GLOBEC Northeast Pacific, Coastal Gulf of Alaska

Cruise Report, R/V *Alpha Helix* (HX 287)
(Alternative Cruise ID: 02HX04)

8 - 19 July 2004

This cruise was
sponsored by the

National Science Foundation

and the

National Oceanic and
Atmospheric Administration

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Chief Scientist:
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Port of Departure: Seward, Alaska
Port of Return: Kodiak, Alaska

Cruise Objectives

This cruise was in support of the Steller Sea Lion Research, Pacific Marine Environmental Laboratory's FOCI base, and United States Global Ocean Ecosystems Dynamics (U.S. GLOBEC) programs. It was undertaken by FOCI to support research into the physical, chemical, and biological mechanisms acting in the coastal Gulf of Alaska that cause it to be an extremely productive ecosystem, the home to diverse species of fish, shellfish, marine mammals and birds. The research focused on two prominent features hypothesized to contribute to the transport of nutrients to the shelf regions south and east of Kodiak Island, and to assess their importance in sustaining production in this area throughout the summer months. The first feature studied was one of the large anti-cyclonic eddies that originate near Yakutat during the winter, then move across the deep Gulf of Alaska and begin to impinge on continental margin south of the Kenai Peninsula between late spring and early fall (Figure 1). These eddies are hypothesized to bring High Nitrate/Low Chlorophyll water to the shelf areas from the deep Gulf of Alaska. Next, we wanted to investigate the possibility that up-trough transport of nutrients, followed by tidal mixing over the banks, causes the banks south and east of Kodiak Island to be regions of sustained production throughout the summer. This study focused on Portlock Bank and Stevenson Trough. Lastly, we wanted to contrast these areas to the region of the Alaskan Coastal Current south of the Kenai Peninsula.

Summaries of each of the GLOBEC projects may be found at the web site: http://globec.coas.oregonstate/edu/groups/nep/projs.html.

Table 1. GLOBEC Cruise Participants

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PMEL = Pacific Marine Environmental Laboratory; AFSC = Alaska Fisheries Science Center (NOAA).

Summary of Cruise

See Appendix 1 (Event Log).

Daily Cruise Summary (Narrative)

8 July. Departed Seward at 1000. While still in Resurrection Bay, we tested the Triaxus, University of Alaska Fairbanks's new towed vehicle, and practiced procedures for deploying and retrieving it. We then proceeded to three mooring sites on the Seward Line, to make calibration CTD casts, and a MARMAP bongo tow at GB3, where an optical plankton counter was deployed (Figure 2). We then transited to the region off the slope, and just west of this year's eddy, that formed during the winter off Yakutat and then moved to its July position south of the Kenai Peninsula. We then made a 10-hour, 120 km transit eastward using the Triaxus, which was equipped with a temperature and conductivity sensor. This transit covered a region from west of the eddy to 40 km east of the center. The structure of the temperature field along this Triaxus transect is shown in Figure 3. Next, we occupied an east-west line of CTD stations across the eddy. CTD stations were taken to a depth of 1500m. At approximately every second station, MARMAP bongo tows and CalVET tows were taken. The bongo tows were made to a depth of 300m (or 10m off the bottom) using two sets of bongo nets with mesh sizes of 0.330mm and 0.120mm, respectively. The CalVET tows were made to a depth of 60m, or 5m off the bottom (Figure 6).

Next, we made a detailed CTD/MARMAP bongo tow survey of Portlock Bank and Stevenson Trough, east of Kodiak Island to assess the mechanisms of transport to the bank and mixing of salinity and nutrients on top of it (Figure 4). Those stations at which bongo tows were taken are shown in Figure 5. As part of that study, we quickly occupied two lines of stations with ~1 nautical mile distance between stations. We made these transects twice on each of the two lines (PBA and PBC). The second occupation began 6 hours after the first, in order to assess the impact that tides might have on the distribution of water properties. The lines of these stations are labeled UPA and UPB on the PBA transect, and UPC and UPD on the PBC transect. The Portlock Bank survey ended with a transect cutting from continental slope on the eastern side of the bank, to the western side near Afognak and Kodiak Islands.

We then made two transects that form two sides of a box of stations occupied in 2003 on the R/V *Kilo Moana* cruises (KM0309 and KM0313). These cut across the Alaska Coastal Current from Afognak Island to Portlock Bank (AP) and from there to Gore Point (GP) on the Kenai Peninsula. The objective of these transects was to contrast the hydrological conditions and plankton in the ACC with those on the Bank and in the trough. Three of those casts were calibration stations for the Gore Point moorings. We ended the cruise by returning to the Seward line and FOCI's GLOBEC moorings, for calibration CTD casts and another MARMAP bongo tow at the site of the AFSC deployment of an optical plankton counter at GB3.

19 July. Arrived in Seward in the morning. The cruise encountered good to excellent weather, so no time was lost due to weather, and all our research goals were met.

Table 2: Cruise Statistics For FOCI Cruise 2HX04 (HX287)

Gear Used	No. Tows
20cm bongo (20Bon)	61
60cm bongo (60Bon)	61
CalCOFI vertical egg tow net (CalVET)	22
Seabird SeaCAT CTD (CAT)	61
CTD without bottle samples (CTD)	65
CTD with bottle samples (CTDB)	126
Deployment of satellite buoy (SatBuoy)	6
Towed vehicle collecting; temp,salinity (Triaxus)	1 tow / 120 km

Table 3: Cruise Statistics For FOCI Cruise 2HX04 (HX287)

Gear Used	# Tows	Samples
SeaBird SeaCat CTD (CAT)	62	
Extracted chlorophyll (Chlor)	124	638
SeaBird CTD (CTD)	193	
Deployment of buoy or mooring (Deploy)	6	6
CTD casts with Stimulated fluorescence (Fluor) data	193	
CTD casts with Photosynthetically Active Radiation (PAR) data	191	
Nutrient Samples (Chlor)		1241
Quantitative tow preserved in formalin (QTowF)	142	151
Transect with towed Triaxus (TriTrans)	2	

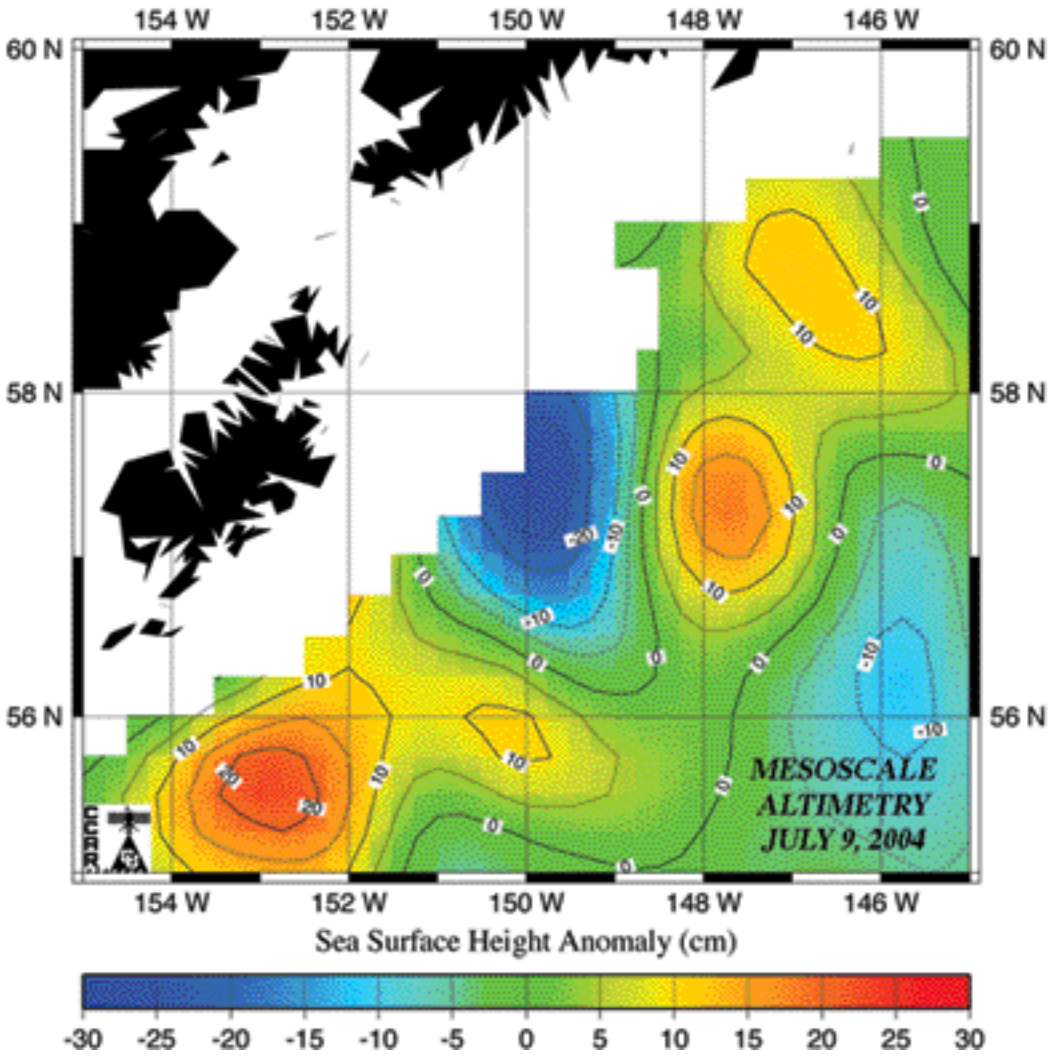

Figure 1. Sea surface altimetry of the eddies near the Kenai Peninsula/Kodiak Island continental slope on July 9, 2004. The eddy in the southwest originated in 2003; the eddy near 57°N x 148°W originated in 2004. These were produced from the following website: http://e450.colorado.edu/realtime/gsfc_global-real-time_ssh/.

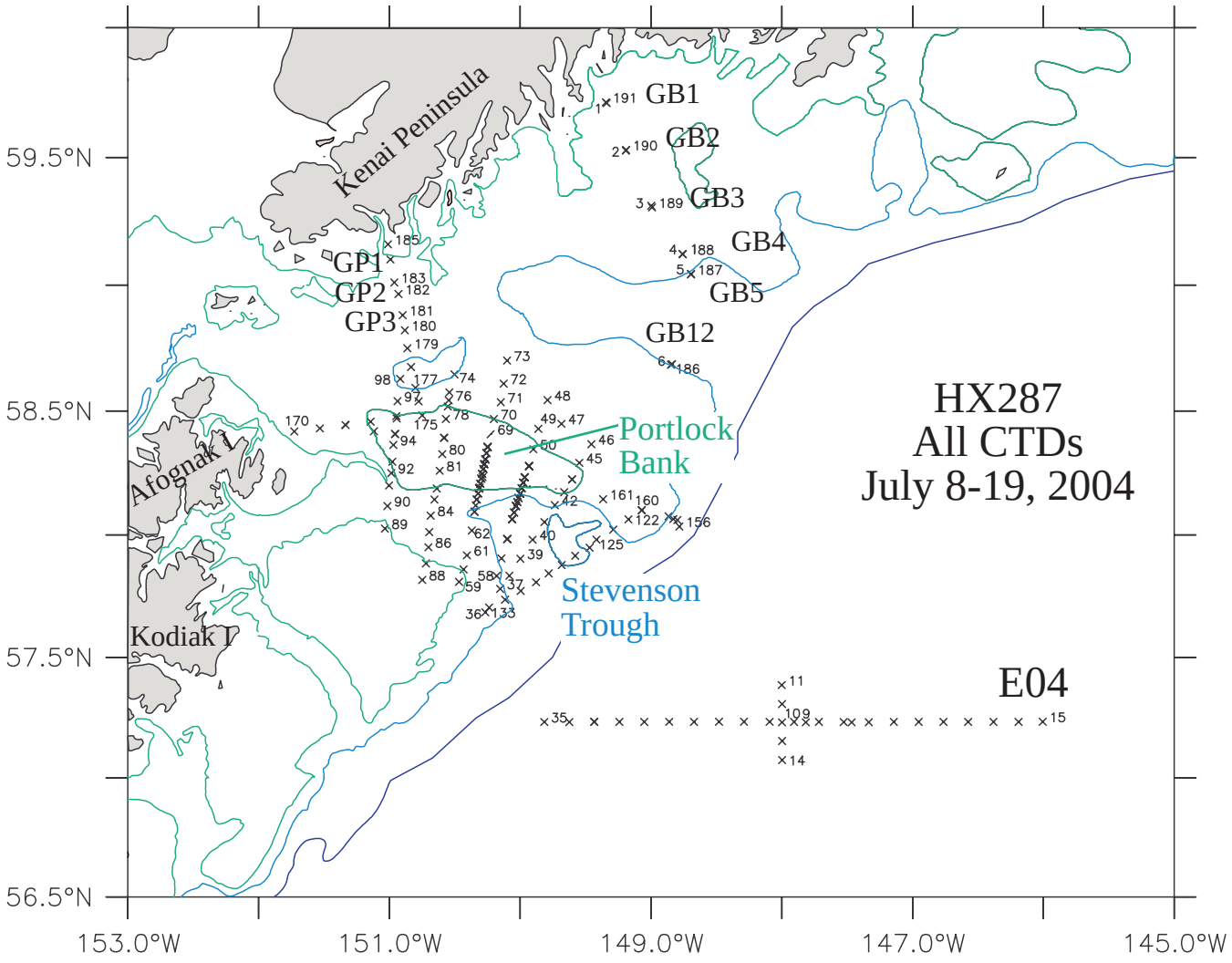

Figure 2. Map of CTD lines and stations for HX287 from July 8 - 19, 2004. Line E04 crosses the 2004 Yakutat eddy seen in Figure 1. On the Seward line moorings (GB) and Gore Point (GP) mooring locations, the sites of calibration casts are indicated. The line names of stations on and near Portlock Bank are shown in Figure 4.

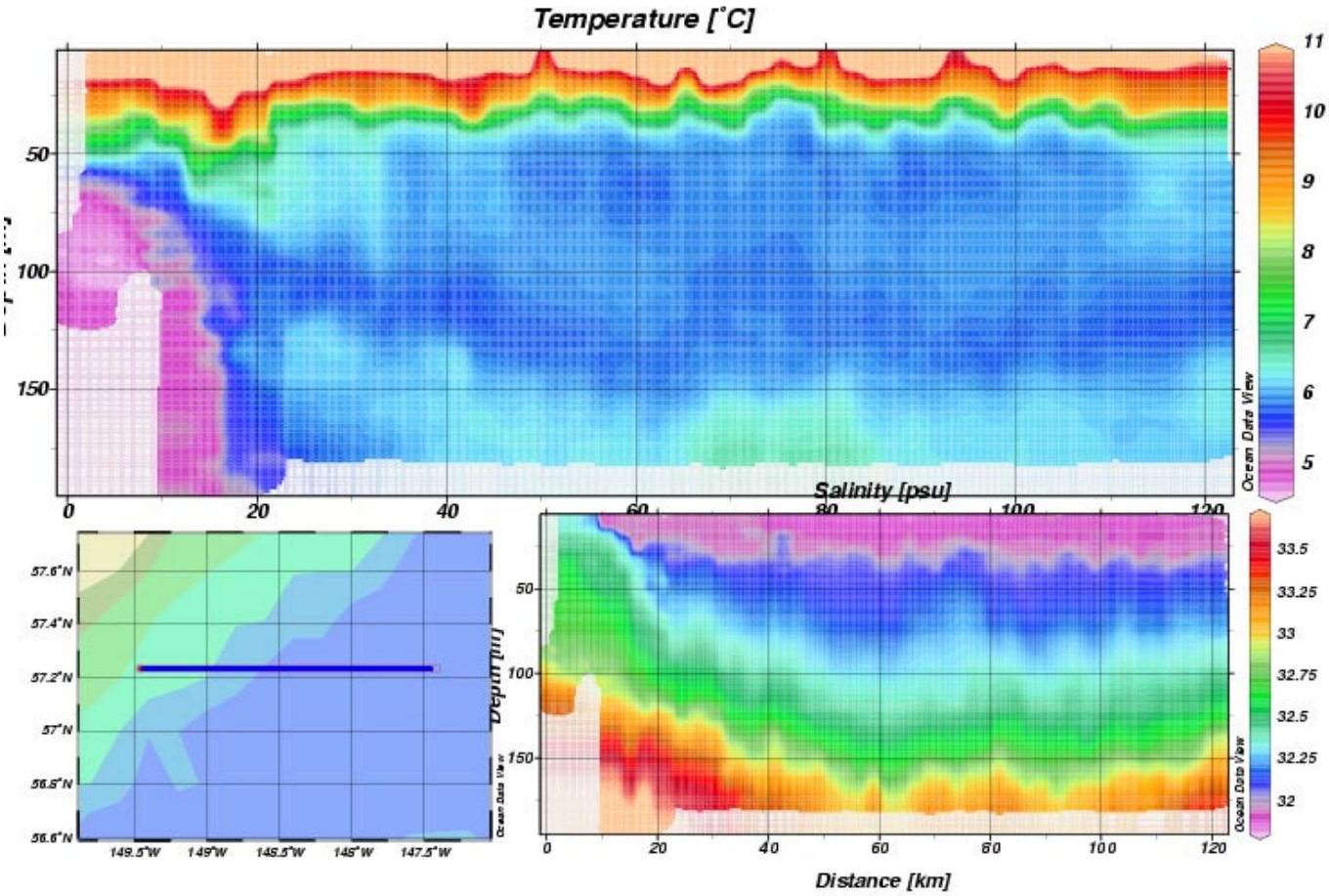

Figure 3. Temperature transect measured using the Triaxus towed vehicle.

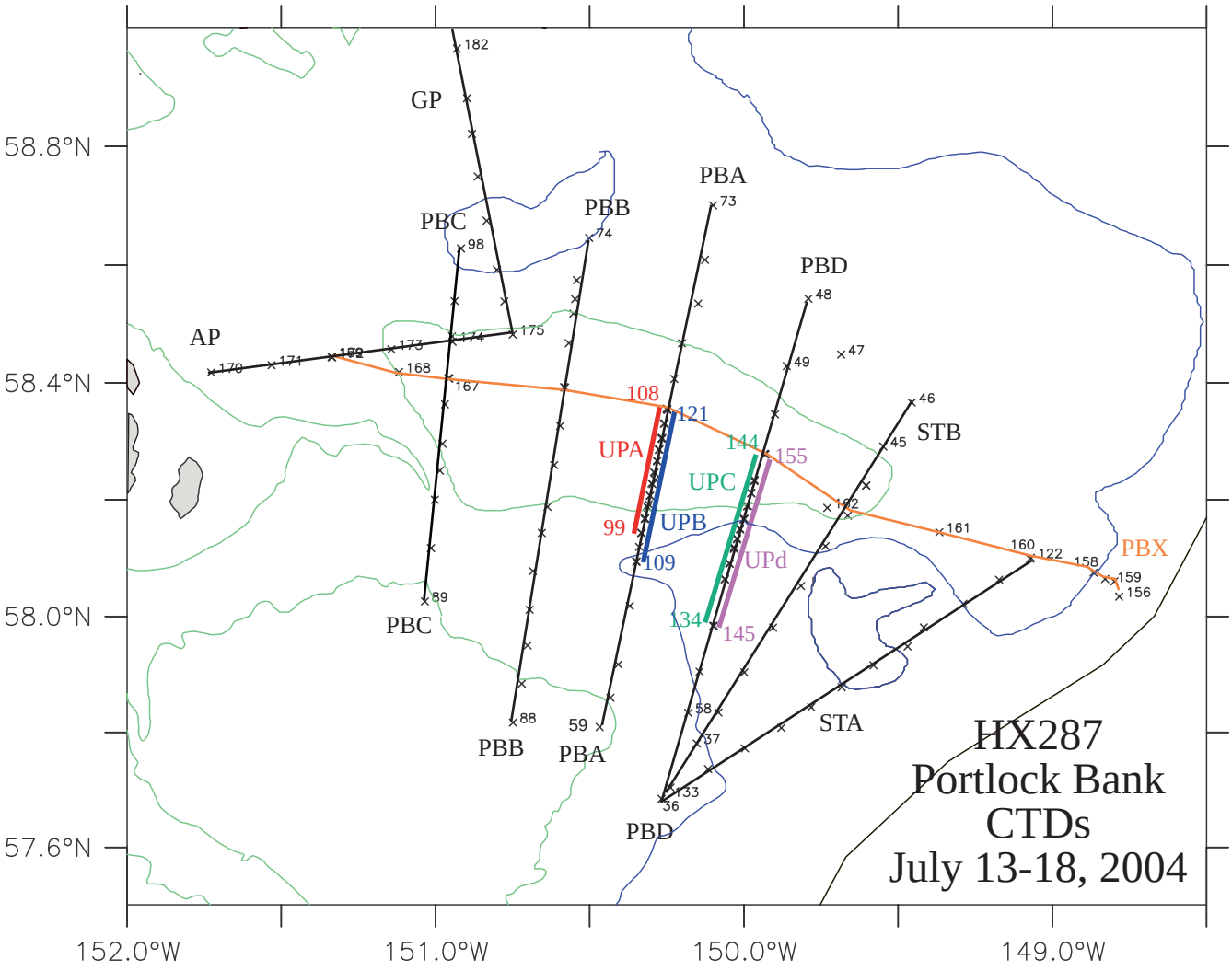

Figure 4. Station map for CTD stations taken near Portlock bank from July 13 - 18, 2004. Lines PBA, PBB, PBC, PBD and PBX cross Portlock Bank and the middle to upper portions of Stevenson Trough, while STA and STB traverse the outer portion of Stevenson Trough and the eastern end of Portlock Bank. GP is the Gore Point line. Line AP crosses between Afognak Island and Portlock Bank. The red and blue lines identify stations taken along PBA during the UPA and UPB quick CTD transects. The green and purple lines identify stations taken along PBA during the UPC and UPD quick transects.

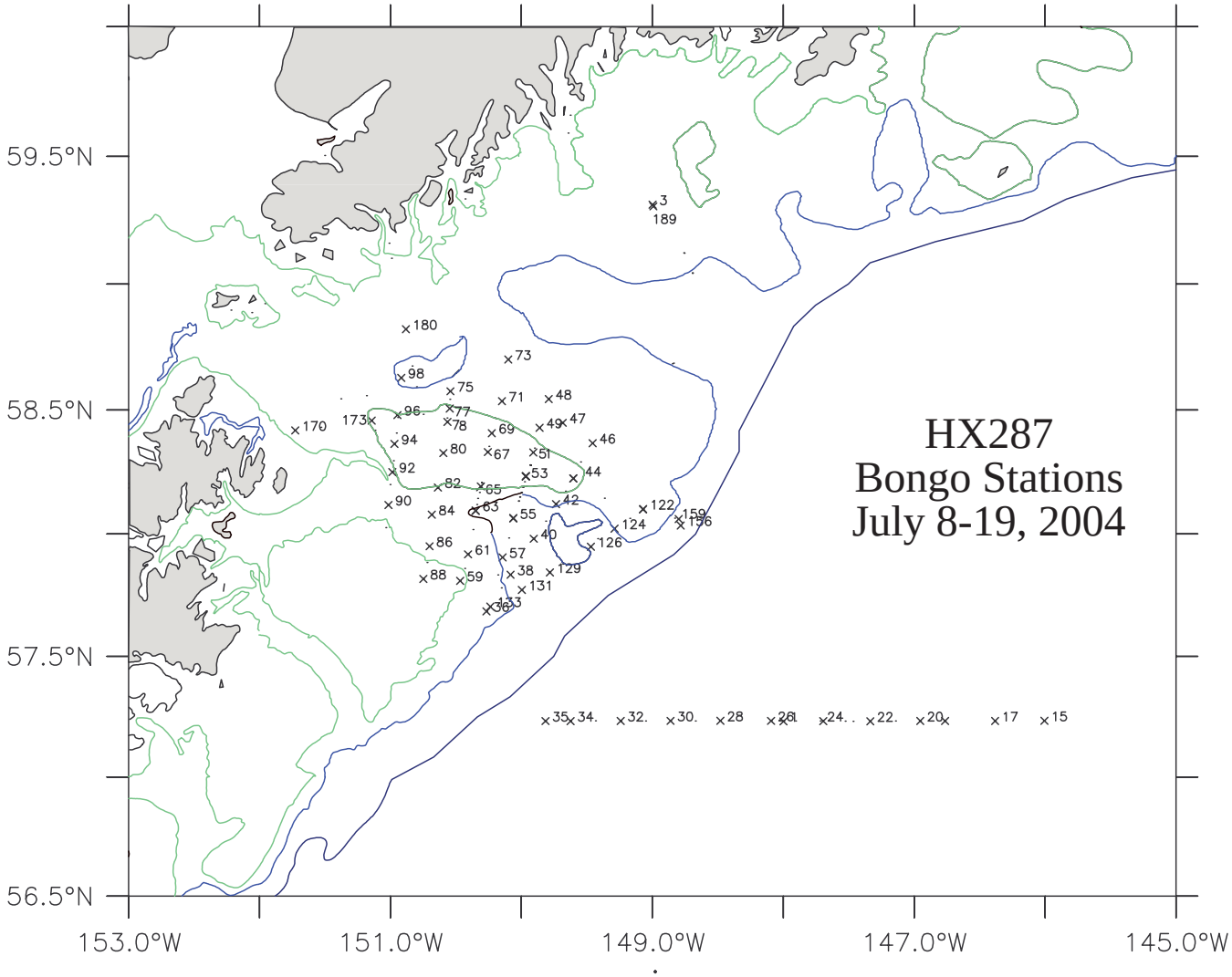

Figure 5. CTD stations with MARMAP bongo tows conducted between July 8 –19, 2004 on HX287.

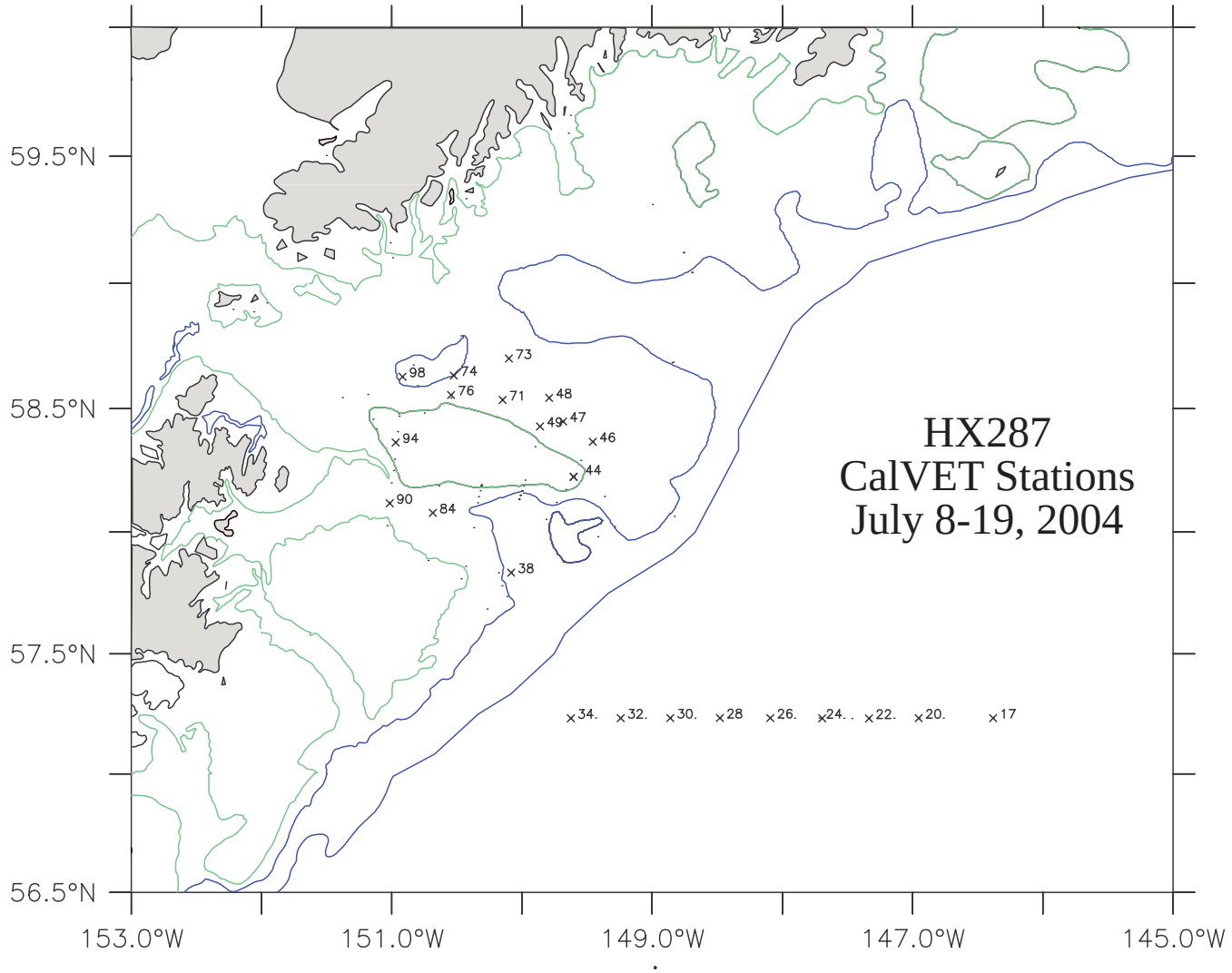

Figure 6. CTD stations with CalVET tows conducted between July 8 –19, 2004 on HX287.

Table 4: 20cm Bongo Net

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04191.02	20Bon	1	3	GBM3A	S	59.3087	-149.0175	189	9	7	0137	BON001	QTowF.; tow stayed in upper 50m longer than necessary during descent. Diff to read wire angles with protractor.
HX04192.12	20Bon	2	15	E401	S	57.2402	-146.0360	3940	10	7	2229	BON002	QTowF.
HX04193.03	20Bon	3	17	E403	S	57.2052	-146.3972	4057	11	7	0339	BON003	QtowF.
HX04193.10	20Bon	4	20	E406	S	57.2225	-146.9583	4394	11	7	1035	BON004	QTowF.
HX04193.16	20Bon	5	22	E408	S	57.2323	-147.3235	4601	11	7	1531	BON005	QTowF.
HX04193.22	20Bon	6	24	E410	S	57.2333	-147.7233	4812	11	7	2042	BON006	QTowF.
HX04194.02	20Bon	7	26	E412	S	51.2307	-148.1072	4902	12	7	0114	BON007	QTowF.
HX04194.08	20Bon	8	28	E414	S	57.2353	-148.4703	4979	12	7	0556	BON008	QTowF.
HX04194.14	20Bon	9	30	E416	S	57.2555	-148.8458	3877	12	7	1026	BON009	QTowF.
HX04194.20	20Bon	10	32	E418	S	57.2472	-149.2388	3160	12	7	1520	BON010	QTowF.
HX04194.26	20Bon	11	34	E420	S	57.2433	-149.6470	2527	12	7	2010	BON011	QTowF.
HX04195.02	20Bon	12	36	STB9	S	57.6832	-150.2688	137	13	7	0213	BON012	QTowF.
HX04195.08	20Bon	13	38	STB7	S	57.8352	-150.0823	201	13	7	0438	BON013	QTowF.
HX04195.13	20Bon	14	40	STB5	S	57.9773	-149.9267	266	13	7	0710	BON014	QTowF.
HX04195.18	20Bon	15	42	STB3	S	58.1223	-149.7282	218	13	7	0930	B0N015	QTowF.
HX04195.24	20Bon	16	44	STB1	S	58.2205	-149.6072	66	13	7	1130	BON016	QTowF.
HX04195.30	20Bon	17	46	STB00	S	58.3637	-149.4525	163	13	7	1334	BON017	QTowF.
HX04195.35	20Bon	18	47	STB0X	S	58.4462	-149.6872	157	13	7	1518	BON018	QTowF.
HX04195.40	20Bon	19	48	PBD0	S	58.5433	-149.7952	138	13	7	1646	BON019	QTowF.
HX04195.45	20Bon	20	49	PBD1	S	58.4260	-149.8688	123	13	7	1805	BON020	QTowF.
HX04195.50	20Bon	21	51	PBD3	S	58.2845	-149.9420	53	13	7	1945	BON021	QTowF.
HX04195.55	20Bon	22	53	PD5	S	58.1673	-149.9877	151	13	7	2119	BON022	QTowF.
HX04195.60	20Bon	23	55	PBD7	S	58.0677	-150.0470	311	13	7	2317	BON023	QTowF.
HX04196.03	20Bon	24	57	PBD9	S	57.9060	-150.1293	220	14	7	0144	BON024	QTowF.
HX04196.08	20Bon	25	59	PBA15	S	57.8027	-150.4675	91	14	7	0419	BON025	QTowF.
HX04196.13	20Bon	26	61	PBA13	S	57.9135	-150.4110	147	14	7	0556	BON026	QTowF.
HX04196.18	20Bon	27	63	PBA11	S	58.0893	-150.3600	210	14	7	0800	BON027	QTowF.
HX04196.23	20Bon	28	65	PBA9	S	58.1895	-150.3123	108	14	7	0954	BON028	QTowF.
HX04196.29	20Bon	29	67	PBA7	S	58.2970	-150.2657	49	14	7	1136	BON029	QTowF.
HX04196.37	20Bon	30	69	PBA5	S	58.3983	-150.2253	65	14	7	1334	BON030	QTowF.
HX04196.42	20Bon	31	71	PBA3	S	58.5308	-150.1430	108	14	7	1522	BON031	QTowF.
HX04196.47	20Bon	32	73	PBA1	S	58.7038	-150.1000	158	14	7	1712	BON032	QTowF.
HX04196.52	20Bon	33	74	PBB1	S	58.6532	-150.5123	212	14	7	1930	BON033	QTowF.
HX04196.58	20Bon	34	76	PBB3	S	58.5490	-150.5497	150	14	7	2126	BON034	QTowF.
HX04196.63	20Bon	35	78	PBB5	S	58.4708	-150.5702	75	14	7	2252	BON035	Discard; wire angle too low. Tow redone.
HX04196.67	20Bon	35B	78	PB5	S	58.4757	-150.5575	77	14	7	2309	BON035B	QTowF.
HX04197.02	20Bon	36	80	PBB7	S	58.3307	-150.5833	60	15	7	0054	BON036	QTowF.
HX04197.07	20Bon	37	82	PBB9	S	58.1873	-150.6307	108	15	7	0226	BON037	QTowF.
HX04197.13	20Bon	38	84	PBB11	S	58.0753	-150.6790	140	15	7	0410	BON038	QTowF.
HX04197.18	20Bon	39	86	PBB13	S	57.9470	-150.6917	113	15	7	0554	BON039	QTowF.
HX04197.23	20Bon	40	88	PBB15	S	57.8145	-150.7407	89	15	7	0737	BON040	QTowF.
HX04197.29	20Bon	41	90	PBC9	S	58.1182	-151.0172	104	15	7	1033	B0N041	QTowF.
HX04197.34	20Bon	42	92	PBC7	S	58.2468	-150.9840	154	15	7	1222	BON042	QTowF.
HX04197.40	20Bon	43	94	PBC5	S	58.3592	-150.9692	55	15	7	1425	BON043	QTowF.
HX04197.45	20Bon	44	96	PBC3	S	58.4792	-150.9503	86	15	7	1550	BON044	QTowF.

Table 4: 20cm Bongo Net (cont'd)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04197.51	20Bon	45	98	PBC1	S	58.6270	-150.9173	202	15	7	1745	BON045	QTowF.
HX04198.18	20Bon	46	122	STA10	S	58.0992	-149.0565	87	16	7	1120	BON046	QTowF.
HX04198.23	20Bon	47	124	STA8	S	58.0110	-149.2778	208	16	7	1321	BON047	QTowF.
HX04198.28	20Bon	48	126	STA6	S	57.9400	-149.4738	210	16	7	1516	BON048	QTowF.
HX04198.32	20Bon	49	127	STA5	S	57.9145	-149.5885	122	16	7	1629	BON049	QTowF.
HX04198.37	20Bon	50	129	STA3A	S	57.8455	-149.7848	265	16	7	1824	BON050	QTowF.
HX04198.42	20Bon	51	131	STA2A	S	57.8163	-150.0025	180	16	7	2048	BON051	QTowF.
HX04198.47	20Bon	52	133	STA1	S	57.6993	-150.2357	135	16	7	2242	BON052	QTowF.
HX04199.24	20Bon	53	156	PBX1	S	58.0368	-148.7870	699	17	7	1840	BON053	QTowF.
HX04199.30	20Bon	54	159	PBX2.5	S	58.0620	-148.8145	320	17	7	2120	BON054	Discard; net hit bottom, samples not saved.
HX04200.10	20Bon	55	169	PBX12	S	58.4450	-151.3355	132	18	7	0915	BON055	QTowF.
HX04200.14	20Bon	56	170	AP6	S	58.4202	-151.7223	182	18	7	1111	BON056	QTowF.
HX04200.20	20Bon	57	173	AP9	S	58.4537	-151.1377	99	18	7	1406	BON057	QTowF.
HX04200.30	20Bon	58	180	GP5	S	58.8245	-150.8800	186	18	7	1917	BON058	QTowF.
HX04200.35	20Bon	59	182	GP3	S	58.9658	-150.8803	140	18	7	2116	BON059	QTowF.
HX04200.41	20Bon	60	185	GPO	S	59.1632	-151.0148	72	18	7	2323	BON060	QTowF.
HX04201.06	20Bon	61	189	04GBM3A	S	59.3073	-148.9815	192	19	7	1147	BON061	QTowF; mooring site.

Table 5: 60cm Bongo Net

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04191.03	60Bon	1	3	GBM3A	S	59.3087	-149.0175	189	9	7	0137	BON001	QtowF; tow stayed in upper 50m longer than necessary during descent. Diff to read wire angles with protractor.
HX04192.13	60Bon	2	15	E401	S	57.2402	-146.0360	3940	10	7	2229	BON002	QTowF.
HX04193.04	60Bon	3	17	E403	S	57.2052	-146.3972	4057	11	7	0339	BON003	QTowF.
HX04193.11	60Bon	4	20	E406	S	57.2225	-146.9583	4394	11	7	1035	BON004	QTowF.
HX04193.17	60Bon	5	22	E408	S	57.2323	-147.3235	4601	11	7	1531	BON005	QTowF.
HX04193.23	60Bon	6	24	E410	S	57.2333	-147.7233	4812	11	7	2042	BON006	QTowF.
HX04194.03	60Bon	7	26	E412	S	51.2307	-148.1072	4902	12	7	0114	BON007	QTowF.
HX04194.09	60Bon	8	28	E414	S	57.2353	-148.4703	4979	12	7	0556	BON008	QTowF.
HX04194.15	60Bon	9	30	E416	S	57.2555	-148.8458	3877	12	7	1026	BON009	QTowF.
HX04194.21	60Bon	10	32	E418	S	57.2472	-149.2388	3160	12	7	1520	BON010	QTowF.
HX04194.27	60Bon	11	34	E420	S	57.2433	-149.6470	2527	12	7	2010	BON011	QTowF.
HX04195.03	60Bon	12	36	STB9	S	57.6832	-150.2688	137	13	7	0213	BON012	QTowF.
HX04195.09	60Bon	13	38	STB7	S	57.8352	-150.0823	201	13	7	0438	BON013	QTowF.
HX04195.14	60Bon	14	40	STB5	S	57.9773	-149.9267	266	13	7	0710	BON014	QTowF.
HX04195.19	60Bon	15	42	STB3	S	58.1223	-149.7282	218	13	7	0930	B0N015	QTowF.
HX04195.25	60Bon	16	44	STB1	S	58.2205	-149.6072	66	13	7	1130	BON016	QTowF.
HX04195.31	60Bon	17	46	STB00	S	58.3637	-149.4525	163	13	7	1334	BON017	QTowF.
HX04195.36	60Bon	18	47	STB0X	S	58.4462	-149.6872	157	13	7	1518	BON018	QTowF.
HX04195.41	60Bon	19	48	PBD0	S	58.5433	-149.7952	138	13	7	1646	BON019	QTowF.
HX04195.46	60Bon	20	49	PBD1	S	58.4260	-149.8688	123	13	7	1805	BON020	QTowF.
HX04195.51	60Bon	21	51	PBD3	S	58.2845	-149.9420	53	13	7	1945	BON021	QTowF.
HX04195.56	60Bon	22	53	PD5	S	58.1673	-149.9877	151	13	7	2119	BON022	QTowF.
HX04195.61	60Bon	23	55	PBD7	S	58.0677	-150.0470	311	13	7	2317	BON023	QTowF.
HX04196.04	60Bon	24	57	PBD9	S	57.9060	-150.1293	220	14	7	0144	BON024	QTowF.
HX04196.09	60Bon	25	59	PBA15	S	57.8027	-150.4675	91	14	7	0419	BON025	QTowF.
HX04196.14	60Bon	26	61	PBA13	S	57.9135	-150.4110	147	14	7	0556	BON026	QTowF.
HX04196.19	60Bon	27	63	PBA11	S	58.0893	-150.3600	210	14	7	0800	BON027	QTowF.
HX04196.24	60Bon	28	65	PBA9	S	58.1895	-150.3123	108	14	7	0954	BON028	QTowF.
HX04196.30	60Bon	29	67	PBA7	S	58.2970	-150.2657	49	14	7	1136	BON029	QTowF.
HX04196.38	60Bon	30	69	PBA5	S	58.3983	-150.2253	65	14	7	1334	BON030	QTowF.
HX04196.43	60Bon	31	71	PBA3	S	58.5308	-150.1430	108	14	7	1522	BON031	QTowF.
HX04196.48	60Bon	32	73	PBA1	S	58.7038	-150.1000	158	14	7	1712	BON032	QTowF.
HX04196.53	60Bon	33	74	PBB1	S	58.6532	-150.5123	212	14	7	1930	BON033	QTowF.
HX04196.59	60Bon	34	76	PBB3	S	58.5490	-150.5497	150	14	7	2126	BON034	QTowF.
HX04196.64	60Bon	35	78	PBB5	S	58.4708	-150.5702	75	14	7	2252	BON035	Discard; wire angle too low. Tow redone.
HX04196.65	60Bon	35	78	PBB5	S	58.4708	-150.5702	75	14	7	2252	BON035	Discard; wire angle too low. Tow redone.
HX04196.68	60Bon	35B	78	PB5	S	58.4757	-150.5575	77	14	7	2309	BON035B	QTowF.
HX04197.03	60Bon	36	80	PBB7	S	58.3307	-150.5833	60	15	7	0054	BON036	QTowF.
HX04197.08	60Bon	37	82	PBB9	S	58.1873	-150.6307	108	15	7	0226	BON037	QTowF.
HX04197.14	60Bon	38	84	PBB11	S	58.0753	-150.6790	140	15	7	0410	BON038	QTowF.
HX04197.19	60Bon	39	86	PBB13	S	57.9470	-150.6917	113	15	7	0554	BON039	QTowF.
HX04197.24	60Bon	40	88	PBB15	S	57.8145	-150.7407	89	15	7	0737	BON040	QTowF.
HX04197.30	60Bon	41	90	PBC9	S	58.1182	-151.0172	104	15	7	1033	B0N041	QTowF.
HX04197.35	60Bon	42	92	PBC7	S	58.2468	-150.9840	154	15	7	1222	BON042	QTowF.

Table 5: 60cm Bongo Net (cont'd)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04197.41	60Bon	43	94	PBC5	S	58.3592	-150.9692	55	15	7	1425	BON043	QTowF.
HX04197.46	60Bon	44	96	PBC3	S	58.4792	-150.9503	86	15	7	1550	BON044	QTowF.
HX04197.52	60Bon	45	98	PBC1	S	58.6270	-150.9173	202	15	7	1745	BON045	QTowF.
HX04198.19	60Bon	46	122	STA10	S	58.0992	-149.0565	87	16	7	1120	BON046	QTowF.
HX04198.24	60Bon	47	124	STA8	S	58.0110	-149.2778	208	16	7	1321	BON047	QTowF.
HX04198.29	60Bon	48	126	STA6	S	57.9400	-149.4738	210	16	7	1516	BON048	QTowF.
HX04198.33	60Bon	49	127	STA5	S	57.9145	-149.5885	122	16	7	1629	BON049	QTowF.
HX04198.38	60Bon	50	129	STA3A	S	57.8455	-149.7848	265	16	7	1824	BON050	QTowF.
HX04198.43	60Bon	51	131	STA2A	S	57.8163	-150.0025	180	16	7	2048	BON051	QTowF.
HX04198.48	60Bon	52	133	STA1	S	57.6993	-150.2357	135	16	7	2242	BON052	QTowF.
HX04199.25	60Bon	53	156	PBX1	S	58.0368	-148.7870	699	17	7	1840	BON053	QTowF.
HX04199.31	60Bon	54	159	PBX2.5	S	58.0620	-148.8145	320	17	7	2120	BON054	Discard; net hit bottom, samples not saved.
HX04200.11	60Bon	55	169	PBX12	S	58.4450	-151.3355	132	18	7	0915	BON055	QTowF.
HX04200.15	60Bon	56	170	AP6	S	58.4202	-151.7223	182	18	7	1111	BON056	QTowF.
HX04200.21	60Bon	57	173	AP9	S	58.4537	-151.1377	99	18	7	1406	BON057	QTowF.
HX04200.31	60Bon	58	180	GP5	S	58.8245	-150.8800	186	18	7	1917	BON058	QTowF.
HX04200.36	60Bon	59	182	GP3	S	58.9658	-150.8803	140	18	7	2116	BON059	QTowF.
HX04200.42	60Bon	60	185	GPO	S	59.1632	-151.0148	72	18	7	2323	BON060	QTowF.
HX04201.07	60Bon	61	189	04GBM3A	S	59.3073	-148.9815	192	19	7	1147	BON061	QTowF; mooring site.

Table 6: CalVET (CalCOFI Vertical Egg Tow Net

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04193.02	CalVET	1	17	E403	S	57.2137	-146.3805	4057	11	7	0325	CV001	QTowF.
HX04193.09	CalVET	2	20	E406	S	57.2330	-146.9533	4407	11	7	1000	CV002	QTowF.
HX04193.15	CalVET	3	22	E408	S	57.2318	-147.3277	4606	11	7	1519	CV003	QTowF.
HX04193.21	CalVET	4	24	E410	S	57.2330	-147.7180	4815	11	7	2015	CV004	QTowF.
HX04194.01	CalVET	5	26	E412	S	57.2332	-148.0987	4902	12	7	0041	CV005	QTowF.
HX04194.07	CalVET	6	28	E414	S	57.2353	-148.4597	4988	12	7	0536	CV006	QTowF.
HX04194.13	CalVET	7	30	E416	S	57.2562	-148.8430	3795	12	7	1020	CAL007	QTowF.
HX04194.19	CalVET	8	32	E418	S	57.2477	-149.2302	3135	12	7	1510	CV008	QTowF; used net 2--net 1 spilled.
HX04194.25	CalVET	9	34	E420	S	57.2428	-149.6300	2674	12	7	1949	CV009	QTowF; net 2 saved as net fouled opening of net 1.
HX04195.07	CalVET	10	38	STB7	S	57.8393	-150.0753	204	13	7	0414	CV010	QTowF; time changed to 0414 from 2014 (error?).
HX04195.23	CalVET	11	44	STB1	S	58.2238	-149.6028	69	13	7	1120	CV011	QTowF.
HX04195.29	CalVET	12	46	STB00	S	58.3663	-149.4522	163	13	7	1325	CV012	QTowF.
HX04195.34	CalVET	13	47	STB0X	S	58.4473	-149.6837	158	13	7	1509	CV013	QTowF.
HX04195.39	CalVET	14	48	PBD0	S	58.5440	-149.7930	137	13	7	1637	CV014	QTowF.
HX04195.44	CalVET	15	49	PBD1	S	58.4273	-149.8638	126	13	7	1757	CV015	QTowF.
HX04196.28	CalVET	16	67	PBA7	S	58.3037	-150.2642	51	14	7	1124	CV016	Discard; hit bottom--not saved.
HX04196.32	CalVET	16	67	PBA7	S	58.2895	-150.2648	51	14	7	1153	CV016	QTowF; second try.
HX04196.51	CalVET	17	74	PBB1	S	58.6508	-150.5128	212	14	7	1920	CV017	QTowF.
HX04196.57	CalVET	18	76	PBB3	S	58.5457	-150.5523	142	14	7	2112	CV018	QTowF.
HX04197.12	CalVET	19	84	PBB11	S	58.0777	-150.6898	141	15	7	0354	CV019	QTowF.
HX04197.28	CalVET	20	90	PBC9	S	58.1180	-151.0220	104	15	7	1024	CV020	QTowF.
HX04197.39	CalVET	21	94	PBC5	S	58.3610	-150.9705	54	15	7	1416	CV021	QTowF.
HX04197.50	CalVET	22	98	PBC1	S	58.6272	-150.9207	203	15	7	1735	CV022	QTowF.

Table 7: Seabird SeaCAT CTD

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04191.04	CAT	1	3	GBM3A	S	59.3087	-149.0175	189	9	7	0137	BON001	QTowF; top 50m salinity readings bad. Problem with SeaCat.
HX04192.14	CAT	2	15	E401	S	57.2402	-146.0360	3940	10	7	2229	BON002	CAT.
HX04193.05	CAT	3	17	E403	S	57.2052	-146.3972	4057	11	7	0339	BON003	CAT.
HX04193.12	CAT	4	20	E406	S	57.2225	-146.9583	4394	11	7	1035	BON004	CAT.
HX04193.18	CAT	5	22	E408	S	57.2323	-147.3235	4601	11	7	1531	BON005	CAT.
HX04193.24	CAT	6	24	E410	S	57.2333	-147.7233	4812	11	7	2042	BON006	CAT.
HX04194.04	CAT	7	26	E412	S	51.2307	-148.1072	4902	12	7	0114	BON007	CAT.
HX04194.10	CAT	8	28	E414	S	57.2353	-148.4703	4979	12	7	0556	BON008	CAT.
HX04194.16	CAT	9	30	E416	S	57.2555	-148.8458	3877	12	7	1026	BON009	CAT.
HX04194.22	CAT	10	32	E418	S	57.2472	-149.2388	3160	12	7	1520	BON010	CAT.
HX04194.28	CAT	11	34	E420	S	57.2433	-149.6470	2527	12	7	2010	BON011	CAT.
HX04195.04	CAT	12	36	STB9	S	57.6832	-150.2688	137	13	7	0213	BON012	CAT.
HX04195.10	CAT	13	38	STB7	S	57.8352	-150.0823	201	13	7	0438	BON013	CAT.
HX04195.15	CAT	14	40	STB5	S	57.9773	-149.9267	266	13	7	0710	BON014	CAT.
HX04195.20	CAT	15	42	STB3	S	58.1223	-149.7282	218	13	7	0930	B0N015	CAT.
HX04195.26	CAT	16	44	STB1	S	58.2205	-149.6072	66	13	7	1130	BON016	CAT.
HX04195.32	CAT	17	46	STB00	S	58.3637	-149.4525	163	13	7	1334	BON017	CAT.
HX04195.37	CAT	18	47	STB0X	S	58.4462	-149.6872	157	13	7	1518	BON018	CAT.
HX04195.42	CAT	19	48	PBD0	S	58.5433	-149.7952	138	13	7	1646	BON019	CAT.
HX04195.47	CAT	20	49	PBD1	S	58.4260	-149.8688	123	13	7	1805	BON020	CAT.
HX04195.52	CAT	21	51	PBD3	S	58.2845	-149.9420	53	13	7	1945	BON021	CAT.
HX04195.57	CAT	22	53	PD5	S	58.1673	-149.9877	151	13	7	2119	BON022	CAT.
HX04195.62	CAT	23	55	PBD7	S	58.0677	-150.0470	311	13	7	2317	BON023	CAT.
HX04196.05	CAT	24	57	PBD9	S	57.9060	-150.1293	220	14	7	0144	BON024	CAT.
HX04196.10	CAT	25	59	PBA15	S	57.8027	-150.4675	91	14	7	0419	BON025	CAT.
HX04196.15	CAT	26	61	PBA13	S	57.9135	-150.4110	147	14	7	0556	BON026	CAT.
HX04196.20	CAT	27	63	PBA11	S	58.0893	-150.3600	210	14	7	0800	BON027	CAT.
HX04196.25	CAT	28	65	PBA9	S	58.1895	-150.3123	108	14	7	0954	BON028	CAT.
HX04196.31	CAT	29	67	PBA7	S	58.2970	-150.2657	49	14	7	1136	BON029	CAT.
HX04196.39	CAT	30	69	PBA5	S	58.3983	-150.2253	65	14	7	1334	BON030	CAT.
HX04196.44	CAT	31	71	PBA3	S	58.5308	-150.1430	108	14	7	1522	BON031	CAT.
HX04196.49	CAT	32	73	PBA1	S	58.7038	-150.1000	158	14	7	1712	BON032	CAT.
HX04196.54	CAT	33	74	PBB1	S	58.6532	-150.5123	212	14	7	1930	BON033	CAT.
HX04196.60	CAT	34	76	PBB3	S	58.5490	-150.5497	150	14	7	2126	BON034	CAT.
HX04196.66	CAT	35	78	PBB5	S	58.4708	-150.5702	75	14	7	2252	BON035	CAT; wire angle too low. Tow redone.
HX04196.69	CAT	35B	78	PB5	S	58.4757	-150.5575	77	14	7	2309	BON035B	CAT.
HX04197.04	CAT	36	80	PBB7	S	58.3307	-150.5833	60	15	7	0054	BON036	CAT.
HX04197.09	CAT	37	82	PBB9	S	58.1873	-150.6307	108	15	7	0226	BON037	CAT.
HX04197.15	CAT	38	84	PBB11	S	58.0753	-150.6790	140	15	7	0410	BON038	CAT.
HX04197.20	CAT	39	86	PBB13	S	57.9470	-150.6917	113	15	7	0554	BON039	CAT.
HX04197.25	CAT	40	88	PBB15	S	57.8145	-150.7407	89	15	7	0737	BON040	CAT.
HX04197.31	CAT	41	90	PBC9	S	58.1182	-151.0172	104	15	7	1033	B0N041	CAT.
HX04197.36	CAT	42	92	PBC7	S	58.2468	-150.9840	154	15	7	1222	BON042	CAT.
HX04197.42	CAT	43	94	PBC5	S	58.3592	-150.9692	55	15	7	1425	BON043	CAT.
HX04197.47	CAT	44	96	PBC3	S	58.4792	-150.9503	86	15	7	1550	BON044	CAT.
HX04197.53	CAT	45	98	PBC1	S	58.6270	-150.9173	202	15	7	1745	BON045	CAT.
HX04198.20	CAT	46	122	STA10	S	58.0992	-149.0565	87	16	7	1120	BON046	CAT.

Table 7: Seabird SeaCAT CTD (cont'd)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04198.25	CAT	47	124	STA8	S	58.0110	-149.2778	208	16	7	1321	BON047	CAT.
HX04198.30	CAT	48	126	STA6	S	57.9400	-149.4738	210	16	7	1516	BON048	CAT.
HX04198.34	CAT	49	127	STA5	S	57.9145	-149.5885	122	16	7	1629	BON049	CAT.
HX04198.39	CAT	50	129	STA3A	S	57.8455	-149.7848	265	16	7	1824	BON050	CAT.
HX04198.44	CAT	51	131	STA2A	S	57.8163	-150.0025	180	16	7	2048	BON051	CAT.
HX04198.49	CAT	52	133	STA1	S	57.6993	-150.2357	135	16	7	2242	BON052	CAT.
HX04199.26	CAT	53	156	PBX1	S	58.0368	-148.7870	699	17	7	1840	BON053	CAT.
HX04199.32	CAT	54	159	PBX2.5	S	58.0620	-148.8145	320	17	7	2120	BON054	CAT; net hit bottom, samples not saved.
HX04200.12	CAT	55	169	PBX12	S	58.4450	-151.3355	132	18	7	0915	BON055	CAT.
HX04200.16	CAT	56	170	AP6	S	58.4202	-151.7223	182	18	7	1111	BON056	CAT.
HX04200.22	CAT	57	173	AP9	S	58.4537	-151.1377	99	18	7	1406	BON057	CAT.
HX04200.32	CAT	58	180	GP5	S	58.8245	-150.8800	186	18	7	1917	BON058	CAT.
HX04200.37	CAT	59	182	GP3	S	58.9658	-150.8803	140	18	7	2116	BON059	CAT.
HX04200.43	CAT	60	185	GPO	S	59.1632	-151.0148	72	18	7	2323	BON060	CAT.
HX04201.08	CAT	61	189	04GBM3A	S	59.3073	-148.9815	192	19	7	1147	BON061	CAT; mooring site

Table 8: CTD Casts (with and without bottle samples)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04190.02	CTDB	1	1	04GB1-A	S	59.7100	-149.3383	231	8	7	2133	CTD001	Chlor,CTD,Fluor,PAR; 30ml lost due to filter system failure.Remaining volume measured with grad cyl.
HX04190.03	CTDB	2	2	04GB-2A	S	59.5265	-149.1927	218	8	7	2310	CTD002	Chlor, CTD, Fluor, PAR.
HX04191.01	CTDB	3	3	GBM3A	S	59.3110	-148.9975	189	9	7	0053	CTD003	Chlor, CTD, Fluor, PAR.
HX04191.05	CTDB	4	4	GB4A	S	59.1250	-148.7613	148	9	7	0343	CTD004	Chlor, CTD, Fluor, PAR.
HX04191.06	CTDB	5	5	GBP5A	S	59.0448	-148.6943	196	9	7	0430	CTD005	Chlor, CTD, Fluor, PAR.
HX04191.07	CTDB	6	6	GPB12A	S	58.6867	-148.8393	211	9	7	0705	CTD006	Chlor, CTD, Fluor, PAR.
HX04191.08	CTDB	7	7	E3TR1	S	57.2340	-149.4345	1997	9	7	1618	CTD007	Chlor, CTD, Fluor, PAR; west end of eddy.
HX04192.02	CTDB	8	8	E4CE	S	57.2312	-147.4650	4672	10	7	0346	CTD008	Chlor, CTD, Fluor, PAR.
HX04192.03	CTDB	9	9	E4C	S	57.2313	-147.8157	4862	10	7	0541	CTD009	Chlor, CTD, Fluor, PAR.
HX04192.05	CTDB	10	10	E4CW	S	57.2290	-147.9952	4892	10	7	0720	CTD010	Chlor, CTD, Fluor, PAR; about 10ml leaked from 40m funnel.
HX04192.07	CTDB	11	11	E4X1	S	57.3855	-148.0092	4963	10	7	0900	CTD011	Chlor, CTD, Fluor, PAR.
HX04192.08	CTDB	12	12	E4X2	S	57.3073	-147.9990	4912	10	7	1013	CTD012	Chlor, CTD, Fluor, PAR.
HX04192.09	CTDB	13	13	E4X3	S	57.1537	-147.9980	4840	10	7	1150	CTD013	Chlor, CTD, Fluor, PAR; 10m and 50m bottles leaking after retrieval quest.
HX04192.10	CTDB	14	14	E3X4	S	57.0745	-147.9978	4722	10	7	1303	CTD014	CTD, Fluor, PAR; bottles did not fire—no water samples taken. CTD data OK.
HX04192.11	CTDB	15	15	E401	S	57.2332	-146.0010	3921	10	7	2020	CTD015	Chlor, CTD, Fluor, PAR.
HX04192.15	CTDB	16	16	E402	S	57.2330	-146.1905	3993	10	7	2334	CTD016	Chlor, CTD, Fluor, PAR.
HX04193.01	CTDB	17	17	E403	S	57.2327	-146.3817	1998	11	7	0137	CTD017	Chlor, CTD, Fluor, PAR.
HX04193.06	CTDB	18	18	E404	S	57.2330	-146.5750	4170	11	7	0457	CTD018	Chlor, CTD, Fluor, PAR.
HX04193.07	CTDB	19	19	E405	S	57.2230	-146.7633	4279	11	7	0651	CTD019	Chlor, CTD, Fluor, PAR.
HX04193.08	CTDB	20	20	E406	S	57.2330	-146.9533	4407	11	7	0930	CTD020	Chlor, CTD, Fluor, PAR.
HX04193.13	CTDB	21	21	E407	S	57.2330	-147.1437	4516	11	7	1214	CTD021	Chlor, CTD, Fluor, PAR.
HX04193.14	CTDB	22	22	E408	S	57.2322	-147.3353	4615	11	7	1450	CTD022	Chlor, CTD, Fluor, PAR.
HX04193.19	CTDB	23	23	E409	S	57.2327	-147.5265	4723	11	7	1729	CTD023	Chlor, CTD, Fluor, PAR.
HX04193.20	CTDB	24	24	E410	S	57.2332	-147.7165	4815	11	7	1930	CTD024	Chlor, CTD, Fluor, PAR.
HX04193.25	CTDB	25	25	E411	S	57.2325	-147.9067	4873	11	7	2139	CTD025	Chlor, CTD, Fluor, PAR.
HX04193.26	CTDB	26	26	E412	S	57.2340	-148.1010	4903	11	7	2330	CTD026	Chlor, CTD, Fluor, PAR.
HX04194.05	CTDB	27	27	E413	S	57.2338	-148.2890	4935	12	7	0212	CTD027	Chlor, CTD, Fluor, PAR; 10m bottle leaked. Sample contaminated through bottom seal.
HX04194.06	CTDB	28	28	E414	S	57.2338	-148.4807	4988	12	7	0417	CTD028	Chlor, CTD, Fluor, PAR.
HX04194.11	CTDB	29	29	E415	S	57.2330	-148.6712	4531	12	7	0656	CTD029	Chlor, CTD, Fluor, PAR.
HX04194.12	CTDB	30	30	E416	S	57.2330	-148.8612	4199	12	7	0950	CTD030	Chlor, CTD, Fluor, PAR.
HX04194.17	CTDB	31	31	E417	S	57.2327	-149.0522	3522	12	7	1218	CTD031	Chlor, CTD, Fluor, PAR.
HX04194.18	CTDB	32	32	E418	S	57.2328	-149.2417	3140	12	7	1430	CTD032	Chlor, CTD, Fluor, PAR; 0 meter bottle did not fire—used bucket for surface samples.
HX04194.23	CTDB	33	33	E419	S	57.2332	-149.4332	2890	12	7	1709	CTD033	Chlor, CTD, Fluor, PAR; 20m bottle leaking when brought on board. 20m sample quest.
HX04194.24	CTDB	34	34	E420	S	57.2323	-149.6248	2626	12	7	1907	CTD034	Chlor, CTD, Fluor, PAR.
HX04194.29	CTDB	35	35	E421	S	57.2327	-149.8153	1974	12	7	2101	CTD035	Chlor, CTD, Fluor, PAR.
HX04195.01	CTDB	36	36	STB9	S	57.6845	-150.2668	150	13	7	0112	CTD036	Chlor, CTD, Fluor, PAR; 20m bottle

Table 8: CTD Casts (with and without bottle samples - cont'd)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
													leaked, sample not taken.
HX04195.05	CTDB	37	37	STB8	S	57.7805	-150.1528	186	13	7	0309	CTD037	Chlor, CTD, Fluor, PAR.
HX04195.06	CTDB	38	38	STB7	S	57.8340	-150.0832	211	13	7	0353	CTD038	Chlor, CTD, Fluor, PAR.
HX04195.11	CTDB	39	39	STB6	S	57.9033	-149.9985	265	13	7	0528	CTD039	Chlor, CTD, Fluor, PAR.
HX04195.12	CTDB	40	40	STB5	S	57.9808	-149.9055	267	13	7	0547	CTD040	Chlor, CTD, Fluor, PAR; 20m bottle was leaking, no sample taken.
HX04195.16	CTDB	41	41	STB4	S	58.0517	-149.8152	246	13	7	0830	CTD041	Chlor, CTD, Fluor, PAR.
HX04195.17	CTDB	42	42	STB3	S	58.1203	-149.7363	221	13	7	0911	CTD042	Chlor, CTD, Fluor, PAR; Surface bottle leaking on way up. 0 meter leaked. Other samples OK.
HX04195.21	CTDB	43	43	STB2	S	58.1733	-149.6643	109	13	7	1032	CTD043	Chlor, CTD, Fluor, PAR.
HX04195.22	CTDB	44	44	STB1	S	58.2248	-149.6035	69	13	7	1112	CTD044	Chlor, CTD, Fluor, PAR.
HX04195.27	CTDB	45	45	STB0	S	58.2915	-149.5483	115	13	7	1217	CTD045	Chlor, CTD, Fluor, PAR.
HX04195.28	CTDB	46	46	STB00	S	58.3663	-149.4567	164	13	7	1310	CTD046	Chlor, CTD, Fluor, PAR.
HX04195.33	CTDB	47	47	STB0X	S	58.4480	-149.6840	158	13	7	1457	CTD047	Chlor, CTD, Fluor, PAR.
HX04195.38	CTDB	48	48	PBD0	S	58.5433	-149.7912	140	13	7	1620	CTD048	Chlor, CTD, Fluor, PAR.
HX04195.43	CTDB	49	49	PBD1	S	58.4283	-149.8610	129	13	7	1742	CTD049	Chlor, CTD, Fluor, PAR.
HX04195.48	CTDB	50	50	PBD2	S	58.3463	-149.8995	78	13	7	1845	CTD050	Chlor, CTD, Fluor, PAR.
HX04195.49	CTDB	51	51	PBD3	S	58.2783	-149.9327	55	13	7	1925	CTD051	Chlor, CTD, Fluor, PAR.
HX04195.53	CTDB	52	52	PBD4	S	58.2342	-149.9708	79	13	7	2021	CTD052	Chlor, CTD, Fluor, PAR.
HX04195.54	CTDB	53	53	PBD5	S	58.1667	-148.9922	154	13	7	2050	CTD053	Chlor, CTD, Fluor, PAR; 30m bottle had a small leak—took sample anyway.
HX04195.58	CTDB	54	54	PBD6	S	58.1163	-150.0323	273	13	7	2155	CTD054	Chlor, CTD, Fluor, PAR; no 40m sample taken.
HX04195.59	CTDB	55	55	PBD7	S	58.0635	-150.0618	321	13	7	2240	CTD055	Chlor, CTD, Fluor, PAR; no 30m chlorophyll sample taken.
HX04196.01	CTDB	56	56	PBD8	S	57.9837	-150.0972	247	14	7	0019	CTD056	Chlor, CTD, Fluor, PAR; 30m bottle leaked a bit but sample still taken. no 20m sample collected.
HX04196.02	CTDB	57	57	PB09	S	57.9047	-150.1440	214	14	7	0114	CTD057	Chlor, CTD, Fluor, PAR; 20m bottle did not fire—no sample.
HX04196.06	CTDB	58	58	PBD10	S	57.8333	-150.1805	189	14	7	0236	CTD058	Chlor, CTD, Fluor, PAR; No 30m chlorophyll sample collected.
HX04196.07	CTDB	59	59	PBA15	S	57.8092	-150.4677	91	14	7	0400	CTD059	Chlor, CTD, Fluor, PAR.
HX04196.11	CTDB	60	60	PBA14	S	57.8595	-150.4330	102	14	7	0457	CTD060	Chlor, CTD, Fluor, PAR.
HX04196.12	CTDB	61	61	PBA13	S	57.9170	-150.4072	148	14	7	0533	CTD061	Chlor, CTD, Fluor, PAR; 30m bottle leaked badly, sample lost.
HX04196.16	CTDB	62	62	PBA12	S	58.0178	-150.3697	184	14	7	0652	CTD062	Chlor, CTD, Fluor, PAR.
HX04196.17	CTDB	63	63	PBA11	S	58.0940	-150.3493	220	14	7	0735	CTD063	Chlor, CTD, Fluor, PAR.
HX04196.21	CTDB	64	64	PBA11	S	58.1437	-150.3333	181	14	7	0857	CTD064	Chlor, CTD, Fluor, PAR.
HX04196.22	CTDB	65	65	PBA9	S	58.1925	-150.3085	109	14	7	0935	CTD065	Chlor, CTD, Fluor, PAR.
HX04196.26	CTDB	66	66	PBA8	S	58.2328	-150.2883	75	14	7	1036	CTD066	Chlor, CTD, Fluor, PAR.
HX04196.27	CTDB	67	67	PBA7	S	58.3043	-150.2642	53	14	7	1119	CTD067	Chlor, CTD, Fluor, PAR.
HX04196.34	CTDB	68	68	PBA6	S	58.3547	-150.2487	51	14	7	1228	CTD068	Chlor, CTD, Fluor, PAR.
HX04196.36	CTDB	69	69	PBA5	S	58.4068	-150.2257	67	14	7	1316	CTD069	Chlor, CTD, Fluor, PAR; no 10m bottle.
HX04196.40	CTDB	70	70	PBA4	S	58.4673	-150.2012	85	14	7	1422	CTD070	Chlor, CTD, Fluor, PAR.
HX04196.41	CTDB	71	71	PBA3	S	58.5345	-150.1475	112	14	7	1503	CTD071	Chlor, CTD, Fluor, PAR.

Table 8: CTD Casts (with and without bottle samples - cont'd)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04196.45	CTDB	72	72	PBA2	S	58.6092	-150.1263	115	14	7	1606	CTD072	Chlor, CTD, Fluor, PAR.
HX04196.46	CTDB	73	73	PBA1	S	58.7007	-150.0995	157	14	7	1650	CTD073	Chlor, CTD, Fluor, PAR.
HX04196.50	CTDB	74	74	PBB1	S	58.6457	-150.5008	209	14	7	1853	CTD074	Chlor, CTD, Fluor, PAR; surface bottle did not fire, sample taken from bucket.
HX04196.55	CTDB	75	75	PBB2	S	58.5748	-150.5428	183	14	7	2027	CTD075	Chlor, CTD, Fluor, PAR.
HX04196.56	CTDB	76	76	PBB3	S	58.5423	-150.5472	142	14	7	2055	CTD076	Chlor, CTD, Fluor, PAR; no 40m bottle collected.
HX04196.61	CTDB	77	77	PBB4	S	58.5175	-150.5527	112	14	7	2155	CTD077	Chlor, CTD, Fluor, PAR.
HX04196.62	CTDB	78	78	PBB5	S	58.4675	-150.5678	78	14	7	2232	CTD078	Chlor, CTD, Fluor, PAR; no 50m sample collected.
HX04196.70	CTDB	79	79	PBB6	S	58.3923	-150.5800	67	14	7	2350	CTD079	Chlor, CTD, Fluor, PAR; no 40m chlorophyll sample collected.
HX04197.01	CTDB	80	80	PBB7	S	58.3300	-150.5957	60	15	7	0030	CTD080	Chlor, CTD, Fluor, PAR.
HX04197.05	CTDB	81	81	PBB8	S	58.2597	-150.6153	68	15	7	0129	CTD081	Chlor, CTD, Fluor, PAR.
HX04197.06	CTDB	82	82	PBB9	S	58.1882	-150.6370	105	15	7	0206	CTD082	Chlor, CTD, Fluor, PAR.
HX04197.10	CTDB	83	83	PBB10	S	58.1433	-150.6555	128	15	7	0255	CTD083	Chlor, CTD, Fluor, PAR; 20m bottle did not trip, no sample collected.
HX04197.11	CTDB	84	84	PBB11	S	58.0780	-150.6838	140	15	7	0339	CTD084	Chlor, CTD, Fluor, PAR.
HX04197.16	CTDB	85	85	PBB12	S	58.0117	-150.6950	124	15	7	0451	CTD085	Chlor, CTD, Fluor, PAR.
HX04197.17	CTDB	86	86	PBB13	S	57.9500	-150.7012	113	15	7	0532	CTD086	Chlor, CTD, Fluor, PAR.
HX04197.21	CTDB	87	87	PBB14	S	57.8840	-150.7203	85	15	7	0635	CTD087	Chlor, CTD, Fluor, PAR.
HX04197.22	CTDB	88	88	PBB15	S	57.8168	-150.7488	88	15	7	0716	CTD088	Chlor, CTD, Fluor, PAR.
HX04197.26	CTDB	89	89	PBC10	S	58.0258	-151.0338	87	15	7	0921	CTD089	Chlor, CTD, Fluor, PAR.
HX04197.27	CTDB	90	90	PBC9	S	58.1173	-151.0148	103	15	7	1009	CTD090	Chlor, CTD, Fluor, PAR.
HX04197.32	CTDB	91	91	PBC8	S	58.2007	-151.0037	105	15	7	1124	CTD091	Chlor, CTD, Fluor, PAR.
HX04197.33	CTDB	92	92	PBC7	S	58.2503	-150.9860	154	15	7	1159	CTD092	Chlor, CTD, Fluor, PAR.
HX04197.37	CTDB	93	93	PBC6	S	58.2965	-150.9768	86	15	7	1315	CTD093	Chlor, CTD, Fluor, PAR.
HX04197.38	CTDB	94	94	PBC5	S	58.3637	-150.9685	59	15	7	1404	CTD094	Chlor, CTD, Fluor, PAR.
HX04197.43	CTDB	95	95	PBC4	S	58.4073	-150.9550	66	15	7	1455	CTD095	Chlor, CTD, Fluor, PAR.
HX04197.44	CTDB	96	96	PBC3	S	58.4792	-150.9460	90	15	7	1533	CTD096	Chlor, CTD, Fluor, PAR.
HX04197.48	CTDB	97	97	PBC2	S	58.5390	-150.9373	154	15	7	1624	CTD097	Chlor, CTD, Fluor, PAR.
HX04197.49	CTDB	98	98	PBC1	S	58.6280	-150.9172	202	15	7	1714	CTD098	Chlor, CTD, Fluor, PAR; no 20m bottle—misfired.
HX04197.54	CTD	99	99	UPA1	S	58.1690	-150.3227	121	15	7	2200	CTD099	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04197.55	CTD	100	100	UPA2	S	58.1893	-150.3147	110	15	7	2218	CTD100	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04197.56	CTD	101	101	UPA3	S	58.2075	-150.3048	97	15	7	2235	CTD101	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04197.57	CTD	102	102	UPA4	S	58.2287	-150.3007	80	15	7	2256	CTD102	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04197.58	CTD	103	103	UPA5	S	58.2477	-150.2928	73	15	7	2311	CTD105	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04197.59	CTD	104	104	UPA6	S	58.2680	-150.2833	63	15	7	2331	CTD104	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04197.60	CTD	105	105	UPA7	S	58.2863	-150.2758	55	15	7	2340	CTD105	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04198.01	CTD	106	106	UPA8	S	58.3063	-150.2652	54	16	7	0000	CTD106	CTD, Fluor, PAR; Portlock Bank

Table 8: CTD Casts (with and without bottle samples - cont'd)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
													upslope experiment labeled A.
HX04198.02	CTD	107	107	UPA9	S	58.3307	-150.2568	53	16	7	0015	CTD107	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04198.03	CTD	108	108	UPA10	S	58.3552	-150.2468	53	16	7	0036	CTD108	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04198.04	CTD	109	109	UPB1	S	58.0850	-150.3478	214	16	7	0237	CTD109	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.05	CTD	110	110	UPB2	S	58.1235	-150.3348	207	16	7	0306	CTD110	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.06	CTD	111	111	UPB3	S	58.1435	-150.3312	179	16	7	0316	CTD111	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.07	CTD	112	112	UPB4	S	58.1673	-150.3215	120	16	7	0345	CTD112	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.08	CTD	113	113	UPB5	S	58.1872	-150.3122	110	16	7	0403	CTD113	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.09	CTD	114	114	UPB6	S	58.2078	-150.3047	96	16	7	0425	CTD114	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.10	CTD	115	115	UPB7	S	58.2272	-150.2963	83	16	7	0441	CTD115	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.11	CTD	116	116	UPB8	S	58.2465	-150.2895	72	16	7	0501	CTD116	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.12	CTD	117	117	UPB9	S	58.2662	-150.2813	62	16	7	0514	CTD117	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.13	CTD	118	118	UPB10	S	58.2862	-150.2745	54	16	7	0533	CTD118	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.14	CTD	119	119	UPB11A	S	58.3052	-150.2675	53	16	7	0548	CTD119	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.15	CTD	120	120	UPB12	S	58.3305	-150.2597	53	16	7	0610	CTD120	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.16	CTD	121	121	UPB13	S	58.3558	-150.2507	52	16	7	0625	CTD121	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.17	CTDB	122	122	STA10	S	58.1007	-149.0687	90	16	7	1106	CTD122	Chlor, CTD, Fluor, PAR.
HX04198.21	CTDB	123	123	STA9	S	58.0632	-149.1723	109	16	7	1206	CTD123	Chlor, CTD, Fluor, PAR.
HX04198.22	CTDB	124	124	STA8	S	58.0222	-149.2882	217	16	7	1248	CTD124	Chlor,CTD,Fluor,PAR; some 30m bottle sample lost—filter not seated; filtered only 90ml. No 40m sample--mistrip.
HX04198.26	CTDB	125	125	STA7	S	57.9815	-149.4168	209	16	7	1417	CTD125	Chlor, CTD, Fluor, PAR.
HX04198.27	CTDB	126	126	STA6	S	57.9483	-149.4693	197	16	7	1451	CTD126	Chlor, CTD, Fluor, PAR.
HX04198.31	CTDB	127	127	STA5	S	57.9157	-149.5790	123	16	7	1605	CTD127	Chlor, CTD, Fluor, PAR.
HX04198.35	CTDB	128	128	STA4	S	57.8777	-149.6828	233	16	7	1704	CTD128	Chlor, CTD, Fluor, PAR.
HX04198.36	CTDB	129	129	STA3A	S	57.8433	-149.7818	265	16	7	1753	CTD129	Chlor, CTD, Fluor, PAR.
HX04198.40	CTDB	130	130	STA3	S	57.8073	-149.8795	256	16	7	1913	CTD130	Chlor, CTD, Fluor, PAR.
HX04198.41	CTDB	131	131	STA2A	S	57.7723	-149.9970	182	16	7	2020	CTD131	Chlor, CTD, Fluor, PAR.
HX04198.45	CTDB	132	132	STA2	S	57.7360	-150.1162	196	16	7	2132	CTD132	Chlor, CTD, Fluor, PAR.
HX04198.46	CTDB	133	133	STA1	S	57.7043	-150.2373	134	16	7	2219	CTD133	Chlor, CTD, Fluor, PAR.
HX04199.01	CTD	134	134	UPC1	S	57.9830	-150.0990	243	17	7	0203	CTD134	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.

Table 8: CTD Casts (with and without bottle samples - cont'd)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04199.02	CTD	135	135	UPC2	S	58.0653	-150.0585	318	17	7	0300	CTD135	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.03	CTD	136	136	UPC3	S	58.0905	-150.0463	306	17	7	0320	CTD136	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.04	CTD	137	137	UPC4	S	58.1167	-150.0300	272	17	7	0359	CTD137	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.05	CTD	138	138	UPC5	S	58.1325	-150.0222	237	17	7	0419	CTD138	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.06	CTD	139	139	UPC6	S	58.1495	-150.0122	187	17	7	0456	CTD139	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.07	CTD	140	140	UPC7	S	58.1670	-150.0013	151	17	7	0515	CTD140	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.08	CTD	141	141	UPC8	S	58.1890	-149.9903	122	17	7	0541	CTD141	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.09	CTD	142	142	UPC9	S	58.2115	-149.9762	97	17	7	0601	CTD142	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.10	CTD	143	143	UPC10	S	58.2343	-149.9645	78	17	7	0625	CTD143	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.11	CTD	144	144	UPC11	S	58.2785	-149.9320	55	17	7	0647	CTD144	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.12	CTD	145	145	UPD1	S	57.9835	-150.0990	240	17	7	0846	CTD145	CTD, Fluor, PAR; Portlock Bank upslope experiment D.
HX04199.13	CTD	146	146	UPD2	S	58.0642	-150.0620	317	17	7	0938	CTD146	CTD, Fluor, PAR.
HX04199.14	CTDB	147	147	UPD3	S	58.0907	-150.0473	306	17	7	1009	CTD147	CTD, Fluor, PAR.
HX04199.15	CTD	148	148	UPD4	S	58.1183	-150.0318	269	17	7	1048	CTD148	CTD, Fluor, PAR.
HX04199.16	CTD	149	149	UPD5	S	58.1333	-150.0220	235	17	7	1117	CTD149	CTD, Fluor, PAR.
HX04199.17	CTD	150	150	UPD6	S	58.1500	-150.0118	186	17	7	1152	CTD150	CTD, Fluor, PAR.
HX04199.18	CTD	151	151	UPD7	S	58.1677	-149.9983	150	17	7	1213	CTD151	CTD, Fluor, PAR.
HX04199.19	CTD	152	152	UPD8	S	58.1890	-149.9873	121	17	7	1237	CTD152	CTD, Fluor, PAR.
HX04199.20	CTD	153	153	UPD9	S	58.2117	-149.9765	96	17	7	1258	CTD153	CTD, Fluor, PAR.
HX04199.21	CTD	154	154	UPD10	S	58.2332	-149.9655	78	17	7	1320	CTD154	CTD, Fluor, PAR.
HX04199.22	CTD	155	155	UPD11	S	58.2782	-149.9308	53	17	7	1350	CTD155	CTD, Fluor, PAR.
HX04199.23	CTDB	156	156	PBX1	S	58.0340	-148.7828	698	17	7	1750	CTD156	Chlor, CTD, Fluor, PAR.
HX04199.27	CTD	157	157	PBX2	S	58.0597	-148.7983	400	17	7	1933	CTD157	CTD, Fluor, PAR.
HX04199.28	CTDB	158	158	PBX3	S	58.9673	-148.8667	134	17	7	2033	CTD158	Chlor, CTD, Fluor, PAR.
HX04199.29	CTDB	159	159	PBX2.5	S	58.0665	-148.8222	207	17	7	2054	CTD159	Chlor, CTD, Fluor, PAR.
HX04199.33	CTDB	160	160	STA10	S	58.0993	-149.0715	89	17	7	2249	CTD160	Chlor, CTD, Fluor, PAR.
HX04200.01	CTDB	161	161	PBX5	S	58.1457	-149.3667	121	18	7	0008	CTD161	Chlor, CTD, Fluor, PAR.
HX04200.02	CTD	162	162	PBX6	S	58.1870	-149.7287	105	18	7	0134	CTD162	CTD, Fluor, PAR.
HX04200.03	CTD	163	163	STB1	S	58.2245	-149.6033	69	18	7	0213	CTD163	CTD, Fluor, PAR.
HX04200.04	CTD	164	164	PBD3	S	58.2787	-149.9320	55	18	7	0332	CTD164	CTD, Fluor, PAR.
HX04200.05	CTD	165	165	PBA6	S	58.3553	-150.2483	52	18	7	0452	CTD165	CTD, Fluor, PAR.
HX04200.06	CTD	166	166	PBB6	S	58.4927	-150.5833	68	18	7	0610	CTD166	CTD, Fluor, PAR.
HX04200.07	CTD	167	167	PCB4	S	58.4078	-150.9595	68	18	7	0727	CTD167	CTD, Fluor, PAR.
HX04200.08	CTD	168	168	PBX11	S	58.4178	-151.1172	102	18	7	0804	CTD168	CTD, Fluor, PAR.
HX04200.09	CTDB	169	169	PBX12	S	58.4437	-151.3362	132	18	7	0854	CTD169	Chlor, CTD, Fluor, PAR.
HX04200.13	CTDB	170	170	AP6	S	58.4172	-151.7265	172	18	7	1046	CTD170	Chlor, CTD, Fluor, PAR.
HX04200.17	CTD	171	171	AP7	S	58.4302	-151.5312	169	18	7	1210	CTD171	CTD, Fluor, PAR.

Table 8: CTD Casts (with and without bottle samples - cont'd)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04200.18	CTD	172	172	AP8	S	58.4432	-151.3353	132	18	7	1301	CTD172	CTD, Fluor, PAR.
HX04200.19	CTDB	173	173	AP9	S	58.4570	-151.1428	99	18	7	1346	CTD173	Chlor, CTD, Fluor, PAR.
HX04200.23	CTD	174	174	AP10	S	58.4697	-150.9450	74	18	7	1453	CTD174	CTD, Fluor, PAR.
HX04200.24	CTD	175	175	AP1	S	58.4825	-150.7500	86	18	7	1536	CTD175	CTD, Fluor, PAR; GP7B
HX04200.25	CTD	176	176	GP7A	S	58.5380	-150.7765	137	18	7	1609	CTD176	CTD, Fluor, PAR.
HX04200.26	CTD	177	177	GP7	S	58.5922	-150.8007	182	18	7	1643	CTD177	CTD, Fluor, PAR.
HX04200.27	CTD	178	178	GP6A	S	58.6747	-150.8347	187	18	7	1730	CTD178	CTD, Fluor, PAR.
HX04200.28	CTD	179	179	GP6	S	58.7493	-150.8630	182	18	7	1816	CTD179	CTD, Fluor, PAR; 04GP3a
HX04200.29	CTDB	180	180	GP5	S	58.8205	-150.8810	186	18	7	1855	CTD180	Chlor, CTD, Fluor, PAR.
HX04200.33	CTD	181	181	GP4	S	58.8813	-150.8985	160	18	7	2008	CTD181	CTD, Fluor, PAR.
HX04200.34	CTDB	182	182	GP3/04	S	58.9647	-150.9312	140	18	7	2048	CTD182	Chlor, CTD, Fluor, PAR; Chlorophyll maximum at 23m.
HX04200.38	CTD	183	183	GP2	S	59.0105	-150.9640	157	18	7	2145	CTD183	CTD, Fluor, PAR.
HX04200.39	CTD	184	184	GP1	S	59.1010	-150.9943	165	18	7	2237	CTD184	CTD, Fluor, PAR.
HX04200.40	CTDB	185	185	GPO	S	59.1607	-151.0123	73	18	7	2309	CTD186	Chlor, CTD, Fluor, PAR.
HX04201.01	CTD	186	186	GB12	S	58.6842	-148.8467	206	19	7	0650	CTD186	CTD, Fluor, PAR.
HX04201.02	CTD	187	187	GB5	S	59.0420	-148.6938	198	19	7	0913	CTD187	CTD, Fluor, PAR.
HX04201.03	CTDB	188	188	04GB4A	S	59.1210	-148.7565	150	19	7	0951	CTD188	Chlor, CTD, Fluor, PAR.
HX04201.04	CTDB	189	189	04GBM3A	S	59.3045	-148.9910	187	19	7	1123	CTD189	Chlor, CTD, Fluor, PAR; mooring site.
HX04201.09	CTDB	190	190	GB2A	S	59.5288	-149.1895	219	19	7	1343	CTD190	Chlor, CTD, Fluor, PAR; mooring site.
HX04201.11	CTDB	191	191	04GB1A	S	59.7137	-149.3435	235	19	7	1512	CTD191	Chlor, CTD, Fluor, PAR.

Table 9: Satellite Buoy Deployments

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04192.04	SatBuoy	nd	9	E4C	S	57.2242	-147.9982	4862	10	7	0625	nd	Deploy.
HX04192.06	SatBuoy	nd	10	E4CW	S	57.2265	-147.9978	4890	10	7	0746	nd	Deploy.
HX04196.33	SatBuoy	nd	67	PBA7	S	58.2922	-150.2663	51	14	7	1145	nd	Deploy; buoy #43697; time out of order?
HX04196.35	SatBuoy	nd	68	PBA6	S	58.3552	-150.2447	51	14	7	1250	nd	Deploy; buoy #43713.
HX04201.05	SatBuoy	nd	189	04GBM3A	S	59.3077	-148.9848	187	19	7	1145	nd	Deploy; Drifter buoy #43714 -- mooring site.
HX04201.10	SatBuoy	nd	190	GB2A	S	59.5288	-149.1895	219	19	7	1402	nd	Deploy; Drifter buoy #43716.

APPENDIX I

HX287 EVENT LOG

EVENT LOG CONTENTS

Column Label	Description
Event#	Unique identifier for each line of event log
Instrument (Instr)	20cm Bongo net: 0.120mm mesh; 60cm Bongo net: 0.330mm mesh; CalVET: quantitative zooplankton sampling with 25 cm diameter CalVET net, equipped with 0.150 mm mesh; towed vertically; CTD: Conductivity Temperature Depth profile collected with Seabird SBE with 5 liter rosette, fluorescence; SatBuoy: Satellite Tracked Drifter; drogued at 40m.
Cast	Sequence # for a particular instrument
Station (Sta)	
Station Standard (Sta std)	
S/E Flag	Start/end flag
Latitude (Lat)	Decimal degrees; north is positive
Longitude (Long)	Decimal degrees; east is positive
Water Depth	Depth of bottom
Day	GMT time basis
Month (Mos)	GMT time basis
Time	Time (GMT)
Region	
Comments	

Appendix I: Event Log

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04190.01	nd	nd	nd	nd	S	nd	nd	nd	8	7	1800	nd	Depart Seward, AK.
HX04190.02	CTDB	1	1	04GB1-A	S	59.7100	-149.3383	231	8	7	2133	CTD001	Chlor,CTD,Fluor,PAR; 30ml lost due to filter system failure. Remaining volume measured with grad cyl.
HX04190.03	CTDB	2	2	04GB-2A	S	59.5265	-149.1927	218	8	7	2310	CTD002	Chlor, CTD, Fluor, PAR.
HX04191.01	CTDB	3	3	GBM3A	S	59.3110	-148.9975	189	9	7	0053	CTD003	Chlor, CTD, Fluor, PAR.
HX04191.02	20Bon	1	3	GBM3A	S	59.3087	-149.0175	189	9	7	0137	BON001	QTowF.; tow stayed in upper 50m longer than necessary during descent. Diff to read wire angles with protractor.
HX04191.03	60Bon	1	3	GBM3A	S	59.3087	-149.0175	189	9	7	0137	BON001	QTowF.; tow stayed in upper 50m longer than necessary during descent. Diff to read wire angles with protractor.
HX04191.04	CAT	1	3	GBM3A	S	59.3087	-149.0175	189	9	7	0137	BON001	QTowF.; top 50m salinity readings bad. Problem with SeaCat.
HX04191.05	CTDB	4	4	GB4A	S	59.1250	-148.7613	148	9	7	0343	CTD004	Chlor, CTD, Fluor, PAR.
HX04191.06	CTDB	5	5	GBP5A	S	59.0448	-148.6943	196	9	7	0430	CTD005	Chlor, CTD, Fluor, PAR.
HX04191.07	CTDB	6	6	GPB12A	S	58.6867	-148.8393	211	9	7	0705	CTD006	Chlor, CTD, Fluor, PAR.
HX04191.08	CTDB	7	7	E3TR1	S	57.2340	-149.4345	1997	9	7	1618	CTD007	Chlor, CTD, Fluor, PAR; West end of eddy.
HX04191.09	Triaxus	1	7	E4TR1	S	57.2333	-149.0838	3321	9	7	1728	nd	Begin transect. Towed on program to zigzag between 10 and 180 meters.
HX04192.01	Triaxus	1	8	E4TR2	E	57.2310	-147.4077	4674	10	7	0238	nd	End transect. Towed zigzag 10-180 m. Total time 10 hr 10 min (610 min).
HX04192.02	CTDB	8	8	E4CE	S	57.2312	-147.4650	4672	10	7	0346	CTD008	Chlor, CTD, Fluor, PAR.
HX04192.03	CTDB	9	9	E4C	S	57.2313	-147.8157	4862	10	7	0541	CTD009	Chlor, CTD, Fluor, PAR.
HX04192.04	SatBuoy	nd	9	E4C	S	57.2242	-147.9982	4862	10	7	0625	nd	Deploy.
HX04192.05	CTDB	10	10	E4CW	S	57.2290	-147.9952	4892	10	7	0720	CTD010	Chlor, CTD, Fluor, PAR; about 10 ml leaked from 40 m funnel.
HX04192.06	SatBuoy	nd	10	E4CW	S	57.2265	-147.9978	4890	10	7	0746	nd	Deploy.
HX04192.07	CTDB	11	11	E4X1	S	57.3855	-148.0092	4963	10	7	0900	CTD011	Chlor, CTD, Fluor, PAR.
HX04192.08	CTDB	12	12	E4X2	S	57.3073	-147.9990	4912	10	7	1013	CTD012	Chlor, CTD, Fluor, PAR.
HX04192.09	CTDB	13	13	E4X3	S	57.1537	-147.9980	4840	10	7	1150	CTD013	Chlor, CTD, Fluor, PAR; 10m and 50 m bottles leaking after retrieval quest.
HX04192.10	CTDB	14	14	E3X4	S	57.0745	-147.9978	4722	10	7	1303	CTD014	CTD, Fluor, PAR; Bottles did not fire - no water samples taken. CTD data OK.
HX04192.11	CTDB	15	15	E401	S	57.2332	-146.0010	3921	10	7	2020	CTD015	Chlor, CTD, Fluor, PAR.
HX04192.12	20Bon	2	15	E401	S	57.2402	-146.0360	3940	10	7	2229	BON002	QTowF.
HX04192.13	60Bon	2	15	E401	S	57.2402	-146.0360	3940	10	7	2229	BON002	QTowF.
HX04192.14	CAT	2	15	E401	S	57.2402	-146.0360	3940	10	7	2229	BON002	CAT.
HX04192.15	CTDB	16	16	E402	S	57.2330	-146.1905	3993	10	7	2334	CTD016	Chlor, CTD, Fluor, PAR.
HX04193.01	CTDB	17	17	E403	S	57.2327	-146.3817	1998	11	7	0137	CTD017	Chlor, CTD, Fluor, PAR.
HX04193.02	CalVET	1	17	E403	S	57.2137	-146.3805	4057	11	7	0325	CV001	QTowF.
HX04193.03	20Bon	3	17	E403	S	57.2052	-146.3972	4057	11	7	0339	BON003	QTowF.
HX04193.04	60Bon	3	17	E403	S	57.2052	-146.3972	4057	11	7	0339	BON003	QTowF.
HX04193.05	CAT	3	17	E403	S	57.2052	-146.3972	4057	11	7	0339	BON003	CAT.
HX04193.06	CTDB	18	18	E404	S	57.2330	-146.5750	4170	11	7	0457	CTD018	Chlor, CTD, Fluor, PAR.
HX04193.07	CTDB	19	19	E405	S	57.2230	-146.7633	4279	11	7	0651	CTD019	Chlor, CTD, Fluor, PAR.
HX04193.08	CTDB	20	20	E406	S	57.2330	-146.9533	4407	11	7	0930	CTD020	Chlor, CTD, Fluor, PAR.

Appendix I: Event Log (cont'd)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04193.09	CalVET	2	20	E406	S	57.2330	-146.9533	4407	11	7	1000	CV002	QTowF.
HX04193.10	20Bon	4	20	E406	S	57.2225	-146.9583	4394	11	7	1035	BON004	QTowF.
HX04193.11	60Bon	4	20	E406	S	57.2225	-146.9583	4394	11	7	1035	BON004	QTowF.
HX04193.12	CAT	4	20	E406	S	57.2225	-146.9583	4394	11	7	1035	BON004	CAT.
HX04193.13	CTDB	21	21	E407	S	57.2330	-147.1437	4516	11	7	1214	CTD021	Chlor, CTD, Fluor, PAR.
HX04193.14	CTDB	22	22	E408	S	57.2322	-147.3353	4615	11	7	1450	CTD022	Chlor, CTD, Fluor, PAR.
HX04193.15	CalVET	3	22	E408	S	57.2318	-147.3277	4606	11	7	1519	CV003	QTowF.
HX04193.16	20Bon	5	22	E408	S	57.2323	-147.3235	4601	11	7	1531	BON005	QTowF.
HX04193.17	60Bon	5	22	E408	S	57.2323	-147.3235	4601	11	7	1531	BON005	QTowF.
HX04193.18	CAT	5	22	E408	S	57.2323	-147.3235	4601	11	7	1531	BON005	CAT.
HX04193.19	CTDB	23	23	E409	S	57.2327	-147.5265	4723	11	7	1729	CTD023	Chlor, CTD, Fluor, PAR.
HX04193.20	CTDB	24	24	E410	S	57.2332	-147.7165	4815	11	7	1930	CTD024	Chlor, CTD, Fluor, PAR.
HX04193.21	CalVET	4	24	E410	S	57.2330	-147.7180	4815	11	7	2015	CV004	QTowF.
HX04193.22	20Bon	6	24	E410	S	57.2333	-147.7233	4812	11	7	2042	BON006	QTowF.
HX04193.23	60Bon	6	24	E410	S	57.2333	-147.7233	4812	11	7	2042	BON006	QTowF.
HX04193.24	CAT	6	24	E410	S	57.2333	-147.7233	4812	11	7	2042	BON006	CAT.
HX04193.25	CTDB	25	25	E411	S	57.2325	-147.9067	4873	11	7	2139	CTD025	Chlor, CTD, Fluor, PAR.
HX04193.26	CTDB	26	26	E412	S	57.2340	-148.1010	4903	11	7	2330	CTD026	Chlor, CTD, Fluor, PAR.
HX04194.01	CalVET	5	26	E412	S	57.2332	-148.0987	4902	12	7	0041	CV005	QTowF.
HX04194.02	20Bon	7	26	E412	S	51.2307	-148.1072	4902	12	7	0114	BON007	QTowF.
HX04194.03	60Bon	7	26	E412	S	51.2307	-148.1072	4902	12	7	0114	BON007	QTowF.
HX04194.04	CAT	7	26	E412	S	51.2307	-148.1072	4902	12	7	0114	BON007	CAT.
HX04194.05	CTDB	27	27	E413	S	57.2338	-148.2890	4935	12	7	0212	CTD027	Chlor, CTD, Fluor, PAR; 10m bottle leaked. Sample contaminated through bottom seal.
HX04194.06	CTDB	28	28	E414	S	57.2338	-148.4807	4988	12	7	0417	CTD028	Chlor, CTD, Fluor, PAR.
HX04194.07	CalVET	6	28	E414	S	57.2353	-148.4597	4988	12	7	0536	CV006	QTowF.
HX04194.08	20Bon	8	28	E414	S	57.2353	-148.4703	4979	12	7	0556	BON008	QTowF.
HX04194.09	60Bon	8	28	E414	S	57.2353	-148.4703	4979	12	7	0556	BON008	QTowF.
HX04194.10	CAT	8	28	E414	S	57.2353	-148.4703	4979	12	7	0556	BON008	CAT.
HX04194.11	CTDB	29	29	E415	S	57.2330	-148.6712	4531	12	7	0656	CTD029	Chlor, CTD, Fluor, PAR.
HX04194.12	CTDB	30	30	E416	S	57.2330	-148.8612	4199	12	7	0950	CTD030	Chlor, CTD, Fluor, PAR.
HX04194.13	CalVET	7	30	E416	S	57.2562	-148.8430	3795	12	7	1020	CAL007	QTowF.
HX04194.14	20Bon	9	30	E416	S	57.2555	-148.8458	3877	12	7	1026	BON009	QTowF.
HX04194.15	60Bon	9	30	E416	S	57.2555	-148.8458	3877	12	7	1026	BON009	QTowF.
HX04194.16	CAT	9	30	E416	S	57.2555	-148.8458	3877	12	7	1026	BON009	CAT.
HX04194.17	CTDB	31	31	E417	S	57.2327	-149.0522	3522	12	7	1218	CTD031	Chlor, CTD, Fluor, PAR.
HX04194.18	CTDB	32	32	E418	S	57.2328	-149.2417	3140	12	7	1430	CTD032	Chlor, CTD, Fluor, PAR; 0 meter bottle did not fire—used bucket for surface samples.
HX04194.19	CalVET	8	32	E418	S	57.2477	-149.2302	3135	12	7	1510	CV008	QTowF.; used net 2—net 1 spilled.
HX04194.20	20Bon	10	32	E418	S	57.2472	-149.2388	3160	12	7	1520	BON010	QTowF.
HX04194.21	60Bon	10	32	E418	S	57.2472	-149.2388	3160	12	7	1520	BON010	QTowF.
HX04194.22	CAT	10	32	E418	S	57.2472	-149.2388	3160	12	7	1520	BON010	CAT.
HX04194.23	CTDB	33	33	E419	S	57.2332	-149.4332	2890	12	7	1709	CTD033	Chlor, CTD, Fluor, PAR; 20m bottle leaking when brought on board. 20m sample quest.
HX04194.24	CTDB	34	34	E420	S	57.2323	-149.6248	2626	12	7	1907	CTD034	Chlor, CTD, Fluor, PAR.

Appendix I: Event Log (cont'd)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04194.25	CalVET	9	34	E420	S	57.2428	-149.6300	2674	12	7	1949	CV009	QTowF.; net 2 saved as net fouled opening of net 1.
HX04194.26	20Bon	11	34	E420	S	57.2433	-149.6470	2527	12	7	2010	BON011	QTowF.
HX04194.27	60Bon	11	34	E420	S	57.2433	-149.6470	2527	12	7	2010	BON011	QTowF.
HX04194.28	CAT	11	34	E420	S	57.2433	-149.6470	2527	12	7	2010	BON011	CAT.
HX04194.29	CTDB	35	35	E421	S	57.2327	-149.8153	1974	12	7	2101	CTD035	Chlor, CTD, Fluor, PAR.
HX04195.01	CTDB	36	36	STB9	S	57.6845	-150.2668	150	13	7	0112	CTD036	Chlor, CTD, Fluor, PAR; 20 bottle leaked, sample not taken.
HX04195.02	20Bon	12	36	STB9	S	57.6832	-150.2688	137	13	7	0213	BON012	QTowF.
HX04195.03	60Bon	12	36	STB9	S	57.6832	-150.2688	137	13	7	0213	BON012	QTowF.
HX04195.04	CAT	12	36	STB9	S	57.6832	-150.2688	137	13	7	0213	BON012	CAT.
HX04195.05	CTDB	37	37	STB8	S	57.7805	-150.1528	186	13	7	0309	CTD037	Chlor, CTD, Fluor, PAR.
HX04195.06	CTDB	38	38	STB7	S	57.8340	-150.0832	211	13	7	0353	CTD038	Chlor, CTD, Fluor, PAR.
HX04195.07	CalVET	10	38	STB7	S	57.8393	-150.0753	204	13	7	0414	CV010	QTowF.; time changed to 0414 from 2014 (error?).
HX04195.08	20Bon	13	38	STB7	S	57.8352	-150.0823	201	13	7	0438	BON013	QTowF.
HX04195.09	60Bon	13	38	STB7	S	57.8352	-150.0823	201	13	7	0438	BON013	QTowF.
HX04195.10	CAT	13	38	STB7	S	57.8352	-150.0823	201	13	7	0438	BON013	CAT.
HX04195.11	CTDB	39	39	STB6	S	57.9033	-149.9985	265	13	7	0528	CTD039	Chlor, CTD, Fluor, PAR.
HX04195.12	CTDB	40	40	STB5	S	57.9808	-149.9055	267	13	7	0547	CTD040	Chlor, CTD, Fluor, PAR; 20m bottle was leaking, no sample taken.
HX04195.13	20Bon	14	40	STB5	S	57.9773	-149.9267	266	13	7	0710	BON014	QTowF.
HX04195.14	60Bon	14	40	STB5	S	57.9773	-149.9267	266	13	7	0710	BON014	QTowF.
HX04195.15	CAT	14	40	STB5	S	57.9773	-149.9267	266	13	7	0710	BON014	CAT.
HX04195.16	CTDB	41	41	STB4	S	58.0517	-149.8152	246	13	7	0830	CTD041	Chlor, CTD, Fluor, PAR.
HX04195.17	CTDB	42	42	STB3	S	58.1203	-149.7363	221	13	7	0911	CTD042	Chlor, CTD, Fluor, PAR; surface bottle leaking on way up. 0 meter leaked. Other samples OK.
HX04195.18	20Bon	15	42	STB3	S	58.1223	-149.7282	218	13	7	0930	B0N015	QTowF.
HX04195.19	60Bon	15	42	STB3	S	58.1223	-149.7282	218	13	7	0930	B0N015	QTowF
HX04195.20	CAT	15	42	STB3	S	58.1223	-149.7282	218	13	7	0930	B0N015	CAT.
HX04195.21	CTDB	43	43	STB2	S	58.1733	-149.6643	109	13	7	1032	CTD043	Chlor, CTD, Fluor, PAR.
HX04195.22	CTDB	44	44	STB1	S	58.2248	-149.6035	69	13	7	1112	CTD044	Chlor, CTD, Fluor, PAR.
HX04195.23	CalVET	11	44	STB1	S	58.2238	-149.6028	69	13	7	1120	CV011	QTowF.
HX04195.24	20Bon	16	44	STB1	S	58.2205	-149.6072	66	13	7	1130	BON016	QTowF.
HX04195.25	60Bon	16	44	STB1	S	58.2205	-149.6072	66	13	7	1130	BON016	QTowF.
HX04195.26	CAT	16	44	STB1	S	58.2205	-149.6072	66	13	7	1130	BON016	CAT.
HX04195.27	CTDB	45	45	STB0	S	58.2915	-149.5483	115	13	7	1217	CTD045	Chlor, CTD, Fluor, PAR.
HX04195.28	CTDB	46	46	STB00	S	58.3663	-149.4567	164	13	7	1310	CTD046	Chlor, CTD, Fluor, PAR.
HX04195.29	CalVET	12	46	STB00	S	58.3663	-149.4522	163	13	7	1325	CV012	QTowF.
HX04195.30	20Bon	17	46	STB00	S	58.3637	-149.4525	163	13	7	1334	BON017	QTowF.
HX04195.31	60Bon	17	46	STB00	S	58.3637	-149.4525	163	13	7	1334	BON017	QTowF.
HX04195.32	CAT	17	46	STB00	S	58.3637	-149.4525	163	13	7	1334	BON017	CAT.
HX04195.33	CTDB	47	47	STB0X	S	58.4480	-149.6840	158	13	7	1457	CTD047	Chlor, CTD, Fluor, PAR.
HX04195.34	CalVET	13	47	STB0X	S	58.4473	-149.6837	158	13	7	1509	CV013	QTowF.
HX04195.35	20Bon	18	47	STB0X	S	58.4462	-149.6872	157	13	7	1518	BON018	QTowF.
HX04195.36	60Bon	18	47	STB0X	S	58.4462	-149.6872	157	13	7	1518	BON018	QTowF.
HX04195.37	CAT	18	47	STB0X	S	58.4462	-149.6872	157	13	7	1518	BON018	CAT.

Appendix I: Event Log (cont'd)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04195.38	CTDB	48	48	PBD0	S	58.5433	-149.7912	140	13	7	1620	CTD048	Chlor, CTD, Fluor, PAR.
HX04195.39	CalVET	14	48	PBD0	S	58.5440	-149.7930	137	13	7	1637	CV014	QTowF.
HX04195.40	20Bon	19	48	PBD0	S	58.5433	-149.7952	138	13	7	1646	BON019	QTowF.
HX04195.41	60Bon	19	48	PBD0	S	58.5433	-149.7952	138	13	7	1646	BON019	QTowF.
HX04195.42	CAT	19	48	PBD0	S	58.5433	-149.7952	138	13	7	1646	BON019	CAT.
HX04195.43	CTDB	49	49	PBD1	S	58.4283	-149.8610	129	13	7	1742	CTD049	Chlor, CTD, Fluor, PAR.
HX04195.44	CalVET	15	49	PBD1	S	58.4273	-149.8638	126	13	7	1757	CV015	QTowF.
HX04195.45	20Bon	20	49	PBD1	S	58.4260	-149.8688	123	13	7	1805	BON020	QTowF.
HX04195.46	60Bon	20	49	PBD1	S	58.4260	-149.8688	123	13	7	1805	BON020	QTowF.
HX04195.47	CAT	20	49	PBD1	S	58.4260	-149.8688	123	13	7	1805	BON020	CAT.
HX04195.48	CTDB	50	50	PBD2	S	58.3463	-149.8995	78	13	7	1845	CTD050	Chlor, CTD, Fluor, PAR.
HX04195.49	CTDB	51	51	PBD3	S	58.2783	-149.9327	55	13	7	1925	CTD051	Chlor, CTD, Fluor, PAR.
HX04195.50	20Bon	21	51	PBD3	S	58.2845	-149.9420	53	13	7	1945	BON021	QTowF.
HX04195.51	60Bon	21	51	PBD3	S	58.2845	-149.9420	53	13	7	1945	BON021	QTowF.
HX04195.52	CAT	21	51	PBD3	S	58.2845	-149.9420	53	13	7	1945	BON021	CAT.
HX04195.53	CTDB	52	52	PBD4	S	58.2342	-149.9708	79	13	7	2021	CTD052	Chlor, CTD, Fluor, PAR.
HX04195.54	CTDB	53	53	PBD5	S	58.1667	-148.9922	154	13	7	2050	CTD053	Chlor, CTD, Fluor, PAR; 30m bottle had a small leak-took sample anyway.
HX04195.55	20Bon	22	53	PD5	S	58.1673	-149.9877	151	13	7	2119	BON022	QTowF.
HX04195.56	60Bon	22	53	PD5	S	58.1673	-149.9877	151	13	7	2119	BON022	QTowF.
HX04195.57	CAT	22	53	PD5	S	58.1673	-149.9877	151	13	7	2119	BON022	CAT.
HX04195.58	CTDB	54	54	PBD6	S	58.1163	-150.0323	273	13	7	2155	CTD054	Chlor, CTD, Fluor, PAR; No 40m sample taken.
HX04195.59	CTDB	55	55	PBD7	S	58.0635	-150.0618	321	13	7	2240	CTD055	Chlor, CTD, Fluor, PAR; No 30m chlorophyll sample taken.
HX04195.60	20Bon	23	55	PBD7	S	58.0677	-150.0470	311	13	7	2317	BON023	QTowF.
HX04195.61	60Bon	23	55	PBD7	S	58.0677	-150.0470	311	13	7	2317	BON023	QTowF.
HX04195.62	CAT	23	55	PBD7	S	58.0677	-150.0470	311	13	7	2317	BON023	CAT.
HX04196.01	CTDB	56	56	PBD8	S	57.9837	-150.0972	247	14	7	0019	CTD056	Chlor, CTD, Fluor, PAR; 30m bottle leaked a bit but sample still taken. No 20m sample collected.
HX04196.02	CTDB	57	57	PB09	S	57.9047	-150.1440	214	14	7	0114	CTD057	Chlor, CTD, Fluor, PAR; 20m bottle did not fire- no sample.
HX04196.03	20Bon	24	57	PBD9	S	57.9060	-150.1293	220	14	7	0144	BON024	QTowF.
HX04196.04	60Bon	24	57	PBD9	S	57.9060	-150.1293	220	14	7	0144	BON024	QTowF.
HX04196.05	CAT	24	57	PBD9	S	57.9060	-150.1293	220	14	7	0144	BON024	CAT.
HX04196.06	CTDB	58	58	PBD10	S	57.8333	-150.1805	189	14	7	0236	CTD058	Chlor, CTD, Fluor, PAR; no 30m chlorophyll sample collected.
HX04196.07	CTDB	59	59	PBA15	S	57.8092	-150.4677	91	14	7	0400	CTD059	Chlor, CTD, Fluor, PAR.
HX04196.08	20Bon	25	59	PBA15	S	57.8027	-150.4675	91	14	7	0419	BON025	QTowF.
HX04196.09	60Bon	25	59	PBA15	S	57.8027	-150.4675	91	14	7	0419	BON025	QTowF.
HX04196.10	CAT	25	59	PBA15	S	57.8027	-150.4675	91	14	7	0419	BON025	CAT.
HX04196.11	CTDB	60	60	PBA14	S	57.8595	-150.4330	102	14	7	0457	CTD060	Chlor, CTD, Fluor, PAR.
HX04196.12	CTDB	61	61	PBA13	S	57.9170	-150.4072	148	14	7	0533	CTD061	Chlor, CTD, Fluor, PAR; 30m bottle leaked badly, sample lost.
HX04196.13	20Bon	26	61	PBA13	S	57.9135	-150.4110	147	14	7	0556	BON026	QTowF.
HX04196.14	60Bon	26	61	PBA13	S	57.9135	-150.4110	147	14	7	0556	BON026	QTowF.
HX04196.15	CAT	26	61	PBA13	S	57.9135	-150.4110	147	14	7	0556	BON026	CAT.

Appendix I: Event Log (cont'd)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04196.16	CTDB	62	62	PBA12	S	58.0178	-150.3697	184	14	7	0652	CTD062	Chlor, CTD, Fluor, PAR.
HX04196.17	CTDB	63	63	PBA11	S	58.0940	-150.3493	220	14	7	0735	CTD063	Chlor, CTD, Fluor, PAR.
HX04196.18	20Bon	27	63	PBA11	S	58.0893	-150.3600	210	14	7	0800	BON027	QTowF.
HX04196.19	60Bon	27	63	PBA11	S	58.0893	-150.3600	210	14	7	0800	BON027	QTowF.
HX04196.20	CAT	27	63	PBA11	S	58.0893	-150.3600	210	14	7	0800	BON027	CAT.
HX04196.21	CTDB	64	64	PBA11	S	58.1437	-150.3333	181	14	7	0857	CTD064	Chlor, CTD, Fluor, PAR.
HX04196.22	CTDB	65	65	PBA9	S	58.1925	-150.3085	109	14	7	0935	CTD065	Chlor, CTD, Fluor, PAR.
HX04196.23	20Bon	28	65	PBA9	S	58.1895	-150.3123	108	14	7	0954	BON028	QTowF.
HX04196.24	60Bon	28	65	PBA9	S	58.1895	-150.3123	108	14	7	0954	BON028	QTowF.
HX04196.25	CAT	28	65	PBA9	S	58.1895	-150.3123	108	14	7	0954	BON028	CAT.
HX04196.26	CTDB	66	66	PBA8	S	58.2328	-150.2883	75	14	7	1036	CTD066	Chlor, CTD, Fluor, PAR.
HX04196.27	CTDB	67	67	PBA7	S	58.3043	-150.2642	53	14	7	1119	CTD067	Chlor, CTD, Fluor, PAR.
HX04196.28	CalVET	16	67	PBA7	S	58.3037	-150.2642	51	14	7	1124	CV016	Discard; hit bottom—not saved.
HX04196.29	20Bon	29	67	PBA7	S	58.2970	-150.2657	49	14	7	1136	BON029	QTowF.
HX04196.30	60Bon	29	67	PBA7	S	58.2970	-150.2657	49	14	7	1136	BON029	QTowF.
HX04196.31	CAT	29	67	PBA7	S	58.2970	-150.2657	49	14	7	1136	BON029	CAT.
HX04196.32	CalVET	16	67	PBA7	S	58.2895	-150.2648	51	14	7	1153	CV016	QTowF.; second try.
HX04196.33	SatBuoy	nd	67	PBA7	S	58.2922	-150.2663	51	14	7	1145	nd	Deploy; buoy #43697; time out of order?
HX04196.34	CTDB	68	68	PBA6	S	58.3547	-150.2487	51	14	7	1228	CTD068	Chlor, CTD, Fluor, PAR.
HX04196.35	SatBuoy	nd	68	PBA6	S	58.3552	-150.2447	51	14	7	1250	nd	Deploy; buoy #43713.
HX04196.36	CTDB	69	69	PBA5	S	58.4068	-150.2257	67	14	7	1316	CTD069	Chlor, CTD, Fluor, PAR; no 10m bottle.
HX04196.37	20Bon	30	69	PBA5	S	58.3983	-150.2253	65	14	7	1334	BON030	QTowF.
HX04196.38	60Bon	30	69	PBA5	S	58.3983	-150.2253	65	14	7	1334	BON030	QTowF.
HX04196.39	CAT	30	69	PBA5	S	58.3983	-150.2253	65	14	7	1334	BON030	CAT.
HX04196.40	CTDB	70	70	PBA4	S	58.4673	-150.2012	85	14	7	1422	CTD070	Chlor, CTD, Fluor, PAR.
HX04196.41	CTDB	71	71	PBA3	S	58.5345	-150.1475	112	14	7	1503	CTD071	Chlor, CTD, Fluor, PAR.
HX04196.42	20Bon	31	71	PBA3	S	58.5308	-150.1430	108	14	7	1522	BON031	QTowF.
HX04196.43	60Bon	31	71	PBA3	S	58.5308	-150.1430	108	14	7	1522	BON031	QTowF.
HX04196.44	CAT	31	71	PBA3	S	58.5308	-150.1430	108	14	7	1522	BON031	CAT.
HX04196.45	CTDB	72	72	PBA2	S	58.6092	-150.1263	115	14	7	1606	CTD072	Chlor, CTD, Fluor, PAR.
HX04196.46	CTDB	73	73	PBA1	S	58.7007	-150.0995	157	14	7	1650	CTD073	Chlor, CTD, Fluor, PAR.
HX04196.47	20Bon	32	73	PBA1	S	58.7038	-150.1000	158	14	7	1712	BON032	QTowF.
HX04196.48	60Bon	32	73	PBA1	S	58.7038	-150.1000	158	14	7	1712	BON032	QTowF.
HX04196.49	CAT	32	73	PBA1	S	58.7038	-150.1000	158	14	7	1712	BON032	CAT.
HX04196.50	CTDB	74	74	PBB1	S	58.6457	-150.5008	209	14	7	1853	CTD074	Chlor, CTD, Fluor, PAR; surface bottle did not fire, sample taken from bucket.
HX04196.51	CalVET	17	74	PBB1	S	58.6508	-150.5128	212	14	7	1920	CV017	QTowF.
HX04196.52	20Bon	33	74	PBB1	S	58.6532	-150.5123	212	14	7	1930	BON033	QTowF.
HX04196.53	60Bon	33	74	PBB1	S	58.6532	-150.5123	212	14	7	1930	BON033	QTowF.
HX04196.54	CAT	33	74	PBB1	S	58.6532	-150.5123	212	14	7	1930	BON033	CAT.
HX04196.55	CTDB	75	75	PBB2	S	58.5748	-150.5428	183	14	7	2027	CTD075	Chlor, CTD, Fluor, PAR.
HX04196.56	CTDB	76	76	PBB3	S	58.5423	-150.5472	142	14	7	2055	CTD076	Chlor, CTD, Fluor, PAR; no 40 m bottle collected.
HX04196.57	CalVET	18	76	PBB3	S	58.5457	-150.5523	142	14	7	2112	CV018	QTowF.
HX04196.58	20Bon	34	76	PBB3	S	58.5490	-150.5497	150	14	7	2126	BON034	QTowF.
HX04196.59	60Bon	34	76	PBB3	S	58.5490	-150.5497	150	14	7	2126	BON034	QTowF.

Appendix I: Event Log (cont'd)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04196.60	CAT	34	76	PBB3	S	58.5490	-150.5497	150	14	7	2126	BON034	CAT.
HX04196.61	CTDB	77	77	PBB4	S	58.5175	-150.5527	112	14	7	2155	CTD077	Chlor, CTD, Fluor, PAR.
HX04196.62	CTDB	78	78	PBB5	S	58.4675	-150.5678	78	14	7	2232	CTD078	Chlor, CTD, Fluor, PAR; no 50m sample collected.
HX04196.63	20Bon	35	78	PBB5	S	58.4708	-150.5702	75	14	7	2252	BON035	Discard; wire angle too low. Tow redone.
HX04196.64	60Bon	35	78	PBB5	S	58.4708	-150.5702	75	14	7	2252	BON035	Discard; wire angle too low. Tow redone.
HX04196.65	60Bon	35	78	PBB5	S	58.4708	-150.5702	75	14	7	2252	BON035	Discard; wire angle too low. Tow redone.
HX04196.66	CAT	35	78	PBB5	S	58.4708	-150.5702	75	14	7	2252	BON035	CAT; wire angle too low. Tow redone.
HX04196.67	20Bon	35B	78	PB5	S	58.4757	-150.5575	77	14	7	2309	BON035B	QTowF.
HX04196.68	60Bon	35B	78	PB5	S	58.4757	-150.5575	77	14	7	2309	BON035B	QTowF.
HX04196.69	CAT	35B	78	PB5	S	58.4757	-150.5575	77	14	7	2309	BON035B	CAT.
HX04196.70	CTDB	79	79	PBB6	S	58.3923	-150.5800	67	14	7	2350	CTD079	Chlor, CTD, Fluor, PAR; no 40m chlorophyll sample collected.
HX04197.01	CTDB	80	80	PBB7	S	58.3300	-150.5957	60	15	7	0030	CTD080	Chlor, CTD, Fluor, PAR.
HX04197.02	20Bon	36	80	PBB7	S	58.3307	-150.5833	60	15	7	0054	BON036	QTowF.
HX04197.03	60Bon	36	80	PBB7	S	58.3307	-150.5833	60	15	7	0054	BON036	QTowF.
HX04197.04	CAT	36	80	PBB7	S	58.3307	-150.5833	60	15	7	0054	BON036	CAT.
HX04197.05	CTDB	81	81	PBB8	S	58.2597	-150.6153	68	15	7	0129	CTD081	Chlor, CTD, Fluor, PAR.
HX04197.06	CTDB	82	82	PBB9	S	58.1882	-150.6370	105	15	7	0206	CTD082	Chlor, CTD, Fluor, PAR.
HX04197.07	20Bon	37	82	PBB9	S	58.1873	-150.6307	108	15	7	0226	BON037	QTowF.
HX04197.08	60Bon	37	82	PBB9	S	58.1873	-150.6307	108	15	7	0226	BON037	QTowF.
HX04197.09	CAT	37	82	PBB9	S	58.1873	-150.6307	108	15	7	0226	BON037	CAT.
HX04197.10	CTDB	83	83	PBB10	S	58.1433	-150.6555	128	15	7	0255	CTD083	Chlor, CTD, Fluor, PAR; 20m bottle did not trip, no sample collected.
HX04197.11	CTDB	84	84	PBB11	S	58.0780	-150.6838	140	15	7	0339	CTD084	Chlor, CTD, Fluor, PAR.
HX04197.12	CalVET	19	84	PBB11	S	58.0777	-150.6898	141	15	7	0354	CV019	QTowF.
HX04197.13	20Bon	38	84	PBB11	S	58.0753	-150.6790	140	15	7	0410	BON038	QTowF.
HX04197.14	60Bon	38	84	PBB11	S	58.0753	-150.6790	140	15	7	0410	BON038	QTowF.
HX04197.15	CAT	38	84	PBB11	S	58.0753	-150.6790	140	15	7	0410	BON038	CAT.
HX04197.16	CTDB	85	85	PBB12	S	58.0117	-150.6950	124	15	7	0451	CTD085	Chlor, CTD, Fluor, PAR.
HX04197.17	CTDB	86	86	PBB13	S	57.9500	-150.7012	113	15	7	0532	CTD086	Chlor, CTD, Fluor, PAR.
HX04197.18	20Bon	39	86	PBB13	S	57.9470	-150.6917	113	15	7	0554	BON039	QTowF.
HX04197.19	60Bon	39	86	PBB13	S	57.9470	-150.6917	113	15	7	0554	BON039	QTowF.
HX04197.20	CAT	39	86	PBB13	S	57.9470	-150.6917	113	15	7	0554	BON039	CAT.
HX04197.21	CTDB	87	87	PBB14	S	57.8840	-150.7203	85	15	7	0635	CTD087	Chlor, CTD, Fluor, PAR.
HX04197.22	CTDB	88	88	PBB15	S	57.8168	-150.7488	88	15	7	0716	CTD088	Chlor, CTD, Fluor, PAR.
HX04197.23	20Bon	40	88	PBB15	S	57.8145	-150.7407	89	15	7	0737	BON040	QTowF.
HX04197.24	60Bon	40	88	PBB15	S	57.8145	-150.7407	89	15	7	0737	BON040	QTowF.
HX04197.25	CAT	40	88	PBB15	S	57.8145	-150.7407	89	15	7	0737	BON040	CAT.
HX04197.26	CTDB	89	89	PBC10	S	58.0258	-151.0338	87	15	7	0921	CTD089	Chlor, CTD, Fluor, PAR.
HX04197.27	CTDB	90	90	PBC9	S	58.1173	-151.0148	103	15	7	1009	CTD090	Chlor, CTD, Fluor, PAR.
HX04197.28	CalVET	20	90	PBC9	S	58.1180	-151.0220	104	15	7	1024	CV020	QTowF.
HX04197.29	20Bon	41	90	PBC9	S	58.1182	-151.0172	104	15	7	1033	B0N041	QTowF.
HX04197.30	60Bon	41	90	PBC9	S	58.1182	-151.0172	104	15	7	1033	B0N041	QTowF.
HX04197.31	CAT	41	90	PBC9	S	58.1182	-151.0172	104	15	7	1033	B0N041	CAT.
HX04197.32	CTDB	91	91	PBC8	S	58.2007	-151.0037	105	15	7	1124	CTD091	Chlor, CTD, Fluor, PAR.
HX04197.33	CTDB	92	92	PBC7	S	58.2503	-150.9860	154	15	7	1159	CTD092	Chlor, CTD, Fluor, PAR.
HX04197.34	20Bon	42	92	PBC7	S	58.2468	-150.9840	154	15	7	1222	BON042	QTowF.

Appendix I: Event Log (cont'd)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04197.35	60Bon	42	92	PBC7	S	58.2468	-150.9840	154	15	7	1222	BON042	QTowF.
HX04197.36	CAT	42	92	PBC7	S	58.2468	-150.9840	154	15	7	1222	BON042	CAT.
HX04197.37	CTDB	93	93	PBC6	S	58.2965	-150.9768	86	15	7	1315	CTD093	Chlor, CTD, Fluor, PAR.
HX04197.38	CTDB	94	94	PBC5	S	58.3637	-150.9685	59	15	7	1404	CTD094	Chlor, CTD, Fluor, PAR.
HX04197.39	CalVET	21	94	PBC5	S	58.3610	-150.9705	54	15	7	1416	CV021	QTowF.
HX04197.40	20Bon	43	94	PBC5	S	58.3592	-150.9692	55	15	7	1425	BON043	QTowF.
HX04197.41	60Bon	43	94	PBC5	S	58.3592	-150.9692	55	15	7	1425	BON043	QTowF.
HX04197.42	CAT	43	94	PBC5	S	58.3592	-150.9692	55	15	7	1425	BON043	CAT.
HX04197.43	CTDB	95	95	PBC4	S	58.4073	-150.9550	66	15	7	1455	CTD095	Chlor, CTD, Fluor, PAR.
HX04197.44	CTDB	96	96	PBC3	S	58.4792	-150.9460	90	15	7	1533	CTD096	Chlor, CTD, Fluor, PAR.
HX04197.45	20Bon	44	96	PBC3	S	58.4792	-150.9503	86	15	7	1550	BON044	QTowF.
HX04197.46	60Bon	44	96	PBC3	S	58.4792	-150.9503	86	15	7	1550	BON044	QTowF.
HX04197.47	CAT	44	96	PBC3	S	58.4792	-150.9503	86	15	7	1550	BON044	CAT.
HX04197.48	CTDB	97	97	PBC2	S	58.5390	-150.9373	154	15	7	1624	CTD097	Chlor, CTD, Fluor, PAR.
HX04197.49	CTDB	98	98	PBC1	S	58.6280	-150.9172	202	15	7	1714	CTD098	Chlor, CTD, Fluor, PAR; no 20m bottle – misfired.
HX04197.50	CalVET	22	98	PBC1	S	58.6272	-150.9207	203	15	7	1735	CV022	QTowF.
HX04197.51	20Bon	45	98	PBC1	S	58.6270	-150.9173	202	15	7	1745	BON045	QTowF.
HX04197.52	60Bon	45	98	PBC1	S	58.6270	-150.9173	202	15	7	1745	BON045	QTowF.
HX04197.53	CAT	45	98	PBC1	S	58.6270	-150.9173	202	15	7	1745	BON045	CAT.
HX04197.54	CTD	99	99	UPA1	S	58.1690	-150.3227	121	15	7	2200	CTD099	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04197.55	CTD	100	100	UPA2	S	58.1893	-150.3147	110	15	7	2218	CTD100	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04197.56	CTD	101	101	UPA3	S	58.2075	-150.3048	97	15	7	2235	CTD101	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04197.57	CTD	102	102	UPA4	S	58.2287	-150.3007	80	15	7	2256	CTD102	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04197.58	CTD	103	103	UPA5	S	58.2477	-150.2928	73	15	7	2311	CTD105	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04197.59	CTD	104	104	UPA6	S	58.2680	-150.2833	63	15	7	2331	CTD104	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04197.60	CTD	105	105	UPA7	S	58.2863	-150.2758	55	15	7	2340	CTD105	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04198.01	CTD	106	106	UPA8	S	58.3063	-150.2652	54	16	7	0000	CTD106	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04198.02	CTD	107	107	UPA9	S	58.3307	-150.2568	53	16	7	0015	CTD107	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04198.03	CTD	108	108	UPA10	S	58.3552	-150.2468	53	16	7	0036	CTD108	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled A.
HX04198.04	CTD	109	109	UPB1	S	58.0850	-150.3478	214	16	7	0237	CTD109	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.05	CTD	110	110	UPB2	S	58.1235	-150.3348	207	16	7	0306	CTD110	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.06	CTD	111	111	UPB3	S	58.1435	-150.3312	179	16	7	0316	CTD111	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.07	CTD	112	112	UPB4	S	58.1673	-150.3215	120	16	7	0345	CTD112	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.

Appendix I: Event Log (cont'd)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04198.08	CTD	113	113	UPB5	S	58.1872	-150.3122	110	16	7	0403	CTD113	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.09	CTD	114	114	UPB6	S	58.2078	-150.3047	96	16	7	0425	CTD114	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.10	CTD	115	115	UPB7	S	58.2272	-150.2963	83	16	7	0441	CTD115	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.11	CTD	116	116	UPB8	S	58.2465	-150.2895	72	16	7	0501	CTD116	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.12	CTD	117	117	UPB9	S	58.2662	-150.2813	62	16	7	0514	CTD117	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.13	CTD	118	118	UPB10	S	58.2862	-150.2745	54	16	7	0533	CTD118	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.14	CTD	119	119	UPB11A	S	58.3052	-150.2675	53	16	7	0548	CTD119	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.15	CTD	120	120	UPB12	S	58.3305	-150.2597	53	16	7	0610	CTD120	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.16	CTD	121	121	UPB13	S	58.3558	-150.2507	52	16	7	0625	CTD121	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled B.
HX04198.17	CTDB	122	122	STA10	S	58.1007	-149.0687	90	16	7	1106	CTD122	Chlor, CTD, Fluor, PAR.
HX04198.18	20Bon	46	122	STA10	S	58.0992	-149.0565	87	16	7	1120	BON046	QTowF.
HX04198.19	60Bon	46	122	STA10	S	58.0992	-149.0565	87	16	7	1120	BON046	QTowF.
HX04198.20	CAT	46	122	STA10	S	58.0992	-149.0565	87	16	7	1120	BON046	CAT.
HX04198.21	CTDB	123	123	STA9	S	58.0632	-149.1723	109	16	7	1206	CTD123	Chlor, CTD, Fluor, PAR.
HX04198.22	CTDB	124	124	STA8	S	58.0222	-149.2882	217	16	7	1248	CTD124	Chlor,CTD,Fluor,PAR; some 30m bottle samples lost—filter not seated; filtered only 90ml. No 40m sample—mistrip.
HX04198.23	20Bon	47	124	STA8	S	58.0110	-149.2778	208	16	7	1321	BON047	QTowF.
HX04198.24	60Bon	47	124	STA8	S	58.0110	-149.2778	208	16	7	1321	BON047	QTowF.
HX04198.25	CAT	47	124	STA8	S	58.0110	-149.2778	208	16	7	1321	BON047	CAT.
HX04198.26	CTDB	125	125	STA7	S	57.9815	-149.4168	209	16	7	1417	CTD125	Chlor, CTD, Fluor, PAR.
HX04198.27	CTDB	126	126	STA6	S	57.9483	-149.4693	197	16	7	1451	CTD126	Chlor, CTD, Fluor, PAR.
HX04198.28	20Bon	48	126	STA6	S	57.9400	-149.4738	210	16	7	1516	BON048	QTowF.
HX04198.29	60Bon	48	126	STA6	S	57.9400	-149.4738	210	16	7	1516	BON048	QTowF.
HX04198.30	CAT	48	126	STA6	S	57.9400	-149.4738	210	16	7	1516	BON048	CAT.
HX04198.31	CTDB	127	127	STA5	S	57.9157	-149.5790	123	16	7	1605	CTD127	Chlor, CTD, Fluor, PAR.
HX04198.32	20Bon	49	127	STA5	S	57.9145	-149.5885	122	16	7	1629	BON049	QTowF.
HX04198.33	60Bon	49	127	STA5	S	57.9145	-149.5885	122	16	7	1629	BON049	QTowF.
HX04198.34	CAT	49	127	STA5	S	57.9145	-149.5885	122	16	7	1629	BON049	CAT.
HX04198.35	CTDB	128	128	STA4	S	57.8777	-149.6828	233	16	7	1704	CTD128	Chlor, CTD, Fluor, PAR.
HX04198.36	CTDB	129	129	STA3A	S	57.8433	-149.7818	265	16	7	1753	CTD129	Chlor, CTD, Fluor, PAR.
HX04198.37	20Bon	50	129	STA3A	S	57.8455	-149.7848	265	16	7	1824	BON050	QTowF.
HX04198.38	60Bon	50	129	STA3A	S	57.8455	-149.7848	265	16	7	1824	BON050	QTowF.
HX04198.39	CAT	50	129	STA3A	S	57.8455	-149.7848	265	16	7	1824	BON050	CAT.
HX04198.40	CTDB	130	130	STA3	S	57.8073	-149.8795	256	16	7	1913	CTD130	Chlor, CTD, Fluor, PAR.
HX04198.41	CTDB	131	131	STA2A	S	57.7723	-149.9970	182	16	7	2020	CTD131	Chlor, CTD, Fluor, PAR.
HX04198.42	20Bon	51	131	STA2A	S	57.8163	-150.0025	180	16	7	2048	BON051	QTowF.
HX04198.43	60Bon	51	131	STA2A	S	57.8163	-150.0025	180	16	7	2048	BON051	QTowF.
HX04198.44	CAT	51	131	STA2A	S	57.8163	-150.0025	180	16	7	2048	BON051	CAT.

Appendix I: Event Log (cont'd)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04198.45	CTDB	132	132	STA2	S	57.7360	-150.1162	196	16	7	2132	CTD132	Chlor, CTD, Fluor, PAR.
HX04198.46	CTDB	133	133	STA1	S	57.7043	-150.2373	134	16	7	2219	CTD133	Chlor, CTD, Fluor, PAR.
HX04198.47	20Bon	52	133	STA1	S	57.6993	-150.2357	135	16	7	2242	BON052	QTowF.
HX04198.48	60Bon	52	133	STA1	S	57.6993	-150.2357	135	16	7	2242	BON052	QTowF.
HX04198.49	CAT	52	133	STA1	S	57.6993	-150.2357	135	16	7	2242	BON052	CAT.
HX04199.01	CTD	134	134	UPC1	S	57.9830	-150.0990	243	17	7	0203	CTD134	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.02	CTD	135	135	UPC2	S	58.0653	-150.0585	318	17	7	0300	CTD135	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.03	CTD	136	136	UPC3	S	58.0905	-150.0463	306	17	7	0320	CTD136	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.04	CTD	137	137	UPC4	S	58.1167	-150.0300	272	17	7	0359	CTD137	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.05	CTD	138	138	UPC5	S	58.1325	-150.0222	237	17	7	0419	CTD138	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.06	CTD	139	139	UPC6	S	58.1495	-150.0122	187	17	7	0456	CTD139	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.07	CTD	140	140	UPC7	S	58.1670	-150.0013	151	17	7	0515	CTD140	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.08	CTD	141	141	UPC8	S	58.1890	-149.9903	122	17	7	0541	CTD141	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.09	CTD	142	142	UPC9	S	58.2115	-149.9762	97	17	7	0601	CTD142	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.10	CTD	143	143	UPC10	S	58.2343	-149.9645	78	17	7	0625	CTD143	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.11	CTD	144	144	UPC11	S	58.2785	-149.9320	55	17	7	0647	CTD144	CTD, Fluor, PAR; Portlock Bank upslope experiment labeled C.
HX04199.12	CTD	145	145	UPD1	S	57.9835	-150.0990	240	17	7	0846	CTD145	CTD, Fluor, PAR; Portlock bank upslope experiment D.
HX04199.13	CTD	146	146	UPD2	S	58.0642	-150.0620	317	17	7	0938	CTD146	CTD, Fluor, PAR.
HX04199.14	CTDB	147	147	UPD3	S	58.0907	-150.0473	306	17	7	1009	CTD147	CTD, Fluor, PAR.
HX04199.15	CTD	148	148	UPD4	S	58.1183	-150.0318	269	17	7	1048	CTD148	CTD, Fluor, PAR.
HX04199.16	CTD	149	149	UPD5	S	58.1333	-150.0220	235	17	7	1117	CTD149	CTD, Fluor, PAR.
HX04199.17	CTD	150	150	UPD6	S	58.1500	-150.0118	186	17	7	1152	CTD150	CTD, Fluor, PAR.
HX04199.18	CTD	151	151	UPD7	S	58.1677	-149.9983	150	17	7	1213	CTD151	CTD, Fluor, PAR.
HX04199.19	CTD	152	152	UPD8	S	58.1890	-149.9873	121	17	7	1237	CTD152	CTD, Fluor, PAR.
HX04199.20	CTD	153	153	UPD9	S	58.2117	-149.9765	96	17	7	1258	CTD153	CTD, Fluor, PAR.
HX04199.21	CTD	154	154	UPD10	S	58.2332	-149.9655	78	17	7	1320	CTD154	CTD, Fluor, PAR.
HX04199.22	CTD	155	155	UPD11	S	58.2782	-149.9308	53	17	7	1350	CTD155	CTD, Fluor, PAR.
HX04199.23	CTDB	156	156	PBX1	S	58.0340	-148.7828	698	17	7	1750	CTD156	Chlor, CTD, Fluor, PAR.
HX04199.24	20Bon	53	156	PBX1	S	58.0368	-148.7870	699	17	7	1840	BON053	QTowF.
HX04199.25	60Bon	53	156	PBX1	S	58.0368	-148.7870	699	17	7	1840	BON053	QTowF.
HX04199.26	CAT	53	156	PBX1	S	58.0368	-148.7870	699	17	7	1840	BON053	CAT.
HX04199.27	CTD	157	157	PBX2	S	58.0597	-148.7983	400	17	7	1933	CTD157	CTD, Fluor, PAR.
HX04199.28	CTDB	158	158	PBX3	S	58.9673	-148.8667	134	17	7	2033	CTD158	Chlor, CTD, Fluor, PAR.
HX04199.29	CTDB	159	159	PBX2.5	S	58.0665	-148.8222	207	17	7	2054	CTD159	Chlor, CTD, Fluor, PAR.
HX04199.30	20Bon	54	159	PBX2.5	S	58.0620	-148.8145	320	17	7	2120	BON054	Discard; net hit bottom, samples not saved.

Appendix I: Event Log (cont'd)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04199.31	60Bon	54	159	PBX2.5	S	58.0620	-148.8145	320	17	7	2120	BON054	Discard; net hit bottom, samples not saved.
HX04199.32	CAT	54	159	PBX2.5	S	58.0620	-148.8145	320	17	7	2120	BON054	CAT; net hit bottom, samples not saved.
HX04199.33	CTDB	160	160	STA10	S	58.0993	-149.0715	89	17	7	2249	CTD160	Chlor, CTD, Fluor, PAR.
HX04200.01	CTDB	161	161	PBX5	S	58.1457	-149.3667	121	18	7	0008	CTD161	Chlor, CTD, Fluor, PAR.
HX04200.02	CTD	162	162	PBX6	S	58.1870	-149.7287	105	18	7	0134	CTD162	CTD, Fluor, PAR.
HX04200.03	CTD	163	163	STB1	S	58.2245	-149.6033	69	18	7	0213	CTD163	CTD, Fluor, PAR.
HX04200.04	CTD	164	164	PBD3	S	58.2787	-149.9320	55	18	7	0332	CTD164	CTD, Fluor, PAR.
HX04200.05	CTD	165	165	PBA6	S	58.3553	-150.2483	52	18	7	0452	CTD165	CTD, Fluor, PAR.
HX04200.06	CTD	166	166	PBB6	S	58.4927	-150.5833	68	18	7	0610	CTD166	CTD, Fluor, PAR.
HX04200.07	CTD	167	167	PCB4	S	58.4078	-150.9595	68	18	7	0727	CTD167	CTD, Fluor, PAR.
HX04200.08	CTD	168	168	PBX11	S	58.4178	-151.1172	102	18	7	0804	CTD168	CTD, Fluor, PAR.
HX04200.09	CTDB	169	169	PBX12	S	58.4437	-151.3362	132	18	7	0854	CTD169	Chlor, CTD, Fluor, PAR.
HX04200.10	20Bon	55	169	PBX12	S	58.4450	-151.3355	132	18	7	0915	BON055	QTowF.
HX04200.11	60Bon	55	169	PBX12	S	58.4450	-151.3355	132	18	7	0915	BON055	QTowF.
HX04200.12	CAT	55	169	PBX12	S	58.4450	-151.3355	132	18	7	0915	BON055	CAT.
HX04200.13	CTDB	170	170	AP6	S	58.4172	-151.7265	172	18	7	1046	CTD170	Chlor, CTD, Fluor, PAR.
HX04200.14	20Bon	56	170	AP6	S	58.4202	-151.7223	182	18	7	1111	BON056	QTowF.
HX04200.15	60Bon	56	170	AP6	S	58.4202	-151.7223	182	18	7	1111	BON056	QTowF.
HX04200.16	CAT	56	170	AP6	S	58.4202	-151.7223	182	18	7	1111	BON056	CAT.
HX04200.17	CTD	171	171	AP7	S	58.4302	-151.5312	169	18	7	1210	CTD171	CTD, Fluor, PAR.
HX04200.18	CTD	172	172	AP8	S	58.4432	-151.3353	132	18	7	1301	CTD172	CTD, Fluor, PAR.
HX04200.19	CTDB	173	173	AP9	S	58.4570	-151.1428	99	18	7	1346	CTD173	Chlor, CTD, Fluor, PAR.
HX04200.20	20Bon	57	173	AP9	S	58.4537	-151.1377	99	18	7	1406	BON057	QTowF.
HX04200.21	60Bon	57	173	AP9	S	58.4537	-151.1377	99	18	7	1406	BON057	QTowF.
HX04200.22	CAT	57	173	AP9	S	58.4537	-151.1377	99	18	7	1406	BON057	CAT.
HX04200.23	CTD	174	174	AP10	S	58.4697	-150.9450	74	18	7	1453	CTD174	CTD, Fluor, PAR.
HX04200.24	CTD	175	175	AP1	S	58.4825	-150.7500	86	18	7	1536	CTD175	CTD, Fluor, PAR; GP7B.
HX04200.25	CTD	176	176	GP7A	S	58.5380	-150.7765	137	18	7	1609	CTD176	CTD, Fluor, PAR.
HX04200.26	CTD	177	177	GP7	S	58.5922	-150.8007	182	18	7	1643	CTD177	CTD, Fluor, PAR.
HX04200.27	CTD	178	178	GP6A	S	58.6747	-150.8347	187	18	7	1730	CTD178	CTD, Fluor, PAR.
HX04200.28	CTD	179	179	GP6	S	58.7493	-150.8630	182	18	7	1816	CTD179	CTD, Fluor, PAR; 04GP3a.
HX04200.29	CTDB	180	180	GP5	S	58.8205	-150.8810	186	18	7	1855	CTD180	Chlor, CTD, Fluor, PAR.
HX04200.30	20Bon	58	180	GP5	S	58.8245	-150.8800	186	18	7	1917	BON058	QTowF.
HX04200.31	60Bon	58	180	GP5	S	58.8245	-150.8800	186	18	7	1917	BON058	QTowF.
HX04200.32	CAT	58	180	GP5	S	58.8245	-150.8800	186	18	7	1917	BON058	CAT.
HX04200.33	CTD	181	181	GP4	S	58.8813	-150.8985	160	18	7	2008	CTD181	CTD, Fluor, PAR.
HX04200.34	CTDB	182	182	GP3/04	S	58.9647	-150.9312	140	18	7	2048	CTD182	Chlor, CTD, Fluor, PAR; chlorophyll maximum at 23m.
HX04200.35	20Bon	59	182	GP3	S	58.9658	-150.8803	140	18	7	2116	BON059	QTowF.
HX04200.36	60Bon	59	182	GP3	S	58.9658	-150.8803	140	18	7	2116	BON059	QTowF.
HX04200.37	CAT	59	182	GP3	S	58.9658	-150.8803	140	18	7	2116	BON059	CAT.
HX04200.38	CTD	183	183	GP2	S	59.0105	-150.9640	157	18	7	2145	CTD183	CTD, Fluor, PAR.
HX04200.39	CTD	184	184	GP1	S	59.1010	-150.9943	165	18	7	2237	CTD184	CTD, Fluor, PAR.
HX04200.40	CTDB	185	185	GPO	S	59.1607	-151.0123	73	18	7	2309	CTD186	Chlor, CTD, Fluor, PAR.
HX04200.41	20Bon	60	185	GPO	S	59.1632	-151.0148	72	18	7	2323	BON060	QTowF.
HX04200.42	60Bon	60	185	GPO	S	59.1632	-151.0148	72	18	7	2323	BON060	QTowF.

Appendix I: Event Log (cont'd)

Event#	Instr	Cast	Sta	Sta std	S/E flag	Lat	Long	Water Depth	Day	Mos	Time	Reg	Comments
HX04200.43	CAT	60	185	GPO	S	59.1632	-151.0148	72	18	7	2323	BON060	CAT.
HX04201.01	CTD	186	186	GB12	S	58.6842	-148.8467	206	19	7	0650	CTD186	CTD, Fluor, PAR.
HX04201.02	CTD	187	187	GB5	S	59.0420	-148.6938	198	19	7	0913	CTD187	CTD, Fluor, PAR.
HX04201.03	CTDB	188	188	04GB4A	S	59.1210	-148.7565	150	19	7	0951	CTD188	Chlor, CTD, Fluor, PAR.
HX04201.04	CTDB	189	189	04GBM3A	S	59.3045	-148.9910	187	19	7	1123	CTD189	Chlor, CTD, Fluor, PAR; mooring site.
HX04201.05	SatBuoy	nd	189	04GBM3A	S	59.3077	-148.9848	187	19	7	1145	nd	Deploy; drifter buoy #43714 - mooring site.
HX04201.06	20Bon	61	189	04GBM3A	S	59.3073	-148.9815	192	19	7	1147	BON061	QTowF; mooring site.
HX04201.07	60Bon	61	189	04GBM3A	S	59.3073	-148.9815	192	19	7	1147	BON061	QTowF; mooring site.
HX04201.08	CAT	61	189	04GBM3A	S	59.3073	-148.9815	192	19	7	1147	BON061	CAT; mooring site.
HX04201.09	CTDB	190	190	GB2A	S	59.5288	-149.1895	219	19	7	1343	CTD190	Chlor, CTD, Fluor, PAR; mooring site.
HX04201.10	SatBuoy	nd	190	GB2A	S	59.5288	-149.1895	219	19	7	1402	nd	Deploy; drifter buoy #43716.
HX04201.11	CTDB	191	191	04GB1A	S	59.7137	-149.3435	235	19	7	1512	CTD191	Chlor, CTD, Fluor, PAR.
HX04201.12	nd	nd	nd	nd	nd	nd	nd	nd	19	7	1810	nd	Arrive Seward.