CRUISE REPORT

Cruise Number: MF0711
FOCI Number: 6MF07

Ship:
NOAA Ship Miller Freeman

Area of Operations:
Gulf of Alaska

Itinerary:
Date depart / port: September 4, 2007 / Kodiak, AK
Date arrive / port: September 16, 2007 / Dutch Harbor, AK

Participating organizations:
Alaska Fisheries Science Center (AFSC)
Pacific Marine Environmental Laboratory (PMEL)

Chief Scientist:

Matt Wilson	M / AFSC
(206) 526-6522	
Matt.Wilson@noaa.gov	

Personnel:

Michael Canino	M / AFSC
Rachael Cartwright	F / AFSC
Annette Dougherty	F / AFSC
Adam Fleischer	M / AFSC
William Floering	M / PMEL/AFSC
Steve Porter	M / AFSC
Ingrid Spies	F / AFSC

Cruise Objectives:
The primary objective was to conduct fieldwork to continue a study designed to compare age-0 pollock and their prey field between two separate pollock nursery regions in the western Gulf of Alaska. A secondary objective was to investigate prey switching by arrowtooth flounder, which is of interest because high abundance of other small midwater fishes (e.g., capelin, eulachon) may relieve predation-related mortality of age-0 pollock. This work is needed to more rigorously evaluate food-related merits of the relative quality of two important juvenile pollock nurseries, and to begin to address the potential for prey switching to act as a density-dependent community stabilizing mechanism.

Summary of Operations:

Operation	Tows
Seabird SeaCAT CTD (CAT)	73
1m² Tucker trawl (Tuck1)	73
10" inner diameter modified Clarke-Bumpus (Lg-CB)	73
Anchovy trawl (Ancho)	71
Shrimp Trawl (Shrimp)	7
CTD without bottle samples (CTD)	3

Samples Collected	Tows	Number
SeaCat/Tucker trawl array		
SeaBird SeaCat CTD (CAT)	73	
Quantitative tow preserved in formalin (QTowF)	192	196
Midwater trawl		
Furuno attached to net (Furuno)	71	
Adult pollock length measurements (A-Length)	5	396
Juvenile pollock collected for gut analysis (J-Gut)	32	942
Juvenile pollock length measurements (J-Length)	32	2254
Juvenile pollock collected for otolith analysis (J-Oto)	32	942
Plankton for genetics, Frank Morado (Fmgen)	13	
Age-0 pollock sample for Frank Morado (Fmpol)	12	260
Arrowtooth stomach scans (Pred)	24	509
SeaBird CTD (CTD)	3	
Stimulated fluorescence collected during CTD casts (Fluor)	3	
Photosynthetically Active Radiation collected during CTD casts (PAR)	3	

Summary of Cruise:

Narrative:

Sampling occurred from northeast to southwest beginning on 4 September with 24-hr operations (Figure 1, Table 1). Collection of data and material was successful at 68 of the intended 72 grid stations. The remaining four grid stations (9B, 5B, 3B, and 1B) were not occupied due to insufficient time. These stations were not sampled in 2005 and were thus considered expendable. Age-0 pollock abundance can now be estimated and compared to previous year estimates. A total of 942 age-0 walleye pollock were frozen at sea for subsequent determination of diet necessary for the eventual comparison of resource utilization between the Semidi and Kodiak grids. Plankton sample collections were also successful and complement the diet data in providing a means to determine resource availability. Temperature and salinity profiles were successfully collected using the SeaCat during the plankton net tows. Three CTD casts were conducted to verify that the SeaCat was operating correctly.

Considerable effort was made to address the secondary cruise objective. A total of 363 arrowtooth flounder were collected in seven bottom trawl hauls. An additional 146 arrowtooth flounder were collected in 17 midwater trawl hauls. The stomach contents of all 509 arrowtooth flounder were visually scanned. In addition, fish and plankton samples were collected from the Stauffer trawl and Tucker net 1 for genetics and pathology studies by F. Morado (AFSC).

Several measurements were made continuously during the cruise. Acoustic data were collected along ca. 2300 nmi of trackline at 18, 38, and 120 kHz using the Simrad ER60 (APC 10) echo-sounder. Temperature, salinity, and fluorescence were measured via the ship's uncontaminated seawater system. The shipboard computer system (SCS) was used to record time, position, and environmental information during the cruise.

There were some gear failures. Five Tucker tows and three anchovy trawl tows failed due to gear malfunction. Repeat tows were conducted so that the necessary data and samples were collected. Some comments are warranted regarding operation of the Tucker trawl. First, two net messengers were lost and may need replacing. Second, the Clarke-Bumpus net, which was suspended in the mouth of Net 1, performed poorly as indicated by no or few flow meter revolutions during many tows; consequently, many of these samples are of questionable quality. Finally, designation of the Tucker trawl nets was altered from that described in the Final Cruise

Instructions. The drogue was designated Net 1, the first messenger opened Net 2, and the upper 40 m of water was sampled with Net 3.

Days Lost to Weather:

None

Days Lost to Equipment Failure:

None

Recommendations:

Set up science snap files to log date, time, and position information in Dataplot, the Trawlhouse, and possibly in the Chemlab. It would be best if the scientists were directly responsible for collecting this information.

Acknowledgments:

The scientific party would like to acknowledge the hard work and support of the captain, officers, and crew of the Miller Freeman for another job done well. Thanks especially to Bruce Knopke and Erick Long for putting our gear out and getting it back, and to Miri Skoriak for help with all the form filing.

Attachments:

Table 1. Cruise Summary

Figure 1. Station Map

Table 1. Cruise Summary For FOCI Cruise 6MF07 (MF0711)

Date (GMT)	Time (GMT)	Station	Haul	FOCI Grid	Alternate Station	Depth (m)	Latitude	Longitude	Gear	SamplesCollected	HaulComments
05-Sep-07	6:57	1	1	29I	TUCK001	164	58 33.15 N	151 26.02 W	CAT	CAT	
05-Sep-07	6:57	1	1	29I	TUCK001	164	58 33.15 N	151 26.02 W	Lg-CB	QTowF	
05-Sep-07	6:57	1	1	29I	TUCK001	164	58 33.15 N	151 26.02 W	Tuck1	QTowF	net 3 catch is questionable, the net was installed upside down on the tucker frame.
05-Sep-07	7:49	1	2	29I		163	58 33.05 N	151 25.72 W	Ancho	Furuno, Pred	
05-Sep-07	10:47	2	1	29H	TUCK002	101	58 18.17 N	150 59.79 W	CAT	CAT	
05-Sep-07	10:47	2	1	29H	TUCK002	101	58 18.17 N	150 59.79 W	Lg-CB	Discard	Cod end blew out, repeat the tow
05-Sep-07	10:47	2	1	29H	TUCK002	101	58 18.17 N	150 59.79 W	Tuck1	Discard	Cod end blew out, repeat the tow
05-Sep-07	11:50	2	2	29H	TUCK003	95	58 18.57 N	150 59.93 W	CAT	CAT	
05-Sep-07	11:50	2	2	29H	TUCK003	95	58 18.57 N	150 59.93 W	Lg-CB	QTowF	
05-Sep-07	11:50	2	2	29H	TUCK003	95	58 18.57 N	150 59.93 W	Tuck1	QTowF	
05-Sep-07	12:43	2	3	29H		80	58 18.31 N	150 58.87 W	Ancho	Furuno	
05-Sep-07	15:18	3	1	29G	TUCK004	141	58 03.71 N	150 34.46 W	CAT	CAT	Flow meter readings low for Net 1 and LG-CB. Codend of LG-CB was twisted.
05-Sep-07	15:18	3	1	29G	TUCK004	141	58 03.71 N	150 34.46 W	Lg-CB	QTowF	Flow meter readings low for Net 1 and LG-CB. Codend of LG-CB was twisted.
05-Sep-07	15:18	3	1	29G	TUCK004	141	58 03.71 N	150 34.46 W	Tuck1	QTowF	Flow meter readings low for Net 1 and LG-CB. Codend of LG-CB was twisted.
05-Sep-07	16:13	3	2	29G		156	58 03.57 N	150 33.04 W	Ancho	Furuno	
05-Sep-07	19:54	4	1	29F	TUCK005	205	57 47.03 N	150 04.42 W	CAT	CAT	
05-Sep-07	19:54	4	1	29F	TUCK005	205	57 47.03 N	150 04.42 W	Lg-CB	QTowF	
05-Sep-07	19:54	4	1	29F	TUCK005	205	57 47.03 N	150 04.42 W	Tuck1	QTowF	
05-Sep-07	20:47	4	2	29F		205	57 46.88 N	150 03.40 W	Ancho	Furuno	Furuno failure.
05-Sep-07	21:43	4	3	29F		204	57 46.90 N	150 03.60 W	Ancho	Furuno	
05-Sep-07	23:56	5	1	28F	TUCK006	106	57 38.71 N	150 25.70 W	CAT	CAT	
05-Sep-07	23:56	5	1	28F	TUCK006	106	57 38.71 N	150 25.70 W	Lg-CB	QTowF	
05-Sep-07	23:56	5	1	28F	TUCK006	106	57 38.71 N	150 25.70 W	Tuck1	QTowF	
06-Sep-07	0:35	5	2	28F		107	57 38.93 N	150 25.19 W	Ancho	Furuno	
06-Sep-07	3:37	6	1	28G	TUCK007	78	57 53.16 N	150 53.78 W	CAT	CAT	
06-Sep-07	3:37	6	1	28G	TUCK007	78	57 53.16 N	150 53.78 W	Lg-CB	QTowF	
06-Sep-07	3:37	6	1	28G	TUCK007	78	57 53.16 N	150 53.78 W	Tuck1	QTowF	
06-Sep-07	3:46	6	2	28G		79	57 52.96 N	150 53.88 W	Ancho	Furuno	
06-Sep-07	6:26	7	1	28H	CTD001	131	58 07.47 N	151 21.99 W	CTD	CTD, Fluor, PAR	
06-Sep-07	6:51	7	2	28H	TUCK008	126	58 07.37 N	151 22.53 W	CAT	CAT	
06-Sep-07	6:51	7	2	28H	TUCK008	126	58 07.37 N	151 22.53 W	Lg-CB	QTowF	
06-Sep-07	6:51	7	2	28H	TUCK008	126	58 07.37 N	151 22.53 W	Tuck1	QTowF	
06-Sep-07	7:48	7	3	28G		142	58 07.21 N	151 21.98 W	Ancho	Furuno, J-Gut, J-Length, J-Oto, Pred	
06-Sep-07	9:25	7	4	28G	SHMP001	127	58 07.37 N	151 22.08 W	Shrimp	Furuno, Pred	
06-Sep-07	11:57	8	1	28I	TUCK009	40	58 21.27 N	151 48.63 W	CAT	CAT	

Table 1. continued.

Date (GMT)	Time (GMT)	Station	Haul	FOCI Grid	Alternate Station	Depth (m)	Latitude	Longitude	Gear	SamplesCollected	HaulComments
06-Sep-07	11:57	8	1	28I	TUCK009	40	58 21.27 N	151 48.63 W	Lg-CB	QTowF	
06-Sep-07	11:57	8	1	28I	TUCK009	40	58 21.27 N	151 48.63 W	Tuck1	QTowF	
06-Sep-07	12:39	8	2	28I		42	58 21.32 N	151 48.85 W	Ancho	Furuno	
06-Sep-07	14:46	9	1	27I	TUCK010	59	58 07.27 N	152 05.23 W	CAT	CAT	
06-Sep-07	14:46	9	1	27I	TUCK010	59	58 07.27 N	152 05.23 W	Lg-CB	QTowF	
06-Sep-07	14:46	9	1	27I	TUCK010	59	58 07.27 N	152 05.23 W	Tuck1	QTowF	
06-Sep-07	15:21	9	2	27I		60	58 07.21 N	152 04.71 W	Ancho	Furuno	
06-Sep-07	16:51	10	1	26I	TUCK011	217	58 02.38 N	152 22.04 W	CAT	CAT	
06-Sep-07	16:51	10	1	26I	TUCK011	217	58 02.38 N	152 22.04 W	Lg-CB	QTowF	
06-Sep-07	16:51	10	1	26I	TUCK011	217	58 02.38 N	152 22.04 W	Tuck1	QTowF	
06-Sep-07	17:55	10	2	26I		221	58 02.97 N	152 21.96 W	Ancho	Furuno, J-Gut, J-Length, J-Oto	
06-Sep-07	21:00	11	1	27H	TUCK012	98	57 57.96 N	151 40.71 W	CAT	CAT	
06-Sep-07	21:00	11	1	27H	TUCK012	98	57 57.96 N	151 40.71 W	Lg-CB	Discard	Net 3 did not trip.
06-Sep-07	21:00	11	1	27H	TUCK012	98	57 57.96 N	151 40.71 W	Tuck1	Discard	Net 3 did not trip.
06-Sep-07	21:32	11	2	27H	TUCK013	98	57 57.67 N	151 40.98 W	CAT	CAT	
06-Sep-07	21:32	11	2	27H	TUCK013	98	57 57.67 N	151 40.98 W	Lg-CB	QTowF	
06-Sep-07	21:32	11	2	27H	TUCK013	98	57 57.67 N	151 40.98 W	Tuck1	QTowF	
06-Sep-07	22:12	11	3	27H		100	57 58.13 N	151 40.61 W	Ancho	Furuno	
06-Sep-07	23:22	11	4	27H		98	57 57.98 N	151 40.69 W	Shrimp	Furuno, Pred	
07-Sep-07	1:51	12	1	27G	TUCK014	67	57 43.96 N	151 12.72 W	CAT	CAT	
07-Sep-07	1:51	12	1	27G	TUCK014	67	57 43.96 N	151 12.72 W	Lg-CB	QTowF	only sent one messenger because of shallow depth
07-Sep-07	1:51	12	1	27G	TUCK014	67	57 43.96 N	151 12.72 W	Tuck1	QTowF	only sent one messenger because of shallow depth
07-Sep-07	2:22	12	2	27G		68	57 44.02 N	151 12.70 W	Ancho	Furuno	
07-Sep-07	4:40	13	1	27F	TUCK015	94	57 27.76 N	150 49.09 W	CAT	CAT	
07-Sep-07	4:40	13	1	27F	TUCK015	94	57 27.76 N	150 49.09 W	Lg-CB	QTowF	
07-Sep-07	4:40	13	1	27F	TUCK015	94	57 27.76 N	150 49.09 W	Tuck1	QTowF	
07-Sep-07	5:23	13	2	27F		97	57 27.97 N	150 48.32 W	Ancho	Furuno	
07-Sep-07	7:20	14	1	26F	TUCK016	94	57 16.94 N	151 10.70 W	CAT	CAT	
07-Sep-07	7:20	14	1	26F	TUCK016	94	57 16.94 N	151 10.70 W	Lg-CB	QTowF	
07-Sep-07	7:20	14	1	26F	TUCK016	94	57 16.94 N	151 10.70 W	Tuck1	QTowF	
07-Sep-07	8:03	14	2	26F		93	57 17.14 N	151 10.44 W	Ancho	Furuno, Pred	
07-Sep-07	10:42	15	1	26G	TUCK017	156	57 31.36 N	151 34.79 W	CAT	CAT	
07-Sep-07	10:42	15	1	26G	TUCK017	156	57 31.36 N	151 34.79 W	Lg-CB	QTowF	
07-Sep-07	10:42	15	1	26G	TUCK017	156	57 31.36 N	151 34.79 W	Tuck1	QTowF	
07-Sep-07	11:40	15	2	26G		155	57 31.13 N	151 34.19 W	Ancho	Furuno, Pred	
07-Sep-07	14:32	16	1	26H	TUCK018	81	57 46.94 N	152 03.50 W	CAT	CAT	Flow meter revs on net 1 and Lg-CB are low.
07-Sep-07	14:32	16	1	26H	TUCK018	81	57 46.94 N	152 03.50 W	Lg-CB	QTowF	Flow meter revs on net 1 and Lg-CB low.
07-Sep-07	14:32	16	1	26H	TUCK018	81	57 46.94 N	152 03.50 W	Tuck1	QTowF	Flow meter revs on net 1 and Lg-CB are low.

Table 1. continued.

Date (GMT)	Time (GMT)	Station	Haul	FOCI Grid	Alternate Station	Depth (m)	Latitude	Longitude	Gear	SamplesCollected	HaulComments
07-Sep-07	15:12	16	2	26H		90	57 46.81 N	152 03.26 W	Ancho	Furuno	
07-Sep-07	17:21	17	1	25H	TUCK019	67	57 38.18 N	152 24.35 W	CAT	CAT	Flow meter revs on net 1 and Lg-CB are low.
07-Sep-07	17:21	17	1	25H	TUCK019	67	57 38.18 N	152 24.35 W	Lg-CB	QTowF	Flow meter revs on net 1 and Lg-CB are low.
07-Sep-07	17:21	17	1	25H	TUCK019	67	57 38.18 N	152 24.35 W	Tuck1	QTowF	Flow meter revs on net 1 and Lg-CB are low.
07-Sep-07	18:05	17	2	25H		76	57 38.27 N	152 24.23 W	Ancho	Furuno	
07-Sep-07	23:40	18	1	24I	TUCK020	62	57 29.95 N	152 52.49 W	CAT	CAT	low flowmeter readings for net1
07-Sep-07	23:40	18	1	24I	TUCK020	62	57 29.95 N	152 52.49 W	Lg-CB	QTowF	low flowmeter readings for net1
07-Sep-07	23:40	18	1	24I	TUCK020	62	57 29.95 N	152 52.49 W	Tuck1	QTowF	low flowmeter readings for net1
08-Sep-07	0:12	18	2	24I		80	57 29.58 N	152 51.27 W	Ancho	A-Length, Furuno	
08-Sep-07	1:49	19	1	24H	TUCK021	69	57 23.24 N	152 29.62 W	CAT	CAT	flowmeter readings low on net 1
08-Sep-07	1:49	19	1	24H	TUCK021	69	57 23.24 N	152 29.62 W	Lg-CB	QTowF	flowmeter readings low on net 1
08-Sep-07	1:49	19	1	24H	TUCK021	69	57 23.24 N	152 29.62 W	Tuck1	QTowF	flowmeter readings low on net 1
08-Sep-07	2:21	19	2	24H		73	57 23.16 N	152 30.37 W	Ancho	Furuno	
08-Sep-07	4:35	20	1	25G	TUCK022	69	57 21.18 N	151 54.36 W	CAT	CAT	flowmeter slow on net 1
08-Sep-07	4:35	20	1	25G	TUCK022	69	57 21.18 N	151 54.36 W	Lg-CB	QTowF	flowmeter slow on net 1
08-Sep-07	4:35	20	1	25G	TUCK022	69	57 21.18 N	151 54.36 W	Tuck1	QTowF	flowmeter slow on net 1
08-Sep-07	5:20	20	2	25G		70	57 21.30 N	151 54.17 W	Ancho	A-Length, Furuno, J-Gut, J-Length, J-Oto	
08-Sep-07	7:53	21	1	25F	TUCK023	140	57 06.88 N	151 30.37 W	CAT	CAT	
08-Sep-07	7:53	21	1	25F	TUCK023	140	57 06.88 N	151 30.37 W	Lg-CB	QTowF	
08-Sep-07	7:53	21	1	25F	TUCK023	140	57 06.88 N	151 30.37 W	Tuck1	QTowF	
08-Sep-07	8:47	21	2	25F		149	57 06.62 N	151 29.17 W	Ancho	Furuno	
08-Sep-07	11:12	22	1	24F	TUCK024	69	56 58.41 N	151 48.84 W	CAT	CAT	
08-Sep-07	11:12	22	1	24F	TUCK024	69	56 58.41 N	151 48.84 W	Lg-CB	QTowF	
08-Sep-07	11:12	22	1	24F	TUCK024	69	56 58.41 N	151 48.84 W	Tuck1	QTowF	
08-Sep-07	11:52	22	2	24F		69	56 58.52 N	151 48.60 W	Ancho	Furuno	
08-Sep-07	14:21	23	1	24G	TUCK025	80	57 11.55 N	152 12.61 W	CAT	CAT	Flow meter revs on net 1 and Lg-CB are low.
08-Sep-07	14:21	23	1	24G	TUCK025	80	57 11.55 N	152 12.61 W	Lg-CB	QTowF	Flow meter revs on net 1 and Lg-CB are low.
08-Sep-07	14:21	23	1	24G	TUCK025	80	57 11.55 N	152 12.61 W	Tuck1	QTowF	Flow meter revs on net 1 and Lg-CB are low.
08-Sep-07	15:03	23	2	24G		80	57 11.62 N	152 12.67 W	Ancho	Furuno	
08-Sep-07	18:34	24	1	23I	TUCK026	102	57 18.41 N	153 05.23 W	CAT	CAT	
08-Sep-07	18:34	24	1	23I	TUCK026	102	57 18.41 N	153 05.23 W	Lg-CB	QTowF	Meter revs low for volume filtered
08-Sep-07	18:34	24	1	23I	TUCK026	102	57 18.41 N	153 05.23 W	Tuck1	QTowF	Flow meter revs low on Net 1 and Lg-CB.
08-Sep-07	19:12	24	2	23I		97	57 18.46 N	153 04.09 W	Ancho	A-Length, Furuno	
08-Sep-07	20:52	25	1	23H	TUCK027	128	57 12.44 N	152 48.98 W	CAT	CAT	
08-Sep-07	20:52	25	1	23H	TUCK027	128	57 12.44 N	152 48.98 W	Lg-CB	QTowF	
08-Sep-07	20:52	25	1	23H	TUCK027	128	57 12.44 N	152 48.98 W	Tuck1	QTowF	

Table 1. continued.

Date (GMT)	Time (GMT)	Station	Haul	FOCI Grid	Alternate Station	Depth (m)	Latitude	Longitude	Gear	SamplesCollected	HaulComments
08-Sep-07	21:35	25	2	23H		130	57 12.33 N	152 48.74 W	Ancho	A-Length, Furuno, J-Gut, J-Length, J-Oto	
08-Sep-07	23:53	26	1	23G	TUCK028	140	57 02.65 N	152 30.98 W	CAT	CAT	
08-Sep-07	23:53	26	1	23G	TUCK028	140	57 02.65 N	152 30.98 W	Lg-CB	QTowF	
08-Sep-07	23:53	26	1	23G	TUCK028	140	57 02.65 N	152 30.98 W	Tuck1	QTowF	
09-Sep-07	1:10	26	2	23G		141	57 02.59 N	152 30.86 W	Ancho	Discard	
09-Sep-07	3:36	27	1	23F	TUCK029	101	56 48.87 N	152 07.00 W	CAT	CAT	
09-Sep-07	3:36	27	1	23F	TUCK029	101	56 48.87 N	152 07.00 W	Lg-CB	QTowF	
09-Sep-07	3:36	27	1	23F	TUCK029	101	56 48.87 N	152 07.00 W	Tuck1	QTowF	
09-Sep-07	4:16	27	2	23F		100	56 49.05 N	152 06.88 W	Ancho	Furuno	
09-Sep-07	6:20	28	1	22F	TUCK030	163	56 39.75 N	152 26.37 W	CAT	CAT	flowmeter in lg-cb slow
09-Sep-07	6:20	28	1	22F	TUCK030	163	56 39.75 N	152 26.37 W	Lg-CB	QTowF	flowmeter in lg-cb slow
09-Sep-07	6:20	28	1	22F	TUCK030	163	56 39.75 N	152 26.37 W	Tuck1	QTowF	flowmeter in lg-cb slow
09-Sep-07	7:08	28	2	22F		170	56 39.95 N	152 26.40 W	Ancho	Furuno, Pred	
09-Sep-07	10:02	29	1	22G	TUCK031	103	56 54.27 N	152 49.26 W	CAT	CAT	
09-Sep-07	10:02	29	1	22G	TUCK031	103	56 54.27 N	152 49.26 W	Lg-CB	QTowF	
09-Sep-07	10:02	29	1	22G	TUCK031	103	56 54.27 N	152 49.26 W	Tuck1	QTowF	
09-Sep-07	10:45	29	2	22G		104	56 54.29 N	152 49.34 W	Ancho	Furuno, Pred	
09-Sep-07	12:32	30	1	22H	TUCK032	49	57 02.50 N	153 06.41 W	CAT	CAT	
09-Sep-07	12:32	30	1	22H	TUCK032	49	57 02.50 N	153 06.41 W	Lg-CB	QTowF	
09-Sep-07	12:32	30	1	22H	TUCK032	49	57 02.50 N	153 06.41 W	Tuck1	QTowF	
09-Sep-07	13:18	30	2	22H		48	57 02.30 N	153 06.78 W	Ancho	Furuno	
09-Sep-07	15:17	31	1	21H	TUCK033	122	56 57.59 N	153 25.77 W	CAT	CAT	
09-Sep-07	15:17	31	1	21H	TUCK033	122	56 57.59 N	153 25.77 W	Lg-CB	QTowF	
09-Sep-07	15:17	31	1	21H	TUCK033	122	56 57.59 N	153 25.77 W	Tuck1	QTowF	
09-Sep-07	16:20	31	2	21H		119	56 57.82 N	153 25.58 W	Ancho	Furuno	
09-Sep-07	18:18	32	1	21G	TUCK034	150	56 44.64 N	153 11.92 W	CAT	CAT	
09-Sep-07	18:18	32	1	21G	TUCK034	150	56 44.64 N	153 11.92 W	Lg-CB	QTowF	
09-Sep-07	18:18	32	1	21G	TUCK034	150	56 44.64 N	153 11.92 W	Tuck1	QTowF	
09-Sep-07	19:05	32	2	21G		150	54 44.49 N	153 11.69 W	Ancho	A-Length, Furuno, J-Gut, J-Length, J-Oto	
09-Sep-07	20:37	32	3	21G		150	56 43.61 N	153 11.02 W	Shrimp	Pred	
09-Sep-07	22:54	33	1	21F	TUCK035	54	56 28.59 N	152 45.35 W	CAT	CAT	
09-Sep-07	22:54	33	1	21F	TUCK035	54	56 28.59 N	152 45.35 W	Lg-CB	Discard	net 2 codend lost-redo
09-Sep-07	22:54	33	1	21F	TUCK035	54	56 28.59 N	152 45.35 W	Tuck1	Discard	net 2 codend lost-redo
09-Sep-07	23:19	33	2	21F	TUCK036	54	56 28.63 N	152 45.07 W	CAT	CAT	
09-Sep-07	23:19	33	2	21F	TUCK036	54	56 28.63 N	152 45.07 W	Lg-CB	QTowF	flowmeter slow net 1
09-Sep-07	23:19	33	2	21F	TUCK036	54	56 28.63 N	152 45.07 W	Tuck1	QTowF	flowmeter slow net 1
09-Sep-07	23:52	33	3	21F		55	56 28.44 N	152 45.09 W	Ancho	Furuno	
10-Sep-07	2:59	34	1	20F	TUCK037	134	56 19.35 N	153 05.13 W	CAT	CAT	

Table 1. continued.

Date (GMT)	Time (GMT)	Station	Haul	FOCI Grid	Alternate Station	Depth (m)	Latitude	Longitude	Gear	SamplesCollected	HaulComments
10-Sep-07	2:59	34	1	20F	TUCK037	134	56 19.35 N	153 05.13 W	Lg-CB	QTowF	
10-Sep-07	2:59	34	1	20F	TUCK037	134	56 19.35 N	153 05.13 W	Tuck1	QTowF	
10-Sep-07	3:37	34	2	20F		127	56 19.41 N	153 04.75 W	Ancho	Furuno	
10-Sep-07	6:16	35	1	20G	TUCK038	124	56 34.95 N	153 30.47 W	CAT	CAT	
10-Sep-07	6:16	35	1	20G	TUCK038	124	56 34.95 N	153 30.47 W	Lg-CB	QTowF	
10-Sep-07	6:16	35	1	20G	TUCK038	124	56 34.95 N	153 30.47 W	Tuck1	QTowF	
10-Sep-07	7:04	35	2	20G		127	56 34.84 N	153 29.93 W	Ancho	Furuno, J-Gut, J-Length, J-Oto, Pred	
10-Sep-07	9:16	36	1	20H	TUCK039	47	56 43.65 N	153 47.83 W	CAT	CAT	
10-Sep-07	9:16	36	1	20H	TUCK039	47	56 43.65 N	153 47.83 W	Lg-CB	QTowF	
10-Sep-07	9:16	36	1	20H	TUCK039	47	56 43.65 N	153 47.83 W	Tuck1	QTowF	JELLY REMOVED FROM NET 2
10-Sep-07	9:51	36	2	20H		44	56 43.83 N	153 47.48 W	Ancho	Furuno, J-Gut, J-Length, J-Oto	
10-Sep-07	17:17	37	1	10B	TUCK040	36	56 13.71 N	155 17.57 W	CAT	CAT	
10-Sep-07	17:17	37	1	10B	TUCK040	36	56 13.71 N	155 17.57 W	Lg-CB	QTowF	
10-Sep-07	17:17	37	1	10B	TUCK040	36	56 13.71 N	155 17.57 W	Tuck1	QTowF	
10-Sep-07	17:46	37	2	10B		34	56 13.23 N	155 17.30 W	Ancho	Furuno	
10-Sep-07	20:38	38	1	10C	CTD002	250	56 36.02 N	155 49.63 W	CTD	CTD, Fluor, PAR	
10-Sep-07	21:05	38	2	10C	TUCK041	251	56 36.36 N	155 49.25 W	CAT	CAT	
10-Sep-07	21:05	38	2	10C	TUCK041	251	56 36.36 N	155 49.25 W	Lg-CB	QTowF	
10-Sep-07	21:05	38	2	10C	TUCK041	251	56 36.36 N	155 49.25 W	Tuck1	QTowF	
10-Sep-07	21:58	38	3	10C		250	56 36.11 N	155 49.29 W	Ancho	Furuno, J-Gut, J-Length, J-Oto	
11-Sep-07	0:58	39	1	10D	TUCK042	198	56 51.47 N	156 11.65 W	CAT	CAT	
11-Sep-07	0:58	39	1	10D	TUCK042	198	56 51.47 N	156 11.65 W	Lg-CB	QTowF	
11-Sep-07	0:58	39	1	10D	TUCK042	198	56 51.47 N	156 11.65 W	Tuck1	Fmgen, QTowF	
11-Sep-07	1:48	39	2	10D		198	56 51.68 N	156 11.48 W	Ancho	Fmpol, Furuno, J-Gut, J-Length, J-Oto	
11-Sep-07	3:24	39	3	10D	SHRI003	196	65 51.97 N	156 11.69 W	Shrimp	Furuno, Pred	
11-Sep-07	5:13	40	1	10E	TUCK043	118	56 58.85 N	156 22.81 W	CAT	CAT	
11-Sep-07	5:13	40	1	10E	TUCK043	118	56 58.85 N	156 22.81 W	Lg-CB	QTowF	
11-Sep-07	5:13	40	1	10E	TUCK043	118	56 58.85 N	156 22.81 W	Tuck1	QTowF	
11-Sep-07	5:51	40	2	10E		123	56 58.74 N	156 22.49 W	Ancho	Furuno, Pred	
11-Sep-07	9:00	41	1	9E	TUCK044	136	56 51.15 N	156 50.91 W	CAT	CAT	Net 3 failed to trip - complete cast redone - this cat profile should be good
11-Sep-07	9:00	41	1	9E	TUCK044	136	56 51.15 N	156 50.91 W	Lg-CB	Discard	Net 3 failed to trip - complete cast redone
11-Sep-07	9:00	41	1	9E	TUCK044	136	56 51.15 N	156 50.91 W	Tuck1	Discard	Net 3 failed to trip - complete cast redone
11-Sep-07	9:43	41	2	9E	TUCK045	144	56 50.96 N	156 51.23 W	CAT	CAT	Redo of cast TUCK044
11-Sep-07	9:43	41	2	9E	TUCK045	144	56 50.96 N	156 51.23 W	Lg-CB	QTowF	Redo of cast TUCK044

Table 1. continued.

Date (GMT)	Time (GMT)	Station	Haul	FOCI Grid	Alternate Station	Depth (m)	Latitude	Longitude	Gear	SamplesCollected	HaulComments
11-Sep-07	9:43	41	2	9E	TUCK045	144	56 50.96 N	156 51.23 W	Tuck1	Fmgen, QTowF	Redo of cast TUCK044. Preserve Net1 in ETOH for Frank Morado. Twenty age-0 pollock preserved from ANCHOVYtrawl (41-3) at this station
11-Sep-07	10:41	41	3	9E		130	56 50.69 N	156 50.18 W	Ancho	Fmpol, Furuno, J-Gut, J-Length, J-Oto, Pred	
11-Sep-07	12:19	41	4	9E		127	56 50.53 N	156 50.79 W	Shrimp	Pred	
11-Sep-07	14:23	42	1	9D	TUCK046	173	56 41.40 N	156 35.06 W	CAT	CAT	
11-Sep-07	14:23	42	1	9D	TUCK046	173	56 41.40 N	156 35.06 W	Lg-CB	Discard	TUCK1 failed - tape on trip mechanism. Redo. CAT is OK.
11-Sep-07	14:23	42	1	9D	TUCK046	173	56 41.40 N	156 35.06 W	Tuck1	Discard	TUCK1 failed - tape on trip mechanism. Redo. CAT is OK.
11-Sep-07	15:02	42	2	9D	TUCK047	173	56 41.31 N	156 35.03 W	CAT	CAT	Redo of TUCK046
11-Sep-07	15:02	42	2	9D	TUCK047	173	56 41.31 N	156 35.03 W	Lg-CB	QTowF	Redo of TUCK046
11-Sep-07	15:02	42	2	9D	TUCK047	173	56 41.31 N	156 35.03 W	Tuck1	QTowF	Redo of TUCK046
11-Sep-07	15:47	42	3	9D		178	56 41.52 N	156 34.85 W	Ancho	Furuno, J-Gut, J-Length, J-Oto	
11-Sep-07	18:58	43	1	9C	TUCK048	267	56 25.32 N	156 12.87 W	CAT	CAT	
11-Sep-07	18:58	43	1	9C	TUCK048	267	56 25.32 N	156 12.87 W	Lg-CB	QTowF	
11-Sep-07	18:58	43	1	9C	TUCK048	267	56 25.32 N	156 12.87 W	Tuck1	QTowF	
11-Sep-07	19:57	43	2	9C		267	56 25.38 N	156 13.02 W	Ancho	Furuno, J-Gut, J-Length, J-Oto	
11-Sep-07	22:00	43	3	9C		268	56 25.46 N	156 12.99 W	Shrimp	Furuno, Pred	
12-Sep-07	1:49	44	1	8B	TUCK049	96	55 55.27 N	156 01.98 W	CAT	CAT	
12-Sep-07	1:49	44	1	8B	TUCK049	96	55 55.27 N	156 01.98 W	Lg-CB	QTowF	
12-Sep-07	1:49	44	1	8B	TUCK049	96	55 55.27 N	156 01.98 W	Tuck1	QTowF	
12-Sep-07	2:25	44	2	8B		88	55 55.08 N	156 01.16 W	Ancho	Furuno, J-Gut, J-Length, J-Oto	
12-Sep-07	5:40	45	1	8C	TUCK050	198	56 16.11 N	156 32.40 W	CAT	CAT	
12-Sep-07	5:40	45	1	8C	TUCK050	198	56 16.11 N	156 32.40 W	Lg-CB	QTowF	
12-Sep-07	5:40	45	1	8C	TUCK050	198	56 16.11 N	156 32.40 W	Tuck1	QTowF	
12-Sep-07	6:36	45	2	8C		202	56 16.27 N	156 32.34 W	Ancho	Furuno, J-Gut, J-Length, J-Oto, Pred	
12-Sep-07	9:38	46	1	8D	TUCK051	54	56 30.05 N	156 53.95 W	CAT	CAT	
12-Sep-07	9:38	46	1	8D	TUCK051	54	56 30.05 N	156 53.95 W	Lg-CB	QTowF	
12-Sep-07	9:38	46	1	8D	TUCK051	54	56 30.05 N	156 53.95 W	Tuck1	QTowF	
12-Sep-07	10:16	46	2	8D		53	56 29.82 N	156 54.42 W	Ancho	Furuno, J-Gut, J-Length, J-Oto	
12-Sep-07	12:36	47	1	8E	TUCK052	80	56 41.09 N	157 16.51 W	CAT	CAT	
12-Sep-07	12:36	47	1	8E	TUCK052	80	56 41.09 N	157 16.51 W	Lg-CB	QTowF	
12-Sep-07	12:36	47	1	8E	TUCK052	80	56 41.09 N	157 16.51 W	Tuck1	Fmgen, QTowF	
12-Sep-07	13:13	47	2	8E		87	56 40.50 N	157 16.24 W	Ancho	Fmpol, Furuno, J-Gut, J-Length, J-Oto	
12-Sep-07	14:17	47	3	8E		88	56 40.53 N	157 16.32 W	Shrimp	Furuno, Pred	
12-Sep-07	17:04	48	1	6E	TUCK053	31	56 35.67 N	157 48.13 W	CAT	CAT	
12-Sep-07	17:04	48	1	6E	TUCK053	31	56 35.67 N	157 48.13 W	Lg-CB	QTowF	

Table 1. continued.

Date (GMT)	Time (GMT)	Station	Haul	FOCI Grid	Alternate Station	Depth (m)	Latitude	Longitude	Gear	SamplesCollected	HaulComments
12-Sep-07	17:04	48	1	6E	TUCK053	31	56 35.67 N	157 48.13 W	Tuck1	Fmgen, QTowF	
12-Sep-07	17:42	48	2	6E		32	56 36.27 N	157 47.76 W	Ancho	Furuno	ROPES TWISTED
12-Sep-07	18:30	48	3	6E		32	56 35.53 N	157 49.95 W	Ancho	Fmpol, Furuno, J-Gut, J-Length, J-Oto	
12-Sep-07	20:45	49	1	6D	TUCK054	117	56 20.07 N	157 24.94 W	CAT	CAT	
12-Sep-07	20:45	49	1	6D	TUCK054	117	56 20.07 N	157 24.94 W	LG-CB	QTowF	
12-Sep-07	20:45	49	1	6D	TUCK054	117	56 20.07 N	157 24.94 W	Tuck1	QTowF	
12-Sep-07	21:29	49	2	6D		111	56 20.02 N	157 25.13 W	Ancho	Furuno, J-Gut, J-Length, J-Oto	
13-Sep-07	0:10	50	1	6C	TUCK055	86	56 02.01 N	157 01.85 W	CAT	CAT	
13-Sep-07	0:10	50	1	6C	TUCK055	86	56 02.01 N	157 01.85 W	Lg-CB	QTowF	
13-Sep-07	0:10	50	1	6C	TUCK055	86	56 02.01 N	157 01.85 W	Tuck1	QTowF	
13-Sep-07	0:55	50	2	6C		87	56 02.25 N	157 01.41 W	Ancho	Furuno, J-Gut, J-Length, J-Oto	
13-Sep-07	3:45	51	1	6B	TUCK056	233	55 41.86 N	156 31.64 W	CAT	CAT	
13-Sep-07	3:45	51	1	6B	TUCK056	233	55 41.86 N	156 31.64 W	Lg-CB	QTowF	
13-Sep-07	3:45	51	1	6B	TUCK056	233	55 41.86 N	156 31.64 W	Tuck1	QTowF	
13-Sep-07	4:29	51	2	6B		233	55 42.39 N	156 30.96 W	Ancho	Furuno	FURUNO BATTERY DEAD
13-Sep-07	5:25	51	3	6B		233	55 41.49 N	156 31.39 W	Ancho	Discard	
13-Sep-07	9:07	52	1	5C	TUCK057	91	55 52.57 N	157 20.95 W	CAT	CAT	
13-Sep-07	9:07	52	1	5C	TUCK057	91	55 52.57 N	157 20.95 W	Lg-CB	QTowF	a bit of sand/shell in cod end in net 1. LG-CB didn't seem to have any although flow revs on the low side
13-Sep-07	9:07	52	1	5C	TUCK057	91	55 52.57 N	157 20.95 W	Tuck1	QTowF	a bit of sand/shell in cod end in net 1. LG-CB didn't seem to have any although flow revs on the low side
13-Sep-07	9:57	52	2	5C		95	55 52.38 N	157 20.68 W	Ancho	Furuno, J-Gut, J-Length, J-Oto	
13-Sep-07	12:41	53	1	5D	TUCK058	139	56 09.02 N	157 46.26 W	CAT	CAT	
13-Sep-07	12:41	53	1	5D	TUCK058	139	56 09.02 N	157 46.26 W	Lg-CB	QTowF	
13-Sep-07	12:41	53	1	5D	TUCK058	139	56 09.02 N	157 46.26 W	Tuck1	Fmgen, QTowF	ONE CYANEA REMOVED FROM NET 3
13-Sep-07	13:25	53	2	5D		160	56 09.10 N	157 46.15 W	Ancho	Fmpol, Furuno, J-Gut, J-Length, J-Oto, Pred	
13-Sep-07	16:11	54	1	5E	TUCK059	114	56 26.12 N	158 07.05 W	CAT	CAT	
13-Sep-07	16:11	54	1	5E	TUCK059	114	56 26.12 N	158 07.05 W	Lg-CB	QTowF	
13-Sep-07	16:11	54	1	5E	TUCK059	114	56 26.12 N	158 07.05 W	Tuck1	Fmgen, QTowF	
13-Sep-07	16:54	54	2	5E		119	56 25.95 N	158 06.97 W	Ancho	Fmpol, Furuno, J-Gut, J-Length, J-Oto, Pred	
13-Sep-07	19:30	55	1	4E	TUCK060	62	56 06.78 N	158 18.41 W	CAT	CAT	
13-Sep-07	19:30	55	1	4E	TUCK060	62	56 06.78 N	158 18.41 W	Lg-CB	QTowF	
13-Sep-07	19:30	55	1	4E	TUCK060	62	56 06.78 N	158 18.41 W	Tuck1	QTowF	
13-Sep-07	20:08	55	2	4E		57	56 06.83 N	158 18.45 W	Ancho	Discard	

Table 1. continued.

Date (GMT)	Time (GMT)	Station	Haul	FOCI Grid	Alternate Station	Depth (m)	Latitude	Longitude	Gear	SamplesCollected	HaulComments
13-Sep-07	21:57	56	1	4D	TUCK061	116	55 58.48 N	158 07.31 W	CAT	CAT	
13-Sep-07	21:57	56	1	4D	TUCK061	116	55 58.48 N	158 07.31 W	Lg-CB	QTowF	
13-Sep-07	21:57	56	1	4D	TUCK061	116	55 58.48 N	158 07.31 W	Tuck1	Fmgen, QTowF	
13-Sep-07	22:42	56	2	4D		122	55 58.16 N	158 07.27 W	Ancho	Fmpol, Furuno, J-Gut, J-Length, J-Oto	
14-Sep-07	1:05	57	1	4C	TUCK062	135	55 43.34 N	157 42.87 W	CAT	CAT	
14-Sep-07	1:05	57	1	4C	TUCK062	135	55 43.34 N	157 42.87 W	Lg-CB	Fmgen	
14-Sep-07	1:05	57	1	4C	TUCK062	135	55 43.34 N	157 42.87 W	Tuck1	Fmgen, QTowF	
14-Sep-07	1:41	57	2	4C		135	55 43.53 N	157 42.61 W	Ancho	Fmpol, Furuno, J-Gut, J-Length, J-Oto	
14-Sep-07	4:27	58	1	4B	TUCK063	89	55 22.39 N	157 15.33 W	CAT	CAT	
14-Sep-07	4:27	58	1	4B	TUCK063	89	55 22.39 N	157 15.33 W	Lg-CB	QTowF	
14-Sep-07	4:27	58	1	4B	TUCK063	89	55 22.39 N	157 15.33 W	Tuck1	QTowF	
14-Sep-07	5:06	58	2	4B		90	55 22.26 N	157 15.37 W	Ancho	Furuno, J-Gut, J-Length, J-Oto	
14-Sep-07	8:24	59	1	3C	TUCK064	130	55 32.59 N	158 01.42 W	CAT	CAT	
14-Sep-07	8:24	59	1	3C	TUCK064	130	55 32.59 N	158 01.42 W	Lg-CB	QTowF	
14-Sep-07	8:24	59	1	3C	TUCK064	130	55 32.59 N	158 01.42 W	Tuck1	Fmgen, QTowF	Removed one small jelly and one chrysaora out of net 3
14-Sep-07	9:13	59	2	3C		131	55 32.47 N	158 01.98 W	Ancho	Fmpol, Furuno, J-Gut, J-Length, J-Oto, Pred	
14-Sep-07	12:19	60	1	3D	TUCK065	107	55 49.11 N	158 26.35 W	CAT	CAT	
14-Sep-07	12:19	60	1	3D	TUCK065	107	55 49.11 N	158 26.35 W	Lg-CB	QTowF	METER 9112 HAD NO REVS FOR LG-CB. LG-CB TOW MAY BE GOOD BUT NOT QUANTITATIVE. TOOK JELLY OUT OF CB
14-Sep-07	12:19	60	1	3D	TUCK065	107	55 49.11 N	158 26.35 W	Tuck1	QTowF	METER 9112 HAD NO REVS FOR NET1 OR LG-CB
14-Sep-07	12:55	60	2	3D		107	55 49.08 N	158 26.58 W	Ancho	Furuno, J-Gut, J-Length, J-Oto, Pred	
14-Sep-07	14:33	61	1	3E	TUCK066	78	55 56.34 N	158 38.40 W	CAT	CAT	
14-Sep-07	14:33	61	1	3E	TUCK066	78	55 56.34 N	158 38.40 W	Lg-CB	QTowF	FLOW METER 9112 low revs
14-Sep-07	14:33	61	1	3E	TUCK066	78	55 56.34 N	158 38.40 W	Tuck1	QTowF	FLOW METER 9112 IN LG-CB FAILED TO TURN AGAIN
14-Sep-07	15:10	61	2	3E		77	55 56.32 N	158 38.54 W	Ancho	Furuno, Pred	
14-Sep-07	17:33	62	1	2E	TUCK067	78	55 54.02 N	159 05.62 W	CAT	CAT	
14-Sep-07	17:33	62	1	2E	TUCK067	78	55 54.02 N	159 05.62 W	Lg-CB	QTowF	FLOWMETER 9112 FAILED
14-Sep-07	17:33	62	1	2E	TUCK067	78	55 54.02 N	159 05.62 W	Tuck1	QTowF	FLOWMETER 9112 FAILED AGAIN - NO REVS RECORDED IN LG-CB
14-Sep-07	18:15	62	2	2E		86	55 53.70 N	159 05.28 W	Ancho	Furuno	
14-Sep-07	20:22	63	1	2D	TUCK068	94	55 39.20 N	158 45.28 W	CAT	CAT	
14-Sep-07	20:22	63	1	2D	TUCK068	94	55 39.20 N	158 45.28 W	Lg-CB	QTowF	

Table 1. continued.

Date (GMT)	Time (GMT)	Station	Haul	FOCI Grid	Alternate Station	Depth (m)	Latitude	Longitude	Gear	SamplesCollected	HaulComments
14-Sep-07	20:22	63	1	2D	TUCK068	94	55 39.20 N	158 45.28 W	Tuck1	QTowF	
14-Sep-07	21:09	63	2	2D		113	55 38.72 N	158 45.65 W	Ancho	Furuno, J-Gut, J-Length, J-Oto	
14-Sep-07	23:41	64	1	2C	TUCK069	141	55 22.28 N	158 21.64 W	CAT	CAT	
14-Sep-07	23:41	64	1	2C	TUCK069	141	55 22.28 N	158 21.64 W	Lg-CB	QTowF	
14-Sep-07	23:41	64	1	2C	TUCK069	141	55 22.28 N	158 21.64 W	Tuck1	Fmgen, QTowF	
15-Sep-07	0:30	64	2	2C		142	55 21.94 N	158 22.43 W	Ancho	Fmpol, Furuno, J-Gut, J-Length, J-Oto	
15-Sep-07	3:08	65	1	2B	TUCK070	81	55 05.48 N	157 59.19 W	CAT	CAT	
15-Sep-07	3:08	65	1	2B	TUCK070	81	55 05.48 N	157 59.19 W	Lg-CB	QTowF	NET 1 FLOWMETER LOW
15-Sep-07	3:08	65	1	2B	TUCK070	81	55 05.48 N	157 59.19 W	Tuck1	QTowF	NET 1 FLOWMETER LOW
15-Sep-07	3:41	65	2	2B		82	55 05.34 N	157 58.78 W	Ancho	Furuno	
15-Sep-07	6:37	66	1	1C	TUCK071	198	55 11.20 N	158 44.08 W	CAT	CAT	
15-Sep-07	6:37	66	1	1C	TUCK071	198	55 11.20 N	158 44.08 W	Lg-CB	QTowF	
15-Sep-07	6:37	66	1	1C	TUCK071	198	55 11.20 N	158 44.08 W	Tuck1	Fmgen, QTowF	
15-Sep-07	7:30	66	2	1C		197	55 11.29 N	158 44.38 W	Ancho	Fmpol, Furuno, J-Gut, J-Length, J-Oto, Pred	
15-Sep-07	10:16	67	1	1D	TUCK072	136	55 28.46 N	159 07.22 W	CAT	CAT	Flow meter revs for Net 1 and Lg-CB are low. Jelly removed from Net 2.
15-Sep-07	10:16	67	1	1D	TUCK072	136	55 28.46 N	159 07.22 W	Lg-CB	QTowF	Flow meter revs for Net 1 and Lg-CB are low. Jelly removed from Net 2.
15-Sep-07	10:16	67	1	1D	TUCK072	136	55 28.46 N	159 07.22 W	Tuck1	Fmgen, QTowF	Flow meter revs for Net 1 and Lg-CB are low. One Jelly removed from Net 2.
15-Sep-07	11:06	67	2	1D		140	55 28.15 N	159 07.05 W	Ancho	Fmpol, Furuno, J-Gut, J-Length, J-Oto, Pred	
15-Sep-07	13:28	68	1	1E	TUCK073	108	55 41.95 N	159 27.04 W	CAT	CAT	Low flow meter revs for Net 1 and Lg-CB.
15-Sep-07	13:28	68	1	1E	TUCK073	108	55 41.95 N	159 27.04 W	Lg-CB	QTowF	Low flow meter revs for Net 1 and Lg-CB.
15-Sep-07	13:28	68	1	1E	TUCK073	108	55 41.95 N	159 27.04 W	Tuck1	QTowF	Low flow meter revs for Net 1 and Lg-CB.
15-Sep-07	14:03	68	2	1E		102	55 41.99 N	159 27.29 W	Ancho	Furuno, J-Gut, J-Length, J-Oto, Pred	
15-Sep-07	14:58	68	3	1E	CTD003	109	55 41.80 N	159 27.07 W	CTD	CTD, Fluor, PAR	

Figure 1. Sampling location by station number.