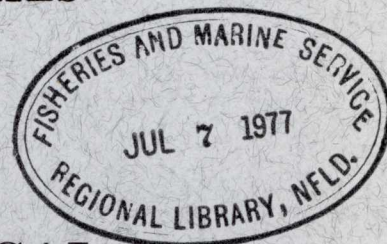


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# **FISHERIES RESEARCH BOARD OF CANADA**

**MANUSCRIPT REPORT SERIES**

No. 1415



## **PHYSICAL AND CHEMICAL OCEANOGRAPHIC DATA FROM QUATSINO SOUND – NEROUTSOS INLET (1973-1976)**

by

**J.C. Davis, I.G. Shand and G. Christie**

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

**January 1977**

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## INTRODUCTION

These surveys in the Quatsino Sound-Neroutsos Inlet area were conducted as a result of Department of Environment concern over the water quality in the area as influenced by the ammonia-base sulfite pulp mill operated by Rayonier Canada Ltd. at Port Alice, British Columbia. Early surveys of Neroutsos Inlet (Hutchinson & Lucas, MS, 1927) found no apparent changes in water chemical characteristics or plankton populations following ten years of waste disposal into Neroutsos Inlet by the mill. Waldichuk (1958) however, noticed surface oxygen depletion in the waters of Neroutsos Inlet and conducted further surveys (Waldichuk et al, 1968) over a nine year period to document the deterioration of water quality in the area as mill production increased. The studies herein constitute a continuance of the surveys done by Waldichuk et al.(1968), and hopefully will form some of the basis for evaluating pollution abatement facilities currently being installed at the Port Alice mill.

### Station Locations and Sampling Periods

Several surveys are described herein as follows:

- 1) During May 3-4, 1973, a repeat of Stations Q1, 2, 3, 4, 5, 15, 16, 17, 18, 19 and 20 as described by Waldichuk et al.(1968). These stations were done without allowing for the state of the tide, hence some samples were taken on rising tides and others on slack water or falling tides. During this series salinity was not accurately determined and is not reported here. This section appears on pages 8 to 16. Stations positions are shown in Fig. 1.
- 2) A time series of vertical bottle casts conducted adjacent to Bucholz Rock at the mouth of Neroutsos Inlet July 24 and 25, 1973. Vertical bottle casts were obtained at that location at intervals of approximately 2 - 3 hours during a

24-hour period. Salinity data from that series are approximate only, as they were determined by hydrometer. The data appear on pages 17 to 23. Station positions are shown in Fig. 2.

- 3) Introduction of a new sampling station series in July 29 - 31, 1975 in which the original series of eleven stations used by Waldichuk et al. (1968) was increased to 22 stations. New stations were added on either side of the mid-channel station at Q2, Q15, Q16, Q17, Q18 and Q19 while Q6 was established in Bucholz Channel south of Drake Island (Figs. 3, 4). The objective of this expanded series was to gain information on physical and chemical characteristics which might vary across the inlet as well as up and down the inlet. All sampling in the expanded series was done during ebb tide periods. Results of this survey are documented on pages 28 to 38.
- 4) A repeat of the expanded series as described in (3) on November 25 - 26, 1975 (pages 39 to 53). Station positions are shown in Figs. 5 and 6.
- 5) A repeat of the expanded series on January 13 - 14, 1976 (pages 55 to 70, Figs. 7, 8).
- 6) A repeat of the expanded series on June 8 - 9, 1976 (pages 71 to 84. Figs. 9,10).

In all cruises, the chronological order in which individual stations were done is retained in the text. In some cases, it was not possible to sample starting at one end of the station series and proceed to the other end. Some stations had to be done at a later period when weather conditions permitted.

#### Station Procedure and Methods of Observation

Sampling was carried out from the CFAV LAYMORE on all but one occasion when the CSS VECTOR was used. In all cases, station position was fixed by radar by

ship's personnel. Positions reported herein are those occupied by the ship at the time of sampling (dropping of the messenger) and may differ slightly from cruise to cruise owing to drift, etc. At each station, some maneuvering was often necessary to hold position and maintain a wire angle as near vertical as possible.

Water samples were taken with Nansen bottles at depths ranging from the surface (bottle just immersed prior to tripping) to a maximum depth of 150 m. The usual series of depths sampled was 0, 2, 4, 6, 10, 15, 20, 30, 50, 80, 100, 120 and 150 meters (depth of water permitting) in the expanded station series. Station procedure consisted of positioning the vessel, lowering the Nansen bottle series, determining water temperature at depth from pairs of reversing thermometers mounted on the bottles, making a BT cast, taking a Secchi disc reading (daylight only) and collecting water samples for salinity, dissolved oxygen, and in some cases, pH determination. Meteorological data, sea state and depth to bottom were recorded by the officer of the watch.

### Presentation of Results

Results of the surveys are summarized in the following pages using this format:

#### a) Heading of Tables

Station: Prefixed "Q" for the Quatsino - Neroutsos series and followed by the station number as indicated on the station location diagrams. A station designated "A" or "C" is located on either side of a mid-channel station designated "B". The Bucholtz Rock series is designated "BR".

Latitude and Longitude: Position of the ship in degrees and minutes as determined by a radar fix at the time the messenger was dropped to trip the Nansen bottles.

Time: The time of day in Pacific Standard Time when the messenger was dropped.

Date: Given as day, month and year.

Depth: Approximate depth under the ship's keel at the time of sampling, as determined by the bridge echosounder readout (given in fathoms for chart reference).

Temp: Air temperature given as: D - dry-bulb thermometer reading on ship's bridge, degrees Celsius: W - wet-bulb thermometer on ship's bridge, degrees Celsius.

BT Serial # and BT Slide #: The serial number of the baythermograph and slide number. The slides are not reproduced herein, but are kept on file at the Pacific Environment Institute.

Weather: Given as general word description.

Sea: General description of sea state as observed from the ship's bridge: direction of sea in degrees true compass bearing, if recorded.

Wind: Given as direction (degrees true compass bearing) and speed in knots as measured on ship's bridge.

Vis: Visibility in miles from ship's bridge.

Cloud: Given as proportion of sky covered by cloud on a scale of 8 (8/8 = fully overcast). In some cases cloud type was observed and reported (Abbreviations - Cu = cumulus, St. = stratus, As = altostratus, Sc = stratocumulus).

Baro: Barometric pressure in millibars, as measured on ship's bridge (aneroid barometer - uncorrected).

Secchi: Secchi disc reading as determined by a secchi lowering from the ship's deck in daylight hours. Depth at which a white disc, 30 cm. in diameter, just disappears from sight is recorded in meters as well as the color of the water over the disc (abbreviations: lt = light, dk = dark, br = brown, gr = green, yl = yellow).

Tide: The state of the tide is indicated in a plot of tidal height versus standard time, yielding a tide curve. The state of the tide at the time of the bottle cast is illustrated by the arrow on the tide curve. Tidal heights and times are based upon the Canadian Tide and Current Tables of the appropriate year using Secondary Port corrections on predicted tides for Tofino.

b) Body of Tables

Depth (M): Depth of water in meters at which a given Nansen bottle was tripped by a messenger dropped from above. The top of the upper (zero depth) bottle was 2 - 3 cm below the surface prior to tripping and other bottles were positioned using a meter block and remote readout dial.

T (°C): Temperature was determined by reversing thermometers attached in pairs to each Nansen bottle and corrected according to standard practice (U.S. Navy Hydrographic Office, 1955). Results are reported to the nearest 0.01° Celsius.

S (‰): Total salt content of water expressed in parts per thousand (‰). Salinity values given to the nearest 0.01‰ are considered accurate to that level and were determined on a precision salinometer. Salinity values reported for the July 1973 series were determined by hydrometer and are considered accurate to ± 0.3‰.

σ<sub>T</sub>: A conveniently abbreviated value of density (ρ) of a seawater sample of temperature, T, and salinity, S:  $\sigma_T = (\rho S, T - 1) \times 10^3$

Oxygen (ml/l, mg/l): Dissolved oxygen content of water samples processed according to the standard modified Winkler method (Strickland & Parsons 1965)

expressed as: ml/l - milliliters O<sub>2</sub>/liter water

mg/l - milligrams O<sub>2</sub>/liter water

% sat. - % saturation of oxygen at in situ

salinity and temperature according to:

% sat. =  $\frac{\text{observed dissolved oxygen conc.}}{\text{saturation dissolved oxygen conc.}}$

The saturation concentration was determined from nomographs or from formulae relating salinity, temperature and saturation (Truesdale & Gameson 1957).

pH: Hydrogen ion concentration in pH units (1 - 14). Samples were analysed within twelve hours of collection, using a PHM - 26C Radiometer and precision buffer solutions.

#### ACKNOWLEDGEMENTS

We are especially grateful to the officers and crews of the ships LAYMORE and VECTOR who made this work possible. Their efforts, competence and hospitality during the studies were greatly appreciated. Thanks also to Mrs. D. Price for typing this often tedious manuscript. The advice of Mr. A. J. Dodimead in designing the program and assisting with data analysis and provision of technical support is most appreciated.

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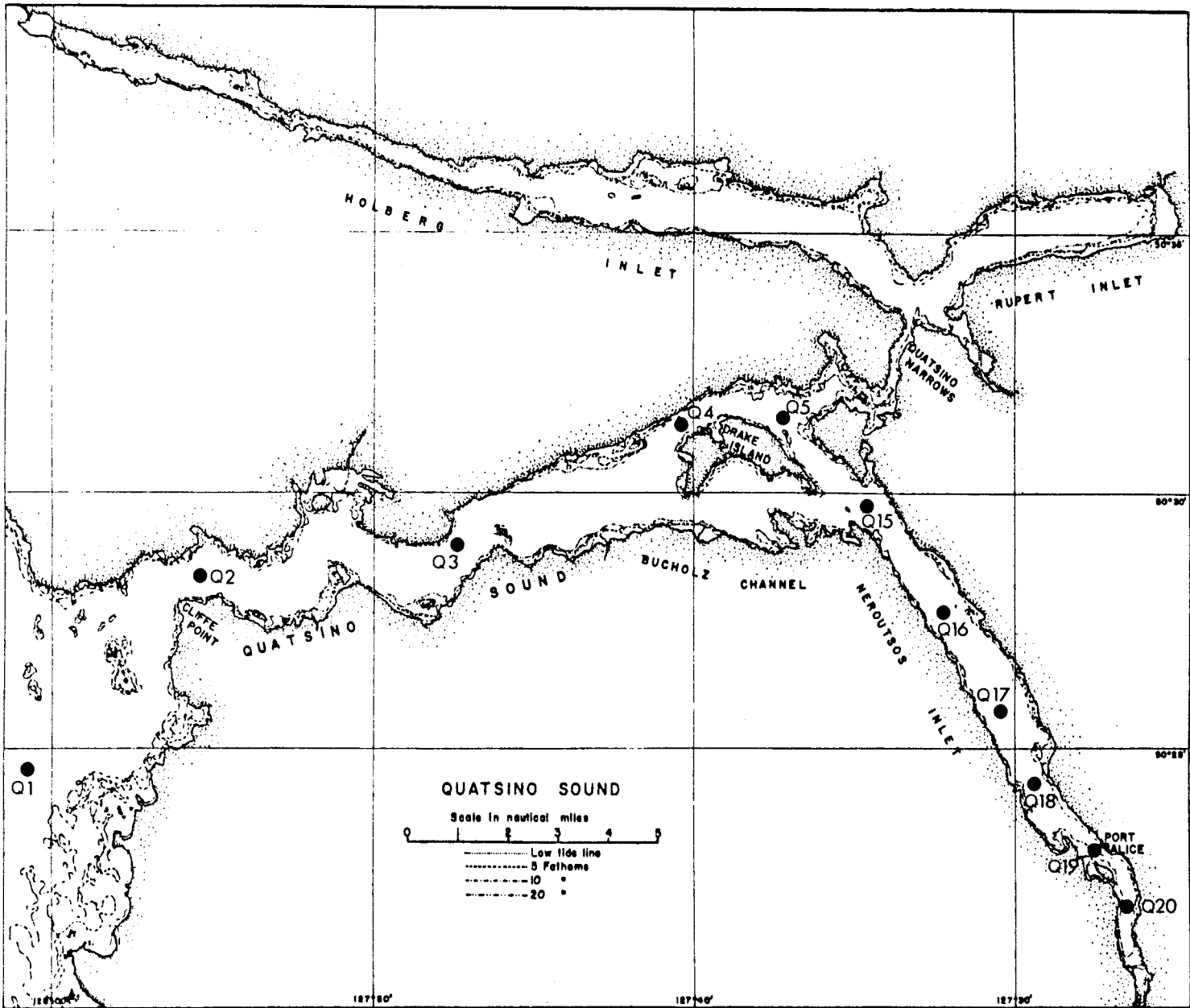
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Part I. May 3 - 4, 1973 Survey

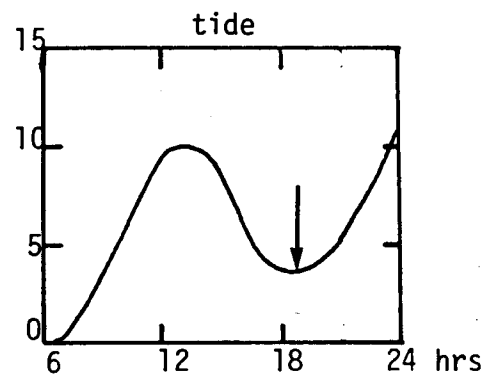
Quatsino Sound - Neroutsos Inlet

Figure 1. Station locations for the May 3 - 4, 1973 survey.



Station: Q1  
 Latitude: 50° 24.5'N  
 Longitude: 128° 0.7'W  
 Time: 1802  
 Date: 3/V/73  
 Depth: 100 fath.  
 Temp: D 9.4, W 8.3

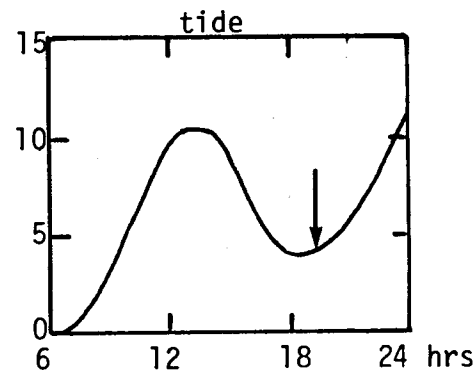
Weather: partly cloudy  
 Sea: slight swell  
 Wind 305°T, 5 kn  
 Cloud Amt: 3/8  
 Baro: 1017 mb



Depth (m)	T (°C)	pH	Dissolved oxygen	
			(ml/l)	(mg/l)
0	9.93	8.22	8.41	12.01
2	9.83	8.25	8.08	11.54
4	9.85	8.25	8.08	11.54
6	9.56	8.10	8.21	11.73
10	9.14	8.20	8.28	11.82
20	8.76	8.20	8.74	12.49
30	8.65	8.15	7.81	11.16
70	7.46	8.00	5.61	8.01
150	6.61	7.80	3.54	5.05

Station: Q2  
 Latitude: 50° 28.4'N  
 Longitude: 127° 55.2'W  
 Time: 1930  
 Date: 3/V/73  
 Depth: 102 fath.  
 Temp: D 9.4, W 8.3

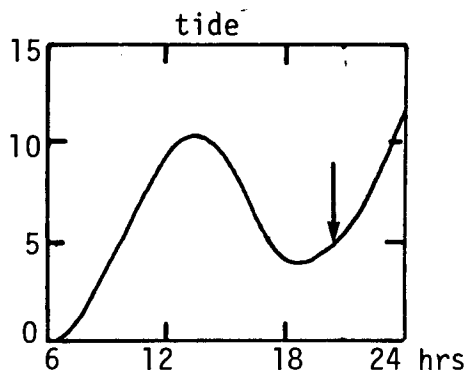
Weather: partly cloudy  
 Sea: calm  
 Wind; light airs  
 Cloud Amt: 3/8  
 Baro: 1017 mb



Depth (m)	T (°C)	pH	Dissolved Oxygen	
			(ml/l)	(mg/l)
0	9.23	7.90	6.21	8.87
2	9.24	7.90	6.21	8.87
4	9.24	7.90	6.17	8.81
6	9.22	7.90	6.17	8.81
10	8.97	8.00	6.27	8.96
20	8.73	7.92	6.94	9.92
30	8.30	7.90	6.17	8.81
70	7.15	7.85	4.47	6.39
150	6.97	7.80	4.14	5.91

Station: Q3  
 Latitude: 50°28.7'N  
 Longitude: 127° 47.3'W  
 Time: 2029  
 Date: 3/V/76  
 Depth: 80 fath.  
 Temp: D 10, W 8.9

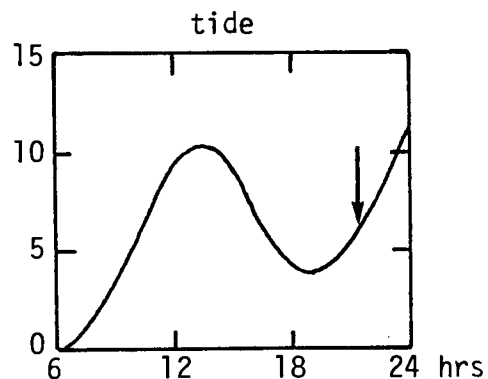
Weather: partly cloudy  
 Sea: -  
 Wind: light airs  
 Cloud Amt: 3/8  
 Baro: 1017 mb



Depth (m)	T (°C)	pH	Dissolved oxygen	
			(ml/l)	(mg/l)
0	9.61	7.82	5.94	8.49
2	9.53	7.82	5.90	8.43
4	9.29	7.80	5.74	8.20
6	9.25	7.80	5.67	8.11
10	9.20	7.80	5.27	7.53
20	8.23	7.81	5.61	8.01
30	8.08	7.83	5.21	7.44
70	7.34	5.82	4.67	6.67
150	7.00	7.80	4.27	6.10

Station: Q4  
 Latitude: 50°31.3'N  
 Longitude: 127°40.6'W  
 Time: 2110  
 Date: 3/V/73  
 Depth: 68 fath.  
 Temp: D 9.4, W 7.8

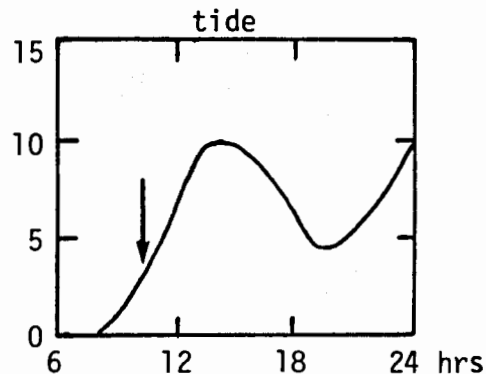
Weather: becoming overcast  
 Sea: calm  
 Wind: light airs  
 Cloud Amt: 8/8  
 Baro: 1018 mb



Depth (m)	T (°C)	pH	Dissolved Oxygen	
			(ml/l)	(mg/l)
0	9.29	7.70	5.21	7.44
2	9.27	7.70	5.14	7.34
4	7.17	7.70	5.21	7.44
6	9.10	7.70	5.14	7.34
10	8.82	7.72	5.07	7.25
20	8.21	7.75	5.03	7.19
30	7.92	7.80	5.01	7.15
70	7.33	7.80	5.27	7.53
150	7.09	7.75	-	-

Station: Q5  
 Latitude: 50°31:5'N  
 Longitude: 127°37.5'W  
 Time: 1000  
 Date: 4/V/73  
 Depth: 60 fath.  
 Temp: D 10.6, W 8.9

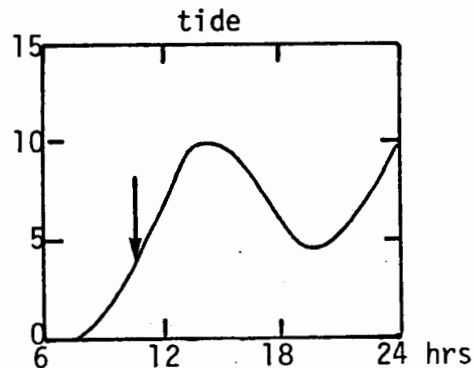
Weather: Overcast  
 Sea: calm  
 Wind light airs  
 Cloud Amt: 8/8  
 Baro: 1018 mb



Depth (m)	T (°C)	pH	Dissolved oxygen	
			(ml/l)	(mg/l)
0	8.45	7.78	5.30	7.57
2	8.39	7.78	5.21	7.44
4	8.37	7.78	5.18	7.40
6	9.11	7.80	5.33	7.61
10	8.36	7.78	5.21	7.44
20	8.28	7.80	5.27	7.53
30	7.69	7.82	5.02	7.17
70	7.43	7.82	4.77	6.81

Station: Q15  
 Latitude: 50°29.8'N  
 Longitude: 127°34.6'W  
 Time: 1040  
 Date: 4/V/73  
 Depth: 90 fath.  
 Temp: D 12.8, W 11.7

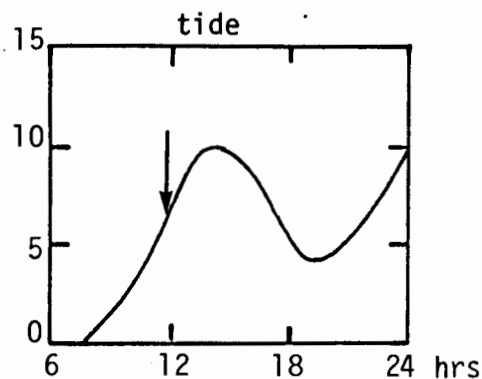
Weather: sky clearing  
 Sea: calm  
 Wind; light airs  
 Cloud Amt: 7/8  
 Baro: 1018 mb



Depth (m)	T (°C)	pH	Dissolved Oxygen	
			(ml/l)	(mg/l)
0	9.26	7.68	5.05	7.21
2	8.99	7.71	5.01	7.15
4	9.12	7.75	4.97	7.09
6	8.65	7.80	5.02	7.17
10	8.36	7.80	5.21	7.44
20	8.16	7.85	5.07	7.25
30	7.58	7.85	4.87	6.96
70	7.34	7.88	5.07	7.25

Station: Q16  
 Latitude: 50° 27.8'N  
 Longitude: 127° 32.2'W  
 Time: 1135  
 Date: 4/V/73  
 Depth: 100 fath.  
 Temp: D 13.3, W 12.2

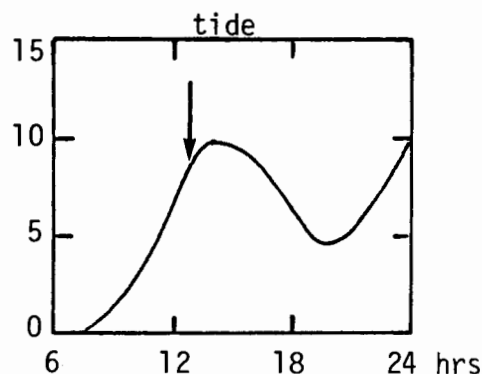
Weather: partly cloudy  
 Sea: calm  
 Wind: light airs  
 Cloud Amt: 7/8  
 Baro: 1018 mb



Depth (m)	T (°C)	pH	Dissolved oxygen	
			(ml/l)	(mg/l)
0	9.94	7.50	4.33	6.18
2	9.66	7.50	4.35	6.22
4	9.31	-	4.59	6.56
6	-	7.75	4.41	6.29
10	8.58	7.70	4.35	6.22
20	8.40	7.80	5.02	7.17
30	8.10	7.75	4.11	5.87
70	7.53	7.85	4.99	7.13
150	7.33	7.88	4.75	6.79

Station: Q17  
 Latitude: 50° 26.0'N  
 Longitude: 127° 30.8'W  
 Time: 1220  
 Date: 4/V/76  
 Depth: 104 fath.  
 Temp: D 13.9, W 12.2

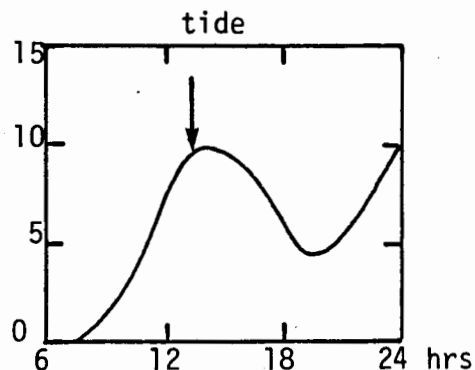
Weather: no change  
 Sea: calm  
 Wind: light airs  
 Cloud Amt: 7/8  
 Baro: 1018 mb



Depth (m)	T (°C)	pH	Dissolved Oxygen	
			(ml/l)	(mg/l)
0	10.43	7.35	3.51	5.02
2	10.33	7.40	3.54	5.05
4	9.96	7.40	3.54	5.05
6	9.49	7.55	4.46	6.37
10	8.71	7.75	5.01	7.15
20	8.41	7.80	4.94	7.06
30	8.05	7.65	3.23	4.62
70	7.50	7.70	5.03	7.19
150	7.34	7.88	4.75	6.79

Station: Q18  
 Latitude: 50°24.3'N  
 Longitude: 127°29.3'W  
 Time: 1300  
 Date: 4/V/73  
 Depth: 74 fath.  
 Temp: D 13.3, W 10.6

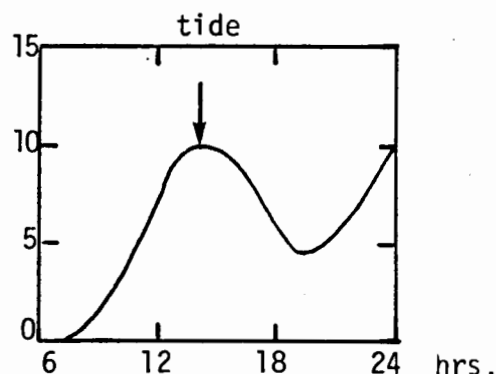
Weather: partly cloudy  
 Sea: rippled  
 Wind 330°T, 7 kn  
 Cloud Amt: 7/8  
 Baro: 1018 mb



Depth (m)	T (°C)	pH	Dissolved oxygen	
			(ml/l)	(mg/l)
0	10.96	7.05	2.38	3.39
2	10.83	7.02	2.27	3.24
4	10.30	7.15	2.54	3.62
6	-	7.42	3.19	4.56
10	8.31	7.60	3.91	5.59
20	8.20	7.70	4.18	5.97
30	8.09	7.65	3.24	4.63
70	7.59	7.95	4.73	6.75

Station: Q19  
 Latitude: 50°23'N  
 Longitude: 127°27.35'W  
 Time: 1400  
 Date: 4/V/73  
 Depth: 26 fath.  
 Temp: D 13.3, W 10.6

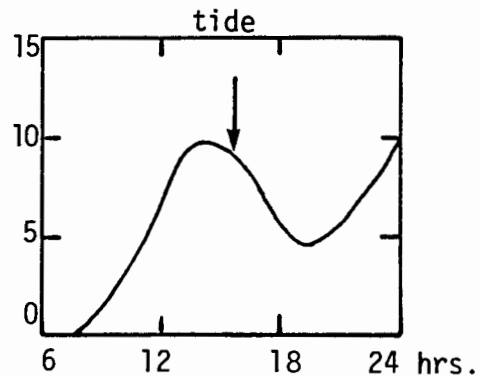
Weather: clearing  
 Sea: rippled  
 Wind; 320°T, 8 kn  
 Cloud Amt: 5/8  
 Baro: 1018 mb



Depth (m)	T (°C)	pH	Dissolved Oxygen	
			(ml/l)	(mg/l)
0	10.95	6.45	0.20	0.29
2	10.16	6.72	0.55	0.78
4	9.63	7.35	2.07	2.96
6	8.74	7.40	3.38	4.82
10	8.30	7.55	3.27	4.67
20	8.17	7.60	3.40	4.86
30	8.03	7.52	2.74	3.91

Station: Q20  
 Latitude: 50°22.1'N  
 Longitude: 127°26.5'W  
 Time: 1530  
 Date: 4/V/73  
 Depth: 30 fath.  
 Temp: D 13.3, W 10.6

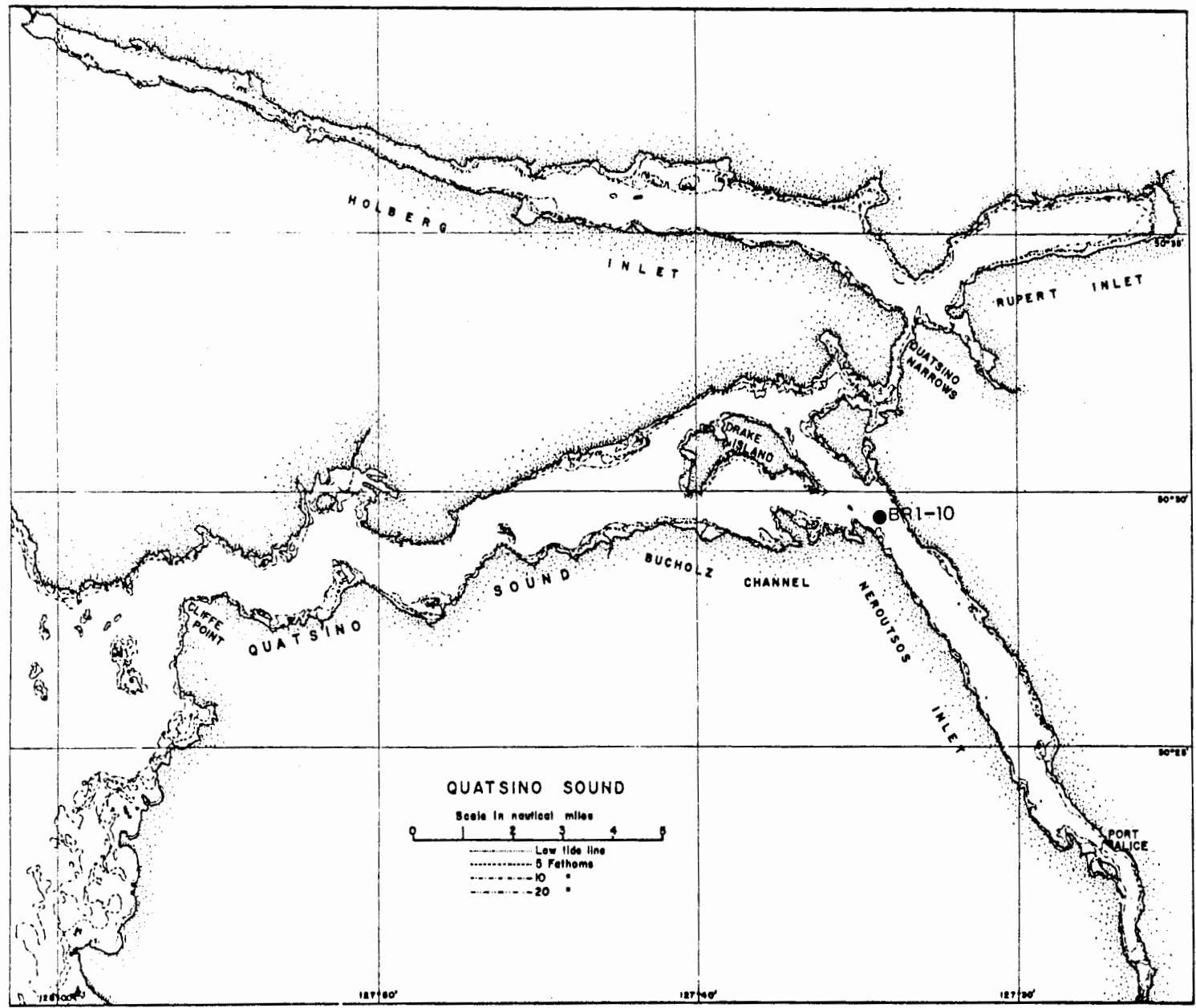
Weather: -  
 Sea: calm  
 Wind 320°T, 8 kn  
 Cloud Amt: 5/8  
 Baro: 1018 mb



Depth (m)	T (°C)	pH
0	11.73	6.32
2	11.74	6.30
4	9.97	6.95
6	9.41	7.10
10	8.23	7.40
20	8.18	7.42
30	8.05	7.45

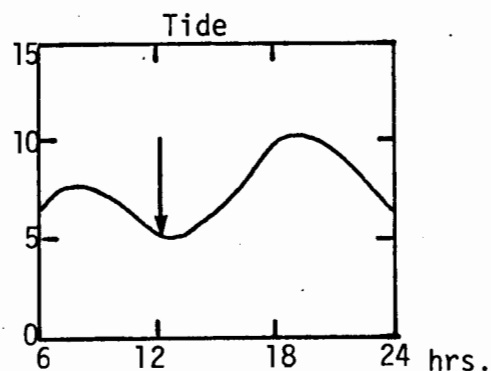
Part II. Bucholz Rock - 24 hour sampling survey  
July 24 - 25, 1973.

Figure 2. The 24 hour sampling station at Bucholz Rock, July 24 - 25, 1973.



Station: BR-1  
 Latitude: 50°29.5'N  
 Longitude: 127°34'W  
 Time: 1227  
 Date: 24/VII/73  
 Depth: 115 fath.  
 Temp: D 12.2, W 11.1

Weather: raining  
 Sea: choppy  
 Wind: 135°T, 18 kn  
 Cloud Amt: 8/8  
 Baro: 1019 mb

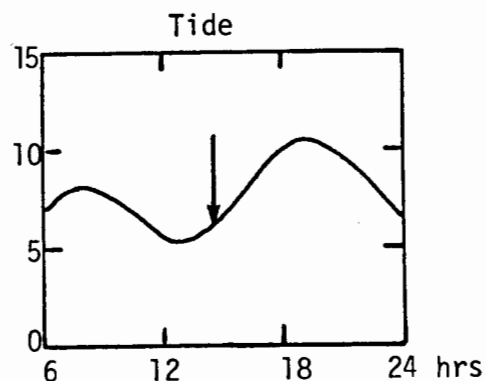


Depth (M)	T (°C)	S* (‰)	pH	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	12.19	29.9	7.30	2.15	3.08	35.6
2	12.03	29.9	7.30	2.69	3.85	44.4
4	10.64	30.8	7.60	3.58	5.11	57.6
6	-	29.9	7.60	4.01	5.72	-
10	9.52	29.9	7.70	3.97	5.67	61.9
20	8.67	31.2	7.68	3.82	5.45	58.9
30	7.14	31.6	7.54	3.59	5.13	53.6
70	6.78	31.8	7.69	3.13	4.47	46.4
150	6.63	31.9	7.69	2.84	4.06	42.0

\* hydrometer used

Station: BR-2  
 Latitude: 50°29.5'N  
 Longitude: 127°34'N  
 Time: 1449  
 Date: 24/VI/73  
 Depth: 82 fath.  
 Temp: D 11.7, W 11.1

Weather: overcast  
 Sea: light chop  
 Wind: 135°T, 12 kn  
 Cloud Amt: 8/8  
 Baro: 1019 mb

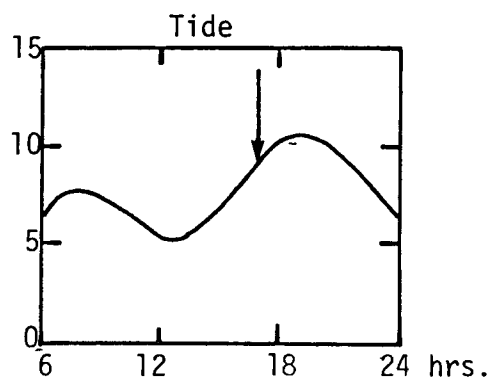


Depth (M)	T (°C)	S* (‰)	pH	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	11.38	29.9	7.51	3.25	4.65	52.9
2	11.32	30.0	7.51	3.27	4.67	53.1
4	11.20	30.0	7.52	3.32	4.74	53.8
6	10.41	30.7	7.75	4.26	6.08	68.1
10	9.37	30.8	7.75	4.01	5.72	62.6
20	8.60	31.5	7.73	3.63	5.19	56.0
30	7.78	31.8	7.74	3.39	4.85	51.5
70	6.91	32.7	7.74	3.27	4.67	48.9
150	6.64	32.5	7.70	2.99	4.27	44.4

\* hydrometer

Station: BR-3  
 Latitude: 50° 29.5'N  
 Longitude: 127° 34'W  
 Time: 1700  
 Date: 24/VII/73  
 Depth: -  
 Temp: D 13.9, W 13.3

Weather: overcast  
 Sea: light chop  
 Wind: 135°T, 15 kn  
 Cloud Amt: 8/8  
 Baro: 1020 mb

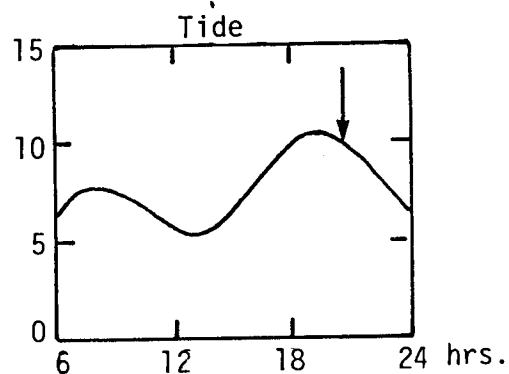


Dissolved oxygen

Depth (M)	T (°C)	S* (°/oo)	pH	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	11.72	29.9	7.38	2.72	3.88	44.5
2	11.45	29.8	7.48	2.95	4.22	48.1
4	11.39	29.7	7.33	2.50	3.58	40.7
6	10.75	29.9	7.52	3.07	4.38	49.2
10	9.40	30.7	7.73	3.94	5.63	61.7
20	8.37	31.8	7.71	3.57	5.10	54.9
30	7.74	32.0	7.72	3.44	4.92	52.3
70	6.96	32.5	7.71	3.24	4.63	48.5
150	6.67	—	7.78	3.07	4.38	—

Station: BR-4  
 Latitude: 50° 29.5'N  
 Longitude: 127° 34.0'W  
 Time: 2028  
 Date: 24/VII/73  
 Depth: 94 fath.  
 Temp: D 13.3, W 12.8

Weather: Overcast  
 Sea: Choppy  
 Wind: 130°T, 10-15 kn  
 Cloud Amt: 8/8  
 Baro: 1020 mb

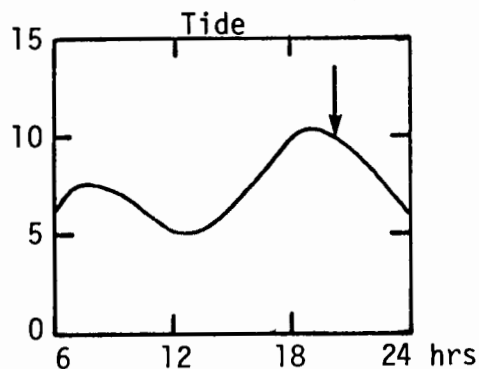


Dissolved oxygen

Depth (M)	T (°C)	S* (°/oo)	pH	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	12.18	29.0	7.20	1.65	2.36	27.2
2	11.45	29.7	7.20	1.75	2.50	28.5
4	11.42	30.0	7.40	2.57	3.67	41.8
6	10.75	-	7.49	2.69	3.85	-
10	9.40	-	7.71	3.94	5.63	-
20	8.37	-	7.72	4.01	5.72	-
30	7.74	32.4	7.71	3.63	5.19	55.3
70	6.96	32.4	7.71	3.25	4.65	48.6
150	6.67	32.7	7.69	2.69	3.85	40.0

Station: BR-5  
 Latitude: 50°29.5'N  
 Longitude: 127°34.0'W  
 Time: 2204  
 Date: 24/VII/73  
 Depth: 98 fath.  
 Temp: D13.9, W 13.3

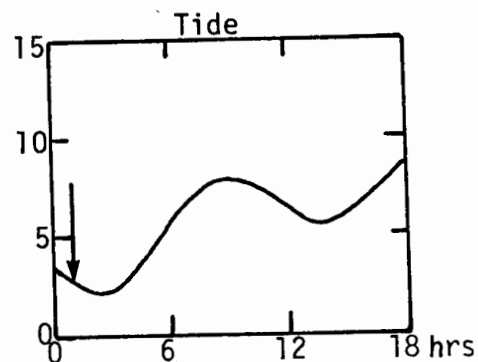
Weather: overcast  
 Sea: light chop  
 Wind: 110°T, 5 kn  
 Cloud Amt: 8/8  
 Baro: 1022 mb



Depth (M)	T (°C)	S* (‰)	pH	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	12.06	-	7.25	1.94	2.77	-
2	12.05	28.9	7.22	1.93	2.75	31.6
4	11.13	-	7.44	2.69	3.85	-
6	10.20	30.2	7.57	3.63	5.19	57.6
10	9.28	31.2	7.73	4.01	5.72	62.7
20	8.76	31.4	7.73	3.82	5.45	59.1
30	7.41	32.0	7.72	3.51	5.01	52.8
70	7.86	32.5	7.71	3.25	4.65	49.7
150	6.62	33.2	7.72	3.13	4.47	46.6

Station: BR-6  
 Latitude: 50°29.5'N  
 Longitude: 127°34'W  
 Time: 0040  
 Date: 25/VII/73  
 Depth: 118 fath.  
 Temp: D 12.8, W 11.1

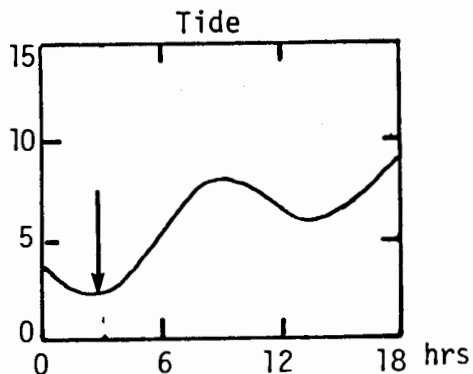
Weather: overcast  
 Sea: rippled  
 Wind: 130°T, 3 kn  
 Cloud Amt: 8/8  
 Baro: 1023 mb



Depth (M)	T (°C)	S* (‰)	pH	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	11.67	29.7	7.32	2.38	3.40	38.9
2	11.26	29.8	7.37	2.59	3.70	42.0
4	10.78	30.2	7.59	3.44	4.92	55.3
6	9.97	30.6	7.71	3.76	5.37	59.4
10	9.48	30.7	7.66	3.94	5.63	61.8
20	8.42	31.4	7.70	3.69	5.28	56.7
30	7.69	31.9	7.71	3.44	4.92	52.2
70	6.85	32.4	7.70	3.13	4.47	46.6
150	6.57	-	7.75	2.94	4.20	-

Station: BR7  
 Latitude: 50°29.5'N  
 Longitude: 127°34'W  
 Time: 0245  
 Date: 25/VII/73  
 Depth: 96 fath.  
 Temp: D13.3, W12.2

Weather: Overcast  
 Sea: rippled  
 Wind: light airs  
 Cloud Amt: 8/8  
 Baro: 1023 mb



Dissolved oxygen

Depth (m)	T (°C)	S* (‰)	pH	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	11.59	29.8	7.59	2.60	3.72	42.5
2	10.71	30.0	7.61	3.13	4.47	50.2
4	10.81	30.0	7.68	3.38	4.83	54.3
6	10.32	30.3	7.77	3.57	5.10	56.8
10	9.65	30.7	7.82	3.78	5.40	59.4
20	8.53	31.2	7.79	3.66	5.22	56.2
30	7.77	31.8	7.83	3.44	4.92	52.2
70	6.98	32.4	7.80	3.19	4.56	47.7
150	6.60	32.5	7.86	2.97	4.24	44.0

Station: BR8  
 Latitude: 50°29.5'N  
 Longitude: 127°34'W  
 Time: 0535  
 Date: 25/VII/73  
 Depth: 86 fath.  
 Temp: D 14.2, W 13.9

Weather: overcast  
 Sea: rippled  
 Wind; light airs  
 Cloud Amt: 8/8  
 Baro: 1024 mb

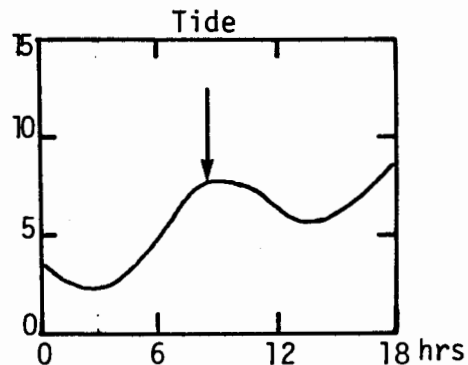


Dissolved Oxygen

Depth (m)	T (°C)	S* (‰)	pH	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	-	30.0	7.51	3.07	4.38	-
2	10.95	30.0	7.50	3.09	4.42	49.8
4	10.77	30.0	7.52	3.07	4.38	49.2
6	10.36	30.4	7.63	3.66	5.22	58.3
10	10.00	30.6	7.72	3.82	5.45	60.5
20	8.69	31.4	7.71	3.69	5.28	57.1
30	7.69	31.9	7.75	3.46	4.94	52.3
70	6.88	32.3	7.74	3.14	4.49	46.8
150	6.63	32.4	7.73	2.89	4.13	42.9

Station: BR9  
 Latitude: 50°29.5'N  
 Longitude: 127°34'W  
 Time: 0815  
 Date: 25/VII/73  
 Depth: 100 fath.  
 Temp: D 14.4, W 13.9

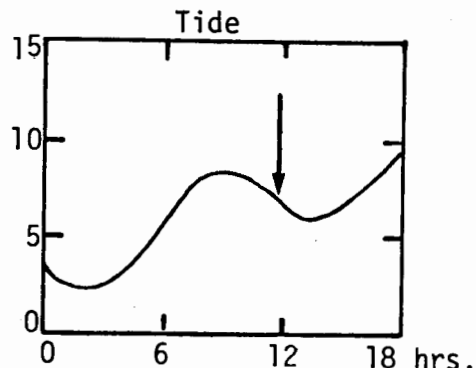
Weather: some clearing  
 Sea: calm  
 Wind: light airs  
 Cloud Amt: 7/8  
 Baro: 1025 mb



Depth (m)	T (°C)	$\sigma_t^*$ (°/oo)	pH	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	11.14	30.0	7.43	2.94	4.20	47.6
2	10.64	30.3	7.52	3.00	4.29	48.2
4	10.37	30.3	7.59	3.44	4.92	54.9
6	10.31	30.6	7.62	3.44	4.92	54.9
10	9.66	30.8	7.67	3.51	5.01	55.2
20	8.59	31.4	7.73	3.66	5.22	56.4
30	7.42	32.1	7.74	3.38	4.83	51.0
70	6.90	32.4	7.74	3.32	4.74	49.5
150	6.61	32.4	7.67	2.90	4.15	43.0

Station: BR10  
 Latitude: 50° 29.5'N  
 Longitude: 127° 34.0'W  
 Time: 1114  
 Date: 25/VII/73  
 Depth: 98 fath.  
 Temp: D 19.4, W 17.8

Weather: overcast  
 Sea: calm  
 Wind; calm  
 Cloud Amt: 8/8  
 Baro: 1025 mb



Depth (m)	T (°C)	$\sigma_t^*$ (°/oo)	pH	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	12.02	30.2	7.42	2.94	4.20	48.6
2	10.56	30.2	7.35	2.63	3.76	42.1
4	-	30.6	7.49	3.13	4.47	-
6	10.49	30.6	7.58	3.32	4.74	53.1
10	9.92	30.8	7.62	3.57	5.10	56.5
20	8.60	31.5	7.71	3.63	5.19	56.0
30	7.46	32.0	7.71	3.44	4.92	51.9
70	7.37	32.3	7.69	3.13	4.47	47.2
150	6.61	32.4	7.68	2.84	4.06	42.1



Part III. Expanded series of Quatsino Sound - Neroutsos Inlet  
Stations, July 29 - 31, 1975.

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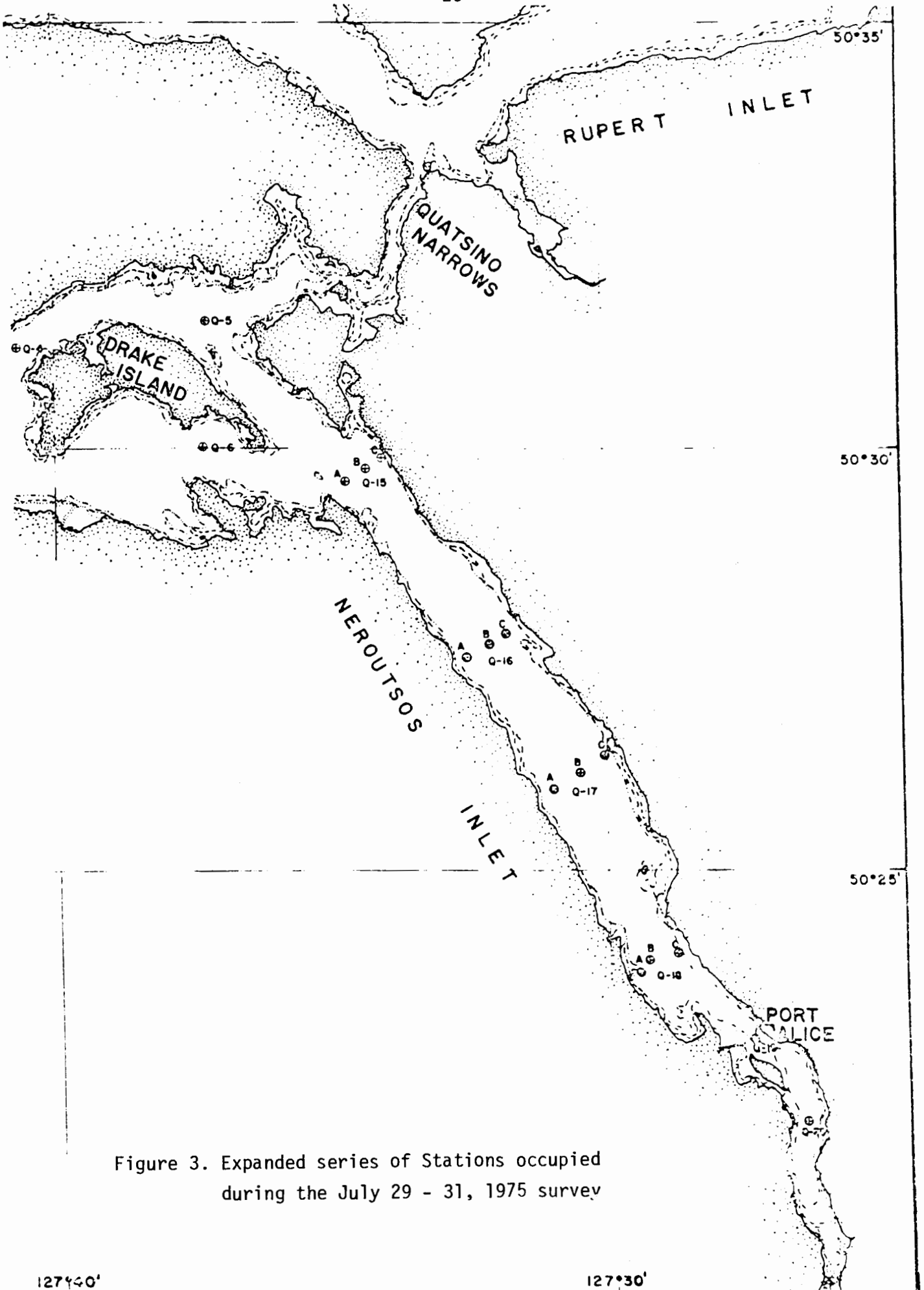


Figure 3. Expanded series of Stations occupied during the July 29 - 31, 1975 survey

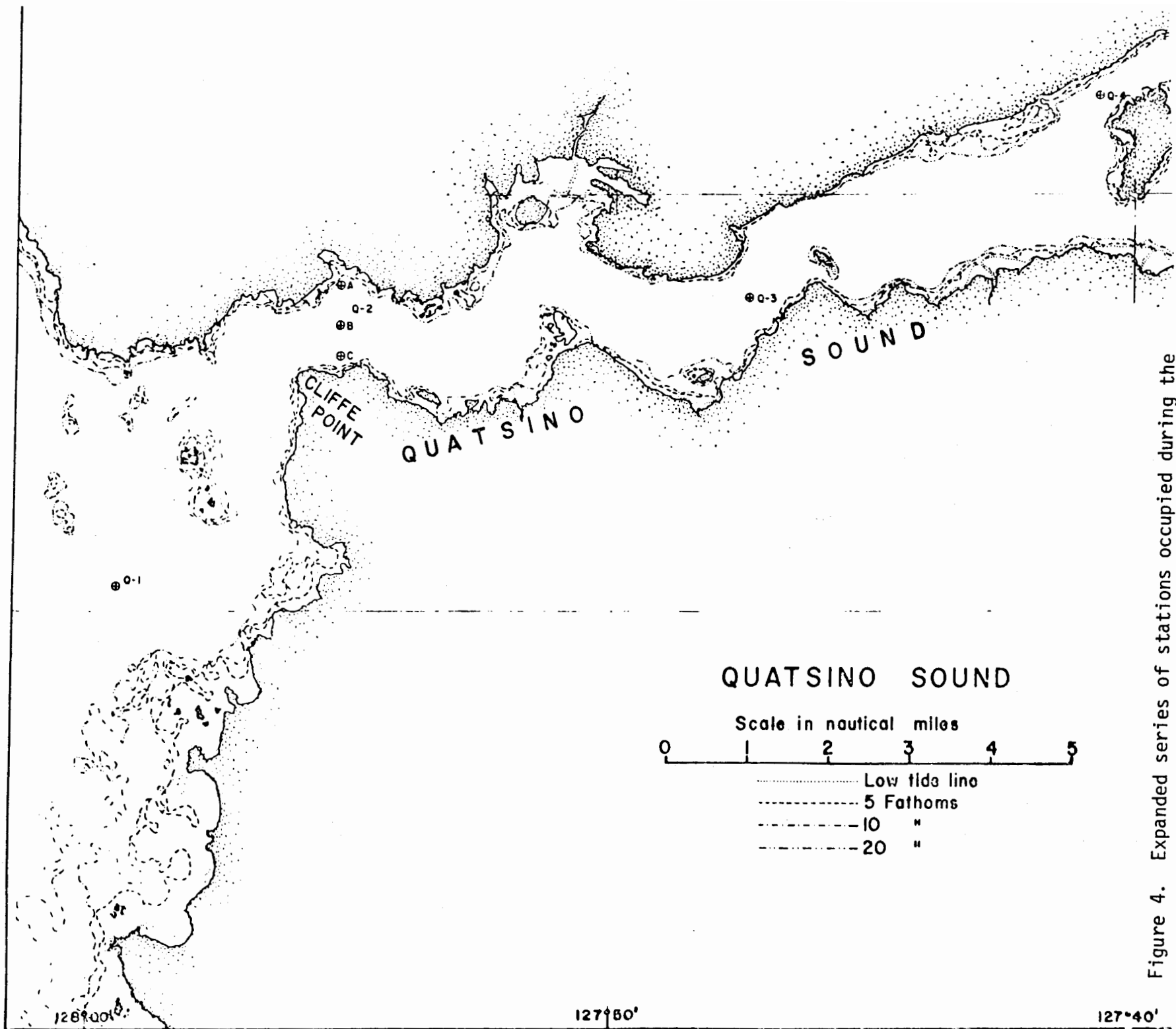
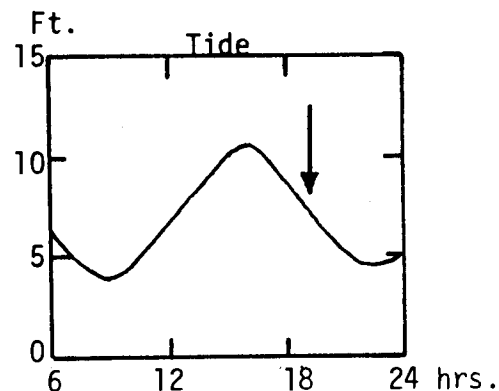


Figure 4. Expanded series of stations occupied during the July 29 - 31, 1975 survey.

Station: Q 18 A  
 Position: 50°23.8N  
 127°29.52W  
 Time Messenger: 1910  
 Depth: 34 fath.  
 BT Serial#: HH 10897  
 BT Slide#: 1  
 Sea: slight chop, 300°T  
 Secchi: 1.5 M, Br.

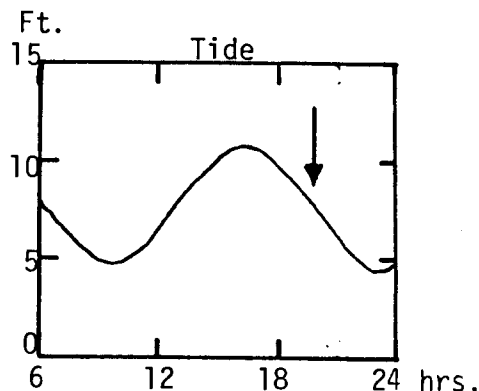
Date: 29/VII/75  
 Weather: Part.Cldy  
 Cloud: Cu, 4/8  
 Wind: 310°T, 10 kn.  
 Temp: 14.0 dry, 12.5 wet  
 Baro: 1019  
 Vis.: 8+ mi.



Depth (M)	Temp. (°C)	Salinity (‰)	Density (σ <sub>T</sub> )	Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	14.43	30.94	23.00	5.47	7.82	95.4
2	14.40	30.94	23.10	5.86	8.37	102.1
4	14.20	31.15	23.23	5.86	8.37	101.7
6	14.15	31.17	23.26	5.86	8.37	101.6
10	12.57	31.30	23.67	4.40	6.28	73.8
15	10.72	31.67	24.26	3.86	5.52	62.4
20	9.84	31.72	24.47	3.21	4.58	50.8
30	9.05	31.80	24.65	2.95	4.21	45.9
50	7.76	32.41	25.32	0.80	1.14	12.1

Station: Q 18 B  
 Position: 50°23.9'N  
 127°29.3'W  
 Time Messenger: 1949  
 Depth: 61 fath.  
 BT Serial#: 6004 B  
 BT Slide#: 2  
 Sea: 1t. chop, 300°T  
 Secchi: 1.5 M, Br.

Date: 29/VII/75  
 Weather: Part.Cldy.  
 Cloud: Cu, 3/8  
 Wind: 310°T, 14 kn.  
 Temp:  
 Baro: 1019.2  
 Vis.: 15 mi.

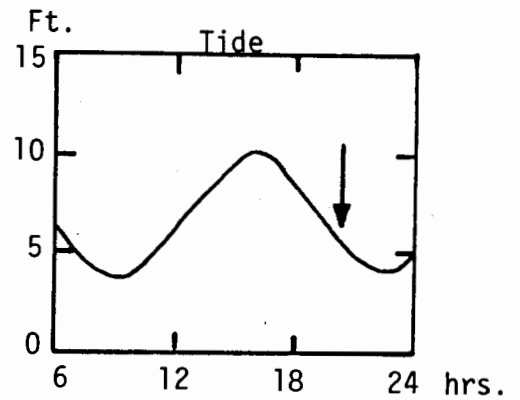


Depth (M)	Temp. (°C)	Salinity (‰)	Density (σ <sub>T</sub> )	Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	14.30	30.92	23.00	5.92	8.46	102.9
2	14.28	30.94	23.02	6.29	8.98	109.1
4	14.23	31.00	23.09	5.77	8.24	100.1
6	14.21	31.13	23.20	5.10	8.29	100.7
10	12.40	31.45	23.80	4.35	6.21	72.8
15	10.03	31.63	24.36	2.84	4.05	45.1
20	9.66	31.74	24.50	3.21	4.59	50.7
30	8.68	31.84	24.73	5.58	7.97	86.1
50	7.53	32.59	25.49	0.83	1.18	12.5
80	7.32	32.82	25.69	1.57	2.24	23.6
100	7.23	32.90	25.77	2.59	3.70	38.9
120*						

\* hit bottom - missing data

Station: Q 18 C  
 Position: 50°24.0'N  
 127°28.8'W  
 Time Messenger: 2037  
 Depth: 52 fath.  
 BT Serial#: HH 10897  
 BT Slide#: 3  
 Sea: Rippled  
 Secchi: -

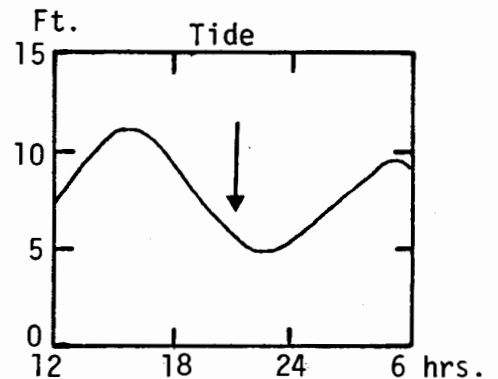
Date: 29/VII/75  
 Weather: Part. Cldy.  
 Cloud: Cu, 2/8  
 Wind: 300°T, 6 kn.  
 Temp:  
 Baro: -  
 Vis.: 15 mi.



Depth (M)	Temp. (°C)	Salinity (‰)	Density ( $\sigma_t$ )	Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	14.19	30.98	23.08	5.70	8.14	98.8
2	14.14	30.98	23.08	5.75	8.21	99.5
4	13.96	31.03	23.17	5.60	8.00	96.6
6	13.92	31.17	23.22	5.57	7.95	96.0
10	11.37	31.49	24.00	3.91	5.58	63.9
15	9.91	31.63	24.38	2.97	4.24	47.1
20	9.68	31.72	24.49	3.28	4.69	51.8
30	8.60	31.90	24.77	2.42	3.46	37.3
50	7.47	32.67	25.55	0.75	1.07	11.3
80	7.32	32.84	25.71	1.87	2.67	28.1

Station: Q 19  
 Position: 50°23.0'N  
 127°27.4'W  
 Time Messenger: 2115  
 Depth: 31 fath.  
 BT Serial#: HH 10897  
 BT Slide#: 4  
 Sea: Calm  
 Secchi: -

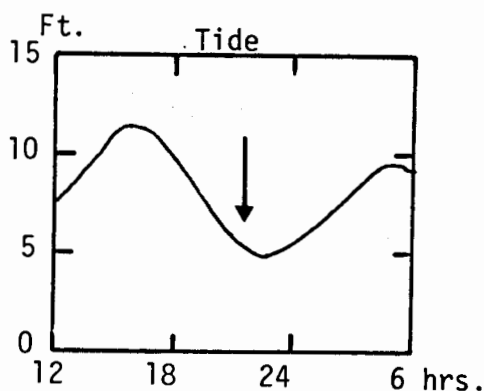
Date: 29/VII/75  
 Weather: Clear  
 Cloud: Cu, 2/8  
 Wind: 300° T 4 kn.  
 Temp:  
 Baro: 1019.7  
 Vis.: 15 mi



Depth (M)	Temp. (°C)	Salinity (‰)	Density ( $\sigma_t$ )	Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	14.46	30.65	22.79	5.80	8.29	101.0
2	14.49	30.61	22.76	6.52	9.31	113.4
4	14.43	30.67	22.80	5.44	7.77	94.6
6	14.43	30.82	22.93	6.17	8.82	107.5
10	12.96	30.98	23.33	4.30	6.14	72.6
15	10.26	31.45	24.18	2.77	3.95	44.1
20	9.77	31.63	24.40	2.99	4.27	47.6
30	8.55	31.80	24.72	1.59	2.27	24.4

Station: Q 20  
 Position: 50°22.0'N  
 127°26.5'W  
 Time Messenger: 2153  
 Depth: 29 fath.  
 BT Serial#: HH 10897  
 BT Slide#: 5  
 Sea: Calm  
 Secchi: -

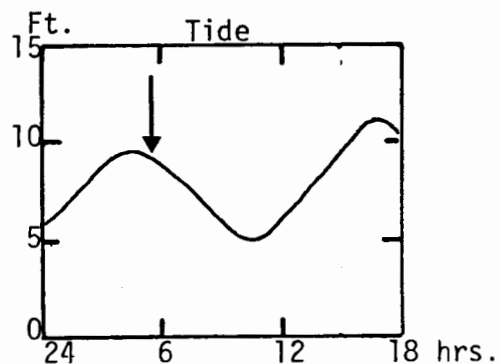
Date: 29/VII/75  
 Weather: Clear  
 Cloud: Cu, 1/8  
 Wind: 300°t, 4 kn.  
 Temp:  
 Baro: 1019.8  
 Vis.: 15 mi.



Depth (M)	Temp. (°C)	Salinity (‰)	Density (σ <sub>t</sub> )	Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	14.98	30.04	22.18	6.63	9.47	116.1
2	15.01	30.06	22.20	6.48	9.25	113.5
4	14.98	30.23	22.33	6.22	8.89	109.1
6	14.83	30.52	22.60	5.98	8.54	104.7
10	14.47	30.84	22.93	5.45	7.78	94.9
15	10.08	31.51	24.27	2.72	3.89	43.3
20	9.27	31.63	24.48	3.12	4.45	48.7
30	8.48	31.74	24.69	1.53	2.18	23.4
40	7.98	32.15	25.08	0.69	0.98	10.4

Station: Q 17 A  
 Position: 50°25.93N  
 127°31.0W  
 Time Messenger: 0521  
 Depth: 60 fath.  
 BT Serial#: 6004 B  
 BT Slide#: 6  
 Sea: calm  
 Secchi: 2.5 M, Br

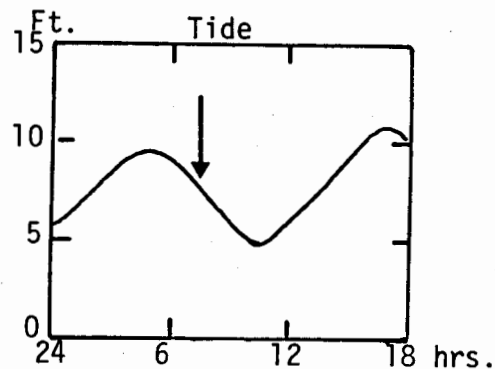
Date: 30/VII/75  
 Weather: Cloudy  
 Cloud: As, 3/8  
 Wind: Calm  
 Temp: 11.5 dry, 10.5 wet  
 Baro: 1021  
 Vis.: 7+ mi.



Depth (M)	Temp. (°C)	Salinity (‰)	Density (σ <sub>t</sub> )	Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	13.21	31.42	23.64	5.80	8.28	98.7
2	13.11	31.42	23.67	5.75	8.21	97.7
4	13.30	31.44	23.64	5.71	8.16	97.5
6	13.21	31.45	23.66	5.71	8.16	97.3
10	12.89	31.55	23.78	5.57	7.95	94.2
15	10.10	31.72	24.43	3.81	5.44	60.7
20	9.66	31.80	24.54	3.16	4.51	49.8
30	8.52	32.01	24.89	2.95	4.22	45.4
50	7.63	32.68	25.53	2.92	4.17	44.2
80	7.39	32.84	25.70	2.95	4.21	44.4
100	7.27	32.90	25.76	2.59	3.70	38.9
120	7.18	32.99	25.85	2.61	3.73	39.2

Station: Q 17 C  
 Position: 50°26.35N  
 127°30.12W  
 Time Messenger: 0634  
 Depth: 48 fath.  
 BT Serial#: 6004 B  
 BT Slide#: 8  
 Sea: Calm  
 Secchi: 2.5 M, Br

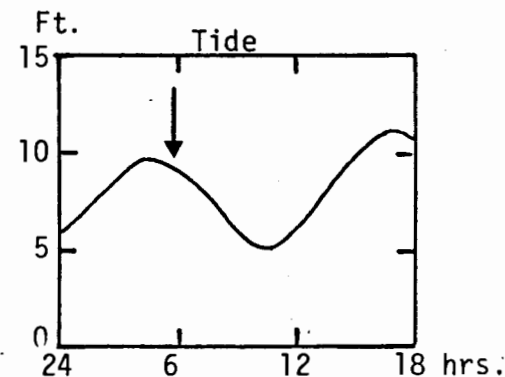
Date: 30/VII/75  
 Weather: 0'cast  
 Cloud: Cu, As., 5/8  
 Wind: Calm  
 Temp: 11.5 wet, 10.5 dry  
 Baro: 1020  
 Vis.: 7 mi.



Depth (M)	Temp. (°C)	Salinity (‰)	Density ( $\sigma_t$ )	Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	13.23	31.40	23.61	7.22	10.32	123.1
2	13.21	31.40	23.62	8.18	11.68	139.2
4	13.20	31.42	23.63	9.37	13.38	159.5
6	13.10	31.45	23.68	7.37	10.53	125.3
10	11.82	31.55	23.98	4.33	6.18	71.6
15	10.46	31.72	24.35	5.77	8.24	92.7
20	9.72	31.84	24.56	2.31	3.30	36.5
30	8.25	32.07	24.98	2.04	2.91	31.2
50	7.58	32.70	25.56	1.89	2.70	28.6
80	7.35	32.84	25.70	2.55	3.64	38.3

Station: Q 17 B  
 Position: 50°26.13N  
 127°30.55 W  
 Time Messenger: 0558  
 Depth: 100 fath.  
 BT Serial#: 6004 B  
 BT Slide#: 7  
 Sea: rippled  
 Secchi: 2.5 M, Br.

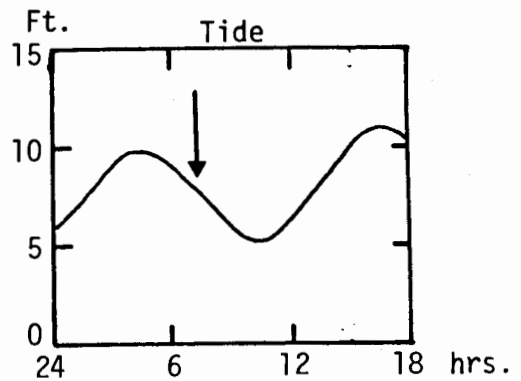
Date: 30/VII/75  
 Weather: 0'cast  
 Cloud: Cu, A St, 5/8  
 Wind: Light Airs.  
 Temp: 11.5 dry, 10.5 wet.  
 Baro: 1020  
 Vis.: 7 mi.



Depth (M)	Temp. (°C)	Salinity (‰)	Density ( $\sigma_t$ )	Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	13.39	31.40	23.58	6.03	8.62	103.2
2	13.36	31.40	23.59	5.15	7.36	88.0
4	13.37	31.40	23.59	5.80	8.29	99.2
6	13.28	31.42	23.63	5.62	8.03	95.9
10	12.49	31.53	23.86	5.19	7.42	87.2
15	10.15	31.76	24.43	3.84	5.49	61.3
20	9.65	31.82	24.56	3.16	4.51	49.8
30	8.45	32.03	24.91	2.89	4.13	44.4
50	7.63	32.72	25.57	2.78	3.97	42.1
80	7.41	32.84	25.70	2.72	3.89	41.0
100	7.25	32.90	25.77	2.60	3.71	39.0
120	7.18	32.97	25.82	2.49	3.55	32.3
150	6.96	33.13	26.00	-	-	-

Station: Q 16 A  
 Position: 50°27.53'N  
 127°32.55'W  
 Time Messenger: 0727  
 Depth: 80 fath.  
 BT Serial#: 6004 B  
 BT Slide#: 9  
 Sea: calm  
 Secchi: 5.0 M Lt. Br.

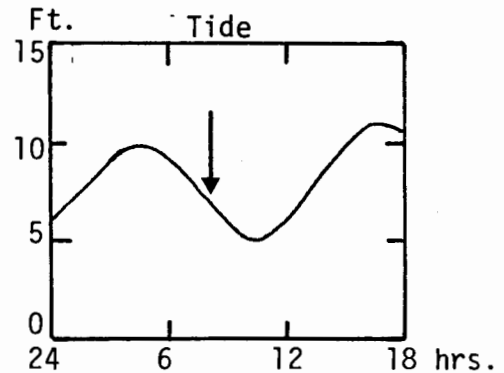
Date: 30/VII/75  
 Weather: Part, 0'cast  
 Cloud: Cu, 6/8  
 Wind: Calm  
 Temp: 11.5 dry, 10.5 wet  
 Baro: 1020  
 Vis.: 10-15 mi



Depth (M)	Temp. (°C)	Salinity (‰)	Density ( $\sigma_t$ )	Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	12.79	31.63	23.86	5.87	8.38	99.2
2	12.76	31.63	23.87	4.91	7.02	83.0
4	12.77	31.63	23.87	8.83	12.61	149.2
6	12.72	31.65	23.89	6.24	8.91	105.3
10	11.68	31.72	24.16	5.38	7.68	88.8
15	9.65	31.80	24.54	4.26	6.08	67.1
20	9.43	31.84	24.62	3.42	4.89	53.7
30	8.22	32.14	25.02	2.72	3.89	41.6
50	7.59	32.76	25.60	3.01	4.30	45.5
80	7.40	32.86	25.71	3.10	4.43	46.7

Station: Q 16 B  
 Position: 50°27.7'N  
 127°32.2'W  
 Time Messenger: 0803  
 Depth: 105 fath.  
 BT Serial#: 6004 B  
 BT Slide#: 10  
 Sea: rippled  
 Secchi: 4.0, Br

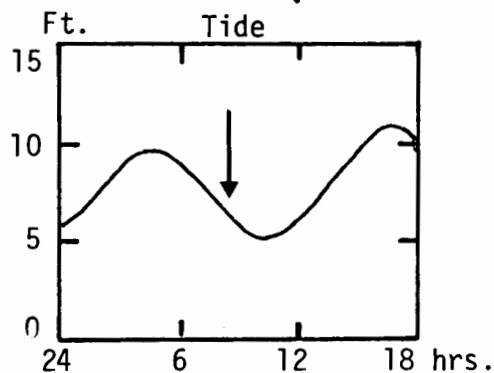
Date: 30/VII/75  
 Weather: 0'cast  
 Cloud: Cu, 8/8  
 Wind: 160°T, 10 kn  
 Temp: 11.5 dry, 10.5 wet  
 Baro: 1022  
 Vis.: 12 mi



Depth (M)	Temp. (°C)	Salinity (‰)	Density ( $\sigma_t$ )	Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	12.90	31.40	23.67	4.33	6.18	73.2
2	12.86	31.55	23.78	5.47	7.81	92.5
4	12.84	31.59	23.81	5.15	7.36	87.2
6	12.76	31.61	23.86	5.17	7.39	87.4
10	11.84	31.67	24.08	4.44	6.34	73.5
15	9.87	31.78	24.50	2.72	3.89	43.2
20	9.42	31.86	24.63	2.67	3.81	41.9
30	8.41	32.13	25.01	2.67	3.81	41.0
50	7.64	32.72	25.56	1.97	2.82	29.9
80	7.39	32.86	25.72	1.79	2.55	26.9
100	7.21	32.92	25.78	2.37	3.38	35.5
120	7.16	33.01	25.86	2.54	3.63	38.1
150	7.00	33.13	25.98	2.37	3.38	35.4

Station: Q 16 C  
 Position: 50°27.83'N  
 127°31.73'W  
 Time Messenger: 0837  
 Depth: 53 fath.  
 BT Serial#: HH 10897  
 BT Slide#: 11  
 Sea: smooth  
 Secchi: 3.2, Br

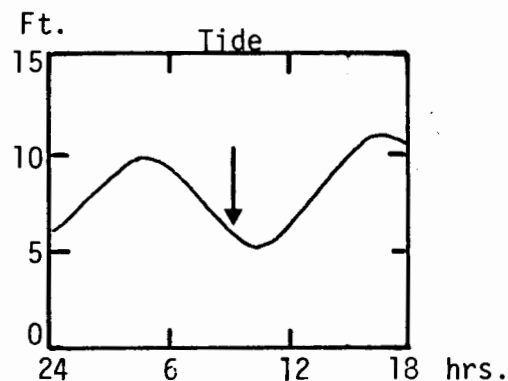
Date: 30/VII/75  
 Weather: 0'cast  
 Cloud: Sc. 8/8  
 Wind: 320°T, 4kn.  
 Temp:  
 Baro: 1022.1  
 Vis.: 12 mi.



Depth (M)	Temp. (°C)	Salinity (‰)	Density ( $\sigma_t$ )	Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	13.08	31.40	23.64	5.58	7.97	94.8
2	12.93	31.42	23.67	4.68	6.69	79.3
4	12.64	31.49	23.80	4.85	6.93	81.7
6	12.54	31.55	23.85	4.14	5.92	69.6
10	11.57	31.57	24.04	4.61	6.59	75.9
15	10.06	31.78	24.46	3.60	5.14	56.2
20	9.71	31.82	24.56	3.68	5.26	58.2
30	8.58	32.09	24.96	2.99	4.27	46.1
50	7.47	32.70	25.57	1.98	2.83	29.9

Station: Q 15 A  
 Position: 50°29.6'N  
 127°34.85'W  
 Time Messenger: 0917  
 Depth: 50 fath.  
 BT Serial#: 6004 B  
 BT Slide#: 12  
 Sea: calm  
 Secchi: 4.0, Br

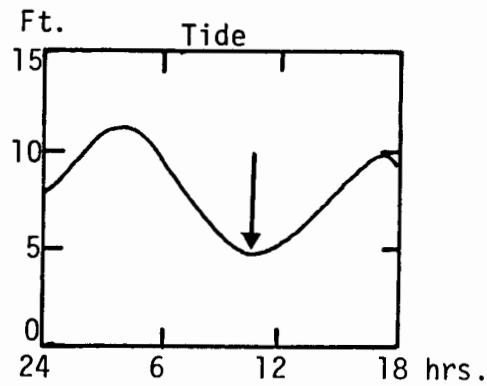
Date: 30/VII/75  
 Weather: Cloudy  
 Cloud: Cu, 3/8  
 Wind: calm  
 Temp:  
 Baro: 1022.2  
 Vis.: 15 mi.



Depth (M)	Temp. (°C)	Salinity (‰)	Density ( $\sigma_t$ )	Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	13.29	31.70	23.82	5.04	7.20	86.2
2	12.92	31.70	23.89	5.75	8.21	97.5
4	12.86	31.70	23.90	5.62	8.03	95.2
6	12.75	31.68	23.90	5.64	8.06	95.3
10	11.94	31.72	24.10	5.29	7.55	87.8
15	-	-	-	4.18	5.97	-
20	9.66	31.84	24.58	3.91	5.58	61.7
30	8.49	32.05	24.93	2.72	3.89	41.9
50	-	32.74	-	2.99	4.27	-
80	-	32.88	-	2.72	3.89	-

Station: Q 15 C  
 Position: 50°29.9'N  
 127°34.22'W  
 Time Messenger: 1040  
 Depth: 50 fath  
 BT Serial#: 6004 B  
 BT Slide#: 14  
 Sea: calm  
 Secchi: 5 M, Gr.

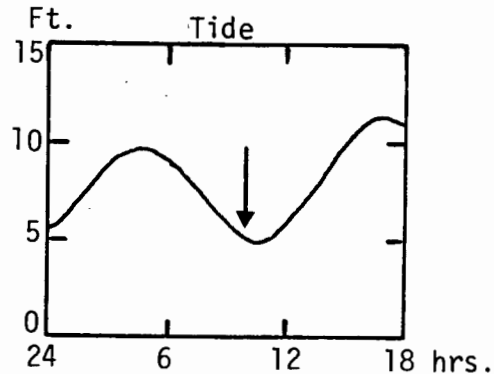
Date: 30/VII/75  
 Weather: cloudy  
 Cloud: Cu, 3/8  
 Wind: calm  
 Temp:  
 Baro: -  
 Vis.: 15 mi



Depth (M)	Temp. (°C)	Salinity (‰)	Density ( $\sigma_t$ )	Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	13.07	31.63	23.80	5.33	7.62	90.7
2	12.48	31.67	23.93	5.34	7.63	89.7
4	12.36	31.68	23.98	5.42	7.74	90.8
6	12.15	31.68	24.00	5.33	7.62	89.0
10	11.83	31.72	24.18	5.00	7.14	82.8
15	10.73	31.74	24.31	4.26	6.08	68.8
20	9.78	31.84	24.56	3.75	5.36	59.4
30	9.01	32.01	24.81	3.55	5.07	55.2
50	7.66	32.74	25.58	2.78	3.97	42.1
80	7.36	32.88	25.73	2.76	3.94	41.5

Station: Q 15 B  
 Position: 50°29.8'N  
 127°34.5'W  
 Time Messenger: 0949  
 Depth: 62 fath.  
 BT Serial#: 6004 B  
 BT Slide#: 13  
 Sea: calm  
 Secchi: 4.0 M, Br

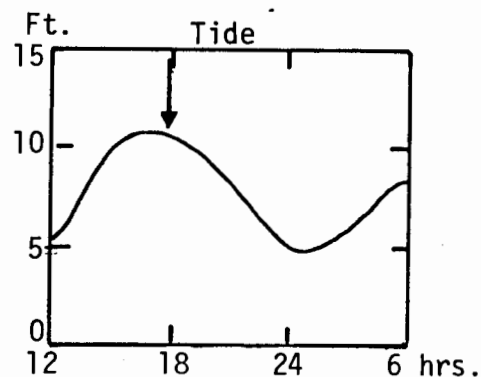
Date: 30/VII/75  
 Weather: cloudy  
 Cloud: Cu, 3/8  
 Wind: Calm  
 Temp:  
 Baro: 1022.3  
 Vis.: 15 mi.



Depth (M)	Temp. (°C)	Salinity (‰)	Density ( $\sigma_t$ )	Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	12.78	31.68	23.90	5.57	7.95	94.1
2	12.64	31.68	23.92	5.40	7.71	91.0
4	12.53	31.68	23.95	5.51	7.87	92.6
6	12.36	31.70	24.00	5.17	7.39	86.7
10	10.83	31.76	24.30	4.44	6.34	71.9
15	10.43	31.80	24.42	4.16	5.94	66.8
20	9.88	31.86	24.56	3.40	4.85	53.9
30	8.40	32.13	25.00	2.99	4.27	45.9
50	7.63	32.74	25.58	2.49	3.55	37.6
80	7.40	32.86	25.70	2.65	3.78	39.9
100	7.31	32.92	25.77	2.72	3.89	40.9
120	7.28	-	-	2.77	3.95	-
150	7.00	33.11	25.97	2.61	3.73	39.0

Station: Q 6  
 Position: 50°30.0'N  
 127°37.3'W  
 Time Messenger: 1756  
 Depth: 78 fath.  
 BT Serial#: 6004 B  
 BT Slide#: 15  
 Sea: Slight chop, 300°T  
 Secchi: 3.0, Gr.

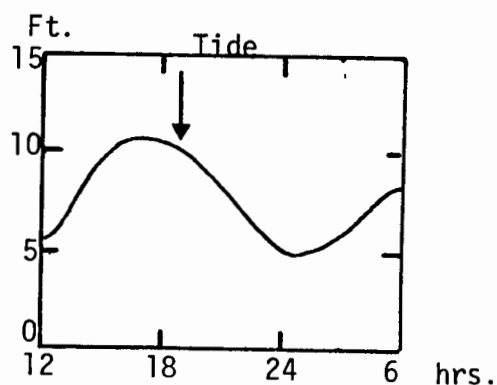
Date: 30/VII/75  
 Weather: Clear  
 Cloud: Cu, 3/8  
 Wind: 300°T, 12 kn.  
 Temp: 20 dry, 15 wet  
 Baro: 1023  
 Vis.: 12 mi.



Depth (M)	Temp. (°C)	Salinity (‰)	Density ( $\sigma_t$ )	Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	13.63	31.72	23.77	6.51	9.30	112.1
2	13.63	31.72	23.77	6.57	9.39	113.2
4	13.47	31.72	23.80	6.18	8.83	106.1
6	11.61	31.92	24.30	5.68	8.11	93.7
10	10.36	31.84	24.47	4.40	6.29	70.6
15	9.81	31.88	24.58	3.96	5.65	62.7
20	9.71	31.97	24.67	3.74	5.34	59.1
30	8.68	32.26	25.06	3.33	4.75	51.4
50	7.55	32.78	25.62	1.39	1.98	20.9
80	7.45	32.84	25.71	1.39	1.98	20.9
100	7.43	32.86	25.71	2.60	3.71	39.1

Station: Q 5  
 Position: 50°31.5'N  
 127°37.3'W  
 Time Messenger: 1858  
 Depth: 66 fath.  
 BT Serial#: 6004 B  
 BT Slide#: 16  
 Sea: slight chop 300°T  
 Secchi: 3.0, Gr/Br

Date: 30/VII/75  
 Weather: Cloudy  
 Cloud: Cu, 3/8  
 Wind: 250°T, 8kn  
 Temp:  
 Baro: 1023  
 Vis.: 12 mi.



Depth (M)	Temp. (°C)	Salinity (‰)	Density ( $\sigma_t$ )	Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	13.24	31.72	23.85	5.85	8.35	99.8
2	13.06	31.72	23.88	5.75	8.21	97.8
4	12.73	31.70	23.93	5.47	7.81	92.3
6	12.46	31.72	23.99	5.47	7.81	91.8
10	11.39	31.78	24.23	4.58	6.54	75.1
15	10.95	31.80	24.32	4.31	6.16	70.1
20	9.72	31.97	24.67	4.46	6.37	70.5
30	8.56	32.41	25.36	3.92	5.60	60.7
50	7.44	32.86	25.54	2.86	4.08	42.9

Station: Q 4

Position: 50°31.2'N  
127°40.7'W

Time Messenger: 1943

Depth: 65 fath.

BT Serial#: 6004 B

BT Slide#: 17

Sea: Slight chop, 300°T

Secchi: 4.5, Gr.

Date: 30/VII/75

Weather: Cloudy

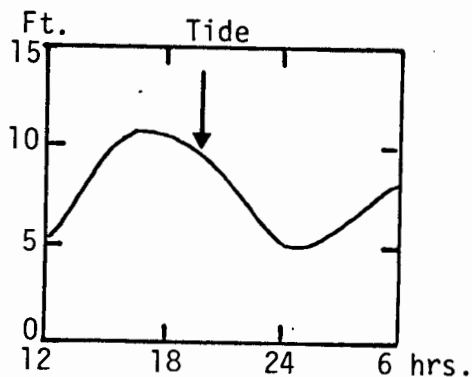
Cloud: Cu, 4/8

Wind: 260°T, 15 kn

Temp:

Baro: 1023.8

Vis.: 15 mi.



## Oxygen

Depth (M)	Temp. (°C)	Salinity (‰)	Density ( $\sigma_t$ )	(ml/l)	(mg/l)	% Sat.
0	12.76	31.86	24.04	4.91	7.01	83.0
2	12.70	31.88	24.06	4.91	7.01	82.9
4	12.43	31.88	24.13	6.08	8.69	102.2
6	12.05	31.88	24.19	5.71	8.16	95.2
10	10.83	31.88	24.42	4.96	7.09	80.5
15	10.11	31.93	24.57	3.81	5.44	60.8
20	9.86	31.99	24.67	2.90	4.14	46.0
30	8.73	32.34	25.11	3.51	5.02	54.4
50	7.48	32.86	25.71	2.65	3.78	39.9
80	7.44	32.88	25.73	2.07	2.96	31.2
100	7.39	32.90	25.76	1.95	2.78	29.3

Station: Q 3

Position: 50°28.8'W  
127°47.4'N

Time Messenger: 2041

Depth: 80 fath.

BT Serial#: 6004 B

BT Slide#: 18

Sea: slight chop, 300°T

Secchi: -

Date: 30/VII/75

Weather: Cloudy

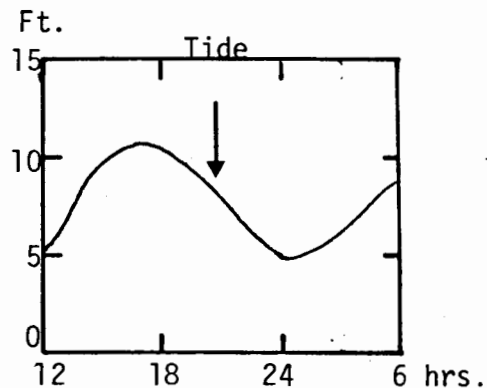
Cloud: Cu, 4/8

Wind: 260°T, 15 kn

Temp:

Baro: 1023.8

Vis.: 15 mi.



## Oxygen

Depth (M)	Temp. (°C)	Salinity (‰)	Density ( $\sigma_t$ )	(ml/l)	(mg/l)	% Sat.
0	11.79	31.88	24.24	3.51	5.02	58.2
2	11.78	31.88	24.24	4.21	6.01	69.7
4	11.80	31.90	24.26	3.77	5.39	62.5
6	11.76	31.90	24.27	4.29	6.13	71.1
10	11.41	31.92	24.33	5.32	7.60	80.0
15	11.35	31.99	24.42	3.96	5.65	65.1
20	9.39	32.13	24.85	3.01	4.30	47.3
30	7.88	32.72	25.53	2.84	4.06	43.3
50	7.46	32.90	25.74	2.23	3.19	33.7
80	7.20	33.01	25.86	2.79	3.98	49.2
100	7.12	33.05	25.90	2.57	3.67	38.5
120	7.14	33.07	25.91	2.67	3.81	40.0

Station: Q2A

Position: 50°28.1'N

127°55.28'N

Time Messenger: 0644

Depth: 50 fath.

BT Serial#: 6004 B

BT Slide#: 19

Sea: calm

Secchi: 8.0 M, Gr.

Date: 31/VII/75

Weather: 0'cast

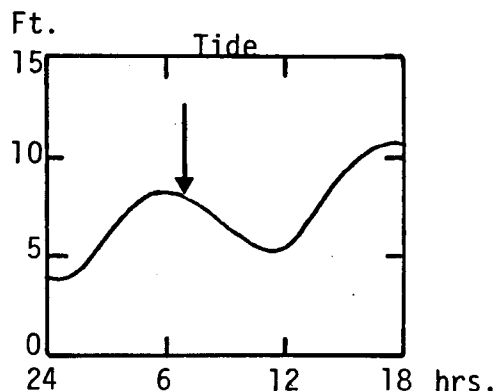
Cloud: Sc. 6/8

Wind: calm

Temp: 13.2 dry, 12.9 wet

Baro: 1021

Vis.: 10+ mi.



## Oxygen

Depth (M)	Temp. (°C)	Salinity (‰)	Density (σ <sub>t</sub> )	(ml/l)	(mg/l)	% Sat.
0	11.02	31.95	24.43	4.67	6.58	75.0
2	10.96	31.95	24.44	4.75	6.79	77.3
4	10.86	32.01	24.51	3.77	5.38	61.2
6	10.17	32.07	24.67	4.80	6.85	76.7
10	9.90	32.15	24.77	4.79	6.84	76.2
15	8.32	32.61	25.39	3.23	4.62	49.7
20	8.05	32.68	25.48	3.11	4.44	47.5
30	7.60	32.85	25.68	3.07	4.38	46.4
50	7.21	33.01	25.86	2.86	4.08	42.9
80	6.91	33.17	26.02	2.80	4.00	41.8

Station: Q2B

Position: 50°28.45'N

127°55.28'W

Time Messenger: 0735

Depth: 105. fath.

BT Serial#: 6004 B

BT Slide#: 20

Sea: rippled

Secchi: 5.0 Gr.

Date: 31/VII/75

Weather: 0'cast

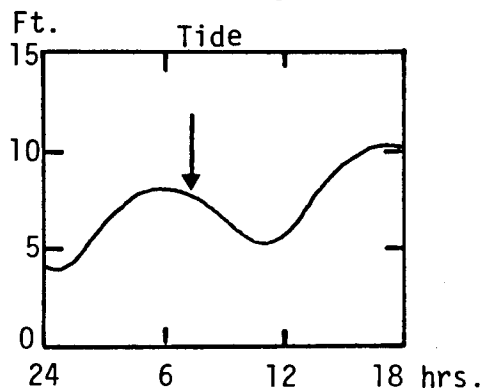
Cloud: Cu, 7/8

Wind: 280°T, 5 kn

Temp: 13.3 dry, 12.8 wet

Baro: 1021

Vis.: -

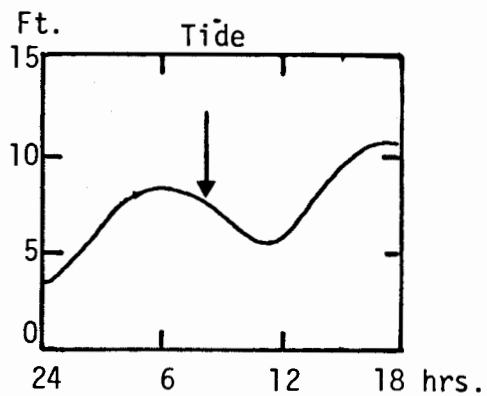


## Oxygen

Depth (M)	Temp. (°C)	Salinity (‰)	Density (σ <sub>t</sub> )	(ml/l)	(mg/l)	% Sat.
0	12.87	31.88	24.01	2.04	2.92	34.7
2	11.87	31.90	24.24	2.51	3.59	41.7
4	11.39	31.90	24.32	4.96	7.09	81.5
6	10.68	31.97	24.51	4.40	6.29	71.2
10	9.94	32.03	24.68	4.33	6.18	68.8
15	9.67	32.15	24.81	4.02	5.74	63.6
20	8.99	32.34	25.07	3.63	5.18	56.5
30	7.15	32.84	25.73	3.01	4.30	45.1
50	7.10	33.05	25.90	3.01	4.30	45.1
80	6.91	33.17	26.03	2.49	3.55	37.1
100	6.83	33.21	26.07	2.67	3.82	39.8
120	6.83	33.24	26.08	2.95	4.22	44.0
150	6.72	33.26	26.10	2.51	3.59	37.3

Station: Q<sub>2</sub>C  
 Position: 50°28.9'N  
 127°55.28'W  
 Time Messenger: 0808  
 Depth: 50 fath.  
 BT Serial#: 6004 B  
 BT Slide#: 21  
 Sea: calm  
 Secchi: 5.0, Gr

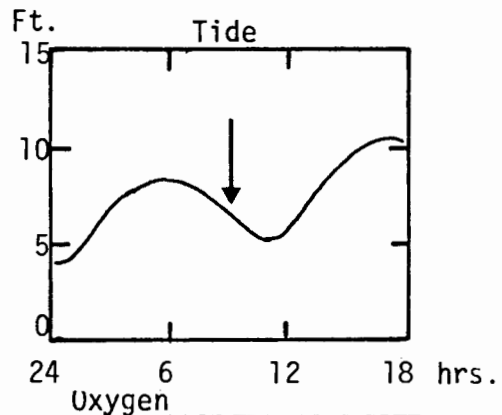
Date: 31/VII/75  
 Weather: 0'cast  
 Cloud: Cu, 8/8  
 Wind: calm  
 Temp:  
 Baro: 1027  
 Vis.: 10-15 mi.



Depth (M)	Temp. (°C)	Salinity (‰)	Density (σ <sub>T</sub> )	Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	12.71	31.86	24.07	5.78	8.26	97.7
2	12.61	31.86	24.09	5.19	7.41	87.5
4	12.11	31.90	24.20	5.21	7.44	86.9
6	11.88	31.88	24.22	5.38	7.68	89.2
10	11.26	31.97	24.42	4.85	6.93	79.5
15	9.74	32.16	24.81	4.02	5.74	63.7
30	9.11	32.32	25.03	-	-	-
30	7.80	32.78	25.59	3.72	5.32	56.6
50	7.17	33.03	25.87	2.93	4.19	44.0
80	6.92	33.34	26.16	2.67	3.82	39.9

Station: Q<sub>1</sub>  
 Position: 50°25.3'N  
 127°59.5'W  
 Time Messenger: 0909  
 Depth: 80 fath.  
 BT Serial#: 6004 B  
 BT Slide#: 22  
 Sea: mod. swell, 300°T  
 Secchi: 7.0, Gr.

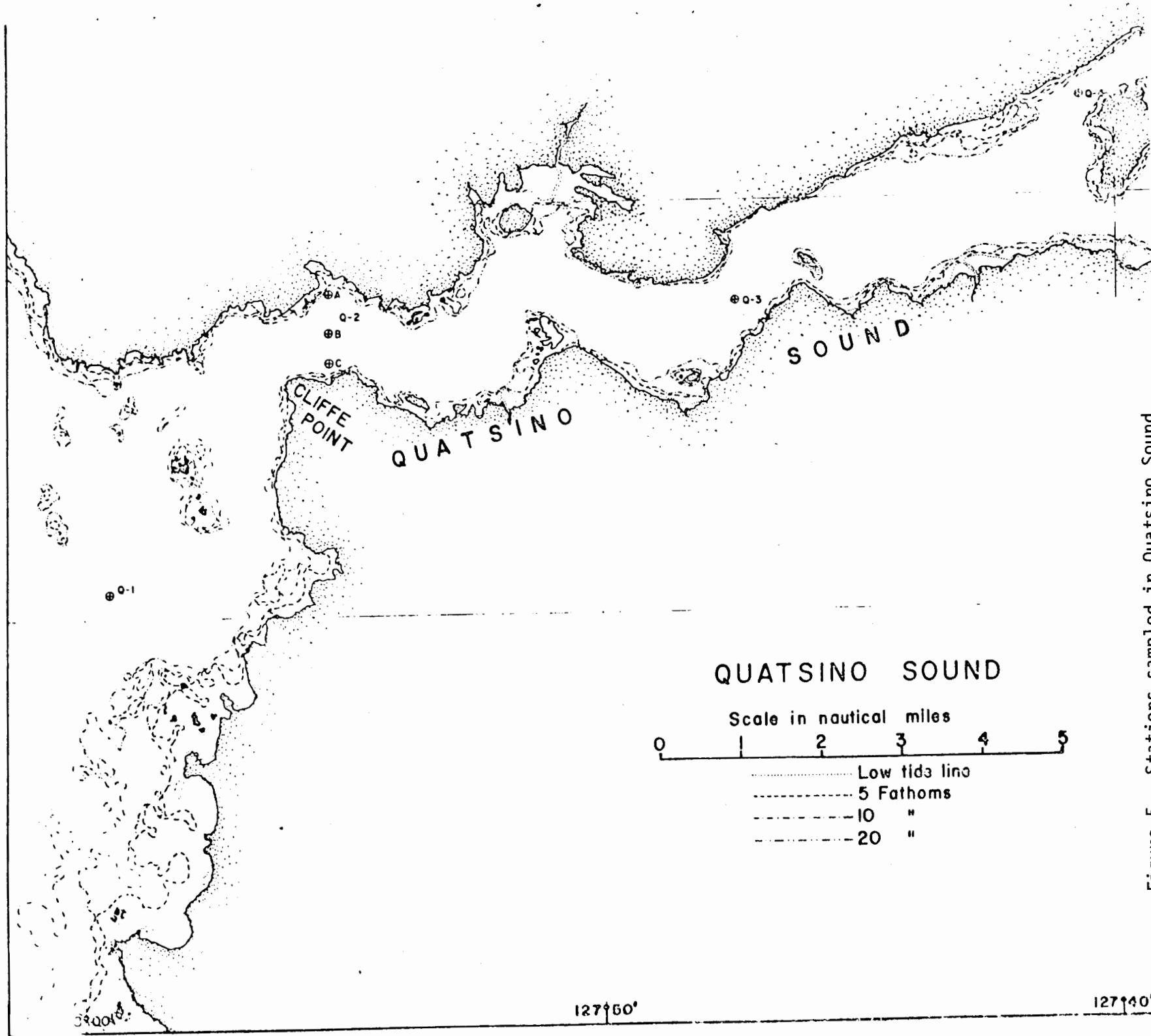
Date: 31/VII/75  
 Weather: 0'cast  
 Cloud: St, 8/8  
 Wind: 270°T, 10 kn.  
 Temp:  
 Baro: 1023 mb  
 Vis.: 2 mi



Depth (M)	Temp. (°C)	Salinity (‰)	Density (σ <sub>T</sub> )	Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	10.97	32.20	24.64	1.79	2.55	29.1
2	10.82	32.22	24.68	2.31	3.30	37.5
4	10.62	32.24	24.72	4.98	7.11	80.5
6	10.22	32.28	24.82	4.46	6.37	71.5
10	8.98	32.45	25.14	4.02	5.74	62.7
15	8.44	32.51	25.28	3.63	5.18	55.9
20	8.17	32.63	25.43	3.47	4.96	53.2
30	7.71	32.82	25.63	3.05	4.35	46.7
50	6.90	33.13	26.00	2.91	4.16	43.4
80	6.52	33.36	26.22	2.60	3.71	38.4
100	6.41	33.44	26.29	2.29	3.27	33.8
120	6.47	33.44	26.30	2.41	3.44	35.6

Part IV - Quatsino Sound - Neroutsos Inlet Survey,  
November 25 - 26, 1975.

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### QUATSINO SOUND

Scale in nautical miles



- ..... Low tide line
- 5 Fathoms
- 10 "
- 20 "

Figure 5. Stations sampled in Quatsino Sound, November 25 - 26, 1975.

39000

127°50'

127°40'

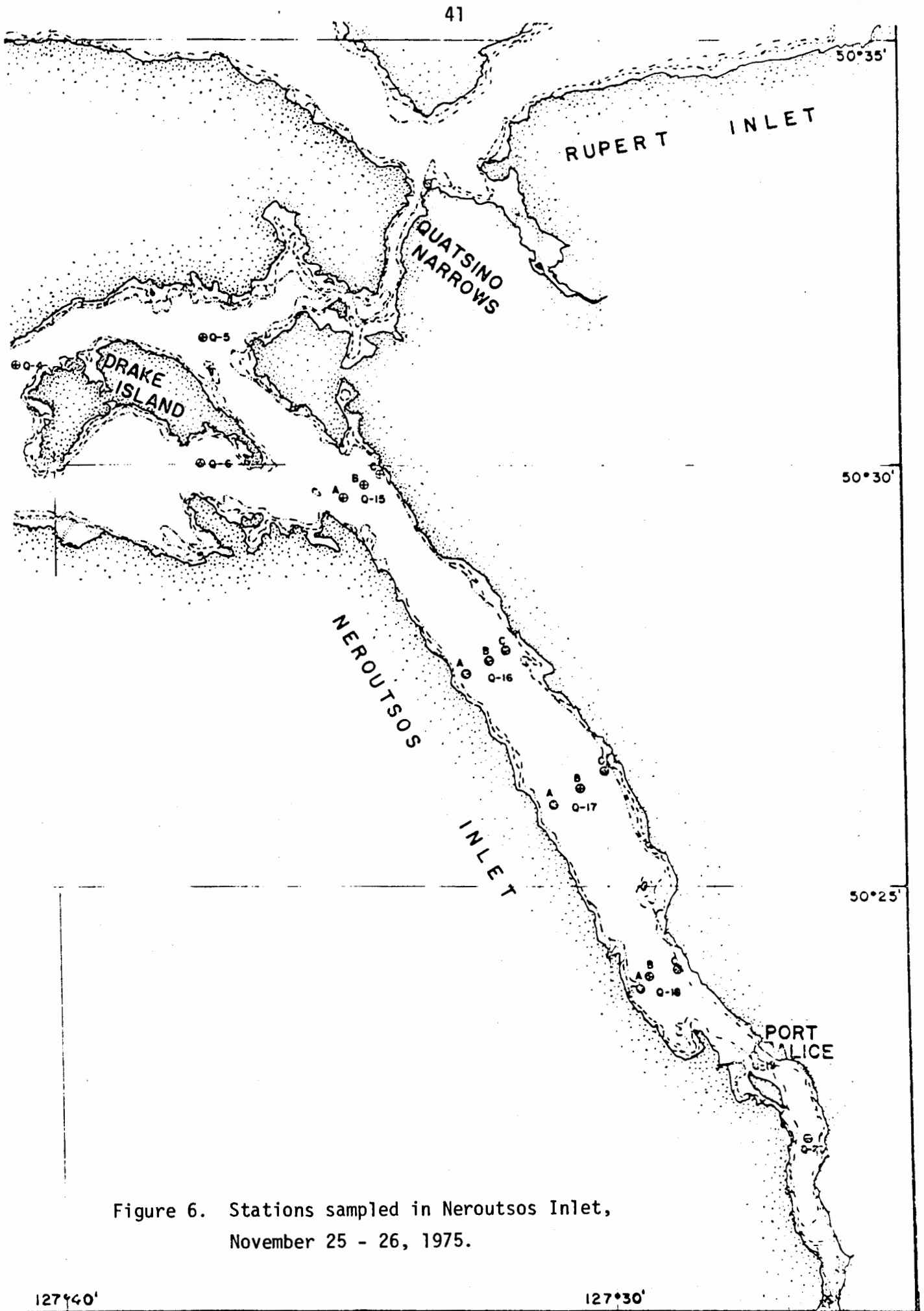
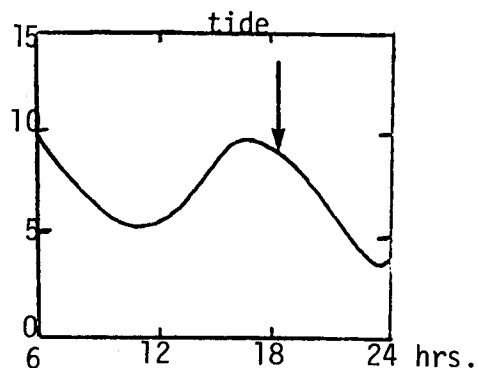


Figure 6. Stations sampled in Neroutsos Inlet,  
November 25 - 26, 1975.

Station: Q 3  
 Latitude: 50°28.8'N  
 Longitude: 127°47.4'W  
 Time: 1801  
 Date: 25/XI/75  
 Depth: 76 fath.  
 Temp: D 10

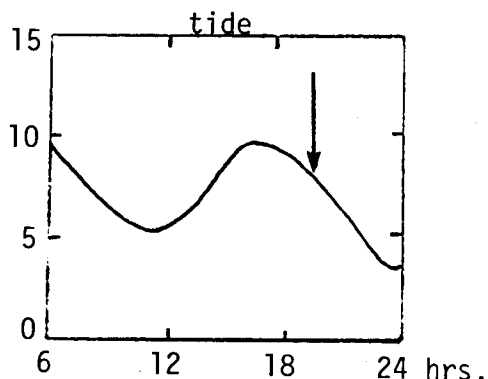
Weather: heavy rain  
 Sea: choppy  
 Wind: 220°T, 35 kn  
 Cloud Amt: 8/8  
 Baro: 1007 mb



Depth (M)	T (°C)	S (‰)	$\sigma_T$	Dissolved oxygen			pH
				(ml/l)	(mg/l)	% Sat.	
0	8.83	25.30	19.62	5.84	8.34	86.5	
2	8.81	25.31	19.57	5.85	8.35	86.5	
4	8.79	25.41	19.72	5.78	8.26	85.7	
6	9.46	25.89	19.98	5.66	8.08	85.4	
10	9.46	27.96	21.60	5.73	8.19	87.8	
15	9.50	28.81	22.25	5.99	8.55	92.2	
20	9.66	29.81	23.00	6.11	8.74	95.2	
30	9.79	30.78	23.78	5.73	8.19	90.1	
50	9.76	31.40	23.49	5.18	7.40	81.7	
80	9.55	31.67	24.48	4.51	6.44	70.8	
100	9.48	31.60	24.41	4.44	6.34	69.6	
120	9.54	31.76	24.55	4.48	6.40	70.4	

Station: Q4  
 Latitude: 50°31.2'N  
 Longitude: 127°40.7'W  
 Time: 1914  
 Date: 25/XI/75  
 Depth: 66 fath  
 Temp: D 10

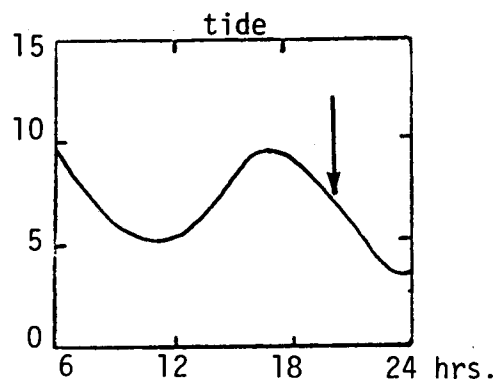
Weather: continuous rain  
 Sea: choppy  
 Wind: 220°T, 20 kn  
 Cloud Amt: 8/8  
 Baro: 1006 mb



Depth (M)	T (°C)	S (‰)	$\sigma_T$	Dissolved oxygen			pH
				(ml/l)	(mg/l)	% Sat.	
0	8.47	22.31	17.32	5.18	7.40	74.7	
2	8.48	22.33	17.35	5.12	7.32	73.9	
4	8.92	-	-	-	-	-	
6	8.84	25.26	19.58	5.48	7.83	81.2	
10	9.20	26.29	20.40	5.43	7.76	81.7	
15	9.48	28.11	21.72	5.53	7.90	84.2	
20	9.62	29.19	22.54	5.89	8.41	91.1	
30	9.78	30.42	23.48	5.84	8.34	91.5	
50	9.66	31.42	24.28	4.25	6.07	66.9	
80	9.52	31.82	24.60	4.23	6.04	66.5	
100	9.43	31.78	24.59	3.87	5.53	60.7	

Station: Q5  
 Latitude: 50°31.5'N  
 Longitude: 127°37.35'W  
 Time: 2001  
 Date: 25/XI/75  
 Depth: 63 fath.  
 Temp: D 10

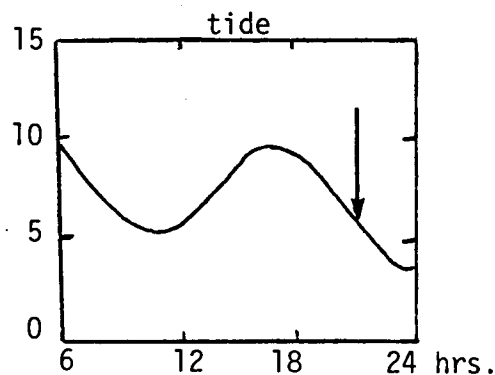
Weather: moderate rain  
 Sea: choppy  
 Wind: 220°T 10 kn  
 Cloud Amt: 8/8  
 Baro: 1005 mb



Depth (M)	T (°C)	S (°/oo)	$\sigma_T$	Dissolved oxygen			pH
				(ml/l)	(mg/l)	% Sat.	
0	8.88	24.69	19.11	5.29	7.55	78.1	
2	8.93	24.72	19.13	5.23	7.47	77.4	
4	8.92	24.91	19.31	5.23	7.47	77.4	
6	8.95	25.19	19.52	5.43	7.76	80.6	
10	9.09	25.86	20.01	5.08	7.26	76.0	
15	9.18	-	-	5.23	7.47	-	
20	9.29	27.13	20.97	5.25	7.50	79.6	
30	9.76	29.85	23.02	5.45	7.79	85.1	
50	9.72	31.20	24.07	4.98	7.11	78.3	
80	9.50	31.72	24.51	4.12	5.89	64.8	

Station: Q6  
 Latitude: 50°30'N  
 Longitude: 127°37.3'W  
 Time: 2102  
 Date: 25/XI/75  
 Depth: 58 fath.  
 Temp: D 10

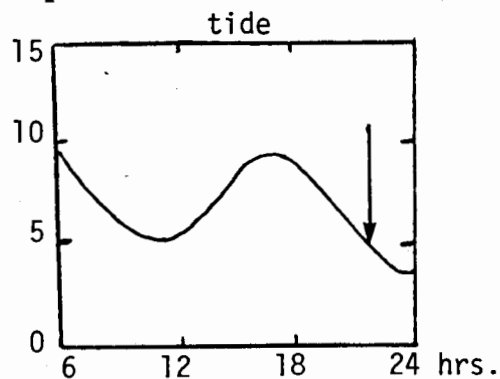
Weather: continuous rain  
 Sea: choppy  
 Wind: 220°T, 25 kn  
 Cloud Amt: 8/8  
 Baro: 1004 mb



Depth (M)	T (°C)	S (°/oo)	$\sigma_T$	Dissolved oxygen			pH
				(ml/l)	(mg/l)	% Sat.	
0	8.96	24.67	19.08	5.17	7.39	66.2	
2	9.01	25.29	19.58	5.23	7.47	77.8	
4	9.01	25.43	19.70	5.18	7.40	77.2	
6	9.25	26.49	20.47	5.20	7.43	73.8	
10	9.39	27.21	21.03	5.29	7.55	80.3	
15	9.54	28.01	21.64	5.29	7.56	81.2	
20	9.72	30.54	23.57	5.78	8.26	90.5	
30	9.88	31.34	24.18	5.27	7.53	83.3	
50	9.69	31.61	24.40	4.17	5.96	65.8	
80	9.57	31.67	24.49	3.98	5.68	62.5	
100	9.55	-	-	4.07	5.81	-	

Station: Q15B  
 Latitude: 50°29.8'N  
 Longitude: 127°34.5'W  
 Time: 2148  
 Date: 25/XI/75  
 Depth: 100 fath.  
 Temp: D10

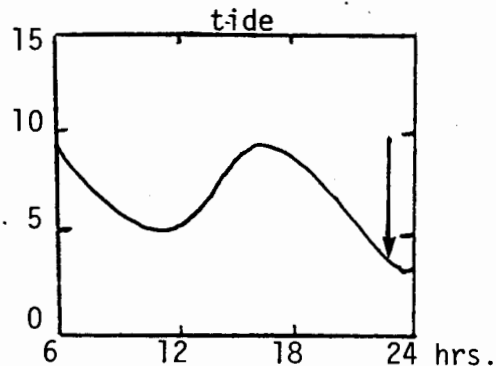
Weather: raining  
 Sea: choppy  
 Wind: 270°T, 25 kn  
 Cloud Amt: 8/8  
 Baro: 1004 mb



Depth (M)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen			pH
				(ml/l)	(mg/l)	% Sat.	
0	9.06	25.54	19.79	5.08	7.26	75.8	
2	9.13	25.80	19.97	5.21	7.44	77.9	
4	9.15	25.89	20.02	5.18	7.40	77.7	
6	9.16	26.08	20.18	5.23	7.47	78.5	
10	9.33	26.74	20.67	5.38	7.69	81.5	
15	9.47	29.00	22.40	5.14	7.34	79.2	
20	9.70	29.57	22.82	5.53	7.90	86.0	
30	10.26	30.52	23.48	4.73	6.76	75.0	
50	9.77	31.26	24.12	4.68	6.68	90.6	
80	9.46	31.70	24.51	4.07	5.82	63.9	
100	8.94	31.88	24.72	3.43	4.90	53.3	
120	7.54	32.32	25.28	2.37	3.38	35.6	

Station: Q16B  
 Latitude: 50°27.7'N  
 Longitude: 127°32.1'W  
 Time: 2240  
 Date: 25/XI/75  
 Depth: 102 fath.  
 Temp: D 9.5

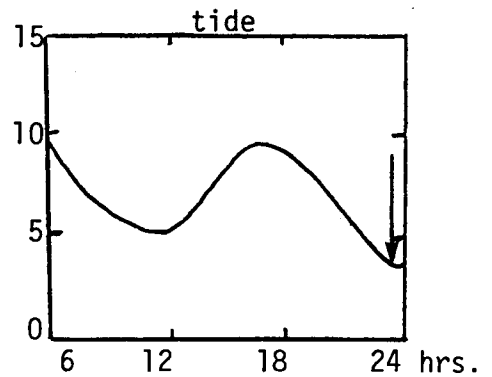
Weather: moderate rain  
 Sea: choppy  
 Wind: 270°T, 15 kn  
 Cloud Amt: 8/8  
 Baro: 1004 mb



Depth (M)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen			pH
				(ml/l)	(mg/l)	% Sat.	
0	9.09	25.63	19.85	5.20	7.43	77.7	
2	9.10	25.60	19.82	5.23	7.47	78.2	
4	9.21	26.01	20.11	5.16	7.37	77.5	
6	9.36	26.61	20.57	5.20	7.43	78.7	
10	9.52	27.77	21.43	5.18	7.40	79.3	
15	9.77	28.50	21.98	4.79	6.84	74.0	
20	9.88	29.91	23.03	5.53	7.90	86.6	
30	10.43	30.67	23.55	3.87	5.53	61.7	
50	9.87	31.34	24.18	4.38	6.25	69.2	
80	9.56	31.70	24.50	3.98	5.68	62.5	
100	9.52	31.88	24.61	3.42	4.89	53.8	
120	8.77	32.34	25.11	1.91	2.73	29.6	
150	7.42	32.92	25.79	1.71	2.44	25.7	

Station: Q17B  
 Latitude: 50°26.1'N  
 Longitude: 127°30.6'W  
 Time: 2327  
 Date: 25/XI/75  
 Depth: 102 fath.  
 Temp: D -

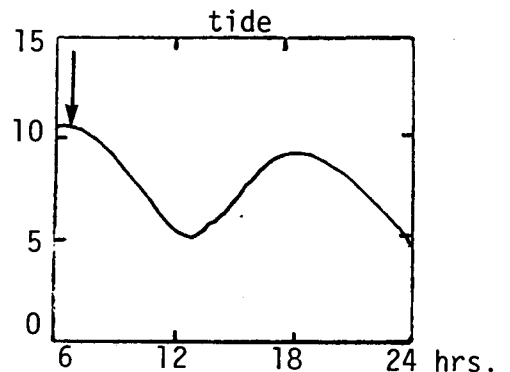
Weather: raining  
 Sea: light chop  
 Wind: calm  
 Cloud Amt: 8/8  
 Baro: 1004 mb



Depth (M)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen			pH
				(ml/l)	(mg/l)	% Sat.	
0	9.17	25.45	19.70	4.78	6.83	71.5	
2	9.21	25.80	19.96	4.55	6.50	68.2	
4	9.38	26.72	20.63	4.99	7.13	75.6	
6	9.40	26.83	20.71	5.09	7.27	77.2	
10	9.60	27.58	21.28	5.12	7.32	78.5	
15	9.88	29.00	22.33	4.33	6.18	67.3	
20	10.19	29.91	22.97	3.93	5.62	62.0	
30	10.47	30.73	23.61	3.48	4.97	55.5	
50	9.98	31.38	24.20	4.31	6.15	68.2	
80	9.68	31.68	24.49	3.82	5.46	60.3	
100	9.74	31.90	24.70	3.12	4.46	49.4	
120	8.71	32.34	25.11	1.66	2.37	25.7	
150	7.38	32.95	25.79	1.43	2.04	21.5	

Station: Q20  
 Latitude: 50°22'N  
 Longitude: 127°26.5'W  
 Time: 0640  
 Date: 26/XI/75  
 Depth: 28 fath.  
 Temp: D -

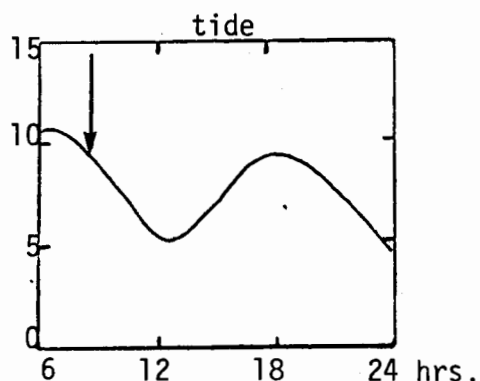
Weather: moderate rain  
 Sea: light chop  
 Wind: 350°T, 10-15 kn  
 Cloud Amt: 8/8  
 Baro: 1003 mb



Depth (M)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen			pH
				(ml/l)	(mg/l)	% Sat.	
0	8.93	24.06	18.61	3.64	5.20	53.6	
2	9.05	24.46	18.91	4.10	5.86	60.8	
4	9.47	26.51	19.71	4.48	6.40	67.9	
6	9.52	26.68	19.81	4.48	6.40	68.1	
10	9.83	27.88	21.50	3.87	5.53	59.7	
15	9.98	28.47	21.89	4.28	6.12	66.6	
20	10.22	29.47	22.70	4.21	6.01	66.2	
30	10.46	30.33	23.31	2.87	4.10	45.6	
45	10.43	31.00	23.80	1.26	1.80	20.1	

Station: Q19  
 Latitude: 50°23'N  
 Longitude: 127°27.4'W  
 Time: 0826  
 Date: 26/XI/75  
 Depth: 20 fath.  
 Temp: D 7.0

Weather: moderate rain  
 Sea: rippled  
 Wind: 000°T, 5kn  
 Cloud Amt: 8/8  
 Baro: 1004 mb

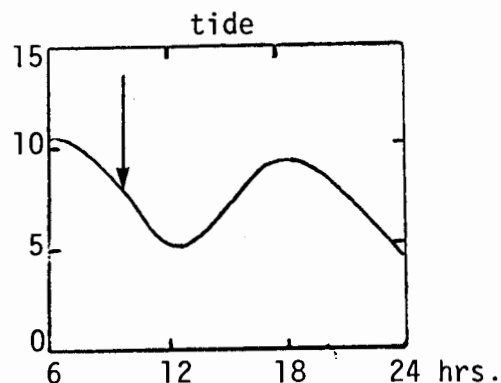


## Dissolved oxygen

Depth (M)	T (°C)	S (°/oo)	$\sigma_T$	Dissolved oxygen			pH
				(ml/l)	(mg/l)	% Sat.	
0	9.01	24.91	19.30	4.23	6.04	62.7	
2	9.20	25.71	19.40	4.38	6.25	65.6	
4	9.29	26.06	20.12	4.48	6.40	67.5	
6	9.32	26.27	20.27	4.58	6.54	69.0	
10	9.59	27.34	21.10	4.68	6.68	71.5	
15	9.83	28.17	21.70	4.28	6.11	66.1	
20	9.92	28.37	21.85	4.05	5.78	62.7	
30	10.44	30.82	23.69	2.26	3.23	36.0	

Station: Q18A  
 Latitude: 50°23.8'N  
 Longitude: 127°29.5'W  
 Time: 0920  
 Date: 26/XI/75  
 Depth: 45 fath.  
 Temp: D 7

Weather: partly overcast  
 Sea: calm  
 Wind: calm  
 Cloud Amt: 7/8  
 Baro: 1004 mb

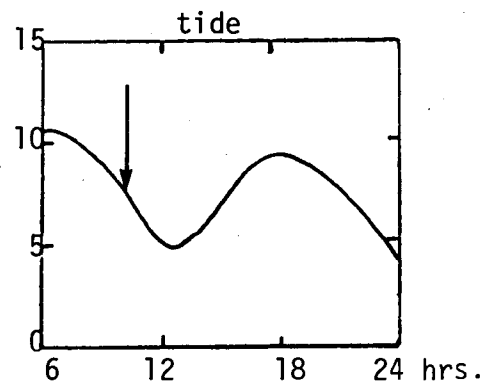


## Dissolved oxygen

Depth (M)	T (°C)	S (°/oo)	$\sigma_T$	Dissolved oxygen			pH
				(ml/l)	(mg/l)	% Sat.	
0	7.79	18.57	-	5.53	7.90	76.6	
2	9.12	25.41	19.68	4.33	6.18	64.6	
4	9.22	25.84	19.20	4.35	6.21	65.3	
6	9.26	26.08	20.15	4.53	6.47	68.2	
10	9.54	27.21	21.00	4.88	6.97	74.5	
15	9.68	27.96	21.55	4.73	6.76	72.8	
20	10.02	29.28	22.53	4.48	6.40	65.7	
30	10.38	30.31	23.30	2.67	3.81	42.3	
50	10.54	31.40	23.33	3.40	4.86	54.6	
80	9.93	-	-	3.47	4.96	-	

Station: Q 18C  
 Latitude: 50°24.1'N  
 Longitude: 127°28.8'W  
 Time: 1000  
 Date: 26/XI/75  
 Depth: 52 fath.  
 Temp: D 7

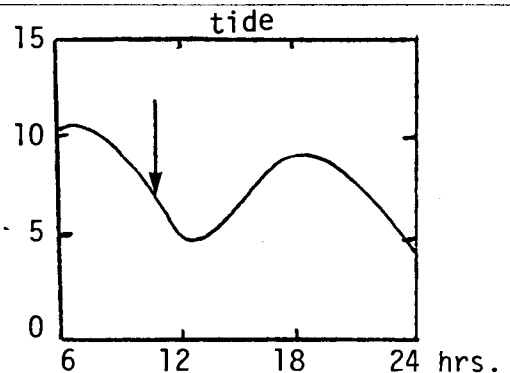
Weather: partly cloudy  
 Sea: calm  
 Wind: calm  
 Cloud Amt: 7/8  
 Baro: 1005 mb



Depth (M)	T (°C)	S (‰)	$\sigma_T$	Dissolved oxygen			pH
				(ml/l)	(mg/l)	% Sat.	
0	8.71	23.08	17.92	4.93	7.04	71.8	
2	9.18	25.89	20.01	4.78	6.83	71.7	
4	9.29	26.27	20.31	4.95	7.07	74.6	
6	9.33	26.51	20.48	4.93	7.04	74.5	
10	9.52	27.04	20.86	4.95	7.07	75.4	
15	9.64	27.67	21.32	4.76	6.80	73.0	
20	10.03	29.15	22.48	3.98	5.68	62.5	
30	10.38	30.35	23.31	2.57	3.67	40.8	
50	10.56	31.34	24.07	3.34	4.77	53.6	
80	9.97	31.72	24.45	3.27	4.67	51.9	

Station: Q18B  
 Latitude: 50°23.9'N  
 Longitude: 127°29.2'W  
 Time: 1032  
 Date: 26/XI/75  
 Depth: 70 fath.  
 Temp: D 8.0

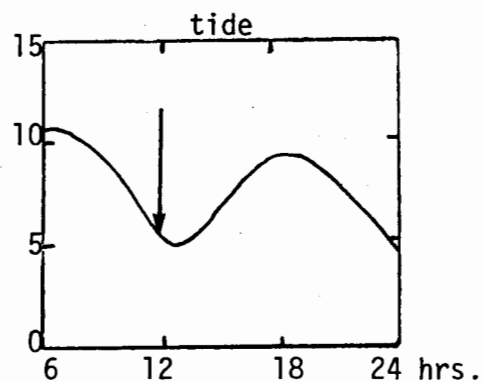
Weather: partly cloudy  
 Sea: calm  
 Wind: calm  
 Cloud Amt: 7/8  
 Baro: 1005.5 mb  
 Secchi: 2.0M, Br.



Depth (M)	T (°C)	S (‰)	$\sigma_T$	Dissolved oxygen			pH
				(ml/l)	(mg/l)	% Sat.	
0	8.98	25.09	19.42	5.08	7.26	75.5	
2	9.00	25.43	19.71	4.98	7.11	74.1	
4	9.15	25.80	19.97	4.73	6.76	70.9	
6	9.33	26.51	20.49	4.79	6.84	72.4	
10	9.53	27.15	20.48	4.78	6.83	72.9	
15	9.74	27.94	21.52	4.64	6.63	71.5	
20	10.09	29.22	22.48	3.84	5.48	60.0	
30	10.41	30.67	23.58	2.21	3.16	35.2	
50	10.52	31.38	24.10	3.57	5.10	57.3	
80	9.90	31.70	24.42	3.52	5.03	55.8	
100	9.85	31.84	24.55	2.81	4.02	44.6	
120	9.36	32.09	24.82	1.96	2.80	30.7	

Station: Q17C  
 Latitude: 50°26.3'N  
 Longitude: 127°29.2'W  
 Time: 1113  
 Date: 26/XI/75  
 Depth: 48 fath.  
 Temp: D 8.0

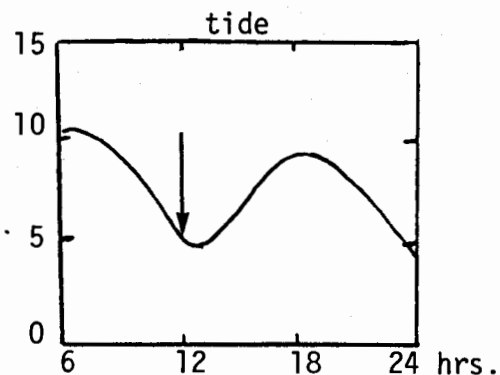
Weather: partly overcast  
 Sea: light chop  
 Wind: 320°T, 10 kn  
 Cloud Amt: 6/8  
 Baro: 1006 mb



Depth (M)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen			pH
				(ml/l)	(mg/l)	% Sat.	
0	9.10	25.73	19.92	5.33	7.62	79.8	
2	9.06	25.67	19.87	5.29	7.55	78.9	
4	9.04	25.80	19.98	5.23	7.47	78.1	
6	9.05	25.86	20.01	5.19	7.42	77.6	
10	9.30	26.42	20.41	4.95	7.07	74.7	
15	9.71	28.01	21.60	4.83	6.90	74.4	
20	9.94	29.22	22.50	4.71	6.73	73.5	
30	10.37	30.44	23.40	3.77	5.39	59.9	
50	10.31	31.38	24.12	3.87	5.53	61.8	
80	9.67	31.67	24.45	3.82	5.46	60.2	

Station: Q17A  
 Latitude: 50°25.9'N  
 Longitude: 127°31'W  
 Time: 1203  
 Date: 26/XI/75  
 Depth: 70 fath.  
 Temp: D 10

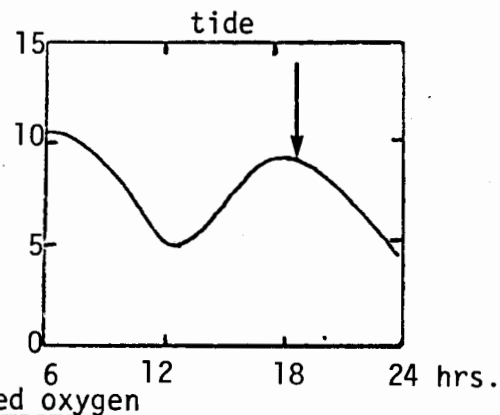
Weather: clearing sky  
 Sea: choppy  
 Wind: 350°T 15 kn  
 Cloud Amt: 5/8  
 Baro: 1006 mb



Depth (M)	T (°C)	S (°/oo)	$\sigma_t$	Dissolved oxygen			
				(ml/l)	(mg/l)	% Sat.	pH
0	8.99	25.39	19.69	5.12	7.37	76.8	
2	9.00	25.39	19.69	5.21	7.44	77.5	
4	9.01	25.50	19.73	5.13	7.33	76.4	
6	9.06	25.75	19.95	5.29	7.55	78.9	
10	9.25	26.16	20.21	4.98	7.11	74.9	
15	9.72	28.03	21.61	4.89	6.99	75.4	
20	9.89	29.21	22.51	3.22	4.60	50.2	
30	10.43	30.56	23.49	4.68	6.68	74.4	
50	10.04	31.42	24.20	4.23	6.04	67.1	
80	9.63	31.68	24.49	3.93	5.61	61.8	
100	9.70	31.72	24.50	3.18	4.54	50.1	

Station: Q16A  
 Latitude: 50°27.5'N  
 Longitude: 127°32.5'W  
 Time: 1843  
 Date: 26/XI/75  
 Depth: 80 fath.  
 Temp: D 6.5

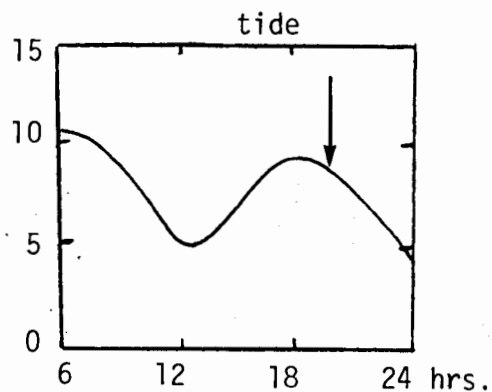
Weather: sky clear  
 Sea: calm  
 Wind: light airs  
 Cloud Amt: 0/8  
 Baro: 1007 mb



Depth (M)	T (°C)	S (°/oo)	$\sigma_t$	Dissolved oxygen			
				(ml/l)	(mg/l)	% Sat.	pH
0	8.65	24.37	18.87	5.43	7.76	79.7	
2	8.69	25.08	19.46	5.48	7.83	80.8	
4	8.85	25.39	19.68	5.34	7.63	79.3	
6	9.10	26.04	20.15	5.23	7.47	78.3	
10	9.15	26.08	20.17	5.23	7.47	78.5	
15	9.55	28.00	21.61	4.88	6.97	74.8	
20	9.83	29.00	22.32	4.75	6.78	73.8	
30	10.42	30.77	23.65	3.72	5.32	59.4	
50	9.91	31.38	24.19	4.28	6.11	67.7	
80	9.51	31.70	24.50	4.03	5.75	63.3	
100	9.59	31.86	24.61	3.57	5.10	56.3	

Station: Q16C  
 Latitude: 50°27.9'N  
 Longitude: 127°31.76'W  
 Time: 1929  
 Date: 26/XI/75  
 Depth: 70 fath.  
 Temp: D 6.5

Weather: clear  
 Sea: light chop  
 Wind: 350°T, 12 kn  
 Cloud Amt: 0/8  
 Baro: 1007 mb

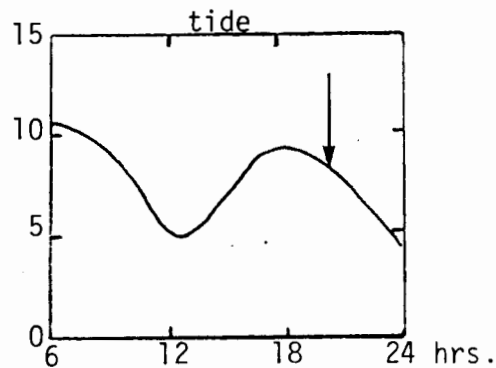


Dissolved oxygen

Depth (M)	T (°C)	S (‰)	$\sigma_T$	(ml/l)	(mg/l)	% Sat.	pH
0	8.92	25.82	20.00	5.38	7.69	80.2	
2	8.92	25.80	19.97	5.33	7.62	79.5	
4	9.01	25.82	19.98	5.33	7.62	79.7	
6	9.22	26.16	20.21	5.19	7.42	78.1	
10	9.40	26.89	20.76	5.03	7.19	76.4	
15	9.62	27.71	21.38	4.98	7.11	76.3	
20	10.04	29.11	22.40	4.29	6.13	67.0	
30	10.31	-	-	4.17	5.96	-	
50	10.00	31.34	24.15	4.28	6.12	67.9	
80	9.68	31.67	24.50	3.77	5.39	59.5	
100	9.54	31.90	24.65	3.32	4.74	52.2	

Station: Q15C  
 Latitude: 50°29.5'N  
 Longitude: 127°34.3'W  
 Time: 2009  
 Date: 26/XI/75  
 Depth: 64 fath.  
 Temp: D 6.5

Weather: clear  
 Sea: rippled  
 Wind: calm  
 Cloud Amt: 0/8  
 Baro: 1007 mb

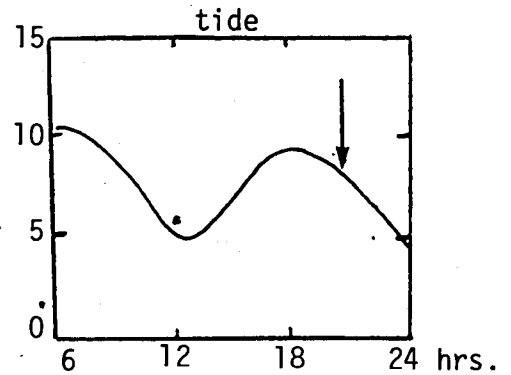


Dissolved oxygen

Depth (M)	T (°C)	S (‰)	$\sigma_T$	(ml/l)	(mg/l)	% Sat.	pH
0	8.71	25.24	19.61	5.48	7.83	80.9	
2	8.75	25.32	19.65	5.43	7.76	80.3	
4	8.98	25.62	19.85	5.33	7.62	79.5	
6	9.31	26.62	20.57	5.16	7.37	78.0	
10	9.49	27.36	21.12	5.14	7.34	78.4	
15	9.76	28.33	21.81	4.83	6.90	74.6	
20	9.80	29.52	22.78	5.24	7.49	81.7	
30	10.26	30.50	23.48	4.23	6.04	67.0	
50	9.75	31.32	24.18	4.48	6.40	70.6	
80	9.50	31.70	24.50	3.82	5.46	60.0	
100	9.50	31.88	24.65	3.27	4.67	51.4	

Station: Q2B  
 Latitude: 50°28.5'N  
 Longitude: 127°55.3'W  
 Time: 2032  
 Date: 26/XI/75  
 Depth: 108 fath.  
 Temp: D 4.5

Weather: clear  
 Sea: calm  
 Wind: light airs  
 Cloud Amt: 0/8  
 Baro: 1009.mb

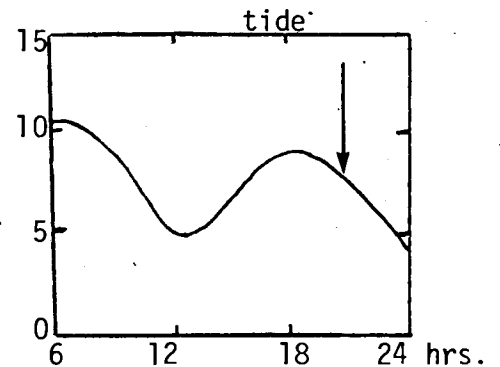


## Dissolved oxygen

Depth (M)	T (°C)	S (‰)	$\sigma_t$	(ml/l)	(mg/l)	% Sat.	pH
0	8.80	25.56	19.82	5.64	8.05	83.6	
2	9.11	26.70	20.68	5.99	8.55	90.1	
4	9.25	27.43	21.21	5.53	7.90	83.9	
6	9.43	28.45	21.98	5.89	8.41	90.3	
10	9.45	28.71	22.19	5.89	8.41	90.5	
15	9.46	30.23	23.39	6.19	8.84	93.2	
20	9.77	30.49	23.51	6.00	8.57	94.0	
30	9.81	31.19	24.05	5.64	8.05	88.8	
50	9.66	31.55	24.35	5.23	7.47	82.3	
80	9.58	31.70	24.50	4.89	6.98	76.9	
100	9.53	31.74	24.55	4.68	6.68	73.5	
120	9.59	31.78	24.56	4.83	6.90	76.0	
150	9.53	31.82	24.61	5.05	7.22	79.5	

Station: Q15A  
 Latitude: 50°29.6'N  
 Longitude: 127°34.8'W  
 Time: 2044  
 Date: 26/XI/75  
 Depth: 61 fath.  
 Temp: D -

Weather: clear  
 Sea: light chop  
 Wind: 290°T, 10 kn  
 Cloud Amt: 0/8  
 Baro: 1008 mb

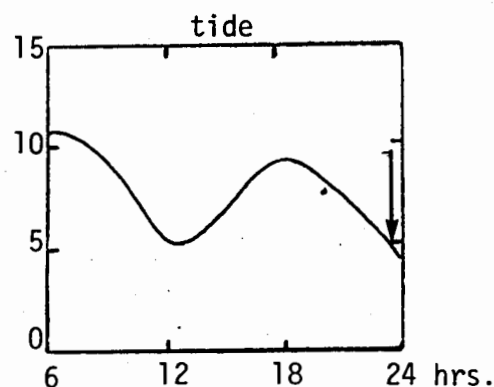


## Dissolved oxygen

Depth (M)	T (°C)	S (‰)	$\sigma_t$	(ml/l)	(mg/l)	% Sat.	pH
0	8.59	24.87	19.31	5.52	7.90	81.3	
2	9.01	25.60	19.82	5.29	7.56	78.9	
4	9.06	25.95	20.11	5.23	7.47	78.3	
6	9.24	26.46	20.43	5.18	7.40	78.1	
10	9.43	27.21	21.02	5.29	7.55	80.4	
15	9.49	27.84	21.51	5.16	7.37	78.9	
20	9.81	29.39	22.68	5.34	7.63	80.3	
30	10.27	30.72	23.61	4.48	6.40	71.1	
50	9.82	31.26	24.10	4.63	6.61	73.0	
80	9.50	31.67	24.50	4.03	5.75	63.2	
100	9.48	31.82	24.61	3.52	5.03	55.3	

Station: Q2A  
 Latitude: 50°28.1'N  
 Longitude: 127°55.3'W  
 Time: 2312  
 Date: 26/XI/75  
 Depth: 98 fath.  
 Temp: D 4.0

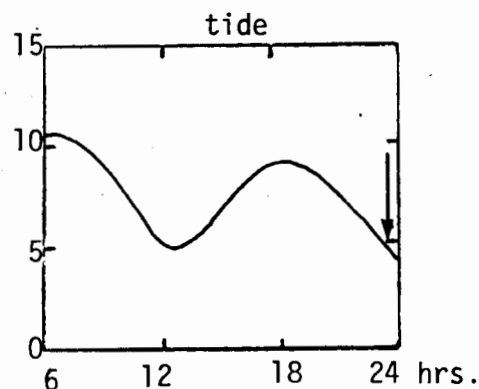
Weather: clear  
 Sea: calm  
 Wind: calm  
 Cloud Amt: 0/8  
 Baro: 1010 mb



Depth (M)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen			pH
				(ml/l)	(mg/l)	% Sat.	
0	8.80	25.48	19.78	5.68	8.11	84.1	
2	8.88	25.62	19.85	5.68	8.11	84.1	
4	9.28	27.24	21.05	5.53	7.90	83.9	
6	9.37	27.75	21.45	5.73	8.18	87.3	
10	9.75	30.33	23.40	6.13	8.76	96.0	
15	9.81	31.11	23.98	5.63	8.04	88.7	
20	9.80	31.32	24.19	5.54	7.92	87.5	
30	9.79	31.36	24.20	5.58	7.97	88.0	
50	9.63	31.67	24.47	5.49	7.84	86.5	
80	9.60	31.72	24.50	5.40	7.71	85.0	

Station: Q2-C  
 Latitude: 50°28.9'N  
 Longitude: 127°55.3'W  
 Time: 2346  
 Date: 26/XI/75  
 Depth: 62 fath.  
 Temp: D 4.5

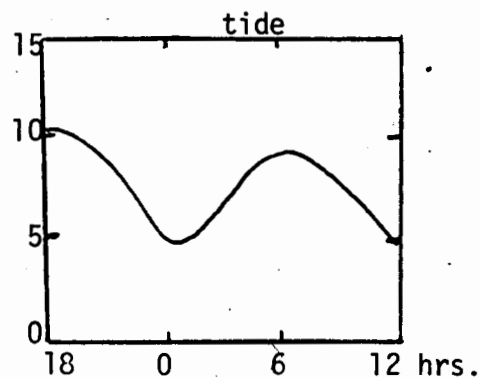
Weather: clear  
 Sea: calm  
 Wind: light airs  
 Cloud Amt: 0/8  
 Baro: 1011 mb



Depth (M)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen			pH
				(ml/l)	(mg/l)	% Sat.	
0	8.97	25.89	20.05	6.08	8.69	90.4	
2	9.04	26.40	20.42	5.94	8.48	89.0	
4	9.15	26.96	20.85	5.96	8.52	90.0	
6	9.50	-	-	6.14	8.77	-	
10	9.56	29.24	22.61	6.19	8.84	95.7	
15	9.61	29.83	23.02	6.16	8.80	95.8	
20	9.81	30.67	23.65	6.08	8.69	95.6	
30	9.72	31.26	24.11	5.53	7.90	87.0	
50	9.68	31.61	24.51	5.15	7.36	81.2	
80	9.59	31.70	24.49	4.83	6.90	76.0	

Station: Q1  
 Latitude: 50°25.3'N  
 Longitude: 127°59.5'W  
 Time: 0043  
 Date: 27/XI/75  
 Depth: 80 fath.  
 Temp: D 5.0

Weather: clear  
 Sea: -  
 Wind: 350°T, 12 kn  
 Cloud Amt: 0/8  
 Baro: 1010 mb



Depth (M)	T (°C)	S (‰)	$\sigma_T$	Dissolved oxygen			pH
				(ml/l)	(mg/l)	% Sat.	
0	9.27	29.02	22.45	6.43	9.19	98.0	
2	9.32	29.07	22.50	6.43	9.19	98.8	
4	9.41	29.26	22.63	6.39	9.13	98.6	
6	9.51	29.60	22.88	6.38	9.12	98.9	
10	9.62	29.91	23.08	6.64	9.48	103.2	
15	9.79	31.15	24.03	5.98	8.54	94.2	
20	9.74	31.30	24.18	6.03	8.61	94.4	
30	9.66	31.59	24.40	6.03	8.61	94.9	
50	9.47	31.80	24.60	5.78	8.25	90.7	
80	9.15	31.95	24.75	5.98	8.54	93.2	
100	9.10	31.97	24.78	6.23	8.90	97.1	



Part V. Quatsino Sound - Neroutsos Inlet Survey,  
January 13 - 14, 1976.

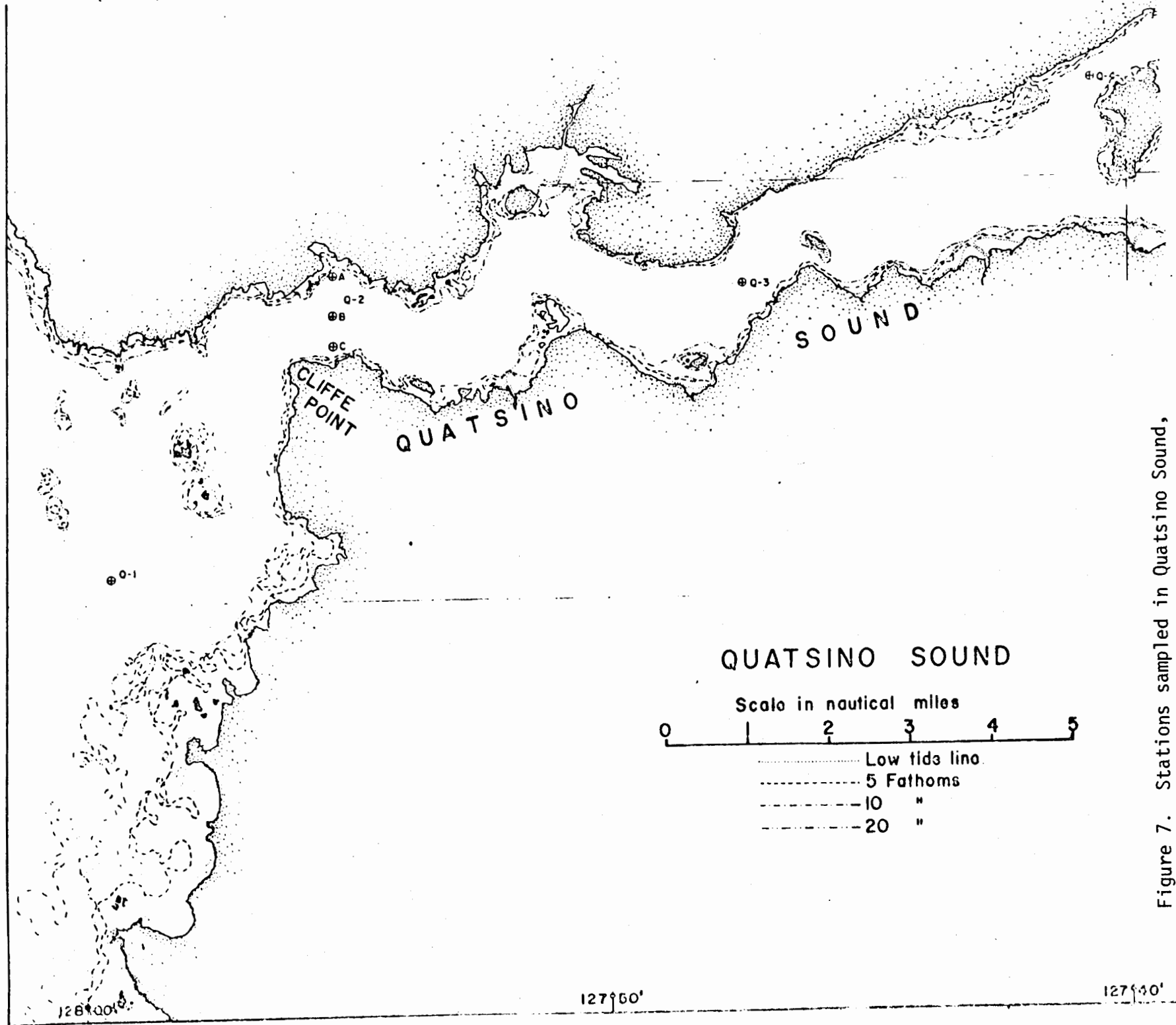


Figure 7. Stations sampled in Quatsino Sound,  
July 13 - 14, 1976.

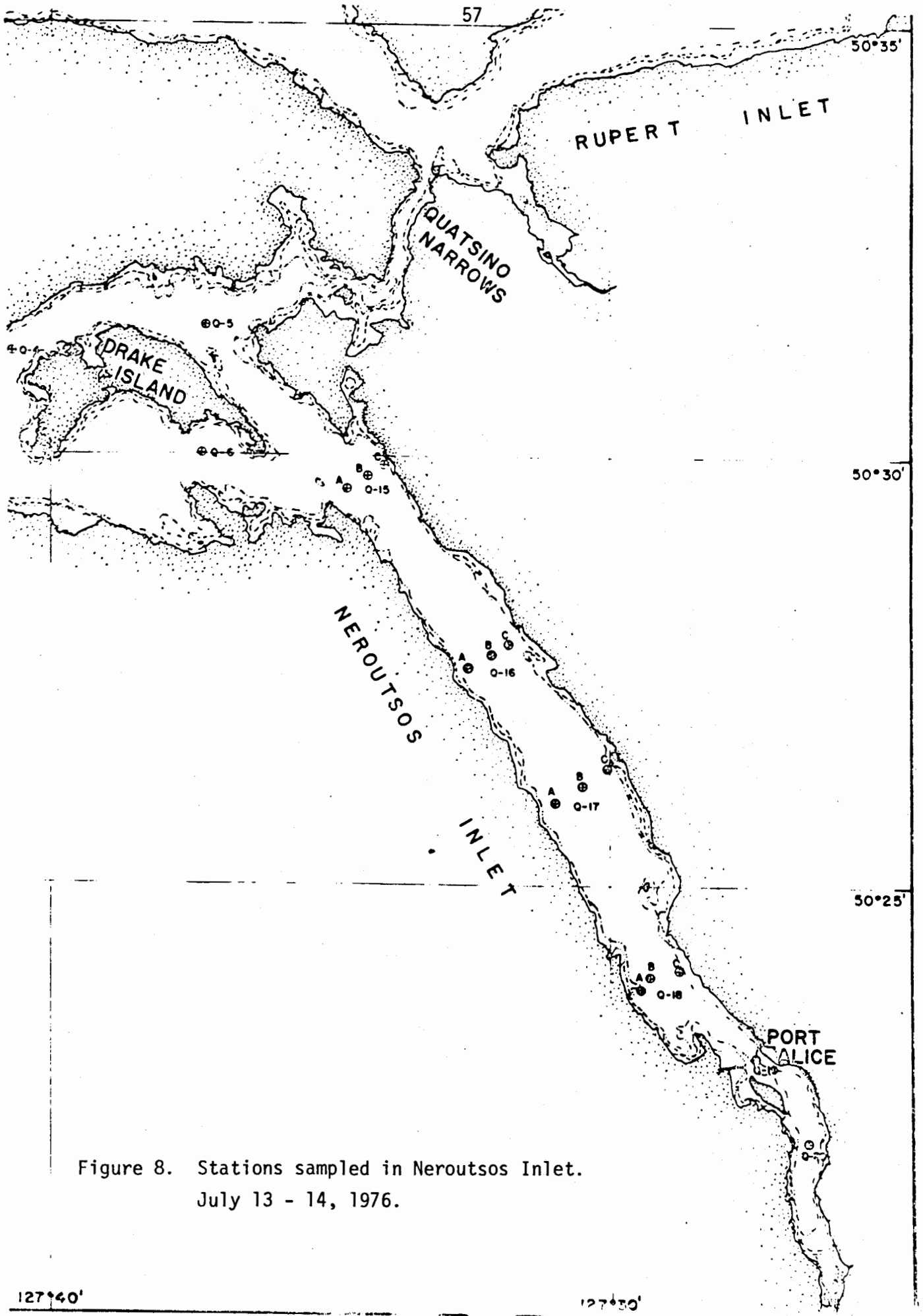
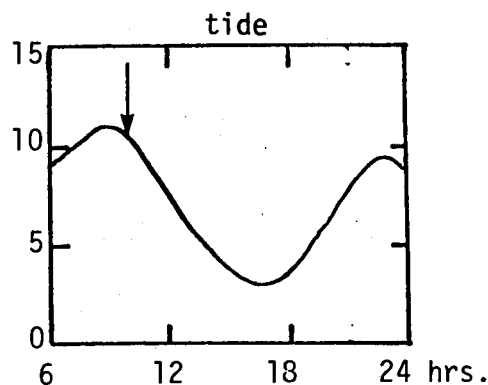


Figure 8. Stations sampled in Neroutsos Inlet.  
July 13 - 14, 1976.

Station: Q1  
 Latitude: 50° 25.5'N  
 Longitude: 127° 59.7'W  
 Time: 0955  
 Date: 13/I/76  
 Depth: 80 fath.  
 Temp: D 5.5, W 4

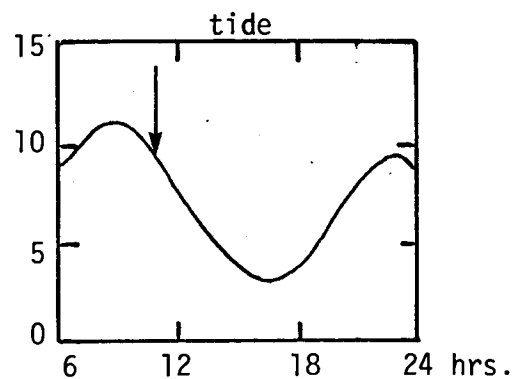
Weather: overcast  
 Sea: steep swell  
 Wind: light airs  
 Cloud Amt: 8/8  
 Baro: 1014 mb



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	6.98	29.47	23.12	-	-	-
2	6.96	29.60	23.26	-	-	-
4	6.99	29.60	23.25	-	-	-
6	7.00	29.62	23.27	-	-	-
10	7.02	29.68	23.30	-	-	-
15	7.01	29.68	23.31	-	-	-
20	7.34	30.02	23.51	-	-	-
30	7.59	30.38	23.75	-	-	-
50	7.96	31.32	24.45	-	-	-
80	7.90	31.78	24.80	-	-	-
100	6.26	32.05	25.21	-	-	-
120	7.70	32.26	25.20	-	-	-
150	7.53	32.61	25.50	-	-	-

Station: Q2 -A  
 Latitude: 50°28.1'N  
 Longitude: 127°55.3'W  
 Time: 1045  
 Date: 13/I/76  
 Depth: 60.4 fath.  
 Temp: D 3.5 W 2

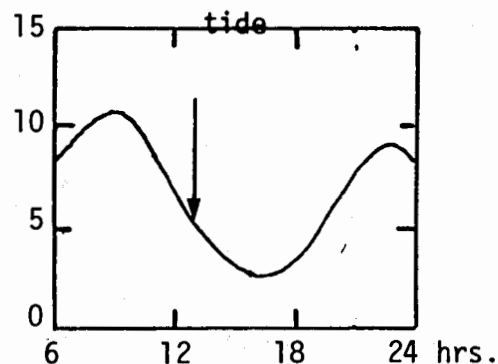
Weather: overcast  
 Sea: light chop  
 Wind: 080°T, 10 kn  
 Cloud Amt: 8/8  
 Baro: 1013 mb



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	7.10	-	-	6.26	8.94	-
2	7.33	28.26	22.12	6.26	8.94	91.2
4	7.35	28.96	22.67	6.50	9.29	95.2
6	7.36	29.45	23.07	6.78	9.69	99.7
10	7.32	29.83	23.39	7.13	10.19	105.0
15	7.34	29.93	23.46	7.14	10.20	105.2
20	7.31	30.02	23.52	7.01	10.01	103.3
30	7.61	30.42	23.78	6.70	9.57	99.7
50	8.01	31.07	24.21	6.04	8.63	91.2
80	8.03	31.80	24.79	5.33	7.61	80.8

Station: Q2-B  
 Latitude: 50° 28.35' N  
 Longitude: 127° 56.8' W  
 Time: 1237  
 Date: 13/I/76  
 Depth: 102 fath.  
 Temp: D 3.5, W2

Weather: moderate rain,  
 overcast,  
 Sea: choppy  
 Wind: 110° T 15 kn  
 Cloud Amt:  
 Baro: 1012 mb



### Dissolved oxygen

Depth (m)	T (°C)	S (‰)	$\sigma_t$	(ml/l)	(mg/l)	% Sat.
0	7.04	27.62	21.67	6.07	8.67	87.4
2	7.06	27.66	21.70	6.01	8.59	86.7
4	7.22	27.79	21.79	5.96	8.51	86.3
6	7.25	27.84	21.82	5.98	8.54	86.5
10	7.41	28.09	21.98	5.89	8.41	85.9
15	7.57	29.24	22.84	6.42	9.17	94.7
20	7.41	29.93	23.45	6.91	9.87	102.0
30	7.68	28.73	23.48	6.12	8.74	90.2
50	7.72	30.56	23.86	6.59	9.41	98.4
80	7.99	31.68	24.72	5.43	7.76	82.3
100	8.15	31.83	24.81	5.43	7.76	82.7
120	-	31.97	-	5.12	7.31	-
150	7.92	32.11	25.08	5.05	7.21	76.6

Station: Q3  
 Latitude: 50° 28.4' N  
 Longitude: 127° 48.05' W  
 Time: 1436  
 Date: 13/I/76  
 Depth: 81 fath.  
 Temp: D 4.0, W 3.0

Weather: continuous rain  
 Sea: choppy  
 Wind: 080° T, 20 kn  
 Cloud Amt: 8/8  
 Baro: 1010 mb

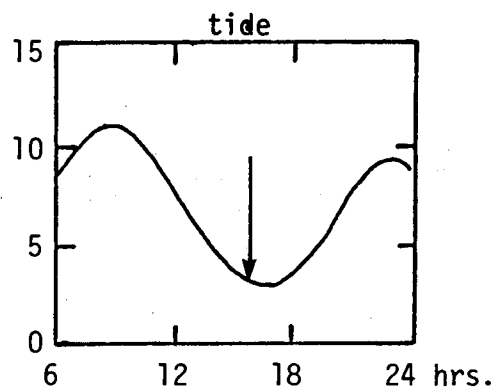


### Dissolved Oxygen

Depth (m)	T (°C)	S (‰)	$\sigma_t$	(ml/l)	(mg/l)	% Sat.
0	7.15	27.54	21.61	5.49	7.84	79.2
2	7.14	27.52	21.60	6.09	8.70	87.9
4	7.16	27.54	21.60	6.06	8.66	87.5
6	7.19	27.54	21.61	6.19	8.84	89.4
10	7.75	28.49	22.23	5.79	8.27	85.4
15	7.76	29.60	23.12	6.29	8.99	93.5
20	7.63	30.06	23.51	6.71	9.59	99.7
30	7.67	30.38	23.72	6.70	9.57	99.8
50	7.99	31.09	24.27	6.28	8.97	94.8
80	8.26	31.78	24.75	5.21	7.44	79.5
100	8.23	32.13	25.05	5.08	7.26	77.7
120	8.13	32.63	25.42	5.04	7.20	77.1

Station: Q4  
 Latitude: 50° 31.3'N  
 Longitude: 127° 41.3'W  
 Time: 1555  
 Date: 13/I/76  
 Depth: 74 fath.  
 Temp: D4, W3

Weather: overcast, rain  
 Sea: -  
 Wind: 040°T, 10 kn  
 Cloud Amt: 8/8  
 Baro: 1002 mb

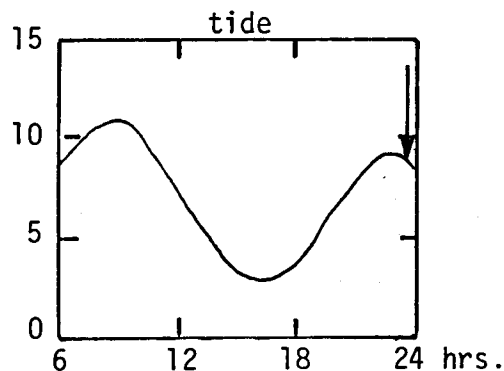


Dissolved oxygen

Depth (m)	T (°C)	S (‰)	$\sigma_t$	(ml/l)	(mg/l)	% Sat.
0	7.69	28.09	21.95	5.79	8.27	85.0
2	7.67	28.24	22.10	5.74	8.20	84.3
4	6.01	27.90	22.00	5.71	8.16	80.3
6	6.77	27.88	21.89	5.68	8.11	81.4
10	7.67	28.43	22.12	5.70	8.14	83.8
15	7.91	28.86	22.52	5.74	8.20	85.2
20	7.99	29.43	22.97	5.97	8.53	89.1
30	7.94	30.19	23.56	6.08	8.69	91.2
50	7.96	30.52	23.83	6.40	9.14	96.1
80	8.44	31.24	24.30	5.47	7.81	83.5
100	8.36	31.51	24.55	5.15	7.36	78.7
120	8.38	31.87	24.80	4.24	6.06	64.9

Station: Q5  
 Latitude: 50° 31.4'N  
 Longitude: 127° 37.4'W  
 Time: 2312  
 Date: 13/I/76  
 Depth: 60 fath.  
 Temp: D3, W2.5

Weather: continuous rain  
 Sea: -  
 Wind: 040°T, 10 kn  
 Cloud Amt: 8/8  
 Baro: 1002 mb

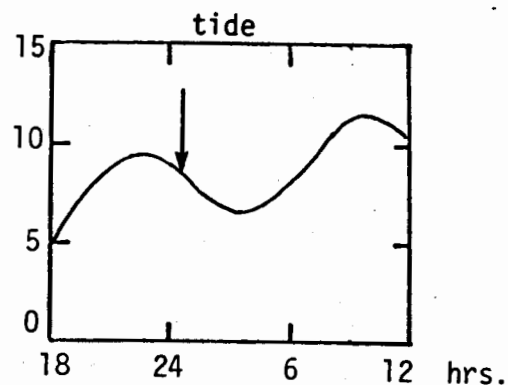


Dissolved Oxygen

Depth (m)	T (°C)	S (‰)	$\sigma_t$	(ml/l)	(mg/l)	% Sat.
0	7.37	27.21	21.30	5.24	7.49	75.9
2	7.83	28.17	21.98	5.25	7.50	77.4
4	7.90	28.45	22.20	5.24	7.49	77.6
6	7.95	28.69	22.38	5.24	7.49	68.4
10	7.98	28.79	22.47	5.96	8.51	88.5
15	7.90	29.41	22.95	6.25	8.93	93.1
20	7.86	29.79	23.30	6.33	9.04	94.4
30	7.90	30.48	23.81	6.53	9.33	97.6
50	8.46	31.28	24.35	5.49	7.84	83.9
80	8.43	31.82	24.77	4.90	7.00	75.1

Station: Q15A  
 Latitude: 50° 29.85'N  
 Longitude: 127° 35.1'W  
 Time: 0013  
 Date: 14/I/76  
 Depth: 60 fath.  
 Temp: D4, W3.5

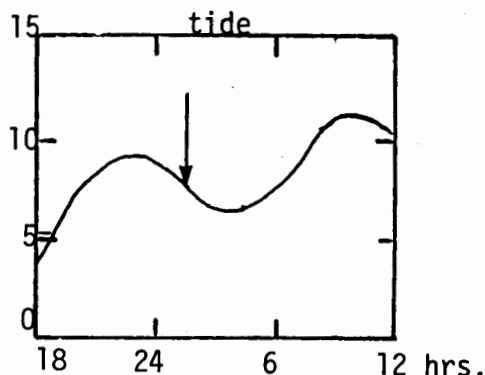
Weather: overcast, rain  
 Sea: -  
 Wind: 140°T, 10 kn  
 Cloud Amt: 8/8  
 Baro: 1000 mb



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	6.55	25.56	20.08	5.25	7.50	73.7
2	7.31	27.32	21.42	5.02	7.17	72.6
4	7.40	27.66	21.64	5.15	7.36	74.9
6*	-	-	-	-	-	-
10	7.85	28.47	22.22	5.63	8.04	83.2
15	8.34	29.64	23.07	4.99	7.13	75.3
20	8.14	29.53	23.03	5.48	7.83	82.1
30	7.51	28.07	21.95	5.70	8.14	83.3
50	8.07	30.33	23.68	6.68	9.54	100.4
80	8.79	31.49	24.46	4.81	6.87	74.2

\* lost bottle

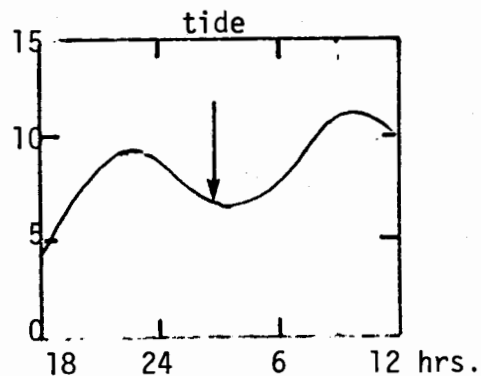
Station: Q15B  
 Latitude: 50° 29.9'N Weather: overcast, rain  
 Longitude: 127° 34.95'W Sea: -  
 Time: 0130 Wind: 010<sup>0</sup>T, 10 kn  
 Date: 14/I/76 Cloud Amt: 8/8  
 Depth: 92 fath Baro: 998 mb  
 Temp: D3.5, W3



## Dissolved oxygen

Depth (m)	T (°C)	S (°/oo)	$\sigma_t$	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	7.02	26.40	20.71	3.48	4.97	49.7
2	7.24	27.09	21.22	3.54	5.06	51.1
4	7.45	27.45	21.50	4.30	6.14	62.5
6	7.63	28.05	21.91	3.93	5.61	57.6
10	8.00	28.86	22.52	4.97	7.10	73.9
15	8.66	29.47	22.91	4.77	6.81	72.3
20	8.04	29.74	23.22	5.84	8.34	87.4
30	7.97	30.71	23.95	6.91	9.87	103.9
50	8.74	31.40	24.40	5.12	7.31	78.8
80	8.54	31.74	24.68	4.96	7.09	76.3
100	8.54	31.92	24.81	3.18	4.54	48.8
120	8.52	31.90	24.80	4.40	6.29	67.6

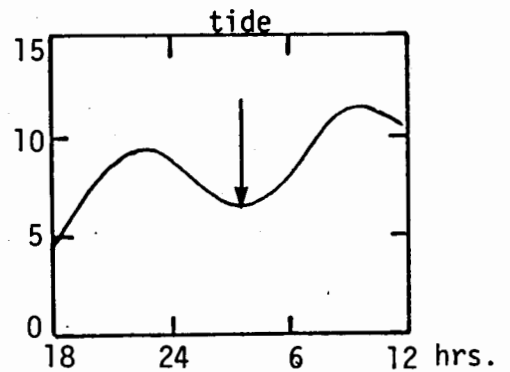
Station: Q15-C  
 Latitude: 50° 29.95'N Weather: overcast, rain  
 Longitude: 127° Sea: smooth  
 Time: 0243 Wind: 1t airs  
 Date: 14/I/76 Cloud Amt: 8/8  
 Depth: 70 fath. Baro: 999 mb  
 Temp: D4, W3.5



## Dissolved Oxygen

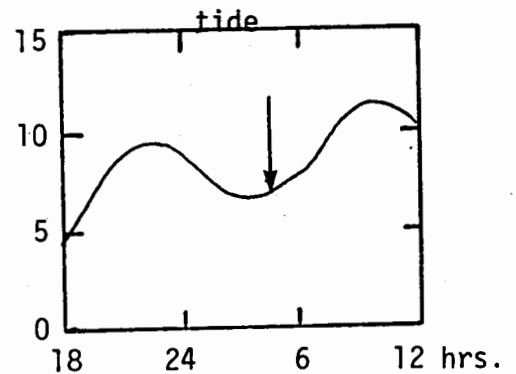
Depth (m)	T (°C)	S (°/oo)	$\sigma_t$	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	7.17	26.66	20.87	4.14	5.91	59.4
2	7.23	26.85	21.03	4.25	6.07	61.2
4	7.32	27.07	21.20	4.58	6.54	66.2
6	7.48	27.77	21.72	4.92	7.03	71.7
10	8.10	28.62	22.31	5.31	7.59	79.1
15	8.58	29.34	22.83	5.08	7.26	76.9
20	8.19	29.85	23.30	5.57	7.96	83.8
30	7.39	30.33	23.72	5.29	7.56	78.3
50	8.14	30.31	23.62	6.39	9.13	96.3
80	8.93	31.51	23.69	4.76	6.80	73.7

Station: Q16-A  
 Latitude: 50° 27.6'N  
 Longitude: 127° 32.6'W  
 Time: 0332  
 Date: 14/I/76  
 Depth: 68 fath.  
 Temp: D4, W4  
 Weather: overcast, rain  
 Sea: smooth  
 Wind: 1t airs  
 Cloud Amt: 8/8  
 Baro: 1000 mb



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	7.28	27.04	21.18	4.71	6.73	68.0
2	7.42	27.34	21.41	4.90	7.00	71.1
4	7.54	27.58	21.58	5.17	7.39	75.4
6	7.70	27.99	21.88	5.49	7.84	80.6
10	8.00	28.68	22.38	5.50	7.86	81.7
15	8.48	29.28	22.80	4.97	7.09	74.8
20	8.52	30.08	23.40	5.53	7.90	83.9
30	8.18	30.46	23.72	5.99	8.56	90.4
50	9.81	31.38	24.21	3.07	4.39	48.5
80	9.05	31.80	24.65	4.30	6.14	66.8

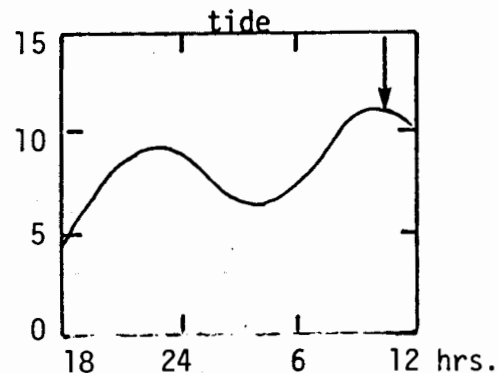
Station: Q16-B  
 Latitude: 50° 27.85'N  
 Longitude: 127° 32.3'W  
 Time: 0423  
 Date: 14/I/76  
 Depth: 60 fath.  
 Temp: D4, W3.5  
 Weather: overcast, rain  
 Sea: smooth  
 Wind: 1t airs  
 Cloud Amt: 8/8  
 Baro: 1000 mb



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	7.26	26.59	25.73	4.06	5.80	58.4
2	7.39	27.13	21.22	4.62	6.60	66.9
4	7.51	27.58	21.60	5.08	7.26	74.0
6	7.73	27.94	21.85	5.09	7.27	74.7
10	8.11	28.81	22.50	5.38	7.69	80.3
15	8.68	29.36	22.81	5.30	7.57	80.3
20	8.36	29.95	23.35	5.34	7.63	80.7
30	8.18	30.40	23.70	6.13	8.76	92.5
50	9.82	31.36	24.19	2.71	3.87	42.7
80	9.16	31.80	24.65	4.30	6.14	67.0
100	9.00	31.93	24.75	4.41	6.30	68.6
120	8.81	32.16	24.98	3.84	5.49	59.6

Station: Q16-C  
 Latitude: 50° 28.1'N  
 Longitude: 127° 32'W  
 Time: 1010  
 Date: 14/I/76  
 Depth: D5.5, W5  
 Temp:

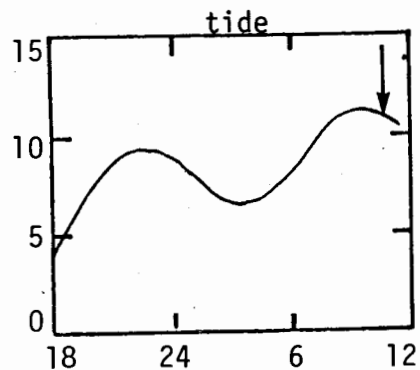
Weather: overcast, rain  
 Sea: smooth  
 Wind: 1t airs  
 Cloud Amt: 8/8  
 Baro: 1004 mb



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	7.27	26.64	20.87	4.14	5.91	59.5
2	7.28	26.64	20.86	4.16	5.94	59.8
4	7.88	26.89	20.97	4.19	5.99	61.4
6	7.89	28.20	22.00	5.02	7.17	74.1
10	8.45	29.11	22.68	5.02	7.17	75.6
15	8.80	29.68	23.00	4.66	6.66	71.0
20	8.40	30.16	23.48	5.56	7.94	84.2
30	8.73	30.50	23.70	5.86	8.37	89.6
50	9.70	31.22	24.10	3.01	4.30	47.3

Station: Q17-A  
 Latitude: 50° 26.1'N  
 Longitude: 127° 31.1'W  
 Time: 1056  
 Date: 14/I/76  
 Depth: 68 fath  
 Temp: D6, W 5.5

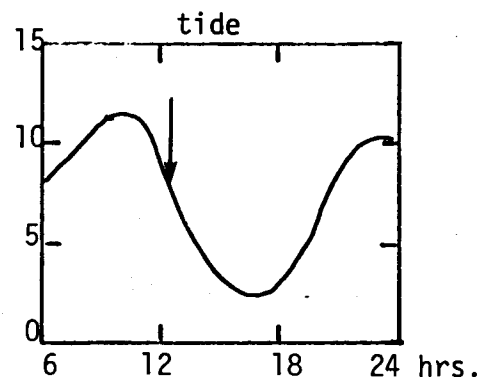
Weather: overcast, rain  
 Sea: 1t chop  
 Wind: 160° ; 10 kn  
 Cloud Amt: 8/8  
 Baro: 1005 mb



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	7.54	27.68	21.65	5.07	7.24	73.9
2	7.51	27.62	21.60	5.08	7.26	74.0
4	7.50	27.64	21.62	5.04	7.20	73.4
6	7.72	28.09	21.95	4.71	6.73	69.3
10	8.48	29.02	22.57	4.40	6.29	66.3
15	8.94	29.68	23.02	5.00	7.14	76.5
20	8.52	30.17	23.49	5.70	8.14	86.6
30	8.31	30.42	23.70	2.17	3.10	32.8
50	9.83	31.32	24.17	4.02	5.74	63.4
80	9.18	31.84	24.68	4.32	6.17	67.4
100	9.16	31.92	24.72	4.30	6.14	67.1

Station: Q17-B  
 Latitude: 50° 26.3'N  
 Longitude: 127° 30.9'W  
 Time: 1219  
 Date: 14/I/76  
 Depth: 98 fath.  
 Temp: D7, W6

Weather: continuous rain  
 Sea: choppy  
 Wind: 150°T, 20 kn  
 Cloud Amt: 8/8  
 Baro: 1005 mb

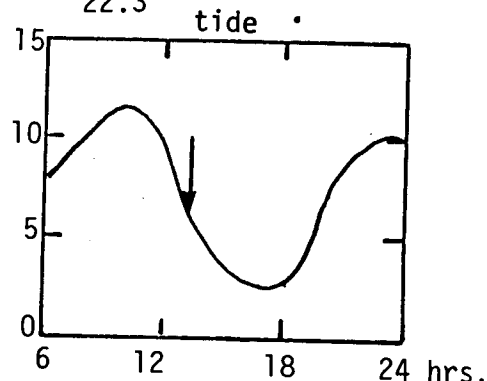


## Dissolved oxygen

Depth (m)	T (°C)	S (‰)	$\sigma_t$	(ml/l)	(mg/l)	% Sat.
0	7.40	27.06	21.18	5.28	7.54	76.5
2	7.53	27.47	21.49	5.23	7.47	76.2
4	7.50	27.34	21.41	5.17	7.39	75.3
6	7.60	27.71	21.67	5.12	7.31	74.8
10	8.51	29.00	22.57	4.83	6.90	72.8
15	8.93	29.68	23.02	4.37	6.24	66.0
20	8.93	29.68	23.00	4.50	6.43	68.8
30	8.62	30.50	23.70	5.07	7.24	77.4
50	9.74	31.28	24.20	2.41	3.44	37.7
80	9.20	31.84	24.68	4.08	5.83	63.7
100	9.10	31.97	24.78	4.15	5.93	64.7
120	8.86	32.07	25.40	3.99	5.70	61.9
150	7.79	32.70	25.52	1.47	2.1	22.3

Station: Q17-C  
 Latitude: 50° 26.55'N  
 Longitude: 127° 30.3'W  
 Time: 1315  
 Date: 14/I/76  
 Depth: 46 fath  
 Temp: D7, W6

Weather: moderate rain  
 Sea: lt chop  
 Wind; 150°T, 10-15 kn  
 Cloud Amt: 8/8  
 Baro: 1005 mb

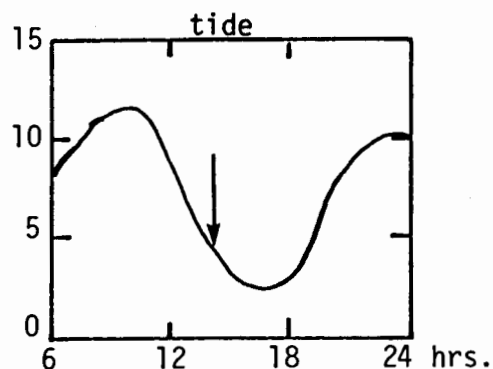


## Dissolved Oxygen

Depth (m)	T (°C)	S (‰)	$\sigma_t$	(ml/l)	(mg/l)	% Sat.
0	7.30	26.36	20.63	4.21	6.01	60.5
2	7.31	26.31	20.60	4.14	5.91	59.5
4	7.33	26.53	20.79	3.91	5.59	56.3
6	8.20	28.52	22.21	4.92	7.03	73.3
10	8.45	29.15	22.69	4.90	7.00	73.8
15	8.99	29.91	23.20	4.37	6.24	66.9
20	8.93	30.27	23.51	4.52	6.46	69.4
30	8.37	30.40	23.70	5.59	7.99	84.8
50	9.70	31.19	24.08	2.58	3.69	40.6

Station: Q18-A  
 Latitude: 50° 23.9'N  
 Longitude: 127° 29.4'W  
 Time: 1405  
 Date: 14/I/76  
 Depth: 36 fath  
 Temp: D5.5, W5

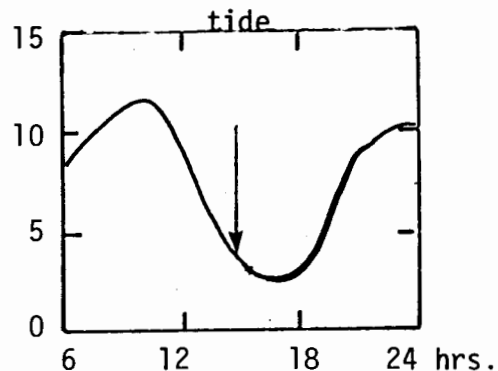
Weather: moderate rain  
 Sea: choppy  
 Wind: 150° T, 15 kn  
 Cloud Amt: 8/8  
 Baro: 1005 mb



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	7.76	27.90	21.81	4.67	6.67	68.6
2	7.83	27.92	21.79	4.69	6.70	69.0
4	7.85	27.96	21.82	4.69	6.70	69.0
6	7.94	28.18	21.98	4.92	7.03	72.7
10	8.60	29.03	22.58	4.70	6.71	70.9
15	9.02	29.79	23.08	4.15	5.93	63.6
20	8.94	30.16	23.41	-	-	-
30	9.04	30.52	23.66	4.51	6.44	69.5

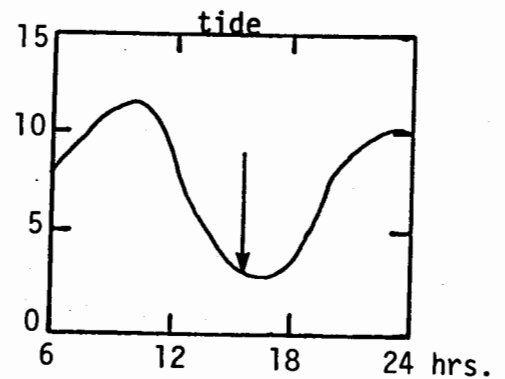
Station: Q18-B  
 Latitude: 50° 24.0'N  
 Longitude: 127° 29.3'W  
 Time: 1442  
 Date: 14/I/76  
 Depth: 62 fath  
 Temp: D5.5, W5

Weather: moderate rain  
 Sea: choppy  
 Wind: 150° T, 15 kn  
 Cloud Amt: 8/8  
 Baro: 1004.5 mb



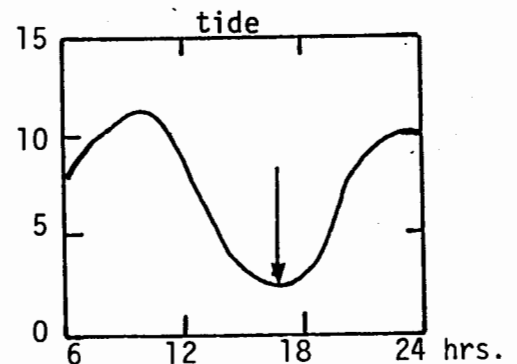
Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	7.80	27.92	21.81	4.75	6.79	69.9
2	7.77	27.85	21.77	4.79	6.84	70.4
4	7.34	28.32	22.19	4.87	6.96	71.1
6	8.37	28.81	22.42	4.83	6.90	72.5
10	8.79	29.19	22.68	4.47	6.39	67.9
15	9.11	29.82	23.11	4.06	5.80	62.4
20	8.76	30.21	23.47	4.88	6.97	74.6
30	8.98	30.56	23.69	4.40	6.29	67.8
50	9.82	31.32	24.17	1.37	1.96	21.6
80	9.45	31.83	24.61	2.10	3.00	32.9
100	9.38	31.93	24.71	3.66	5.23	57.4

Station: Q18-C  
 Latitude: 50° 24.25'N Weather: moderate rain  
 Longitude: 127° 29.4'W Sea: choppy  
 Time: 1527 Wind: 150<sup>0</sup>T, 20-25 kn  
 Date: 14/I/76 Cloud Amt: 8/8  
 Depth: 60 fath Baro: 1004 mb  
 Temp: D5.5, W5



Depth (m)	T (°C)	S (°/oo)	$\sigma_t$	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	7.55	26.70	20.87	4.78	6.83	69.8
2	7.56	26.66	20.83	4.73	6.76	68.6
4	7.66	26.90	21.02	4.74	6.77	69.0
6	8.02	28.15	22.04	4.84	6.91	71.6
10	8.58	29.02	22.57	4.66	6.66	70.4
15	8.92	29.64	22.98	4.10	5.86	62.7
20	8.96	30.17	23.40	4.41	6.30	67.7
30	8.34	30.40	23.69	5.68	8.11	86.0
50	8.87	31.28	24.28	1.43	2.04	22.0
80	9.44	31.86	24.63	3.35	4.79	52.6

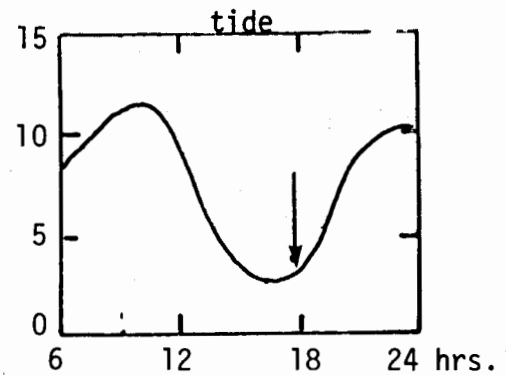
Station: Q20  
 Latitude: 50° 22'N Weather: continuous rain  
 Longitude: 127° 26.5'W Sea: calm  
 Time: 1618 Wind: 1t airs  
 Date: 14/I/76 Cloud Amt: 8/8  
 Depth: 26 fath Baro: 1005 mb  
 Temp: D5.5, W5



Depth (m)	T (°C)	S (°/oo)	$\sigma_t$	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	6.16	17.80	14.02	5.92	8.46	78.4
2	7.81	27.73	21.68	4.35	6.21	63.8
4	8.08	28.33	22.10	4.63	6.61	68.7
6	8.46	28.62	22.27	4.51	6.44	67.7
10	8.74	29.09	22.61	4.39	6.27	66.5
15	9.34	29.87	23.11	3.31	4.72	51.0
20	9.46	30.35	23.48	3.09	4.41	48.0
30	9.43	30.61	23.68	3.07	4.39	47.8
40	9.65	30.88	23.81	2.06	2.94	32.3

Station: Q19  
 Latitude: 50° 23'N  
 Longitude: 127° 27.4'W  
 Time: 1649  
 Date: 14/I/76  
 Depth: 20 fath  
 Temp: D5.5, W5

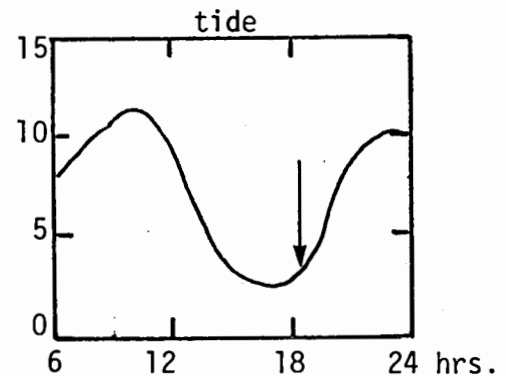
Weather: overcast, rain  
 Sea: rippled  
 Wind: 1t airs  
 Cloud Amt: 8/8  
 Baro: 1005 mb



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	5.56	17.02	13.48	7.03	10.04	91.2
2	7.87	27.79	21.61	4.47	6.39	65.8
4	8.29	28.32	22.05	4.51	6.44	67.2
6	8.32	28.71	22.32	4.60	6.57	68.8
10	8.62	29.13	22.68	4.57	6.53	69.2
15	9.19	29.81	23.08	3.64	5.20	56.0
20	9.28	30.37	23.50	3.53	5.04	54.6
30	9.31	30.67	23.72	3.19	4.56	49.6

Station: Q6  
 Latitude: 50° 30'N  
 Longitude: 127° 37.3'W  
 Time: 1832  
 Date: 14/I/76  
 Depth: 80 fath  
 Temp: D5.5, W5

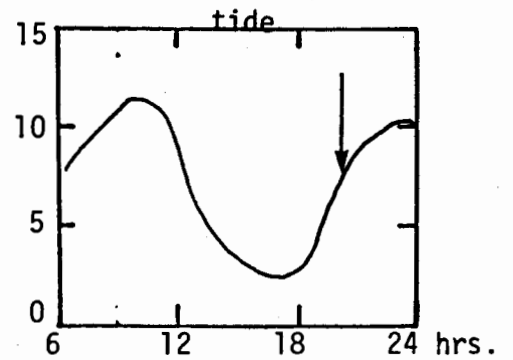
Weather: overcast, rain  
 Sea: smooth  
 Wind: light airs  
 Cloud Amt: 8/8  
 Baro: 1005 mb



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	7.26	27.13	21.27	4.67	6.67	65.9
2	7.46	27.43	21.48	4.58	6.54	66.5
4	7.52	27.62	21.60	4.87	6.96	71.0
6	7.54	27.77	21.71	4.94	7.06	72.2
10	7.85	28.50	22.23	5.38	7.69	79.6
15	7.97	28.79	22.45	5.56	7.94	82.6
20	8.08	29.57	23.05	5.79	8.27	86.7
30	7.95	30.23	23.62	6.40	9.14	95.9
50	8.54	31.01	24.15	5.43	7.76	83.0
80	8.72	31.61	24.55	4.92	7.03	75.8
100	8.74	31.74	24.68	4.76	6.80	73.5
120	8.79	31.78	24.68	4.56	6.51	70.5

Station: Q2-C  
 Latitude: 50° 28'9N  
 Longitude: 127° 55.3'W  
 Time: 2003  
 Date: 14/I/76  
 Depth: 64 fath  
 Temp: D5.5, W5.0

Weather: overcast  
 Sea: choppy  
 Wind: 230 T, 15 kn  
 Cloud Amt: 8/8  
 Baro: 1008 mb



Depth (m)	T (°C)	S (°/oo)	$\sigma_t$	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	7.11	27.32	21.42	6.25	8.93	90.0
2	7.15	27.66	21.68	6.66	9.51	96.2
4	7.31	28.11	22.01	6.25	8.93	90.9
6	7.33	28.41	22.23	6.66	9.51	97.1
10	7.40	28.58	22.32	6.40	9.14	93.6
15	7.31	29.43	23.05	6.66	9.51	97.7
20	7.22	29.79	23.36	6.66	9.51	97.7
30	—	—	—	6.56	9.37	—
50	7.31	29.91	23.45	6.91	9.87	101.7



Part VI. Quatsino Sound - Neroutsos Inlet Survey,  
June 8 - 9, 1976.

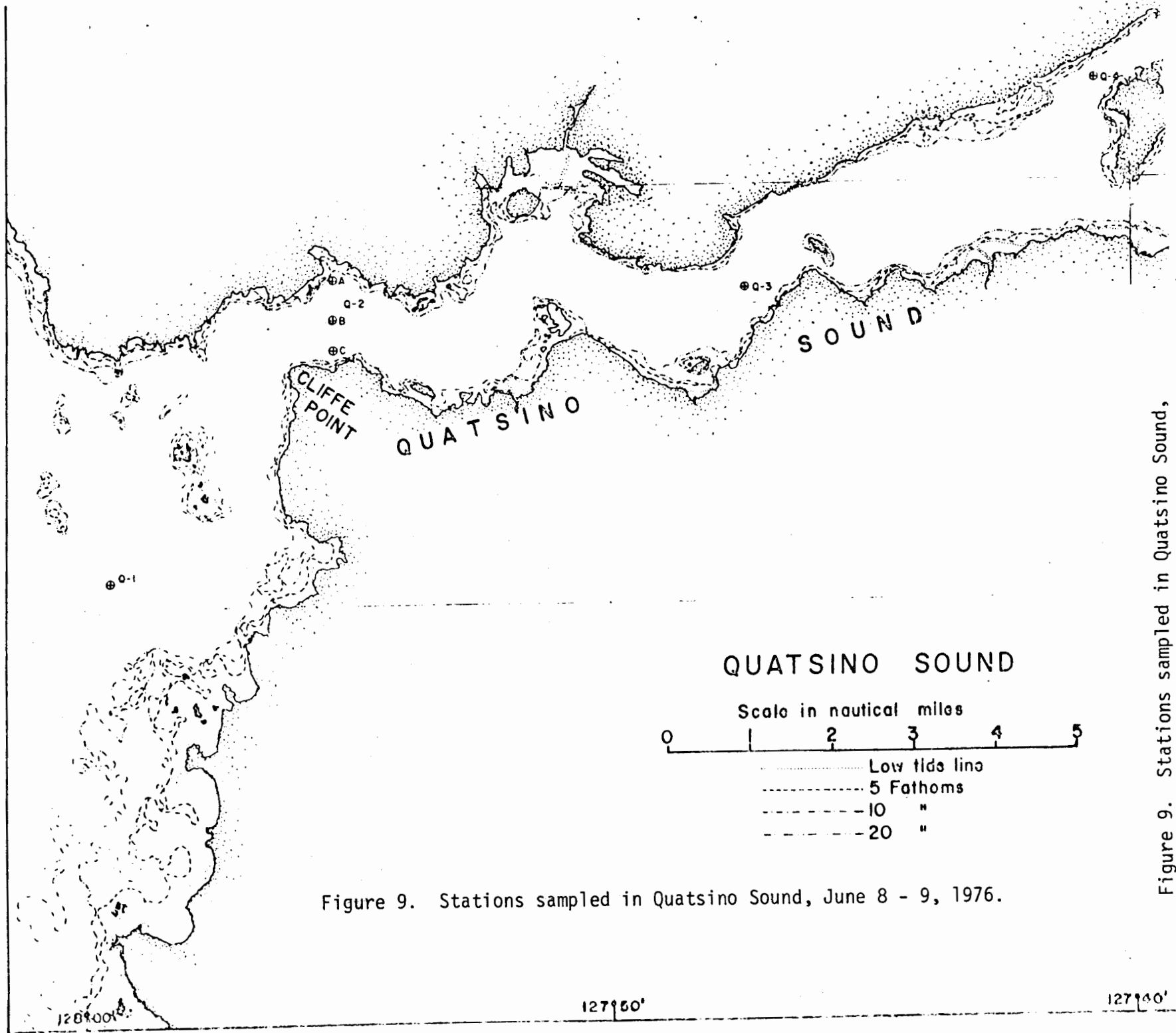


Figure 9. Stations sampled in Quatsino Sound, June 8 - 9, 1976.

Figure 9. Stations sampled in Quatsino Sound,  
June 8 - 9, 1976.

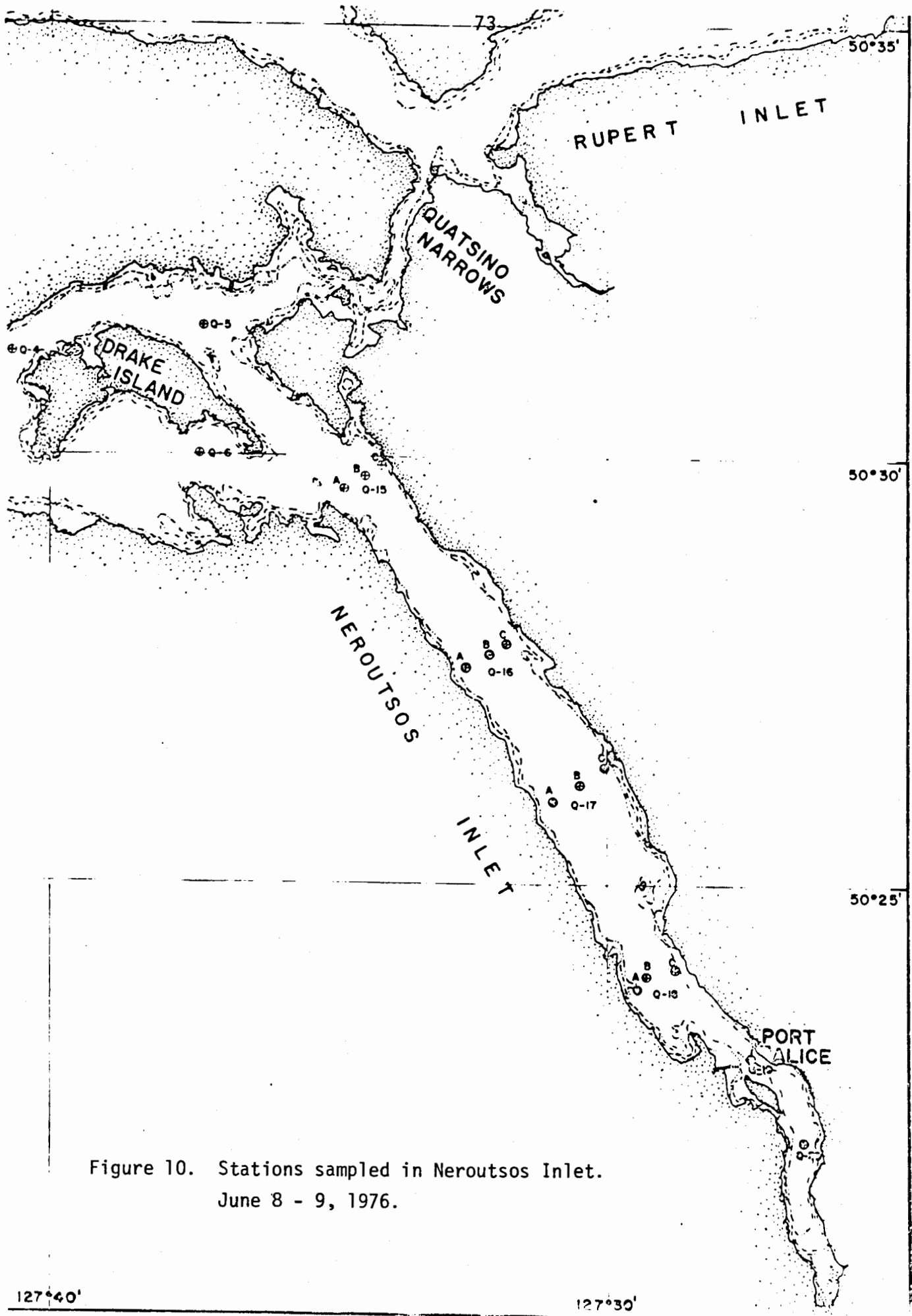
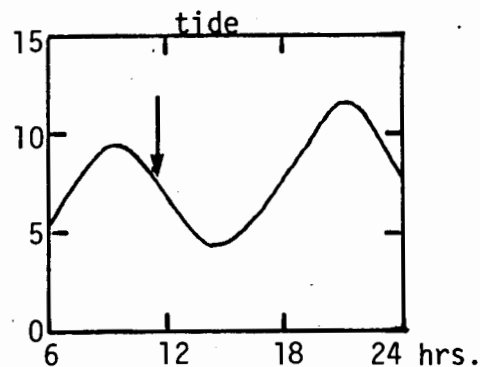


Figure 10. Stations sampled in Neroutsos Inlet.  
June 8 - 9, 1976.

Station: Q 1  
 Latitude: 50° 25.3'N  
 Longitude: 127° 59.5'W  
 Time: 1138  
 Date: 8/VI/76  
 Depth: 80 fath.  
 Temp: D 8.5, W 8.1

Weather: Overcast  
 Sea: Rippled  
 Wind: 240° T, 10kn  
 Cloud Amt: 8/8  
 Baro: 1015 mb  
 Secchi: 4.5m, lt br

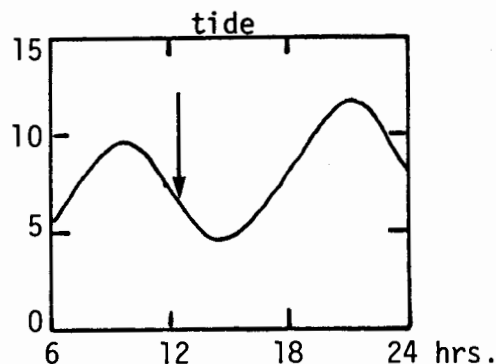


## Dissolved oxygen

Depth (m)	T (°C)	S (‰)	$\sigma_t$	(ml/l)	(mg/l)	% Sat.
0	10.16	30.40	24.00	5.96	8.51	94.1
2	10.21	30.44	23.38	5.82	8.31	92.1
4	10.27	30.75	23.65	5.73	8.19	91.0
6	10.06	30.86	23.73	5.66	8.08	85.4
10	9.52	31.19	24.50	4.93	7.04	72.7
15	9.29	31.34	24.28	4.77	6.82	74.5
20	8.90	31.47	24.42	3.97	5.67	60.2
30	8.09	32.05	24.98	3.78	5.40	57.5
50	7.39	32.74	25.61	2.98	4.25	44.7
80	7.04	33.11	25.96	2.41	3.44	36.0
100	-	33.24	-	2.22	3.17	-
120	6.92	33.33	26.17	2.17	3.10	32.4

Station: Q<sub>2</sub> A  
 Latitude: 50° 28.1'N  
 Longitude: 127° 55.28'W  
 Time: 1250  
 Date: 8/VI/76  
 Depth: 84 fath  
 Temp: D8.5 W8.1

Weather: Overcast  
 Sea: Chop  
 Wind; 260° T  
 Cloud Amt: 8/8  
 Baro: 1015 mb  
 Secchi: 2.2 m, lt br

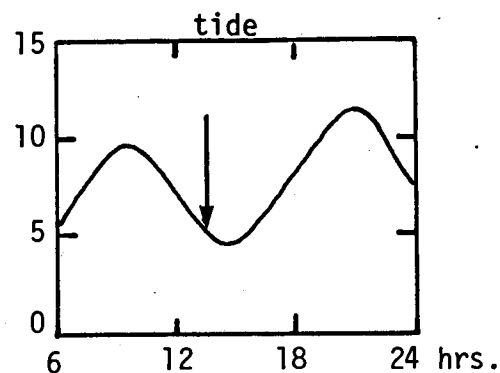


## Dissolved Oxygen

Depth (m)	T (°C)	S (‰)	$\sigma_t$	(ml/l)	(mg/l)	% Sat.
0	10.48	28.98	22.21	6.44	9.20	101.6
2	10.62	29.13	22.32	6.52	9.32	103.3
4	9.51	29.19	22.55	6.10	8.72	94.3
6	8.89	30.04	23.34	4.54	6.48	69.4
10	8.76	30.73	23.85	4.35	6.21	66.7
15	8.77	31.00	24.06	4.45	6.35	68.3
20	8.74	31.26	24.25	4.31	6.15	66.2
30	8.49	31.57	24.53	4.12	5.89	59.3
50	7.49	32.57	25.45	3.18	4.54	47.8
80	7.27	32.82	25.69	2.98	4.25	44.6

Station: Q<sub>2</sub> B  
 Latitude: 50° 28.45' N  
 Longitude: 127° 55.28' W  
 Time: 1330  
 Date: 8/VI/76  
 Depth: 105 fath.  
 Temp: D9.0, W8.5

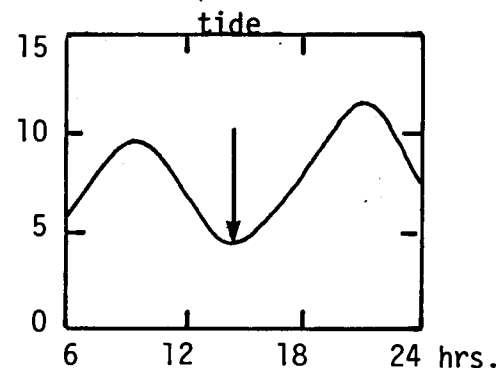
Weather: Overcast  
 Sea: moderate chop  
 Wind: 260° T, 20 kn  
 Cloud Amt: 8/8  
 Baro: 1015.5 mb  
 Secchi: 2.5 m, lt br



Depth (m)	T (°C)	S (‰)	σ <sub>t</sub>	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	10.32			6.34	9.05	
2	10.32			6.38	9.12	
4	10.25			6.30	9.05	
6	9.75			5.77	8.24	
10	8.85			4.55	6.50	
15	8.75			4.40	6.28	
20	8.77			4.35	6.21	
30	8.19			4.01	5.73	
50	7.49			3.26	4.66	
80	7.28			2.84	4.05	
100	7.30			2.86	4.09	
120	7.23			2.74	3.92	
150	7.16			2.70	3.85	

Station: Q<sub>2</sub>-C  
 Latitude: 50° 28.9' N  
 Longitude: 127° 55.28' W  
 Time: 1425  
 Date: 8/IV/76  
 Depth: 42 fath  
 Temp: D9.0, W8.5

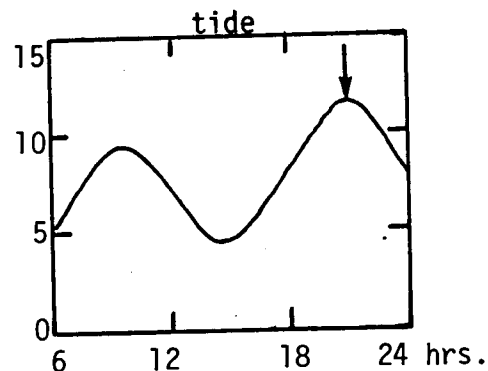
Weather: partly overcast  
 Sea: moderate chop  
 Wind: 260° T, 15 kn  
 Cloud Amt: 6/8  
 Baro: 1016 mb  
 Secchi: 2.6m, gr-br



Depth (m)	T (°C)	S (‰)	σ <sub>t</sub>	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	10.70	29.09	22.30	6.91	9.87	109.6
2	10.40	29.00	22.25	6.83	9.76	107.6
4	9.87	29.28	22.56	6.33	9.04	98.6
6	9.07	30.06	23.30	4.87	6.95	74.8
10	8.93	30.65	23.75	4.50	6.43	69.2
15	8.75	30.92	24.01	4.39	6.27	67.4
20	8.67	31.15	24.20	4.31	6.16	66.1
30	8.46	31.53	24.58	4.16	5.94	63.7
50	7.56	32.61	25.50	3.30	4.72	49.8

Station: Q15-A  
 Latitude: 50° 29.6'N  
 Longitude: 127° 34.85'W  
 Time: 2030  
 Date: 8/VI/76  
 Depth: 60 fath.  
 Temp: D9.5, W8.6

Weather: Cloudy  
 Sea: 1t chop  
 Wind: 270° T, 5 kn  
 Cloud Amt: 8/8  
 Baro: 1013.5 mb  
 Secchi: -

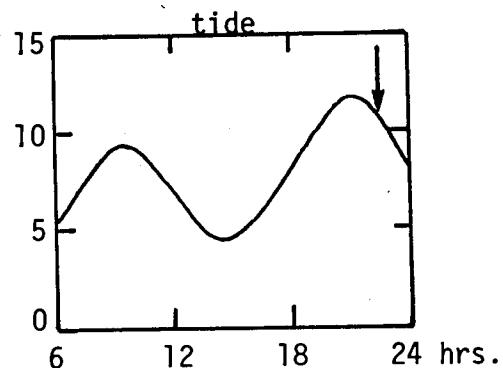


#### Dissolved oxygen

Depth (m)	T (°C)	S (‰)	$\sigma_t$	(ml/l)	(mg/l)	% Sat.
0	10.18	28.68	22.03	6.83	9.75	106.7
2	10.19	28.68	22.03	7.12	10.17	111.5
4	10.18	28.71	22.05	6.94	9.92	108.6
6	10.05	28.73	22.10	6.85	9.78	106.7
10	9.50	29.26	22.61	5.91	8.44	91.3
15	8.61	29.66	23.03	4.96	7.09	75.3
20	8.07	30.14	23.52	4.16	5.94	62.5
30	7.61	31.97	24.98	4.03	5.76	60.0
50	7.42	32.40	25.21	3.78	5.40	56.8

Station: Q15-B  
 Latitude: 50° 29.77'N  
 Longitude: 127° 34.54'W  
 Time: 2232  
 Date: 8/VI/76  
 Depth: 100  
 Temp: D9.5, W8.6

Weather: Overcast  
 Sea: ripple  
 Wind: 270° T, 5-10 kn  
 Cloud Amt: 8/8  
 Baro: 1013.5 mb  
 Secchi: -

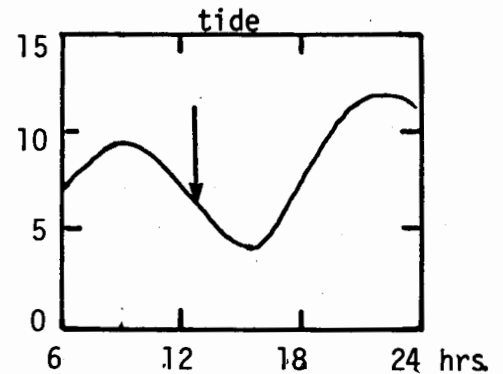


#### Dissolved Oxygen

Depth (m)	T (°C)	S (‰)	$\sigma_t$	(ml/l)	(mg/l)	% Sat.
0	10.02	29.68	22.84	6.85	9.79	107.5
2	9.96	28.73	22.12	6.64	9.48	103.3
4	9.80	28.88	21.71	6.29	8.98	97.6
6	9.76	28.94	22.25	6.34	9.05	98.2
10	9.51	29.11	22.51	6.01	8.57	92.6
15	8.62	29.60	23.00	4.87	6.95	73.8
20	7.92	30.25	23.62	3.89	5.56	58.3
30	7.64	31.97	25.00	3.97	5.67	59.8
50	7.43	32.40	25.32	3.83	5.47	57.5
80	7.34	32.55	25.48	3.64	5.20	54.6
100	7.37	32.55	25.47	2.93	4.19	44.0
120	7.24	32.61	25.51	3.54	5.06	53.0
150	7.21	32.67	25.58	3.88	5.54	58.0

Station: Q15-C  
 Latitude: 50°29.94'N  
 Longitude: 127°34.28'W  
 Time: 1217  
 Date: 9/VI/76  
 Depth: 45 fath.  
 Temp: D9.4 W8.8

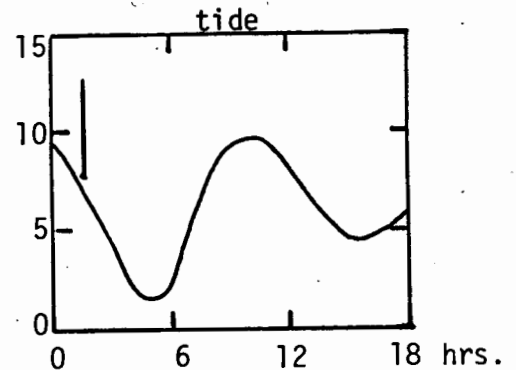
Weather: overcast  
 Sea: rippled  
 Wind: 220<sup>0</sup>T 5 kn  
 Cloud Amt: 8/8  
 Baro: 1013 mb  
 Secchi: -



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	9.77	28.85	22.21	5.48	7.83	85.0
2	9.71	29.02	22.37	5.77	8.24	89.4
4	9.69	29.09	22.42	5.32	7.60	82.5
6	9.59	29.07	22.47	5.48	7.83	84.8
10	9.31	29.21	22.61	4.96	7.09	76.3
15	8.16	29.83	23.28	3.69	5.27	55.4
20	7.85	30.61	23.90	3.31	4.73	49.5
30	7.98	31.61	24.68	4.10	5.86	62.1
50	7.39	32.34	25.30	3.26	4.66	48.9

Station: Q16-A  
 Latitude: 50° 27.53'N  
 Longitude: 127° 32.55'W  
 Time: 0104  
 Date: 9/VI/76  
 Depth: 64 fath.  
 Temp: D9.4, W8.8

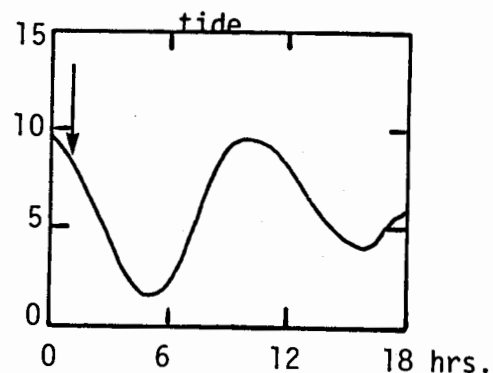
Weather: overcast  
 Sea: smooth  
 Wind: calm  
 Cloud Amt: 8/8  
 Baro: 1013 mb  
 Secchi: -



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	10.47	28.30	21.70	5.58	7.97	87.6
2	10.40	28.47	21.82	5.88	8.40	92.2
4	10.01	28.62	22.00	5.40	7.72	84.1
6	9.78	28.66	22.10	5.67	8.10	87.8
10	8.98	29.05	22.48	4.87	6.95	74.1
15	8.27	29.57	23.03	3.84	5.48	57.7
20	7.85	30.50	23.80	2.46	3.51	36.7
30	7.82	31.49	24.61	3.12	4.46	47.0
50	7.41	32.38	25.32	3.40	4.86	51.0

Station: Q16-B  
 Latitude: 50° 27.7'N  
 Longitude: 127° 32.15'W  
 Time: 0048  
 Date: 9/IV/76  
 Depth: 100 fath.  
 Temp: D9.4, W8.8

Weather: overcast  
 Sea: smooth  
 Wind: calm  
 Cloud Amt: 8/8  
 Baro: 1012.5 mb  
 Secchi: -

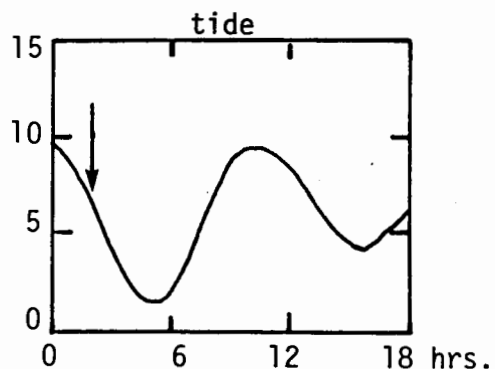


## Dissolved oxygen

Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	11.64			4.77	6.82	
2	11.48	27.92	21.21	5.86	8.37	93.8
4	9.99	28.73	22.10	5.96	8.51	92.7
6	9.88	28.77	22.27	6.00	8.57	93.2
10	9.16	29.02	22.47	5.34	7.63	81.7
15	8.25	29.55	23.02	4.26	6.08	63.9
20	7.85	30.33	23.68	2.84	4.05	42.4
30	7.93	31.53	24.61	4.02	5.74	60.7
50	7.41	32.36	25.30	3.64	5.20	54.6
80	7.35	32.49	25.41	3.60	5.14	53.9
100	7.30	32.55	25.48	3.54	5.06	53.1
120	7.27	32.59	25.45	3.59	5.13	53.8
150	7.25	32.67	25.59	3.59	5.13	53.8

Station: Q16-C  
 Latitude: 50° 27.85'N  
 Longitude: 127° 31.73'W  
 Time: 0131  
 Date: 9/VI/76  
 Depth: 44 fath.  
 Temp: D9.5, W8.8

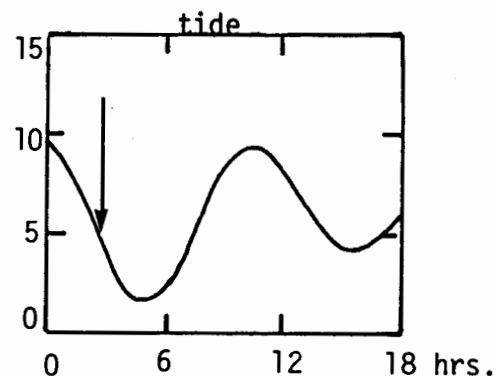
Weather: overcast  
 Sea: smooth  
 Wind: calm  
 Cloud Amt: 8/8  
 Baro: 1011.5 mb  
 Secchi: -



## Dissolved Oxygen

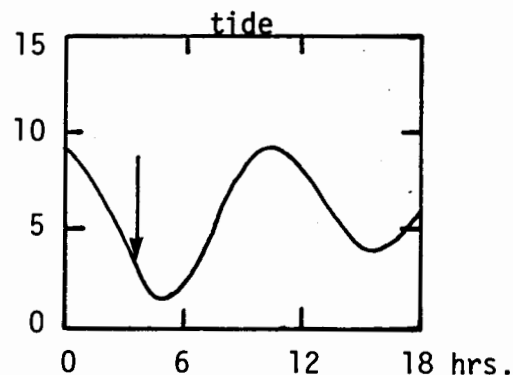
Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	12.96	24.72	18.49	3.35	4.79	54.3
2	11.30	26.44	20.11	4.17	5.95	65.8
4	10.07	28.46	21.87	5.18	7.40	80.7
6	9.16	29.00	22.45	5.24	7.48	80.1
10	8.76	29.91	23.32	4.76	6.80	72.6
15	8.25	30.94	24.01	4.12	5.89	62.6
20	7.88	30.88	24.11	3.07	4.39	46.2
30	7.66	31.93	24.85	3.57	5.10	53.7

Station: Q17-A  
 Latitude: 50°25.93'N Weather: overcast, rain  
 Longitude: 127°31.0'W Sea: choppy  
 Time: 0221 Wind: 145°T, 25 kn  
 Date: 9/VI/76 Cloud Amt: 8/8  
 Depth: 94 fath. Baro: 1011.5 mb  
 Temp: D9.5, W8.8 Secchi:



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	13.02	24.89	18.65	2.71	3.87	44.0
2	11.96	25.88	19.55	3.73	5.33	59.6
4	10.19	27.73	21.30	4.92	7.03	76.5
6	9.66	28.77	22.20	4.87	6.95	75.2
10	8.41	29.26	22.78	4.35	6.21	65.5
15	8.05	29.91	23.33	3.88	5.54	58.2
20	7.92	30.69	23.92	3.50	5.00	52.6
30	7.75	31.82	24.83	4.02	5.74	60.6
50	7.36	32.47	25.41	3.69	5.27	55.3
80	7.27	32.63	25.55	3.51	5.02	52.6
100	7.31	32.70	25.69	3.45	4.93	51.8

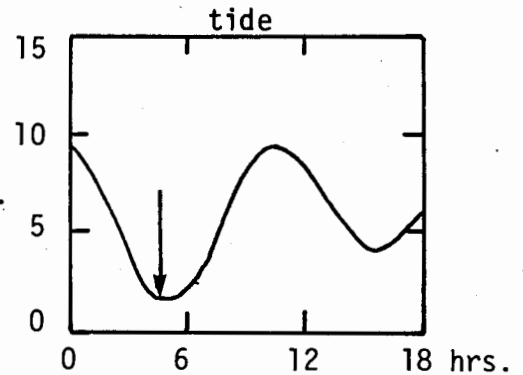
Station: Q17-B  
 Latitude: 50°26.13'N Weather: overcast, rain  
 Longitude: 127°30.55'W Sea: choppy  
 Time: 0315 Wind: 145°T, 20-30 kn  
 Date: 9/VI/76 Cloud Amt: 8/8  
 Depth: 100 fath. Baro: 1011.5 mb  
 Temp: D9.5, W8.8 Secchi: -



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	12.54	25.26	18.96	2.18	3.11	35.0
2	12.20	25.56	19.29	2.96	4.25	47.7
4	10.63	27.79	21.28	4.45	6.35	69.8
6	9.55	28.03	21.65	3.59	5.13	55.1
10	8.42	29.40	23.15	4.54	6.48	68.4
15	8.17	29.74	23.21	4.07	5.81	61.1
20	7.88	30.44	23.77	3.54	5.06	53.0
30	7.68	31.61	24.70	3.60	5.14	54.1
50	7.33	32.57	25.48	3.54	5.06	33.5
80	7.29	—	—	3.59	5.13	—
100	7.30	32.59	25.52	3.54	5.06	53.1
120	7.20	32.61	25.57	3.59	5.13	53.7
150	7.19	32.94	25.82	3.45	4.93	51.7

Station: Q17-C  
 Latitude: 50° 26.35'N  
 Longitude: 127° 30.12'W  
 Time: 0413  
 Date: 9/VI/76  
 Depth: 46 fath.  
 Temp: -

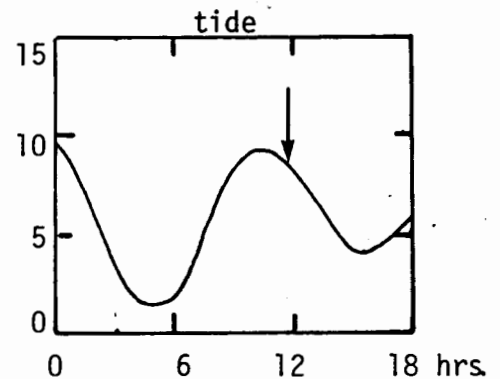
Weather: overcast, rain  
 Sea: choppy  
 Wind: 160° T, 20-25 kn.  
 Cloud Amt: 8/8  
 Baro: 1010 mb  
 Secchi: -



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	12.45	25.45	19.17	3.78	5.40	60.8
2	12.44	25.39	19.11	3.64	5.20	58.5
4	12.38	26.85	20.22	3.83	5.47	62.2
6	12.44	26.61	20.07	4.30	6.14	69.7
10	8.31	29.28	22.80	4.45	6.35	66.8
15	8.16	29.76	23.22	4.32	6.17	64.8
20	7.83	30.88	24.12	3.49	4.99	52.0
30	7.76	31.80	24.85	3.78	5.40	57.0

Station: Q20  
 Latitude: 50° 22'N  
 Longitude: 127° 26.5'W  
 Time: 1139  
 Date: 9/VI/76  
 Depth: 30 fath.  
 Temp: D9.5, W9.0

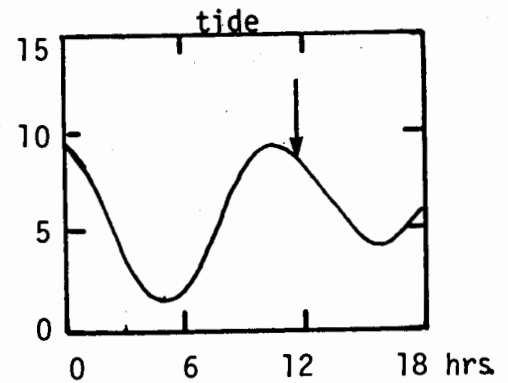
Weather: overcast, rain  
 Sea: ripple  
 Wind: 130° T, 14 kn  
 Cloud Amt: 8/8  
 Baro: 1008 mb  
 Secchi: 1.0 m, dk br



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	13.32	23.10	17.20	2.08	2.97	33.6
2	11.50	25.32	19.21	2.51	3.58	39.5
4	9.07	28.43	22.02	3.92	5.60	59.6
6	8.37	29.07	22.63	4.16	5.94	62.5
10	8.24	29.38	22.89	3.92	5.60	58.8
15	7.77	29.95	23.40	2.78	3.97	41.4
20	7.80	30.96	24.19	1.99	2.84	29.8
30	7.67	31.53	24.57	1.61	2.30	24.2

Station: Q19  
 Latitude: 50° 23'N  
 Longitude: 127° 27.4'W  
 Time: 1142  
 Date: 9/VI/76  
 Depth: 22 fath.  
 Temp: D9.5, W9.0

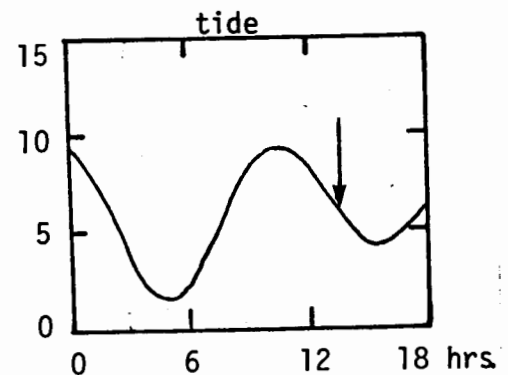
Weather: overcast, rain  
 Sea: smogth  
 Wind: 130°T, 14 kn  
 Cloud Amt: 8/8  
 Baro: 1008 mb  
 Secchi: 1.0m, dk, br



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	13.75	22.95	17.00	1.57	2.24	25.5
2	9.46	26.89	20.81	2.88	4.12	43.8
4	8.61	28.75	22.32	4.02	5.74	60.6
6	8.34	29.11	22.70	4.26	6.08	63.9
10	8.27	29.36	22.87	4.21	6.01	63.2
15	8.01	29.81	23.30	2.98	4.25	44.5
20	7.82	30.94	24.19	2.70	3.85	40.4
30	7.68	31.44	24.60	1.99	2.84	29.8

Station: Q18A  
 Latitude: 50° 23.8'N  
 Longitude: 127° 29.52'W  
 Time: 1320  
 Date: 9/VI/76  
 Depth: 32 fath.  
 Temp: D9.5, W9.0

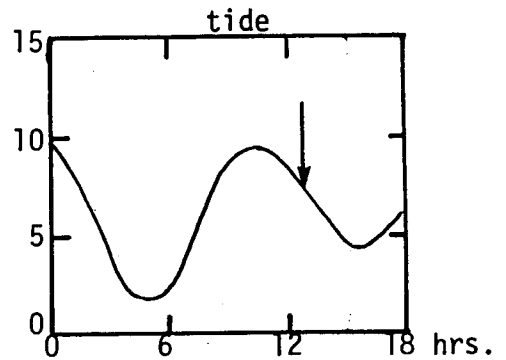
Weather: overcast, rain  
 Sea: 1t chop  
 Wind: 130°T, 15-20 kn  
 Cloud Amt: 8/8  
 Baro: 1007.5 mb  
 Secchi: 1.6 m, br



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	10.82	26.21	20.02	4.49	6.41	70.0
2	10.46	26.70	20.47	4.63	6.62	71.9
4	9.28	28.60	22.12	5.20	7.43	79.6
6	8.76	29.28	22.77	4.83	6.91	73.5
10	8.33	29.47	22.95	4.54	6.48	68.3
15	8.02	29.76	23.28	3.14	4.48	46.9
20	7.83	30.33	23.70	2.70	3.85	40.3

Station: Q18-B  
 Latitude: 50° 23.9'N  
 Longitude: 127° 29.2'W  
 Time: 1255  
 Date: 9/VI/76  
 Depth: 66 fath.  
 Temp: D10.5, W9.1

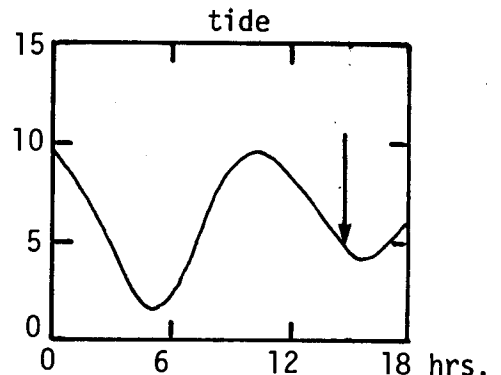
Weather: overcast, rain  
 Sea: 1t chop  
 Wind: 130°T, 10-25 kn  
 Cloud Amt: 8/8  
 Baro: 1007.5 mb  
 Secchi: 2.2 m, br



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	10.82	26.14	19.96	4.21	6.01	65.6
2	9.68	-	-	4.59	6.56	-
4	9.19	28.39	21.95	4.78	6.83	72.9
6	8.75	28.86	22.41	4.75	6.79	71.9
10	8.37	29.21	22.77	4.59	6.55	68.9
15	8.17	29.62	23.10	4.00	5.72	60.1
20	7.87	30.19	23.58	2.93	4.19	43.8
30	7.67	31.51	24.65	2.86	4.08	42.9
50	7.33	32.28	25.28	3.69	5.27	55.3
80	7.25	32.47	25.42	3.59	5.13	53.7
100	7.30	32.55	25.49	-	-	-

Station: Q18-C  
 Latitude: 50° 24.08'N  
 Longitude: 127° 28.83'W  
 Time: 1438  
 Date: 9/VI/76  
 Depth: 50 fath.  
 Temp: D 10.5, W9.1

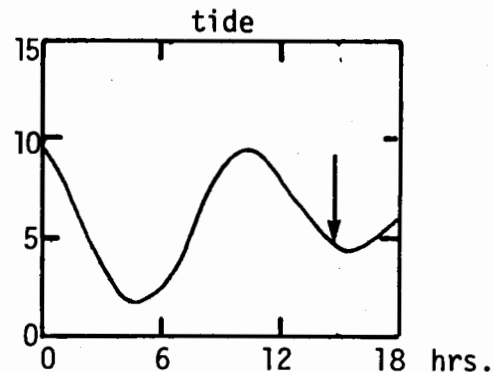
Weather: overcast, rain  
 Sea: choppy  
 Wind: 130°T, 15-30 kn  
 Cloud Amt: 8/8  
 Baro: 1007.5 mb  
 Secchi: 1.1m dk br



Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	12.83	24.28	18.17	3.54	5.06	57.0
2	11.46	26.42	20.08	2.08	2.97	32.9
4	8.87	29.74	23.07	3.21	4.59	49.1
6	8.57	-	-	4.49	6.41	-
10	8.28	30.52	23.77	4.59	6.55	69.4
15	7.94	-	-	4.44	6.34	-
20	7.79	30.61	23.91	3.44	4.92	51.5
30	7.56	31.67	24.79	2.74	3.92	41.1
50	7.32	32.96	25.79	3.07	4.39	46.2

Station: Q-6  
 Latitude: 50° 30'N  
 Longitude: 127° 37.3'W  
 Time: 1447  
 Date: 9/VI/76  
 Depth: 72 fath  
 Temp: D10.5, W9.1

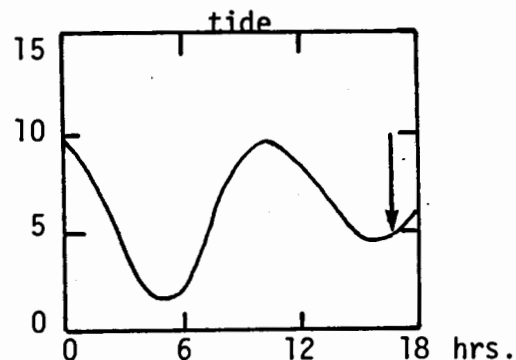
Weather: overcast, rain  
 Sea: lt chop  
 Wind: 130°T, 15 kn  
 Cloud Amt: 8/8  
 Baro: 1007 mb  
 Secchi: 2.0 m, lt br



Depth (m)	T (°C)	S (°/oo)	$\sigma_t$	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	10.44	27.83	21.34	3.83	5.47	59.9
2	10.28	28.24	21.69	5.50	7.86	85.9
4	9.75	28.69	22.11	5.34	7.63	82.7
6	9.59	29.17	22.54	6.24	8.91	96.5
10	9.30	29.22	22.62	5.75	8.22	88.5
15	8.56	30.06	23.40	4.73	6.75	71.8
20	8.17	31.28	24.39	4.37	6.24	66.3
30	7.55	32.20	25.19	3.97	5.67	59.7
50	7.46	32.35	25.30	3.80	5.43	57.1
80	7.34	32.47	25.40	3.21	4.59	48.2
100	7.38	32.55	25.49	3.78	5.40	56.8

Station: Q-5  
 Latitude: 50° 31.5'N  
 Longitude: 127° 37.3'W  
 Time: 1635  
 Date: 9/VI/76  
 Depth: 58 fath  
 Temp: -

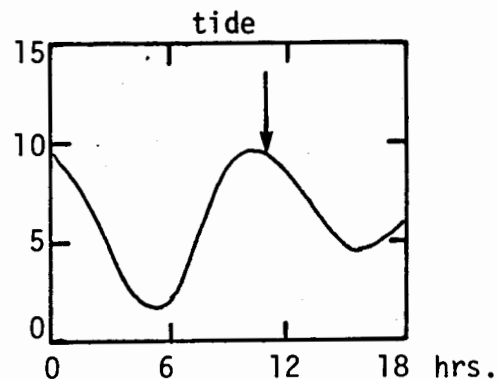
Weather: overcast, rain  
 Sea: rippled  
 Wind: -  
 Cloud Amt: 8/8  
 Baro: 1007 mb  
 Secchi: 2.2 m, br



Depth (m)	T (°C)	S (°/oo)	$\sigma_t$	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	10.30	27.83	21.40	5.05	7.22	78.8
2	10.07	28.00	21.53	4.96	7.09	77.1
4	9.83	28.56	21.97	5.02	7.17	77.8
6	9.54	28.58	22.08	5.05	7.22	77.8
10	8.83	29.15	22.64	4.96	7.09	75.5
15	8.70	29.36	22.80	5.01	7.16	76.0
20	8.51	29.93	23.28	4.73	6.75	71.6
30	8.18	30.92	24.10	4.40	6.28	66.6
50	7.57	32.38	24.55	4.11	5.87	61.9

Station: Q-4  
 Latitude: 50° 31.2'N  
 Longitude: 127° 40.7'W  
 Time: 1034  
 Date: 9/VI/76  
 Depth: 74 fath  
 Temp: -

Weather: overcast, rain  
 Sea: calm  
 Wind: calm  
 Cloud Amt: 8/8  
 Baro: 1007 mb  
 Secchi: -

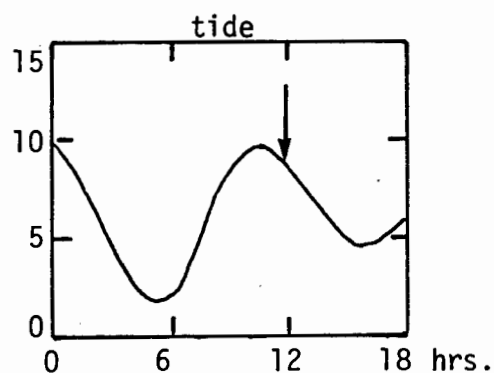


#### Dissolved oxygen

Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved oxygen		
				(ml/l)	(mg/l)	% Sat.
0	9.62	28.86	22.28	5.10	7.29	78.8
2	9.25	29.17	22.60	5.24	7.48	80.4
4	9.10	29.32	22.73	5.22	7.45	79.8
6	9.01	29.45	22.83	5.22	7.45	79.8
10	8.86	29.72	23.07	5.05	7.22	77.2
15	8.79	29.83	23.18	5.12	7.32	78.2
20	8.47	30.63	23.83	4.77	6.82	69.8
30	8.08	32.09	25.02	4.49	6.41	68.3
50	7.52	32.43	25.35	4.01	5.73	60.4
80	7.34	32.76	25.70	3.83	5.47	57.5
100	7.37	32.86	25.61	3.72	5.32	56.0

Station: Q3  
 Latitude: 50° 28.8'N  
 Longitude: 127° 47.4'W  
 Time: 1134  
 Date: 9/VI/76  
 Depth: 84 fath  
 Temp: D9.3, W9.3

Weather: overcast, rain  
 Sea: smooth  
 Wind: calm  
 Cloud Amt: 8/8  
 Baro: 1008 mb  
 Secchi: -



#### Dissolved Oxygen

Depth (m)	T (°C)	S (‰)	$\sigma_t$	Dissolved Oxygen		
				(ml/l)	(mg/l)	% Sat.
0	10.51	28.77	22.07	8.74	12.48	137.0
2	9.91	29.15	22.49	7.41	10.59	115.5
4	9.70	29.32	22.67	6.71	9.58	104.2
6	9.48	29.40	22.85	6.52	9.32	100.8
10	9.47	29.45	22.79	6.29	8.98	97.2
15	9.33	29.83	23.10	5.99	8.57	92.7
20	8.93	30.27	23.50	5.34	7.63	79.1
30	8.67	31.09	24.18	4.97	7.10	76.3
50	7.85	32.26	25.18	4.30	6.14	65.2
80	7.34	32.90	25.75	3.68	5.26	55.4
100	7.29	32.90	25.78	3.31	4.73	49.7