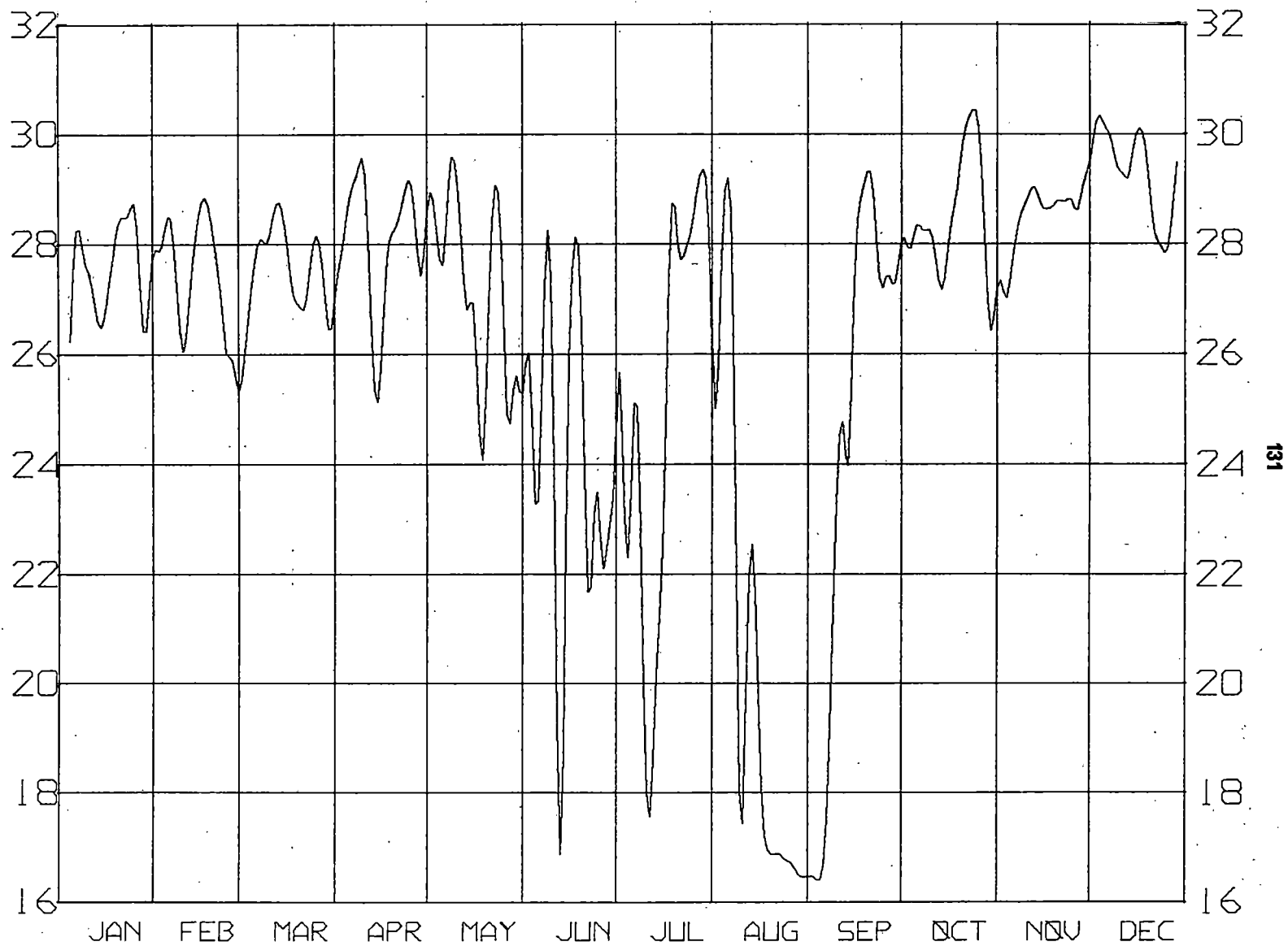
ACTIVE PASS HW

1970 TEMPERATURES



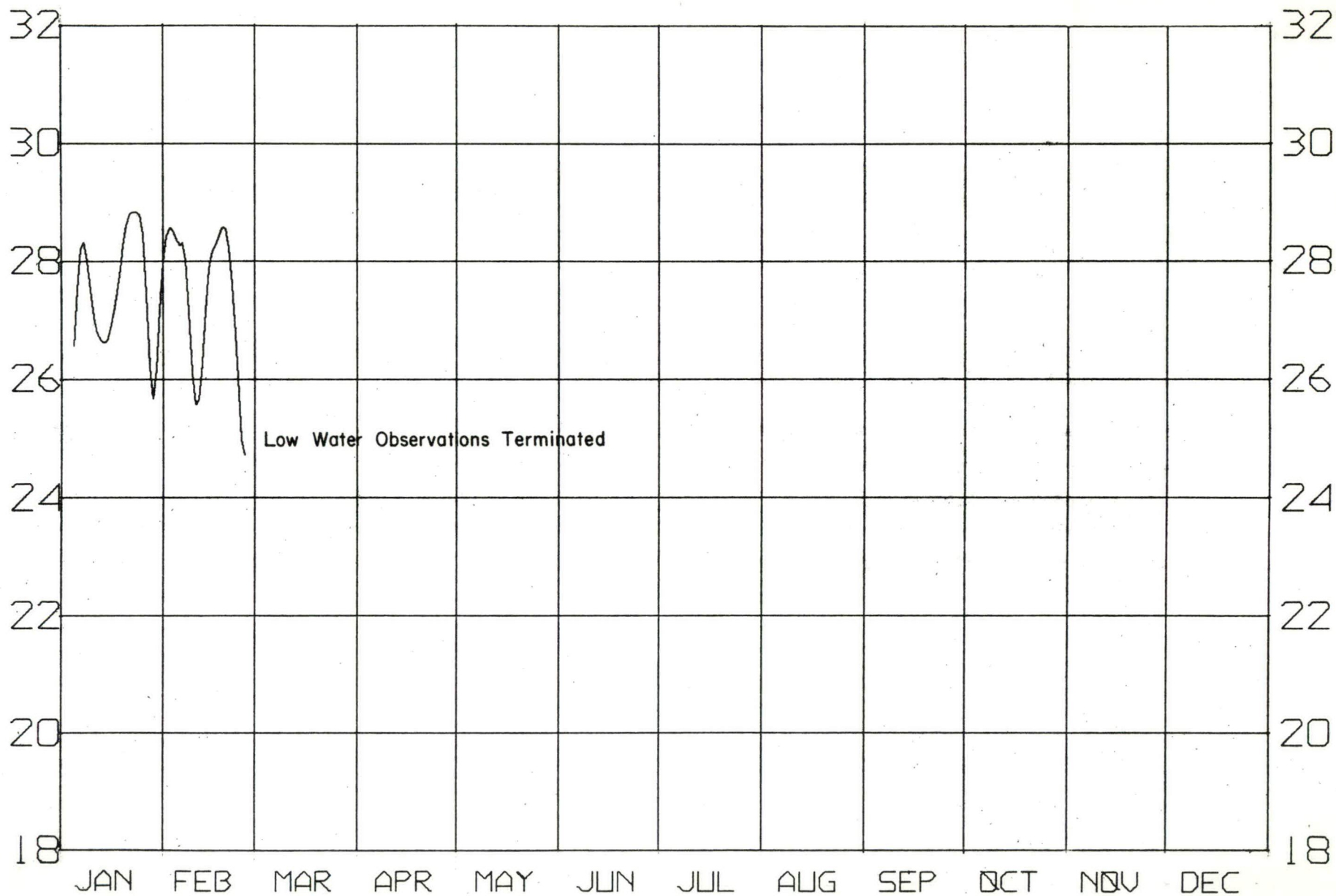
ACTIVE PASS HW

1970 SALINITIES



ACTIVE PASS LW

1970 SALINITIES





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