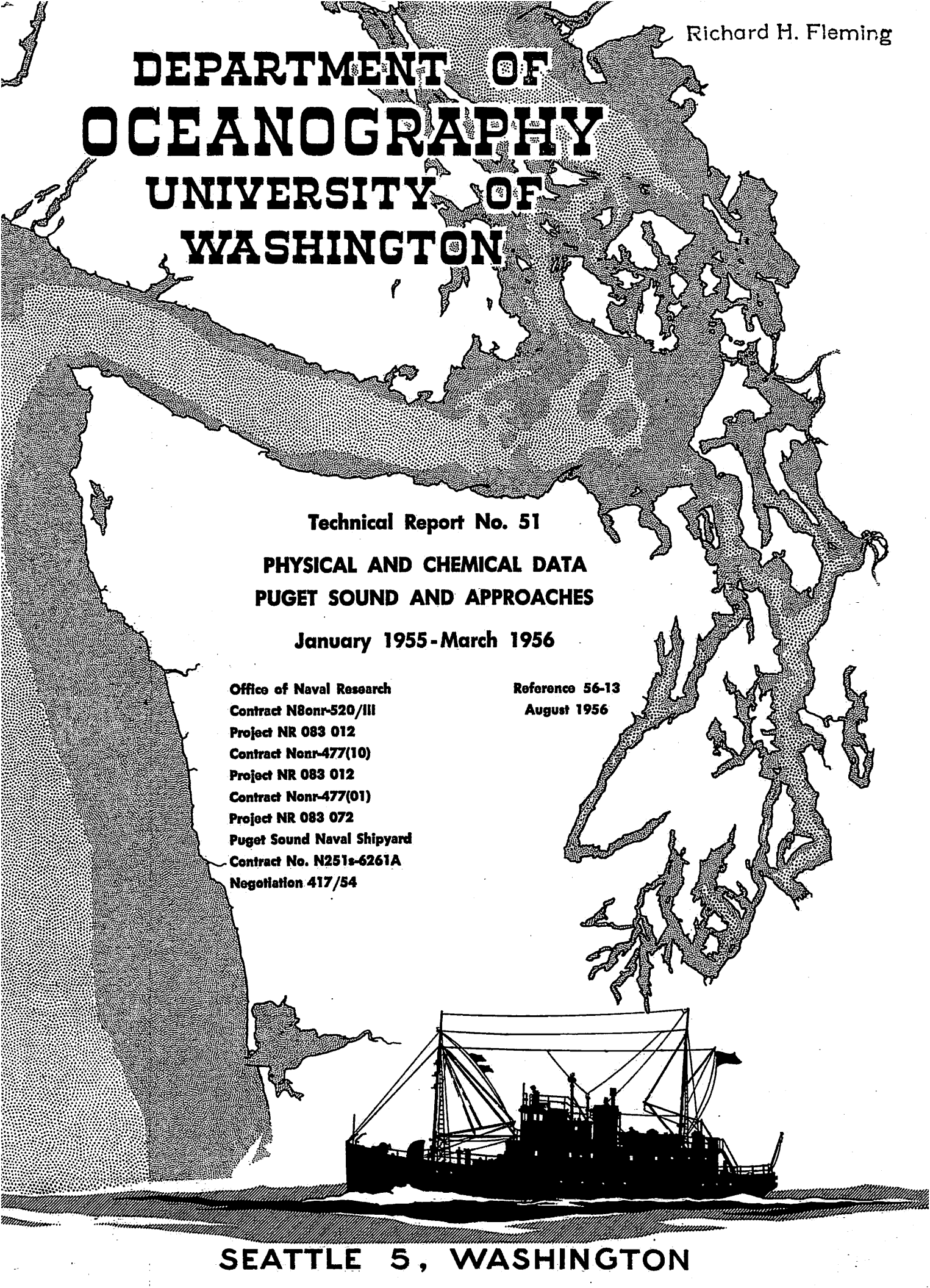




Richard H. Fleming

DEPARTMENT OF OCEANOGRAPHY UNIVERSITY OF WASHINGTON

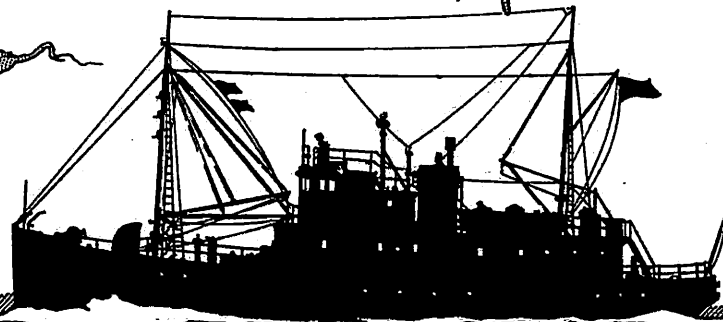
Technical Report No. 51

PHYSICAL AND CHEMICAL DATA
PUGET SOUND AND APPROACHES

January 1955-March 1956

Office of Naval Research
Contract N8onr-520/III
Project NR 083 012
Contract Nonr-477(10)
Project NR 083 012
Contract Nonr-477(01)
Project NR 083 072
Puget Sound Naval Shipyard
Contract No. N251s-6261A
Negotiation 417/54

Reference 56-13
August 1956



SEATTLE 5, WASHINGTON

UNIVERSITY OF WASHINGTON DEPARTMENT OF OCEANOGRAPHY
Seattle 5, Washington

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Richard H. Fleming
Executive Officer

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ABSTRACT

This report tabulates physical and chemical observations made at various locations in Puget Sound and its approaches by the University of Washington Department of Oceanography using the research vessel BROWN BEAR. The observations were made during the period from January 1955 through March 1956. A detailed monthly survey of Carr Inlet begun in February 1954 was completed in February 1955. Charts show the position of the stations sampled. Values for temperature, salinity, dissolved oxygen and dissolved inorganic phosphate, as determined using accepted oceanographic procedures, are given at selected depths from the surface to bottom.

INTRODUCTION

This report tabulates inshore chemical and physical data collected at various locations in Puget Sound and approaches from January 1955 through March 1956 by University of Washington personnel aboard the Department of Oceanography research vessel BROWN BEAR and the School of Fisheries research vessel ONCORHYNCHUS. Station location charts are presented before the data for each cruise (see pages 1, 5, 23, 30, 38, 42, 58, 61, 77, 90, 105, 108, 111, 125 and 128). Quite extensive surveys of Puget Sound were made in January, March, May and November 1955 and February 1956. A survey of Georgia Strait, Strait of Juan de Fuca and northern Puget Sound was made in July 1955. An annual series of monthly surveys made of Carr Inlet for the Puget Sound Naval Shipyard was completed in February 1955. Two studies of short period variations at the northern end of Colvos Passage were made in February and April 1955. Special chemical studies of Port Susan were made in January, February and March 1956. The chemical and physical data for plankton studies in central Puget Sound conducted by Hebard (7) are included in this report (pages 128 to 141). Additional inshore data not contained in this report were obtained using the Salinity-Temperature-Depth Recorder (1) and various current meters.

Station Numbering System

The station numbers used on the BROWN BEAR consist of two parts. The first part is the cruise number followed by a number starting with "1" for the first station occupied on that particular cruise and continuing in consecutive order (i.e., 80-1, 80-2, etc.).

Sampling Bottles

Water samples were taken with Nansen bottles and Fjarlie bottles (2).

Determination of Properties

Deep-sea reversing thermometers were used to determine temperature. The depths reported for subsurface observations were calculated from measured wire angle and unprotected reversing thermometer readings as described by La Fond (3). Copenhagen standard sea water was used exclusively as the standard in the determination of Salinity. Dissolved oxygen was determined by the modified Winkler method described by Thompson and Robinson (4). Soluble inorganic phosphate was determined by the method of Thompson and Robinson (5) except that the color intensity was measured with a Beckman Spectrophotometer Model DU (6) rather than Nessler tubes. The phosphate data, corrected for salt error, are reported conventionally to the second decimal place in microgram-atoms per liter, although it is realized that the individual determinations may be in error by 5 to 10 percent.

Data

The time at which the messenger was dropped on the first cast is listed for the +8 time zone. Positions are given to the nearest 0.1 minute. Depth is reported in fathoms and was obtained with the aid of a Navy EDO echo sounder. Weather is reported in the Navy bathythermograph weather code given in H. O. Publication No. 606-c, except in cases where the only weather phenomenon reported is the state of the sky. For the state of the sky the following symbols were used: b., clear sky; b.c., blue sky with detached clouds; c., sky mainly cloudy; and o., sky overcast.

Wind velocity is reported in knots. Dry and wet bulb air temperatures are reported in degrees Fahrenheit ($^{\circ}\text{F}$). The dry bulb reading is listed first, followed by a virgule (/) and then the wet bulb reading.

All data are actual observed values. The maximum depth of sampling was governed by the depth of water. All clearly questionable data have been excluded.

The presentation of these data in this form does not constitute publication. Subsequent, more rigorous analyses of these data may disclose errors which are not apparent at this time.

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1953. A Seawater Sampling Bottle. Jour. Mar. Res., 12(1):21-30.
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1951. Processing Oceanographic Data. U. S. Navy H. O. Publication No. 614, Washington, D. C.: 114 pages.
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1939. Notes on the Determination of Dissolved Oxygen in Sea Water. Jour. Mar. Res., 2(1):1-8.
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1956. The Seasonal Variation of Zooplankton in Puget Sound. Thesis, University of Washington, 64 pages, typewritten.

ACKNOWLEDGMENT

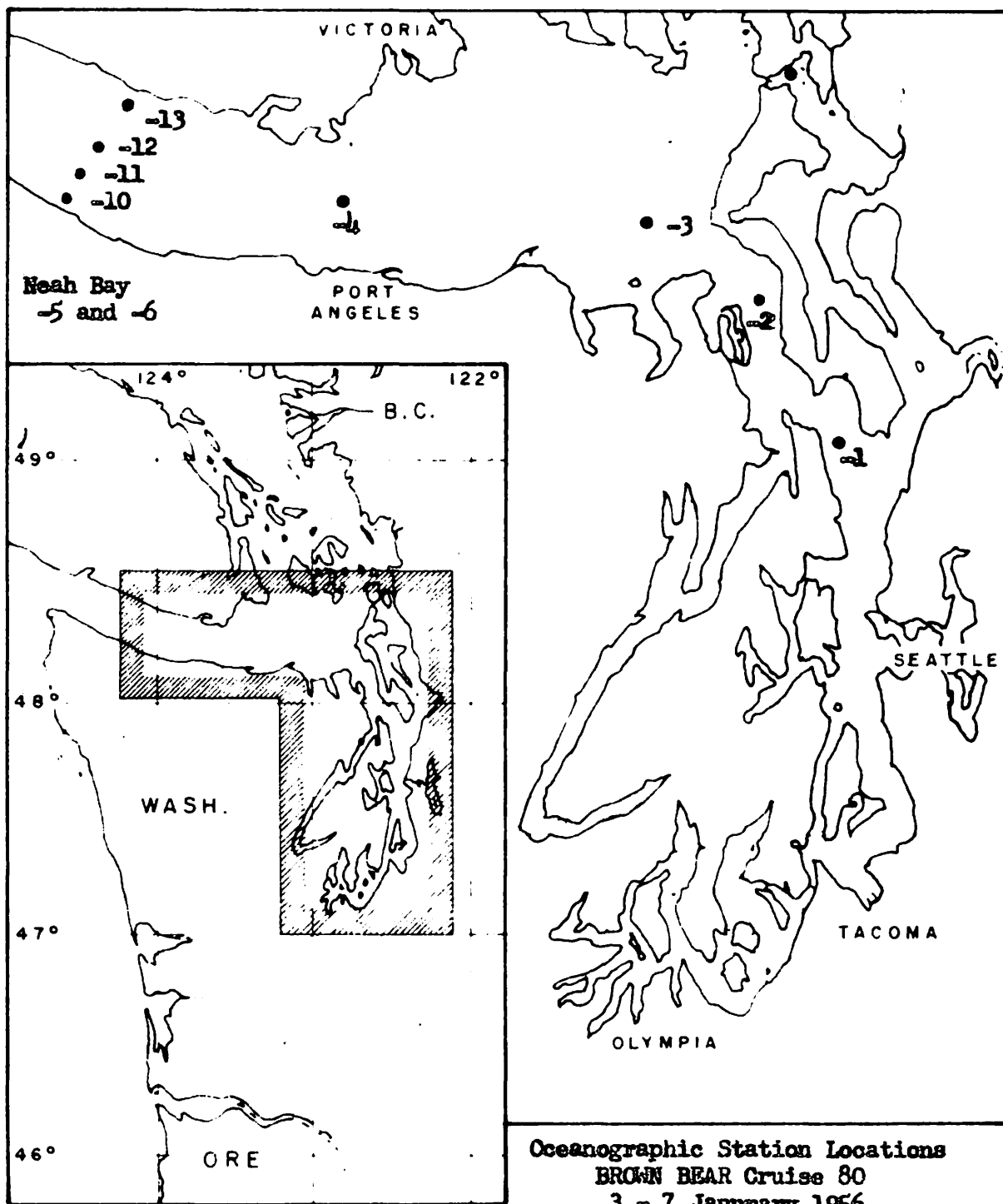
The data contained in this report were obtained and largely processed under Office of Naval Research Contracts Nonr-477(01), Project NR 083-072, and N8onr-520/III, Project NR 083-012, and the processing completed under Contract Nonr-477(10), Project NR 083-012. The Carr Inlet Surveys were conducted under Contract No. N251s-6261A, Negotiation 417/54, with the Puget Sound Naval Shipyard at Bremerton, Washington.

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Hebard, J. Frank	Research Assistant
Helle, James R.	Undergraduate Assistant

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The wholehearted cooperation of Franklin W. Princehouse, Master of the M. V. BROWN BEAR, and all of the ship's officers and crew, has contributed greatly to this work.



STA 80-1 47° 54.4' N WEATHER c. 3 Jan 55 122° 28.6' W WIND Calm 1536 (+8) DEPTH 110 fm 45°/42°F Point No Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.50	22.68	0.570	2.40
10	8.42	27.18	0.492	2.35
24	8.95	29.01	0.475	2.65
47	8.87	29.44	0.479	2.65
95	8.69	29.52	0.487	----
142	8.53	29.57	0.487	----
185	8.52	29.59	0.487	2.45
147	8.46	29.69	0.487	2.20

STA 80-2 48° 06.1' N WEATHER c. 3 Jan 55 122° 39.0' W WIND E 4 1713 (+8) DEPTH 105 fm 42°/40°F Marrowstone Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.63	25.01	0.546	2.20
9	8.49	29.13	0.492	2.20
43	8.39	29.60	0.488	1.90
87	8.25	30.10	0.486	2.00
108	8.28	30.01	0.485	1.85
117	8.28	30.01	0.485	2.35
192	8.23	30.17	0.482	1.90

STA 80-3 48° 14.5' N WEATHER b.c. 3 Jan 55 122° 58.9' W WIND ENE 12 1924 (+8) DEPTH 85 fm 42°/40°F Protection Island				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.10	30.16	0.492	2.00
10	8.09	30.17	0.492	2.50
50	8.13	30.44	0.476	2.40
100	8.12	30.84	0.462	2.15
125	8.18	31.00	0.448	2.40
150	8.15	31.14	0.436	2.40
164	8.15	31.15	0.436	2.25

STA 80-4 48° 14.7' N WEATHER b.c. 3 Jan 55 123° 31.5' W WIND E 15 2259 (+8) DEPTH 98 fm 43°/41°F Race Rocks				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.93	30.36	0.508	2.35
10	7.95	30.35	0.506	2.50
50	7.98	31.07	0.450	2.60
100	8.02	31.16	0.371	2.45
150	7.73	33.19	0.292	2.35
178	7.65	33.30	0.286	2.60

STA 80-5 48° 26.9' N WEATHER c. 4 Jan 55 124° 34.9' W WIND SE 22 0444 (+8) DEPTH 140 fm 43°/40°F Off Neah Bay				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.03	30.61	0.529	2.25
8	8.02	30.61	0.525	2.25
19	8.11	30.70	0.506	2.30
38	8.32	30.77	0.465	2.35
76	8.57	31.55	0.411	2.30
114	8.27	31.82	0.425	2.10
152	7.90	33.25	0.337	2.20

STA 80-6 48° 23.9' N WEATHER 63 4 Jan 55 124° 36.9' W WIND ESE 22 0634 (+8) DEPTH 27 fm 42°/40°F Neah Bay				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.26	31.27	0.487	2.10
10	8.41	31.61	0.456	2.10
25	8.46	31.32	0.442	1.80
40	8.42	32.00	0.425	2.10

STA 80-10 48° 13.9' N WEATHER 61 6 Jan 55 124° 06.6' W WIND SSW 7 0924 (+8) DEPTH 77 fm 43°/42°F Pillar Point I				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.87	30.87	0.495	----
10	7.89	30.91	0.489	----
25	8.05	31.18	0.461	----
50	8.14	31.71	0.419	----
100	8.30	32.60	0.361	----

STA 80-11 48° 16.1' N WEATHER o. 6 Jan 55 124° 04.7' W WIND SxW 7 1010 (+8) DEPTH 100 fm 43°/42°F Pillar Point II				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.73	30.60	0.515	----
10	7.94	30.76	0.483	----
25	8.02	30.90	0.467	----
50	8.06	31.28	0.440	----
100	8.30	32.88	0.327	----
150	7.76	33.37	0.303	
175	7.58	33.56	0.270	

STA 80-12 48° 18.2' N WEATHER o.
 6 Jan 55 124° 03.2' W WIND SxW 5
 1058 (+8) DEPTH 104 fm 43°/42°F
 Pillar Point (G)

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.82	30.12	0.506	----
10	7.81	30.68	0.507	----
25	8.00	30.75	0.483	----
50	8.04	30.90	0.464	----
100	8.24	32.63	0.346	----
150	7.51	33.55	0.268	----
185	7.50	33.60	0.264	----

STA 80-13 48° 22.6' N WEATHER o.
 6 Jan 55 123° 59.6' W WIND Calm
 1219 (+8) DEPTH 48 fm 44°/42°F
 Pillar Point (H)

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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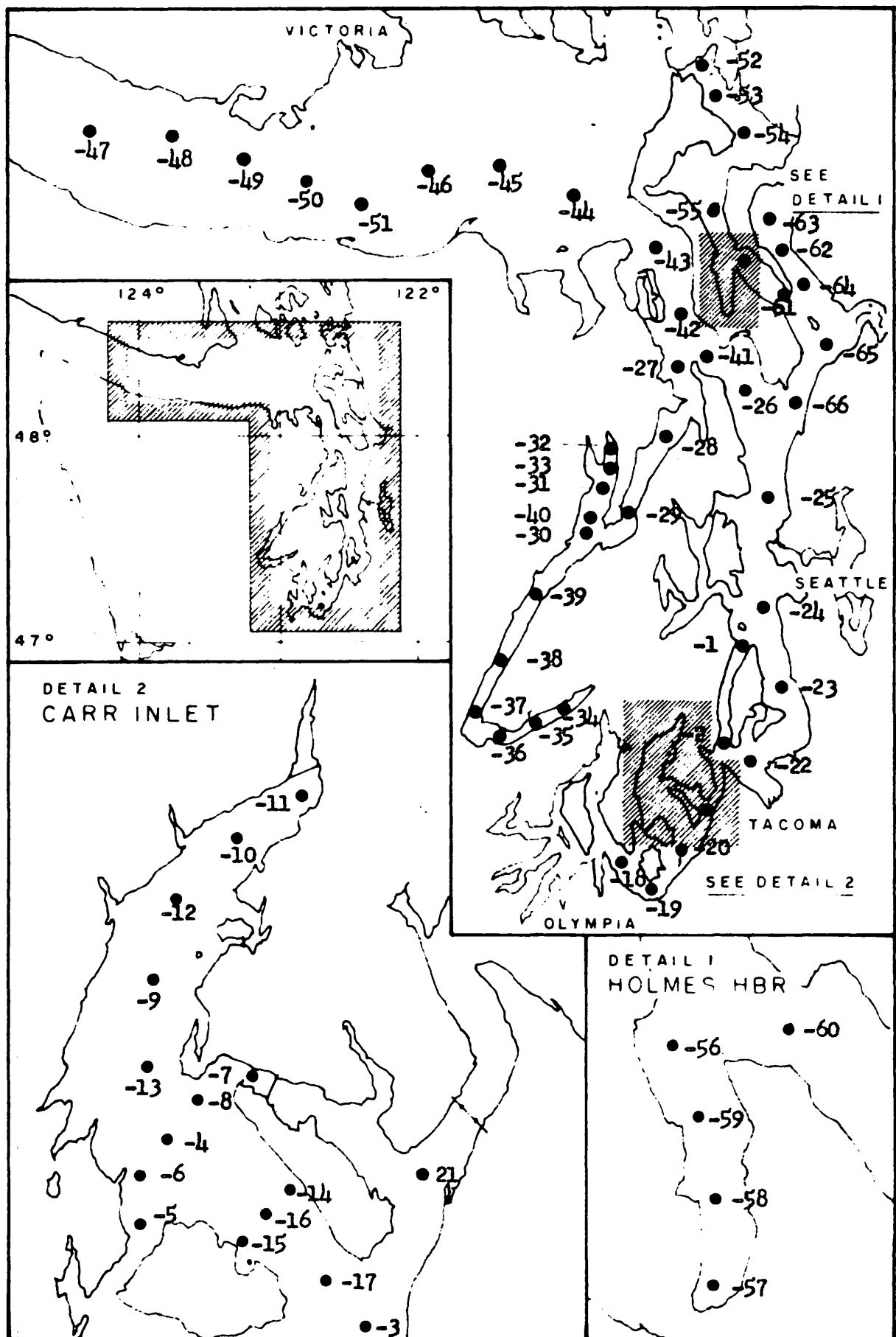
0	7.98	30.44	0.538	----
10	8.15	30.59	0.508	----
25	8.01	30.77	0.498	----
50	8.17	30.94	0.449	----
90	8.08	31.58	0.409	----

STA 81-21 47° 15.0' N WEATHER o. 18 Jan 55 122° 34.3' W WIND NE 2 0520 (+8) DEPTH 32 fm 45°/40°F Day Island				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.85	29.19	0.484	2.96
5	8.92	29.20	0.486	2.43
10	8.83	29.19	0.485	2.44
20	8.78	29.22	0.484	2.52
30	8.78	29.22	0.481	2.41
50	8.82	29.21	0.483	2.42

STA 81-22 47° 19.0' N WEATHER o. 18 Jan 55 122° 28.2' W WIND ExS 3 0611 (+8) DEPTH 95 fm 45°/40°F Brown Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.13	25.35	0.532	2.41
5	8.70	28.87	0.502	2.54
10	8.83	29.14	0.485	2.49
20	8.89	29.31	0.478	2.56
30	8.98	29.58	0.467	2.92
50	8.98	29.27	0.470	2.39
75	8.96	29.49	0.465	2.54
100	9.12	29.49	0.454	2.58
130	9.08	29.51	0.455	2.69
160	8.98	29.50	0.465	2.66

STA 81-23 47° 26.5' N WEATHER o. 18 Jan 55 122° 23.5' W WIND ENE 5 0836 (+8) DEPTH 132 fm 44°/40°F Pulley Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.60	29.08	0.516	2.58
5	8.68	29.11	0.510	2.50
10	8.64	29.12	0.507	2.50
20	8.62	29.20	0.505	2.49
30	8.63	29.23	0.504	2.47
50	8.84	29.38	0.480	2.41
75	8.74	29.43	0.478	2.52
100	8.71	29.46	0.478	2.51
140	8.40	29.47	0.484	2.49
180	8.30	29.50	0.491	2.49
220	8.27	29.51	0.489	2.45

STA 81-24 47° 34.3' N WEATHER b.c. 18 Jan 55 122° 26.5' W WIND NW 5 1022 (+8) DEPTH 134 fm 46°/42°F				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.72	29.23	0.503	2.54
5	8.80	29.25	0.499	2.46
10	8.81	29.32	0.493	2.50
20	8.80	29.31	0.491	2.62
30	8.76	29.27	0.489	2.54
50	8.78	29.31	0.487	2.45
75	8.58	29.43	0.484	2.57
100	8.52	29.43	0.488	2.47
140	8.33	29.46	0.493	2.46
180	8.28	29.51	0.489	2.48
220	8.22	29.60	0.489	2.48



Oceanographic Station Locations
BROWN BEAR Cruise 81
17-21 January 1955

STA 81-1 47° 30.8' N WEATHER 20
17 Jan 55 122° 29.1' W WIND Calm
1221 (+8) DEPTH 57 fm 44°/42°F
Point Vashon

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.88	29.28	0.484	2.73
5	8.92	29.26	0.485	2.64
10	8.88	29.28	0.484	2.27
20	8.83	29.26	0.483	2.33
30	8.87	29.27	0.480	2.11
50	8.94	29.32	0.479	2.64
75	8.90	29.33	0.479	2.61
100	9.04	29.33	0.477	2.63

STA 81-2 47° 21.2' N WEATHER o.
17 Jan 55 122° 32.5' W WIND N 9
1355 (+8) DEPTH 55 fm 44°/43°F
Spring Beach

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.92	29.18	0.495	2.28
5	8.86	29.20	0.494	2.36
10	8.98	29.33	0.480	2.25
20	8.93	29.38	0.476	2.33
30	8.94	29.40	0.474	2.14
50	8.98	29.43	0.475	2.58
75	8.99	29.43	0.472	2.55
95	9.00	29.45	0.470	2.53

STA 81-3 47° 11.7' N WEATHER o.
17 Jan 55 122° 35.7' W WIND N 12
1543 (+8) DEPTH 73 fm 45°/43°F
Toliva Shoal

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.55	28.36	0.513	2.39
5	8.60	28.76	0.508	2.31
10	8.73	29.00	0.498	2.32
20	8.72	29.06	0.495	2.36
30	8.75	29.07	0.492	2.11
50	8.78	29.09	0.493	2.58
75	8.80	29.14	0.489	2.59
100	8.85	29.15	0.488	2.52
125	8.82	29.15	0.486	2.60

STA 81-4 47° 15.7' N WEATHER o.
17 Jan 55 122° 41.8' W WIND N 8
1645 (+8) DEPTH 49 fm 44°/42°F
South Head II

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.68	29.05	0.513	2.41
5	8.60	29.05	0.513	2.28
10	8.58	29.05	0.512	2.22
20	8.51	29.05	0.512	2.28
30	8.48	29.05	0.513	2.50
40	8.49	29.06	0.519	2.67
60	8.50	29.06	0.516	2.68
85	8.52	29.06	0.515	2.58

STA 81-5 47° 13.9' N WEATHER o.
 17 Jan 55 122° 42.8' W WIND N 8
 1721 (+8) DEPTH -- 44°/42°F
 South Head IV

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.41	28.85	0.524	2.46
5	8.36	28.87	0.523	2.48
10	8.34	28.87	0.523	2.37
15	8.29	28.90	0.522	2.49

STA 81-6 47° 14.8' N WEATHER o.
 17 Jan 55 122° 42.8' W WIND N 8
 1753 (+8) DEPTH 12 fm 44°/43°F

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.39	28.85	0.524	2.60
5	8.33	28.85	0.524	----
10	8.38	28.91	0.519	2.52
15	8.46	29.04	0.514	2.60
20	8.56	29.06	0.508	2.74

STA 81-7 47° 16.8' N WEATHER o.
 17 Jan 55 122° 39.4' W WIND N 4
 1832 (+8) DEPTH 12 fm 46°/42°F
 Warren

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.74	29.02	0.502	2.56
5	8.70	29.03	0.502	2.61
10	8.66	29.02	0.503	2.57
15	8.62	29.02	0.501	2.66
20	8.63	29.03	0.501	2.70

STA 81-8 47° 16.2' N WEATHER o.
 17 Jan 55 122° 40.9' W WIND N 4
 1904 (+8) DEPTH 46 fm 46°/42°F
 South Head I

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.72	28.97	0.502	2.52
5	8.68	28.99	0.506	2.41
10	8.68	29.03	0.498	2.57
20	8.71	29.05	0.498	2.47
30	8.70	29.05	0.500	2.57
40	8.62	29.05	0.505	2.52
60	8.52	29.06	0.512	2.66
80	8.58	29.07	0.510	2.66

STA 81-9 47° 18.8' N WEATHER 61
17 Jan 55 122° 42.4' W WIND NE 5
1945 (+8) DEPTH 38 fm 43°/41°F
Cutts Island, Southwest of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.74	29.03	0.515	2.50
5	8.63	29.03	0.515	2.23
10	8.61	29.03	0.513	2.59
20	8.55	29.03	0.511	2.59
30	8.50	29.03	0.513	2.64
40	8.52	29.04	0.514	2.55
50	8.50	29.03	0.516	2.74
60	8.57	29.05	0.519	2.63

STA 81-10 47° 21.5' N WEATHER 60
17 Jan 55 122° 39.8' W WIND N 2
2028 (+8) DEPTH 15 fm 44°/42°F
Elgin, East of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.64	28.42	0.564	2.54
5	7.85	28.75	0.561	2.36
10	8.04	28.88	0.549	2.54
15	8.36	28.97	0.527	2.63
20	8.50	29.01	0.520	2.64
25	8.49	29.02	0.474	----

STA 81-11 47° 22.6' N WEATHER o.
17 Jan 55 122° 38.1' W WIND NNE 8
2055 (+8) DEPTH 8 fm 42°/41°F
Wauna

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.70	28.38	0.559	2.61
2	7.77	28.40	0.562	2.56
4	7.60	28.42	0.560	2.58
6	8.01	28.85	0.541	2.63
10	8.18	28.97	0.529	2.63

STA 81-12 47° 20.3' N WEATHER o.
17 Jan 55 122° 41.7' W WIND NNE 8
2144 (+8) DEPTH 29 fm 42°/40°F
Glencove, East of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.40	28.87	0.529	2.68
5	8.63	28.96	0.515	2.56
10	8.58	29.05	0.509	2.62
20	8.48	29.05	0.513	2.59
30	8.54	29.07	0.509	2.62
40	8.56	29.06	0.510	2.54
50	8.54	29.06	0.513	2.65

STA 81-13 47° 17.0' N WEATHER 60 17 Jan 55 122° 42.6' W WIND NNE 8 2224 (+8) DEPTH 58 fm 44°/41°F Green Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.66	29.03	0.505	2.61
5	8.70	29.04	0.505	2.58
10	8.68	29.05	0.501	2.61
20	8.60	29.05	0.501	2.67
30	8.58	29.04	0.504	2.60
40	8.56	29.06	0.508	2.57
50	8.48	29.06	0.517	2.66
70	8.48	29.06	0.520	2.70
90	8.46	29.05	0.514	----

STA 81-14 47° 13.7' N WEATHER o. 17 Jan 55 122° 39.8' W WIND NE 8 2313 (+8) DEPTH 30 fm 44°/41°F Still Harbor III				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.62	29.05	0.508	2.57
5	8.72	29.06	0.505	2.59
10	8.66	29.07	0.501	2.63
20	8.62	29.07	0.498	2.63
30	8.62	29.08	0.499	2.62
40	8.64	29.07	0.501	2.52
50	8.62	29.06	0.504	2.63

STA 81-15 47° 14.5' N WEATHER o. 17 Jan 55 122° 38.5' W WIND NE 8 2355 (+8) DEPTH 68 fm 45°/41°F Still Harbor I				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.64	28.97	0.505	2.59
5	8.68	28.96	0.501	2.50
10	8.72	28.97	0.496	2.65
20	8.68	29.06	0.494	2.65
30	8.69	29.07	0.494	2.58
50	8.72	29.06	0.496	2.46
75	8.72	29.07	0.497	2.89
100	8.86	29.14	0.483	2.86
125	8.81	29.14	0.467	----

STA 81-16 47° 14.1' N WEATHER o. 18 Jan 55 122° 39.0' W WIND ENE 3 0034 (+8) DEPTH 66 fm 46°/42°F Still Harbor II				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.60	28.98	0.502	2.58
5	8.75	28.99	0.498	2.46
10	8.70	29.03	0.496	2.37
20	8.71	29.06	0.494	2.58
30	8.69	29.06	0.494	2.37
50	8.72	29.07	0.495	2.43
75	8.70	29.09	0.498	2.65
100	8.60	29.09	0.503	2.80
120	8.63	29.09	0.498	2.90

STA 81-17 47° 12.7' N WEATHER o.
18 Jan 55 122° 37.3' W WIND NNE 4
0120 (+8) DEPTH 89 fm 46°/42°F
Gibson Point, Southwest of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.78	29.06	0.494	2.54
5	8.83	29.06	0.492	2.28
10	8.76	29.07	0.490	2.90
20	8.72	29.06	0.491	2.53
30	8.72	29.06	0.490	2.39
50	8.74	29.10	0.491	2.37
75	8.72	29.10	0.489	2.67
100	8.73	29.10	0.495	2.80
130	8.74	29.12	0.489	2.76
160	8.82	29.14	0.486	2.68

STA 81-18 47° 10.0' N WEATHER o.
18 Jan 55 122° 47.4' W WIND Calm
0254 (+8) DEPTH 47 fm 44°/40°F
Devils Head

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.21	28.51	0.520	2.67
5	8.30	28.52	0.517	2.60
10	8.26	28.59	0.516	2.75
20	8.54	28.83	0.498	2.61
30	8.64	28.89	0.491	2.66
50	8.78	28.98	0.487	2.59
75	8.82	29.04	0.482	2.78

STA 81-19 47° 07.2' N WEATHER o.
18 Jan 55 122° 42.5' W WIND Calm
0336 (+8) DEPTH 35 fm 42°/40°F
Nisqually Reach

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.53	28.60	0.511	2.45
5	8.65	28.72	0.501	2.36
10	8.58	28.75	0.502	2.36
20	8.76	28.99	0.489	2.44
40	8.80	29.08	0.482	2.46
60	8.90	29.11	0.484	2.20

STA 81-20 47° 11.0' N WEATHER o.
18 Jan 55 122° 37.7' W WIND NNE 4
0435 (+8) DEPTH 91 fm 46°/41°F
Gordon Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.56	28.84	0.503	2.59
5	8.65	28.85	0.504	2.22
10	8.54	28.85	0.504	2.33
20	8.56	28.91	0.500	2.28
30	8.65	28.96	0.497	2.10
50	8.72	29.01	0.491	2.27
75	8.82	29.09	0.484	2.59
100	8.86	29.14	0.484	2.30
130	8.78	29.17	0.477	2.60
160	8.86	29.19	0.484	2.62

STA 81-21 47° 15.0' N WEATHER o.
18 Jan 55 122° 34.3' W WIND NE 2
0520 (+8) DEPTH 32 fm 45°/40°F
Day Island

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.85	29.19	0.484	2.96
5	8.92	29.20	0.486	2.43
10	8.83	29.19	0.485	2.44
20	8.78	29.22	0.484	2.52
30	8.78	29.22	0.481	2.41
50	8.82	29.21	0.483	2.42

STA 81-22 47° 19.0' N WEATHER o.
18 Jan 55 122° 28.2' W WIND ExS 3
0641 (+8) DEPTH 95 fm 45°/40°F
Brown Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.13	25.35	0.532	2.41
5	8.70	28.87	0.502	2.54
10	8.83	29.14	0.485	2.49
20	8.89	29.31	0.478	2.56
30	8.98	29.58	0.467	2.92
50	8.98	29.27	0.470	2.39
75	8.96	29.49	0.465	2.54
100	9.12	29.49	0.454	2.58
130	9.08	29.51	0.455	2.69
160	8.98	29.50	0.465	2.66

STA 81-23 47° 26.5' N WEATHER o.
18 Jan 55 122° 23.5' W WIND ENE 5
0836 (+8) DEPTH 132 fm 44°/40°F
Pulley Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.60	29.08	0.516	2.58
5	8.68	29.11	0.510	2.50
10	8.64	29.12	0.507	2.50
20	8.62	29.20	0.505	2.49
30	8.63	29.23	0.504	2.47
50	8.84	29.38	0.480	2.41
75	8.74	29.43	0.478	2.52
100	8.71	29.46	0.478	2.51
140	8.40	29.47	0.484	2.49
180	8.30	29.50	0.491	2.49
220	8.27	29.51	0.489	2.45

STA 81-24 47° 34.3' N WEATHER b.c.
18 Jan 55 122° 26.5' W WIND NW 5
1022 (+8) DEPTH 134 fm 46°/42°F
Alki Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.72	29.23	0.503	2.54
5	8.80	29.25	0.499	2.46
10	8.81	29.32	0.493	2.50
20	8.80	29.31	0.491	2.62
30	8.76	29.27	0.489	2.54
50	8.78	29.31	0.487	2.45
75	8.58	29.43	0.484	2.57
100	8.52	29.43	0.488	2.47
140	8.33	29.46	0.493	2.46
180	8.28	29.51	0.489	2.48
220	8.22	29.60	0.489	2.48

STA 81-25 47° 45.4' N WEATHER b.c. 18 Jan 55 122° 25.5' W WIND N 5 1204 (+8) DEPTH 156 fm 49°/44°F Point Jefferson				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.67	28.98	0.510	2.36
5	8.64	28.91	0.515	2.24
10	8.71	29.16	0.500	2.23
20	8.76	29.29	0.491	2.16
30	8.78	29.31	0.484	2.01
50	8.79	29.40	0.482	2.06
75	8.64	29.40	0.487	2.48
100	8.44	29.44	0.491	2.44
150	8.30	29.52	0.493	2.44
200	8.24	29.60	0.495	2.44
240	8.14	29.76	0.489	2.43
270	8.11	29.81	0.489	2.44

STA 81-26 47° 54.3' N WEATHER b.c. 18 Jan 55 122° 28.8' W WIND NWxW 12 1402 (+8) DEPTH 110 49°/44°F Point No Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.42	28.46	0.513	2.20
5	8.54	28.75	0.509	2.27
10	8.62	29.21	0.508	2.17
20	8.70	29.35	0.489	2.27
30	8.62	29.41	0.486	2.09
50	8.54	29.41	0.494	1.99
75	8.50	29.43	0.493	2.42
100	8.38	29.55	0.494	2.44
117	8.44	29.48	0.492	2.45
147	8.26	29.62	0.496	2.41
177	8.14	29.85	0.494	2.41

STA 81-27 47° 58.5' N WEATHER b.c. 18 Jan 55 122° 38.0' W WIND NWxW 12 1521 (+8) DEPTH 66 fm 47°/44°F Tala Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.77	28.78	0.534	2.14
5	7.87	28.90	0.522	2.16
10	7.86	29.32	0.513	1.99
20	7.90	29.77	0.498	1.99
30	7.92	29.95	0.495	1.98
50	7.90	30.11	0.490	1.92
75	7.90	30.20	0.489	1.89
100	7.86	30.32	0.489	1.88

STA 81-28 47° 50.1' N WEATHER b.c. 18 Jan 55 122° 39.8' W WIND W 12 1711 (+8) DEPTH 37 fm ---- South Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.96	28.26	0.527	2.40
5	8.05	28.28	0.519	2.39
10	7.94	28.83	0.512	2.34
20	7.92	29.51	0.500	2.25
30	----	29.57	0.496	2.21
40	7.90	29.70	0.498	2.24
60	7.92	29.97	0.496	2.41

STA 81-29 47° 42.0' N WEATHER b.c. 18 Jan 55 122° 45.9' W WIND N 8 1844 (+8) DEPTH 70 fm 43°/41°F Hazel Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.72	27.86	0.542	2.43
5	7.98	28.45	0.525	2.43
10	8.14	28.69	0.502	2.47
20	----	29.57	0.507	2.47
30	8.22	29.69	0.454	2.45
50	8.12	29.75	0.468	2.42
80	8.00	29.78	0.486	2.45
110	8.02	29.86	0.484	2.46

STA 81-30 47° 39.8' N WEATHER b.c. 18 Jan 55 122° 52.4' W WIND N 15 1936 (+8) DEPTH 75 fm 44°/41°F Pleasant Harbor				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.34	28.04	0.577	2.36
5	7.38	28.08	0.576	2.46
10	7.44	28.13	0.568	2.43
19	8.72	29.40	0.427	2.58
28	8.91	29.62	0.401	2.61
47	9.12	29.78	0.376	2.58
71	9.40	29.94	0.341	2.80
95	9.79	30.16	0.287	2.85
123	9.82	30.28	0.266	3.19
138	9.71	30.30	0.280	3.19

STA 81-31 47° 44.6' N WEATHER b.c. 18 Jan 55 122° 49.6' W WIND NNE 10 2057 (+8) DEPTH 102 fm 42°/40°F Tabook Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.88	27.74	0.589	2.36
5	7.01	27.75	0.596	2.33
10	8.84	29.26	0.417	2.55
20	9.12	29.66	0.391	2.54
30	9.10	29.74	0.396	2.27
39	8.84	29.75	0.398	2.28
59	9.24	29.91	0.353	2.76
78	8.80	29.90	0.409	2.58
95	9.82	30.19	0.269	2.94
114	9.96	30.30	0.246	2.74
133	9.91	30.35	0.265	2.86
152	9.76	30.37	0.278	2.58
171	9.78	30.38	0.257	3.07
192	9.74	30.39	0.250	2.85

STA 81-32 47° 50.0' N WEATHER b.c. 18 Jan 55 122° 48.8' W WIND N 7 2245 (+8) DEPTH 26 fm 40°/39°F Dabob Bay, Head of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.04	27.82	0.560	2.39
5	9.42	29.69	0.357	2.67
10	9.58	29.79	0.336	2.73
20	9.56	29.89	0.319	2.77
30	9.53	29.97	0.294	2.81
40	9.74	30.00	0.291	2.81

STA 81-33 47° 46.9' N WEATHER b.c.
 18-19 Jan 55 122° 48.5' W WIND NNE 6
 2351 (+8) DEPTH 85 fm 41°/39°F

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.67	27.51	0.606	2.30
5	7.00	27.63	0.600	2.32
10	9.18	29.64	0.388	2.45
20	9.32	29.76	0.364	2.47
30	9.18	29.80	0.368	2.70
40	9.08	29.84	0.372	2.81
60	9.26	29.93	0.350	2.80
80	9.70	30.08	0.299	2.83
100	9.87	30.22	0.262	2.96
120	9.90	30.34	0.250	3.08
140	9.80	30.32	0.268	3.07
150	9.79	30.37	0.264	2.94

STA 81-34 47° 23.8' N WEATHER 41
 19 Jan 55 122° 55.8' W WIND WSW 8
 0615 (+8) DEPTH 10 fm 36°/35°F

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	5.62	22.23	0.606	2.16
2	8.44	25.26	0.463	2.46
6	9.36	28.41	0.289	2.81
10	9.26	28.94	0.239	3.05
14	9.59	29.33	0.199	2.97
18	9.82	29.56	0.142	3.02

STA 81-35 47° 22.4' N WEATHER 41
 19 Jan 55 122° 59.7' W WIND WSW 5
 0700 (+8) DEPTH 21 fm 34°/34°F
 Lynch Cove, Middle of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	5.36	20.05	1.065	1.90
5	9.48	28.84	0.316	2.70
10	9.66	29.27	0.252	2.87
20	9.83	29.76	0.189	2.98
30	9.88	29.84	0.176	3.20
36	9.88	29.84	0.170	3.58

STA 81-36 47° 21.4' N WEATHER 42
 19 Jan 55 123° 03.8' W WIND Calm
 0748 (+8) DEPTH 24 fm 32°/32°F
 Tahuya River

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	5.86	16.26	0.630	1.75
5	9.23	28.29	0.368	2.65
10	9.49	29.10	0.324	2.73
20	9.78	29.70	0.233	2.93
30	9.86	29.79	0.216	3.04
40	9.90	29.88	0.210	3.09

STA 81-37 47° 23.4' N WEATHER 42 19 Jan 55 123° 07.8' W WIND Calm 0833 (+8) DEPTH 61 fm 32°/32°F Musqueti Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.06	-----	0.558	1.86
5	8.65	28.02	0.406	2.47
10	9.58	29.29	0.326	2.62
20	9.64	29.72	0.303	2.61
30	9.59	29.78	0.321	2.45
40	9.70	29.85	0.314	2.49
50	9.73	29.88	0.304	2.75
60	9.88	29.91	0.271	2.78
80	9.96	30.04	0.213	3.09
100	10.00	30.17	0.196	3.23
109	10.00	30.23	0.189	3.24

STA 81-38 47° 28.6' N WEATHER c. 19 Jan 55 123° 04.0' W WIND SwsS 5 1030 (+8) DEPTH 84 fm 46°/41°F Eagle Creek				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.34	26.46	0.534	2.32
5	8.00	27.37	0.508	2.35
10	9.12	29.06	0.414	2.53
20	9.08	29.49	0.397	2.45
30	9.30	29.71	0.392	2.51
40	9.42	29.78	0.355	2.34
50	9.50	29.86	0.341	2.64
75	9.90	30.05	0.268	2.77
100	9.95	30.18	0.221	2.98
125	9.97	30.26	0.211	3.15
150	9.95	30.32	0.247	2.77

STA 81-39 47° 35.7' N WEATHER o. 19 Jan 55 122° 57.4' W WIND WSW 4 1143 (+8) DEPTH 94 fm 44°/42°F Tekiu Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.28	27.81	0.565	2.24
5	7.58	28.12	0.554	2.14
10	8.38	28.85	0.481	1.94
20	8.98	29.52	0.402	2.22
30	9.16	29.66	0.384	2.40
40	9.22	29.75	0.374	2.26
50	9.40	29.86	0.352	2.61
75	9.74	30.05	0.300	2.71
100	9.89	30.22	0.255	2.91
130	9.90	30.30	0.257	2.92
160	9.90	30.34	0.256	3.16
172	9.88	30.33	0.247	2.83

STA 81-40 47° 41.7' N WEATHER o. 19 Jan 55 122° 51.6' W WIND SW 4 1313 (+8) DEPTH 80 fm 45°/42°F Tskutsko Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.94	27.54	0.587	2.27
5	7.39	28.04	0.563	2.32
10	8.10	28.61	0.503	2.25
20	8.84	29.59	0.418	2.36
30	8.97	29.73	0.389	2.40
40	8.98	29.75	0.388	2.41
50	8.92	29.79	0.387	2.61
60	8.91	29.80	0.396	2.53
80	8.90	29.89	0.386	2.62
100	9.62	30.16	0.300	2.84
120	9.92	30.34	0.257	2.89
149	9.74	30.41	0.266	2.82

STA 81-41 47° 57.6' N WEATHER o. 19 Jan 55 122° 34.8' W WIND SWxW 11 1634 (+8) DEPTH 61 fm 42°/40°F Double Bluff				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.84	27.41	0.539	2.21
5	8.38	28.19	0.521	2.43
10	8.56	29.10	0.501	2.41
20	8.58	29.19	0.496	2.47
30	8.58	29.33	0.496	2.48
50	8.50	29.41	0.492	2.44
75	8.31	29.50	0.500	2.49
100	8.04	29.99	0.553	2.44

STA 81-42 48° 02.5' N WEATHER o. 19 Jan 55 122° 37.7' W WIND SWxW 11 1719 (+8) DEPTH 65 fm 42°/40°F Bush Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.96	27.86	0.533	2.32
5	8.58	29.27	0.498	2.38
10	8.44	29.35	0.500	2.39
20	8.37	29.43	0.499	2.45
30	8.36	29.46	0.491	2.19
50	8.18	29.67	0.496	2.29
75	8.04	29.93	0.494	2.44
100	7.86	30.47	0.484	2.36

STA 81-43 48° 08.7' N WEATHER o. 19 Jan 55 122° 41.5' W WIND S 8 1808 (+8) DEPTH 65 fm 44°/41°F Port Townsend				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.24	29.31	0.508	2.36
5	8.32	29.35	0.502	2.33
10	8.28	29.36	0.505	2.42
20	8.18	29.45	0.505	2.26
30	8.29	29.52	0.500	2.21
50	8.14	29.65	0.500	2.24
71	8.13	29.83	0.498	2.39
94	7.94	30.32	0.482	2.36

STA 81-44 48° 12.5' N WEATHER o. 20 Jan 55 122° 53.0' W WIND SxW 8 1929 (+8) DEPTH 52 fm 44°/42°F Protection Island				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.86	30.52	0.483	2.11
5	7.93	30.52	0.477	1.98
10	7.85	30.58	0.474	1.99
19	7.78	30.64	0.470	2.03
28	7.78	30.55	0.477	2.04
47	7.79	30.84	0.466	2.16
66	7.76	31.18	0.446	2.27
81	7.76	31.62	0.422	2.25

STA 81-45 48° 15.9' N WEATHER o.
20 Jan 55 123° 04.4' W WIND SxE 8
2057 (+8) DEPTH 92 fm 44°/42°F
New Dungeness, Northeast of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.52	29.79	0.532	2.24
5	7.59	29.82	0.530	2.24
10	7.61	29.93	0.523	2.32
19	7.65	30.08	0.508	2.33
28	7.71	30.17	0.504	2.29
47	7.73	30.58	0.479	2.21
71	7.64	31.37	0.450	2.30
95	7.68	31.38	0.451	2.25
123	7.64	31.92	0.408	2.27
152	7.65	32.19	0.385	2.26

STA 81-46 48° 15.3' N WEATHER 20
20 Jan 55 123° 14.2' W WIND WNW 10
2210 (+8) DEPTH 75 fm 44°/41°F
New Dungeness, Northwest of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.62	30.26	0.512	2.34
5	7.66	30.26	0.509	2.26
10	7.72	30.28	0.490	2.14
20	7.63	30.95	0.479	2.32
30	7.62	31.09	0.476	2.22
50	7.54	31.22	0.474	2.22
75	7.64	31.74	0.448	2.27
100	7.66	32.20	0.383	2.27
130	7.60	32.44	0.360	2.30

STA 81-47 48° 18.4' N WEATHER 61
20 Jan 55 124° 03.5' W WIND WxS 5
0415 (+8) DEPTH 103 fm 44°/42°F
Pillar Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.54	30.81	0.504	2.22
5	7.59	30.83	0.508	2.21
10	7.55	30.84	0.503	2.18
20	7.54	30.86	0.508	2.30
30	7.54	30.89	0.502	2.05
50	7.57	31.00	0.489	2.22
75	7.58	31.24	0.498	2.22
100	7.80	31.98	0.403	2.21
140	7.46	33.38	0.283	2.21
180	7.27	33.64	0.252	2.45

STA 81-48 48° 17.8' N WEATHER 61
20 Jan 55 123° 52.1' W WIND W 16
0529 (+8) DEPTH 96 fm 43°/41°F
Otter Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.52	31.20	0.513	2.14
5	7.58	31.20	0.509	2.14
10	7.54	31.24	0.505	2.14
20	7.55	31.26	0.496	2.16
30	7.50	31.29	0.499	2.14
50	7.60	31.34	0.484	2.21
75	7.80	31.69	0.423	2.23
100	7.80	32.25	0.377	2.24
130	7.64	32.90	0.322	2.25
160	7.38	33.55	0.267	2.39

STA 81-49 48° 15.6' N WEATHER c. 20 Jan 55 123° 41.0' W WIND W 12 0654 (+8) DEPTH 102 fm 43°/41°F Beechy Head				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.52	30.71	0.515	2.12
5	7.11	30.68	0.513	2.12
10	7.50	30.70	0.514	2.11
20	7.50	30.78	0.503	2.21
30	7.52	30.82	0.498	2.15
50	7.56	31.16	0.489	2.03
75	7.76	31.45	0.454	2.30
100	7.80	31.65	0.429	2.28
140	7.75	33.07	0.325	2.15
180	7.12	33.45	0.278	2.32

STA 81-50 48° 14.3' N WEATHER c. 20 Jan 55 123° 32.9' W WIND WxS 16 0756 (+8) DEPTH 94 fm 43°/41°F Race Rocks				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.46	30.42	0.525	2.24
5	7.48	30.42	0.526	2.36
10	7.52	30.67	0.511	2.21
20	7.48	30.77	0.505	2.12
30	7.46	30.84	0.503	2.06
50	7.56	31.12	0.480	2.11
77	7.74	31.59	0.433	2.19
98	7.80	32.24	0.383	2.28
128	7.72	32.45	0.364	2.25
157	7.62	33.01	0.319	2.10

STA 81-51 48° 12.3' N WEATHER c. 20 Jan 55 123° 24.2' W WIND WxN 20 0901 (+8) DEPTH 70 fm 47°/44°F Ediz Hook				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.56	30.82	0.498	2.14
5	7.62	30.80	0.499	2.17
10	7.54	30.80	0.498	2.09
19	7.54	30.88	0.490	2.13
28	7.56	30.92	0.486	2.09
47	7.60	31.05	0.475	2.14
71	7.64	31.47	0.450	2.17
94	7.72	31.91	0.409	2.22
117	7.68	32.38	0.374	2.19

STA 81-52 48° 25.0' N WEATHER c. 20 Jan 55 122° 35.9' W WIND Calm. 1306 (+8) DEPTH 20 fm 52°/48°F Dewey				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.45	25.50	0.529	2.27
5	7.78	26.37	0.505	2.40
10	7.75	27.16	0.499	2.49
20	7.60	27.81	0.505	2.44
30	7.52	28.78	0.510	2.39

STA 81-53 48° 21.4' N WEATHER c.
 20 Jan 55 122° 33.3' W WIND ExN 6
 1345 (+8) DEPTH 7 fm 52°/48°F
 Goat Island

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	5.51	11.18	0.704	1.32
2	7.20	23.57	0.550	2.25
5	6.83	25.10	0.556	2.25
10	8.20	27.03	0.470	2.58

STA 81-54 48° 18.4' N WEATHER c.
 20 Jan 55 122° 29.5' W WIND E 6
 1431 (+8) DEPTH 14 fm 42°/42°F
 Strawberry Point, North of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.76	21.80	0.589	2.17
2	7.38	23.59	0.565	2.27
5	7.54	25.28	0.544	2.33
10	9.43	28.72	0.384	2.72
20	9.52	29.22	0.362	2.80

STA 81-55 48° 10.9' N WEATHER c.
 20 Jan 55 122° 33.1' W WIND S 6
 1548 (+8) DEPTH 56 fm 44°/42°F
 Onamac Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.64	24.49	0.617	2.25
5	7.23	25.19	0.594	2.37
10	8.88	27.84	0.437	2.49
20	9.42	29.27	0.381	2.54
30	9.36	29.34	0.394	2.36
49	9.58	29.45	0.367	2.53
74	9.72	29.55	0.348	2.82
98	9.82	29.55	0.333	3.21

STA 81-56 48° 06.2' N WEATHER c.
 20 Jan 55 122° 33.1' W WIND SxE 4
 1637 (+8) DEPTH 42 fm 45°/43°F
 Greenbank

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.80	25.12	0.604	1.66
5	7.28	25.67	0.569	1.55
10	7.57	26.39	0.551	1.84
20	9.54	29.25	0.373	2.19
30	9.60	29.40	0.360	1.92
40	9.68	29.48	0.345	2.63
50	9.68	29.48	0.345	2.54
60	9.71	29.51	0.346	2.72

STA 81-57 48° 01.5' N WEATHER c. 20 Jan 55 122° 31.8' W WIND SxE 4 1718 (+8) DEPTH 20 fm 45°/43°F Holmes Harbor, Head of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.18	25.81	0.582	2.24
5	7.16	25.81	0.580	2.23
10	7.38	26.20	0.565	2.33
20	9.46	29.10	0.375	2.62
30	9.73	29.34	0.324	2.64
36	9.76	29.40	0.319	2.80

STA 81-58 48° 03.0' N WEATHER c. 20 Jan 55 122° 31.8' W WIND SxE 2 1755 (+8) DEPTH 27 fm 44°/41°F Classic				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.02	25.62	0.589	2.45
5	7.08	25.64	0.586	2.77
10	7.44	26.21	0.562	2.45
20	9.54	29.09	0.366	2.11
30	9.70	29.34	0.342	2.62
40	9.76	29.44	0.329	2.66

STA 81-59 48° 04.7' N WEATHER c. 20 Jan 55 122° 32.2' W WIND SxE 2 1840 (+8) DEPTH 30 fm 44°/41°F Dines Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.83	25.34	0.601	2.23
5	6.86	25.37	0.598	2.71
10	7.34	26.08	0.558	2.72
20	9.52	29.26	0.370	2.64
30	9.68	29.44	0.336	2.52
40	9.64	29.47	0.352	2.65
50	9.71	29.48	0.329	2.86

STA 81-60 48° 06.5' N WEATHER c. 20 Jan 55 122° 29.4' W WIND SxE 4 1925 (+8) DEPTH 80 fm 41°/40°F East Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.70	24.61	0.613	2.23
5	6.78	24.76	0.603	2.22
10	8.11	27.27	0.496	2.47
20	9.24	29.33	0.415	1.97
30	9.16	29.38	0.420	2.55
50	9.46	29.48	0.392	2.45
75	9.54	29.53	0.377	2.64
100	9.56	29.50	0.378	2.62
130	9.44	29.53	0.384	2.67

STA 81-61 48° 02.7' N WEATHER 63 20 Jan 55 122° 22.4' W WIND Calm 2024 (+8) DEPTH 102 fm 41°/40°F Camano Head, West of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.12	25.75	0.589	2.39
5	7.74	26.61	0.537	2.51
10	8.54	27.57	0.484	2.62
20	9.06	29.15	0.429	2.61
30	8.80	29.28	0.465	2.48
50	9.14	29.41	0.430	2.43
75	9.28	29.51	0.406	2.58
100	9.34	29.57	0.394	2.28
125	8.74	29.53	0.446	2.46
150	8.54	29.54	0.461	2.63

STA 81-62 48° 06.2' N WEATHER 41 20 Jan 55 122° 22.0' W WIND Calm 2113 (+8) DEPTH 67 fm 40°/39°F Port Susan, Middle of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	5.59	20.48	0.654	1.90
5	7.61	25.16	0.544	2.03
10	8.86	28.61	0.437	2.31
20	9.16	29.17	0.403	2.47
30	9.28	29.29	0.382	2.45
50	9.64	29.40	0.362	2.47
70	9.75	29.52	0.336	2.55
90	9.95	29.70	0.295	2.21
110	10.30	30.18	0.134	3.62
124	10.36	30.22	0.111	4.23

STA 81-63 48° 09.2' N WEATHER 41 20 Jan 55 122° 24.7' W WIND Sx E 4 2206 (+8) DEPTH 51 fm 41°/40°F Port Susan, Head of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	4.60	14.69	0.780	1.66
5	8.64	28.09	0.465	2.35
10	8.96	28.93	0.431	2.09
20	8.94	29.16	0.417	2.09
30	9.02	29.23	0.405	2.36
40	9.23	29.33	0.381	2.17
60	9.64	29.45	0.353	2.35
80	9.90	29.61	0.305	2.75
93	9.98	29.76	0.268	2.90

STA 81-64 48° 04.0' N WEATHER c. 20 Jan 55 122° 19.7' W WIND Ex N 6 2323 (+8) DEPTH 67 fm 41°/40°F Camano Head, East of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.26	20.75	0.610	2.09
5	7.46	25.54	0.551	2.25
10	8.77	28.60	0.453	2.47
20	8.79	29.09	0.457	2.41
30	8.86	29.24	0.419	2.35
50	9.28	29.37	0.388	2.06
70	9.82	29.61	0.321	2.57
90	9.95	29.70	0.288	2.65
110	10.27	30.13	0.147	3.62
120	10.33	30.22	0.128	4.17

STA 81-65 47° 58.4' N WEATHER c.
 21 Jan 55 122° 17.0' W WIND ExN 6
 0035 (+8) DEPTH 72 fm 41°/40°F
 Port Gardner

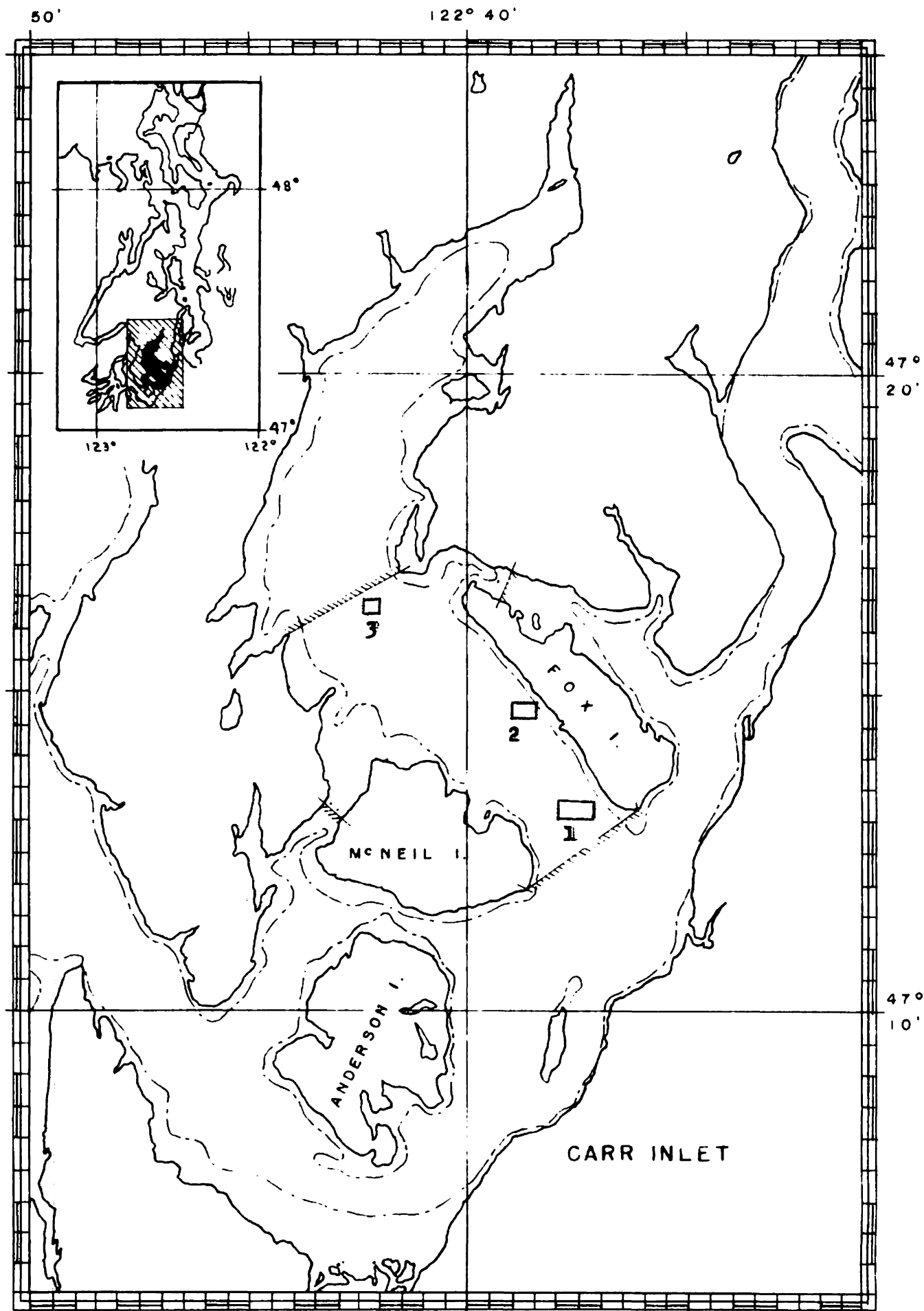
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.46	23.12	0.529	1.92
5	8.58	27.90	0.476	2.46
10	8.78	28.62	0.460	2.42
20	8.82	29.21	0.428	2.41
30	8.82	29.25	0.436	2.58
50	9.26	29.43	0.367	2.33
70	9.36	29.50	0.365	2.61
90	9.34	29.52	0.378	2.58
110	9.02	29.55	0.403	2.61
130	8.44	29.60	0.468	2.56

STA 81-66 47° 53.6' N WEATHER c.
 21 Jan 55 122° 21.6' W WIND ExN 8
 0154 (+8) DEPTH 126 fm 39°/38°F
 Possession Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.06	25.41	0.575	1.61
5	8.57	28.38	0.489	2.31
10	8.61	28.77	0.485	2.14
20	8.68	29.11	0.487	2.04
29	8.70	29.23	0.493	2.50
48	8.87	29.38	0.458	2.46
73	8.88	29.42	0.443	2.48
97	8.70	29.44	0.465	2.13
136	8.54	29.51	0.468	2.44
175	8.20	29.73	0.485	2.52
213	8.19	29.79	0.489	2.35



Oceanographic Station Locations
BROWN BEAR CRUISE 83
31 January - 4 February 1955

CARR INLET STATION #1

LAT. 47° 13.2'N LONG. 122° 37.3'W

BROWN BEAR CRUISE 83 1-2 FEBRUARY 1955

Depth (m)	Temp (°C)	Salinity (‰)	Density (σ_t)
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Sta. 83-15 Time 2235

0	8.31	28.84	22.43
10	8.30	28.94	22.51
20	8.36	28.99	22.53
50	8.37	29.01	22.56
80	8.40	29.00	22.55
120	8.38	28.97	22.52

Sta. 83-16 Time 0000

0	8.28	28.82	22.42
10	8.31	28.89	22.47
20	8.35	28.97	22.52
50	8.35	29.01	22.56
80	8.39	29.00	22.55
120	8.39	29.01	22.56

Sta. 83-17 Time 0200

0	8.27	28.79	22.39
10	8.29	28.86	22.45
20	8.33	28.90	22.48
50	8.32	28.94	22.51
80	8.37	28.98	22.52
120	8.38	29.00	22.55

Sta. 83-18 Time 0408

0	8.24	28.84	22.44
10	8.32	28.91	22.49
20	8.33	28.91	22.49
50	8.35	29.00	22.55
80	8.38	29.00	22.55
120	8.40	29.04	22.58

Depth (m)	Temp (°C)	Salinity (‰)	Density (σ_t)
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Sta. 83-19 Time 0600

0	8.34	28.87	22.46
10	8.28	28.87	22.47
20	8.37	28.97	22.52
50	8.35	28.99	22.53
80	8.38	29.02	22.56
120	8.40	29.05	22.59

Sta. 83-20 Time 0755

0	8.25	28.82	22.42
10	8.27	28.88	22.46
20	8.34	28.92	22.50
50	8.34	28.99	22.55
80	8.37	29.05	22.59
120	8.36	29.06	22.59

Sta. 83-21 Time 1000

0	8.24	28.85	22.45
10	8.23	28.87	22.47
20	8.27	28.92	22.50
50	8.30	28.96	22.53
80	8.36	28.98	22.52
120	8.35	29.05	22.59

Sta. 83-22 Time 1200

0	8.34	28.77	22.38
10	8.28	28.82	22.42
20	8.30	28.92	22.50
50	8.30	28.99	22.55
80	8.36	29.00	22.55
120	8.35	29.03	22.57

CARR INLET STATION #1
(continued)

Depth (m)	Temp (°C)	Salinity (‰)	Density (σ_t)
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Sta. 83-23 Time 1402

0	8.47	28.81	22.38
10	8.31	28.92	22.50
20	8.30	28.93	22.50
50	8.34	29.02	22.58
80	8.32	29.05	22.50
120	8.34	29.06	22.61

Sta. 83-24 Time 1600

0	8.40	28.82	22.40
10	8.30	28.92	22.50
20	8.32	28.96	22.53
50	8.35	29.05	22.59
80	8.36	29.08	22.61
120	8.37	29.13	22.64

Sta. 83-25 Time 1800

0	8.36	28.87	22.43
10	8.32	28.91	22.49
20	8.34	28.96	22.53
50	8.36	29.08	22.61
80	8.36	29.09	22.61
120	8.35	29.10	22.62

Depth (m)	Temp (°C)	Salinity (‰)	Density (σ_t)
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Sta. 83-26 Time 2006

0	8.25	28.87	22.46
10	8.36	28.93	22.48
20	8.33	28.99	22.55
50	8.40	29.03	22.57
80	8.35	29.05	22.59
120	8.37	29.08	22.61

Sta. 83-27 Time 2202

0	8.20	28.59	22.25
10	8.27	28.85	22.44
20	8.28	28.88	22.46
50	8.32	28.92	22.50
80	8.35	28.98	22.52
120	8.38	29.03	22.57

Sta. 83-28 Time 2400

0	8.18	28.69	22.33
10	8.30	28.87	22.46
20	8.29	28.92	22.50
50	8.35	28.96	22.51
80	8.43	28.99	22.53
120	8.42	29.02	22.56

CARR INLET STATION # 2

LAT. 47° 14.8'N LONG. 122° 38.9'W

BROWN BEAR CRUISE 83 1 FEBRUARY 1955

Depth (m)	Temp (°C)	Salinity (‰)	Density (σ_t)
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Sta. 83-1 Time 1815

0	8.27	28.93	22.50
10	8.26	28.93	22.50
20	8.26	28.92	22.50
50	8.38	28.98	22.52
70	8.39	29.02	22.56
95	8.39	29.02	22.56

Sta. 83-2 Time 2012

0	8.26	28.92	22.50
10	8.27	28.91	22.49
20	8.25	28.92	22.50
50	8.33	29.06	22.61
70	8.40	29.10	22.62

Sta. 83-3 Time 2157

0	8.29	28.91	22.49
10	8.31	28.91	22.49
20	8.30	28.93	22.50
50	8.34	28.96	22.53
70	8.42	29.04	22.58

Sta. 83-4 Time 2358

0	8.26	28.90	22.48
10	8.29	28.91	22.49
20	8.26	28.91	22.49
50	8.27	28.93	22.50
70	8.32	28.95	22.52

Depth (m)	Temp (°C)	Salinity (‰)	Density (σ_t)
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Sta. 83-5 Time 0209

0	8.26	28.91	22.49
10	8.27	28.92	22.50
20	8.26	28.92	22.50
50	8.34	28.95	22.52
70	8.39	28.99	22.53

Sta. 83-6 Time 0406

0	8.27	28.90	22.48
10	8.33	28.89	22.47
20	8.29	28.91	22.49
50	8.27	28.90	22.48
70	8.29	28.95	22.52

Sta. 83-7 Time 0600

0	8.33	28.87	22.46
10	8.30	28.90	22.48
20	8.24	28.90	22.49
50	8.32	28.94	22.51
70	8.39	28.96	22.51

Sta. 83-8 Time 0800

0	8.24	28.91	22.50
10	8.28	28.92	22.50
20	8.29	28.95	22.52
50	8.32	28.95	22.52
70	8.36	28.97	22.52

CARR INLET STATION #2
(continued)

Depth (m)	Temp (°C)	Salinity (°/oo)	Density (σ_t)
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Sta. 83-9 Time 1000

0	8.33	28.93	22.50
10	8.26	28.94	22.51
20	8.26	28.93	22.51
50	8.36	28.98	22.52
70	8.37	28.98	22.52
100	8.43	29.04	22.58

Depth (m)	Temp (°C)	Salinity (°/oo)	Density (σ_t)
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Sta. 83-12 Time 1605

0	8.36	28.88	22.44
10	8.35	28.88	22.44
20	8.34	28.89	22.45
50	8.35	28.97	22.52
70	8.38	29.00	22.55
100	8.43	29.05	22.59

Sta. 83-10 Time 1200

0	8.38	28.89	22.46
10	8.37	28.91	22.47
20	8.32	28.95	22.52
50	8.37	28.98	22.52
70	8.38	29.00	22.55
100	8.42	29.07	22.60

Sta. 83-13 Time 1800

0	8.35	28.89	22.45
10	8.32	28.91	22.49
20	8.36	28.91	22.47
50	8.32	28.96	22.53
70	8.40	29.00	22.55
100	8.44	29.04	22.58

Sta. 83-11 Time 1400

0	8.42	28.90	22.46
10	8.35	28.91	22.47
20	8.33	28.93	22.50
50	8.36	28.98	22.52
70	8.40	29.04	22.58
100	8.44	29.05	22.59

Sta. 83-14 Time 1955

0	8.35	28.90	22.46
10	8.33	28.92	22.50
20	8.36	28.93	22.48
50	8.35	28.96	22.51
70	8.40	28.97	22.55
100	8.42	29.01	22.56

GARR INLET STATION #3

LAT. 47° 16.3'N LONG. 122° 42.2'W

BROWN BEAR CRUISE 83 3-4 FEBRUARY 1955

Depth (m)	Temp (°C)	Salinity (°/oo)	Density (σ_t)
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Sta. 83-29 Time 0402

0	8.24	28.91	22.50
10	8.23	28.89	22.48
20	8.25	28.89	22.47
50	8.36	28.96	22.51
70	8.39	29.01	22.56

Sta. 83-30 Time 0600

0	8.15	28.90	22.49
10	8.24	28.92	22.51
20	8.30	28.96	22.53
50	8.39	29.00	22.55
70	8.42	29.01	22.56

Sta. 83-31 Time 0800

0	8.10	28.89	22.50
10	8.14	28.90	22.51
20	8.29	28.94	22.51
50	8.37	28.97	22.52
70	8.43	29.02	22.56

Sta. 83-32 Time 0957

0	8.08	28.87	22.49
10	8.25	28.91	22.49
20	8.29	28.95	22.52
50	8.37	28.99	22.53
70	8.41	29.01	22.55

Depth (m)	Temp (°C)	Salinity (°/oo)	Density (σ_t)
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Sta. 83-33 Time 1200

0	8.08	28.87	22.49
10	8.24	28.90	22.49
20	8.27	28.92	22.50
50	8.36	28.97	22.52
70	8.41	29.00	22.54

Sta. 83-34 Time 1400

0	7.98	28.84	22.47
10	8.28	28.94	22.51
20	8.32	28.96	22.53
50	8.35	28.97	22.52
70	8.38	29.00	22.55

Sta. 83-35 Time 1600

0	7.81	28.71	22.40
10	8.25	28.92	22.51
20	8.24	28.94	22.52
50	8.37	28.96	22.51
70	8.40	29.01	22.55

Sta. 83-36 Time 1803

0	8.10	28.72	22.37
10	8.25	28.93	22.51
20	8.23	28.94	22.52
50	8.37	28.97	22.52
70	8.43	29.03	22.57

CARR INLET STATION #3
(continued)

Depth (m)	Temp (°C)	Salinity (‰)	Density (σ_t)
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Sta. 83-37 Time 2003

0	7.83	28.73	22.41
10	8.24	28.91	22.50
20	8.19	28.92	22.51
50	8.35	28.98	22.52
70	8.43	29.01	22.55

Sta. 83-38 Time 2213

0	7.85	28.78	22.45
10	8.26	28.95	22.52
20	8.23	28.96	22.54
50	8.41	28.99	22.53
70	8.41	29.06	22.59

Sta. 83-39 Time 0000

0	7.75	28.71	22.40
10	8.28	28.92	22.50
20	8.28	28.97	22.54
50	8.39	29.02	22.56
70	8.44	29.02	22.56

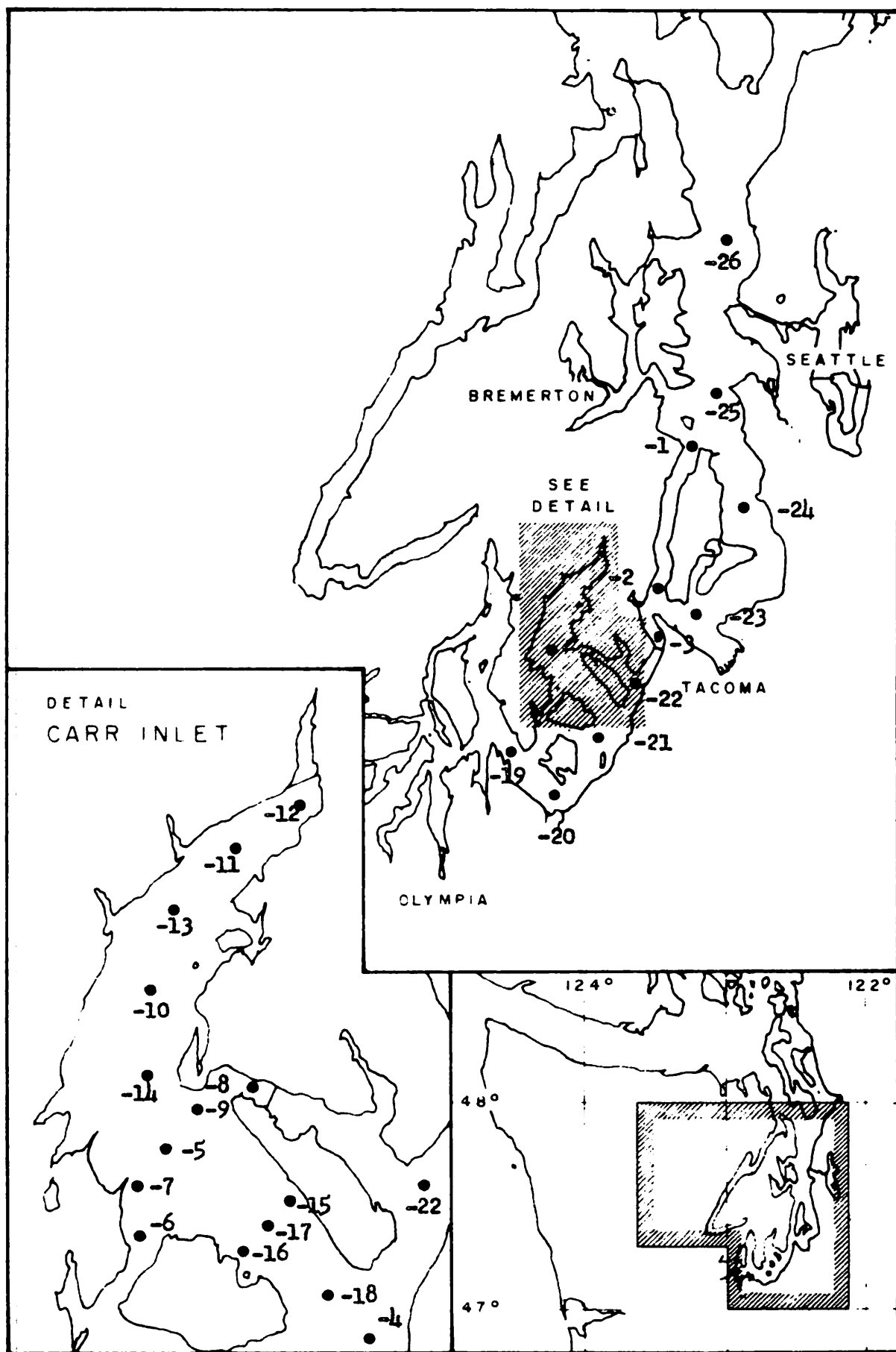
Depth (m)	Temp (°C)	Salinity (‰)	Density (σ_t)
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Sta. 83-40 Time 0200

0	7.94	28.70	22.38
10	8.17	28.89	22.48
20	8.22	28.93	22.51
50	8.33	28.99	22.55
70	8.40	29.01	22.55

Sta. 83-41 Time 0404

0	7.99	28.84	22.47
10	8.09	28.87	22.49
20	8.26	28.95	22.52
50	8.34	28.97	22.55
70	8.44	29.01	22.55



Oceanographic Station Locations
 BROWN BEAR Cruise 85
 9-10 February 1956

STA 85-1 47° 30.8' N WEATHER b.c.
 9 Feb 55 122° 28.9' W WIND N 20
 1151 (+8) DEPTH 57 fm 40°/36°F
 Point Vashon

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.14	29.15	0.521	2.36
5	8.15	29.16	0.516	2.43
10	8.12	29.19	0.512	2.39
20	8.12	29.23	0.511	2.36
30	8.16	29.24	0.510	2.43
50	8.16	29.26	0.510	2.31
75	8.16	29.25	0.510	2.41
100	8.18	29.27	0.524	2.39

STA 85-2 47° 21.1' N WEATHER b.c.
 9 Feb 55 122° 32.1' W WIND N 16
 1331 (+8) DEPTH 51 fm 43°/38°F
 Spring Beach

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.14	29.05	0.520	2.48
5	8.15	29.06	0.517	2.38
10	8.14	29.06	0.517	2.48
20	8.14	29.10	0.512	2.34
30	8.17	29.11	0.511	2.34
50	8.20	29.14	0.513	2.33
75	8.19	29.14	0.512	2.39
95	8.20	29.14	0.512	2.20

STA 85-3 47° 17.2' N WEATHER b.c.
 9 Feb 55 122° 32.3' W WIND N 8
 1431 (+8) DEPTH 30 fm 48°/42°F
 Point Evans

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.15	28.99	0.525	2.31
5	8.15	28.99	0.520	2.32
10	8.12	29.01	0.519	2.34
20	8.14	29.01	0.519	2.47
30	8.14	29.02	0.519	2.39
50	8.15	29.10	0.515	2.38

STA 85-4 47° 11.5' N WEATHER b.c.
 9 Feb 55 122° 36.8' W WIND NNE 12
 1525 (+8) DEPTH 76 fm 50°/43°F
 Toliva Shoal

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.17	28.71	0.541	2.45
5	8.15	28.73	0.541	2.27
10	8.16	28.78	0.535	2.50
20	8.10	28.85	0.529	2.42
30	8.26	28.89	0.530	2.53
50	8.17	28.95	0.522	2.35
75	8.14	28.95	0.527	2.46
100	8.11	28.97	0.526	2.55
125	8.15	29.05	0.520	2.55

STA 85-5 47° 15.6' N WEATHER b.c.
 9 Feb 55 122° 42.0' W WIND NNW 8
 1629 (+8) DEPTH 50 fm 43°/36°F
 South Head II

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.07	28.87	0.552	2.45
2	8.05	28.87	0.551	2.50
5	8.03	28.87	0.549	2.63
10	8.02	28.88	0.548	2.50
20	8.12	28.88	0.546	2.50
30	8.04	28.89	0.547	2.38
40	8.16	28.93	0.536	2.56
60	8.28	28.97	0.517	2.45
85	8.27	29.05	0.503	2.56

STA 85-6 47° 13.9' N WEATHER b.c.
 9 Feb 55 122° 42.8' W WIND N 10
 1659 (+8) DEPTH 10 fm 54°/42°F
 South Head IV

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.07	28.85	0.553	2.60
5	8.02	28.85	0.552	2.47
10	8.00	28.86	0.546	2.55
15	7.90	28.88	0.547	2.55

STA 85-7 47° 14.8' N WEATHER b.c.
 9 Feb 55 122° 42.8' W WIND N 10
 1723 (+8) DEPTH 12 fm 44°/38°F
 South Head III

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.04	28.86	0.549	2.57
5	8.02	28.86	0.551	2.43
10	7.99	28.86	0.552	2.33
15	7.96	28.86	0.554	2.58
20	8.10	28.86	0.562	2.48

STA 85-8 47° 16.8' N WEATHER b.c.
 9 Feb 55 122° 39.4' W WIND N 3
 1756 (+8) DEPTH 15 fm 46°/42°F
 Warren

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.15	28.93	0.541	2.52
5	8.10	28.93	0.542	2.33
10	8.10	28.93	0.541	2.34
15	8.07	28.93	0.540	2.37
20	8.24	28.92	0.537	2.28

STA 85-9 47° 16.4' N WEATHER b.c. 9 Feb 55 122° 41.1' W WIND N 4 1821 (+8) DEPTH --- 42°/36°F South Head I				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.12	28.84	0.552	2.34
5	8.09	28.89	0.552	2.29
10	8.09	28.89	0.549	2.39
20	8.01	28.89	0.547	2.48
30	8.24	28.89	0.537	2.29
40	8.14	28.92	0.536	2.62
60	8.15	28.96	0.528	2.30
80	8.20	28.97	0.527	2.39

STA 85-10 47° 18.8' N WEATHER b.c. 9 Feb 55 122° 42.3' W WIND NNE 3 1857 (+8) DEPTH --- 40°/35°F Cutts Island, Southwest of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.82	28.62	0.625	2.50
2	7.77	28.64	0.591	2.44
5	7.90	28.71	0.580	2.37
10	7.94	28.80	0.573	2.40
20	8.07	28.80	0.571	2.33
30	8.28	28.96	0.512	2.29
40	8.22	28.98	0.515	2.51
50	8.26	28.98	0.514	2.45
60	8.23	29.05	0.510	----

STA 85-11 47° 21.4' N WEATHER b.c. 9 Feb 55 122° 40.2' W WIND NNE 9 1938 (+8) DEPTH 17 fm 39°/35°F Elgin, East of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.37	27.85	0.565	2.58
2	7.48	28.02	0.563	2.43
5	7.90	28.68	0.571	2.46
10	7.88	28.73	0.565	2.44
15	8.23	28.80	0.554	2.42
20	8.19	28.87	0.522	2.46
25	8.23	28.92	0.505	2.25

STA 85-12 47° 22.5' N WEATHER b. 9 Feb 55 122° 38.2' W WIND NNE 6 2000 (+8) DEPTH 9 fm 37°/34°F Wauna				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at-L)	PO ₄ (ug-at/L)
0	7.89	28.52	0.576	2.49
2	7.88	28.48	0.572	2.47
4	8.01	28.62	0.560	2.39
6	8.04	28.66	0.554	2.31
10	8.04	28.76	0.551	2.40

STA 85-13 47° 20.2' N WEATHER b.
9 Feb 55 122° 41.7' W WIND NNE 5
2033 (+8) DEPTH 28 fm 37°/34°F
Glencove, East of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.54	28.14	0.586	2.54
2	7.58	28.15	0.586	2.52
5	7.80	28.47	0.578	2.57
10	7.86	28.69	0.566	2.47
20	8.24	28.84	0.540	2.41
30	8.32	28.96	0.499	2.34
40	8.28	29.00	0.493	2.46
50	8.30	29.05	0.492	2.57

STA 85-14 47° 16.9' N WEATHER b.
9 Feb 55 122° 42.3' W WIND NNE 7
2112 (+8) DEPTH 55 fm 38°/35°F
Green Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.04	28.86	0.544	2.60
2	8.00	28.89	0.546	2.52
5	8.00	28.89	0.542	2.62
10	7.97	28.86	0.544	2.62
20	8.14	28.87	0.543	2.57
30	8.14	28.87	0.527	2.34
40	8.16	28.87	0.519	2.52
50	8.20	28.95	0.519	2.60
70	8.23	29.05	0.500	2.57
90	8.24	29.05	0.498	2.60

STA 85-15 47° 13.6' N WEATHER b.
9 Feb 55 122° 39.6' W WIND NNE 8
2152 (+8) DEPTH 30 fm 39°/35°F
Still Harbor III

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.06	28.87	0.537	2.55
5	8.04	28.87	0.535	2.41
10	8.02	28.87	0.537	2.42
20	8.02	28.87	0.537	2.37
30	8.20	28.87	0.530	2.37
40	8.23	28.96	0.510	2.68
50	8.22	28.96	0.509	2.45

STA 85-16 47° 14.4' N WEATHER b.
9 Feb 55 122° 38.4' W WIND NE 4
2213 (+8) DEPTH 67 fm 38°/34°F
Still Harbor I

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.06	28.87	0.526	2.45
5	8.02	28.87	0.527	2.38
10	8.03	28.96	0.523	2.37
20	8.10	28.91	0.519	2.42
30	8.28	28.95	0.512	2.37
50	8.18	28.95	0.512	2.63
75	8.16	28.95	0.509	2.50
100	8.28	29.00	0.502	2.45
125	8.16	29.05	0.497	3.02

STA 85-17 47° 14.2' N WEATHER b.
9 Feb 55 122° 39.3' W WIND ENE 10
2302 (+8) DEPTH 65 fm 38°/35°F
Still Harbor II

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.06	28.90	0.530	2.42
2	8.04	28.89	0.533	2.50
5	8.02	28.89	0.534	2.52
10	8.04	28.89	0.535	2.50
20	8.18	28.89	0.531	2.23
30	8.12	28.90	0.529	2.40
50	8.12	28.92	0.523	----
75	8.28	29.01	0.502	2.39
100	8.22	29.05	0.501	2.50
120	8.23	29.07	0.498	----

STA 85-18 47° 12.6' N WEATHER b.
9 Feb 55 122° 37.3' W WIND NNE 13
2346 (+8) DEPTH 89 fm 38°/35°F
Gibson Point, Southwest of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.06	28.90	0.530	2.47
2	8.02	28.90	0.532	2.46
5	8.04	28.91	0.528	2.45
10	8.06	28.87	0.521	2.61
20	8.24	28.94	0.519	2.52
30	8.15	28.96	0.513	2.40
50	8.14	28.99	0.512	2.52
75	8.16	29.00	0.512	2.51
100	8.14	29.01	0.508	2.48
130	8.16	29.06	0.506	2.34
160	8.18	29.09	0.505	2.39

STA 85-19 47° 10.2' N WEATHER b.c.
10 Feb 55 122° 47.3' W WIND ENE 8
0130 (+8) DEPTH 47 fm 37°/34°F
Devils Head

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.75	28.28	0.518	2.52
5	7.79	28.33	0.516	2.51
10	7.85	28.35	0.515	2.52
20	7.93	28.49	0.514	2.58
30	8.09	28.71	0.498	2.47
50	8.09	28.73	0.499	2.42
75	8.14	28.89	0.492	2.61

STA 85-20 47° 07.3' N WEATHER b.c.
10 Feb 55 122° 42.8' W WIND ExN 8
0220 (+8) DEPTH 35 fm
Nisqually Reach

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.82	28.21	0.521	2.48
5	7.87	28.46	0.513	2.42
10	7.99	28.64	0.508	2.48
20	8.05	28.73	0.507	2.48
40	8.10	28.82	0.500	2.38
60	8.11	28.86	0.499	2.71

STA 85-21 47° 11.0' N WEATHER b.c.
10 Feb 55 122° 38.2' W WIND NE 8
0323 (+8) DEPTH 92 fm 34°/32°F
Gordon Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.59	27.78	0.533	2.42
2	7.59	27.77	0.533	2.48
5	7.98	28.48	0.717	2.48
10	8.02	28.68	0.512	2.42
20	8.04	28.78	0.510	2.36
30	8.04	28.80	0.510	2.38
50	8.10	28.89	0.510	2.25
75	8.14	28.91	0.510	2.24
100	8.15	29.01	0.504	2.42
130	8.14	29.05	0.502	2.38
160	8.18	29.07	0.498	2.51

STA 85-22 47° 14.8' N WEATHER b.
10 Feb 55 122° 34.3' W WIND NE 6
0439 (8) DEPTH 32 fm 34°/34°F
Day Island

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.08	29.08	0.496	2.41
5	8.10	29.08	0.490	2.46
10	8.08	29.08	0.488	2.48
20	8.09	29.08	0.490	2.48
30	8.12	29.08	0.488	2.48
50	8.12	29.09	0.487	2.37

STA 85-23 47° 19.1' N WEATHER b.
10 Feb 55 122° 28.1' W WIND NE 6
0639 (+8) DEPTH 98 fm 35°/34°F
Brown Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.33	26.29	0.554	2.36
2	7.51	27.36	0.547	2.36
5	8.02	28.77	0.528	2.19
10	8.14	29.11	0.516	2.30
20	8.14	29.14	0.509	2.15
30	8.17	29.34	0.487	2.63
50	8.19	29.39	0.478	2.51
75	8.22	29.45	0.475	2.43
100	8.17	29.47	0.480	2.48
130	8.16	29.57	0.469	2.53
160	8.17	29.58	0.466	2.48

STA 85-24 47° 26.5' N WEATHER b.
10 Feb 55 122° 23.8' W WIND NNW 11
0817 (+8) DEPTH 134 fm 36°/34°F
Pully Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.83	29.07	0.532	2.50
5	7.81	29.07	0.533	2.43
10	7.97	29.15	0.523	2.44
20	8.02	29.19	0.514	2.30
30	8.06	29.24	0.505	2.22
49	8.09	29.26	0.499	2.28
74	8.12	29.34	0.485	2.53
98	8.13	29.45	0.480	2.51
137	8.10	29.54	0.470	2.49
176	8.04	29.58	0.469	2.49
215	8.11	29.57	0.467	2.53

STA 85-25 47° 33.8' N WEATHER b.
 10 Feb 55 122° 26.5' W WIND N 14
 1000 (+8) DEPTH 137 fm 38°/35°F
 Alki Point

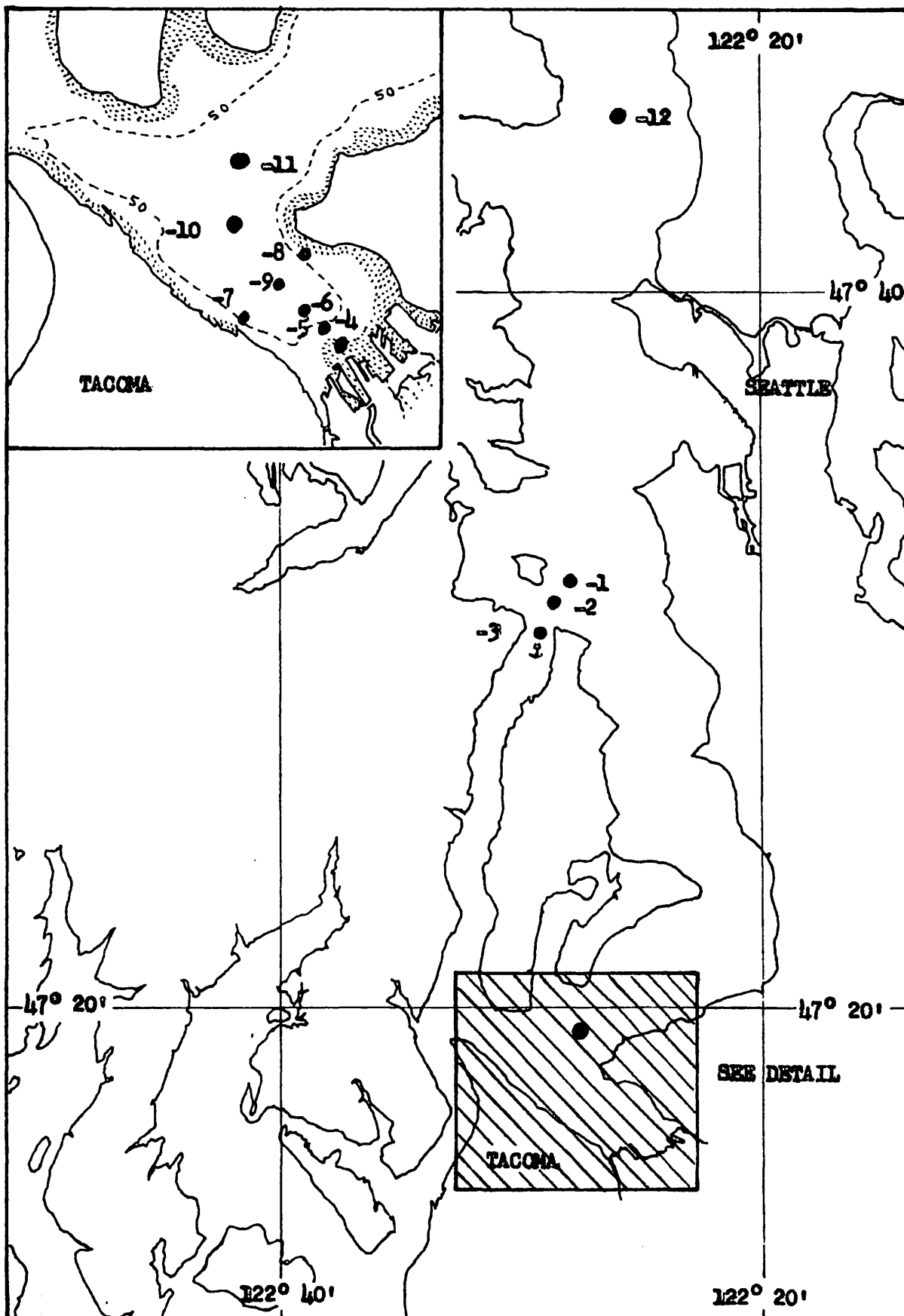
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.90	26.06	0.556	2.34
5	6.92	26.15	0.553	2.26
9	7.78	28.46	0.522	2.34
18	7.90	28.69	0.507	2.24
27	8.03	29.06	0.498	2.48
45	8.06	29.38	0.483	2.10
67	8.06	29.49	0.479	2.42
90	8.09	29.49	0.476	2.30
126	8.04	29.51	0.477	2.48
162	8.01	29.56	0.476	2.47
198	8.05	29.56	0.476	2.47

STA 85-26 47° 44.5' N WEATHER b.
 10 Feb 55 122° 25.4' W WIND N 12
 1142 (+8) DEPTH 155 fm 36°/40°F
 Point Jefferson

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.37	26.56	0.544	2.44
5	7.58	27.47	0.530	2.42
10	7.81	28.19	0.523	2.41
20	7.97	28.95	0.506	2.42
29	8.05	29.13	0.502	2.39
49	8.13	29.38	0.491	2.19
73	8.07	29.44	0.491	2.51
99	8.09	29.46	0.489	2.45
148	8.00	29.53	0.489	2.40
197	7.95	29.56	0.489	2.58
237	7.98	29.55	0.489	2.51
266	7.97	29.58	0.489	2.26



Oceanographic Station Locations
Brown Bear Cruise 87
18-19 February 1956

STA 87-1 47° 32.0' N WEATHER b.
18 Feb 55 122° 27.6' W WIND NW 5
2135 (+8) DEPTH 34 fm 38°/35°F
Blake Island, East of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.12	26.98	0.574	----
2	7.40	27.71	0.557	----
4	7.55	28.04	0.546	----
6	7.60	28.13	0.539	----
10	7.68	28.27	0.535	----
20	7.80	28.69	0.521	----
30	7.91	29.02	0.509	----
50	7.94	29.24	0.505	----
55	7.97	29.22	0.502	----
60	8.00	29.35	0.499	----

STA 87-2 47° 31.4' N WEATHER b.
18 Feb 55 122° 28.4' W WIND WxN 5
2238 (+8) DEPTH 18 fm 36°/34°F
Blake Island, Southeast of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.25	26.90	0.571	----
2	7.42	27.29	0.561	----
4	7.46	27.64	0.553	----
6	7.47	27.81	0.550	----
10	7.53	27.93	0.545	----
15	7.70	28.51	0.530	----
20	7.79	28.80	0.522	----

STA 87-3 47° 30.4' N WEATHER b.
18 Feb 55 122° 29.4' W WIND Calm
2315 (+8) DEPTH 57 fm 36°/35°F
Point Vashon

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.04	26.82	0.568	----
2	7.30	27.40	0.553	----
4	7.47	27.92	0.548	----
6	7.50	28.01	0.548	----
10	7.56	28.19	0.545	----
20	7.78	28.81	0.519	----
50	8.02	29.12	0.501	----
80	8.06	29.23	0.494	----
102	8.04	29.26	0.493	----

STA 87-4 47° 16.3' N WEATHER b.
19 Feb 55 122° 25.6' W WIND Calm
1316 (+8) DEPTH 25 fm 41°/36°F
Puyallup Waterway, North of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.08	26.08	0.543	2.47
2	7.98	28.55	0.506	2.53
4	7.93	28.73	0.509	2.53
6	7.93	28.86	0.509	2.53
10	7.75	28.91	0.509	2.63
20	7.95	28.97	0.505	2.53
22	7.96	28.99	0.505	2.53
27	7.98	-----	0.505	2.48
32	7.99	29.10	0.502	2.62
37	8.08	29.20	0.491	2.54

STA 87-5 47° 16.7' N WEATHER b.
19 Feb 55 122° 26.3' W WIND SW 4
1408 (+8) DEPTH 52 fm 44°/39°F
Puyallup Waterway, Northwest of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	5.81	18.89	0.603	2.40
2	7.86	28.48	0.523	2.39
4	7.86	28.57	0.520	2.44
6	7.90	28.65	0.518	2.29
10	7.91	28.86	0.513	2.31
20	7.90	28.92	0.509	2.53
50	8.03	29.03	0.500	2.62
86	8.12	29.46	0.474	2.56
91	8.11	29.50	0.478	2.52
96	8.15	29.43	0.498	2.48
106	8.12	29.51	0.471	2.48

STA 87-6 47° 16.7' N WEATHER b.
19 Feb 55 122° 26.3' W WIND SW 4
1506 (+8) DEPTH 72 fm 44°/39°F
Commencement Bay, Middle of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.81	27.83	-----	2.73
2	7.81	28.21	-----	2.54
4	7.90	28.48	-----	2.50
6	7.91	28.69	-----	2.66
10	7.95	28.77	-----	2.47
20	7.87	28.86	-----	2.36
50	8.03	29.12	-----	2.49
100	8.09	29.48	0.480	2.41
111	8.09	29.51	0.477	2.66
116	8.14	29.52	0.476	2.54
121	8.09	29.53	0.475	----
126	8.10	29.53	0.470	2.61

STA 87-7 47° 17.0' N WEATHER b.
19 Feb 55 122° 28.2' W WIND NxE 2
1623 (+8) DEPTH 33 fm 42°/37°F
Commencement Bay

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.44	23.40	0.581	2.39
2	7.86	27.42	0.533	2.54
4	7.91	28.46	0.522	2.45
6	7.92	-----	0.519	2.44
8	7.91	28.66	0.516	2.54
10	7.91	28.71	0.514	2.39
13	7.87	28.69	0.517	2.50
18	7.89	28.79	0.518	2.49
20	7.89	28.83	0.511	2.37
30	7.90	28.95	0.512	2.46

STA 87-8 47° 17.8' N WEATHER b.
19 Feb 55 122° 26.4' W WIND NxE 2
1746 (+8) DEPTH 33 fm 42°/37°F

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.73	19.38	0.606	2.35
2	7.76	28.22	0.528	2.54
4	7.94	28.83	0.514	2.51
6	7.95	28.82	0.510	2.51
10	7.96	28.91	0.509	2.57
20	7.97	-----	0.506	2.47
50	8.08	29.24	0.493	2.55
100	8.09	29.52	0.483	2.49
135	8.09	29.54	0.442	2.71
138	8.13	-----	0.486	2.60
141	8.05	29.54	0.516	2.53
144	8.09	29.52	0.481	2.53

STA 87-9 47° 17.5' N WEATHER b.
19 Feb 55 122° 27.8' W WIND NxE 2
1858 (+8) DEPTH 86 fm 40°/37°F
Commencement Bay

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.53	27.47	0.544	2.48
2	7.86	27.85	0.541	2.43
5	7.92	28.74	0.523	2.47
10	7.96	28.87	0.512	2.68
20	8.00	29.02	0.509	2.47
50	8.11	29.31	0.476	2.60
100	8.10	29.54	0.477	2.58
130	8.12	29.54	0.477	2.57
143	8.08	29.54	0.476	2.57
146	8.11	29.54	0.477	2.65
149	8.10	29.54	0.475	2.51
152	8.08	29.55	0.473	2.52

STA 87-10 47° 18.1' N WEATHER b.
19 Feb 55 122° 28.1' W WIND N 4
2003 (+8) DEPTH 95 fm 40°/37°F

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.18	26.84	0.565	2.38
2	7.24	27.27	0.560	2.43
4	7.75	28.09	0.540	2.49
6	7.86	28.49	0.528	2.50
10	7.89	28.58	0.523	2.44
20	7.96	28.86	0.512	2.43
50	8.00	29.07	0.504	2.59
100	8.13	29.47	0.475	2.56
144	8.09	29.52	0.480	2.66
149	8.14	29.53	0.478	2.50
154	8.08	29.55	0.473	2.51
159	8.10	29.55	0.476	2.57

STA 87-11 47° 19.2' N WEATHER b.
19 Feb 55 122° 28.2' W WIND NNE 6
2107 (+8) DEPTH 94 fm 39°/37°F
Brown Point

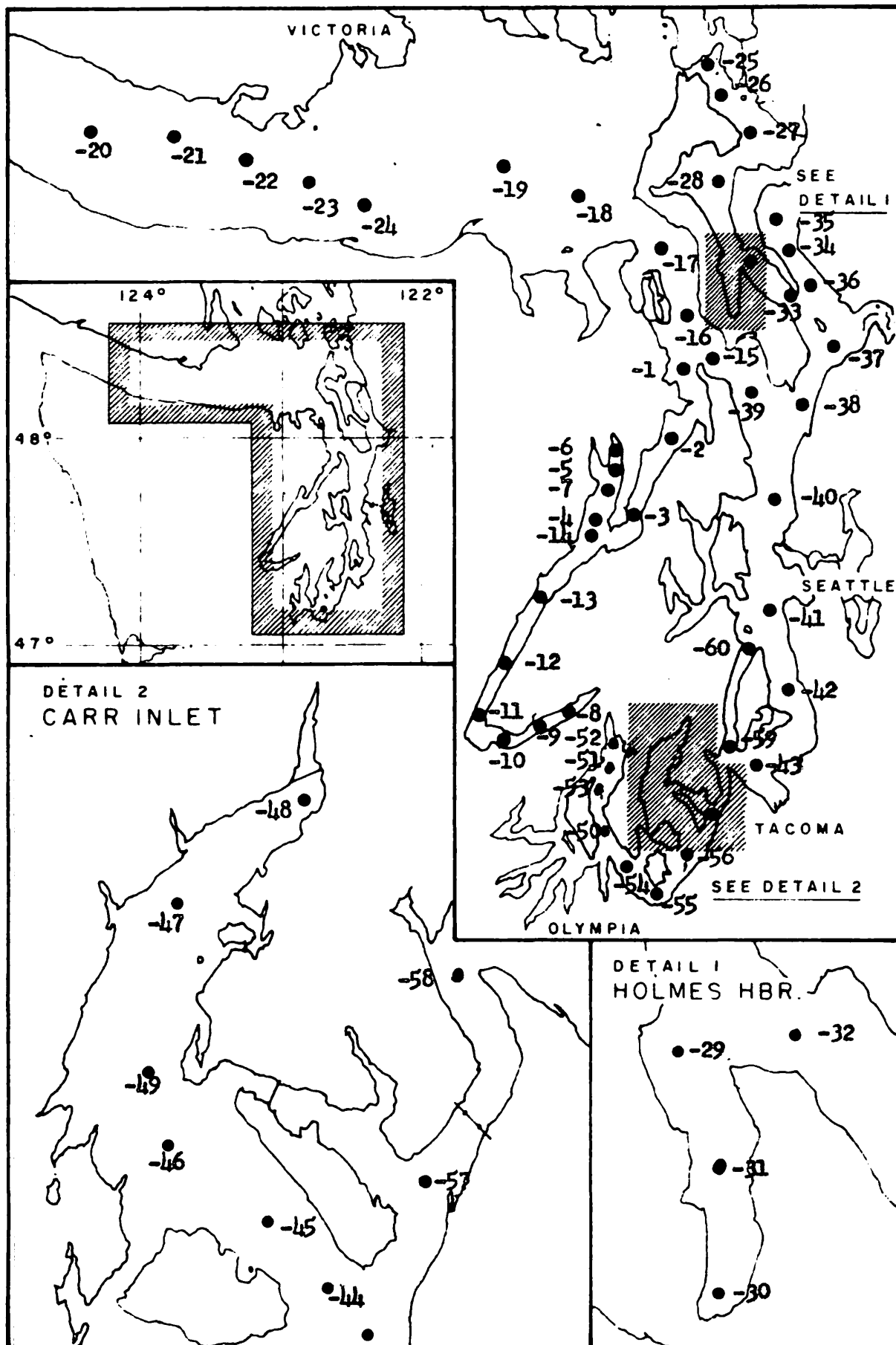
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.27	27.68	0.560	2.44
2	7.48	28.00	0.557	2.43
4	7.70	28.29	0.537	2.56
6	7.85	28.61	0.528	2.51
10	7.88	28.73	0.520	2.47
20	7.90	28.91	0.514	2.39
50	8.01	29.10	0.506	2.72
100	8.09	29.52	0.484	2.66
154	8.05	29.54	0.482	2.72
159	8.10	29.57	0.484	2.58
164	8.06	29.59	0.481	2.52
169	8.06	29.59	0.483	2.75

STA 87-12 47° 44.8' N WEATHER b.
20 Feb 55 122° 25.2' W WIND NNW 6
0110 (+8) DEPTH 155 fm 38°/36°F
Point Jefferson

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.96	26.72	0.641	2.09
2	7.27	27.00	0.567	2.43
5	7.39	27.53	0.611	2.53
10	7.78	28.57	0.591	2.32
20	7.95	29.03	0.535	2.48
30	7.97	29.20	0.505	2.52
50	7.98	29.44	0.502	2.72
100	7.84	29.55	0.548	2.53
146	7.75	-----	0.499	2.72
194	7.70	29.84	0.558	2.62
233	7.65	29.86	0.576	2.38
263	7.59	29.89	0.498	2.48



Oceanographic Station Locations
 BROWN BEAR Cruise 94
 21-25 March 1955

STA 94-1 47° 56.4' N WEATHER c. 21 Mar 55 122° 37.9' W WIND S 36 1244 (+8) DEPTH 67 fm 47°/43°F Tala Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.26	29.63	0.533	2.22
5	7.24	29.63	0.537	2.03
10	7.26	29.64	0.535	2.03
20	7.25	29.63	0.536	2.06
29	7.19	29.77	0.520	2.04
49	7.16	30.02	0.510	2.08
70	7.13	30.14	0.507	2.18
93	7.14	30.21	0.504	2.36

STA 94-2 47° 50.3' N WEATHER c. 21 Mar 55 122° 40.0' W WIND SSW 40 1430 (+8) DEPTH 37 fm 49°/46°F South Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.50	29.36	0.552	2.00
5	7.48	29.36	0.555	2.40
9	7.48	29.38	0.548	2.28
17	7.46	29.42	0.543	2.19
26	7.32	29.66	0.524	2.15
35	7.24	29.88	0.518	2.43
52	7.06	30.30	0.495	2.33

STA 94-3 47° 42.3' N WEATHER 58 21 Mar 55 122° 45.6' W WIND SxW 20 1612 (+8) DEPTH 75 fm 48°/46°F Hazel Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.72	29.10	0.586	1.88
5	7.70	29.10	0.585	1.88
10	7.70	29.08	0.583	1.90
19	7.67	29.13	0.564	2.00
28	7.78	29.61	0.470	2.22
43	7.73	29.73	0.457	2.28
69	7.35	29.81	0.500	2.44
95	7.27	29.89	0.504	2.38

STA 94-4 47° 42.0' N WEATHER 61 21 Mar 55 122° 51.5' W WIND SxW 16 1733 (+8) DEPTH 82 fm 47°/46°F Tskutsko Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.96	29.32	0.515	2.15
5	7.94	29.33	0.511	2.26
10	7.97	29.33	0.510	2.11
19	7.98	29.55	0.458	2.58
29	7.78	29.66	0.454	2.45
38	8.24	29.79	0.411	2.54
57	8.04	29.80	0.424	2.68
77	7.51	29.74	0.474	2.63
96	7.98	29.86	0.420	2.79
115	7.92	29.88	0.432	2.63
152	8.20	30.08	0.318	2.86

STA 94-5 47° 47.3' N WEATHER 58
21 Mar 55 122° 48.5' W WIND SxW 25
1902 (+8) DEPTH 87 fm 47°/46° F
Bolton Peninsula, East of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.82	28.96	0.593	2.03
5	7.80	28.97	0.592	2.08
9	7.81	28.96	0.592	2.09
17	7.79	28.96	0.592	2.24
26	7.80	29.00	0.583	2.27
34	7.78	29.04	0.580	2.18
52	8.38	29.70	0.413	2.28
69	8.54	29.83	0.381	2.29
86	8.48	29.90	0.367	2.88
104	7.75	29.87	0.434	2.70
121	7.96	29.88	0.419	2.63
160	8.09	29.92	0.412	2.68

STA 94-6 47° 49.4' N WEATHER 58
21 Mar 55 122° 48.5' W WIND S 19
2027 (+8) DEPTH 42 fm 46°/45° F
Dabob, Head of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.50	28.80	0.646	1.96
5	7.48	28.80	0.640	1.96
10	7.48	28.81	0.630	1.86
20	7.48	28.84	0.623	2.00
30	7.51	28.84	0.619	1.97
40	7.50	28.86	0.617	1.99

STA 94-7 47° 44.8' N WEATHER b.c.
21 Mar 55 122° 49.6' W WIND SW 20
2124 (+8) DEPTH 105 fm 46°/45° F
Tabook Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.72	28.87	0.599	2.20
5	7.68	28.87	0.603	2.17
10	7.72	28.91	0.598	2.22
20	7.80	29.12	0.555	2.39
30	7.85	29.22	0.534	2.40
40	7.91	29.33	0.516	2.32
60	8.61	29.79	0.379	2.85
80	8.24	29.83	0.403	2.82
100	7.85	29.80	0.430	2.62
120	7.58	29.78	0.470	2.54
140	7.63	29.83	0.477	2.09
160	8.08	29.94	0.413	2.68
180	8.40	30.02	0.362	2.93
192	8.74	30.11	0.334	2.97

STA 94-8 47° 23.5' N WEATHER b.
22 Mar 55 122° 57.2' W WIND WSW 28
0248 (+8) DEPTH 14 fm 48°/47° F
Lynch Cove, Head of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.46	25.94	0.690	1.27
2	8.43	25.94	0.691	1.31
5	8.44	25.94	0.690	1.27
10	8.76	27.30	0.591	1.81
14	9.00	28.23	0.475	1.89
18	9.24	29.28	0.352	2.58

STA 94-9 47° 22.6' N WEATHER b.c.
22 Mar 55 122° 59.7' W WIND WSW 20
0332 (+8) DEPTH 18 fm 46°/40°F
Lynch Cove, Middle of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.84	27.86	0.560	1.91
5	8.82	27.93	0.552	1.82
10	9.02	28.53	0.454	2.18
15	9.20	29.19	0.341	2.59
20	9.44	29.72	0.230	2.86
30	9.56	29.92	0.211	2.89

STA 94-10 47° 21.4' N WEATHER b.c.
22 Mar 55 123° 03.8' W WIND WxS 13
0441 (+8) DEPTH 25 fm 43°/39°F
Tahuya River

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.73	28.35	0.618	1.83
5	8.72	28.37	0.614	1.85
10	8.96	29.25	0.417	2.63
20	9.39	29.82	0.264	2.89
30	9.48	29.98	0.242	3.12
40	9.46	30.00	0.245	2.86

STA 94-11 47° 23.3' N WEATHER b.c.
22 Mar 55 123° 07.9' W WIND SSW 12
0543 (+8) DEPTH 62 fm 49°/43°F
Musqueti Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.08	29.64	0.335	2.63
5	9.07	29.62	0.332	2.63
10	9.40	29.88	0.278	2.70
20	9.40	29.94	0.272	2.68
30	9.42	30.02	0.270	2.74
40	9.46	30.06	0.254	2.63
50	9.48	30.06	0.251	2.95
60	9.35	30.04	0.277	2.86
80	8.84	29.99	0.326	2.74
100	7.91	29.87	0.431	2.67
109	7.90	29.87	0.432	2.72

STA 94-12 47° 29.0' N WEATHER b.c.
22 Mar 55 123° 03.4' W WIND SSW
0745 (+8) DEPTH 88 fm 48°/46°F
Eagle Creek

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.55	28.75	0.495	2.42
5	8.54	28.75	0.487	2.31
9	8.83	29.26	0.414	2.31
19	8.91	29.57	0.379	2.59
28	9.07	29.92	0.326	2.70
38	9.12	29.99	0.310	2.63
47	9.12	29.99	0.305	2.86
66	8.76	29.95	0.341	2.70
94	8.17	29.90	0.402	2.63
117	7.74	29.89	0.450	2.58
141	7.52	29.88	0.472	2.36

STA 94-13 47° 36.4' N WEATHER c. 22 Mar 55 122° 57.3' W WIND SSW 16 0921 (+8) DEPTH 100 fm 52°/44°F Tekiu Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.56	28.91	0.568	2.00
5	8.54	28.95	0.545	2.56
10	8.72	29.17	0.471	2.50
18	8.69	29.52	0.418	2.63
26	8.53	29.69	0.401	2.38
35	8.63	29.87	0.370	2.48
44	8.66	29.90	0.359	2.76
66	7.87	29.78	0.447	2.59
77	8.54	29.87	0.374	2.63
100	8.09	29.85	0.417	2.53
122	8.08	29.90	0.405	2.59

STA 94-14 47° 40.4' N WEATHER c. 22 Mar 55 122° 52.2' W WIND WSW 20 1042 (+8) DEPTH 75 fm 46°/41°F Pleasant Harbor				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.10	28.95	0.567	2.17
5	8.08	28.98	0.561	2.08
10	8.00	29.10	0.541	2.27
20	7.99	29.42	0.481	2.53
30	8.14	29.59	0.440	2.48
40	8.16	29.64	0.434	2.28
50	8.08	29.74	0.425	2.59
71	7.88	29.69	0.448	2.58
94	8.28	29.85	0.397	2.64
122	7.56	29.85	0.468	2.59

STA 94-15 47° 57.3' N WEATHER b.c. 22 Mar 55 122° 34.4' W WIND W 24 1424 (+8) DEPTH 62 fm 48°/42°F Double Bluff				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.28	29.71	0.536	2.59
5	7.24	29.73	0.532	2.44
10	7.23	29.77	0.532	2.48
19	7.16	29.84	0.525	2.50
29	7.15	29.90	0.519	2.50
48	7.11	30.20	0.509	2.32
73	7.10	30.21	0.512	2.47
97	7.10	30.37	0.504	2.47

STA 94-16 48° 01.6' N WEATHER b.c. 22 Mar 55 122° 37.4' W WIND WxN 30 1534 (+8) DEPTH 72 fm 46°/42°F Bush Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.25	29.71	0.537	2.47
5	7.22	29.71	0.537	2.48
10	7.23	29.70	0.537	2.44
20	7.21	29.70	0.538	2.38
30	7.18	29.73	0.532	2.36
50	7.16	29.79	0.531	2.34
75	7.03	30.43	0.509	2.46
100	7.06	30.44	0.511	2.53

STA 94-17 48° 08.6' N WEATHER b.c. 22 Mar 55 122° 41.4' W WIND WNW 30 1655 (+8) DEPTH 62 fm 45°/41°F Port Townsend				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.07	30.39	0.529	2.36
5	7.05	30.42	0.525	2.46
10	6.98	30.63	0.509	2.50
20	6.90	30.80	0.501	2.28
30	6.90	30.82	0.500	2.19
49	6.94	30.91	0.493	2.11
69	6.93	31.14	0.481	2.35
92	6.88	31.14	0.486	2.34

STA 94-18 48° 12.3' N WEATHER b.c. 22 Mar 55 123° 52.4' W WIND WNW 32 1848 (+8) DEPTH 53 fm 44°/40°F Protection Island, North of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.84	30.35	0.541	2.19
5	6.88	30.35	0.542	2.22
10	6.93	30.42	0.530	2.26
20	6.94	30.55	0.515	2.39
30	6.98	30.69	0.507	2.21
49	6.92	31.36	0.466	2.36
79	6.90	31.99	0.413	2.43

STA 94-19 48° 15.7' N WEATHER b.c. 22 Mar 55 123° 05.7' W WIND W 30 2037 (+8) DEPTH 92 fm 43°/39°F New Dungeness, Northeast of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.91	30.59	0.546	2.48
5	6.88	30.59	0.542	2.47
10	6.89	30.59	0.541	2.50
20	6.88	30.60	0.537	2.56
30	6.93	30.61	0.533	2.35
50	6.90	31.73	0.436	2.14
77	6.88	32.13	0.406	2.20
98	6.90	32.72	0.339	2.27
128	6.84	32.87	0.326	2.40
157	6.86	33.02	0.312	2.50

STA 94-20 48° 18.0' N WEATHER o. 23 Mar 55 124° 04.0' W WIND W 16 0422 (+8) DEPTH 105 fm 42°/39°F Pillar Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.81	31.34	0.532	2.04
5	6.80	31.32	0.532	1.98
10	6.80	31.32	0.527	2.07
20	6.81	31.34	0.532	2.07
29	6.80	31.52	0.495	2.00
49	6.88	32.52	0.396	1.93
73	6.94	33.06	0.344	2.32
98	7.14	33.49	0.281	2.29
137	6.56	33.87	0.213	2.60
176	6.56	33.88	0.200	2.64

STA 94-21 48° 17.5' N WEATHER o. 23 Mar 55 123° 52.1' W WIND W 15 0607 (+8) DEPTH 93 fm 41°/38°F Otter Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.76	31.46	0.527	2.23
5	6.75	31.46	0.524	2.22
10	6.76	31.47	0.524	2.12
20	6.74	31.47	0.522	2.78
30	6.78	31.47	0.520	2.13
50	6.81	32.34	0.411	2.15
75	7.04	33.30	0.317	2.36
100	7.06	33.69	0.248	2.45
130	6.54	33.90	0.201	2.47
160	6.56	33.88	0.199	2.54

STA 94-22 48° 16.3' N WEATHER o. 23 Mar 55 123° 41.7' W WIND W 22 0750 (+8) DEPTH 102 fm 41°/39°F Beechy Head				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.75	31.12	0.508	2.30
5	6.75	31.14	0.504	2.20
10	6.74	31.23	0.502	2.31
20	6.74	31.31	0.497	2.22
29	6.76	31.34	0.497	2.18
48	6.77	31.52	0.498	2.13
71	6.80	31.72	0.467	2.92
94	7.00	33.21	0.302	2.50
132	6.68	33.85	0.216	2.63
169	6.68	33.89	0.208	2.70

STA 94-23 48° 14.3' N WEATHER o. 23 Mar 55 123° 33.5' W WIND WSW 29 0945 (+8) DEPTH 95 41°/38°F Race Rocks				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.78	31.18	0.530	2.31
5	6.76	31.17	0.533	2.25
10	6.75	31.17	0.533	2.32
19	6.76	31.33	0.512	2.36
28	6.74	31.51	0.493	2.36
47	6.76	31.67	0.472	2.45
70	6.76	31.78	0.459	2.43
94	6.87	33.07	0.312	2.48
122	6.82	33.49	0.265	2.49
151	6.82	33.66	0.249	2.63

STA 94-24 48° 11.9' N WEATHER o. 23 Mar 55 123° 23.0' W WIND W 22 1118 (+8) DEPTH 65 fm 42°/40°F Ediz Hook				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.78	30.86	0.547	2.23
5	6.78	30.85	0.548	2.31
10	6.76	30.86	0.544	2.36
19	6.74	30.86	0.544	2.36
28	6.74	30.86	0.544	2.15
47	6.82	31.45	0.476	2.09
70	6.86	32.56	0.361	2.44
94	6.87	32.86	0.328	2.44
118	6.76	33.22	0.283	2.51

STA 94-25 48° 25.0' N WEATHER c. 23 Mar 55 122° 35.8' W WIND N 12 1522 (+8) DEPTH 20 fm 46°/40°F Dewey				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.12	28.88	0.564	2.42
5	7.10	28.95	0.561	2.42
10	6.94	29.23	0.557	2.45
20	6.86	29.55	0.554	2.46
30	6.82	29.83	0.548	2.27

STA 94-26 48° 21.4' N WEATHER c. 23 Mar 55 123° 03.4' W WIND NxW 1605 (+8) DEPTH 10 fm 52°/44°F Goat Island				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.98	18.08	0.649	1.88
2	7.38	25.74	0.561	2.20
4	7.56	27.79	0.532	2.31
6	7.60	28.20	0.518	2.54
10	7.62	28.29	0.492	2.50

STA 94-27 48° 18.5' N WEATHER c. 23 Mar 55 122° 29.5' W WIND NxW 12 1700 (+8) DEPTH 12 fm 56°/46°F Strawberry Point, North of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.26	26.43	0.581	2.15
2	7.26	26.41	0.579	2.23
5	8.01	29.37	0.443	2.56
10	8.00	29.41	0.441	2.53
20	7.99	29.40	0.439	2.64

STA 94-28 48° 13.7' N WEATHER c. 23 Mar 55 122° 33.2' W WIND N 16 1806 (+8) DEPTH 45 fm 41°/37°F Demock Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.73	27.86	0.565	2.15
5	7.74	27.95	0.545	2.30
10	7.92	28.48	0.514	2.36
20	7.99	28.96	0.464	2.28
30	7.95	29.32	0.450	2.44
50	7.94	29.51	0.446	2.47
75	7.84	29.56	0.453	2.41

STA 94-29 48° 06.1' N WEATHER b.
23 Mar 55 122° 33.2' W WIND N
1925 (+8) DEPTH 46 fm 38°/35°F
Greenbank

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.66	27.77	0.566	2.22
5	7.67	27.77	0.569	2.18
10	7.72	27.77	0.563	2.11
20	7.88	28.74	0.494	2.31
30	7.88	29.25	0.459	2.23
40	7.89	29.40	0.457	2.46
50	7.90	29.42	0.449	2.62
60	7.89	29.45	0.451	2.63

STA 94-30 48° 01.5' N WEATHER b.c.
23 Mar 55 122° 31.9' W WIND NW 11
2018 (+8) DEPTH 20.5 fm 38°/36°F
Holmes Harbor, Head of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.71	27.56	0.572	2.44
5	7.66	27.73	0.574	2.35
10	7.66	27.72	0.572	2.22
20	7.64	27.74	0.572	2.27
30	8.16	27.75	0.419	2.48

Sta 94-31 48° 04.8' N WEATHER b.
23 Mar 55 122° 32.0' W WIND N 4
2053 (+8) DEPTH 27 fm 47°/44°F
Holmes Harbor, Middle of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.70	27.77	0.569	2.32
5	7.68	27.75	0.566	2.18
10	7.74	27.84	0.560	2.41
20	7.94	28.56	0.500	2.30
30	8.04	29.27	0.434	2.24
40	8.08	29.28	0.434	2.22
50	8.01	29.44	0.432	2.67

STA 94-32 48° 06.5' N WEATHER o.
23 Mar 55 122° 29.5' W WIND WxN 5
2202 (+8) DEPTH 82 fm 37°/35°F
East Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.66	28.03	0.545	2.40
5	7.66	28.03	0.544	2.36
10	7.72	28.04	0.541	2.47
20	7.91	28.69	0.498	2.50
30	7.88	29.28	0.483	2.46
50	7.66	29.53	0.483	2.26
75	7.59	29.60	0.474	2.51
100	7.56	29.64	0.477	2.56
130	7.46	29.65	0.482	2.60

STA 94-33 48° 02.8' N WEATHER o. 23 Mar 55 122° 22.3' W WIND NNW 13 2303 (+8) DEPTH 104 fm 38°/35°F Camano Head, West of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.70	28.30	0.538	2.27
5	7.71	28.30	0.537	2.27
10	7.71	-----	0.538	2.31
20	7.74	28.38	0.532	2.35
29	7.76	29.13	0.471	2.31
49	7.66	29.50	0.453	2.13
73	7.40	29.56	0.504	2.45
98	7.34	29.67	0.512	2.40
122	7.18	29.83	0.516	2.49
147	7.20	29.85	0.513	2.45

STA 94-34 48° 06.2' N WEATHER o. 24 Mar 55 122° 22.0' W WIND NW 10 0004 (+8) DEPTH 67 fm 38°/35°F Port Susan, Middle of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.42	27.57	0.548	2.39
5	7.42	27.59	0.547	2.18
10	7.77	28.37	0.508	2.14
20	7.77	29.01	0.487	2.37
30	7.84	29.23	0.456	2.26
50	8.62	29.62	0.323	2.41
70	8.22	29.64	0.350	2.69
90	7.65	29.63	0.444	2.43
110	7.37	29.67	0.474	2.50
124	7.38	29.70	0.478	2.59

STA 94-35 48° 09.2' N WEATHER o. 24 Mar 55 122° 24.9' W WIND NW 14 0114 (+8) DEPTH --- 38°/34°F Port Susan, Head of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.10	26.20	0.565	2.42
5	7.58	27.59	0.545	2.46
10	7.76	28.34	0.510	2.24
19	7.94	29.03	0.457	2.41
28	8.05	29.26	0.431	2.22
48	8.84	29.60	0.322	2.49
66	8.57	29.66	0.327	2.51
85	7.66	30.47	0.428	2.64

STA 94-36 48° 04.0' N WEATHER c. 24 Mar 55 122° 20.0' W WIND NNW 12 0204 (+8) DEPTH 67 fm 38°/35°F Camano Head, East of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.52	27.95	0.541	2.52
5	7.54	27.95	0.538	2.33
10	7.58	28.24	0.531	2.45
20	7.92	29.09	0.464	2.50
30	7.88	29.30	0.439	2.49
50	8.28	29.56	0.348	2.68
70	8.22	29.63	0.363	2.87
90	7.55	29.59	0.466	2.47
110	7.32	29.66	0.474	2.53
123	7.38	29.70	0.484	2.53

STA 94-37 47° 58.6' N WEATHER c. 24 Mar 55 122° 16.8' W WIND Calm 0315 (+8) DEPTH 71 fm 38°/35°F Port Gardner				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.52	23.71	0.579	2.05
5	7.57	28.13	0.541	2.08
10	7.64	28.63	0.518	2.35
20	7.62	29.04	0.501	2.32
30	7.64	29.27	0.479	2.24
40	7.66	29.48	0.444	2.40
60	7.56	29.58	0.462	2.50
80	7.39	29.60	0.483	2.48
100	7.20	29.70	0.520	2.62
120	7.22	29.72	0.519	2.55

STA 94-38 47° 53.1' N WEATHER c. 24 Mar 55 122° 21.2' W WIND NW 4 0423 (+8) DEPTH 120 fm 37°/34°F Possession Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.90	26.94	0.574	2.10
5	7.51	28.79	0.518	2.10
10	7.44	28.94	0.532	2.11
20	7.31	29.25	0.540	2.08
30	7.28	29.31	0.544	2.10
50	7.24	29.41	0.545	2.14
61	7.22	29.52	0.532	2.36
82	7.20	29.68	0.526	2.37
114	7.17	29.80	0.529	2.44
147	7.19	29.87	0.520	2.41
180	7.12	29.98	0.512	2.22

STA 94-39 47° 54.0' N WEATHER c. 24 Mar 55 122° 28.7' W WIND NW 10 0552 (+8) DEPTH 112 fm 37°/32°F Point No Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.26	29.04	0.551	2.26
5	7.33	29.06	0.554	2.28
10	7.26	29.37	0.545	2.12
20	7.23	29.49	0.545	2.21
30	7.22	29.51	0.543	2.16
50	7.22	29.56	0.545	2.16
75	7.21	29.61	0.546	2.46
100	7.18	29.73	0.545	2.30
130	7.16	29.75	0.545	2.48
160	7.21	29.76	0.541	2.48
190	7.20	29.79	0.534	2.22

STA 94-40 47° 44.7' N WEATHER c. 24 Mar 55 122° 25.6' W WIND NxW 9 0738 (+8) DEPTH 157 fm 38°/35°F Point Jefferson				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.22	29.13	0.576	2.29
5	7.21	29.13	0.574	2.30
10	7.22	29.13	0.572	2.45
20	7.32	29.24	0.559	2.38
30	7.32	29.30	0.554	2.30
50	7.32	29.33	0.549	2.30
75	7.26	29.47	0.539	2.36
100	7.30	29.49	0.538	2.36
150	7.23	29.53	0.538	2.53
200	7.20	29.84	0.521	2.45
240	7.19	29.88	0.513	2.36
270	7.22	29.92	0.516	2.34

STA 94-41 47° 34.1' N WEATHER o. 24 Mar 55 122° 26.5' W WIND N 9 0940 (+8) DEPTH 137 fm 40°/36°F Alki Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.33	29.27	0.572	2.46
5	7.26	29.26	0.569	2.31
10	7.26	29.32	0.559	2.46
20	7.24	29.33	0.550	2.39
30	7.24	29.33	0.550	2.39
50	7.22	29.35	0.551	2.09
75	7.24	29.43	0.542	2.50
100	7.18	29.67	0.525	2.41
140	7.14	29.85	0.521	2.28
180	7.16	29.92	0.514	2.46
220	7.14	29.96	0.513	2.41

STA 94-42 47° 26.3' N WEATHER o. 24 Mar 55 122° 23.0' W WIND NW 12 1203 (+8) DEPTH 130 fm 42°/37°F				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.43	29.07	0.593	2.36
5	7.42	29.09	0.594	2.36
10	7.36	29.09	0.591	2.40
20	7.32	29.11	0.591	2.38
30	7.34	29.13	0.587	2.35
50	7.32	29.28	0.562	2.45
75	7.18	29.70	0.524	2.44
100	7.15	29.78	0.518	2.30
140	7.12	29.93	0.516	2.49
180	7.14	29.99	0.510	2.54
220	7.12	30.01	0.516	2.31

STA 94-43 47° 19.2' N WEATHER o. 24 Mar 55 122° 28.0' W WIND NW 4 1331 (+8) DEPTH 95 fm 43°/38°F Brown Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.64	28.45	0.587	2.24
5	7.36	28.73	0.582	2.22
10	7.34	28.98	0.580	2.16
20	7.30	29.22	0.562	2.35
30	7.28	29.37	0.542	2.12
50	7.26	29.52	0.527	2.14
75	7.18	29.69	0.518	2.39
100	7.14	29.74	0.519	2.31
130	7.10	29.86	0.520	2.44
160	7.14	29.92	0.517	2.48

STA 94-44 47° 12.6' N WEATHER o. 24 Mar 55 122° 37.2' W WIND Calm 1515 (+8) DEPTH 89 fm 43°/38°F Gibson Point, Southwest of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.37	28.89	0.581	2.44
5	7.34	28.91	0.577	2.44
10	7.28	28.99	0.580	2.46
20	7.27	28.99	0.574	2.59
30	7.31	28.99	0.571	2.46
50	7.30	29.00	0.567	2.43
74	7.24	29.07	0.564	2.47
99	7.33	29.11	0.556	2.46
128	7.28	29.12	0.556	2.46
158	7.30	29.15	0.559	2.48

STA 94-45 47° 14.0' N WEATHER o.
24 Mar 55 122° 39.0' W WIND Calm
1556 (+8) DEPTH 70 fm 44°/38°F
Still Harbor II

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.64	28.79	0.632	2.16
5	7.36	28.79	0.624	2.19
10	7.28	28.80	0.601	2.15
20	7.26	28.83	0.580	2.32
30	7.29	28.89	0.578	2.12
50	7.28	28.96	0.569	2.04
75	7.26	28.99	0.568	2.26
100	7.31	29.02	0.565	2.29
120	7.28	29.14	0.557	2.50

STA 94-46 47° 15.6' N WEATHER o.
24 Mar 55 122° 41.8' W WIND Calm
1646 (+8) DEPTH 52 fm 45°/40°F
South Head II

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.70	28.76	0.633	2.31
5	7.54	28.78	0.618	2.48
10	7.21	28.78	0.607	2.34
20	7.20	28.78	0.593	2.44
30	7.26	28.79	0.588	2.14
40	7.38	28.85	0.566	2.14
60	7.37	28.92	0.544	2.50
85	7.36	29.06	0.548	2.46

STA 94-47 47° 20.4' N WEATHER o.
24 Mar 55 122° 41.8' W WIND NE 8
1745 (+8) DEPTH 30 fm 43°/37°F
Glencove, East of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.70	28.38	1.005	1.05
5	7.56	28.41	0.971	1.06
10	7.26	28.55	0.743	1.65
20	7.22	28.77	0.593	2.22
30	7.34	28.90	0.535	2.42
40	7.34	28.95	0.539	2.28
50	7.34	28.99	0.538	2.58

STA 94-48 47° 22.5' N WEATHER o.
24 Mar 55 122° 38.1' W WIND NE 6
1831 (+8) DEPTH 7 fm 42°/37°F
Wauna

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.55	28.25	0.932	0.93
2	7.54	28.26	0.930	0.90
4	7.39	28.31	0.879	1.01
6	7.22	28.60	0.710	1.67
10	7.23	28.66	0.678	1.94

STA 94-49 47° 16.8' N WEATHER c.
24 Mar 55 122° 42.6' W WIND NE 6
1941 (+8) DEPTH 55 fm 41°/38°F
Green Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.35	28.68	0.738	1.87
5	7.32	28.69	0.736	1.86
10	7.20	28.70	0.679	1.99
20	7.21	28.73	0.667	2.00
30	7.32	28.85	0.573	2.04
40	7.34	28.86	0.558	1.98
50	7.34	28.93	0.549	2.36
70	7.34	29.01	0.550	2.31
90	7.24	29.07	0.557	2.24

STA 94-50 47° 12.9' N WEATHER o.
24 Mar 55 122° 49.5' W WIND N x W 4
2227 (+8) DEPTH 25 fm 38°/35°F
Whiteman Cove

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.22	28.37	0.598	2.18
5	7.23	28.40	0.597	2.14
10	7.22	28.44	0.591	2.32
20	7.24	28.66	0.598	2.28
30	7.27	28.75	0.562	2.42
40	7.28	28.80	0.558	2.38

STA 94-51 47° 18.6' N WEATHER o.
24 Mar 55 122° 48.7' W WIND NNE 4
2334 (+8) DEPTH 15 fm 40°/36°F
Dutchers Cove

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.23	27.70	0.660	2.18
5	7.22	27.79	0.641	----
10	7.14	28.02	0.620	2.32
15	7.16	28.19	0.601	2.25
20	7.20	28.39	0.575	2.23
25	7.24	28.63	0.551	2.36
28	7.13	28.67	0.551	2.62

STA 94-52 47° 21.8' N WEATHER o.
25 Mar 55 122° 49.0' W WIND NNE 4
0026 (+8) DEPTH 6 fm 38°/35°F
Rocky Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.16	27.65	0.637	2.44
2	7.14	27.78	0.632	2.34
4	7.10	28.00	0.608	2.31
6	7.14	28.10	0.593	2.36
10	7.18	28.28	0.581	2.36

STA 94-53 47° 15.9' N WEATHER o.
25 Mar 55 122° 51.1' W NxE 4
0145 (+8) DEPTH 27 fm 36°/35°F
Herron Island

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.17	27.72	0.641	2.14
5	7.16	27.94	0.623	2.24
10	7.14	28.10	0.617	2.36
15	7.13	28.23	0.604	2.32
25	7.24	28.59	0.571	2.36
35	7.25	28.65	0.567	2.26
45	7.26	28.71	0.562	2.48

STA 94-54 47° 10.0' N WEATHER o.
25 Mar 55 122° 47.3' W WIND Calm
0304 (+8) DEPTH 47 fm 37°/36°F
Devils Head

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.18	28.38	0.587	2.48
5	7.20	28.41	0.582	2.40
10	7.20	28.43	0.586	2.53
20	7.26	28.50	0.576	2.44
30	7.28	28.71	0.567	2.40
50	7.28	28.79	0.568	2.44
75	7.28	28.84	0.567	2.46

STA 94-55 47° 07.1' N WEATHER o.
25 Mar 55 122° 42.8' W WIND Calm
0358 (+8) DEPTH 35 fm 38°/37°F
Nisqually Reach

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.13	28.49	0.582	2.34
5	7.14	28.60	0.579	2.31
10	7.16	28.67	0.579	2.20
19	7.24	28.87	0.570	2.40
38	7.24	28.97	0.568	2.31
57	7.26	29.00	0.567	3.04

STA 94-56 47° 11.2' N WEATHER
25 Mar 55 122° 37.6' W WIND NNE 4
0509 (+8) DEPTH 92 fm 36°/35°F
Gordon Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.20	28.66	0.578	2.89
5	7.24	28.78	0.570	2.50
10	7.26	28.88	0.570	2.34
20	7.24	28.93	0.570	2.40
30	7.26	28.92	0.569	2.22
50	7.28	28.93	0.570	2.22
75	7.26	28.91	0.565	2.54
100	7.30	29.09	0.562	2.19
130	7.24	29.11	0.564	2.53
160	7.28	29.03	0.565	2.41

STA 94-57 47° 14.6' N WEATHER o.
25 Mar 55 122° 34.3' W WIND NE 2
0615 (+8) DEPTH 51 fm 36°/35°F
Day Island

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.26	29.31	0.565	2.15
5	7.22	29.34	0.551	2.56
10	7.24	29.35	0.555	2.45
20	7.22	29.39	0.550	2.53
30	7.24	29.38	0.551	2.45
50	7.24	29.35	0.547	----

STA 94-58 47° 18.6' N WEATHER o.
25 Mar 55 122° 33.5' W WIND NE 2
0657 (+8) DEPTH 37 fm 36°/35°F
Point Defiance

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.26	29.36	0.551	2.50
5	7.25	29.36	0.552	2.36
10	7.24	29.36	0.552	2.44
20	7.26	29.34	0.550	2.40
40	7.24	29.43	0.545	2.36
60	7.21	29.55	0.536	2.42

STA 94-59 47° 21.3' N WEATHER o.
25 Mar 55 122° 32.4' W WIND NNE 6
0730 (+8) DEPTH 55 fm 35°/35°F
Spring Beach

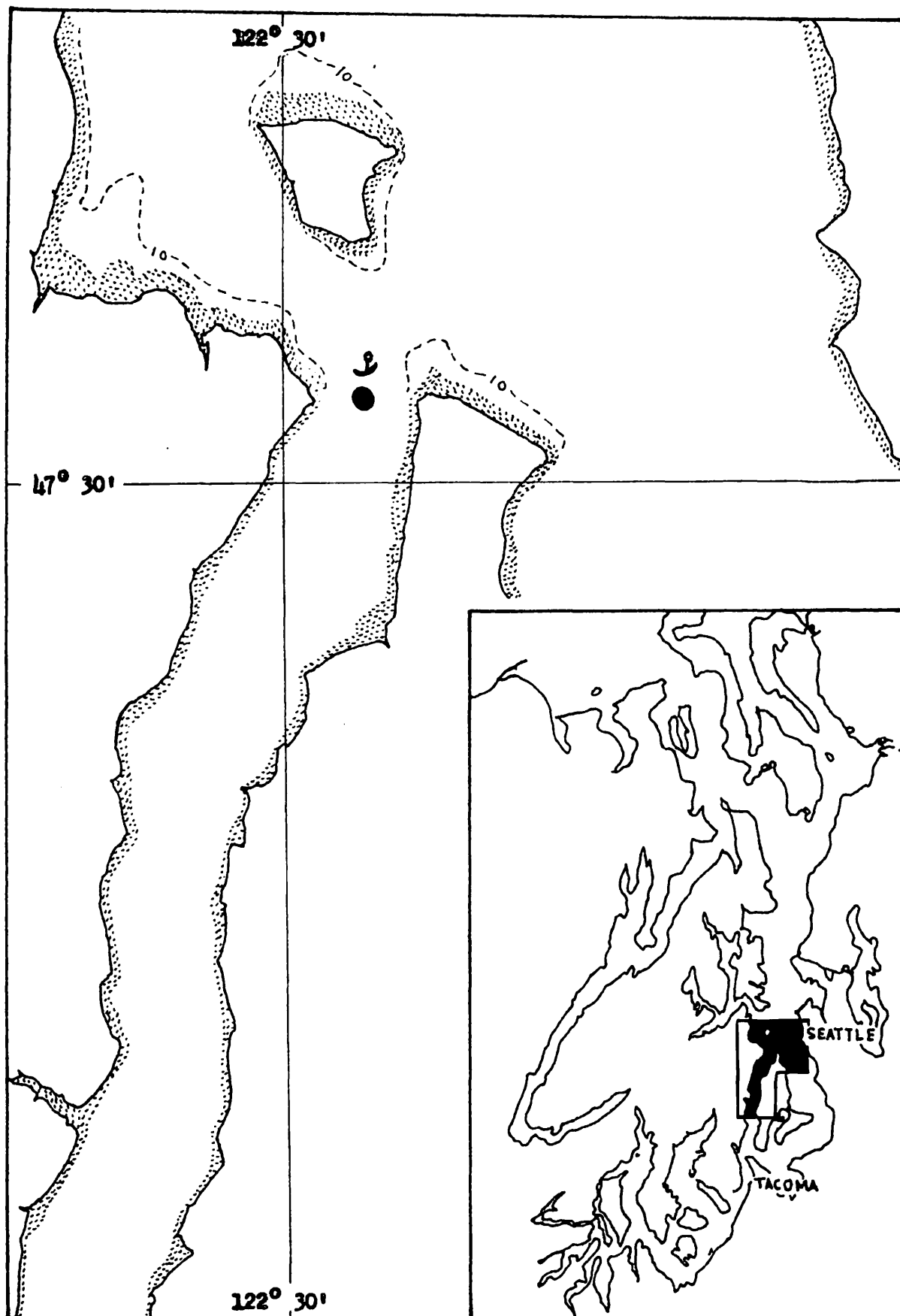
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.25	29.21	0.560	2.38
5	7.24	29.17	0.564	2.32
10	7.26	29.23	0.560	2.39
20	7.26	29.24	0.558	2.32
30	7.27	29.26	0.552	2.08
50	7.26	29.29	0.548	2.22
75	7.24	29.40	0.545	2.47
100	7.24	29.53	0.531	3.57

STA 94-60 47° 30.7' N WEATHER o.
25 Mar 55 122° 29.1' W WIND Calm
0847 (+8) DEPTH 60 fm 35°/34°F
Point Vashon

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.20	29.24	0.565	2.38
5	7.20	29.25	0.561	2.47
10	7.20	29.24	0.576	2.44
20	7.22	29.25	0.554	2.47
30	7.24	29.25	0.558	2.46
50	7.24	29.30	0.551	2.48
75	7.24	29.32	0.547	2.46
100	7.25	29.33	0.552	2.15



Oceanographic Station Location
BROWN BEAR Cruise 100
29 - 30 April 1955

BROWN BEAR CRUISE 100

COLVOS PASSAGE, NORTH END

LAT. 47° 30.6' N, LONG. 122° 29.1' W

29 - 30 April 1955

Sta No. 100-1 Time (+8) 1755			
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)
0	8.12	29.22	0.598
10	7.82	29.27	0.575
20	7.70	29.28	0.565
30	7.67	29.31	0.564
60	7.61	29.31	0.565
90	7.64	29.35	0.562

Sta No. 100-2 Time (+8) 2020			
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)
0	7.88	29.23	0.590
10	7.80	29.24	0.576
20	7.75	29.24	0.577
30	7.70	29.27	0.576
60	7.66	29.30	0.565
90	7.64	29.34	0.555

Sta No. 100-3 Time (+8) 2215			
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)
0	7.87	29.27	0.584
10	7.87	29.25	0.587
20	7.83	29.27	0.589
30	7.83	29.28	0.583
60	7.83	29.29	0.570
90	7.73	29.33	0.569

Sta No. 100-4 Time 0104			
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)
0	7.75	29.25	0.575
10	7.77	29.25	0.572
20	7.77	29.27	0.572
30	7.77	29.27	0.570
60	7.75	29.29	0.570
90	7.71	29.33	0.565

Sta No. 100-5 Time (+8) 0244			
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)
0	7.77	29.23	0.583
10	7.84	29.27	0.565
20	7.81	29.27	0.565
30	7.79	29.26	0.560
60	7.74	29.28	0.555
90	7.69	29.31	0.550

Sta No. 100-6 Time (+8) 0446			
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)
0	7.70	29.17	0.586
10	7.84	29.22	0.584
20	7.80	29.23	0.578
30	7.79	29.27	0.565
60	7.64	29.36	0.545
90	7.67	29.36	0.544

BROWN BEAR CRUISE 100 (Cont'd)

Sta No. 100-7 Time (+8) 0608			
Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)
0	7.70	29.19	0.563
10	7.79	29.20	0.575
20	7.77	29.23	0.563
30	7.74	29.24	0.565
60	7.72	29.28	0.557
90	7.61	29.36	0.544

Sta No. 100-8 Time (+8) 0812			
Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)
0	7.94	29.15	0.572
10	7.81	29.18	0.575
20	7.79	29.18	0.572
30	7.75	29.23	0.561
60	7.70	29.29	0.555
90	7.64	29.35	0.542

Sta No. 100-9 Time (+8) 1011			
Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)
0	8.05	29.21	0.585
10	7.80	29.21	0.580
20	7.77	29.25	0.565
30	7.74	29.26	0.562
60	7.65	29.32	0.550
90	7.66	29.36	0.544

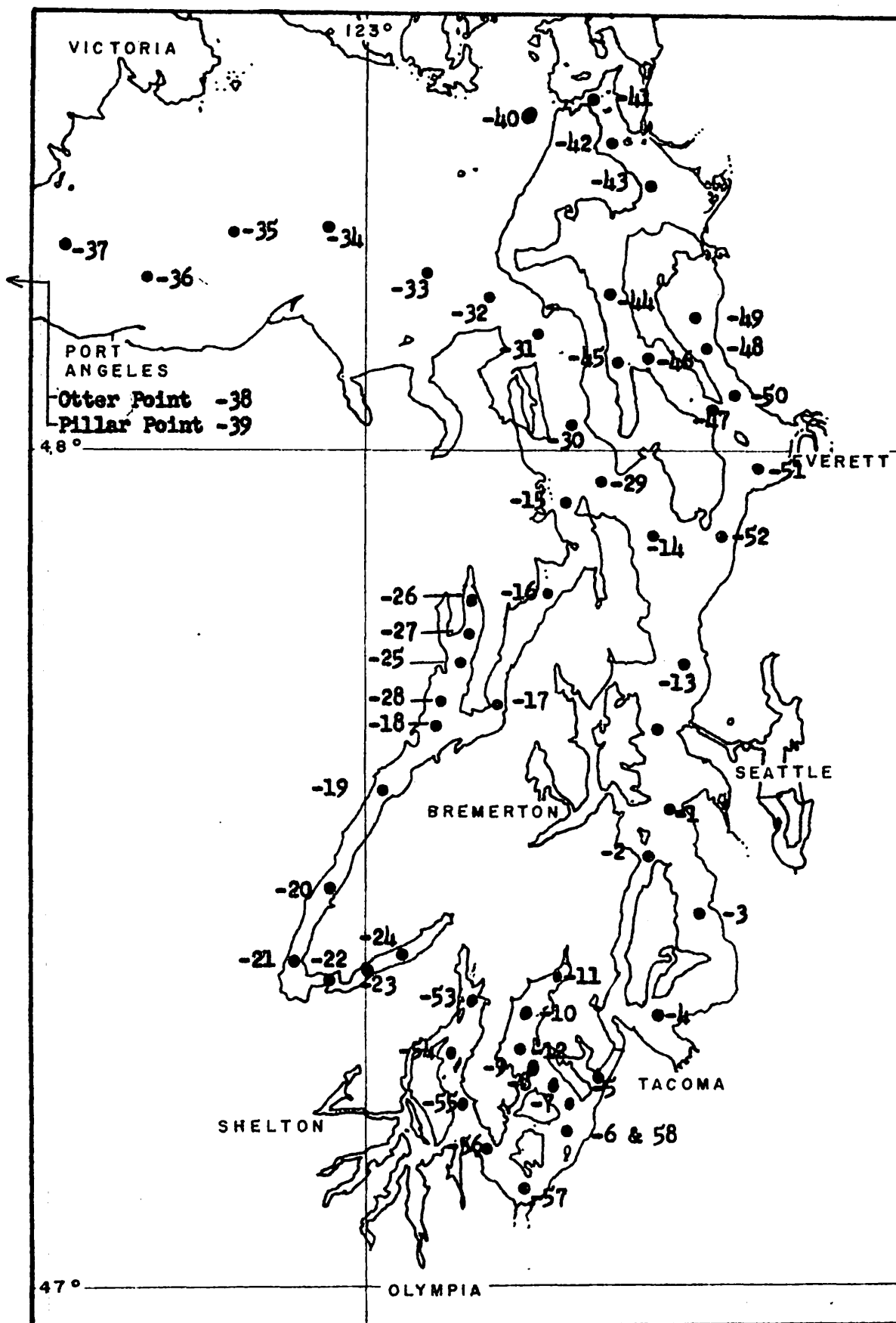
Sta No. 100-10 Time (+8) 1218			
Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)
0	8.56	29.20	0.583
10	7.81	29.20	0.568
20	7.80	29.22	0.570
30	7.74	29.26	0.560
60	7.61	29.33	0.546
90	7.68	29.33	0.544

Sta No. 100-11 Time (+8) 1407			
Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)
0	8.28	29.19	0.590
10	7.80	29.22	0.550
20	7.77	29.27	0.559
30	7.71	29.31	0.551
60	7.68	29.33	0.549
90	7.67	29.35	0.388

Sta No. 100-12 Time (+8) 1615			
Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)
0	8.42	29.20	0.592
10	7.88	29.26	0.568
20	7.76	29.28	0.564
30	7.71	29.32	0.553
60	7.64	29.38	0.542
90	7.65	29.40	0.540

Sta No. 100-13 Time (+8) 1805			
Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)
0	8.37	29.21	0.593
10	8.00	29.21	0.583
20	7.84	29.22	0.554
30	7.70	29.27	0.577
60	7.63	29.32	0.551
90	7.68	29.33	0.545

Sta No. 100-14 Time (+8) 1952			
Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)
0	8.08	29.19	0.585
10	7.82	29.22	0.565
20	7.79	29.23	0.561
30	7.74	29.23	0.555
60	7.68	29.32	0.550
90	7.67	29.39	0.542



Oceanographic Station Locations
 BROWN BEAR Cruises 102 - 103
 9-14 May 1956

STA 102-1 47° 34.3' N WEATHER b.c. 9 May 55 122° 26.4' W WIND SE 10 113 (+8) DEPTH 137 fm 50°/46°F Alki Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.69	29.13	0.739	1.48
5	8.46	29.19	0.692	1.64
10	8.36	29.23	0.662	1.69
20	8.34	29.23	0.658	1.75
30	8.21	29.28	0.631	1.81
50	8.06	29.38	0.605	1.85
75	7.84	29.54	0.560	1.96
100	7.76	29.65	0.536	2.22
140	7.68	29.75	0.519	2.29
180	7.64	29.80	0.517	2.38
220	7.64	29.81	0.512	2.34

STA 102-2 47° 30.7' N WEATHER b.c. 9 May 55 122° 29.1' W WIND E 3 1248 (+8) DEPTH 57 fm 53°/45°F Point Vashon				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.64	29.18	0.669	1.72
5	8.53	29.16	0.669	1.79
10	8.21	29.20	0.647	1.69
20	8.10	29.25	0.612	1.93
30	8.09	29.26	0.610	1.88
50	8.06	29.26	0.606	1.95
75	7.98	29.36	0.590	2.05
100	7.96	29.40	0.581	2.08

STA 102-3 47° 26.2' N WEATHER b.c. 9 May 55 122° 23.3' W WIND NE 2 1401 (+8) DEPTH 132 fm 58°/50°F Pully Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	11.64	28.11	0.967	0.53
5	8.82	29.04	0.812	1.07
10	8.45	29.22	0.703	1.35
20	8.30	29.23	0.661	1.46
30	8.12	29.32	0.617	1.73
50	7.97	29.38	0.587	1.89
74	7.88	29.45	0.572	2.03
99	7.68	29.66	0.532	2.20
139	7.63	29.76	0.519	2.24
178	7.56	29.81	0.511	2.25
218	7.58	29.81	0.508	2.25

STA 102-4 47° 19.3' N WEATHER b.c. 9 May 55 122° 28.0' W WIND Calm 1537 (+8) DEPTH 97 fm 61°/52°F Brown Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.64	26.35	1.049	0.71
5	8.77	28.98	0.869	0.91
10	8.56	29.16	0.740	1.23
20	8.24	29.25	0.653	1.57
30	8.15	29.32	0.633	1.81
50	8.01	29.33	0.612	1.85
75	7.68	29.60	0.538	2.19
100	7.64	29.70	0.526	2.24
130	7.60	29.75	0.518	2.27
160	7.52	29.82	0.506	2.34

STA 102-5 47° 14.9' N WEATHER b.c. 9 May 55 122° 34.2' W WIND Calm 1700 (+8) DEPTH 32 fm 59°/51°F Day Island				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.06	29.37	0.606	1.82
5	8.05	29.36	0.604	1.66
10	8.04	29.37	0.602	1.86
20	8.02	29.36	0.601	1.96
30	8.03	29.37	0.602	1.98
50	8.01	29.36	0.600	1.95

STA 102-6 47° 11.1' N WEATHER c. 9 May 55 122° 37.9' W WIND WxN 2 1746 (+8) DEPTH 94 fm 60°/52°F Gordon Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.51	28.55	0.775	1.37
5	8.83	28.78	0.709	1.55
10	8.72	28.78	0.710	1.50
20	8.40	28.96	0.651	1.72
29	8.40	28.96	0.652	1.74
48	8.34	29.01	0.647	1.78
72	8.33	29.02	0.645	1.73
96	8.34	29.04	0.638	1.74
125	8.24	29.13	0.624	1.91
154	8.24	29.14	0.621	1.91

STA 102-7 47° 12.8' N WEATHER c. 9 May 55 122° 37.2' W WIND W 2 1837 (+8) DEPTH 92 fm 59°/52°F Gibson Point, Southwest of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.50	28.83	0.674	1.66
5	8.48	28.84	0.675	1.65
10	8.34	28.96	0.645	1.81
20	8.28	29.01	0.635	1.86
30	8.30	29.01	0.635	1.86
50	8.28	29.03	0.631	1.87
74	8.26	29.03	0.631	1.87
99	8.16	29.04	0.609	1.95
128	8.06	29.04	0.587	2.05
157	8.10	29.08	0.601	2.00

STA 102-8 47° 14.0' N WEATHER c. 9 May 55 122° 39.3' W WIND W 6 1916 (+8) DEPTH 67 fm 59°/53°F Still Harbor II				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.60	28.88	1.041	0.42
5	10.12	28.88	1.037	0.40
10	8.67	28.90	0.744	1.41
20	8.36	28.96	0.653	1.75
30	8.35	28.96	0.652	1.74
50	8.08	28.99	0.590	2.02
74	7.90	29.04	0.559	2.29
99	7.96	29.07	0.571	2.19
118	7.99	29.10	0.564	2.29

STA 102-9 47° 15.8' N WEATHER c.
9 May 55 122° 41.7' W WIND W 6
1950 (+8) DEPTH 52 fm 57°/51°F
South Head II

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.46	28.93	0.858	1.03
5	9.26	28.92	0.834	1.16
10	8.55	28.94	0.680	1.60
20	8.26	28.97	0.634	1.86
30	8.07	28.97	0.590	2.05
40	8.15	29.03	0.608	1.93
60	7.98	29.02	0.567	2.14
85	7.90	29.03	0.544	2.24

STA 102-10 47° 20.4' N WEATHER c.
9 May 55 122° 41.7' W WIND SSW 6
2039 (+8) DEPTH 32 fm 55°/50°F
Glencove

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.60	28.85	0.960	0.45
5	9.93	28.85	0.939	0.59
10	9.07	28.92	0.834	1.69
20	8.43	28.96	0.656	1.94
30	8.32	28.97	0.634	1.84
40	8.14	28.99	0.597	2.01
50	8.02	28.99	0.578	2.12

STA 102-11 47° 22.5' N WEATHER c.
9 May 55 122° 38.1' W WIND SWxW 5
2114 (+8) DEPTH 8.5 fm 55°/50°F
Wauna

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	11.57	28.47	0.925	0.58
2	11.57	28.46	0.934	0.69
4	11.64	28.49	0.920	0.55
6	11.60	28.71	0.934	0.55
10	10.66	28.68	0.968	0.38

STA 102-12 47° 16.9' N WEATHER c.
9 May 55 122° 42.3' W WIND WxS 12
2220 (+8) DEPTH 58 fm 53°/48°F
Green Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.73	28.93	0.797	1.08
5	9.54	28.94	0.795	1.10
10	8.78	28.98	0.712	1.46
20	8.54	28.98	0.666	1.63
30	8.36	28.99	0.631	1.87
40	8.21	29.01	0.611	1.89
50	8.15	29.01	0.600	2.01
70	8.18	29.03	0.599	2.04
90	8.14	29.04	0.594	2.10

STA 102-13 47° 44.6' N WEATHER c.
10 May 55 122° 25.5' W WIND S 6
0615 (+8) DEPTH 155 fm 50°/49°F
Point Jefferson

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.44	28.52	0.843	0.76
5	8.77	28.74	0.795	1.04
10	8.38	29.14	0.667	1.53
20	8.26	29.23	0.637	1.72
30	8.07	29.33	0.599	1.89
50	7.94	29.56	0.550	1.93
74	7.92	29.61	0.542	1.93
99	8.12	29.72	0.535	2.00
148	8.10	29.78	0.521	2.01
197	7.76	29.78	0.493	2.16
236	7.72	29.77	0.496	2.21
265	7.73	29.79	0.496	2.34

STA 102-14 47° 54.6' N WEATHER c.
10 May 55 122° 28.8' W WIND S 1
0800 (+8) DEPTH 110 fm 49°/48°F
Point No Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.01	28.52	0.705	0.98
5	8.76	28.71	0.669	1.25
10	8.46	29.04	0.616	1.44
20	8.29	29.57	0.559	1.67
30	8.38	29.68	0.559	1.70
50	8.18	29.72	0.540	1.86
75	8.30	29.78	0.543	1.78
100	8.36	29.81	0.544	2.17
130	8.35	29.88	0.542	1.82
160	8.32	29.98	0.535	1.85
190	8.30	30.08	0.532	1.89

STA 102-15 47° 56.2' N WEATHER c.
10 May 55 122° 37.9' W WIND NNE 1
0930 (+8) DEPTH 71 fm 50°/48°F
Tala Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.92	29.74	0.554	1.91
5	8.77	29.82	0.552	1.82
10	8.66	29.83	0.547	1.77
20	8.51	29.91	0.548	1.81
30	8.40	29.95	0.540	1.84
50	8.26	30.17	0.521	1.91
75	8.24	30.29	0.517	1.99
100	8.22	30.45	0.509	2.03

STA 102-16 47° 50.1' N WEATHER c.
10 May 55 122° 40.0' W WIND NE 4
1106 (+8) DEPTH 39 fm 55°/52°F
South Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.98	29.40	0.565	1.81
5	9.18	29.41	0.557	1.93
10	8.90	29.63	0.544	1.91
20	8.54	29.81	0.535	1.98
30	8.46	29.88	0.532	2.00
40	8.44	29.93	0.527	2.04
60	8.34	30.05	0.521	2.04

STA 102-17 47° 42.0' N WEATHER c.
10 May 55 122° 45.7' W WIND Calm
1236 (+8) DEPTH 72 fm 55°/52°F
Hazel Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	11.30	28.35	0.722	1.00
5	10.06	28.84	0.607	1.48
10	9.26	29.32	0.557	1.84
20	8.44	29.64	0.506	2.11
30	8.20	29.78	0.487	2.20
50	7.98	29.86	0.469	2.29
80	7.81	29.90	0.446	2.45
110	7.82	29.91	0.446	2.45

STA 102-18 47° 40.1' N WEATHER o.
10 May 55 122° 52.4' W WIND SSW 2
1340 (+8) DEPTH 77 fm 59°/54°F
Pleasant Harbor

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	12.67	27.06	0.684	0.87
5	8.70	29.31	0.505	2.10
10	8.60	29.45	0.514	2.08
20	8.12	29.62	0.473	2.24
30	8.10	29.68	0.480	2.26
40	7.93	29.82	0.465	2.30
50	7.86	29.84	0.453	2.29
75	7.76	29.93	0.431	2.40
100	7.68	30.00	0.436	2.40
130	7.66	30.04	0.432	2.53

STA 102-19 47° 35.9' N WEATHER 60
10 May 55 122° 57.7' W WIND ---
1447 (+8) DEPTH 75 fm 54°/52°F
Tekiu Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	12.51	28.10	0.682	0.66
5	10.46	28.25	0.808	0.83
10	8.48	29.34	0.461	2.30
19	8.10	29.66	0.464	2.29
29	8.02	29.70	0.466	2.20
38	7.97	29.76	0.465	2.15
48	7.92	29.81	0.460	2.34
72	7.79	29.87	0.426	2.48
95	7.70	29.96	0.435	2.34
123	7.64	30.01	0.447	2.47
152	7.66	30.05	0.443	2.55

STA 102-20 47° 28.7' N WEATHER 60
10 May 55 123° 03.7' W WIND S 9
1637 (+8) DEPTH 85 fm 56°/53°F
Eagle Creek

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	12.40	25.82	0.687	0.69
5	12.04	26.26	0.705	0.72
10	8.68	29.29	0.463	2.39
20	8.12	29.62	0.430	2.45
30	7.98	29.69	0.448	2.45
39	7.88	29.78	0.444	2.29
49	7.84	29.84	0.427	2.39
73	7.82	29.90	0.400	2.62
98	7.64	29.94	0.424	2.46
123	7.60	29.98	0.436	2.48
147	7.62	30.03	0.440	2.53

STA 102-21 47° 23.3' N WEATHER 60
10 May 55 123° 08.1' W WIND S 6
1742 (+8) DEPTH 62 fm 56°/54°F
Musqueti Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	11.67	26.51	0.755	0.99
5	8.97	28.99	0.632	1.91
10	8.41	29.52	0.404	2.40
20	8.06	29.71	0.414	2.49
30	8.02	29.74	0.412	2.54
40	7.99	29.79	0.410	2.45
50	7.94	29.83	0.408	2.70
60	7.92	29.88	0.382	2.67
80	7.70	29.95	0.398	2.77
100	7.63	29.97	0.402	2.89

STA 102-22 47° 21.5' N WEATHER 60
10 May 55 122° 03.7' W WIND S 6
1938 (+8) DEPTH 25 fm 62°/52°F
Tahuya River

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	12.92	24.43	0.668	0.65
5	10.19	28.30	0.648	1.58
10	8.42	29.53	0.393	2.57
20	8.30	29.62	0.385	2.64
30	8.10	29.76	0.371	2.76
40	8.04	29.79	0.361	3.20

STA 102-23 47° 22.5' N WEATHER 60
10 May 55 122° 59.7' W WIND SW 9
2014 (+8) DEPTH 24 fm 52°/51°F
Lynch Cove, Middle of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	13.24	24.54	0.692	0.68
5	11.00	27.42	0.786	0.84
10	8.63	29.31	0.412	2.52
15	8.40	29.58	0.366	2.74
20	8.16	29.71	0.353	2.78
30	8.12	29.74	0.349	2.87

STA 102-24 47° 23.8' N WEATHER 60
10 May 55 122° 55.7' W WIND SWxW 14
2108 (+8) DEPTH 13 fm 52°/51°F
Lynch Cove, Head of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	13.18	24.94	0.692	0.69
2	13.17	24.99	0.694	0.74
6	8.80	29.14	0.375	2.57
10	8.62	29.51	0.291	2.72
14	8.48	29.67	0.264	3.01
18	8.38	29.72	0.275	3.07

STA 102-25 47° 45.0' N WEATHER 63
11 May 55 122° 49.8' W WIND N 7
0550 (+8) DEPTH 110 fm 48°/46°F
Tabook Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	12.06	28.24	0.673	0.87
5	11.66	28.92	0.831	0.99
10	8.66	29.21	0.546	1.86
20	8.07	29.55	0.461	2.23
30	7.94	29.70	0.454	2.39
40	7.90	29.75	0.452	2.34
60	7.84	29.84	0.432	2.30
80	7.75	29.92	0.409	2.34
100	7.62	29.99	0.429	2.58
120	7.66	30.03	0.454	2.49
140	7.66	30.07	0.454	2.44
160	7.68	30.08	0.458	2.44
180	7.68	30.09	0.443	2.53
190	7.70	30.10	0.424	2.68

STA 102-26 47° 50.0' N WEATHER 50
11 May 55 122° 48.6' W WIND NNE 1
0719 (+8) DEPTH 29 fm 47°/46°F
Dabob Bay, Head of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	11.86	28.63	0.721	0.79
5	11.62	28.83	0.773	0.84
10	11.41	28.90	0.782	0.95
20	8.02	29.60	0.431	2.44
30	7.92	29.70	0.413	2.54
40	7.90	29.79	0.390	2.65

STA 102-27 47° 46.7' N WEATHER 50
11 May 55 122° 49.2' W WIND NNE 3
0800 (+8) DEPTH 94 fm 46°/46°F
Bolton Peninsula, East of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	12.08	28.24	0.686	0.83
5	10.99	28.81	0.703	0.92
10	8.58	29.27	0.519	2.02
20	8.04	29.59	0.446	2.44
30	8.04	29.67	0.467	2.30
40	7.92	29.73	0.449	2.41
60	7.84	29.81	0.419	3.06
80	7.78	29.90	0.389	2.76
100	7.66	29.99	0.424	2.56
120	7.66	30.04	0.441	2.53
140	7.68	30.05	0.455	2.48
164	7.70	30.09	0.431	2.72

STA 102-28 47° 41.7' N WEATHER 50
11 May 55 122° 51.9' W WIND NxE 4
0900 (+8) DEPTH 82 fm 48°/47°F
Tskutsko Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	10.14	28.23	0.615	1.43
5	10.04	28.67	0.629	1.48
10	8.62	29.25	0.532	1.93
20	8.10	29.58	0.456	2.34
30	8.01	29.77	0.469	2.36
40	8.00	29.82	0.469	2.48
60	7.96	29.84	0.468	2.34
80	7.80	29.91	0.444	2.46
100	7.64	29.97	0.437	2.54
120	7.66	30.00	0.444	2.49
145	7.68	30.06	0.446	2.55

STA 102-29 47° 57.2' N WEATHER o.
 11 May 55 122° 34.6' W WIND NWxN 10
 1202 (+8) DEPTH 60 fm 48°/47°F
 Double Bluff

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.90	26.85	0.845	1.29
5	8.84	29.22	0.669	1.63
10	8.48	29.43	0.591	1.70
20	8.37	29.47	0.577	1.80
30	8.34	29.62	0.561	1.86
50	8.27	29.68	0.538	1.86
75	8.36	29.79	0.541	1.89
100	8.36	29.97	0.531	----

STA 102-30 48° 01.5' N WEATHER o.
 11 May 55 122° 37.4' W WIND NWxN 8
 1251 (+8) DEPTH 70 fm 47°/46°F
 Bush Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.89	28.75	0.695	1.26
5	8.76	28.96	0.672	1.36
10	8.54	29.47	0.594	1.65
20	8.42	29.64	0.560	1.72
30	8.38	29.73	0.552	1.83
50	8.36	29.89	0.540	1.74
75	8.34	30.02	0.537	1.87
100	8.34	30.05	0.530	1.89

STA 102-31 48° 08.2' N WEATHER o.
 11 May 55 122° 41.0' W WIND NWxN 8
 1352 (+8) DEPTH 65 fm 48°/48°F
 Port Townsend

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.48	29.77	0.567	1.69
5	8.48	29.79	0.564	1.69
10	8.45	29.78	0.562	1.79
20	8.44	29.79	0.560	1.77
30	8.42	29.84	0.551	1.65
50	8.33	30.13	0.528	1.87
75	8.26	30.36	0.513	1.93
100	8.24	30.42	0.504	2.00

STA 102-32 48° 12.3' N WEATHER o.
 11 May 55 122° 53.3' W WIND WxS 20
 1549 (+8) DEPTH 56 fm 48°/47°F
 Protection Island

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.34	30.17	0.529	1.82
5	8.34	30.17	0.532	1.72
10	8.23	30.42	0.509	1.92
20	8.12	30.67	0.487	2.01
30	8.08	30.78	0.482	2.04
40	7.99	30.99	0.339	2.10
60	7.84	31.27	0.436	2.20
80	7.44	32.21	0.355	2.31

STA 102-33 47° 15.6' N WEATHER c.
11 May 55 123° 03.5' W WIND W 16
1717 (+8) DEPTH 97 fm 48°/46°F
New Dungeness

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.30	30.52	0.513	2.00
5	8.31	30.53	0.512	2.05
10	8.28	30.51	0.512	2.12
20	8.17	30.70	0.491	2.06
30	7.88	31.21	0.442	2.15
50	7.76	31.54	0.426	2.20
75	7.48	32.13	0.373	2.29
99	7.38	32.46	0.460	2.34
129	7.26	32.70	0.316	2.34
158	7.08	33.12	0.277	2.36

STA 102-34 47° 15.4' N WEATHER c.
11 May 55 123° 13.3' W WIND W 20
1848 (+8) DEPTH 80 fm 49°/46°F
New Dungeness, Northwest of

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.04	31.09	0.548	2.15
5	8.04	31.08	0.487	2.15
10	7.98	31.17	0.476	2.14
20	7.88	31.27	0.457	1.87
30	7.78	31.51	0.446	2.17
50	7.74	31.56	0.428	2.17
75	7.72	31.66	0.425	2.20
100	7.49	32.20	0.370	2.22
130	6.97	33.29	0.260	2.39

STA 102-35 47° 12.0' N WEATHER o.
11 May 55 123° 23.0' W WIND W 24
2043 (+8) DEPTH 77 fm 47°/45°F
Ediz Hook

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.98	31.30	0.482	2.10
5	7.99	31.30	0.480	2.22
10	7.97	31.34	0.472	2.05
20	7.57	31.97	0.406	2.24
30	7.40	32.43	0.356	2.32
50	7.10	33.10	0.303	2.39
75	6.78	33.69	0.220	2.44
99	6.76	33.74	0.208	2.49
124	6.78	33.74	0.213	2.45

STA 102-36 47° 14.3' N WEATHER c.
11 May 55 123° 32.2' W WIND WxN 23
2159 (+8) DEPTH 97 fm 48°/45°F
Race Rocks

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.80	31.52	0.455	2.20
5	7.81	31.54	0.455	2.20
10	7.76	31.59	0.443	2.15
20	7.62	31.92	0.403	2.12
29	7.56	32.06	0.389	2.20
48	7.36	32.48	0.345	2.15
73	6.83	33.46	0.231	2.58
97	6.75	33.79	0.208	2.53
127	6.70	33.79	0.203	2.51
156	6.70	33.81	0.205	2.45

STA 102-37 47° 15.9' N WEATHER b.c
11 May 55 123° 41.1' W WIND WxS 22
2311 (+8) DEPTH 102 fm 47°/45°F
Beechy Head

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.80	31.67	0.450	2.20
5	7.82	31.67	0.448	2.20
10	7.78	31.67	0.446	2.17
20	7.67	31.69	0.414	2.24
30	7.66	31.84	0.413	2.28
50	7.52	31.91	0.382	2.20
75	6.78	32.10	0.232	2.39
100	6.49	32.09	0.188	2.58
140	6.48	32.10	0.184	2.51
180	6.48	32.10	0.182	2.48

STA 102-38 47° 17.8' N WEATHER b.c.
12 May 55 123° 52.3' W WIND W 13
0024 (+8) DEPTH 96 fm 46°/44°F
Otter Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.83	31.65	0.577	2.09
5	7.82	31.68	0.451	2.20
10	7.80	31.68	0.440	2.10
20	7.65	31.71	0.410	2.22
30	7.55	32.10	0.387	2.20
50	7.30	32.57	0.345	2.35
75	7.04	33.01	0.287	2.53
100	6.74	33.58	0.223	2.63
130	6.50	33.90	0.189	2.58
160	6.50	33.90	0.185	2.26

STA 102-39 48° 18.0' N WEATHER 60
12 May 55 124° 02.9' W WIND SWxW 6
0144 (+8) DEPTH 103 fm 46°/44°F
Pillar Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.90	31.65	0.599	2.10
5	7.90	31.66	0.470	2.20
10	7.89	31.65	0.473	2.20
20	7.88	31.67	0.465	2.24
30	7.70	31.93	0.415	2.24
49	7.54	32.21	0.385	2.24
73	7.10	32.82	0.307	2.24
96	6.88	33.36	0.244	2.44
134	6.39	33.90	0.179	2.53
173	6.40	33.91	0.179	2.58

STA 102-40 47° 25.2' N WEATHER 63
12 May 55 122° 41.1' W WIND Calm
0906 (+8) DEPTH 52 fm 45°/42°F
Deception Island

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.24	30.05	0.503	2.09
5	8.24	30.16	0.506	2.05
10	8.22	30.26	0.503	2.09
20	8.22	30.34	0.504	2.10
30	8.16	30.54	0.484	2.11
50	7.98	30.94	0.456	2.10
75	7.73	31.54	0.415	2.22

STA 102-41 48° 24.9' N WEATHER o. 12 May 55 122° 36.0' W WIND Calm 1230 (+8) DEPTH 20 fm 47°/44°F Dewey				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.32	24.20	0.583	1.63
5	8.30	24.20	0.574	1.72
10	8.26	27.26	0.554	1.86
20	8.30	28.39	0.535	2.04
30	8.34	28.65	0.535	2.01

STA 102-42 48° 21.4' N WEATHER 50 12 May 55 122° 33.4' W WIND SSE 4 1308 (+8) DEPTH 7 fm 46°/43°F Goat Island				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.96	4.43	0.707	0.69
2	8.86	16.76	0.629	1.24
4	8.26	27.46	0.544	1.93
6	8.10	27.80	0.515	2.10
10	8.07	28.05	0.512	2.20

STA 102-43 48° 18.0' N WEATHER o. 12 May 55 122° 29.6' W WIND S 6 1353 (+8) DEPTH 14 fm 49°/47°F Strawberry Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.18	6.51	0.688	0.86
2	9.03	14.31	0.646	1.08
5	8.60	20.81	0.594	1.47
10	8.01	28.04	0.504	2.20
20	7.78	29.04	0.469	2.37

STA 102-44 48° 13.8' N WEATHER 60 12 May 55 122° 33.4' W WIND S 6 1441 (+8) DEPTH 42 fm 46°/44°F Demock Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.06	25.53	0.813	0.56
5	8.71	27.44	0.672	0.93
10	8.06	28.59	0.513	1.96
20	7.86	29.16	0.488	2.31
30	7.82	29.28	0.493	2.19
50	7.70	29.43	0.482	2.22
75	7.64	29.48	0.444	----

STA 102-45 48° 06.2' N WEATHER c.
12 May 55 122° 32.2' W WIND NW 4
1552 (+8) DEPTH 42 fm 45°/43°F
Greenbank

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.84	24.92	0.869	0.41
5	9.41	27.47	0.708	0.44
10	8.20	28.60	0.552	1.67
20	7.74	29.36	0.480	2.20
30	7.69	29.42	0.464	2.34
40	7.59	29.49	0.422	2.34
50	7.58	29.50	0.419	2.59
60	7.56	29.51	0.369	2.24

STA 102-46 48° 06.4' N WEATHER c.
12 May 55 122° 29.3' W WIND NW 4
1630 (+8) DEPTH 82 fm 46°/44°F
East Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.72	25.37	0.924	0.67
5	9.20	27.27	0.761	0.75
10	8.42	28.43	0.586	1.41
20	7.93	29.15	0.526	2.09
30	7.81	29.38	0.512	2.20
50	7.73	29.43	0.498	2.26
75	7.64	29.53	0.467	2.29
100	7.62	29.55	0.461	2.44
130	7.60	29.56	0.450	2.44

STA 102-47 48° 02.9' N WEATHER c.
12 May 55 122° 22.6' W WIND NW 4
1741 (+8) DEPTH 90 fm 47°/46°F
Camano Head, West of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.96	24.24	0.810	0.39
5	9.74	26.46	0.807	0.28
10	8.38	28.65	0.588	1.59
20	8.08	29.17	0.554	1.98
30	7.87	29.42	0.529	2.15
50	7.83	29.44	0.528	2.15
75	7.70	29.50	0.506	2.29
100	7.60	29.57	0.457	2.23
125	7.55	29.63	0.450	2.43
150	7.51	29.66	0.443	2.44

STA 102-48 48° 06.4' N WEATHER c.
12 May 55 122° 22.2' W WIND NW 2
1838 (+8) DEPTH 67 fm 48°/45°F
Port Susan, Middle of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	10.10	15.84	0.766	0.75
5	8.64	27.81	0.642	1.24
10	8.31	28.47	0.565	1.62
20	8.04	29.05	0.523	1.87
30	7.85	29.26	0.492	2.15
50	7.76	29.42	0.442	2.29
70	7.74	29.49	0.406	2.44
90	7.42	29.67	0.388	2.56
110	7.37	29.83	0.416	2.72
122	7.42	29.87	0.384	3.31

STA 102-49 48° 09.3' N WEATHER c. 12 May 55 122° 25.6' W WIND NW 2 1945 (+8) DEPTH 55 fm 46°/43°F Port Susan, Head of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.60	15.81	0.734	1.04
5	8.36	28.22	0.574	1.18
10	8.04	28.86	0.522	2.06
20	7.83	29.23	0.495	2.12
30	7.81	29.35	0.507	2.01
50	7.74	29.44	0.432	2.30
70	7.71	29.49	0.420	2.24
90	7.56	29.61	0.383	2.49

STA 102-50 48° 04.0' N WEATHER c. 12 May 55 122° 19.6' W WIND SW 3 2052 (+8) DEPTH 69 fm 45°/43°F Camano Head, East of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.08	19.00	0.803	0.38
5	8.48	28.35	0.594	1.42
10	8.42	28.76	0.625	1.70
20	8.06	29.14	0.539	1.91
30	7.86	29.34	0.498	2.03
50	7.79	29.42	0.493	2.24
70	7.74	29.51	0.473	2.28
90	7.57	29.62	0.393	2.46
110	7.36	29.78	0.408	2.54
121	7.36	29.83	0.406	2.89

STA 102-51 47° 58.4' N WEATHER c. 12 May 55 122° 17.1' W WIND Calm 2200 (+8) DEPTH 74 fm 45°/43°F Port Gardner				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.16	17.95	0.789	0.34
5	9.03	27.95	0.685	1.06
10	8.36	29.10	0.625	1.73
20	8.20	29.24	0.600	1.89
30	8.00	29.31	0.514	1.94
40	7.84	29.42	0.501	2.10
60	7.75	29.47	0.466	2.15
80	7.71	29.53	0.467	2.24
100	7.59	29.61	0.432	2.39
120	7.52	29.72	0.441	2.39

STA 102-52 47° 53.6' N WEATHER 50 12 May 55 122° 21.4' W WIND WSW 1 2310 (+8) DEPTH 130 fm 45°/43°F Possession Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.16	17.65	0.800	0.37
5	8.89	28.61	0.857	1.33
10	8.68	28.97	0.692	1.62
20	8.18	29.32	0.603	2.01
30	8.00	29.42	0.568	2.08
50	7.90	29.48	0.542	2.06
75	7.74	29.56	0.494	2.23
100	7.68	29.60	0.467	2.30
140	7.60	29.66	0.455	2.30
180	7.59	29.73	0.454	2.36
220	7.72	29.77	0.464	2.38

STA 103-53 47° 18.5' N WEATHER c.
14 May 55 122° 48.7' W WIND ENE 8
0600 (+8) DEPTH 16 fm 44°/44°F
Dutchers Cove

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	11.71	27.92	0.831	0.41
5	10.54	28.18	0.760	0.37
10	9.30	28.42	0.753	0.92
15	8.60	28.63	0.626	1.60
20	8.26	28.71	0.555	2.25
25	8.28	28.64	0.562	2.24

STA 103-54 47° 15.7' N WEATHER 10
14 May 55 122° 51.2' W WIND ENE 5
0730 (+8) DEPTH 29 fm 46°/45°F
Heron Island

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.15	28.24	0.838	0.34
5	9.70	28.33	0.853	0.46
10	9.23	28.55	0.778	0.88
20	8.64	28.75	0.676	1.66
30	8.41	28.86	0.628	1.96
40	8.39	28.87	0.609	1.99

STA 103-55 47° 13.0' N WEATHER c.
14 May 55 122° 49.3' W WIND NE 5
0854 (+8) DEPTH 26 49°/46°F
Whiteman Cove

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.59	28.48	0.851	0.65
5	9.45	28.49	0.834	0.71
10	9.16	28.57	0.773	1.04
20	8.90	28.68	0.633	1.41
30	8.56	28.82	0.628	1.89
40	8.45	28.93	0.621	1.88

STA 103-56 47° 10.0' N WEATHER c.
14 May 55 122° 47.6' W WIND ExS 9
1012 (+8) DEPTH 50 fm 50°/47°F
Devils Head

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.31	28.60	0.758	0.95
5	9.14	28.60	0.749	0.97
10	8.94	28.64	0.703	1.21
25	8.60	28.84	0.641	1.72
50	8.46	28.95	0.615	1.82
75	8.44	28.98	0.630	1.82

STA 103-57 47° 07.2' N WEATHER b.c.
 14 May 55 122° 42.4' W WIND Calm
 1230 (+8) DEPTH 67 fm 53°/48°F
 Nisqually Reach

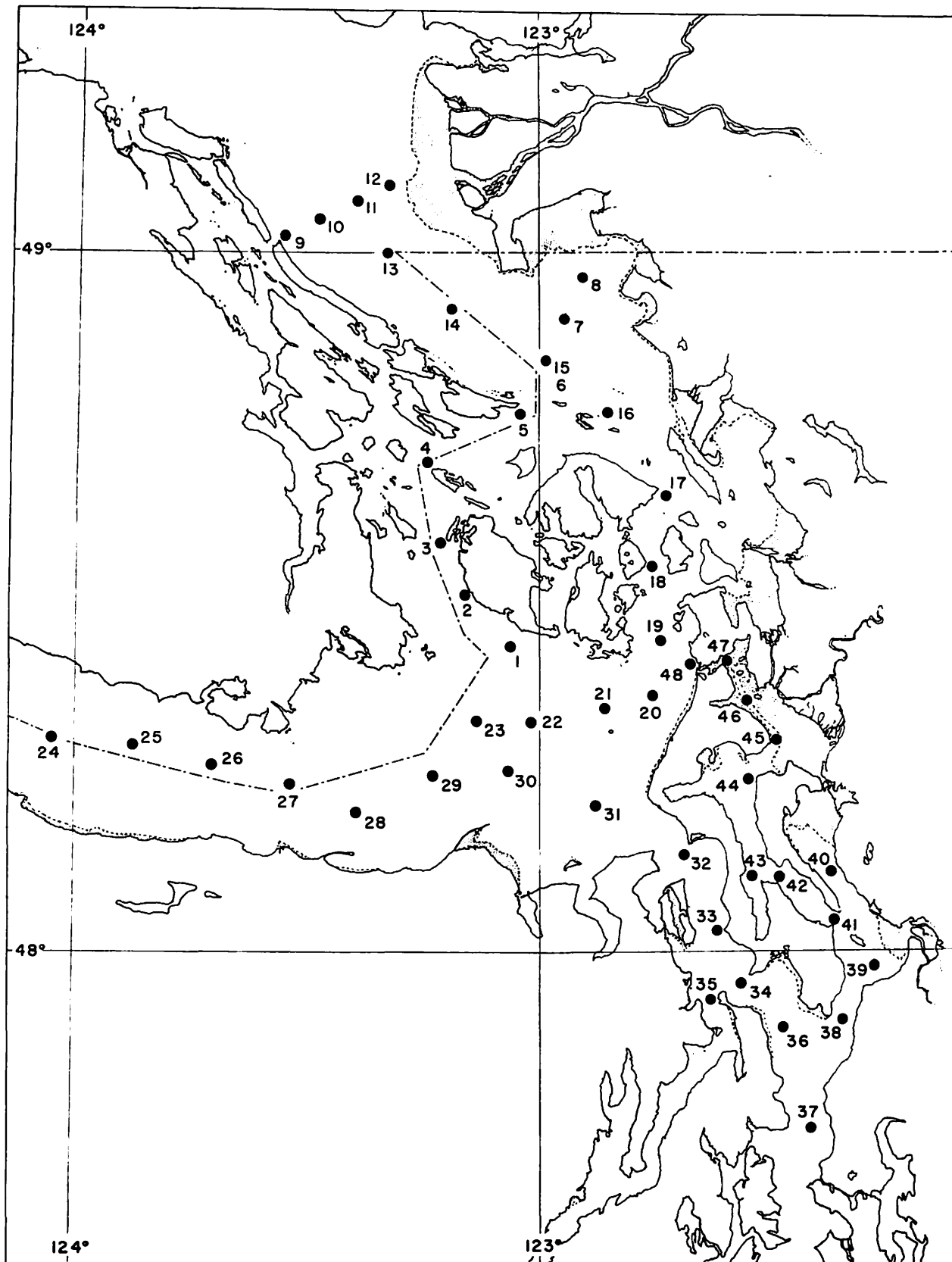
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	10.39	21.65	0.724	1.21
5	8.92	28.68	0.734	1.52
10	8.65	28.78	0.604	1.70
20	8.46	28.93	0.416	1.99
40	8.41	28.98	0.625	1.99
60	8.38	29.05	0.463	2.03

STA 103-58 47° 11.0' N WEATHER b.c.
 14 May 55 122° 38.0' W WIND Calm
 1320 (+8) DEPTH 94 fm 54°/48°F
 Gordon Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	11.70	28.09	0.737	----
10	8.68	28.79	0.702	----
20	8.62	28.88	0.660	----
50	8.39	29.04	0.625	----
100	8.14	29.14	0.611	----
150	8.27	29.20	0.603	----



Oceanographic Station Locations
 BROWN BEAR Cruise 109
 13-16 July 1955

STA 109-1 48° 26.2' N WEATHER b.
13 July 55 123° 03.5' W WIND SW 5
1430 (+8) DEPTH 106 fm 57°/54°F
Eagle Point, Southwest of

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	10.62	30.44	0.425	1.52
5	10.14	30.48	0.420	1.74
10	9.38	30.57	0.342	1.94
20	9.27	30.62	0.334	1.71
30	9.11	30.81	0.329	2.16
50	8.85	31.17	0.312	2.78
75	7.92	32.16	0.305	2.40
100	7.78	32.37	0.285	2.33
104	8.05	32.05	0.307	2.24
120	7.56	32.63	0.267	2.37
150	7.34	32.87	0.250	2.32

STA 109-2 48° 30.1' N WEATHER b.c.
13 July 55 123° 08.7' W WIND SSE 1
1610 (+8) DEPTH 170 fm 57°/54°F
Lime Kiln Point

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.36	30.78	0.397	2.00
5	9.18	30.87	0.390	2.03
10	9.16	30.87	0.387	1.95
20	9.14	30.92	0.386	1.95
30	9.06	30.98	0.380	2.15
50	8.99	31.12	0.379	2.26
75	8.65	31.43	0.362	1.78
100	8.35	31.73	0.331	1.94
143	7.92	32.27	0.245	2.26
190	7.69	32.46	0.234	2.30
238	7.59	32.57	0.271	2.24

STA 109-3 48° 35.3' N WEATHER b.c.
13 July 55 123° 12.3' W WIND SxE 6
1742 (+8) DEPTH 150 fm 61°/56°F
Kellett Bluff

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	10.28	29.61	0.464	1.79
5	9.99	29.62	0.440	1.75
10	9.77	29.74	0.427	1.61
20	9.51	30.04	0.413	1.62
30	9.49	30.17	0.412	2.19
50	9.06	30.89	0.379	2.27
75	8.42	31.64	0.339	2.35
100	8.19	31.89	0.315	2.46
145	8.37	31.67	0.329	2.23
193	7.89	32.29	0.289	2.36
240	7.68	32.48	0.281	2.28

STA 109-4 48° 42.1' N WEATHER b.c.
13 July 55 123° 13.9' W WIND Calm
1927 (+8) DEPTH 59°/58°F
Turn Point

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	10.80	29.16	0.521	1.70
5	10.51	29.23	0.508	1.77
10	10.44	29.26	0.501	1.73
20	10.27	29.38	0.478	1.75
30	10.13	29.50	0.448	----
50	9.07	30.50	0.377	1.74
75	8.18	31.79	0.309	2.42
100	7.82	32.27	0.290	2.54
150	7.68	32.45	0.272	2.44
190	7.69	32.43	0.280	2.46
238	7.64	32.50	0.276	2.64
287	7.60	32.56	0.275	2.68
334	7.56	32.61	0.268	2.51

STA 109-5 48° 46.4' N WEATHER b.c.
13 July 55 123° 02.0' W WIND WSW 5
2125 (+8) DEPTH 107 fm 59°/58°F
East Point, Southeast of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	11.69	26.71	0.520	1.44
5	11.01	27.70	0.494	1.49
10	10.44	28.79	0.459	1.76
20	9.75	29.45	0.423	1.81
30	9.54	29.81	0.405	2.18
50	9.03	30.39	0.383	2.20
75	8.69	30.93	0.360	2.34
100	8.33	31.39	0.329	2.22
140	8.00	31.95	0.301	2.22
180	7.86	32.22	0.289	2.37

STA 109-6 48° 50.7' N WEATHER b.c.
13 July 55 122° 59.6' W WIND SSE 4
2232 (+8) DEPTH 115 fm 60°/59°F
Alden Point, North of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	13.50	21.65	0.581	0.97
5	11.64	26.71	0.529	1.42
10	11.33	28.23	0.462	2.00
20	10.26	28.81	0.014	1.78
30	9.74	29.31	0.433	2.18
50	9.50	29.61	0.400	2.12
75	9.11	30.10	0.395	2.27
100	8.85	30.57	0.375	2.28
140	8.59	30.91	0.357	2.17
170	8.50	31.12	0.347	2.27
200	8.16	31.75	0.317	2.38

STA 109-7 48° 54.5' N WEATHER b.
14 July 55 122° 57.2' W WIND SE 10
0004 (+8) DEPTH 67 fm 57°/55°F
Point Roberts, Southeast of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	13.13	24.67	0.565	1.03
5	10.56	27.88	0.478	1.57
10	9.91	28.97	0.451	1.78
20	9.45	29.60	0.419	1.75
30	9.35	29.69	0.412	2.12
50	9.19	29.97	0.403	2.17
70	9.19	30.01	0.401	2.27
100	8.78	30.64	0.369	2.18

STA 109-8 48° 57.8' N WEATHER b.
14 July 55 122° 54.4' W WIND SE 8
0055 (+8) DEPTH 17 fm 58°/56°F
Boundary Bay

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	15.97	22.03	0.761	0.21
5	10.96	26.64	0.554	1.35
10	10.96	27.86	0.560	1.23
15	9.82	29.40	0.419	1.98
20	9.48	29.76	0.405	2.22
25	9.47	29.87	0.404	2.22

STA 109-9 49° 01.4' N WEATHER b.
14 July 55 123° 33.5' W WIND NNW 8
0500 (+8) DEPTH 80 fm 62°/59°F
Off Porlier Pass

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	16.06	5.77	0.674	0.70
5	12.70	22.74	0.572	0.82
10	11.99	27.21	0.578	1.06
20	10.73	28.42	0.494	1.46
30	10.39	29.02	0.486	1.99
50	9.53	29.48	0.432	2.28
75	8.76	30.02	0.399	2.39
100	8.43	30.33	0.397	2.45

STA 109-10 49° 01.7' N WEATHER b.
14 July 55 123° 29.1' W WIND NNW 8
0605 (+8) DEPTH 187 fm 62°/59°F
Porlier Pass, Northeast of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	17.25	7.27	0.661	0.30
5	15.09	16.78	0.620	0.10
10	12.25	26.55	0.586	0.84
20	10.65	28.39	0.457	1.44
29	9.81	29.05	0.416	2.16
49	9.23	29.60	0.399	2.29
73	8.49	29.95	0.377	2.49
97	8.28	30.07	0.385	2.38
146	8.57	30.61	0.383	1.99
175	8.54	30.66	0.381	2.02
				2.03
219	8.18	30.78	0.376	2.03
262	8.11	30.84	0.373	2.15
306	8.11	30.86	0.367	2.27

STA 109-11 49° 03.7' N WEATHER b.
14 July 55 123° 25.0' W WIND WNW 11
0754 (+8) DEPTH 150 fm 65°/61°F
Frazer River Lightship, SW of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	15.55	4.11	0.656	2.17
5	13.40	22.47	0.529	0.25
10	10.93	28.12	0.485	1.15
20	10.02	28.86	0.435	1.43
30	9.74	29.14	0.426	1.79
50	8.91	29.79	0.397	1.99
75	8.39	29.98	0.371	2.20
100	8.13	30.21	0.393	2.44
144	8.48	30.62	0.380	2.51
192	8.13	30.74	0.382	2.16
240	8.34	30.88	0.362	2.16

STA 109-12 49° 05.8' N WEATHER b.
14 July 55 123° 20.0' W WIND NW 10
0930 (+8) DEPTH 72 fm 65°/64°F
Off Frazer River Lightship

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	16.68	4.78	0.669	1.26
5	13.03	25.05	0.606	0.63
10	10.99	27.94	0.469	1.45
20	9.49	29.31	0.409	1.81
30	8.97	29.69	0.402	2.23
50	8.39	29.99	0.396	2.36
75	8.65	30.38	0.386	2.28
100	8.72	30.72	0.376	2.21

STA 109-13 49° 00.5' N WEATHER b.
14 July 55 123° 19.5' W WIND NxE 4
1038 (+8) DEPTH 112 fm 62°/61°F
Southern Georgia Strait

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	17.57	0.50	0.635	2.98
5	12.20	24.29	0.559	1.28
10	10.35	27.18	0.466	1.77
20	9.57	29.24	0.427	1.90
29	9.16	29.64	0.413	2.28
49	8.70	29.98	0.397	2.31
73	8.99	30.22	0.391	2.14
97	8.88	30.39	0.383	2.10
136	8.56	30.68	0.373	2.10
194	8.48	31.08	0.352	2.28

STA 109-14 48° 53.7' N WEATHER b.
14 July 55 123° 12.0' W WIND Calm
1208 (+8) DEPTH 75 fm 69°/64°F
Point Roberts, Southwest of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	18.30	7.63	0.671	1.89
5	12.70	23.21	0.578	1.70
10	11.45	27.43	0.520	1.42
20	9.73	28.95	0.451	1.84
29	8.92	29.70	0.414	2.23
49	8.76	30.08	0.400	2.28
73	8.56	30.22	0.399	2.36
97	8.79	30.47	0.390	2.18
122	8.72	30.73	0.372	2.20

STA 109-15 48° 51.0' N WEATHER b.
14 July 55 122° 58.8' W WIND ESE 4
1340 (+8) DEPTH 125 fm 59°/58°F
Alden Point, North of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.84	27.45	0.473	1.73
5	10.14	28.47	0.410	1.80
10	9.82	28.83	0.434	1.70
20	9.47	29.44	0.412	1.83
30	9.48	29.47	0.416	2.13
50	9.43	29.61	0.409	2.08
75	9.29	29.87	0.403	2.12
100	8.66	30.81	0.357	2.17
140	8.67	30.82	0.360	2.19
180	8.62	30.91	0.357	2.18
220	8.38	31.33	0.335	2.43

STA 109-16 48° 46.0' N WEATHER b.
14 July 55 122° 50.9' W WIND
1459 (+8) DEPTH 80 fm 59°/58°F
Ewing Point, East of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	11.95	26.00	0.556	1.20
5	10.68	27.70	0.489	1.65
10	10.03	28.80	0.443	1.76
20	9.67	29.40	0.430	1.77
30	9.48	29.70	0.413	2.10
50	9.38	29.85	0.410	2.06
75	9.32	29.99	0.409	2.11
100	8.82	30.75	0.371	2.27
140	8.71	30.97	0.360	2.24

STA 109-17 48° 38.8' N WEATHER b.
14 July 55 122° 43.5' W WIND SSW 8
1613 (+8) DEPTH 57 fm 62°/57°F
Peapod Rocks, East of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.82	28.37	0.525	1.51
5	10.25	29.01	0.500	1.70
14	9.94	29.56	0.477	1.80
24	9.97	29.70	0.472	1.89
43	9.96	29.71	0.472	1.91
67	9.89	29.87	0.458	1.92
90	9.51	30.25	0.432	1.94

STA 109-18 48° 32.8' N WEATHER b.
14 July 55 122° 45.2' W WIND SSE 6
1725 (+8) DEPTH 66 fm 58°/55°F
Black Rock, Northeast of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.95	29.96	0.475	2.20
5	9.82	30.01	0.463	1.91
10	9.69	30.08	0.450	2.16
20	9.60	30.22	0.433	2.20
30	9.47	30.41	0.430	2.16
50	9.15	30.77	0.404	2.17
80	9.04	30.94	0.396	2.23
110	8.94	31.03	0.381	2.17

STA 109-19 48° 26.8' N WEATHER b.
14 July 55 122° 44.1' W WIND SSE 9
1833 (+8) DEPTH 44 fm 54°/52°F
Lawson Reef, North of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.39	29.97	0.481	1.82
5	10.22	30.01	0.482	1.83
10	9.84	30.17	0.455	1.86
20	9.59	30.30	0.014	1.87
30	9.49	30.45	0.426	2.14
50	8.97	30.99	0.382	2.17
75	8.55	31.47	0.352	2.41

STA 109-20 48° 21.8' N WEATHER b.
14 July 55 122° 45.3' W WIND SSW 1
1937 (+8) DEPTH 48 fm
Lawson Reef, South of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.05	30.35	0.470	1.90
5	10.01	30.35	0.466	1.88
10	9.95	30.35	0.463	1.71
20	9.80	30.35	0.464	1.94
30	9.26	30.67	0.408	2.20
50	8.82	31.21	0.372	2.33
80	8.15	32.00	0.317	2.08

STA 109-21 48° 20.8' N WEATHER b. 14 July 55 122° 51.6' W WIND WSW 17 2045 (+8) DEPTH 54 fm 53°/52°F Smith Island, North of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.89	30.24	0.471	1.86
5	9.95	30.26	0.469	1.94
9	9.78	30.37	0.449	1.93
18	9.47	30.59	0.417	1.93
27	9.24	30.82	0.406	2.10
46	8.42	31.65	0.402	2.27
64	8.17	31.96	0.319	2.29
82	8.06	32.05	0.313	2.32

STA 109-22 48° 20.2' N WEATHER b. 14 July 55 123° 00.4' W WIND WxS 17 2210 (+8) DEPTH 93 fm 53°/52°F Hein Bank, Southeast of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.70	30.69	0.446	1.84
5	9.71	30.70	0.446	1.83
10	9.70	30.71	0.444	1.68
20	9.67	30.74	0.439	1.59
29	9.63	30.73	0.439	1.55
49	9.00	31.03	0.392	1.90
73	7.85	32.26	0.310	2.35
97	7.32	32.87	0.256	2.20
126	7.19	33.03	0.249	2.48
155	7.13	33.12	0.237	2.47

STA 109-23 48° 19.3' N WEATHER b. 14 July 55 123° 09.0' W WIND WSW 20 2356 (+8) DEPTH 67 fm 53°/52°F Hein Bank, Southwest of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.53	30.63	0.440	2.06
5	9.53	30.63	0.440	2.06
10	9.53	30.63	0.438	1.97
20	9.25	30.82	0.406	1.98
30	8.87	31.18	0.375	2.27
49	8.37	31.74	0.344	2.20
79	7.65	32.55	0.286	2.43
108	6.62	33.58	0.203	2.58

STA 109-24 48° 18.5' N WEATHER c. 15 July 55 124° 03.5' W WIND NW 13 0415 (+8) DEPTH 103 fm 52°/51°F Pillar Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.20	31.39	0.450	1.49
5	9.20	31.40	0.448	1.59
10	9.20	31.40	0.446	1.76
20	9.18	31.44	0.433	1.90
30	8.57	31.75	0.367	2.20
50	7.90	32.43	0.308	2.25
75	6.77	33.44	0.220	2.54
100	6.27	33.87	0.177	2.55
140	6.27	33.90	0.170	2.39
180	6.25	33.91	0.169	3.00

STA 109-25 48° 18.0' N WEATHER c.
15 July 55 123° 53.3' W WIND WxN 12
0555 (+8) DEPTH 99 fm 54°/53°F
Otter Point

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.31	31.21	0.450	1.72
5	9.32	31.23	0.450	2.26
10	9.25	31.25	0.439	1.87
20	9.22	31.26	0.439	1.90
30	9.19	31.27	0.436	2.06
50	8.46	32.08	0.360	2.24
75	7.19	33.12	0.252	2.34
100	6.35	33.74	0.180	2.48
130	6.23	33.89	0.164	2.64
160	6.18	33.89	0.164	2.59

STA 109-26 48° 16.4' N WEATHER b.
15 July 55 123° 41.9' W WIND WxN 8
0742 (+8) DEPTH 102 fm 54°/52°F
Beechy Head

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.71	30.83	0.463	2.01
5	9.57	30.86	0.457	2.30
7	9.51	30.90	0.447	1.94
19	9.30	31.09	0.427	1.99
28	8.85	31.47	0.392	2.44
47	7.70	32.49	0.295	2.56
71	7.36	32.96	0.275	2.58
94	6.97	33.41	0.239	2.51
131	6.86	33.50	0.227	2.49
169	6.42	33.75	0.186	2.66

STA 109-27 48° 15.3' N WEATHER b.
15 July 55 123° 32.3' W WIND WxS 8
0908 (+8) DEPTH 100 fm 54°/52°F
Race Rocks

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.84	30.72	0.470	2.00
5	9.68	30.74	0.464	2.02
10	9.44	30.92	0.430	1.94
20	8.37	31.83	0.282	2.06
30	8.16	32.10	0.317	2.51
49	7.99	32.24	0.317	2.46
74	7.26	32.95	0.256	2.52
99	6.64	33.58	0.204	2.60
128	6.55	33.69	0.175	2.60
158	6.46	33.77	0.187	2.59

STA 109-28 48° 12.0' N WEATHER b.
15 July 55 123° 23.0' W WIND WxN 8
1030 (+8) DEPTH 72 fm 52°/51°F
Ediz Hook

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	10.11	30.90	0.481	1.95
5	9.90	30.90	0.466	1.93
15	9.53	31.14	0.433	1.90
25	7.98	32.30	0.307	2.32
45	7.42	32.90	0.267	2.36
70	6.85	33.45	0.228	2.48
95	6.70	33.57	0.211	2.38
120	6.67	33.64	0.208	2.41

STA 109-29 48° 14.6' N WEATHER b. 15 July 55 123° 13.6' W WIND SW 5 1147 (+8) DEPTH 82 fm 58°/55°F New Dungeness, Northwest of					STA 109-30 48° 15.6' N WEATHER b. 15 July 55 123° 03.8' W WIND Calm 1302 (+8) DEPTH 93 fm 57°/54°F New Dungeness, Northeast of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)	Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.00	30.62	0.459	2.28	0	10.27	30.38	0.465	1.97
5	10.06	30.64	0.461	2.26	5	10.07	30.38	0.462	1.95
10	10.05	30.62	0.460	2.24	10	9.70	30.45	0.448	1.93
20	9.32	30.88	0.410	1.89	20	9.60	30.50	0.434	1.92
30	8.80	31.26	0.367	2.14	29	9.38	30.85	0.402	2.18
49	8.48	31.64	0.341	2.12	49	8.62	31.47	0.353	2.30
74	8.46	31.67	0.336	2.25	73	8.12	32.05	0.312	2.35
98	7.77	32.73	0.263	2.33	97	7.62	32.60	0.274	2.17
128	7.06	33.20	0.231	2.37	127	7.04	33.20	0.229	2.38
					156	7.00	33.24	0.225	2.64

STA 109-31 48° 12.5' N WEATHER b. 15 July 55 122° 52.5' W WIND SW 4 1425 (+8) DEPTH 53 fm 58°/56°F Protection Island					STA 109-32 48° 08.1' N WEATHER 10 15 July 55 122° 41.3' W WIND SW 6 1550 (+8) DEPTH 65 fm 60°/56°F Port Townsend				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)	Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.93	30.45	-----	2.29	0	10.56	29.77	0.425	1.94
5	9.95	30.46	0.410	2.07	5	9.80	30.26	0.403	1.95
10	9.57	30.60	0.398	2.08	10	9.43	30.54	0.386	2.79
20	9.46	30.63	0.396	1.99	20	9.24	30.82	0.378	2.36
30	9.42	30.71	0.396	2.21	30	9.20	30.84	0.354	2.24
50	8.08	32.10	0.305	2.17	50	9.15	30.98	0.375	2.19
70	7.70	32.52	0.283	2.41	75	8.93	31.27	0.362	2.15
85	7.36	32.89	0.253	2.25	100	8.64	31.52	0.342	2.24

STA 109-33 48° 01.9' N WEATHER b.
15 July 55 122° 37.8' W WIND NxW 6
1703 (+8) DEPTH 62 63°/58°F
Bush Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	10.66	29.12	0.470	1.67
5	10.47	29.21	0.449	1.69
10	10.42	29.39	0.460	1.83
20	10.48	29.70	0.444	1.84
30	9.96	29.95	0.431	2.09
50	9.72	30.16	0.420	1.90
75	9.30	30.90	0.400	2.01
100	9.26	30.94	0.391	1.64

STA 109-34 47° 57.1' N WEATHER 5
15 July 55 122° 34.6' W WIND NxW 14
1800 (+8) DEPTH 60 fm 67°/58°F
Double Bluff

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	10.80	28.70	0.486	1.64
5	10.80	28.74	0.484	1.60
10	10.24	29.32	0.466	1.78
20	9.96	29.55	0.432	1.74
30	9.92	29.58	0.431	1.93
50	9.64	30.05	0.416	1.93
75	9.54	30.38	0.411	2.02
100	9.46	30.58	0.401	1.95

STA 109-35 47° 56.1' N WEATHER
15 July 55 122° 38.0' W WIND NxW 14
1855 (+8) DEPTH 64 fm 60°/57°F
Tala Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	10.92	29.22	0.494	1.61
5	11.00	29.31	0.492	1.65
10	11.00	29.42	0.484	1.64
20	10.18	29.79	0.434	1.62
30	9.90	29.96	0.425	1.95
50	9.60	30.10	0.410	2.00
75	9.42	30.49	0.400	2.08
100	9.36	30.58	0.392	2.06

STA 109-36 47° 54.1' N WEATHER 13
15 July 55 122° 28.9' W WIND NNW 9
2012 (+8) DEPTH 110 fm 58°/56°F
Point No Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	12.74	26.30	0.579	1.14
5	10.18	28.96	0.466	1.87
10	10.00	29.31	0.454	1.90
20	9.78	29.61	0.435	1.86
30	9.76	29.75	0.426	2.43
50	9.74	29.85	0.422	2.03
75	9.54	29.99	0.414	2.02
100	9.52	30.12	0.404	1.99
130	9.48	30.15	0.404	1.95
160	9.49	30.16	0.405	1.91
190	9.48	30.43	0.400	1.95

STA 109-37 47° 44.9' N WEATHER 25
15 July 55 122° 25.8' W WIND NxW 13
2151 (+8) DEPTH 162 fm 59°/57°F
Point Jefferson

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	13.34	26.75	0.631	0.99
5	13.08	27.77	0.539	1.31
10	11.28	28.61	0.541	1.54
20	10.44	29.15	0.455	1.70
30	10.06	29.42	0.466	2.05
50	9.64	29.70	0.360	2.14
75	9.48	29.96	0.404	2.16
100	9.48	30.07	0.400	2.01
150	9.45	30.22	0.379	2.04
200	9.43	30.26	0.392	2.08
240	9.39	30.28	0.392	2.13
270	9.40	30.32	0.395	2.08

STA 109-38 47° 53.6' N WEATHER 13
15 July 55 122° 21.4' W WIND NxW 8
2344 (+8) DEPTH 132 fm 60°/58°F
Possession Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	15.38	21.24	0.621	0.43
5	12.62	26.77	0.597	1.19
10	11.19	28.52	0.537	1.63
20	10.22	29.28	0.483	1.79
30	10.18	29.30	0.480	2.01
50	9.74	29.51	0.447	2.05
75	8.77	29.75	0.353	1.92
100	9.20	30.07	0.392	2.59
140	9.36	30.15	0.395	2.09
180	9.38	30.18	0.391	2.17
220	9.33	30.23	0.384	2.24

STA 109-39 47° 58.5' N WEATHER 61
16 July 55 122° 17.0' W WIND Calm
0052 (+8) DEPTH 75 fm 59°/58°F
Port Gardner

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	16.16	13.75	0.666	0.16
5	11.82	26.83	0.553	1.38
10	10.36	29.10	0.482	1.88
20	10.02	29.29	0.466	1.89
30	9.62	29.36	0.405	2.15
40	8.94	29.40	0.357	2.21
50	8.73	29.52	0.323	2.25
70	8.53	29.75	0.298	1.96
90	8.60	29.88	0.331	0.04
110	9.12	30.08	0.391	
127	9.14	30.15	0.377	

STA 109-40 48° 06.2' N WEATHER 25
16 July 55 122° 22.0' W WIND N 2
0228 (+8) DEPTH 70 fm 59°/57°F
Port Susan, Middle of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	15.65	14.38	0.649	
5	9.90	28.62	0.454	
10	9.74	28.95	0.416	
20	9.22	29.18	0.386	
30	8.93	29.27	0.380	
40	8.18	29.29	0.412	
50	8.12	29.42	0.376	2.14
70	7.84	29.59	0.344	2.41
90	7.88	29.71	0.328	2.97
110	7.66	29.78	0.279	3.25
120	7.61	29.79	0.248	

STA 109-41 48° 02.9' N WEATHER 91
16 July 55 122° 22.5' W WIND S 6
0338 (+8) DEPTH 96 fm 57°/56°F
Camano Head, West of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	14.88	20.59	0.798	
5	10.38	27.74	0.496	1.63
10	9.80	28.64	0.439	1.59
20	9.46	29.24	0.415	2.05
30	9.32	29.36	0.406	2.12
50	8.76	29.50	0.371	2.14
75	8.40	29.70	0.372	2.27
100	8.59	29.86	0.376	2.22
125	8.72	29.97	0.372	2.21
150	8.86	30.04	0.372	2.31

STA 109-42 48° 06.7' N WEATHER 91
16 July 55 122° 29.5' W WIND NW 8
0455 (+8) DEPTH 73 fm 56°/56°F
East Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	13.52	20.64	0.849	0.14
5	12.03	24.49	0.846	0.19
10	9.40	28.70	0.410	1.93
20	9.00	29.16	0.382	----
30	8.84	29.31	0.379	2.19
50	8.65	29.41	0.370	2.43
75	8.40	29.70	0.365	2.44
100	8.46	29.76	0.363	2.41
130	8.50	29.78	0.364	2.36

STA 109-43 48° 06.2' N WEATHER
16 July 55 122° 33.1' W WIND SxE 20
0551 (+8) DEPTH 40 fm 58°/57°F
Greenbank

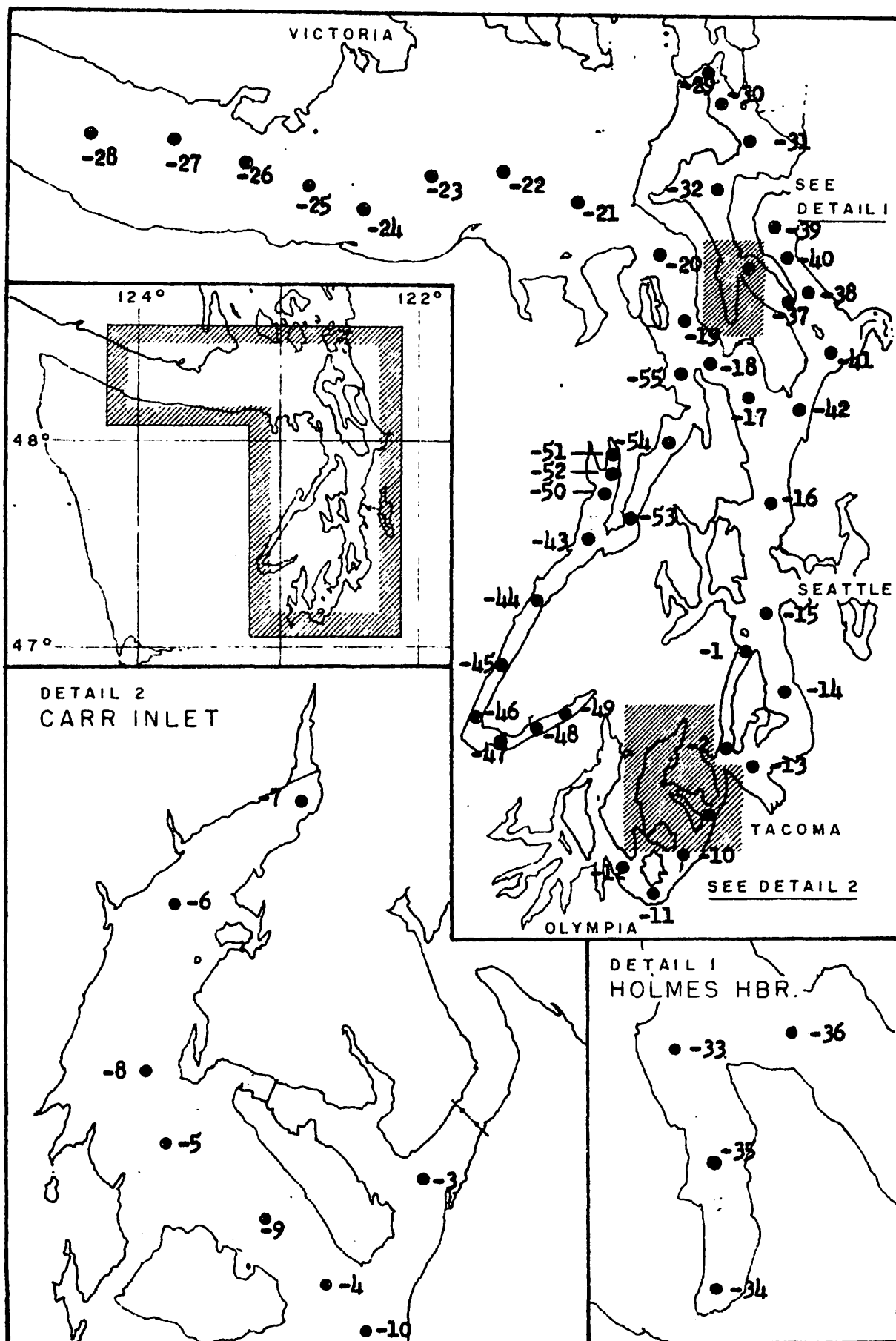
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	14.60	17.90	0.807	0.23
5	9.80	27.89	0.467	1.62
10	9.29	28.75	0.403	1.84
20	9.00	29.03	0.387	1.89
30	8.76	29.22	0.385	2.38
40	8.37	29.33	0.293	3.01
50	8.30	29.34	0.251	2.59
60	8.33	29.38	0.261	3.20

STA 109-44 48° 13.8' N WEATHER o.
16 July 55 122° 33.3' W WIND S 14
0702 (+8) DEPTH 41 fm 58°/58°F
Demock Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	13.97	9.87	0.662	1.04
5	11.55	22.81	0.704	0.67
10	9.24	28.56	0.390	1.90
15	9.16	28.77	0.386	2.14
35	8.52	29.18	0.345	2.44
55	8.30	29.35	0.334	1.75

STA 109-45 48° 18.8' N WEATHER 16 July 55 122° 29.8' W WIND SxE 15 0843 (+8) DEPTH 14 fm 58°/56°F Strawberry Point					STA 109-46 48° 21.4' N WEATHER 16 July 55 122° 33.4' W WIND SxE 13 0928 (+8) DEPTH 8 fm 58°/56°F Goat Island				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)	Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	11.78	4.67	0.669	2.43	0	11.63	19.20	0.547	1.86
2	11.94	8.21	0.622	2.25	2	11.52	20.08	0.539	1.89
5	11.18	20.03	0.511	2.09	5	9.98	26.40	0.441	2.06
10	9.78	26.82	0.414	2.28	10	9.57	27.43	0.411	2.01
20	9.16	28.06	0.387	2.60					

STA 109-47 48° 24.9' N WEATHER 16 July 55 122° 35.9' W WIND SSE 8 1011 (+8) DEPTH 16 fm 58°/56°F Dewey					STA 109-48 48° 25.2' N WEATHER 16 July 55 122° 41.2' W WIND SSE 16 1314 (+8) DEPTH 52 fm 60°/56°F Deception Island				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)	Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.53	25.61	0.464	1.75	0	9.87	29.95	0.453	1.85
5	10.25	26.44	0.434	1.91	5	9.89	29.95	0.450	2.03
10	9.94	28.68	0.438	2.01	10	9.86	29.96	0.451	1.88
20	9.84	29.75	0.430	1.76	20	9.73	30.09	0.434	2.04
					30	9.59	30.26	0.420	2.26
					50	9.05	30.96	0.380	2.30
					80	8.45	31.63	0.333	2.38



Oceanographic Station Locations
BROWN BEAR Cruise 111
7-11 November 1955

STA 111-1 47° 30.5' W WEATHER 42 7 Nov 55 122° 29.1' W WIND SW 4 1212 (+8) DEPTH 63 fm 49°/49°F Point Vashon				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.04	26.88	0.471	1.83
5	10.28	29.78	0.399	1.84
10	10.32	29.88	0.394	2.17
20	10.32	29.93	0.391	2.12
30	10.28	29.97	0.393	2.47
50	10.28	30.00	0.386	2.68
75	10.28	30.07	0.382	2.64
100	10.26	30.13	0.376	2.66

STA 111-2 47° 21.0' N WEATHER 42 7 Nov 55 122° 32.6' W WIND Calm 1344 (+8) DEPTH 57 fm 48°/48°F Spring Beach				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.34	28.78	0.437	2.59
5	10.40	29.22	0.417	2.67
10	10.36	29.61	0.402	2.49
20	10.31	29.96	0.388	2.35
30	10.31	29.96	0.391	2.68
50	10.27	30.08	0.385	2.58
75	10.24	30.23	0.373	2.66
95	10.20	30.29	0.373	2.58

STA 111-3 47° 14.7' N WEATHER 42 7 Nov 55 122° 34.4' W WIND Calm 1516 (+8) DEPTH 37 fm 49°/49°F Day Island				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.46	29.55	0.422	2.70
10	10.42	29.70	0.403	2.75
20	10.40	29.75	0.398	2.64
30	10.37	29.76	0.397	2.48
50	10.34	29.82	0.397	2.71

STA 111-4 47° 12.6' N WEATHER 42 7 Nov 55 122° 37.3' W WIND Calm 1615 (+8) DEPTH 90 fm 51°/51°F Gibson Point, Southwest of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.54	29.55	0.437	1.87
5	10.54	29.57	0.436	2.47
10	10.52	29.63	0.432	2.50
20	10.45	29.75	0.397	2.50
30	10.46	29.81	0.389	2.75
50	10.51	29.83	0.389	2.62
75	10.53	29.87	0.389	2.77
100	10.52	29.86	0.386	2.75
130	10.53	29.89	0.384	2.74
160	10.49	29.93	0.385	2.64

STA 111-5 47° 15.8' N WEATHER o. 7 Nov 55 122° 42.1' W WIND Calm 1711 (+8) DEPTH 50 fm 49°/49°F South Head II				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.23	28.61	0.576	2.48
5	10.54	29.27	0.473	2.60
10	10.68	29.53	0.458	2.48
20	10.75	29.72	0.433	2.79
30	10.78	29.78	0.414	2.73
40	10.89	29.83	0.391	2.76
60	10.84	29.89	0.369	2.83
85	10.74	29.91	0.359	2.85

STA 111-6 47° 20.6' N WEATHER o. 7 Nov 55 122° 41.7' W WIND Calm 1811 (+8) DEPTH 30 fm 49°/49°F Glencove, East of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.55	28.99	0.533	2.34
5	10.73	29.39	0.507	2.45
10	10.73	29.49	0.489	2.37
20	10.82	29.74	0.417	2.33
30	10.83	29.79	0.404	2.76
40	10.84	29.78	0.402	2.76
50	10.83	29.83	0.374	2.92

STA 111-7 47° 22.5' N WEATHER 10 7 Nov 55 122° 38.1' W WIND Calm 1855 (+8) DEPTH 8 fm 49°/49°F Wauna				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.74	29.36	0.464	2.77
2	10.74	29.39	0.466	2.64
4	10.77	29.42	0.463	2.84
6	10.79	29.43	0.462	2.97
8	10.77	29.44	0.462	2.71
10	10.77	29.53	0.456	2.56

STA 111-8 47° 17.1' N WEATHER o. 7 Nov 55 122° 42.4' W WIND Calm 2006 (+8) DEPTH 57 fm 49°/49°F Green Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	10.50	29.12	0.502	2.58
5	10.50	29.33	0.439	2.76
10	10.50	29.52	0.422	2.62
20	10.63	29.63	0.429	2.90
30	10.64	29.67	0.431	2.80
40	10.71	29.70	0.429	2.80
50	10.73	29.79	0.405	2.98
70	10.67	29.86	0.391	2.72
90	10.69	29.90	0.360	2.82

STA 111-9 47° 14.0' N WEATHER o.
7 Nov 55 122° 39.0' W WIND Calm
2057 (+8) DEPTH 70 fm 49°/49°F
Still Harbor II

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	10.46	29.01	0.497	2.51
5	10.56	29.44	0.427	2.62
10	10.54	29.57	0.407	2.47
20	10.53	29.69	0.407	2.44
30	10.52	29.74	0.400	2.72
60	10.67	29.86	0.382	2.80
90	10.70	29.92	0.370	2.71
120	10.68	29.93	0.357	2.90

STA 111-10 47° 11.1' N WEATHER o.
7 Nov 55 122° 38.0' W WIND Calm
2147 (+8) DEPTH 96 fm 50°/50°F
Gordon Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	10.56	27.43	0.472	2.64
5	10.55	29.15	0.428	2.70
10	10.56	29.21	0.427	2.66
20	10.53	29.43	0.418	2.41
29	10.49	29.56	0.409	2.72
49	10.43	29.70	0.409	2.73
73	10.40	29.76	0.392	2.66
98	10.43	29.85	-----	2.79
127	10.44	29.88	0.386	2.71
157	10.42	29.91	0.387	2.80

STA 111-11 47° 07.2' N WEATHER 60
7 Nov 55 122° 42.8' W WIND SxW 5
2245 (+8) DEPTH 39 fm 50°/50°F
Nisqually Reach

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	10.49	28.60	0.428	2.61
5	10.53	29.13	0.422	2.67
10	10.49	29.64	0.404	2.75
20	10.50	29.69	0.403	2.55
40	10.46	29.76	0.398	2.77
60	10.45	29.75	0.398	2.76

STA 111-12 47° 10.0' N WEATHER 60
7 Nov 55 122° 47.5' W WIND S 4
2335 (+8) DEPTH 52 fm 52°/52°F
Devils Head

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	10.61	28.65	0.441	2.52
5	10.64	28.85	0.434	2.69
10	10.65	29.06	0.430	2.26
20	10.58	29.52	0.410	2.35
30	10.55	29.56	0.409	2.71
50	10.52	29.66	0.402	2.69
75	10.53	29.68	0.400	2.69

STA 111-13 47° 19.3' N WEATHER 10
8 Nov 55 122° 27.9' W WIND SSW 6
0614 (+8) DEPTH 97 fm 53°/52°F
Brown Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.68	21.80	0.497	0.46
5	10.24	29.44	0.427	2.34
10	10.29	29.83	0.412	2.42
20	10.31	29.92	0.389	2.30
30	10.29	29.97	0.390	2.64
50	10.30	30.08	0.394	2.61
75	10.28	30.19		2.61
100	10.15	30.38	0.357	2.44
130	10.10	30.47	0.344	2.36
160	10.05	30.48	0.349	2.48

STA 111-14 47° 26.6' N WEATHER 50
8 Nov 55 122° 23.7' W WIND SSW 6
0747 (+8) DEPTH 135 fm 54°/53°F
Pully Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	10.10	28.52	0.481	2.48
5	10.18	28.87	0.460	2.53
10	10.19	29.38	0.444	2.58
20	10.29	29.74	0.424	2.30
30	10.29	29.97		2.41
50	10.29	30.12	0.386	2.38
75	10.22	30.28	0.373	2.55
100	10.16	30.31	0.368	2.53
140	10.04	30.46	0.352	2.47
180	9.95	30.53	0.348	2.62
220	9.94	30.54	0.344	2.66

STA 111-15 47° 34.3' N WEATHER 10
8 Nov 55 122° 26.6' W WIND SSW 7
0913 (+8) DEPTH 135 fm 52°/52°F
A;li Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	10.06	27.07	0.490	1.68
5	10.09	27.42	0.471	2.51
10	10.24	29.22	0.417	2.60
20	10.26	29.63	0.404	2.38
30	10.26	30.08	0.387	2.64
49	10.26	30.18	0.387	2.65
74	10.20	30.25	0.376	2.68
98	10.04	30.36	0.367	2.48
137	10.03	30.44	0.357	2.68
177	9.97	30.52	0.350	2.69
216	9.97	30.53	0.345	2.51

STA 111-16 47° 44.6' N WEATHER 10
8 Nov 55 122° 25.5' W WIND SSE 8
1054 (+8) DEPTH 157 fm 52°/52°F
Point Jefferson

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.86	25.08	0.513	2.44
5	9.97	28.45	0.434	2.60
10	10.00	28.84	0.424	2.50
20	10.15	29.76	0.417	2.25
30	10.16	29.97	0.407	2.54
49	10.04	30.16	0.393	2.58
74	9.93	30.28	0.382	2.62
98	9.84	30.36	0.377	2.53
147	9.94	30.43	0.363	2.65
196	9.91	30.47	0.353	2.60
236	9.93	30.51	0.353	2.76
266	9.95	30.52	0.351	2.69

STA 111-17 47° 54.1' N WEATHER o.
3 Nov 55 122° 28.5' W WIND Calm
1228 (+8) DEPTH 110 fm 54°/54°F
Point No Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.29	18.13	0.562	1.93
4	9.35	19.51	0.542	1.88
9	9.64	28.08	0.438	2.21
17	9.41	29.49	0.429	2.55
25	9.30	29.88	0.429	2.62
43	9.35	30.08	0.422	2.66
64	9.35	30.12	0.420	2.61
85	9.28	30.15	0.421	2.39
111	9.29	30.15	0.418	2.51
136	9.22	30.20	0.418	2.60
163	9.13	30.34	0.419	2.46

STA 111-18 47° 57.2' N WEATHER o.
8 Nov 55 122° 35.2' W WIND WNW 2
1326 (+8) DEPTH 65 fm 54°/54°F
Double Bluff

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.56	21.06	0.539	2.34
5	9.55	25.77	0.474	2.47
9	9.52	28.20	0.443	2.48
18	9.43	29.24	0.427	2.17
28	9.35	29.56	0.425	2.64
46	9.22	30.16	0.417	2.65
69	9.18	30.25	0.416	2.65
92	9.15	30.31	0.416	2.62

STA 111-19 48° 02.1' N WEATHER o.
8 Nov 55 122° 38.0' W WIND WNW 2
1418 (+8) DEPTH 70 fm 54°/54°F
Bush Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.49	28.13	0.446	2.56
5	9.51	28.20	0.448	2.48
9	9.43	28.74	0.437	2.48
19	9.44	28.81	0.437	2.32
28	9.28	29.74	0.427	2.68
47	9.18	30.13	0.422	2.74
71	9.09	30.34	0.417	2.73
94	9.07	30.39	0.424	2.64

STA 111-20 48° 12.6' N WEATHER o.
8 Nov 55 122° 52.7' W WIND N 2
1505 (+8) DEPTH 60 fm 52°/52°F
Port Townsend

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.20	29.87	0.431	2.64
5	9.20	29.87	0.427	2.64
10	9.19	29.91	0.430	2.64
20	9.19	29.95	0.429	2.38
30	9.15	30.10	0.429	2.64
50	9.04	30.36	0.426	2.67
71	9.03	30.56	0.425	2.70
96	8.98	30.62	0.425	2.65

STA 111-21 48° 12.6' N WEATHER o.
8 Nov 55 122° 52.8' W WIND S 3
1620 (+8) DEPTH 53 fm 53°/52°F
Protection Island

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.08	30.12	0.431	2.68
5	9.08	30.16	0.432	2.68
9	9.04	30.28	0.430	2.74
18	8.98	30.49	0.423	2.31
27	8.93	30.61	0.423	2.78
46	8.79	30.99	0.411	2.74
64	8.66	31.34	0.397	2.62
83	8.40	31.77	0.366	2.68

STA 111-22 48° 15.5' N WEATHER c.
8 Nov 55 123° 03.9' W WIND SW 3
1726 (+8) DEPTH 97 fm 52°/52°F
New Dungeness, Northeast of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.64	30.65	0.482	2.12
5	9.13	30.92	0.445	2.43
10	9.01	31.08	0.426	2.45
20	8.85	31.24	0.414	2.52
29	8.79	31.32	0.411	2.58
49	8.52	31.50	0.397	2.16
73	8.44	31.58	0.386	2.66
97	8.37	31.67	0.375	2.60
126	8.28	31.81	0.363	2.66
155	8.28	31.82	0.363	2.65

STA 111-23 48° 15.0' N WEATHER b.c.
8 Nov 55 123° 15.4' W WIND WNW 4
1833 (+8) DEPTH 77 fm 52°/52°F
New Dungeness, Northwest of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.63	30.68	0.477	2.00
5	9.48	30.79	0.462	2.13
10	9.28	30.91	0.452	2.17
20	9.10	31.05	0.440	2.24
29	8.98	31.14	0.429	2.35
49	8.80	31.31	0.411	2.52
73	8.50	31.54	0.387	2.50
97	8.34	31.77	0.367	2.59
126	8.12	32.07	0.333	2.94

STA 111-24 48° 12.0' N WEATHER 47
8 Nov 55 123° 23.9' W WIND NNE 4
1936 (+8) DEPTH 70 fm 51°/51°F
Ediz Hook

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.39	30.89	0.467	2.17
5	9.39	30.87	0.465	2.22
10	9.22	30.98	0.447	2.30
20	9.02	31.09	0.432	2.39
30	8.70	31.23	0.413	2.67
50	8.55	31.33	0.391	2.73
75	8.30	31.72	0.364	2.77
100	7.92	32.34	0.307	2.79
125	7.56	32.90	0.253	2.82

STA 111-25 48° 14.8' N WEATHER 45
8 Nov 55 123° 32.9' W WIND ENE 4
2049 (+8) DEPTH 97 fm 50°/50°F
Race Rocks

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.22	30.97	0.457	2.40
5	9.22	30.99	0.457	2.35
10	9.15	31.02	0.447	2.39
20	9.00	31.08	0.438	2.32
30	8.81	31.20	0.418	2.66
50	8.53	31.31	0.398	2.77
75	8.44	31.57	0.385	2.70
100	8.27	31.83	0.362	2.74
130	7.65	32.79	0.263	2.83
160	7.32	33.20	0.222	2.91

STA 111-26 48° 15.7' N WEATHER 45
8 Nov 55 123° 41.3' W WIND SE 4
2149 (+8) DEPTH 105 fm 50°/50°F
Beechy Head

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	8.65	31.41	0.407	2.55
4	8.64	31.40	0.408	2.61
9	8.62	31.41	0.403	2.57
17	8.59	31.43	0.399	2.37
26	8.54	31.45	0.399	2.57
44	8.50	31.48	0.398	2.62
65	8.39	31.68	0.375	2.74
87	8.27	31.82	0.358	2.69
122	7.67	32.77	0.263	2.82
157	7.05	33.52	0.187	2.88

STA 111-27 48° 18.0' N WEATHER 45
8 Nov 55 123° 53.0' W WIND SE 4
2314 (+8) DEPTH 98 fm 50°/50°F
Otter Point

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	10.30	29.88	0.533	1.39
5	9.97	30.41	0.499	1.82
10	9.68	30.80	0.467	2.00
20	9.11	31.09	0.438	2.21
30	8.95	31.22	0.429	2.48
50	8.72	31.34	0.409	2.58
75	8.48	31.83	0.372	2.56
100	8.11	32.06	0.341	2.65
130	7.37	33.07	0.277	2.73
160	6.93	33.64	0.181	2.86

STA 111-28 48° 18.2' N WEATHER 45
9 Nov 55 124° 03.0' W WIND SE 4
0022 (+8) DEPTH 105 fm 51°/51°F
Pillar Point

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	10.38	29.77	0.534	1.53
5	10.51	29.97	0.530	1.49
10	10.60	30.31	0.522	1.47
20	9.53	30.82	0.463	2.04
30	8.97	31.27	0.426	2.47
50	8.45	31.69	0.380	2.78
75	8.14	31.96	0.354	2.83
100	7.95	32.19	0.325	2.82
140	7.28	33.25	0.209	2.96
180	6.87	33.69	0.170	2.97

STA 111-29 48° 25.1' N WEATHER 61
9 Nov 55 122° 35.5' W WIND ENE 12
1123 (+8) DEPTH 23 fm 52°/52°F
Dewey

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.08	21.89	0.479	2.22
5	9.04	26.49	0.427	2.58
10	8.93	27.96	0.429	2.31
20	8.88	28.99	0.430	2.52
30	8.80	29.66	0.429	2.70

STA 111-30 48° 12.4' N WEATHER o.
9 Nov 55 122° 33.4' W WIND SE 12
1215 (+8) DEPTH 8 fm 54°/54°F
Goat Island

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.26	22.75	0.434	2.62
2	9.44	25.77	0.381	2.91
4	9.93	27.68	0.312	3.19
6	10.01	27.63	0.311	2.74
10	10.24	29.24	0.258	3.56

STA 111-31 48° 18.5' N WEATHER c.
9 Nov 55 122° 29.5' W WIND SE 11
1904 (+8) DEPTH 16 fm 54°/54°F
Strawberry Point, North of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.16	16.24	0.498	2.30
2	10.01	27.34	0.312	3.00
5	10.34	29.42	0.256	2.89
10	10.34	29.74	0.252	2.86
20	10.33	29.79	0.250	3.25

STA 111-32 48° 14.2' N WEATHER c.
9 Nov 55 122° 33.0' W WIND SSE 9
1410 (+8) DEPTH 50 fm 57°/56°F
Demock Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.98	9.16	0.632	1.39
5	9.87	26.35	0.365	2.78
10	10.35	29.02	0.348	2.78
20	10.39	29.89	0.262	2.45
30	10.34	30.03	0.238	2.99
50	10.33	30.25	0.218	3.15
70	10.32	30.31	0.214	3.28

STA 111-33 48° 06.1' N WEATHER 0.
9 Nov 55 122° 33.1' W WIND SSE 9
1536 (+8) DEPTH 40 fm 59°/57°F
Greenbank

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.20	11.80	0.629	1.23
5	9.94	26.47	0.442	2.32
10	10.29	28.70	0.354	2.66
20	10.38	29.59	0.297	2.61
30	10.35	30.02	0.252	3.08
40	10.33	30.10	0.231	2.92
50	10.35	30.10	0.233	2.88
60	10.32	30.15	0.233	3.12

STA 111-34 48° 01.5' N WEATHER 62
9 Nov 55 122° 31.8' W WIND NW 3
1629 (+8) DEPTH 20 fm 56°/55°F
Holmes Harbor, Head of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.22	14.65	0.600	1.57
5	9.73	24.65	0.494	2.22
10	10.34	29.15	0.344	2.65
20	10.38	29.74	0.287	2.55
30	10.36	29.97	0.252	2.98

STA 111-35 48° 03.8' N WEATHER 51
9 Nov 55 122° 32.0' W WIND N 2
1710 (+8) DEPTH 30 fm 54°/54°F
Holmes Harbor, Middle of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.17	13.04	0.619	1.39
5	9.89	26.57	0.442	2.60
10	10.29	28.66	0.367	2.66
20	10.39	29.59	0.307	2.46
30	10.36	29.93	0.266	2.94
40	10.34	29.04	0.252	3.02
50	10.34	30.09	0.227	3.12

STA 111-36 48° 06.5' N WEATHER 51
9 Nov 55 122° 29.4' W WIND WNW 3
1802 (+8) DEPTH 80 fm 55°/54°F
East Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.05	12.88	0.617	1.54
5	9.67	25.70	0.463	2.58
10	10.35	28.87	0.338	2.70
20	10.37	29.84	0.316	2.40
30	10.37	30.09	0.290	2.75
50	10.33	30.23	0.270	2.86
75	10.30	30.34	0.262	2.68
100	10.28	30.34	0.262	2.79
130	10.31	30.38	0.262	2.76

STA 111-37 48° 02.9' N WEATHER o. 9 Nov 55 122° 22.5' W WIND Calm 1903 (+8) DEPTH 99 fm 55°/54°F Camano Head, West of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.02	9.61	0.613	2.27
5	10.14	24.02	0.373	2.94
10	10.33	28.94	0.329	2.48
20	10.27	29.63	0.338	2.20
30	10.10	29.90	0.370	2.61
50	9.87	30.17	0.390	2.79
75	10.13	30.33	0.324	2.72
100	10.14	30.46	0.304	2.63
125	10.26	30.52	0.273	2.49
150	10.24	30.54	0.257	2.78

STA 111-38 48° 03.9' N WEATHER o. 9 Nov 55 122° 20.0' W WIND WNW 4 2001 (+8) DEPTH 70 fm 54°/53°F Camano Head, East of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.93	12.23	0.639	1.28
5	9.78	27.79	0.450	2.32
10	10.31	29.10	0.361	2.32
20	10.24	29.92	0.354	2.14
30	10.05	30.13	0.257	2.76
50	10.16	30.19	0.393	2.58
70	10.25	30.31	0.206	2.78
90	10.25	30.33	0.229	2.79
110	10.27	30.39	0.255	2.82
123	10.14	30.43	0.235	3.04

STA 111-39 48° 09.2' N WEATHER o. 9 Nov 55 122° 25.5' W WIND W 20 2114 (+8) DEPTH 60 fm 54°/52°F Port Susan, Head of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.77	6.31	0.649	1.54
5	10.20	27.52	0.376	2.58
10	10.31	29.42	0.362	2.18
20	10.44	29.84	0.385	2.27
30	10.03	29.95	0.204	2.90
50	9.73	30.10	0.159	3.12
70	10.21	30.32	0.202	3.36
90	10.29	30.42	0.203	2.75

STA 111-40 48° 06.2' N WEATHER b.c. 9 Nov 55 122° 21.9' W WIND WSW 13 2203 (+8) DEPTH 71 fm 53°/52°F Port Susan, Middle of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	8.97	6.37	0.653	1.46
5	10.12	26.64	0.412	2.34
10	10.31	29.39	0.347	2.24
20	10.38	29.75	0.317	2.02
30	10.14	29.90	0.282	2.58
50	10.17	30.15	0.202	2.56
70	10.23	30.35	0.197	2.91
90	10.33	30.48	0.221	2.70
110	10.33	30.54	0.242	2.70
136	10.15	30.55	0.228	3.06

STA 111-41 47° 58.5' N WEATHER b.c.
9 Nov 55 122° 17.0' W WIND NW 10
2333 (+8) DEPTH 78 fm 53°/52°F
Port Gardner

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.10	11.82	0.611	1.27
5	9.73	24.94	0.458	2.34
10	10.19	28.31	0.371	2.30
20	10.25	29.70	0.345	2.22
30	10.22	29.95	0.322	2.52
50	10.12	30.14	0.364	2.60
75	10.13	30.25	0.310	2.61
100	10.16	30.30	0.273	2.56
125	10.24	30.44	0.250	2.83

STA 111-42 47° 53.8' N WEATHER b.c.
10 Nov 55 122° 21.6' W WIND WSW 5
0045 (+8) DEPTH 120 fm 52°/52°F
Possession Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.57	17.99	0.570	1.74
5	10.04	25.77	0.482	2.37
10	10.13	28.62	0.405	2.32
20	10.13	29.64	0.394	2.48
29	10.04	29.87	0.398	2.52
49	9.72	30.08	0.406	2.56
73	9.66	30.17	0.406	2.64
98	9.66	30.26	0.396	2.39
137	10.06	30.43	0.322	2.68
176	10.04	30.52	0.315	2.42
216	10.03	30.52	0.318	2.60

STA 111-43 47° 39.8' N WEATHER b.c.
10 Nov 55 122° 52.5' W WIND Calm
0619 (+8) DEPTH 78 fm 50°/49°F
Pleasant Harbor

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.95	22.56	0.545	2.18
5	9.65	26.60	0.467	2.47
10	9.49	28.87	0.466	2.17
20	9.45	29.68	0.391	2.58
30	9.45	30.17	0.364	2.77
39	9.52	30.28	0.334	2.74
49	9.54	30.35	0.323	2.73
73	9.64	30.43	0.308	2.68
98	9.68	30.48	0.309	2.60
127	9.63	30.53	0.311	2.74

STA 111-44 47° 35.7' N WEATHER b.c.
10 Nov 55 122° 58.1' W WIND Calm
0724 (+8) DEPTH 97 fm 50°/49°C
Tekiu Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.71	23.08	0.497	2.34
5	9.64	26.82	0.450	2.40
10	9.51	28.49	0.453	2.00
20	9.55	29.71	0.354	2.01
30	9.57	30.20	0.325	2.36
40	9.60	30.30	0.309	2.72
50	9.56	30.33	0.318	2.72
75	9.72	30.43	0.297	2.63
100	9.71	30.50	0.307	2.58
130	9.66	30.53	0.317	2.68
160	9.59	30.56	0.317	2.50

STA 111-45 47° 28.5' N WEATHER b.c.
 10 Nov 55 123° 04.2' W WIND NE 9
 0845 (+8) DEPTH 98 fm 48°/48°F
 Eagle Creek

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.33	26.11	0.478	2.46
5	9.61	27.74	0.442	2.57
10	9.53	29.20	0.403	2.59
20	9.67	30.08	0.296	2.51
30	9.74	30.28	0.277	2.75
40	9.80	30.42	0.276	2.76
50	9.79	30.42	0.283	2.76
75	9.77	30.49	0.293	2.84
100	9.80	30.53	0.301	2.70
125	9.71	30.54	0.306	2.78
150	9.67	30.57	0.308	2.68

STA 111-46 47° 23.4' N WEATHER b.c.
 10 Nov 55 123° 07.9' W WIND N 12
 0953 (+8) DEPTH 62 fm 50°/49°F
 Musqueti Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.41	27.41	0.437	2.58
5	9.56	29.03	0.382	2.72
10	9.59	29.41	0.338	2.38
20	9.72	30.10	0.278	2.51
30	9.77	30.32	0.258	2.74
40	9.84	30.41	0.264	2.76
50	9.85	30.43	0.270	2.64
60	9.83	30.45	0.278	2.72
80	9.84	30.49	0.279	2.76
100	9.80	30.52	0.277	2.68
113	9.79	30.54	0.279	2.76

STA 111-47 47° 21.6' N WEATHER b.c.
 10 Nov 55 123° 03.7' W WIND SW 11
 1031 (+8) DEPTH 23 fm 54°/49°F
 Tahuya River

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.60	23.66	0.492	2.58
5	9.56	28.42	0.354	2.79
10	9.54	29.04	0.314	2.54
20	9.61	30.07	0.222	2.69
30	9.64	30.22	0.220	3.20
40	9.75	30.39	0.247	----

STA 111-48 47° 22.4' N WEATHER b.c.
 10 Nov 55 122° 59.5' W WIND SW 12
 1106 (+8) DEPTH 24 fm 58°/51°F
 Lynch Cove, Middle of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.70	22.34	0.510	2.59
5	9.68	24.23	0.434	2.37
10	9.52	28.86	0.309	2.62
15	9.52	29.56	0.253	2.58
20	9.50	30.08	0.202	3.10
30	9.69	30.32	0.220	3.18

STA 111-49 47° 23.8' N WEATHER b.c. 10 Nov 55 122° 55.8' W WIND SW 12 1140 (+8) DEPTH 17 fm 58°/52°F Lynch Cove, Head of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.98	18.42	0.570	1.58
2	9.93	18.54	0.570	2.07
6	9.50	28.61	0.284	2.70
10	9.50	29.09	0.250	2.79
14	9.47	29.50	0.220	3.12
18	9.45	29.76	0.180	3.31

STA 111-50 47° 45.0' N WEATHER 51 10 Nov 55 122° 49.7' W WIND NE 5 1625 (+8) DEPTH 107 fm 43°/42°F Tabook Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.88	21.82	0.570	2.32
5	9.62	27.66	0.484	2.48
10	9.51	28.61	0.484	2.42
20	9.45	29.79	0.384	2.67
30	9.57	30.16	0.317	2.80
40	9.57	30.27	0.312	2.72
60	9.62	30.41	0.280	2.92
80	9.71	30.45	0.288	2.76
100	9.72	30.52	0.302	2.80
120	9.65	30.54	0.315	2.72
140	9.61	30.58	0.320	2.76
160	9.59	30.60	0.312	2.72
180	9.58	30.62	0.305	2.51
195	9.57	30.61	0.296	2.96

STA 111-51 47° 50.0' N WEATHER o. 10 Nov 55 122° 48.8' W WIND Calm 1738 (+8) DEPTH 28 fm 44°/43°F Dabob Bay, Head of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.70	24.85	0.519	1.78
5	9.72	26.82	0.510	2.30
10	9.55	29.49	0.376	2.38
20	9.60	30.10	0.300	2.42
30	9.59	30.30	0.268	2.91
40	9.59	30.34	0.257	2.98

STA 111-52 47° 47.1' N WEATHER o. 10 Nov 55 122° 48.7' W WIND SW 3 1837 (+8) DEPTH 86 fm 42°/41°F Bolton Peninsula, East of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	9.84	23.13	0.547	2.24
5	9.66	26.53	0.484	2.42
10	9.51	28.69	0.493	2.14
20	9.52	29.91	0.362	2.42
30	9.56	30.09	0.325	2.80
40	9.56	30.25	0.314	2.80
60	9.58	30.36	0.283	2.84
80	9.66	30.43	0.277	3.12
100	9.71	30.49	0.306	2.68
120	9.64	30.54	0.312	2.72
140	9.62	30.53	0.315	2.76
159	9.61	30.55	0.306	2.91

STA 111-53 47° 41.7' N WEATHER 51
 10 Nov 55 122° 45.7' W WIND WSW 4
 2012 (+8) DEPTH 69 fm 43°/42°F
 Hazel Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.68	24.76	0.510	2.26
5	9.68	26.22	0.483	2.44
10	9.50	28.45	0.435	2.50
20	9.39	29.79	0.404	2.46
30	9.43	30.16	0.377	2.50
50	9.49	30.30	0.355	2.83
80	9.57	30.43	0.324	2.83
110	9.58	30.43	0.320	2.88

STA 111-54 47° 50.2' N WEATHER o.
 10 Nov 55 122° 39.6' W WIND Calm
 2142 (+8) DEPTH 42 fm 43°/42°F
 South Point

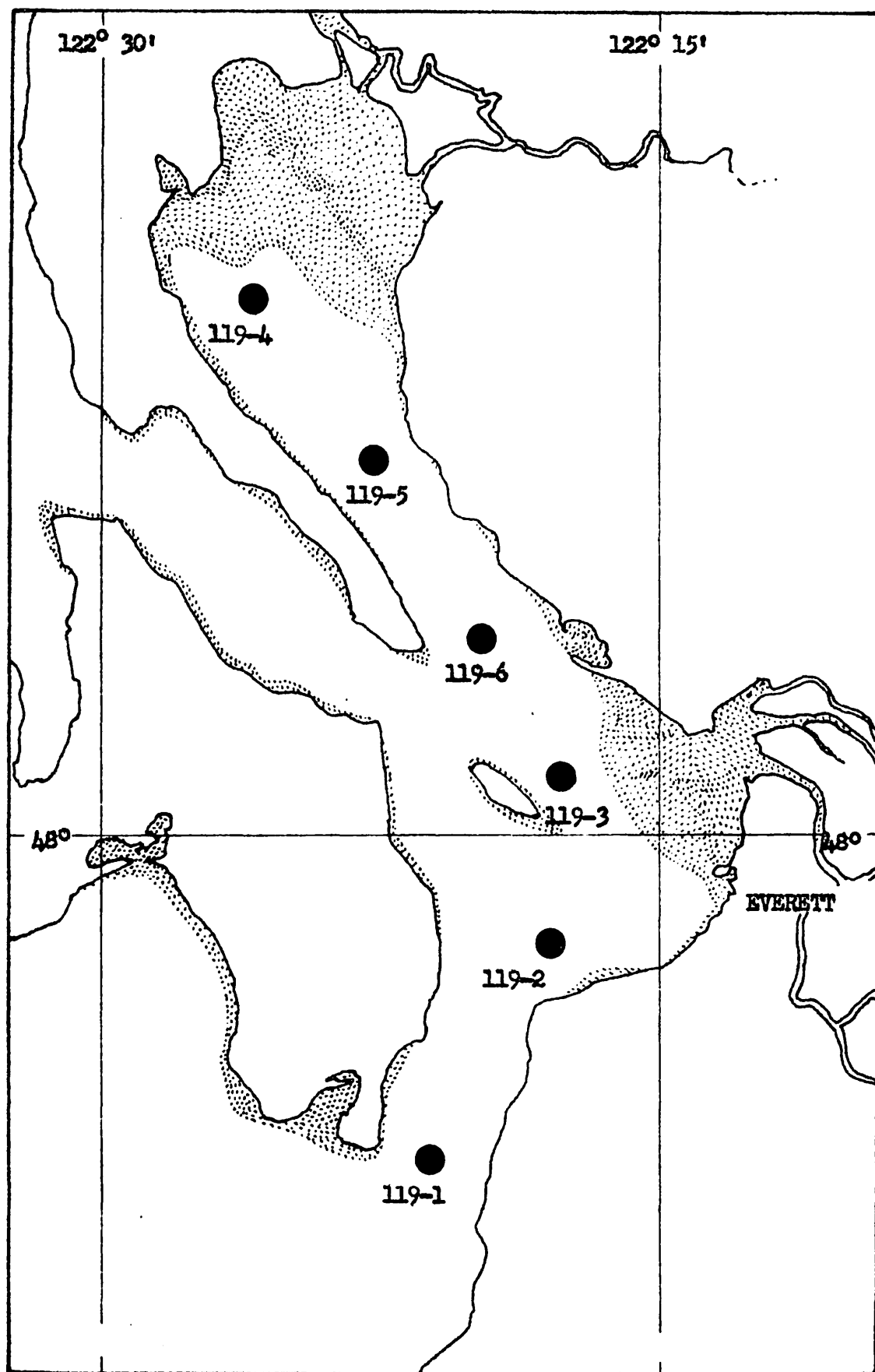
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.48	24.95	0.507	2.27
5	9.59	25.44	0.500	2.44
10	9.52	27.29	0.456	2.34
20	9.35	29.10	0.442	2.57
40	9.25	30.04	0.427	2.76
60	9.21	30.24	0.418	2.86

STA 111-55 47° 56.0' N WEATHER o.
 10 Nov 55 122° 38.2' W WIND ESE 6
 2255 (+8) DEPTH 67 fm 41°/40°F
 Tala Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	9.29	27.40	0.493	2.62
5	9.31	28.03	0.484	2.66
10	9.34	30.35	0.467	2.52
20	9.37	29.13	0.445	2.54
30	9.30	29.51	0.439	2.76
50	9.21	29.89	0.432	2.46
75	9.19	30.26	0.424	2.46
100	9.12	30.33	0.422	2.68



Oceanographic Station Locations
BROWN BEAR CRUISE 119
23 January 1956

STA 119-1 47° 54.7' N WEATHER c. 23 Jan 56 122° 20.9' W WIND SxW 20 1225 (+8) DEPTH 131 fm 45°/45°F Possession Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.30	27.77	0.552	2.64
5	7.31	27.93	0.547	2.61
9	7.28	27.95	0.547	2.58
18	7.26	28.08	0.540	2.41
26	7.33	28.39	0.524	2.64
44	7.38	28.69	0.505	2.71
66	7.36	28.96	0.489	2.62
88	7.54	29.15	0.464	2.71
106	7.60	29.18	0.446	2.54
137	7.77	29.33	0.420	2.60
167	----	29.51	0.326	2.84

STA 119-2 47° 59.0' N WEATHER c. 23 Jan 56 122° 17.0' W WIND SSW 24 1430 (+8) DEPTH 75 fm 45°/45°F Port Gardner				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.78	24.88	0.576	2.37
5	6.82	25.02	0.570	2.32
9	7.13	27.00	0.543	2.58
18	7.40	28.06	0.478	2.58
27	7.36	28.13	0.493	2.67
46	7.54	28.79	0.422	2.54
68	7.68	28.91	0.402	2.58
91	8.29	29.28	0.332	2.63
114	8.45	29.38	0.315	2.73

STA 119-3 48° 01.5' N WEATHER c. 23 Jan 56 122° 18.9' W WIND SE 12 1618 (+8) DEPTH 56 fm 41°/40°F Gedney Island				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.58	21.71	0.580	2.26
5	6.93	24.87	0.553	2.46
9	7.22	26.58	0.496	2.60
18	7.42	28.41	0.477	2.68
28	7.56	28.69	0.454	2.64
47	8.08	28.99	0.389	2.68
70	8.31	29.22	0.347	2.68
93	9.10	29.60	0.285	2.86

STA 119-4 48° 09.4' N WEATHER c. 23 Jan 56 122° 25.6' W WIND SSE 32 1810 (+8) DEPTH 57 fm 39°/39°F Port Susan, Head of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	5.64	9.72	0.691	2.09
5	5.91	13.55	0.672	2.01
10	6.53	10.92	0.588	2.22
19	7.43	28.40	0.476	2.65
29	7.53	28.57	0.457	2.65
49	7.99	28.96	0.385	2.75
73	8.48	29.24	0.328	2.81
95	9.30	29.61	0.259	3.05

STA 119-5 48° 06.3' N WEATHER o.
 23 Jan 56 122° 21.9' W WIND SSE 23
 1943 (+8) DEPTH 67 fm 39°/39°F
 Port Susan, Middle of

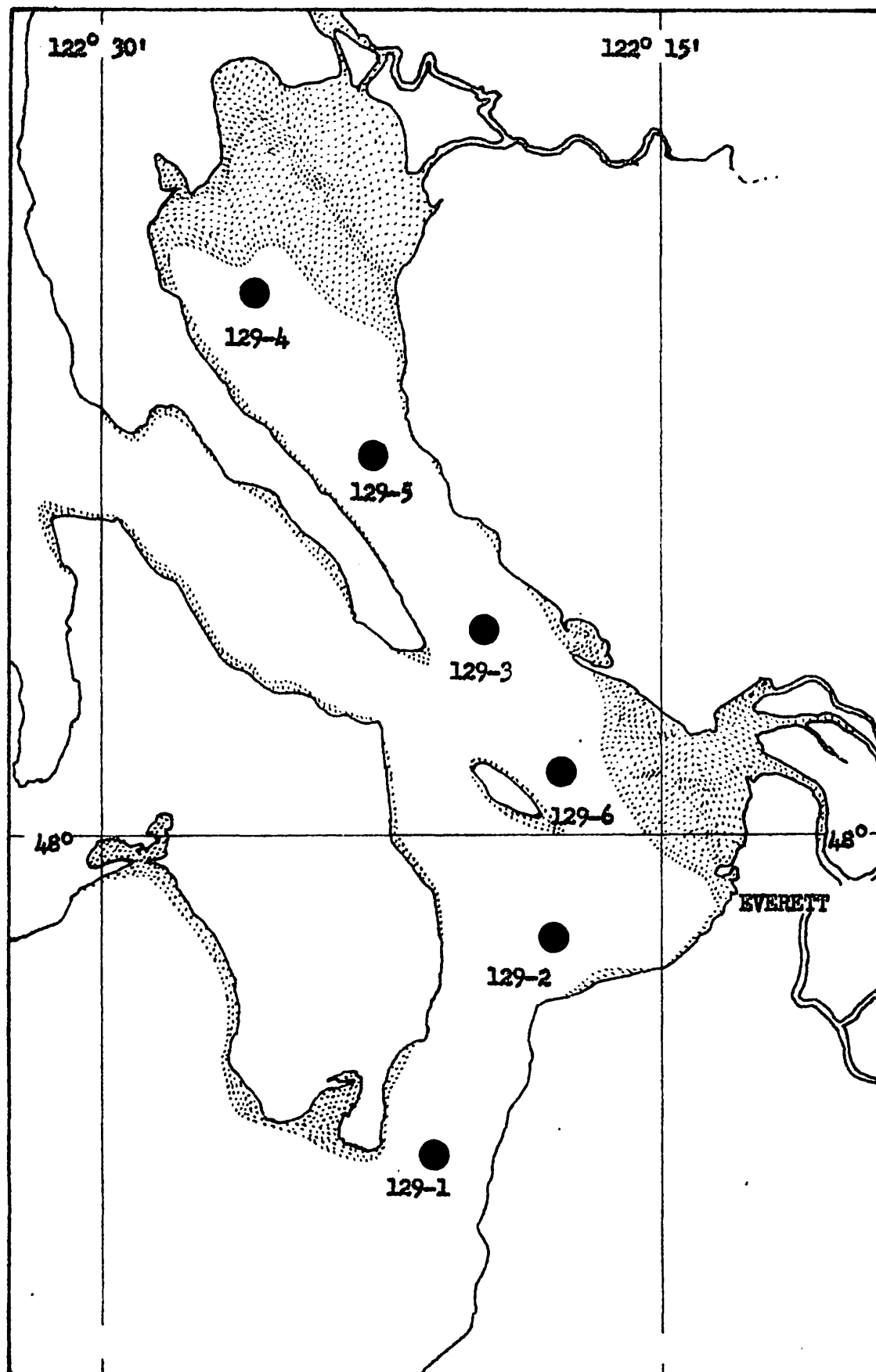
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	5.90	14.47	0.663	1.74
5	6.18	15.24	0.623	1.79
10	7.17	26.87	0.495	2.58
19	7.51	28.36	0.466	2.67
29	7.58	28.60	0.444	2.74
48	7.79	28.85	0.412	2.55
73	8.74	29.23	0.331	2.70
97	9.40	29.69	0.253	2.93
116	9.96	30.26	0.125	4.15

STA 119-6 48° 04.4' N WEATHER o.
 23 Jan 56 122° 19.8' W WIND SSE 22
 2100 (+8) DEPTH 65 fm 40°/40°F
 Camano Head, East of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.18	18.30	0.616	1.95
5	6.27	18.89	0.606	1.98
9	6.36	19.78	0.608	2.17
18	7.41	28.03	0.474	2.57
27	7.84	28.59	0.425	2.79
45	7.71	28.84	0.411	2.68
67	7.93	29.07	0.358	2.36
89	9.14	29.55	0.271	2.68
107	9.84	30.10	0.163	3.39



Oceanographic Station Locations
BROWN BEAR Cruise 129
25 February 1956

STA 129-1 47° 53.7' N WEATHER 61
25 Feb 56 122° 21.3' W WIND SSW 15
0821 (+8) DEPTH 132 40°/40°F
Possession Point

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.58	28.68	0.588	2.19
5	6.56	28.68	0.586	2.20
10	6.58	28.69	0.557	2.15
19	6.56	28.67	0.529	1.94
29	6.65	28.72	0.543	2.31
48	6.71	28.90	0.548	2.14
72	7.00	29.20	0.391	2.19
94	6.66	29.25	0.157	2.20
132	6.60	29.41	-----	2.02
169	6.54	29.67	-----	2.04
207	6.56	29.72	-----	2.19

STA 129-2 47° 58.6' N WEATHER o.
25 Feb 56 122° 17.5' W WIND NNE 6
1017 (+8) DEPTH 69 fm 39°/39°F
Port Gardner

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.54	28.10	-----	2.23
5	6.60	28.17	-----	2.23
10	6.62	28.18	-----	2.19
19	6.67	28.32	-----	2.25
29	6.83	28.51	-----	2.25
48	7.06	28.72	-----	2.32
72	7.36	29.07	-----	2.06
96	7.26	29.15	-----	2.16
120	7.07	29.22	-----	2.21

STA 129-3 48° 04.1' N WEATHER o.
25 Feb 56 122° 20.0' W WIND SSE 4
1131 (+8) DEPTH 67 fm 39°/38°F
Camano Head, East of

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	5.18	25.08	0.429	2.14
5	6.30	27.56	0.327	2.24
10	6.66	27.78	0.485	2.28
19	6.72	28.04	0.439	2.22
29	7.23	28.44	0.382	1.92
48	7.89	29.02	0.313	2.32
72	7.99	29.21	0.298	2.08
96	7.08	29.26	-----	2.09
115	9.59	29.98	-----	3.13

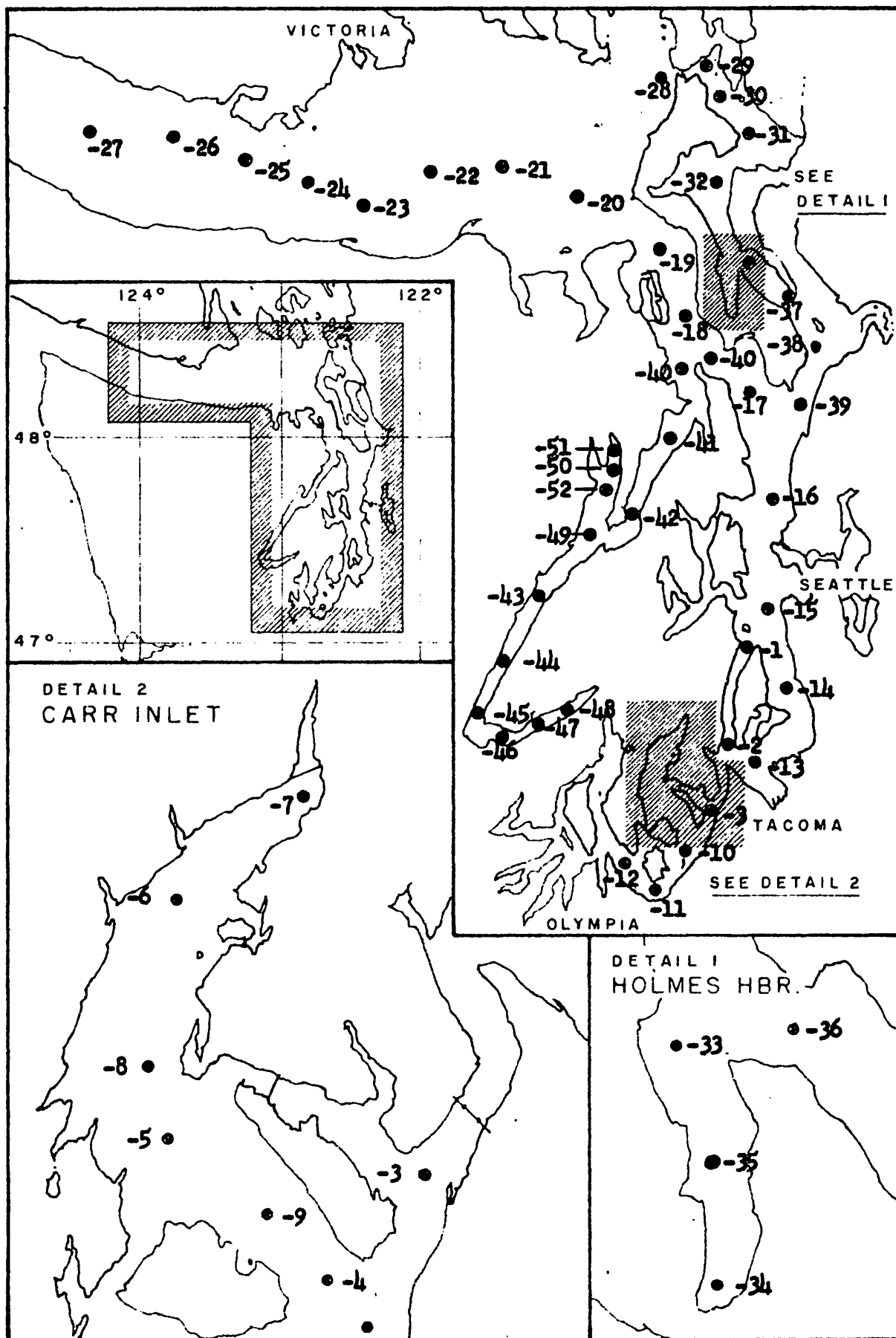
STA 129-4 48° 09.1' N WEATHER o.
25 Feb 56 122° 25.5' W WIND SE 8
1232 (+8) DEPTH 55 fm 40°/39°F
Port Susan, Head of

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	4.75	23.98	0.601	2.18
5	4.95	25.55	0.588	2.12
10	5.71	26.45	0.242	2.15
19	7.08	28.39	0.459	2.36
29	7.50	28.68	0.426	2.38
48	8.14	29.05	0.339	2.50
72	8.12	29.27	0.327	2.55
93	8.39	29.45	0.289	2.60

STA 129-5 48° 06.3' N WEATHER o. 25 Feb 56 122° 22.1' W WIND SSE 7 1422 (+8) DEPTH 68 fm 40°/39°F Port Susan, Middle of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	4.69	23.84	0.568	2.10
5	5.00	25.47	0.565	2.03
10	6.17	27.31	0.502	2.17
19	6.44	27.64	0.496	2.14
29	7.47	28.57	0.404	2.37
48	8.01	28.95	0.333	2.42
72	7.96	29.20	0.302	2.27
96	7.34	29.24	0.388	2.35
116	9.62	29.92	0.114	3.20

STA 129-6 48° 01.3' N WEATHER o. 25 Feb 56 122° 18.5' W WIND SE 4 1545 (+8) DEPTH 60 fm 39°/38°F Gedney Island				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	5.51	26.14	0.553	2.10
5	6.18	26.66	0.521	2.14
10	6.53	27.85	0.477	2.05
19	7.01	28.51	0.413	2.25
29	7.12	28.57	0.395	2.17
48	7.56	28.70	0.355	2.64
73	7.47	29.13	0.277	2.35
96	7.47	29.24	0.369	2.35



Oceanographic Station Locations
 BROWN BEAR Cruise 130
 27 February - 2 March 1956

STA 130-1 47° 30.9' N WEATHER o.
27 Feb 56 122° 28.9' W WIND SxW 9
1214 (+8) DEPTH 55 fm 43°/41°F
Point Vashon

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.50	28.77	0.546	2.25
5	6.48	28.75	0.544	2.21
10	6.49	28.77	0.544	1.98
19	6.51	28.79	0.541	2.47
29	6.51	28.78	0.541	2.45
48	6.51	28.81	0.538	2.23
73	6.51	28.82	0.540	2.55
97	6.52	28.79	0.538	2.31

STA 130-2 47° 21.1' N WEATHER o.
27 Feb 56 122° 32.6' W WIND SxE 4
1408 (+8) DEPTH 55 fm 42°/41°F
Spring Beach

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.50	28.63	0.548	2.52
5	6.45	28.63	0.543	2.23
10	6.46	28.64	0.545	2.11
20	6.48	28.64	0.545	2.51
30	6.50	28.66	0.527	2.12
50	6.47	28.62	0.529	2.27
75	6.49	28.65	0.533	2.55
95	6.58	28.81	0.522	2.47

STA 130-3 47° 14.7' N WEATHER o.
27 Feb 56 122° 34.5' W WIND SSW 12
1510 (+8) DEPTH 34 fm 42°/41°F
Day Island

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.53	28.70	0.527	2.38
10	6.50	28.72	0.525	2.56
20	6.50	28.74	0.524	2.46
30	6.53	28.76	0.525	2.60
50	6.58	28.81	0.522	2.54

STA 130-4 47° 12.7' N WEATHER o.
27 Feb 56 122° 37.1' W WIND SSW 12
1549 (+8) DEPTH 90 fm 44°/43°F
Gibson Point, Southwest of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.36	28.35	0.545	2.27
5	6.32	28.39	0.543	2.28
10	6.34	28.39	0.545	2.28
19	6.37	28.40	0.543	2.56
28	6.43	28.46	0.539	2.52
47	6.41	28.48	0.533	2.32
71	6.47	28.53	0.530	2.52
94	6.49	28.55	0.529	2.55
122	6.47	28.63	0.527	2.40
150	6.50	28.65	0.525	2.46

STA 130-5 47° 15.9' N WEATHER o.- 27 Feb 56 122° 41.8' W WIND SxW 16 1644 (+8) DEPTH 50 fm 45°/43°F South Head II					STA 130-6 47° 20.2' N WEATHER 50 27 Feb 56 122° 41.6' W WIND SxW 20 1737 (+8) DEPTH 30 fm 45°/43°F Glencove, East of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)	Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.29	28.13	0.552	2.42	0	5.63	27.82	0.601	2.57
5	6.25	28.16	0.551	2.19	5	5.60	27.82	0.596	2.37
10	6.27	28.18	0.553	2.17	10	5.65	27.83	0.598	2.39
20	6.28	28.20	0.549	2.47	20	5.75	27.94	0.590	2.89
30	6.34	28.21	0.541	2.41	30	6.04	28.03	0.558	2.36
40	6.36	28.22	0.537	2.68	40	6.65	28.35	0.512	2.51
60	6.52	28.34	0.526	2.71	50	6.60	28.47	-----	2.63
85	6.54	28.50	0.520	2.59					

STA 130-7 47° 22.5' N WEATHER 50 27 Feb 56 122° 37.8' W WIND SW 7 1817 (+8) DEPTH 7 fm 44°/42°F Wauna.					STA 130-8 47° 17.1' N WEATHER 50 27 Feb 56 122° 42.2' W WIND SxW 12 1926 (+8) DEPTH 56 fm 45°/43°F Green Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)	Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	5.19	26.94	0.624	2.16	0	6.23	28.15	0.551	2.37
2	5.17	26.95	0.629	2.52	5	6.21	28.14	0.555	2.49
6	5.22	26.99	0.625	2.51	10	6.25	28.15	0.551	2.60
10	6.61	27.69	0.593	2.64	20	6.24	28.14	0.550	2.67
					30	6.44	28.27	0.530	2.29
					50	6.62	28.37	0.513	2.13
					70	6.55	28.44	0.518	2.62
					90	6.53	28.51	0.528	2.52

STA 130-9 47° 14.2' N WEATHER 50
27 Feb 56 122° 38.9' W WIND SSW 2
2022 (+8) DEPTH 67 fm 45°/43°F
Still Harbor II

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.21	28.15	0.558	2.35
5	6.17	28.15	0.561	2.65
10	6.21	28.16	0.562	2.50
20	6.31	28.26	0.546	2.60
30	6.38	28.40	0.529	2.37
60	6.44	28.43	0.532	2.38
90	6.49	28.50	0.526	2.45
120	6.44	28.61	0.528	2.57

STA 130-10 47° 11.3' N WEATHER o.
27 Feb 56 122° 37.9' W WIND SSW 8
2122 (+8) DEPTH 94 fm 45°/43°F
Gibson Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.34	28.20	0.549	2.42
5	6.30	28.21	0.549	2.69
10	6.35	28.26	0.545	2.50
19	6.38	28.31	0.540	2.46
28	6.39	28.37	0.539	2.91
47	6.43	28.51	0.532	2.28
71	6.43	28.53	0.536	2.52
94	6.48	28.55	0.531	2.50
122	6.47	28.62	0.529	2.32
150	6.50	28.68	-----	2.43

STA 130-11 47° 07.1' N WEATHER o.
27 Feb 56 122° 41.9' W WIND Sx E 20
2234 (+8) DEPTH 39 fm 47°/45°F
Nisqually Reach

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.26	28.01	0.557	1.81
10	6.35	28.25	0.542	2.46
20	6.38	28.29	0.537	2.37
40	6.40	28.29	0.541	2.61
60	6.41	28.37	0.538	2.56

STA 130-12 47° 10.1' N WEATHER 50
27 Feb 56 122° 47.3' W WIND SSW 12
2333 (+8) DEPTH 52 fm 47°/45°F
Devils Head

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.14	27.75	0.553	2.50
5	6.09	27.75	0.553	2.57
10	6.15	27.80	0.553	2.47
20	6.15	27.80	0.556	2.86
30	6.19	27.87	0.552	2.62
50	6.35	28.18	0.552	2.46
75	----	28.28	0.538	2.67

STA 130-13 47° 19.3' N WEATHER 50
28 Feb 56 122° 28.0' W WIND SxE 8
0239 (+8) DEPTH 97 fm 46°/44°F
Brown Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.28	27.20	0.562	1.92
5	6.31	28.34	0.561	2.04
10	6.40	28.45	0.555	2.11
20	6.50	28.69	0.543	2.12
30	6.65	28.96	0.524	2.40
50	6.83	29.14	0.510	2.37
75	6.58	29.30	0.518	2.50
100	6.61	29.37	0.519	2.42
130	6.52	29.47	0.519	2.36
160	6.55	29.54	0.516	2.38

STA 130-14 47° 26.4' N WEATHER 60
28 Feb 56 122° 23.5' W WIND SE 16
0434 (+8) DEPTH 135 fm 46°/44°F
Pully Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.37	28.66	0.564	2.59
5	6.34	28.66	0.563	2.22
10	6.37	28.66	0.560	2.55
19	6.42	28.69	0.554	2.66
28	6.42	28.71	0.553	2.52
47	6.46	28.78	0.545	2.56
71	6.54	28.95	0.535	2.51
94	6.65	29.23	0.519	2.52
132	6.58	29.43	0.507	2.23
169	6.58	29.49	0.506	2.46
207	6.43	29.56	0.503	2.64

STA 130-15 47° 34.1' N WEATHER o.
28 Feb 56 122° 26.5' W WIND SSE 12
0522 (+8) DEPTH 138 fm 47° 45°F
Alki Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.54	28.87	0.530	2.33
5	6.50	28.84	0.529	2.77
10	6.52	28.86	0.529	2.67
19	6.54	28.90	0.528	2.50
28	6.56	28.91	0.527	2.54
47	6.59	29.13	0.514	2.71
71	6.62	29.24	0.510	2.44
95	6.61	29.32	0.511	2.49
133	6.56	29.38	0.510	2.52
171	6.57	29.43	0.506	2.46
209	6.58	29.46	0.504	2.33

STA 130-16 47° 45.2' N WEATHER o.
28 Feb 56 122° 25.5' W WIND SxW 13
0735 (+8) DEPTH 157 fm 46°/45°F
Point Jefferson

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.48	28.69	0.538	2.64
4	6.47	28.70	0.544	2.45
8	6.47	28.72	0.533	2.47
16	6.53	28.80	0.532	2.57
24	6.54	28.87	0.524	2.58
40	6.56	29.04	0.521	2.29
60	6.56	29.19	0.513	2.52
80	6.58	29.26	0.510	2.37
120	6.52	29.36	0.514	2.38
160	6.53	29.48	0.510	2.23
192	6.52	29.49	0.508	2.01
216	6.51	29.51	0.510	2.54

STA 130-17 47° 54.0' N WEATHER o. 28 Feb 56 122° 28.7' W WIND Sx E 18 0852 (+8) DEPTH 112 fm 48°/46°F Point No Point					STA 130-18 48° 02.4' N WEATHER o. 28 Feb 56 122° 37.8' W WIND S 20 1048 (+8) DEPTH 65 fm 46°/44°F Bush Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)	Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.52	28.95	0.533	2.45	0	6.52	29.19	0.525	2.46
5	6.47	28.95	0.532	2.32	5	6.49	29.19	0.527	2.47
9	6.50	28.96	0.533	2.52	10	6.50	29.22	0.525	2.45
18	6.53	28.97	0.528	2.52	19	6.47	29.40	0.522	2.50
28	6.52	28.99	0.528	2.32	28	6.47	29.51	0.517	2.42
46	6.50	29.08	0.523	2.41	47	6.46	29.60	0.519	2.35
70	6.49	29.29	0.524	2.22	71	6.49	29.61	0.518	2.45
93	6.51	29.27	0.523	2.46	94	6.47	29.82	0.517	2.38
121	6.44	29.55	0.519	2.43					
126	6.49	29.55	0.518	2.46					
149	6.48	29.64	0.518	2.40					

STA 130-19 48° 08.7' N WEATHER o. 28 Feb 56 122° 41.5' W WIND S 23 1137 (+8) DEPTH 64 fm 45°/43°F Port Townsend					STA 130-20 48° 12.4' N WEATHER b.c. 28 Feb 56 122° 52.9' W WIND Calm 1254 (+8) DEPTH 53 fm 50°/47°F Protection Island				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)	Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.50	29.51	0.528	2.47	0	6.49	30.58	0.510	1.87
5	6.45	29.51	0.526	2.48	5	6.46	30.59	0.510	2.29
10	6.47	29.61	0.524	2.61	10	6.46	30.58	0.512	2.21
18	6.47	29.74	0.522	2.39	19	6.47	30.59	0.510	2.40
28	6.47	29.79	0.522	2.34	29	6.46	30.59	0.510	2.04
47	6.44	29.82	0.520	2.34	48	6.45	30.66	0.504	2.33
70	6.46	29.70	0.523	2.43	68	6.47	30.86	0.497	2.42
95	6.47	29.76	0.517	2.43	88	6.53	31.12	0.486	2.34

STA 130-21 48° 15.6' N WEATHER b.c.
 28 Feb 56 123° 04.0' W WIND Calm
 1415 (+8) DEPTH 96 fm 45°/45°F
 New Dungeness, Northeast of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.59	31.25	0.496	1.93
5	6.52	31.27	0.493	2.28
10	6.48	31.30	0.489	2.27
19	6.52	31.41	0.476	1.87
29	6.49	31.46	0.472	2.24
48	6.57	31.59	0.455	1.78
73	6.60	31.65	0.460	2.31
97	6.63	31.69	0.455	2.30
126	6.61	31.70	0.447	2.46
155	6.63	31.72	0.455	2.47

STA 130-22 48° 14.8' N WEATHER b.c.
 28 Feb 56 123° 13.7' W WIND Calm
 1531 (+8) DEPTH 77 fm 46°/45°F
 New Dungeness, Northwest of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.36	30.99	0.526	1.87
5	6.39	31.02	0.522	2.22
10	6.36	31.07	0.510	2.05
19	6.38	31.10	0.507	2.23
29	6.41	31.15	0.498	2.42
48	6.42	31.26	0.491	1.78
73	6.48	31.37	0.480	2.34
97	6.52	31.44	0.477	2.31
126	6.52	31.53	0.471	2.21

STA 130-23 48° 12.3' N WEATHER o.
 28 Feb 56 123° 23.4' W WIND WxN 3
 1655 (+8) DEPTH 71 fm 45°/44°F
 Ediz Hook

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.75	31.62	0.488	2.40
5	6.75	31.59	0.489	2.27
10	6.62	31.61	0.489	2.26
19	6.59	31.68	0.473	2.27
29	6.60	31.73	0.467	2.34
48	6.60	31.77	0.459	2.37
73	6.61	31.79	0.453	2.38
97	6.65	31.89	0.449	2.19
124	6.69	32.07	0.432	2.18

STA 130-24 48° 14.3' N WEATHER o.
 28 Feb 56 123° 32.5' W WIND WNW 4
 1824 (+8) DEPTH 94 fm 44°/43°F
 Race Rocks

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.53	31.66	0.487	2.24
5	6.50	31.66	0.489	2.26
10	6.52	31.66	0.491	2.35
19	6.54	31.66	0.487	2.26
29	6.54	31.67	0.488	2.23
48	6.55	31.75	0.480	2.01
73	6.73	32.14	0.435	1.83
97	6.86	32.50	0.390	2.16
126	6.87	32.64	0.376	2.15
155	6.90	33.10	0.324	2.36

STA 130-25 48° 15.9' N WEATHER 61
28 Feb 56 123° 41.4' W WIND NW 5
1946 (+8) DEPTH 186 fm 44°/43° F
Beechy Head

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.52	31.58	0.509	2.19
5	6.51	31.59	0.509	2.16
10	6.54	31.66	0.498	2.14
19	6.55	31.70	0.489	2.27
29	6.55	31.71	0.483	2.18
48	6.56	31.73	0.479	2.33
73	6.66	31.94	0.450	2.41
97	6.70	31.99	0.450	2.40
136	6.85	33.04	0.336	2.32
175	6.78	33.35	0.295	2.40

STA 130-26 48° 17.9' N WEATHER o.
28 Feb 56 123° 52.7' W WIND WxS 8
2115 (+8) DEPTH 95 fm 45°/44° F
Otter Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.43	31.36	0.552	1.97
5	6.39	31.33	0.550	2.03
10	6.42	31.33	0.551	2.03
19	6.45	31.43	0.515	2.16
29	6.42	31.48	0.521	2.15
48	6.57	31.65	0.484	2.20
73	6.67	31.89	0.454	2.27
97	6.85	32.25	0.409	2.27
126	6.83	33.04	0.323	2.36
155	6.70	33.57	0.263	2.61

STA 130-27 48° 18.6' N WEATHER o.
28 Feb 56 124° 03.6' W WIND SW 10
2227 (+8) DEPTH 102 fm 45°/43° F
Pillar Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.39	31.41	0.543	2.08
5	6.33	31.41	0.542	2.18
10	6.39	31.44	0.518	2.04
19	6.49	31.54	0.517	2.14
29	6.46	31.58	0.510	2.08
48	6.56	31.63	0.492	2.12
73	6.60	31.71	0.472	2.21
97	6.71	31.92	0.397	2.20
136	6.98	32.73	0.371	2.22
175	6.66	33.63	0.254	2.43

STA 130-28 48° 24.8' N WEATHER 61
29 Feb 56 122° 42.1' W WIND W 11
1101 (+8) DEPTH 52 fm 40°/39° F
Deception Island

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.00	29.20	0.556	2.47
5	5.98	29.43	0.557	2.45
10	6.02	29.51	0.555	2.41
20	6.04	29.59	0.551	2.41
30	6.03	29.72	0.551	2.34
50	6.05	30.11	0.550	2.36
75	6.11	30.46	0.535	2.43

STA 130-29 48° 25.1' N WEATHER 61
 29 Feb 56 122° 35.8' W WIND SE 7
 1209 (+8) DEPTH 20 fm 37°/37°F
 Dewey

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	5.82	25.94	0.588	2.06
5	5.83	26.06	0.582	2.18
10	5.86	26.18	0.580	2.23
20	5.90	26.66	0.576	2.58
30	5.93	27.98	0.565	2.42

STA 130-30 48° 21.4' N WEATHER o.
 29 Feb 56 122° 33.4' W WIND ----
 1249 (+8) DEPTH ----- --- ---
 Goat Island

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	5.80	23.00	0.605	2.21
2	5.83	24.58	0.589	2.29
4	6.00	25.81	0.570	2.42
6	6.09	26.53	0.553	2.78
10	6.19	26.90	0.539	2.96

STA 130-31 48° 18.5' N WEATHER o.
 29 Feb 56 122° 29.5' W WIND ExS 10
 1341 (+8) DEPTH 14 fm 38°/37°F
 Strawberry Point, North of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	5.57	18.57	0.650	1.72
2	5.67	20.59	0.633	2.11
4	5.80	22.43	0.610	2.17
6	5.83	23.21	0.599	2.39
10	6.10	25.89	0.560	2.40
20	6.64	27.57	0.499	2.59

STA 130-32 48° 14.2' N WEATHER o.
 29 Feb 56 122° 33.0' W WIND SxE 11
 1424 (+8) DEPTH 47 fm 42°/41°F
 Demock Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	5.90	26.25	0.580	2.15
5	5.84	26.79	0.574	2.34
10	5.84	27.01	0.579	2.39
19	6.06	27.32	0.559	2.65
28	6.52	27.80	0.502	2.44
47	7.45	28.70	0.412	2.37
66	7.62	29.02	0.397	2.94

STA 130-33 48° 05.9' N WEATHER o.
29 Feb 56 122° 32.9' W WIND SSE 30
1540 (+8) DEPTH 40 fm 43°/41°F
Greenbank

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	5.88	27.07	0.580	2.26
5	5.85	27.09	0.582	2.39
10	6.22	27.17	0.554	2.20
19	6.34	27.68	0.546	2.61
29	7.17	28.39	0.445	2.47
38	7.53	28.80	0.403	2.41
47	7.62	28.87	0.384	2.92
56	7.61	28.90	0.379	2.72

STA 130-34 48° 01.5' N WEATHER o.
29 Feb 56 122° 31.8' W WIND SSE 18
1628 (+8) DEPTH 20 fm 43°/41°F
Holmes Harbor, Head of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.35	27.73	0.555	2.65
5	6.31	27.73	0.554	2.65
10	6.38	27.76	0.547	2.38
20	6.60	28.04	0.522	2.66
30	6.76	28.14	0.504	2.44

STA 130-35 48° 03.9' N WEATHER o.
29 Feb 56 122° 31.9' W WIND SSE 24
1709 (+8) DEPTH 28 fm 43°/41°F
Holmes Harbor, Middle of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.43	27.79	0.547	2.64
5	6.38	27.79	0.547	2.63
10	6.41	27.78	0.541	2.68
20	6.63	27.97	0.510	2.49
29	7.10	28.40	0.465	2.44
39	7.52	28.73	0.400	2.26
48	7.68	28.81	0.384	2.94

STA 130-36 48° 06.5' N WEATHER o.
29 Feb 56 122° 29.4' W WIND SSE 20
1805 (+8) DEPTH 79 fm 41°/40°F
East Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.29	27.57	0.554	2.51
5	6.25	27.56	0.554	2.60
10	6.29	27.58	0.551	2.55
19	6.39	27.72	0.538	2.60
28	6.78	27.97	0.508	2.45
47	7.24	28.92	0.438	2.25
70	7.15	29.14	0.454	2.66
93	7.03	29.23	0.464	2.56
121	6.97	29.24	0.467	2.43

STA 130-37 48° 02.9' N WEATHER o.
29 Feb 56 122° 22.4' W WIND SxE 16
1928 (+8) DEPTH 94 fm 41°/39°F
Camano Head, West of

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	5.72	25.61	0.584	2.42
5	6.05	26.62	0.555	2.39
10	6.37	27.42	0.530	2.46
19	6.69	28.04	0.502	2.54
29	6.93	28.35	0.471	2.39
48	7.32	28.90	0.425	2.33
72	7.08	29.20	0.452	2.52
93	6.87	29.30	0.481	2.30
116	6.71	29.42	0.492	2.51
140	6.69	29.45	0.495	2.47

STA 130-38 47° 59.7' N WEATHER o.
29 Feb 56 122° 19.8' W WIND SSW 20
2035 (+8) DEPTH 92 fm 41°/39°F
Clinton

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.72	28.07	0.500	2.32
5	6.65	28.07	0.501	2.50
10	6.72	28.06	0.500	2.35
19	6.82	28.21	0.487	2.46
29	7.22	28.76	0.429	2.24
48	7.30	28.87	0.423	2.17
73	7.02	28.96	0.448	2.38
94	6.80	29.23	0.493	2.37
117	6.67	29.37	0.505	2.42
141	6.62	29.47	0.504	2.46

STA 130-39 47° 53.8' N WEATHER o.
29 Feb 56 122° 21.4' W WIND SSE 20
2205 (+8) DEPTH 125 fm 43°/42°F
Possession Point

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.62	28.68	0.525	2.38
5	6.58	28.69	0.525	2.53
9	6.62	28.69	0.523	2.48
18	6.66	28.73	0.518	2.51
27	6.55	28.75	0.538	2.46
46	6.51	28.78	0.539	2.47
68	6.77	29.04	0.497	2.37
91	6.54	29.34	0.517	2.33
127	6.52	29.42	0.515	2.46
164	6.51	29.51	0.513	2.44
200	6.57	29.54	0.512	2.50

STA 130-40 47° 56.2' N WEATHER o.
1 Mar 56 122° 37.9' W WIND SSW 12
0008 (8) DEPTH 67 fm 43°/42°F
Tala Point

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.51	29.04	0.542	1.97
5	6.46	29.10	0.541	2.25
9	6.48	29.25	0.534	2.25
19	6.47	29.50	0.534	2.19
28	6.47	29.75	0.525	2.45
47	6.47	29.83	0.519	2.13
70	6.47	29.92	0.517	2.18
93	6.50	29.97	0.517	2.54

STA 130-41 47° 50.0' N WEATHER b.c.
1 Mar 56 122° 39.9' W WIND S 20
0132 (+8) DEPTH 37 fm 43°/43°F
South Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.67	28.79	0.537	2.46
5	6.63	28.79	0.537	2.29
9	6.65	28.82	0.535	2.24
19	6.63	28.96	0.534	2.52
38	6.47	29.59	0.521	2.42
56	6.45	29.87	0.514	2.43

STA 130-42 47° 41.8' N WEATHER b.c.
1 Mar 56 122° 45.7' W WIND SxW 20
0309 (+8) DEPTH 70 fm 45°/43°F
Hazel Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.73	28.95	0.523	1.97
5	6.71	28.89	0.523	2.30
10	6.71	28.98	0.520	2.06
19	6.72	29.20	0.508	2.25
29	6.66	29.24	0.509	2.30
48	6.59	29.38	0.510	2.26
77	6.53	29.53	0.511	2.23
105	6.53	29.61	0.513	2.52

STA 130-43 47° 35.8' N WEATHER c.
1 Mar 56 122° 58.0' W WIND SxW 20
0517 (+8) DEPTH 95 fm 47°/45°F
Tekiu Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.62	28.94	0.456	2.53
5	7.64	28.96	0.455	2.60
9	7.68	29.00	0.450	2.57
18	7.86	29.23	0.428	2.70
27	7.70	29.45	0.418	2.48
36	7.50	29.53	0.429	2.33
55	7.17	29.62	0.455	1.38
57	7.26	29.60	0.451	2.41
74	7.05	29.66	0.464	2.37
100	7.03	29.72	0.465	2.36
124	8.18	30.02	0.354	2.84
106	7.10	29.72	0.461	2.52
124	7.36	29.78	0.442	2.34
142	8.75	30.10	0.311	2.79

STA 130-44 47° 29.0' N WEATHER o.
1 Mar 56 123° 03.7' W WIND SSW 30
0707 (+8) DEPTH 87 fm 47°/45°F
Eagle Creek

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.84	28.83	0.444	2.71
4	7.81	-----	-----	-----
8	7.83	28.86	0.443	2.73
16	8.10	29.43	0.392	2.80
24	8.17	29.63	0.381	2.71
33	8.21	29.72	0.371	2.31
59	7.83	29.70	0.402	2.16
66	7.86	29.77	0.401	2.52
91	7.93	29.88	0.379	2.46
114	8.92	30.16	0.275	2.76
137	9.34	30.25	0.240	3.02
0	8.19	29.12	0.416	2.29
5	8.14	29.12	0.417	2.52
10	8.16	29.20	0.409	2.55
20	8.12	29.63	0.383	2.73
130	9.35	30.21	0.241	3.03
152	9.36	30.23	0.238	3.06

STA 130-45 47° 23.5' N WEATHER 61
1 Mar 56 123° 07.6' W WIND SW 16
0830 (+8) DEPTH 62 fm 46°/45°F
Musqueti Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.92	28.78	0.430	2.58
5	7.84	28.74	0.430	2.43
10	8.27	29.51	0.367	2.76
19	8.39	29.64	0.347	2.77
29	8.54	29.74	0.330	2.75
39	8.63	29.81	0.324	2.61
58	8.93	29.96	0.287	2.78
78	9.13	30.08	0.271	3.04
97	9.20	30.13	0.257	3.12
110	9.37	30.21	0.	3.22

STA 130-46 47° 21.5' N WEATHER 61
1 Mar 56 123° 03.6' W WIND SW 27
0929 (+8) DEPTH 23 fm 45°/44°F
Tahuya River

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.14	26.65	0.540	2.51
5	7.17	26.66	0.526	2.46
10	8.21	29.43	0.355	2.94
15	8.34	29.06	0.335	2.84
25	8.55	29.67	0.313	2.96
35	8.73	29.76	0.297	2.94
42	8.86	29.95	0.271	3.10

STA 130-47 47° 24.0' N WEATHER o.
1 Mar 56 122° 55.3' W WIND SW 30
1029 (+8) DEPTH 12 fm 45°/44°F
Lynch Cove, Head of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	5.80	25.08	0.638	1.87
2	5.76	25.08	0.637	1.87
6	5.79	25.15	0.635	1.84
10	6.44	25.99	0.567	2.19
14	6.76	26.43	0.529	2.41
18	6.81	26.50	0.525	2.42

STA 130-48 47° 22.5' N WEATHER o.
1 Mar 56 122° 59.4' W WIND WSW 34
1121 (+8) DEPTH 22 fm 45°/45°F
Lynch Cove, Middle of

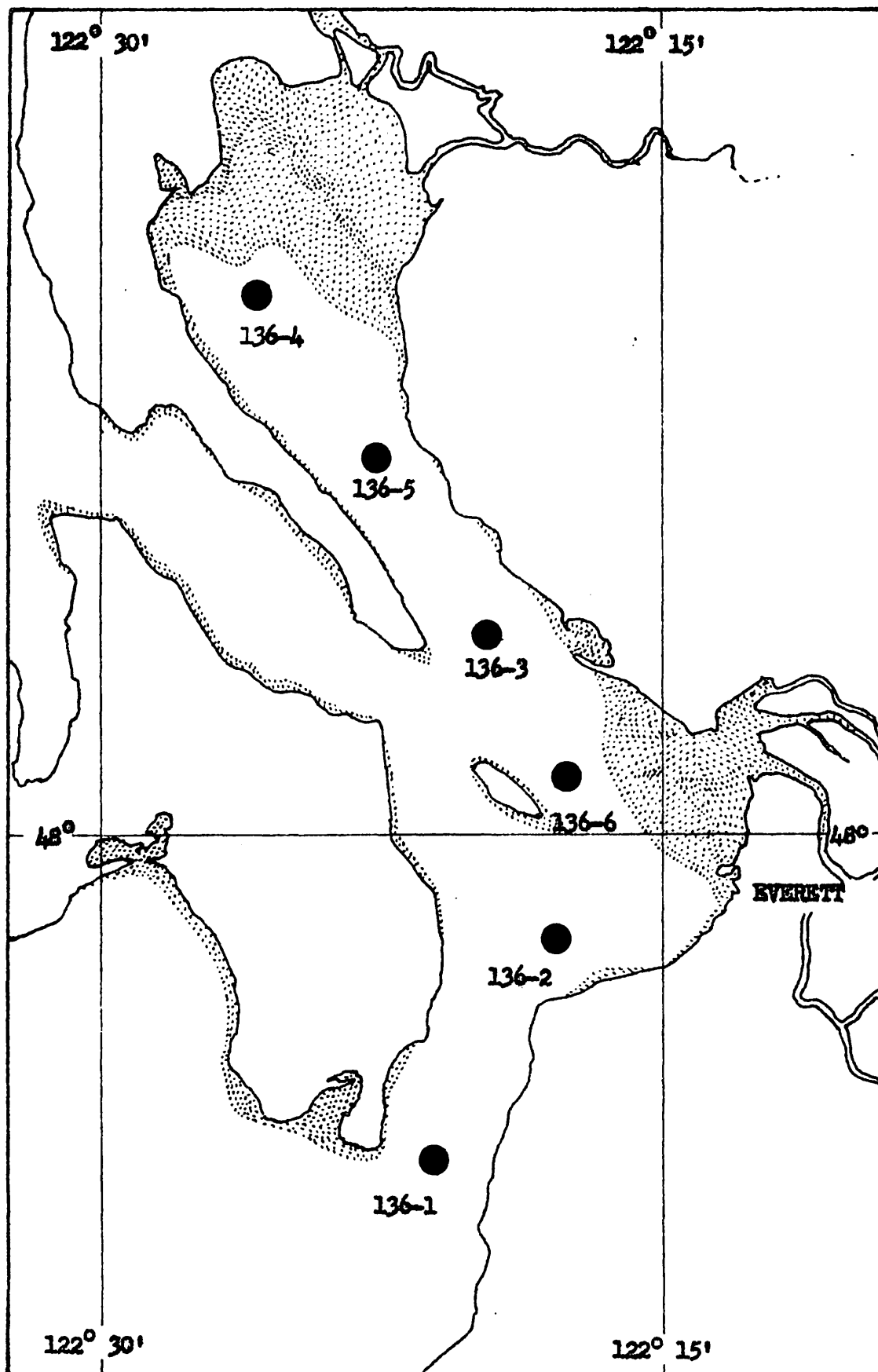
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.69	27.83	0.437	2.62
2	7.64	27.83	0.438	2.63
6	7.75	27.98	0.425	2.72
10	7.96	28.42	0.375	2.85
15	8.21	28.94	0.322	2.95
20	8.40	29.43	0.313	2.88
30	8.51	29.56	0.308	2.97

STA 130-49 47° 40.2' N WEATHER o. 1 Mar 56 122° 52.0' W WIND SxW 17 1529 (+8) DEPTH 75 fm 47°/45°F Pleasant Harbor				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	7.02	28.91	0.515	2.04
5	7.00	28.89	0.516	2.31
10	7.02	28.91	0.515	2.38
19	7.06	28.93	0.510	2.65
29	7.24	29.52	0.453	2.34
48	7.09	29.40	-----	2.13
58	7.06	29.56	0.461	2.37
77	6.70	29.56	0.493	2.38
97	6.62	29.58	0.500	2.38
116	6.71	29.62	0.488	2.38
147	7.71	29.87	0.400	2.61

STA 130-50 47° 46.8' N WEATHER o. 1 Mar 56 122° 48.6' W WIND SxW 16 1646 (+8) DEPTH 90 fm 47°/45°F Bolton Peninsula, East of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	5.97	27.87	0.616	2.36
5	5.92	27.87	0.615	2.43
10	5.97	27.95	0.605	2.43
19	6.08	28.09	0.601	2.52
29	7.14	28.63	0.506	2.57
48	7.75	29.51	0.407	2.42
58	7.99	29.66	0.388	2.55
77	7.59	29.69	0.417	2.47
97	7.49	29.76	0.413	2.47
116	7.37	29.74	0.436	2.47
135	8.79	30.15	0.291	2.92
170	9.26	30.24	0.259	3.08

STA 130-51 47° 50.0' N WEATHER o. 1 Mar 56 122° 48.6' W WIND SE 8 1726 (+8) DEPTH 30 fm 45°/45°F Dabob Bay, Head of				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	5.89	27.12	0.636	2.30
5	5.84	27.45	0.633	2.49
10	5.77	27.65	0.628	2.41
20	5.70	27.68	0.625	2.51
30	5.74	27.82	0.612	2.37
40	7.62	29.31	0.407	2.55

STA 130-52 47° 44.8' N WEATHER o. 1 Mar 56 122° 49.9' W WIND S 12 1833 (+8) DEPTH 106 fm 46°/44°F Tabook Point				
Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
0	6.12	28.12	0.592	2.34
5	6.08	28.13	0.597	2.36
10	6.17	28.17	0.593	2.43
20	6.53	28.37	0.699	2.49
30	7.89	29.54	0.395	2.54
40	7.80	29.57	0.399	2.41
60	7.21	29.64	0.446	2.34
80	7.04	29.66	0.464	2.54
100	6.89	29.69	0.475	2.53
120	7.33	29.77	0.436	2.63
140	8.74	30.12	0.297	2.91
160	9.27	30.36	0.240	3.11
180	9.29	30.37	0.250	3.06
197	9.33	30.47	0.191	3.47



Oceanographic Station Locations
BROWN BEAR Cruise 136
19 March 1956

STA 136-1 47° 53.6' N WEATHER o.
 19 Mar 56 122° 21.3' W WIND SW 11
 1212 (+8) DEPTH --- 46°/44°F
 Possession Point

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	6.86	26.91	0.554	1.93
5	6.58	28.05	0.558	2.22
10	6.39	28.83	0.553	2.19
19	6.38	28.96	0.542	2.08
29	6.37	29.00	0.542	2.25
48	6.38	29.09	0.540	2.21
72	6.37	29.20	0.540	1.96
94	6.44	29.30	0.537	2.30
131	6.45	29.42	0.532	2.09
169	6.51	29.50	0.511	2.22
207	6.54	29.53	0.511	2.40

STA 136-2 47° 58.6' N WEATHER o.
 19 Mar 56 122° 16.6' W WIND NW 8
 1350 (+8) DEPTH 72 fm 45°/44°F
 Port Gardner

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.14	24.87	0.593	1.97
5	7.05	25.22	0.567	2.03
10	6.69	28.78	0.468	2.16
19	6.43	28.91	0.520	2.36
29	6.48	28.98	0.517	2.32
48	6.68	29.08	0.433	2.23
72	6.66	29.18	0.423	2.00
96	6.66	29.35	0.461	2.25
120	6.69	29.43	0.462	2.37

STA 136-3 48° 04.9' N WEATHER o.
 19 Mar 56 122° 19.7' W WIND WxN 8
 1526 (+8) DEPTH 67 fm 45°/43°F
 Camano Head, East of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.20	22.95	0.600	1.86
5	6.88	28.40	0.473	2.29
10	7.19	28.80	0.390	2.19
19	6.93	28.94	0.413	2.19
29	7.26	29.07	0.376	2.28
48	6.82	29.16	0.428	2.32
72	6.95	29.33	0.400	2.16
96	6.75	29.48	0.441	2.44
115	6.76	29.53	0.446	2.46

STA 136-4 48° 09.1' N WEATHER o.
 19 Mar 56 122° 25.6' W WIND WSW 7
 1630 (+8) DEPTH 54 fm 45°/42°F
 Port Susan, Head of

Depth (m)	Temp (°C)	Sal (°/oo)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.34	24.20	0.579	2.07
5	7.17	25.91	0.543	2.16
10	7.35	29.05	0.322	2.42
19	7.88	28.47	0.409	2.41
29	7.94	29.17	0.302	2.01
48	7.82	29.31	0.192	2.60
73	7.37	29.43	0.139	2.61
95	6.99	29.48	0.226	2.52

STA 136-5 48° 06.1' N WEATHER o.
 19 Mar 56 122° 21.9' W WIND WSW 10
 1819 (+8) DEPTH --- 44°/41° F
 Port Susan, Middle of

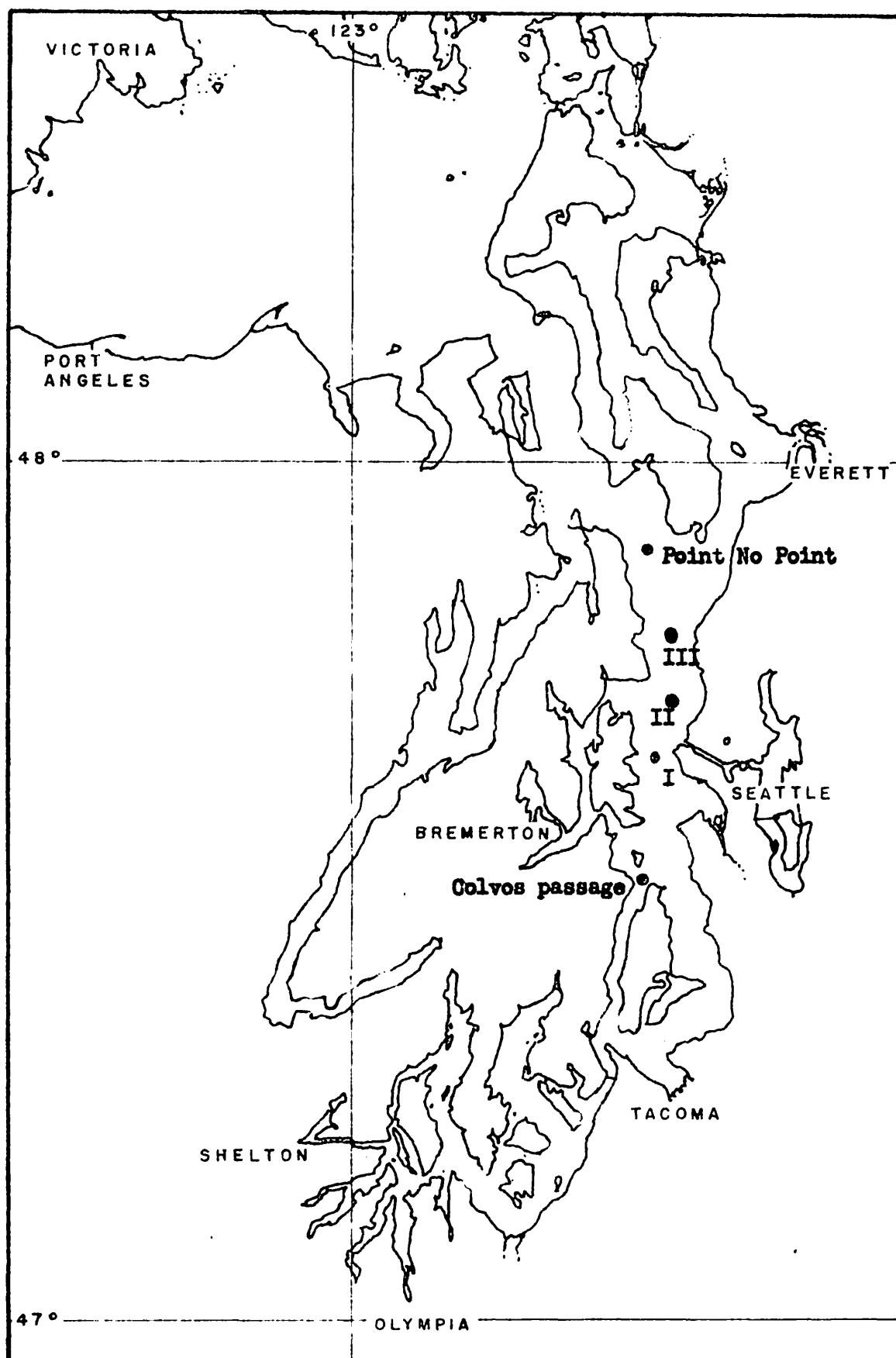
Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.11	23.97	0.585	1.80
5	7.34	25.72	0.510	2.15
10	7.13	28.22	0.447	2.22
19	7.92	29.00	0.327	2.51
29	7.89	29.14	0.310	2.56
48	7.87	29.29	0.314	2.64
72	7.18	29.33	0.368	2.34
96	6.95	29.47	0.413	2.54
115	6.76	29.54	0.458	2.54

STA 136-6 48° 01.3' N WEATHER o.
 19 Mar 56 122° 18.6' W WIND N 7
 1942 (+8) DEPTH 58 fm 44°/41° F
 Gedney Island

Depth (m)	Temp (°C)	Sal (‰)	O ₂ (mg-at/L)	PO ₄ (ug-at/L)
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0	7.08	24.31	0.611	2.00
5	6.94	25.80	0.585	2.11
10	6.73	28.30	0.494	2.25
19	6.51	28.79	0.510	2.23
29	6.65	28.96	0.464	2.24
48	6.84	29.15	0.448	2.46
72	7.16	29.33	0.373	2.31
96	6.94	29.45	0.408	2.54



Oceanographic Station Locations
 Plankton Studies
 February 1955 - March 1956

STATION I

West Point

LAT. 47° 39.8' N LONG. 122° 28.0' W

Depth 130 fathoms

	3 March 1955 -----			10 March 1955 1616 (+8)			18 March 1955 0828 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	7.16	28.96	-----	7.47	29.00	0.468	7.23	28.53	0.564
57	7.65	29.33	-----	7.42	29.47	0.504	7.27	29.42	-----
148	7.49	29.56	-----	7.18	29.61	0.502	7.14	29.72	0.521

	24 March 1955 0750 (+8)			31 March 1955 1104 (+8)			8 April 1955 0736 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	7.12	29.07	0.559	7.32	29.27	0.547	7.74	29.22	0.563
57	7.22	29.40	0.530	7.23	29.58	0.509	7.24	29.60	0.519
148	7.16	29.74	0.530	7.20	29.79	0.510	7.27	29.90	0.518

	14 April 1955 0724 (+8)			21 April 1955 0747 (+8)			28 April 1955 0744 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	7.56	29.09	0.577	7.74	29.18	0.608	7.94	28.24	0.667
57	7.39	29.70	0.523	7.51	29.70	0.520	7.61	29.58	0.534
148	7.46	29.94	0.519	7.51	29.97	0.507	7.59	29.88	0.510

	5 May 1955 1155 (+8)			19 May 1955 0733 (+8)			2 June 1955 0733 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	10.37	28.75	0.931	9.57	28.59	0.739	10.10	28.42	0.656
57	7.67	29.36	0.529	7.95	29.67	0.517	8.47	29.67	0.519
148	7.70	29.78	0.501	8.26	30.08	0.509	8.61	29.97	0.495

STATION I (Cont'd)

	8 June 1955 0927 (+8)			23 June 1955 0749 (+8)			29 June 1955 0750 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	11.63	-----	0.660	10.92	28.44	0.545	11.56	28.17	0.562
57	8.65	29.70	0.502	9.25	29.54	0.492	9.30	29.70	0.456
148	8.71	30.03	0.440	8.90	30.05	0.441	8.98	30.01	0.438

	7 July 1955 0743 (+8)			14 July 1955 0731 (+8)			21 July 1955 0847 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	13.11	26.06	0.836	13.04	25.14	0.610	12.83	27.79	0.670
57	9.39	29.70	0.457	9.34	29.94	0.416	9.85	29.69	-----
148	9.25	30.14	0.415	9.31	30.17	0.396	9.46	30.08	-----

	29 July 1955 1100 (+8)			8 August 1955 1136 (+8)			18 August 1955 0809 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	11.12	29.38	0.470	14.64	26.76	0.813	13.04	28.80	0.623
57	10.35	29.58	0.413	9.97	29.94	0.438	10.23	29.85	0.376
148	9.63	30.05	0.359	9.96	30.26	0.367	10.06	30.16	0.355

	25 August 1955 0742 (+8)			14 October 1955 1057 (+8)			21 October 1955 1318 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	10.37	-----	-----	11.18	29.11	-----	10.92	29.60	0.443
57	10.58	29.88	0.395	10.53	30.46	-----	10.68	30.32	0.401
	-----	-----	-----	10.24	30.59	-----	10.17	30.55	0.400

STATION I (Cont'd)

	4 November 1955 0800 (+8)			30 November 1955 1220 (+8)			12 December 1955 1330 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	9.24	29.61	0.497	9.16 9.43 8.67	28.77 29.99 30.14	0.513 0.436 0.442	8.09	27.66	-----

	23 December 1955 1243 (+8)			30 December 1955 1329 (+8)			30 January 1956 0743 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	7.39	26.78	0.542	6.92	25.75	0.558	6.51	27.83	0.525
57	8.01	29.45	0.481	8.06	29.20	0.487	7.31	28.66	0.481
148	8.15	29.70	0.480	7.83	29.67	0.472	7.34	29.04	0.467

	6 February 1956 0725 (+8)			13 February 1956 0715 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	6.97	28.46	0.501	6.82	28.37	0.522
57	7.17	28.91	0.482	6.97	28.93	0.496
148	6.89	29.05	0.493	6.92	29.22	0.500

STATION II

Point Jefferson, Southeast of

LAT. 47° 42.8' N LONG. 122° 26.7' W

Depth 150 fathoms

	26 February 1955 0759 (+8)			3 March 1955 -----			10 March 1955 1810 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	7.63	29.13	-----	7.36	29.00	-----	7.41	29.11	0.537
57	7.87	29.36	-----	7.55	29.31	-----	7.29	29.42	0.503
148	7.62	29.65	-----	7.48	29.58	-----	7.11	29.58	0.504

	18 March 1955 1009 (+8)			24 March 1955 1049 (+8)			31 March 1955 0733 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	7.29	27.48	0.590	7.12	29.07	0.560	7.31	29.11	0.545
57	7.24	29.49	0.514	7.22	29.49	0.520	7.32	29.38	0.532
148	7.12	29.81	0.441	7.16	29.76	0.475	7.21	29.79	0.514

	8 April 1955 0921 (+8)			14 April 1955 0907 (+8)			21 April 1955 0940 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	7.83	28.78	0.555	7.62	28.15	0.587	7.97	28.53	0.667
57	7.26	29.60	0.519	7.48	29.65	0.534	7.52	29.63	0.520
148	7.31	29.83	0.508	7.56	29.96	0.525	7.48	29.92	0.510

	28 April 1955 0922 (+8)			5 May 1955 1458 (+8)			19 May 1955 0934 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	8.08	28.37	0.698	9.38	28.80	0.950	9.25	28.44	0.754
57	7.60	29.56	0.536	7.74	29.47	0.540	8.09	29.65	0.521
148	7.59	30.01	0.512	7.64	29.83	0.494	8.25	29.92	0.510

STATION II (Cont'd)

	2 June 1955 0909 (+8)			8 June 1955 1058 (+8)			23 June 1955 0920 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	10.05	28.13	0.656	11.70	26.29	0.664	10.84	28.13	0.546
57	8.49	29.56	0.527	8.68	29.61	0.506	9.31	29.60	0.452
148	8.57	29.90	0.485	8.70	29.97	0.483	9.08	29.88	0.438

	29 June 1955 0931 (+8)			7 July 1955 0937 (+8)			14 July 1955 0930 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	11.46	28.17	0.562	13.10	25.93	0.850	13.60	24.76	0.645
57	9.57	29.42	0.479	9.31	29.78	0.447	9.54	29.70	0.441
148	9.03	30.05	0.414	9.26	30.10	0.406	9.30	30.21	0.392

	21 July 1955 1027 (+8)			29 July 1955 0738 (+8)			8 August 1955 0959 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	13.22	27.27	0.693	12.64	29.22	0.490	13.80	26.76	0.735
57	9.76	29.79	0.417	11.42	29.83	0.383	10.23	29.74	0.385
148	9.54	30.07	0.410	9.75	30.14	0.373	10.00	30.21	0.366

	18 August 1955 0943 (+8)			25 August 1955 1047 (+8)			2 September 1955 0857 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	12.92	28.98	0.627	12.01	29.33	-----	-----	-----	0.532
57	10.88	29.54	0.423	10.59	30.07	0.403	10.69	-----	0.377
148	10.25	30.01	0.363	10.48	30.30	0.402	10.41	-----	0.369

STATION II (Cont'd)

	2 June 1955 0909 (+8)			8 June 1955 1058 (+8)			23 June 1955 0920 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	10.05	28.13	0.656	11.70	26.29	0.664	10.84	28.13	0.546
57	8.49	29.56	0.527	8.68	29.61	0.506	9.31	29.60	0.452
148	8.57	29.90	0.485	8.70	29.97	0.483	9.08	29.88	0.438

	29 June 1955 0931 (+8)			7 July 1955 0937 (+8)			14 July 1955 0930 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	11.46	28.17	0.562	13.10	25.93	0.850	13.60	24.76	0.645
57	9.57	29.42	0.479	9.31	29.78	0.447	9.54	29.70	0.441
148	9.03	30.05	0.414	9.26	30.10	0.406	9.30	30.21	0.392

	21 July 1955 1027 (+8)			29 July 1955 0738 (+8)			8 August 1955 0959 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	13.22	27.27	0.693	12.64	29.22	0.490	13.80	26.76	0.735
57	9.76	29.79	0.417	11.42	29.83	0.383	10.23	29.74	0.385
148	9.54	30.07	0.410	9.75	30.14	0.373	10.00	30.21	0.366

	18 August 1955 0943 (+8)			25 August 1955 1047 (+8)			2 September 1955 0857 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	12.92	28.98	0.627	12.01	29.33	-----	-----	-----	0.532
57	10.88	29.54	0.423	10.59	30.07	0.403	10.69	-----	0.377
148	10.25	30.01	0.363	10.48	30.30	0.402	10.41	-----	0.369

STATION II (Cont'd)

	8 September 1955 1157 (+8)			15 September 1955 0850 (+8)			22 September 1955 1317 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	12.37	29.51	0.478	11.77	29.90	0.392	11.57	29.78	0.423
57	10.84	30.16	0.377	10.83	30.28	0.343	10.82	30.30	0.358
148	10.58	30.46	0.367	10.62	30.44	0.344	10.50	30.46	0.352

	7 October 1955 0945 (+8)			14 October 1955 0854 (+8)			21 October 1955 1125 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	11.07	30.19	-----	11.08	29.67	-----	10.92	29.25	0.519
57	10.73	30.34	-----	10.41	30.52	-----	10.38	30.35	0.398
148	10.33	30.57	-----	10.19	30.57	-----	10.06	30.55	0.407

	4 November 1955 0900 (+8)			12 November 1955 0955 (+8)			18 November 1955 1117 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	10.44	30.30	0.467	7.98	24.25	-----	8.51	28.37	0.541
				10.22	29.29	-----	8.93	29.70	0.583
				9.82	30.46	-----	9.74	30.19	0.483

	30 November 1955 0955 (+8)			12 December 1955 1118 (+8)			16 December 1955 0956 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	8.63	24.69	0.547	8.62	28.51	0.523	7.56	27.79	0.530
57	9.07	29.85	0.457	8.69	29.56	0.480	8.52	29.54	0.458
148	8.58	30.05	0.455	8.53	29.85	0.479	7.99	29.76	0.458

STATION II (Cont'd)

	23 December 1955 1037 (+8)			30 December 1955 1200 (+8)			6 January 1956 1043 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	7.66	29.96	0.530	6.92	26.78	0.547	7.60	28.13	0.523
57	7.78	29.26	0.443	7.75	29.25	0.487	7.40	29.14	0.493
148	8.13	29.76	0.422	7.84	29.60	0.465	8.14	29.49	0.432

	13 January 1956 0946 (+8)			23 January 1956 1000 (+8)			30 January 1956 0927 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	7.40	27.36	0.527	7.42	28.42	0.526	6.57	27.94	0.524
57	----	29.02	0.511				7.26	28.77	0.487
148	8.14	29.45	0.480				7.30	28.95	0.472

	6 February 1956 0908 (+8)			13 February 1956 0859 (+8)			15 March 1956 0659 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	6.62	27.12	0.524	6.79	28.44	0.523	5.97	28.26	0.576
57	6.99	28.64	0.492	6.95	28.93	0.497			
148	6.80	29.04	0.502	6.90	29.16	0.502	6.41	29.61	0.531

STATION II (Time Study)

Point Jefferson, Southeast of

LAT. $47^{\circ} 42.8' N$ LONG. $122^{\circ} 26.7' W$

Depth 150 fathoms

	20 February 1956 1756 (+8)			20 February 1956 2050 (+8)			20 February 1956 2350 (+8)		
Depth (m)	Temp (°C)	Sal (‰)	Oxygen (mg-at/L)	Temp (°C)	Sal (‰)	Oxygen (mg-at/L)	Temp (°C)	Sal (‰)	Oxygen (mg-at/L)
0	6.58	28.62	0.529	6.62	28.62	0.523	6.60	28.62	0.526
57	6.71	28.77	0.510	6.68	28.91	0.512	6.72	28.98	0.510
148	6.48	29.38	0.519	6.53	29.25	0.513	6.67	29.00	0.510

	21 February 1956 0307 (+8)			21 February 1956 0504 (+8)			21 February 1956 0851 (+8)		
Depth (m)	Temp (°C)	Sal (‰)	Oxygen (mg-at/L)	Temp (°C)	Sal (‰)	Oxygen (mg-at/L)	Temp (°C)	Sal (‰)	Oxygen (mg-at/L)
0	6.42	28.03	0.529	6.42	28.64	0.533	6.47	28.44	0.517
57	6.72	29.05	0.507	6.69	29.05	0.507	6.67	28.98	0.513
148	6.51	29.25	0.516	6.53	29.25	0.516	6.56	29.27	0.511

	21 February 1956 1146 (+8)			21 February 1956 1400 (+8)			21 February 1956 1720 (+8)		
Depth (m)	Temp (°C)	Sal (‰)	Oxygen (mg-at/L)	Temp (°C)	Sal (‰)	Oxygen (mg-at/L)	Temp (°C)	Sal (‰)	Oxygen (mg-at/L)
0	6.42	28.31	0.534	6.42	28.26	0.531	6.58	28.64	0.526
57	6.68	28.98	0.511	6.71	28.91	0.506	6.71	28.77	0.511
148	6.61	29.18	0.510	6.55	29.31	0.510	6.54	29.25	0.514

STATION III

Point Wells

LAT. 47° 47.6' N LONG. 122° 26.2' W

Depth 150 fathoms

	26 February 1955 1450 (+8)			10 March 1955 1951 (+8)			18 March 1955 1157 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	4.84	-----	-----	7.35	29.11	0.534	7.63	28.22	0.578
57	7.77	-----	-----	7.28	29.45	0.508	7.21	29.47	0.521
148	7.60	-----	-----	7.08	29.61	0.503	7.14	29.92	0.506

	24 March 1955 1125 (+8)			31 March 1955 0919 (+8)			8 April 1955 1117 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	7.23	29.13	0.561	7.33	29.31	0.550	----	28.91	0.586
57	7.24	29.42	0.529	7.25	29.61	0.520	----	29.72	0.515
148	7.18	29.85	0.499	7.24	29.83	0.514	----	29.94	0.506

	14 April 1955 1034 (+8)			21 April 1955 1114 (+8)			28 April 1955 1104 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	7.70	28.59	0.550	8.20	28.55	0.691	8.34	28.84	0.668
57	7.51	29.70	0.533	7.53	29.61	0.522	7.79	29.58	0.544
148	7.54	29.92	0.525	7.51	30.05	0.501	7.70	29.81	0.523

	19 May 1955 1123 (+8)			2 June 1955 1045 (+8)			8 June 1955 1238 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	9.34	28.77	0.786	10.44	27.38	0.658	12.11	26.33	0.703
57	8.12	29.69	0.524	8.57	29.65	0.506	8.64	29.69	0.505
148	8.26	29.94	0.511	8.72	30.01	0.491	8.74	30.03	0.475

STATION III (Cont'd)

	23 June 1955 1050 (+8)			29 June 1955 1112 (+8)			7 July 1955 1107 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	11.47	27.65	0.503	12.09	27.81	0.592	13.38	26.38	0.886
57	9.32	29.74	0.417	9.30	29.72	0.433	9.41	29.72	0.438
148	8.91	30.03	0.438	9.14	30.05	0.412	9.24	30.19	0.396

	14 July 1955 1100 (+8)			21 July 1955 1204 (+8)			29 July 1955 0910 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	12.31	26.60	0.607	13.65	27.39	0.694	11.68	29.16	0.528
57	9.42	29.87	0.417	9.94	29.65	0.435	10.01	29.88	0.394
148	9.35	30.16	0.411	9.39	30.12	0.387	-----	-----	-----

	8 August 1955 0823 (+8)			18 August 1955 1113 (+8)			25 August 1955 0924		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	13.15	27.47	0.643	13.46	-----	0.715	12.00	29.54	0.496
57	10.21	30.01	0.379	10.56	29.81	0.387	10.65	29.99	0.412
148	10.02	30.21	0.372	10.05	30.19	0.389	10.59	30.21	0.408

	2 Sept 1955 1118 (+8)			8 Sept 1955 0904 (+8)			14 October 1955 0700 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	13.38	-----	0.607	12.29	29.60	0.442	10.84	28.86	-----
57	10.60	-----	0.375	10.82	30.25	0.383	10.47	30.50	-----
148	-----	-----	0.367	10.62	30.44	0.373	10.08	30.66	-----

STATION III (Cont'd)

	21 October 1955 0926 (+8)			30 November 1955 0755 (+8)			12 December 1955 0930 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	10.98	29.52	0.491	8.62	28.31	0.542	8.63	29.13	0.524
57	10.35	30.37	0.410	8.27	29.87	0.473	8.60	29.56	0.488
148	9.87	30.48	0.413	8.28	30.01	0.473	8.13	29.94	0.472

	30 December 1955 1007 (+8)			30 January 1956 1049 (+8)			6 February 1956 1025 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	6.26	24.72	0.582	6.36	27.32	0.508	6.96	28.62	0.500
57	7.51	29.05	0.501	7.16	28.78	0.498	7.07	28.86	0.490
148	7.72	29.61	0.464	7.34	29.00	0.468	6.76	29.07	0.505

	13 February 1956 1026 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	6.82	28.37	0.522
57	6.97	28.93	0.496
148	6.92	29.22	0.500

STATION POINT NO POINT

(Time Study)

LAT. 47° 54.0' N LONG. 122° 28.6' W

Depth 110 fathoms

	14 March 1956 0324 (+8)			14 March 1956 0603 (+8)			14 March 1956 0904 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	6.03	28.08	0.553	6.29	28.96	0.551	6.09	27.85	0.585
57	6.32	29.27	0.545	6.29	29.23	0.547	6.31	29.09	0.539
148	6.33	29.36	0.540	6.29	29.34	0.545	6.33	29.34	0.542

	14 March 1956 1218 (+8)			14 March 1956 1511 (+8)			14 March 1956 1758 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	6.27	29.27	0.556	6.25	29.25	0.556	6.31	29.05	0.548
57	6.33	29.54	0.544	6.33	29.33	0.539			
148	6.43	29.72	0.529	6.35	29.87	0.543	6.32	29.40	0.546

	14 March 1956 2112 (+8)			15 March 1956 0002 (+8)			15 March 1956 0259 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	6.22	28.37	0.551	6.32	29.40	0.544	6.15	28.53	0.552
148	6.36	29.42	0.540	6.35	29.42	0.537	6.33	29.34	0.544

	15 March 1956 0455 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	6.26	29.04	0.546
148	6.32	29.38	0.544

STATION COLVOS PASSAGE

(Time Study)

LAT. 47° 30.6' N LONG. 122° 29.1' W

Depth 60 fathoms

	15 March 1956 0944 (+8)			15 March 1956 1233 (+8)			15 March 1956 1530 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	6.31	28.77	0.537	6.60	28.73	0.543	6.44	28.78	0.536
57	6.36	28.89	0.527	6.35	28.85	0.531	6.38	28.97	0.524

	15 March 1956 1757 (+8)			15 March 1956 2117 (+8)			16 March 1956 0002 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	6.39	28.80	0.535	6.40	28.84	0.535	6.29	28.66	0.535
57	6.38	28.96	0.524	6.39	28.89	0.528	6.39	28.87	0.533

	16 March 1956 0304 (+8)			16 March 1956 0558 (+8)			16 March 1956 0954 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	6.31	28.68	0.540	6.28	28.68	0.538	6.32	28.70	0.535
57	6.40	28.78	0.532	6.37	28.82	0.533	6.38	28.86	0.529

	16 March 1956 1053 (+8)		
Depth (m)	Temp (°C)	Sal (°/oo)	Oxygen (mg-at/L)
0	6.38	28.72	0.535
57	6.38	28.90	0.528

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