

Data Report
Water Column Characteristics of Effingham Inlet and Clayoquot Sound,
September 2001

By

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Abstract

This cruise report contains water column CTD data collected in Effingham Inlet (Barkley Sound) and Clayoquot Sound, British Columbia, between September 4 and 9, 2001. The objectives of the cruise were three-fold; to establish collaborative research efforts with faculty and students from three regional universities in Washington State, to investigate the preservation of organic matter in the sediments of the inlets, and to evaluate the extent of the regional oxygen minimum zone in the inlets. Data on the organic matter content of the sedimentary samples is incomplete at this time and is not included in this report.

Introduction

The scientific objectives of the September 2001 cruise to the outer inlets of Vancouver Island were to evaluate the water column conditions within the inlets and also to sample the sediments in order to evaluate their organic matter contents. To accomplish these goals, three types of measurements were made; CTD casts, water incubations, and sediment grabs using a 1-m long gravity core. Data from the core samples will be reported at a later date. Measurements were made at thirty-seven stations within the region (Figure 1). Both sediments and waters were sampled at each station. Chief scientist on the cruise was Richard G. Keil from the University of Washington's School of Oceanography and further inquiries should be addressed to him. Cruise participants and their affiliations are listed in Table 1.

Methods

CTD casts were made at a descent rate of 20 m min^{-1} . The CTD system contained a YSI oxygen meter which was calibrated from ship-board measurements. Calibrated data is presented here. Chlorophyll measurements were made using standard fluorescence techniques (Parsons et al., 1984). Bacterial growth was measured using the dual-labeled approach of Chin-Leo and Kirchman (1988). Chlorophyll and bacterial growth estimates are provided in Table 2. Table 3 presents the CTD data.

References

- Chin-Leo G. and Kirchman D. L. (1988) Estimating bacterial production in marine waters from the simultaneous incorporation of thymidine and leucine. *Applied and Environmental Microbiology* **54**(8), 1934-1939.
- Parsons, T.R., Maita, Y., and Lalli, C.M. (1984) A manual of chemical and biological methods for seawater analysis. Pergamon Press, Oxford. 173 p.

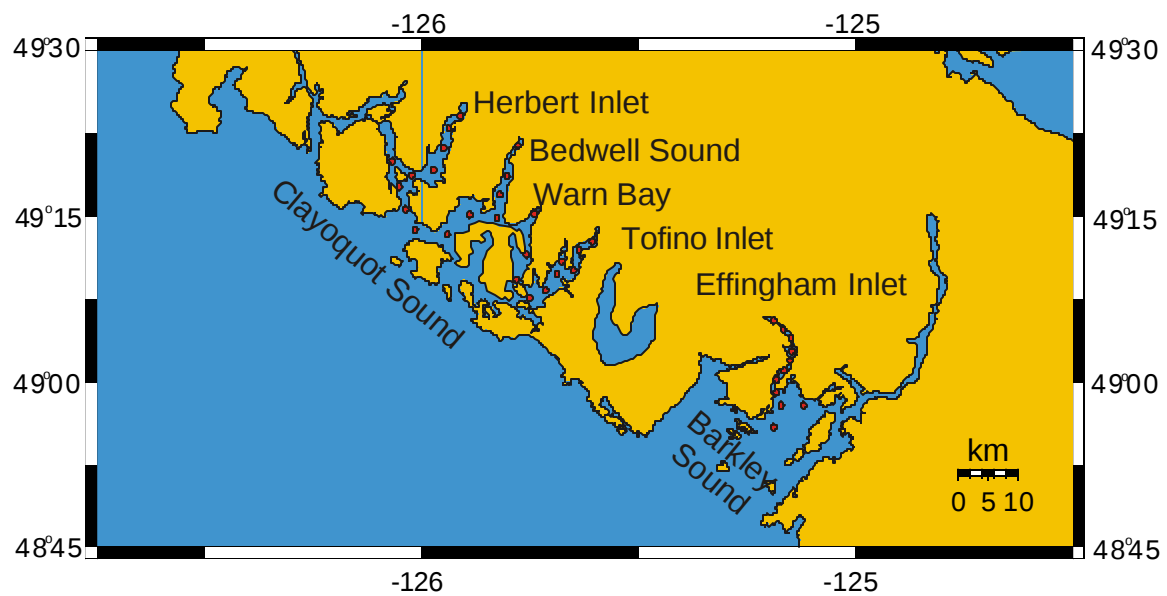


Figure 1. Approximate locations of the samples taken in 2001.

Table 1. Cruise Participants and affiliations.

Name	Status	Affiliation
Dr. Richard G. Keil	<i>Associate Professor</i>	University of Washington, Seattle
Dr. Cheryl Greengrove	<i>Assistant Professor</i>	University of Washington, Tacoma
Dr. Gerardo Chin-Leo	<i>Associate Professor</i>	The Evergreen State College
Ms. Kathy Newell	<i>Research Technician</i>	University of Washington, Seattle
Ms. Jaime Grocock	<i>Undergraduate</i>	University of Washington, Seattle

Table 2. Chlorophyll and Bacterial growth at selected stations.

STATION	Depth (m)	Chlorophyll (mg m-3)	Phaeopigment (mg m-3)	Fo/Fa Ratio	TDR (pmol l-1 h-1)	LEU (pmol l-1 h-1)
2	1.0	9.19	2.99	1.83	39.19	435
3	3.5	12.51	4.34	1.82	29.12	252
6	2.0	15.89	2.30	1.79	45.61	398
9	2.5	5.56	1.84	1.83	29.93	128
13	1.0	5.47	1.55	1.86	16.96	150
15	3.0	3.04	1.64	1.91	8.36	52
2	12.0	0.64	0.61	1.56	10.2	43
3	30.0	0.09	0.27	1.26	8.05	34
6	100.0	0.22	0.32	1.45	5.63	27
9	100.0	0.04	0.34	1.11	7.97	16
13	95.0	0.06	0.34	1.16	7.79	35
15	25.0	0.13	0.18	1.46	2.62	16

Table 3. CTD data for thirty seven stations in Barkley and Clayoquot Sounds.

Station 72100201
 Sep 4 2001 14:42:16 PST
 Latitude 48 58.72 N
 Longitude 125 9.78 W

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	22.2341	22.2403	6.04148	13.4976	29.7641	59.1124
8	24.0574	24.0585	2.43135	11.4421	31.61	85.3164
12	24.2401	24.2391	2.6197	11.0968	31.7635	87.9196
16	24.4651	24.4655	3.74324	10.7027	31.9667	88.4704
20	24.6133	24.6128	3.71468	10.4226	32.0944	88.7075
24	24.7072	24.7068	4.05357	10.481	32.2278	88.9179
28	24.7801	24.7796	3.98043	10.2681	32.2751	88.8516
32	24.822	24.8214	3.83609	10.2449	32.3238	88.8822
36	24.8724	24.8717	3.68208	9.9646	32.3285	88.8541
40	24.9317	24.931	3.24968	9.6923	32.3473	88.6776
44	24.9901	24.9894	3.14437	9.5624	32.3953	88.5186
48	25.0317	25.0309	3.08223	9.4701	32.4295	88.1143
52	25.096	25.0951	2.94697	9.329	32.483	87.9235
56	25.1829	25.1821	2.7535	9.141	32.5563	87.4849
60	25.2866	25.2855	2.55952	8.9261	32.6459	86.9094
64	25.4618	25.461	2.12706	8.5796	32.8021	83.9705
68	25.5622	25.5612	1.94065	8.3944	32.8943	79.6151
72	25.6052	25.6041	1.94785	8.3227	32.9354	77.2508
76	25.6398	25.6387	1.96742	8.2656	32.9688	75.2198
80	25.6601	25.6589	1.82098	8.2348	32.9889	68.8746
84	25.6627	25.6614	1.77214	8.2299	32.9912	67.4209

Station	72100301		
Sep	4	2001	15:58:23
Latitude	48	59.45 N	
Longitude	125	11.37 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	22.6615	22.6641	5.78127	13.1958	30.2346	61.6728
8	24.1044	24.1043	2.63076	11.4708	31.676	84.8681
12	24.348	24.3484	3.71339	11.0155	31.8858	87.4165
16	24.5801	24.5795	3.65246	10.5194	32.0727	88.4211
20	24.6478	24.6474	3.62465	10.3413	32.1212	88.672
24	24.7022	24.7014	3.5303	10.208	32.1617	88.854
28	24.7799	24.7798	3.48186	10.0367	32.2257	88.8849
32	24.8166	24.816	3.34497	9.9533	32.2546	88.8565
36	24.8746	24.874	3.26736	9.8255	32.3021	88.7628
40	24.9223	24.9216	3.07947	9.7146	32.34	88.5253
44	24.9649	24.9638	3.01511	9.6168	32.3739	88.3828
48	25.0808	25.0803	2.75874	9.3585	32.47	87.9419
52	25.1716	25.1706	2.4511	9.1518	32.5437	86.8337
56	25.2736	25.2728	2.22829	8.9269	32.6296	85.3311
60	25.3526	25.3517	2.04176	8.7564	32.6968	84.0281
64	25.4563	25.4554	1.8242	8.5454	32.7883	81.7048
68	25.5145	25.5135	1.6902	8.4411	32.8424	79.4418
72	25.5397	25.5386	1.71984	8.4048	32.8676	78.6432
76	25.578	25.5772	1.68785	8.351	32.9066	74.1315

Station	72100401		
Sep	4	2001	15:29:14
Latitude	49	0.01 N	
Longitude	125	11.07 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	22.5116	22.5124	3.40778	13.2924	30.0642	66.8412
8	24.0538	24.0534	4.96104	11.5983	31.64	85.3425
12	24.2903	24.2911	3.99662	11.091	31.8291	87.7007
16	24.5069	24.5065	3.31863	10.7109	32.0211	88.3312
20	24.6119	24.6113	3.19991	10.461	32.1009	88.6467
24	24.6999	24.6992	3.1793	10.2418	32.1663	88.8531
28	24.7623	24.7618	3.11515	10.0973	32.2156	88.8478
32	24.8187	24.8181	3.09784	9.9672	32.2602	88.7855
36	24.8587	24.8579	3.00669	9.8671	32.2902	88.6348
40	24.9204	24.9196	2.98174	9.7273	32.3401	88.574
44	25.0279	25.0273	2.74917	9.4829	32.4275	88.0502
48	25.1123	25.1115	2.44159	9.2888	32.4957	87.1979
52	25.1612	25.1602	2.3341	9.1717	32.5344	86.767
56	25.2312	25.2305	2.24258	9.0142	32.5928	85.7461
60	25.3385	25.3375	2.02448	8.78	32.6833	84.6761

Station	72100501		
Sep	4	2001	16:41:11
Latitude	49	0.3 N	
Longitude	125	10.61 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	22.5617	22.5608	5.53642	13.3414	30.1388	65.5427
8	23.9988	23.998	2.81896	11.689	31.5892	85.437
12	24.2808	24.2815	3.91675	11.1598	31.8324	87.3979
16	24.5192	24.5188	3.74448	10.6786	32.0299	88.2331
20	24.6633	24.6627	3.4255	10.3454	32.1417	88.6586
24	24.7586	24.7584	3.38613	10.1078	32.2134	88.81
28	24.7883	24.7877	3.4008	10.0323	32.235	88.7416
32	24.8655	24.8649	3.23399	9.8511	32.2957	88.7053
36	24.9438	24.9433	3.04031	9.6669	32.3578	88.6064
40	25.0056	25.0049	2.89021	9.5075	32.4039	88.5012
44	25.0716	25.0707	2.57471	9.3306	32.4519	88.0062
48	25.1491	25.1484	2.4316	9.1469	32.5143	87.4078
52	25.2532	25.2524	2.22988	8.9429	32.6066	86.388
56	25.4057	25.4048	1.83675	8.6014	32.7344	84.173
60	25.4563	25.4555	1.50181	8.4679	32.7734	82.546
64	25.4864	25.4854	1.57674	8.3827	32.7953	82.2376
68	25.5127	25.5117	1.38804	8.3051	32.8142	80.1787
72	25.5161	25.515	1.32551	8.292	32.816	78.4222
76	25.5187	25.5176	1.33705	8.2814	32.8174	79.0045

Station	72100601		
Sep	4	2001	17:11:35
Latitude	49	0.87 N	
Longitude	125	9.83 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	22.3121	22.3127	5.07676	13.6414	29.8944	65.4664
8	23.9788	23.9788	3.43416	11.7865	31.5874	84.6125
12	24.2347	24.2342	4.11322	11.3423	31.8131	87.1255
16	24.5041	24.5036	3.85874	10.7365	32.0232	88.0458
20	24.6777	24.6777	3.31689	10.3048	32.152	88.6199
24	24.7313	24.731	3.41601	10.1776	32.1932	88.8053
28	24.792	24.7912	3.40098	10.034	32.2399	88.8165
32	24.8507	24.8501	3.26332	9.8897	32.2849	88.7866
36	24.8956	24.895	3.12884	9.7789	32.3193	88.7579
40	24.9457	24.9449	3.01385	9.6528	32.357	88.6079
44	24.9965	24.9958	2.8156	9.5131	32.3933	88.1837
48	25.0592	25.0583	2.66527	9.3491	32.4399	88.1346
52	25.1423	25.1411	2.32884	9.1314	32.502	87.5414
56	25.2796	25.2789	2.06503	8.859	32.624	86.2962
60	25.3605	25.3598	1.84703	8.6967	32.6955	84.5982
64	25.4414	25.4403	1.69117	8.5044	32.7612	83.6265
68	25.4764	25.4754	1.47555	8.4093	32.7878	82.8687
72	25.4967	25.4957	1.47425	8.351	32.8026	82.7128
76	25.5124	25.5112	1.35071	8.3027	32.8133	82.4146
80	25.5137	25.5125	1.33194	8.2975	32.814	82.647
84	25.5178	25.5165	1.2993	8.2828	32.8165	82.6918
88	25.522	25.5207	1.26702	8.2678	32.8191	82.4999
92	25.5253	25.5239	1.21611	8.2571	32.8211	82.5315
96	25.5298	25.5284	1.18624	8.2421	32.8242	82.7398
100	25.5304	25.5289	1.15594	8.2392	32.8243	82.7082
104	25.5313	25.5297	1.14672	8.237	32.8249	82.561
108	25.5353	25.5337	1.12968	8.2207	32.8271	82.6713
112	25.5361	25.5345	1.11642	8.2201	32.8281	82.5961
116	25.5365	25.5348	1.10013	8.2175	32.828	82.0163
120	25.5386	25.5368	1.08876	8.2138	32.8299	81.8154
124	25.541	25.5391	1.06414	8.2074	32.8318	81.6451

Station	72100701		
Sep	4	2001	17:53:19
Latitude	49	1.37 N	
Longitude	125	9.3 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	21.8956	21.8945	5.94705	14.1101	29.4708	64.1419
8	23.802	23.8034	5.21018	12.1536	31.4494	83.3194
12	24.2641	24.2636	3.3174	11.3373	31.85	86.9258
16	24.5096	24.5093	3.58313	10.8026	32.0451	88.1089
20	24.6696	24.6694	3.34099	10.3566	32.1526	88.5659
24	24.7313	24.7309	3.28854	10.1935	32.1964	88.7373
28	24.7754	24.7749	3.26345	10.08	32.2288	88.8569
32	24.8139	24.8133	3.23463	9.9838	32.2576	88.8427
36	24.859	24.8583	3.12236	9.869	32.2911	88.7979
40	24.9246	24.9238	2.97179	9.7051	32.3409	88.63
44	25.0168	25.016	2.72072	9.462	32.4088	88.2802
48	25.0839	25.0831	2.34121	9.2391	32.4493	87.748
52	25.1555	25.1546	2.13908	9.0466	32.5022	87.2396
56	25.2597	25.2588	2.01508	8.86	32.5985	86.3036
60	25.3569	25.3559	1.77971	8.6629	32.684	85.281
64	25.4075	25.4066	1.64403	8.5765	32.732	84.2544
68	25.4498	25.4488	1.58703	8.4724	32.7659	83.8901
72	25.4802	25.4791	1.4159	8.3971	32.7902	83.5349
76	25.4895	25.4884	1.39547	8.3753	32.798	83.0137
80	25.4999	25.4987	1.33517	8.3425	32.805	82.7065
84	25.5016	25.5003	1.29578	8.337	32.8061	82.562
88	25.5075	25.5061	1.272	8.3201	32.8104	82.7419
92	25.5125	25.5111	1.21261	8.3011	32.8132	83.2409
96	25.52	25.5186	1.17784	8.2696	32.8168	83.709
100	25.5302	25.5288	1.09869	8.228	32.822	84.1256
104	25.5393	25.5378	1.07434	8.1988	32.8281	84.3231
108	25.5446	25.5431	1.0903	8.1903	32.8333	84.37

Station	72100801		
Sep	4	2001	18:57:19
Latitude	49	1.91 N	
Longitude	125	9.1 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	21.9187	21.9198	6.49605	14.3012	29.553	67.8161
8	23.9272	23.9274	4.00417	12.114	31.5992	84.3012
12	24.2568	24.2566	3.32313	11.3807	31.8508	87.1584
16	24.5192	24.5187	3.61835	10.7905	32.0544	88.0736
20	24.6421	24.6418	3.34262	10.4465	32.1368	88.4882
24	24.706	24.7055	3.41426	10.2718	32.1808	88.6954
28	24.7615	24.761	3.34651	10.1195	32.2193	88.856
32	24.8247	24.8242	3.27769	9.9582	32.2661	88.6903
36	24.889	24.8883	3.02363	9.7911	32.3132	88.5941
40	24.9552	24.9545	2.88326	9.612	32.3608	88.4349
44	25.0025	25.0017	2.67266	9.4743	32.3929	88.1832
48	25.0787	25.0779	2.45194	9.2188	32.4386	87.7104
52	25.1652	25.1645	2.11839	9.0102	32.5076	87.2729
56	25.2806	25.2796	1.8564	8.7585	32.6052	86.3912
60	25.3561	25.3551	1.67384	8.6284	32.6763	85.3986
64	25.3961	25.3951	1.66733	8.5464	32.7116	84.9719
68	25.4411	25.4401	1.5283	8.4675	32.7538	84.3106
72	25.4699	25.4688	1.50072	8.4123	32.78	83.893
76	25.4936	25.4925	1.37528	8.3533	32.799	83.6554
80	25.503	25.5018	1.30186	8.3266	32.8059	83.7041
84	25.5057	25.5045	1.29246	8.3174	32.8076	83.6086
88	25.512	25.5106	1.24649	8.2968	32.8117	83.6908
92	25.5201	25.5188	1.16327	8.252	32.8137	83.9814
96	25.5232	25.5218	1.04528	8.2311	32.8136	84.1778
100	25.5261	25.5247	1.03574	8.2205	32.8154	84.4477
104	25.529	25.5275	1.03413	8.2082	32.8167	84.5799
108	25.5334	25.5318	0.97205	8.1888	32.8187	84.6291
112	25.5365	25.5348	0.93578	8.1837	32.8216	84.7065
116	25.5441	25.5425	1.03738	8.181	32.8309	84.7118
120	25.5453	25.5435	1.10905	8.1826	32.8326	84.6115
124	25.5463	25.5445	1.06742	8.1873	32.8349	84.5364
128	25.553	25.5512	1.08883	8.1788	32.8418	84.0682
132	25.5557	25.5538	1.10382	8.1745	32.8444	83.4751
136	25.5569	25.5549	1.10114	8.1721	32.8455	83.3474
140	25.5579	25.5558	1.10267	8.1698	32.8463	83.1921
144	25.5594	25.5573	1.12595	8.1665	32.8477	84.1568
148	25.562	25.5598	1.13457	8.1639	32.8505	84.6321
152	25.5649	25.5626	1.09553	8.1633	32.854	84.1369

Station	72100901		
Sep	4	2001	19:36:20
Latitude	49	2.48 N	
Longitude	125	9.19 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	21.8192	21.8183	5.84738	14.4632	29.4645	72.6919
8	24.0601	24.0602	6.02594	12.0597	31.7571	84.731
12	24.3077	24.3077	3.28974	11.4088	31.9232	87.3497
16	24.4961	24.4956	3.6655	10.9508	32.0605	88.1338
20	24.6231	24.6229	3.67846	10.561	32.1376	88.5594
24	24.7114	24.7111	3.25274	10.2885	32.1914	88.7236
28	24.7674	24.7668	3.25563	10.1251	32.228	88.678
32	24.8341	24.8335	3.17108	9.9397	32.2742	88.6064
36	24.9037	24.9031	2.97671	9.7469	32.323	88.5549
40	24.9771	24.9764	2.74154	9.5292	32.3717	88.246
44	25.0198	25.0191	2.56797	9.3931	32.3985	87.9695
48	25.0732	25.0724	2.43157	9.2195	32.4317	87.7622
52	25.1405	25.1395	2.09809	9.0164	32.477	87.3634
56	25.2615	25.2608	1.81634	8.7315	32.5758	86.8036
60	25.3428	25.3419	1.49895	8.5525	32.6447	86.1989
64	25.415	25.414	1.49867	8.4276	32.7129	85.6397
68	25.4542	25.4531	1.36012	8.3499	32.7481	85.2786
72	25.4798	25.4787	1.31555	8.2848	32.7684	85.1619
76	25.4944	25.4933	1.21069	8.2442	32.7794	85.0941
80	25.5045	25.5033	1.13726	8.2292	32.7894	84.9764
84	25.513	25.5118	1.04822	8.2224	32.799	84.7451
88	25.5168	25.5155	1.04797	8.2107	32.8017	84.7087
92	25.522	25.5206	0.98455	8.2028	32.8068	84.7314
96	25.5276	25.5262	0.91919	8.1945	32.8124	84.7621
100	25.5313	25.5299	0.91194	8.1873	32.8158	84.7062
104	25.5366	25.5351	0.92324	8.1784	32.8209	84.7495
108	25.5401	25.5385	1.00282	8.1729	32.8242	84.7155
112	25.5434	25.5417	1.05072	8.1747	32.8287	84.9526
116	25.5477	25.546	1.08675	8.1732	32.8339	84.96
120	25.5511	25.5494	1.14461	8.1692	32.8376	84.9671
124	25.5544	25.5526	1.21795	8.1575	32.8396	85.5539
128	25.5567	25.5548	1.27033	8.153	32.8416	85.9664
132	25.5583	25.5563	1.25651	8.1524	32.8435	86.1731
136	25.5598	25.5578	1.25281	8.152	32.8454	86.0697
140	25.5609	25.5588	1.24497	8.1534	32.847	86.3131
144	25.5619	25.5599	1.23607	8.1558	32.8489	86.3357
148	25.563	25.5608	1.21464	8.1547	32.85	86.1577
152	25.5637	25.5615	1.24714	8.1543	32.8508	86.2857
156	25.564	25.5617	1.22475	8.1585	32.852	86.1742

160	25.5647	25.5624	1.1434	8.1615	32.8535	85.5405
164	25.5652	25.5628	1.14726	8.1628	32.8544	85.4563
168	25.5657	25.5632	1.13051	8.1629	32.855	85.3164
172	25.5664	25.5639	1.13883	8.1623	32.8558	85.4052
176	25.5668	25.5642	1.12956	8.1641	32.8566	85.386
180	25.5674	25.5648	1.07785	8.1678	32.8581	85.1992
184	25.5681	25.5653	0.96222	8.1721	32.8597	84.8273
188	25.5686	25.5658	0.91886	8.1751	32.8609	84.4182
192	25.5687	25.5658	0.77837	8.179	32.8615	83.6884
196	-9.99E-29	-9.99E-29	0.80659	8.2454	-9.99E-29	83.4164

Station	721001001		
Sep	5	2001	9:34:15
Latitude	49	3.07 N	
Longitude	125	8.59 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	21.7596	21.7594	6.78382	14.5067	29.3997	70.6944
8	23.9516	23.9527	4.59064	12.1632	31.6435	84.5178
12	24.2416	24.2415	3.30839	11.4974	31.8584	87.0079
16	24.4396	24.4391	3.89144	11.0681	32.0145	88.1365
20	24.6	24.5998	3.71272	10.6243	32.122	88.3917
24	24.7441	24.7436	3.26053	10.2054	32.2153	88.5837
28	24.7846	24.784	3.16022	10.0747	32.2393	88.5779
32	24.895	24.8945	3.09891	9.7698	32.3166	88.5084
36	24.9427	24.942	2.72678	9.6248	32.3473	88.3598
40	24.9858	24.9852	2.75594	9.4973	32.3764	88.2075
44	25.0211	25.0203	2.6044	9.3873	32.399	87.998
48	25.0823	25.0816	2.40417	9.1989	32.4393	87.6597
52	25.1211	25.1199	1.91075	9.0786	32.4642	87.5028

Station	72101101		
Sep	4	2001	20:21:38
Latitude	49	3.46 N	
Longitude	125	8.85 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	21.7169	21.7174	6.57626	14.7486	29.4095	66.4146
8	23.9763	23.9768	4.41933	12.3353	31.7154	82.7293
12	24.2061	24.206	3.44188	11.6024	31.8371	86.3677
16	24.4832	24.4827	3.97278	10.9734	32.0491	87.7317
20	24.6583	24.6579	3.60181	10.4656	32.1617	88.3862
24	24.7581	24.7577	3.25211	10.1543	32.2224	88.6184
28	24.8151	24.8145	3.33112	9.974	32.257	88.6146
32	24.875	24.8744	3.11039	9.7965	32.2964	88.5215

Station	72101201		
Sep	5	2001	8:54:45
Latitude	49	3.96 N	
Longitude	125	9.11 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	22.1393	22.1373	6.61756	14.6559	29.9285	75.5832
8	23.9478	23.9486	3.80046	12.2316	31.6548	84.1733
12	24.2237	24.2235	3.85791	11.5562	31.849	87.0632
16	24.5252	24.5249	4.07287	10.8484	32.0753	88.1639
20	24.6649	24.6644	3.59694	10.4255	32.1612	88.4658
24	24.7392	24.7388	3.48808	10.1941	32.2067	88.5326
28	24.8161	24.8155	3.38186	9.9651	32.2564	88.5412
32	24.8879	24.8874	3.0937	9.7541	32.3042	88.4521
36	24.9456	24.9449	2.87562	9.5752	32.3409	88.2677
40	25.0143	25.0136	2.55611	9.3282	32.3784	87.8971
44	25.0862	25.0855	2.17057	9.1072	32.4258	87.5406
48	25.1977	25.197	1.8205	8.7725	32.5023	87.0809
52	25.3209	25.3202	1.29628	8.4264	32.5927	86.7615
56	25.3454	25.3445	1.44498	8.3546	32.6102	86.8561
60	25.3538	25.3529	1.43773	8.3374	32.6177	86.8143
64	25.3593	25.3584	1.40525	8.3352	32.6243	86.386
68	25.363	25.362	1.25367	8.3284	32.6277	85.8941
72	25.3653	25.3643	1.11702	8.3274	32.6305	85.4281
76	25.3664	25.3652	1.13528	8.3305	32.6324	85.1776
80	25.3671	25.3659	0.94265	8.3292	32.6331	84.5029
84	25.3683	25.367	0.83849	8.3277	32.6343	83.7617
88	25.3687	25.3674	0.74919	8.3279	32.6349	83.4539
92	25.3691	25.3677	0.72188	8.3282	32.6354	83.0629
96	25.3694	25.3679	0.67665	8.328	32.6357	82.6927
100	25.3691	25.3676	0.65758	8.328	32.6354	82.6782

Station	72101301		
Sep	4	2001	20:51:14
Latitude	49	4.46 N	
Longitude	125	9.77 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	21.7336	21.7333	6.62997	14.7071	29.4199	70.7555
8	24.0593	24.0599	4.64963	12.2338	31.7983	82.7185
12	24.2696	24.2694	3.83366	11.5981	31.9176	86.8874
16	24.563	24.5627	4.43164	10.7924	32.1114	88.4178
20	24.6749	24.6746	3.54379	10.4087	32.1707	88.5929
24	24.7577	24.7572	3.27767	10.1373	32.2182	88.6613
28	24.8368	24.8363	3.18685	9.8893	32.267	88.636
32	24.9008	24.9002	2.90179	9.6962	32.3085	88.4776
36	24.9519	24.9513	2.73277	9.5036	32.3343	88.3076
40	25.0088	25.0081	2.35498	9.3416	32.3739	88.1267
44	25.077	25.0763	2.20148	9.1147	32.4155	87.7798
48	25.1895	25.1888	1.58401	8.7525	32.4879	87.3256
52	25.3133	25.3125	0.87384	8.4334	32.5843	86.7818
56	25.3486	25.3477	1.3086	8.347	32.6128	86.4809
60	25.3582	25.3574	1.32968	8.3322	32.6224	86.4503
64	25.3619	25.3609	1.30565	8.3266	32.6259	86.2855
68	25.3634	25.3624	1.09681	8.3247	32.6275	85.6824
72	25.3657	25.3646	1.10989	8.3248	32.6305	85.6186
76	25.3671	25.366	0.84597	8.3272	32.6327	84.0947
80	25.3678	25.3666	0.80321	8.3276	32.6337	84.0106
84	25.3684	25.3672	0.78939	8.3276	32.6345	83.8179
88	25.3692	25.3679	0.67561	8.3281	32.6355	83.025
92	25.3693	25.3679	0.61256	8.3281	32.6357	82.6686
96	25.3695	25.3681	0.60977	8.328	32.6359	82.5318

Station	72101401		
Sep	5	2001	8:11:51
Latitude	49	5.15 N	
Longitude	125	10.64 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	22.0712	22.0741	6.09759	14.8935	29.9131	73.1519
8	24.0625	24.0622	6.88767	12.371	31.8351	80.841
12	24.2851	24.2849	4.30617	11.6874	31.9587	87.5012
16	24.4791	24.4787	4.51901	11.0168	32.054	88.5602
20	24.6406	24.6404	3.8235	10.4569	32.1372	88.9052
24	24.7273	24.7268	3.49629	10.1632	32.1848	89.054
28	24.8191	24.8186	3.02417	9.8071	32.2271	89.2181
32	24.8749	24.8743	2.63814	9.6234	32.2603	89.0506
36	24.9368	24.9361	2.04326	9.3814	32.2899	88.1074
40	25.0016	25.0009	1.65121	9.1976	32.3357	87.4811
44	25.1133	25.1126	1.32082	8.8841	32.4162	86.6993
48	25.2519	25.2512	0.82031	8.5648	32.5311	85.9333
52	25.3271	25.3262	0.43218	8.394	32.5943	85.4193

Station	72101501		
Sep	5	2001	7:43:07
Latitude	49	5.53 N	
Longitude	125	11.69 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	23.0261	23.0267	6.68357	14.1969	30.9642	73.0178
8	24.0738	24.0737	5.41701	12.4109	31.8597	78.2071
12	24.3286	24.3284	4.39618	11.5679	31.9868	86.219
16	24.5192	24.5189	3.87057	10.8311	32.064	87.8114
20	24.663	24.6626	3.16256	10.2712	32.1256	88.3786
24	24.7228	24.7223	3.16397	10.0461	32.154	88.8162
28	24.7892	24.7886	3.23078	9.8069	32.1886	89.0594

Station	72101601		
Sep	6	2001	11:27:46
Latitude	48	58.06 N	
Longitude	125	7.44 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	23.2272	23.227	5.67092	12.5328	30.7962	59.4657
8	23.9762	23.9755	3.95648	11.5741	31.5336	74.5794
12	24.3004	24.3005	3.34789	11.1543	31.8556	82.4302
16	24.481	24.4806	3.91509	11.0415	32.0617	83.0708
20	24.53	24.5296	4.06096	10.9783	32.1104	83.383
24	24.6098	24.6093	3.93028	10.8624	32.187	83.6992
28	24.6633	24.6627	4.03434	10.8014	32.2422	83.9542
32	24.7652	24.7646	3.73009	10.604	32.3292	84.2895
36	24.8067	24.8061	3.65954	10.2832	32.3127	84.3338
40	24.8475	24.8466	3.23795	10.0335	32.311	84.0712
44	24.9286	24.9279	3.32601	9.926	32.3926	84.0851
48	25.0004	24.9996	3.27883	9.7329	32.4438	84.0924
52	25.0346	25.0337	3.06787	9.6152	32.4632	83.9485
56	25.0849	25.084	2.99678	9.4674	32.4971	83.7499
60	25.1655	25.1645	2.8411	9.2517	32.5564	83.7143
64	25.2679	25.2668	2.45606	8.9986	32.6363	83.0017
68	25.3393	25.3383	2.27549	8.8141	32.6913	82.3848
72	25.4932	25.492	1.9338	8.4734	32.8215	81.2733
76	25.6192	25.6182	1.41805	8.2305	32.9361	78.5998
80	25.647	25.6458	1.6772	8.2096	32.9674	75.864
84	25.6582	25.6569	1.65061	8.1991	32.9797	75.1178

Station	72103101		
Sep	7	2001	8:58:43
Latitude	49	14.13 N	
Longitude	126	1.85 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	22.2571	22.2571	4.29556	12.4935	29.5334	72.6495
8	22.578	22.5778	4.01654	12.3539	29.9145	73.787
12	22.831	22.8341	4.0655	12.155	30.1981	74.0062

Station	72103301		
Sep	7	2001	10:34:47
Latitude	49	17.75 N	
Longitude	126	2.24 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	21.9067	21.9065	4.78565	12.9663	29.1948	64.3112
8	22.4468	22.4467	3.86316	12.5252	29.7861	73.1815
12	22.7498	22.7496	4.04512	12.2791	30.1185	75.889
16	23.171	23.1708	3.6945	11.8854	30.5692	77.8437
20	23.458	23.4576	3.50359	11.6054	30.874	79.1198
24	23.6163	23.6157	3.55057	11.509	31.0555	79.971
28	23.6838	23.6833	3.47853	11.4065	31.1191	80.4144
32	23.7341	23.7334	3.46062	11.3437	31.1695	80.6113
36	23.7471	23.7463	3.42256	11.3115	31.1789	80.6236
40	23.7727	23.7718	3.36499	11.2299	31.1932	80.5133
44	23.8938	23.8931	3.09725	10.9964	31.2969	79.7094

Station	72103401		
Sep	7	2001	11:00:05
Latitude	49	18.79 N	
Longitude	126	0.8 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	21.6842	21.6837	6.0684	13.2565	28.978	62.0855
8	22.2589	22.258	3.32959	12.7538	29.5976	74.3676
12	22.7961	22.7966	3.83146	12.2712	30.1773	83.0261
16	23.0212	23.0208	4.01919	12.0689	30.4189	84.5786
20	23.3106	23.3103	3.88289	11.7708	30.7225	85.7001
24	23.4999	23.4994	3.68173	11.5121	30.9066	86.346
28	23.606	23.6054	3.55889	11.3528	31.0066	86.5472
32	23.7262	23.7257	3.3377	10.8378	31.0466	86.6674
36	23.8733	23.8725	2.99165	10.8023	31.2271	86.3569
40	24.0102	24.0094	3.12893	10.6484	31.3693	84.8568
44	24.0654	24.0645	2.83481	10.4975	31.4074	84.1724
48	24.1108	24.11	2.7666	10.1765	31.397	84.5983
52	24.1398	24.1389	2.76104	10.0419	31.4056	85.3858
56	24.1618	24.1608	2.73957	10.0481	31.4352	84.7973
60	24.1794	24.1783	2.70016	10.0244	31.4527	85.0457
64	24.1921	24.1909	2.67986	10.0438	31.4731	84.8767
68	24.1967	24.1955	2.65794	10.0449	31.4792	84.629
72	24.2022	24.2009	2.5985	10.06	31.4895	83.568
76	24.206	24.2046	2.60838	10.0481	31.4919	84.0963
80	24.2146	24.2131	2.63294	10.0527	31.5038	84.8673
84	24.2195	24.2179	2.62759	10.057	31.5109	85.0416
88	24.2219	24.2203	2.62728	10.0651	31.5158	85.3217
92	24.224	24.2223	2.62438	10.0725	31.52	85.3774
96	24.2281	24.2263	2.59571	10.0878	31.5285	84.7137
100	24.2315	24.2296	2.50375	10.0988	31.5352	83.3179
104	24.234	24.2321	2.44921	10.1021	31.5391	81.6828
108	24.2357	24.2337	2.43149	10.101	31.5411	79.7643

Station	72103501		
Sep	7	2001	11:41:34
Latitude	49	19.77 N	
Longitude	125	58.57 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	21.9327	21.9337	6.17979	13.0693	29.2556	60.6945
8	22.5219	22.5216	2.78524	12.5494	29.8887	77.8444
12	22.7629	22.7623	3.649	12.3164	30.1438	80.6091
16	23.1281	23.1279	3.85241	11.9502	30.5292	81.7947
20	23.3358	23.3355	3.63717	11.6875	30.7357	82.2829
24	23.5286	23.528	3.42323	11.1189	30.8545	82.7396
28	23.6715	23.6711	2.98357	10.5973	30.9235	82.9523
32	23.7924	23.7917	2.8889	10.3715	31.0297	82.8499
36	23.8654	23.8647	3.00494	10.2015	31.0872	82.7305
40	23.9428	23.9422	2.94861	10.0891	31.163	82.5918
44	24.0526	24.0519	2.87635	9.808	31.2452	82.5565
48	24.1227	24.1218	2.82094	9.7611	31.3252	82.5995
52	24.1524	24.1515	2.82761	9.8076	31.373	82.3236
56	24.1714	24.1704	2.84023	9.7878	31.3932	82.7764
60	24.1833	24.1823	2.84889	9.8573	31.4229	82.643
64	24.1939	24.1927	2.76292	9.9433	31.4542	82.1544
68	24.2038	24.2026	2.76475	9.9736	31.4733	82.5329
72	24.2065	24.2052	2.79115	9.9975	31.4819	82.6523
76	24.2106	24.2092	2.75642	10.0237	31.4926	82.6864
80	24.2154	24.2139	2.74205	10.0261	31.4992	82.8687
84	24.2208	24.2192	2.72781	10.0266	31.5062	82.8159
88	24.2234	24.2218	2.68408	10.0531	31.5152	82.6151
92	24.2263	24.2246	2.69483	10.0579	31.5199	82.6235
96	24.2285	24.2267	2.65899	10.0805	31.5275	82.5403
100	24.2314	24.2296	2.68525	10.0854	31.5323	82.5871
104	24.2335	24.2316	2.63674	10.0714	31.532	82.3735
108	24.2366	24.2346	2.5888	10.0809	31.538	82.0829
112	24.2398	24.2377	2.58822	10.0981	31.5457	81.8093
116	24.2436	24.2414	2.55721	10.1036	31.5517	81.3608
120	24.2463	24.244	2.49251	10.0818	31.5505	81.3273
124	24.2532	24.2509	2.51039	10.0702	31.557	81.5585
128	24.2561	24.2538	2.24402	10.0703	31.5608	78.8191
132	24.2562	24.2537	2.22185	10.0704	31.5608	77.9108

Station	72103601		
Sep	7	2001	12:28:42
Latitude	49	21.71 N	
Longitude	125	56.92 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	21.9544	21.956	6.21625	13.1959	29.3156	54.1232
8	22.5692	22.5691	3.29006	12.5807	29.9577	72.363
12	22.922	22.9221	3.31654	12.2125	30.3254	76.8996
16	23.1835	23.183	3.62938	11.8478	30.5762	78.477
20	23.3911	23.3905	3.35471	11.334	30.7257	79.6191
24	23.5313	23.531	2.90885	10.7573	30.778	80.6597
28	23.6456	23.6451	2.76576	10.3824	30.8437	81.219
32	23.7862	23.7857	2.83083	10.0043	30.9446	81.4803
36	23.854	23.8533	2.71661	9.6946	30.9672	81.8125
40	23.9529	23.9523	2.80894	9.5964	31.0741	82.0306
44	24.0386	24.0378	2.90247	9.5723	31.1789	82.1863
48	24.0916	24.0908	2.91052	9.6306	31.2587	82.4094
52	24.1197	24.1189	2.89583	9.665	31.3018	82.5331
56	24.1448	24.1438	2.88773	9.6893	31.3388	82.8543
60	24.1665	24.1655	2.8596	9.7212	31.3732	83.0736
64	24.1795	24.1784	2.82953	9.7387	31.3934	83.202
68	24.1883	24.1871	2.82759	9.7644	31.4101	83.3956
72	24.1965	24.1953	2.83144	9.7776	31.4233	83.6276
76	24.2033	24.2019	2.78196	9.8109	31.4388	83.737
80	24.2103	24.2088	2.82041	9.8617	31.4583	83.9945
84	24.2164	24.215	2.84464	9.9095	31.4762	84.2304
88	24.2213	24.2197	2.7888	9.8999	31.4804	84.2829
92	24.2245	24.2228	2.71362	9.8966	31.4838	84.285
96	24.227	24.2253	2.73832	9.8984	31.4874	84.2053
100	24.229	24.2272	2.70332	9.8983	31.4899	84.3493
104	24.2325	24.2306	2.69863	9.9201	31.499	84.3855
108	24.237	24.2351	2.74422	9.9508	31.5112	84.5651
112	24.2409	24.2389	2.67256	9.9553	31.5171	84.3991
116	24.2435	24.2414	2.63857	9.9878	31.5273	84.2846
120	24.247	24.2448	2.60223	10.0105	31.5365	84.1173
124	24.2498	24.2475	2.53685	10.0232	31.5427	83.7961
128	24.2539	24.2516	2.44875	10.0378	31.5511	82.775
132	24.2584	24.256	2.419	10.0274	31.5547	83.0566
136	24.2637	24.2612	2.42185	10.0301	31.562	83.2616
140	24.2689	24.2664	2.32473	10.0355	31.5699	83.1439

Station	72103701		
Sep	7	2001	13:05:08
Latitude	49	23.55 N	
Longitude	125	56.33 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	21.6967	21.6974	6.23976	13.4736	29.0504	51.0246
8	22.2676	22.2675	3.58988	12.8996	29.6453	63.8708
12	22.7028	22.7028	3.78955	12.4518	30.0994	73.9839
16	23.0018	23.0016	3.72575	12.0024	30.3785	76.301
20	23.2593	23.2588	3.37646	11.45	30.5825	77.5488
24	23.4238	23.4234	3.13731	11.0489	30.704	78.485
28	23.524	23.5234	3.09424	10.7085	30.7578	79.4119
32	23.6803	23.6798	2.63671	9.989	30.8057	80.5842
36	23.7805	23.7798	2.44825	9.617	30.8573	81.4635
40	23.8825	23.8819	2.75826	9.472	30.9589	82.0734
44	23.9904	23.9896	2.90442	9.4476	31.0919	82.3792
48	24.0557	24.0549	2.94686	9.5381	31.1939	82.814
52	24.0979	24.097	2.8753	9.5985	31.2602	83.0333
56	24.1416	24.1407	2.84369	9.6729	31.3314	83.5575
60	24.1638	24.1627	2.82944	9.7042	31.3662	84.0002
64	24.1729	24.1717	2.7949	9.7157	31.3802	84.3179
68	24.182	24.1807	2.76322	9.7275	31.3942	84.5869
72	24.1946	24.1933	2.72237	9.7488	31.4148	84.8693
76	24.2042	24.2029	2.71937	9.7677	31.4311	85.2094
80	24.2096	24.2082	2.67664	9.7831	31.4411	85.4666
84	24.2157	24.2142	2.65672	9.7994	31.4523	85.4911
88	24.2207	24.2191	2.59385	9.8068	31.4602	85.5128
92	24.2242	24.2226	2.55589	9.8138	31.4662	85.4147
96	24.2299	24.2282	2.51795	9.829	31.4767	85.3178
100	24.2385	24.2367	2.41441	9.8687	31.4959	84.6051
104	24.2425	24.2406	2.35088	9.8901	31.5055	84.3582
108	24.244	24.2421	2.38832	9.8971	31.509	84.5735
112	24.2456	24.2435	2.35728	9.903	31.5121	84.3844
116	24.2467	24.2446	2.29917	9.9096	31.5149	84.158
120	24.2481	24.2459	2.27961	9.9167	31.5182	83.9557

Station	72103801		
Sep	7	2001	13:41:02
Latitude	49	24.71 N	
Longitude	125	54.42 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	21.6587	21.6588	6.25326	13.7204	29.0624	62.0049
8	22.197	22.1968	4.5497	13.1015	29.6038	68.9058
12	22.5025	22.5023	4.18194	12.8124	29.9277	77.7653
16	22.7429	22.7426	4.1629	12.4878	30.1597	82.6944
20	23.0234	23.0229	3.81961	12.0199	30.4103	85.3427
24	23.263	23.2625	3.18517	11.3156	30.557	85.9549
28	23.4174	23.4169	2.65245	10.7792	30.6363	86.401
32	23.5254	23.5248	2.53081	10.3608	30.6846	86.5509
36	23.6196	23.619	2.61127	10.069	30.7442	86.6367
40	23.7764	23.7758	2.47107	9.5735	30.8435	86.5794
44	23.9189	23.918	2.59933	9.3538	30.9815	86.3859
48	23.984	23.9832	2.78615	9.4203	31.0783	86.3222
52	24.0438	24.0429	2.77355	9.5112	31.1732	86.2757
56	24.0842	24.0833	2.65424	9.5825	31.2394	85.962
60	24.1216	24.1206	2.62643	9.6489	31.3008	85.9863
64	24.1443	24.1432	2.5491	9.6819	31.3366	85.8616
68	24.1611	24.1598	2.463	9.699	31.3616	85.6843
72	24.1792	24.178	2.42229	9.7162	31.3885	85.4974
76	24.187	24.1856	2.28823	9.7245	31.4001	84.9718
80	24.1941	24.1927	2.28357	9.7324	31.4109	84.9628
84	24.1997	24.1982	2.2607	9.7381	31.4192	84.8826
88	24.2069	24.2053	2.18621	9.7519	31.4312	84.5057
92	24.211	24.2092	2.09746	9.7661	31.4392	83.5964

Station	72103901		
Sep	7	2001	17:28:33
Latitude	49	20.95 N	
Longitude	126	4.34 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	21.1283	21.1264	4.97526	13.3989	28.2911	65.2539
8	22.2305	22.2301	4.16461	12.7257	29.5547	77.107

Station	72104001		
Sep	8	2001	13:19:23
Latitude	49	21.12 N	
Longitude	125	47.19 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	20.8096	20.8093	4.25486	13.7967	27.9802	78.2799
8	20.9805	20.9803	3.87868	13.5677	28.1443	81.9257
12	21.053	21.0526	4.18056	13.5032	28.222	82.4937
16	21.1343	21.1338	4.18591	13.4482	28.3136	82.3109
20	21.2106	21.2101	4.15541	13.4029	28.4013	82.2489
24	21.2769	21.2763	4.20426	13.3668	28.4782	82.6582
28	21.3679	21.3671	4.26741	13.3353	28.5881	82.9598
32	21.4848	21.4841	4.22108	13.3046	28.7321	82.8725
36	21.5547	21.5539	4.21871	13.2828	28.8173	82.3949
40	21.6217	21.6206	4.15206	13.2703	28.9007	81.5378
44	21.7294	21.7282	4.11585	13.271	29.0404	81.4093
48	21.8404	21.8391	4.06735	13.2112	29.1691	81.2971
52	22.103	22.1019	3.76404	12.9072	29.4345	81.0585
56	22.1905	22.1891	3.29881	12.7955	29.52	78.6424
60	22.2707	22.2693	3.27689	12.6942	29.5993	75.4446
64	22.3471	22.3456	2.98093	12.5979	29.6747	71.2666

Station	72104101		
Sep	8	2001	13:54:43
Latitude	49	20.17 N	
Longitude	125	48.3W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	20.824	20.8253	4.31353	13.8143	28.0055	79.2652
8	21.0099	21.0097	4.02056	13.5504	28.1781	81.21
12	21.074	21.0736	4.07077	13.4911	28.2461	82.5153
16	21.1606	21.1602	4.11816	13.4302	28.3434	82.7649
20	21.2243	21.2237	4.12223	13.394	28.4167	82.5427
24	21.3073	21.3067	4.16589	13.3565	28.515	82.8501
28	21.4083	21.4076	4.18867	13.3196	28.6367	82.9292
32	21.4779	21.4771	4.17249	13.2981	28.7215	82.7105
36	21.5207	21.5198	4.14801	13.2793	28.7722	82.2182
40	21.5618	21.5607	4.06646	13.2594	28.8205	80.9687
44	21.6223	21.6213	4.03137	13.2308	28.8919	79.4448
48	21.6393	21.6381	3.99976	13.2225	28.9117	78.5042
52	21.6905	21.689	3.9953	13.1916	28.9701	77.7521
56	21.8179	21.8165	3.88587	13.1037	29.1135	75.5009
60	21.9458	21.9445	3.68082	13.0031	29.2546	72.3307
64	22.1698	22.1681	3.23671	12.7943	29.4929	66.9668
68	22.3523	22.3508	2.76399	12.5932	29.6803	67.7207

Station	72104201		
Sep	8	2001	15:10:12
Latitude	49	16.2 N	
Longitude	125	49.19 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	20.8746	20.8763	4.22307	13.6458	28.0288	81.9157
8	20.9418	20.9415	4.13778	13.5758	28.096	83.9789
12	21.0769	21.0766	4.07563	13.4823	28.2478	85.4613
16	21.1706	21.1702	4.17674	13.4327	28.3569	86.2198
20	21.272	21.2716	4.20045	13.3927	28.4784	86.0146
24	21.3387	21.3381	4.19684	13.3612	28.5569	86.0244
28	21.4249	21.4242	4.24027	13.3286	28.6604	84.7119
32	21.479	21.4782	4.26817	13.2944	28.722	83.6908
36	21.5757	21.5748	4.23982	13.2302	28.8313	83.9918
40	21.663	21.662	4.22249	13.1717	28.9298	84.5051
44	21.7254	21.7243	4.19262	13.1224	28.9985	83.5888
48	21.8278	21.8266	3.96223	13.1201	29.1305	82.4712
52	21.9565	21.9552	3.82052	12.9495	29.255	79.4843
56	22.1473	22.146	4.05268	12.7314	29.4487	76.8327
60	22.2246	22.2233	3.91172	12.6627	29.5321	66.8344

Station	72104301		
Sep	8	2001	16:15:16
Latitude	49	14.16 N	
Longitude	125	45.54 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	20.1815	20.1814	4.43073	14.046	27.2284	78.0809
8	20.5869	20.5869	4.17949	13.7744	27.686	80.6833
12	20.7063	20.7059	4.18751	13.7142	27.8254	81.861
16	20.8208	20.8205	4.43063	13.6939	27.969	81.3819
20	20.921	20.9205	4.40284	13.6078	28.0771	81.4341
24	20.9706	20.97	4.32026	13.5595	28.1294	81.7381
28	21.0704	21.0697	4.29072	13.4928	28.242	82.1265
32	21.1403	21.1395	4.26186	13.454	28.323	82.3667
36	21.1812	21.1803	4.25843	13.4338	28.3709	82.4443
40	21.1895	21.1885	4.26717	13.4298	28.3807	82.4712
44	21.1895	21.1884	4.26755	13.4301	28.3807	82.5341
48	21.2064	21.2052	4.2637	13.4232	28.4009	82.438
52	21.2125	21.2112	4.23868	13.4207	28.4082	82.8337
56	21.2194	21.218	4.23663	13.4171	28.4162	83.0042
60	21.2323	21.2308	4.22381	13.4119	28.4316	83.2339
64	21.2477	21.2461	4.20473	13.4062	28.4502	83.3786
68	21.2511	21.2494	4.21012	13.4052	28.4543	83.3727
72	21.2606	21.2588	4.21054	13.3991	28.4651	83.0809
76	21.275	21.273	4.21034	13.3917	28.4819	82.6977
80	21.298	21.296	4.20097	13.3818	28.5092	82.1369
84	21.3364	21.3344	4.16229	13.3682	28.5558	82.2059
88	21.3414	21.3391	4.11385	13.3686	28.5621	82.9114
92	21.3434	21.341	4.1181	13.3675	28.5645	82.7721
96	21.3494	21.3469	4.12232	13.3653	28.5716	82.8253
100	21.3673	21.3648	4.11604	13.3584	28.5933	82.8455
104	21.3748	21.3721	4.10904	13.3557	28.6022	82.6806
108	21.3846	21.3818	4.10062	13.3519	28.6139	83.0952
112	21.4123	21.4095	4.076	13.3406	28.6471	83.1628
116	21.4373	21.4343	4.05193	13.3321	28.6773	82.8642
120	21.5385	21.5354	3.9536	13.3003	28.8005	80.8404
124	21.6151	21.612	3.81172	13.2758	28.8937	77.4053

Station	72104401		
Sep	8	2001	17:24:36
Latitude	49	11.15 N	
Longitude	125	45.86 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	20.407	20.4073	4.37418	13.691	27.4319	75.1477
8	20.8043	20.8041	3.51396	13.4813	27.8942	81.0799
12	20.8426	20.8423	3.91347	13.4732	27.9419	81.7672
16	20.9161	20.9156	4.07782	13.4769	28.038	83.0318
20	20.9686	20.9681	4.16723	13.4962	28.111	83.1841
24	20.9946	20.994	4.19609	13.5007	28.1457	83.0317
28	21.032	21.0312	4.19511	13.4859	28.1905	82.7797
32	21.0629	21.0621	4.15602	13.4767	28.2283	82.9926
36	21.0877	21.0868	4.19891	13.4757	28.2602	83.4919
40	21.1035	21.1023	4.19621	13.4705	28.2792	83.2764
44	21.1347	21.1337	4.21038	13.4583	28.3169	82.931
48	21.1718	21.1706	4.21626	13.4439	28.3613	82.9204
52	21.1923	21.191	4.19695	13.4349	28.3855	83.1425
56	21.2122	21.2108	4.16559	13.4295	28.41	82.947
60	21.2223	21.2207	4.16746	13.4262	28.4221	83.4958
64	21.235	21.2335	4.12467	13.4186	28.4369	82.8491
68	21.2372	21.2354	4.11825	13.4163	28.439	81.8186
72	21.2476	21.2457	4.09892	13.4107	28.4511	80.5759
76	21.2566	21.2547	4.09129	13.4061	28.4617	80.0308
80	21.2608	21.2587	4.07757	13.4043	28.4666	79.705

Station	72104501		
Sep	9	2001	8:19:08
Latitude	49	7.51 N	
Longitude	125	45.91 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	18.9621	18.9632	4.45403	14.1478	25.6718	79.6104
8	20.2188	20.2183	3.74584	13.6316	27.1722	82.7126
12	20.4517	20.4511	3.9464	13.546	27.4528	82.6404
16	20.6722	20.6725	4.01261	13.4399	27.7137	82.6074
20	20.905	20.9043	3.83532	13.2618	27.9702	83.7446
24	20.9932	20.9923	3.74076	13.1799	28.0643	83.7959
28	21.1352	21.1347	3.7106	13.0567	28.2186	83.567
32	21.3444	21.3437	3.64343	12.8397	28.4367	82.9278
36	21.5991	21.5979	3.25685	12.5762	28.7022	78.6712
40	21.7587	21.7591	3.14509	12.4042	28.8697	74.9852

Station	72104601		
Sep	9	2001	8:52:56
Latitude	49	8.06 N	
Longitude	125	42.96 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	18.8125	18.8159	4.65943	14.082	25.4632	79.1853
8	19.9692	19.9688	3.2745	13.702	26.866	83.4209
12	20.3257	20.3256	3.66735	13.5539	27.2921	85.0783
16	20.6014	20.601	3.7196	13.4263	27.6176	85.1318
20	20.751	20.7505	3.79147	13.3467	27.7919	84.9975
24	20.9383	20.9377	3.72709	13.2459	28.0097	85.281
28	21.0677	21.067	3.65723	13.1615	28.1565	85.6093
32	21.2021	21.2012	3.64019	13.0514	28.3036	85.9648
36	21.3547	21.3541	3.63354	12.6647	28.4085	86.5917
40	21.5509	21.55	3.42664	12.3553	28.5881	85.6538
44	21.6888	21.6876	3.46469	12.3253	28.759	84.5616
48	21.8071	21.8061	3.38625	12.3333	28.9141	82.9603
52	21.897	21.8957	3.17702	12.3645	29.0373	78.8686
56	21.9538	21.9525	2.97762	12.3781	29.114	75.2611

Station	72104701		
Sep	9	2001	9:33:58
Latitude	49	9.93 N	
Longitude	125	41.42 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	18.9578	18.9682	5.21576	14.3699	25.7348	72.8052
8	19.8687	19.8686	3.00807	13.7977	26.7599	83.8172
12	20.2277	20.2278	3.4074	13.6538	27.1901	85.5395
16	20.472	20.4714	3.77528	13.5106	27.4706	86.1872
20	20.7385	20.7381	3.72015	13.3736	27.7824	86.397
24	20.9381	20.9375	3.78005	13.2062	27.9998	86.6216
28	21.1204	21.1197	3.71867	12.8676	28.1535	86.5742
32	21.3242	21.3235	3.62826	12.6249	28.359	86.7515
36	21.4886	21.4879	3.36569	11.9811	28.4209	86.91
40	21.6168	21.6158	3.55898	12.091	28.6116	87.0955
44	21.7321	21.7311	3.62909	12.1708	28.779	86.957
48	21.8243	21.8232	3.56147	12.2642	28.9198	86.2691
52	21.8884	21.8872	3.41018	12.301	29.0112	84.2061
56	21.9334	21.9321	3.47247	12.3321	29.0768	84.7475
60	21.9624	21.961	3.3823	12.3556	29.1198	83.9585
64	21.9887	21.9873	3.25596	12.3797	29.1595	82.0432
68	22.0183	22.0166	2.89015	12.4021	29.2028	73.3282

Station	72104801		
Sep	9	2001	10:14:56
Latitude	49	11.8N	
Longitude	125	40.48W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	18.8308	18.8306	4.20076	14.6275	25.6225	64.2662
8	19.8964	19.8963	3.47077	13.9133	26.8249	75.6203
12	20.3476	20.3474	4.54643	13.6085	27.3339	78.9852
16	20.6528	20.6525	4.52569	13.222	27.6343	80.149
20	21.2774	21.2769	3.75015	12.1502	28.1874	81.0558
24	21.6974	21.6969	3.07295	12.0344	28.7027	82.3412
28	21.7264	21.7258	3.75603	12.0967	28.7544	83.2442
32	21.7367	21.736	3.61006	12.1134	28.7716	83.4348
36	21.744	21.7431	2.86403	12.1229	28.7831	82.8212
40	21.7485	21.7476	2.54108	12.1393	28.7928	82.2376
44	21.7516	21.7506	2.2558	12.1549	28.8004	82.0848

Station	72104901		
Sep	9	2001	11:02:07
Latitude	49	9.64 N	
Longitude	125	39.8W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	18.9274	18.9294	4.14633	14.4251	25.6987	69.5413
8	19.866	19.8659	2.51191	13.829	26.7643	78.956
12	20.2662	20.266	3.71584	13.6101	27.2288	80.9643
16	20.5117	20.5115	3.91034	13.489	27.5171	81.8469
20	20.7511	20.7507	3.91152	13.3762	27.7993	82.2999
24	20.929	20.9282	3.88894	13.2302	27.9935	82.7567
28	21.118	21.1175	3.8168	12.9969	28.1818	83.0697
32	21.2593	21.2586	3.73525	12.7109	28.2959	83.4551
36	21.3982	21.3974	3.32766	11.8075	28.2646	83.8894
40	21.5687	21.5678	3.31033	11.5689	28.4307	84.3284
44	21.7425	21.7415	3.6559	11.897	28.7292	84.6608
48	21.8278	21.8266	3.79674	12.0997	28.8859	84.6235
52	21.8856	21.8845	3.64329	12.2701	29.0005	83.6384
56	21.934	21.9327	3.52162	12.3162	29.0738	83.2265
60	21.9973	21.996	3.34424	12.3845	29.1718	80.7472
64	22.0089	22.0075	3.15763	12.3956	29.1894	78.9303
68	22.023	22.0214	3.17226	12.4079	29.2104	78.5939

Station 72105001
 Sep 9 2001 11:39:11
 Latitude 49 11.82 N
 Longitude 125 38.98 W

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	19.0911	19.0937	5.04921	14.5475	25.9441	74.9623
8	19.966	19.9659	2.14841	13.9362	26.921	85.4272
12	20.3247	20.3245	3.50932	13.6466	27.3138	86.7232
16	20.5964	20.5961	4.35303	13.3818	27.6003	87.0113
20	20.8237	20.8232	4.51009	13.0374	27.8105	87.1644
24	21.0015	21.0009	4.04705	12.716	27.9633	87.2589
28	21.1725	21.1719	3.75511	12.1447	28.0506	87.3799
32	21.3139	21.3132	3.46666	11.4732	28.0812	87.7521
36	21.4454	21.4449	3.24006	11.1191	28.1731	87.9567
40	21.6126	21.6116	3.3345	11.3242	28.4328	88.071
44	21.7624	21.7616	3.81429	11.7978	28.7324	88.0065
48	21.8546	21.8535	4.00085	12.146	28.9314	87.9387
52	21.9191	21.918	3.93404	12.309	29.053	87.7816
56	21.9538	21.9525	3.83719	12.3493	29.1072	87.723
60	21.9803	21.9789	3.73516	12.3666	29.1455	87.4176
64	22.0159	22.0144	3.69287	12.4099	29.2018	87.343
68	22.0304	22.0287	3.65656	12.4222	29.2233	87.3798
72	22.0416	22.04	3.5633	12.4267	29.239	86.8057
76	22.046	22.0442	3.51221	12.4317	29.2458	86.9375
80	22.0521	22.0502	3.5187	12.4346	29.2543	87.0548
84	22.0571	22.0552	3.53563	12.4364	29.2613	86.8329
88	22.0617	22.0597	3.43376	12.4393	29.268	86.1983
92	22.0656	22.0634	3.4275	12.4423	29.2736	86.1118
96	22.0676	22.0654	3.35633	12.4432	29.2764	85.2544
100	22.0689	22.0666	3.34142	12.4466	29.2789	85.2211
104	22.0693	22.0669	3.3123	12.4471	29.2796	85.0347
108	22.0698	22.0673	3.28847	12.4469	29.2802	84.7021
112	22.0706	22.068	3.22774	12.4458	29.281	84.2474
116	22.072	22.0692	3.02652	12.4408	29.2815	82.8488
120	22.072	22.0693	2.79391	12.4028	29.279	81.3705

Station	72105101		
Sep	9	2001	12:31:43
Latitude	49	13.58 N	
Longitude	125	35.93 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	19.4374	19.4379	5.16651	14.8861	26.4803	78.7622
8	20.0254	20.0251	4.5559	14.1665	27.0566	86.5692
12	20.3603	20.3601	5.07564	13.5825	27.3441	87.9211
16	20.6481	20.6476	4.86905	12.861	27.5409	88.3125
20	21.1854	21.185	3.58171	11.4197	27.9054	88.3497
24	21.7029	21.7026	0.95642	11.4103	28.5689	87.6966
28	21.7429	21.7423	0.28166	11.5718	28.656	86.1794
32	21.7447	21.744	0.77715	11.5866	28.6616	85.414
36	21.7464	21.7457	0.67397	11.5963	28.666	80.5871
40	21.7478	21.747	0.51489	11.6022	28.6692	74.6208

Station	72105201		
Sep	9	2001	13:16:15
Latitude	49	13.08 N	
Longitude	125	36.15 W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	18.7567	18.7632	5.49688	14.784	25.5743	74.6454
8	19.9333	19.9345	5.19849	14.1264	26.9285	84.959
12	20.3066	20.3063	3.72599	13.7032	27.3044	87.738
16	20.7379	20.7376	4.29134	12.7734	27.6368	88.2517
20	21.1853	21.1848	3.47808	11.4186	27.9048	88.5433
24	21.685	21.6846	1.79587	11.3492	28.5323	88.9228
28	21.744	21.7435	1.17377	11.6043	28.6648	88.7482
32	21.7484	21.7477	1.52684	11.6466	28.6799	88.8068
36	21.7516	21.7508	1.51231	11.6757	28.6905	88.5612
40	21.7518	21.7509	1.54409	11.6787	28.6916	88.4802

Station	72105301		
Sep	9	2001	13:37:18
Latitude	49	12.5N	
Longitude	125	36.63W	

Depth (m)	Density Sigma-theta	Density sigma-t	Oxygen, (ml/l)	Pot. Temp (deg C)	Salinity (psu)	Transmission (%)
4	18.1596	18.1624	5.62049	14.8192	24.7999	73.5679
8	19.9757	19.9751	3.38815	14.0208	26.9544	86.1704
12	20.3657	20.3657	4.32376	13.6486	27.3677	87.6971
16	20.6313	20.6308	4.51377	13.1623	27.5915	88.0511
20	20.876	20.8758	4.23405	12.4969	27.7497	88.2807
24	21.0556	21.0549	3.79682	11.8751	27.8377	88.4181
28	21.1917	21.1911	3.50691	11.5015	27.9297	88.5929
32	21.3105	21.3099	3.33639	11.2208	28.0213	88.7562
36	21.4499	21.4493	3.11048	11.0884	28.1721	88.781
40	21.6121	21.6112	3.23721	11.309	28.4289	88.7299
44	21.7421	21.7412	3.55218	11.702	28.6844	88.8209
48	21.8526	21.8517	3.74348	12.0496	28.9067	88.6275
52	21.9291	21.9278	3.71268	12.2555	29.0531	88.1675
56	21.9613	21.9601	3.59376	12.3199	29.11	87.8187
60	21.9739	21.9725	3.57771	12.3501	29.1333	87.7666
64	21.985	21.9836	3.56972	12.3707	29.1526	88.0916
68	21.9947	21.9932	3.47821	12.3819	29.1678	88.1024
72	21.9997	21.998	3.40408	12.3855	29.175	87.8208
76	22.0028	22.001	3.51326	12.3884	29.1797	88.2707
80	22.0036	22.0018	3.47214	12.3868	29.1804	88.151
84	22.0056	22.0037	3.36432	12.3836	29.1822	87.7692