

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

2010-03

DATE:

From:

FEB 5/10

to:

MAR 15 /10

VESSEL:

W.E. RICKER

PROJECT(S):

TRUDEL / SWEETING - Hi SEAS SALMON

Water Properties Group
Fisheries and Oceans Canada
Institute of Ocean Sciences
Ocean Sciences Division
Sidney, BC, Canada

WaterProperties.ca

Captain: ANDY QUAYE First Officer: RYAN HALL
 Second Officer: IAN COPPING Third Officer: _____
 Fishing Master: _____

Mission Participants / Agencies: PBS / IOS

[illegible]

Second leg of Mission:

Chief Scientist:

MARY THIESS

[illegible]

Data logging computer:

PAC 02328

Data acquisition program:

SCASAVE V 7

CTD deck unit make: S-C-A-B-A-D model: 11 serial number: 0471

Primary CTD

Make: SCABIA model: 9 serial number: 595

Primary temperature serial number: 4054

Primary conductivity serial number: 3321

Secondary temperature serial number: 4700

Secondary conductivity serial number: 1766

Transmissometer: w67LAB Model: ?

Fluorometer: Model SEAPOINT Cable gain: 10 x .15 s/n: 2223 P, S or NO pump? P

Oxygen sensor: SEABERG Model: 43 s/n: 1176 P: S or NO pump?

PAR sensor:	Model:	s/n:
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Other sensors: _____ s/n: _____ P, S or NO pump? _____

Other sensors: _____ s/n: _____ P: S or NO pump? _____

Other sensors:	s/n:	P, S or NO pump?

Other sensors: _____

s/n: _____

P, S or NO pump? _____

Secondary CTD

Make: _____ model: _____ serial number: _____

Primary temperature serial number: _____

Primary conductivity serial number:

Secondary temperature serial number:

Secondary conductivity serial number:

Transmissometer:	Model:	s/n:
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Fluorometer: Model	Cable gain:	s/n:	P, S or NO pump?

Oxygen sensor: _____ Model: _____ s/n: _____ P, S or NO pump? _____

PAR sensor: _____ Model: _____ s/n: _____

Other sensors:	s/n:	P, S or NO pump?

Other sensors: _____ s/n: _____ P: S or NO pump?

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CTD calibration bottle location (height above CTD in metres):

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Month FEBRUARY				Year 2010			Ship W. E. RITCHIE				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
6	GS 01	1630	BE	CTD		001	49° 15.70	123° 46.28	394		—	1	H.M.	✓	T: 7.61 S: 27.45
		1643	BO				49° 15.81	123° 46.27		250					BOT @ 10m - SAL/CHL/NU75
		1649	GN				49° 15.83	123° 46.25						*	JP CAST ONLY →
		1653	BE	NET		002	49° 15.83	123° 46.21		50					1ST BONGO
		1700	BE			003	49° 15.85	123° 46.17		100					2ND BONGO
		1752	BE	TRAWL		004	49° 15.50	123° 50.35		TOW AT 100 m					TRAWL
6	GS 02	1840 1840	BE	NET		005	49° 15.82	123° 54.80	305	150		0	M.T.		BONGO & TRAWL
		1905	BE	TRAWL		006	49° 15.80	123° 56.04		SURFACE TOW					ONLY
6	GS 03	2240	BE	CTD		007	49° 15.77	123° 46.39	390						* →
		2245	BO				49° 15.84	123° 46.35		250	—	1	H.M.	✓	T: 7.61 S: 27.47
		2253	GN				49° 15.89	123° 46.35							BOT @ 10m - SAL/CHL/NU75
		2258	BE	NET		008	49° 15.93	123° 46.34		150					
		2330	BE	TRAWL		009	49° 16.02	123° 48.84		TOW AT 250 m					

Cast Type:

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DRF = Drifter

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US = Up / Stop
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Notes:

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Transmissometer to be cleaned before each cast, do not use Ammonia products

Produced by the Water Properties Group, IOS

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* FORGOT TO ARCHIVE DATA - UPGRADE FROM 100a ONLY - OOPS

* CALLED 2010-03.002 (SHOULD BE 2010-03.007)

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Month FEBRUARY				Year 2010				Ship W.E. RICKER				Cruise ID 2010-03			
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
7	GS 04	0026	BC	CTD		010	49° 14. 87	123° 52. 53	244			1	H.M.		T: 8.04 S: 27.72
		0030	BO				49° 14. 90	123° 52. 46		230					BOT@ 10m. SAL/CAL/NTS
		0036	EN				49° 14. 93	123° 52. 39							
		0042	BC	NET		011	49° 14. 95	123° 52. 21		150					BONGO
			BC	TRAWL		012			ND	TRAWL					TRAWL
7 GS 04 1503 BC CTD 013 48° 52. 64 123° 36. 41 108 175 T: 8.09 S: 27.79 BOT@ 10m. SAL/CAL/NTS															
7	GS 05	1503	BC	CTD		013	48° 52. 64	123° 36. 41	108			1		✓	T: 8.09 S: 27.79
		1507	BO				48° 52. 64	123° 36. 41		175					BOT@ 10m. SAL/CAL/NTS
		1511	EN				48° 52. 64	123° 36. 38							
		1514	BC	NET		014	48° 52. 63	123° 36. 36							BONGO
		1538	BC	TRAWL		015	48° 53. 31	123° 37. 16		SURFACE TOW					TRAWL
7	GS 06	1641	BC	TRAWL		016	48° 57. 23	123° 42. 93		TOW AT 15m					TRAWL
7	GS 07	1742	BC	CTD		017	49° 02. 59	123° 43. 79	70			1			T: 7.96 S: 27.98
		1744	BO				49° 02. 59	123° 43. 79		60					BOT@ 10m. SAL/CAL/NTS
		1746	EN				49° 02. 59	123° 43. 78							
		1751	BC	NET		018	49° 02. 59	123° 43. 77		60					BONGO
		1809	BC	TRAWL		019	49° 03. 44	123° 44. 34		TOW AT 30m					TRAWL

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Month FEBRUARY			Year 2010			Ship W.E. RICKER			Cruise ID 2010-03						
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
7	GS 08	2005	BE	TRAWL		020	49° 06.35	123° 42.65	58	TOW AT 15 m			H.M.		TRAWL ONLY
7	GS 09	2109	BE	CTD		021	49° 01.58	123° 38.58	37			1			T: 8.04 S: 27.94
		2111	BO				49° 01.57	123° 38.58		30					BOT@ 10m - SAL/CHL/NUYS
		2113	GN				49° 01.57	123° 38.57							
		2118	BE	NET		022	49° 01.56	123° 38.58		27					BONGO
		2135	BE	TRAWL		023	49° 00.80	123° 37.48	47	SURFACE TOW					TRAWL
7	GS 10	2233	BE	TRAWL		024	48° 58.79	123° 34.95	48	TOW AT 45m					TRAWL ONLY
7	GS 11	2334	BE	CTD		025	48° 55.63	123° 30.69	38						T: 8.08 S: 28.50
		2335	BO				48° 55.60	123° 30.64		30					BOT@ 10m - SAL/CHL/NUYS
		2337	GN				48° 55.58	123° 30.60							
		2341	BE	NET		026	48° 55.57	123° 30.60		30					BONGO
		2358	BE	TRAWL		027	48° 54.91	123° 29.06		SURFACE TOW					TRAWL

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Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
8	GS 12	1501	BE	CTD		028	48° 52.41	123° 24.46	39			1	H.M.	✓	T: 8.00 S: 28.92
		1502	BO				48° 52.41	123° 24.45		35					BOT@10m - SAL/CAL/NUTS
		1503	EN				48° 52.41	123° 24.44							
		1508	BE	NET		029	48° 52.42	123° 24.40		30					BONGO
		1524	BE	TRAWL		030	48° 51.97	123° 23.43		Surface tow					TRAWL
										0					
8	GS 13	1623	BE	TRAWL		031	48° 47.96	123° 20.90		Tow at 15m					TRAWL ONLY
8	GS 14	1728	BE	CTD		032	48° 47.05	123° 19.57	59			1			T: 8.08 S: 29.52
		1729	BO				48° 47.04	123° 19.57		50					BOT@10m - SAL/CAL/NUTS
		1730	EN				48° 47.04	123° 19.56							
		1733	BE	NET		033	48° 47.03	123° 19.54							BONGO
		1750	BE	TRAWL		034	48° 46.04	123° 19.48		Tow at 60m					TRAWL
8	GS 15	1900	BE	TRAWL		035	48° 44.95	123° 23.03		Tow at 30m					TRAWL ONLY

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Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
8	GS 16	2033	BC	CTD		036	48° 43.95	123° 33.42	54			1	N.M.		T: 8.17 S: 29.17
		2024	BO				48° 43.95	123° 33.41		50					BOT @ 10m SAL/CAL/NOTS
		2036	CH				48° 43.95	123° 33.40							
		2039	BC	NET		037	48° 43.95	123° 33.41		45					BONGO
		2056	BC	TRAWL		038	48° 43.48	123° 32.32	Surface tow						TRAWL
8	GS 17	2159	BC	TRAWL		039	48° 42.04	123° 29.12	Tow at 15m						TRAWL ONLY
8	GS 18	2303	BC	CTD		040	48° 45.20	123° 21.97	50			1			T: 8.08 S: 29.10
		2304	BO				48° 45.19	123° 21.93		45					BOT @ 10m SAL/CAL/NOTS
		2305	CH				48° 45.18	123° 21.91							
		2308	BC	NET		041	48° 45.11	123° 21.88		40					BONGO
		2325	BC	TRAWL		042	48° 45.69	123° 21.14	Tow at 35m						TRAWL
	GS19	0021	BC	TRAWL		043	48° 45.64	123° 18.98	Surface tow						TRAWL ONLY
9	GS20	1502	BC	CTD		044	49° 40.24	123° 11.39	111			1		✓	T: 7.66 S: 26.22
		1504	BO				49° 40.26	123° 11.35		100					BOT @ 10m SAL/CAL/NOTS
		1507	CH				49° 40.27	123° 11.36							
		1511	BC	NET		045	49° 40.29	123° 11.37		100					BONGO
		1529	BC	TRAWL		046	49° 40.02	123° 12.54	Tow at surface						TRAWL
9	GS21	1629	BC	TRAWL		047	49° 35.11	123° 14.44	Tow @ 15m						TRAWL ONLY

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Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
9	GS 22	1738	BE	CTD		048	49° 28. 28	123° 17. 26	238			1	H.M.		T: 7.47 S: 26.84
		1743	BO				49° 28. 31	123° 17. 34		225					BOT@10m. SAL/CAL/NTS
		1747	EN				49° 28. 32	123° 17. 39							
		1750	BE	NET		049	49° 28. 32	123° 17. 42		150					BONGO
		1812	BE	TRAWL		050	49° 21. 52	123° 17. 36		Tow @ 30 m.					TRAWL
9	GS 23	2005	BE	TRAWL		051	49° 25. 57	123° 19. 05		Tow @ surface					TRAWL ONLY
9	GS 24	21:04	BE	CTD		052	49° 23. 09	123° 26. 39	160			1			T: 7.52 S: 24.06
		2108	BO				49° 23. 07	123° 26. 46		150					BOT@10m. SAL/CAL/NTS
		2110	EN				49° 23. 07	123° 26. 48							
		2114	BE	NET		053	49° 23. 07	123° 26. 47		130					BONGO
		2134	BE	TRAWL		054	49° 22. 76	123° 27. 76		Tow @ 60 m.					TRAWL
9	GS 25	2232	BE	TRAWL		055	49° 22. 82	123° 34. 35		Tow @ surface					TRAWL ONLY
9	GS 26	2331	BE	CTD		056	49° 24. 23	123° 42. 20		171		1			T: 7.77 S: 25.42
		2334	BO				49° 24. 22	123° 42. 21			160				BOT@10m. SAL/CAL/NTS
		2338	EN				49° 24. 21	123° 42. 20							
		2342	BE	NET		057	49° 24. 20	123° 42. 20		150					BONGO
		003	BE	TRAWL		058				Tow @ 15 m					TRAWL
10	GS 27	055	BE	TRAWL		059	49° 25. 436	123° 48. 362		Tow @ 80 m					TRAWL ONLY

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8.4 9.1
30.3 30.7

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Month <u>FEBRUARY</u>				Year <u>2010</u>			Ship <u>W.E. RICKER</u>				Cruise ID <u>2010-03</u>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
10	G528	1516	BE	CTD		060	49° 28. 23	124° 01. 59	145			1	H.M.	✓	T: 7.44 S: 25.76
		1518	BO				49° 28. 26	124° 01. 60		135					BOTE 10m - SAL/CHL/NUTS
		1522	EN				49° 28. 28	124° 01. 59							
		1528	BE	NET		061	49° 28. 32	124° 01. 52							BONGO
		1549	BE	TRAWL		062	49° 29. 00	124° 02. 21		Surface tow					TRAWL
10	G5 29	1655	BE	TRAWL		063	49° 32. 59	124° 08. 50		Tow @ 15m					TRAWL ONLY
10	G5 30	1802	BE	CTD		064	49° 37. 44	124° 09. 16	212			1			T: 7.57 S: 26.61
		1806	BO				49° 37. 45	124° 09. 13		200					BOTE 10m - SAL/CHL/NUTS
		1810	EN				49° 37. 47	124° 09. 10							
		1813	BE	NET		065	49° 37. 50	124° 09. 06							BONGO
		1836	BE	TRAWL		066	49° 38. 00	124° 10. 13		Tow @ 30m					TRAWL
10	G5 31	2003	BE	TRAWL		067	49° 44. 07	124° 21. 47		Tow @ 100m					TRAWL ONLY
10	G5 32	2105	BE	CTD		068	49° 46. 17	124° 27. 54	198			1			T: 7.50 S: 26.24
		2109	BO				49° 46. 19	124° 27. 52		190					BOTE 10m - SAL/CHL/NUTS
		2113	EN				49° 46. 21	124° 27. 52							
		2116	BE	NET		069	49° 46. 23	124° 27. 53		150					BONGO
		2140	BE	TRAWL		070	49° 46. 56	124° 29. 25		Surface tow					TRAWL
10	G5 33	2240	BE	TRAWL		071	49° 49. 13	124° 36. 70		Tow @ 15m					TRAWL ONLY

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Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
10	GS 34	2348	BE	CTD		072	49° 49.61	124° 46.10	201	(207)		1	H.M.		T: 7.67 S: 28.04
		2352	BO				49° 49.64	124° 46.04		190					BOTEION - SAL/CHL/NUTS
		2356	EN				49° 49.67	124° 45.98							
		2359	BE	NET		073	49° 49.70	124° 45.95		150					BONGO
		0001	BE	TRAWL		074	49° 50.34	124° 47.11		Tow @ 30 m					TRAWL
11	GS 35	1502	BE	CTD		075	50° 04.66	125° 09.66	84			1		*	T: 7.62 S: 28.04
		1504	BO				50° 04.67	125° 09.63		75				✓	BOTEION - SAL/CHL/NUTS
		1506	EN				50° 04.67	125° 09.61							
		1512	BE	NET		076	50° 04.67	125° 09.56		75					BONGO
		1726	BE	TRAWL		077	50° 02.872	125° 07.55		Surface tow					TRAWL
11	GS 36	1818	BE	TRAWL		078	49° 59.17	125° 05.46		Surface tow					TRAWL ONLY
11	GS 37	1919	BE	CTD		079	49° 55.44	125° 07.01	98			1			T: 8.18 S: 29.08
		1921	BO				49° 55.47	125° 07.00		90					BOTEION - SAL/CHL/NUTS
		1923	EN				49° 55.49	125° 06.98							
		1926	BE	NET		080	49° 55.50	125° 06.96		90					BONGO
		1944	BE	TRAWL		081	49° 55.03	125° 04.46		Tow @ 30 m					TRAWL
11	GS 38	2043	BE	TRAWL		082	49° 52.48	124° 57.82		Tow @ 15 m					TRAWL ONLY
							128° 02.74								

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This page is for any notes or observations

LABELLED # 076 IN COMPUTER - SHOULD BE # 075 STA 35 (NOT 36)

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							Latitude	Longitude							
11	GS 39	2136	BE	CTD		083	49°52.57	124°58.98	299			1	H.M.		T: 7.91 S: 28.66
		2141	BO				49°52.62	124°58.94		250					BOT@10m. SAL/CHL/NUTS
		2146	EN				49°52.67	124°58.89							
		2149	BE	NET		084	49°52.69	124°58.86		150					BONGO
		2220	BE	TRAWL		085	49°52.14	124°57.82		Tow @ 100m					TRAWL
11	GS 40	2326	BE	TRAWL		086	49°49.28	124°58.63		Tow @ 30m					TRAWL ONLY
12	GS 41	0024	BE	CTD		087	49°46.44	124°55.35	61			1			T: 8.09 S: 28.97
		0026	BO				49°46.47	124°55.34		50					BOT@10m. SAL/CHL/NUTS
		0027	EN				49°46.48	124°55.34							
		0031	BE	NET		088	49°46.55	124°55.34							BONGO
		0051	BE	TRAWL		089	49°46.40	124°54.12		Tow @ 15m					TRAWL
12 GS 41 1501 BE CTD 090 49°46.23 124°40.25 156 1 7.67 27.85															
12	GS 42	1501	BE	CTD		090	49°46.23	124°40.25	156			1		✓	T: 7.67 S: 27.85
		1504	BO				49°46.22	124°40.25		145					BOT@10m. SAL/CHL/NUTS
		1507	EN				49°46.21	124°40.26							
		1513	BE	NET		091	49°46.21	124°40.23		145					BONGO
		1535	BE	TRAWL		092	49°45.52	124°41.00		Surface tow					TRAWL
12	GS 43	1646	BE	TRAWL		093	49°39.93	124°47.36		Tow @ 15m					TRAWL ONLY

Cast Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
SET = Fish Set

USW = Sea Water Loop
MOR = Mooring
NET = Plankton Net Haul
DRF = Drifter

Bottle Firing Method:

US = Up / Stop
UN = Up / No stop
DN = Down / No stop

Notes:

Time Code:

BE = Beginning Time of Cast
BO = Bottom Time of Cast
EN = End Time of Cast
DE = Deployment Time
MR = Messenger Release Time
RE = Recover Mooring Time

Transmissometer to be cleaned before each cast, do not use Ammonia products

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DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month				Year			Ship				Cruise ID				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
12	GS 44	1800	BE	CTD		094	49° 34. 58	124° 41. 69	77			1	H.M.		T: 8.01 S: 28.94
		1801	BO				49° 34. 59	124° 41. 69		65					BOT@10m - SAL/CAL/NUTS
		1803	EN				49° 34. 59	124° 41. 69							
		1807	BE	NET		095	49° 34. 60	124° 41. 67		69					BONGO
		1822	BE	TRAWL		096	49° 34. 18	124° 40. 61		Tow @ 30m					TRAWL
12	GS 45	2002	BE	TRAWL		097	49° 29. 30	124° 34. 22		Tow @ 70m					TRAWL ONLY
12	GS 46	2110	BO	CTD		098	49° 25. 48	124° 35. 42	85			1			T: 8.18 S: 29.15
		2112	BO				49° 25. 51	124° 35. 41		75					BOT@10m - SAL/CAL/NUTS
		2114	EN				49° 25. 52	124° 35. 39							
		2138	BE	NET		099	49° 25. 32	124° 34. 65		Tow @ 15m					BONGO
		2139	BE	TRAWL		100	49° 22. 88	124° 37. 69		Tow @ 30m					TRAWL
13	GS 48	1503	BE	CTD		102	49° 12. 08	123° 39. 01	360			1			T: 8.05 S: 28.85
		1508	BO				49° 12. 09	123° 38. 98		250					BOT@10m - SAL/CAL/NUTS
		1513	EN				49° 12. 11	123° 38. 93							
		1518	BE	NET		104	49° 12. 14	123° 38. 83		150					BONGO
		1538	BE	TRAWL		105	49° 12. 27	123° 37. 56		Tow @ Surface					TRAWL
	GS 49	16:41	BE	TRAWL	(?)	103	49° 14. 23	123° 29. 78		Tow @ 30m					
12	GS 47		B	TRAWL		101									TRAWL ONLY

Notes Missing [103]

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Month <u>FEBRUARY</u>				Year <u>2010</u>			Ship <u>W.E. RICKER</u>				Cruise ID <u>2010-03</u>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
13	GS 50	1747	BE	CTD		106	49° 12.79	123° 23.64	274			1	H.M.	✓	T: 7.38 S: 24.52
		1753	BO				49° 12.77	123° 23.64		250					BOT@10m - SAL/CHL/NUTS
		1758	EN				49° 12.78	123° 23.65							
		1801	BE	NET		107	49° 12.78	123° 23.65		150					BONGO
		18:21	BE	TRAWL		108	49° 12.00	123° 24.14		Tow @ 15m					TRAWL
13	GS 51	19:16	BE	TRAWL		109				Tow @ 100m					TRAWL ONLY
13	GS 52	2027	BE	CTD		110	49° 02.58	123° 28.72	327			1			T: 8.06 S: 28.82
		2033	BO				49° 02.63	123° 28.71		250					BOT@10m - SAL/CHL/NUTS
		2038	EN				49° 02.68	123° 28.69							
		2041	BE	NET		111	49° 02.71	123° 28.66		150					BONGO
		21:02	BE	TRAWL		112	49° 02.13	123° 28.48		Surface Tow					TRAWL
13	GS 53	22:15	BE	TRAWL		113	48° 57.53	123° 24.78		Tow @ 30m					TRAWL ONLY
13	GS 54	2324	BE	CTD		114	48° 56.62	123° 17.81	166			1			T: 8.07 S: 29.19
		2327	BO				48° 56.66	123° 17.83		155					BOT@10m - SAL/CHL/NUTS
		2331	EN				48° 56.71	123° 17.84							
		2333	BE			115	48° 56.72	123° 17.83		150					BONGO
		2356	BE			116	48° 56.31	123° 16.79		Tow @ 15m					TRAWL

Cast Type:

BOT = Bottle cast, no CTD
 CTD = CTD without Rosette
 ROS = Rosette plus CTD
 SET = Fish Set

USW = Sea Water Loop

MOR = Mooring
 NET = Plankton Net Haul
 DRF = Drifter

Bottle Firing Method:

US = Up / Stop
 UN = Up / No stop
 DN = Down / No stop

Notes:

Time Code:

BE = Beginning Time of Cast
 BO = Bottom Time of Cast
 EN = End Time of Cast
 DE = Deployment Time
 MR = Messenger Release Time
 RE = Recover Mooring Time

Transmissometer to be cleaned before each cast, do not use Ammonia products

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DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month FEBRUARY				Year 2010			Ship W.E. RICHIE				Cruise ID 2010.03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
14	PS 01	1627	BC	CTD		117	47° 34.56	122° 25.93	118			1	H.M.	✓	T: 8.79 S: 29.31
		1629	BO				47° 34.57	122° 25.92		110		.			BOT@10m - SAL/CHL/NUTS
		1632	CH				47° 34.59	122° 25.90							
		1635	BC	NET		118	47° 34.56	122° 25.86		104					BONGO
		16:54	BE	TRAWL		119	47° 33.861	122° 25.54		Surface tow					TRAWL
14	PS02	18:26	BC	TRAWL		120	47° 29.771	122° 24.09		Tow @ 15 m					TRAWL ONLY
14	PS03	1953	BC	CTD		121	47° 22.43	122° 20.37	125			1			T: 8.90 S: 29.09
		1956	BO				47° 22.43	122° 20.36		115					BOT@10m - SAL/CHL/NUTS
		1959	CH				47° 22.43	122° 20.35							
		2001	BC	NET		122	47° 22.42	122° 20.33							BONGO
		20:21	BC	TRAWL		123	47° 21.78	122° 21.06		Tow @ 30 m					TRAWL
14	PS04	2149	BE	TRAWL		124	47° 19.93	122° 33.26		Surface tow					TRAWL ONLY
14	PS05	2247	BC	CTD		125	47° 25.02	122° 31.84	104			1			T: 8.91 S: 29.31
		2249	BO				47° 25.02	122° 31.85		95					BOT@10m - SAL/CHL/NUTS
		2251	CH				47° 25.02	122° 31.86							
		2256	BC	NET		126	47° 25.00	122° 31.86		95					BONGO
		2315	BE	TRAWL		127	47° 25.63	122° 31.59		Tow @ 30 m					TRAWL
14	PS 06	0015	BC	TRAWL		128	47° 28.46	122° 30.78		Surface tow					TRAWL ONLY

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Month <u>FEBRUARY</u>		Year <u>2010</u>		Ship <u>W.E. RICKER</u>		Cruise ID <u>2010-03</u>									
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
15	PS 07	1731	BC	CTD		129	47° 49. 41	122° 24. 42	120			1	H.M.	✓	T: 8.74 S: 28.89
		1733	BO				47° 49. 42	122° 24. 41		110					BOTTOM SAL/CAL/NTS
		1736	GH				47° 49. 41	122° 24. 41							
		1741	BC	NET		130	47° 49. 42	122° 24. 38		105					BONGO
		1758	BC	TRAWL		131	47° 50. 15	122° 23. 53		Surface tow					TRAWL
15	PS 09	1943	BC	TRAWL		132	47° 59. 30	122° 19. 81		Tow @ 15m					TRAWL ONLY
15	PS 09	2052	BC	CTD		133	48° 04. 44	122° 25. 26	109			1			T: 8.80 S: 26.92
		2054	BO				48° 04. 45	122° 25. 30		100					BOTTOM SAL/CAL/NTS
		2056	GH				48° 04. 46	122° 25. 35							
		2059	BC	NET		134	48° 04. 45	122° 25. 42		98					BONGO
		2118	BC	TRAWL		135	48° 05. 01	122° 26. 50		Tow @ 30m					TRAWL
15	PS 10	2237	BC	CTD		136	48° 10. 90	122° 33. 25	83			1			T: 8.92 S: 26.28
		2239	BO				48° 10. 88	122° 33. 24		75					BOTTOM SAL/CAL/NTS
		2241	GH				48° 10. 87	122° 33. 24							
		2244	BC	NET		137	48° 10. 86	122° 33. 24		73					BONGO
			BC	TRAWL		138									TRAWL

Cast Type:

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 ROS = Rosette plus CTD
 SET = Fish Set

USW

= Sea Water Loop
 MOR = Mooring
 NET = Plankton Net Haul
 DRF = Drifter
 — =

Bottle Firing Method:

US = Up / Stop
 UN = Up / No stop
 DN = Down / No stop

Notes:

Time Code:

BE = Beginning Time of Cast DE = Deployment Time
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Transmissometer to be cleaned before each cast, do not use Ammonia products

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This page is for any notes or observations

Trawl cancelled @ PS10, as the 3rd wire jammed and then broke.

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Ocean Sciences Division, Institute of Ocean Sciences

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Month FEBRUARY			Year 2010				Ship W.G. RICKER				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
16	PS 11	1606	BE	CTD		139	47° 41. 46	122° 26. 06	156			1	H.M.	✓	T: 8.85 S: 28.67
		1609	BO				47° 41. 46	122° 26. 04		145					BOTOM. SAL/CHL/NUTS
		1612	EN				47° 41. 47	122° 26. 03							
		1615	BE	NET		140	47° 41. 48	122° 26. 03		147					BONGO
		1634	BE	TRAWL		141	47° 42. 46	122° 22. 61		Surface tow					TRAWL
16	PS 12	1742	BE	TRAWL		142	47° 49. 57	122° 27. 32		tow @ 15m					TRAWL ONLY
16	PS 13	1837	BE	CTD		143	47° 54. 39	122° 27. 51	127			1			T: 8.79 S: 28.87
		1839	BO				47° 54. 40	122° 27. 57		115					BOTOM. SAL/CHL/NUTS
		1842	EN				47° 54. 43	122° 27. 60							
		1845	BE	NET		144	47° 54. 48	122° 27. 67		126					BONGO
		1905	BE	TRAWL		145	47° 55. 63	122° 28. 56		Tow @ 15m					TRAWL
16	PS 14	2042	BE	TRAWL		146	47° 51. 08	122° 29. 46		Surface tow					TRAWL ONLY
16	PS 15	2204	BE	CTD		147	47° 57. 79	122° 36. 68	66			1			T: 8.61 S: 28.82
		2206	BO				47° 57. 78	122° 36. 68		60					BOTOM. SAL/CHL/NUTS
		2207	EN				47° 57. 77	122° 36. 67							
		2211	BE	NET		148	47° 57. 76	122° 36. 64							BONGO
			BE	TRAWL		149				cancelled					TRAWL
			BE	TRAWL		150									TRAWL ONLY

Cast Type:

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CTD = CTD without Rosette
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SET = Fish Set

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=

Bottle Firing Method:

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Notes:

Time Code:

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Transmissometer to be cleaned before each cast, do not use Ammonia products

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This page is for any notes or observations

⇒ Travel @ PSIS cancelled, as we had to drop some science personnel

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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Month FEBRUARY				Year 2010				Ship W.E. RICKER				Cruise ID 2010-03			
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
17	JFA 01	1504	BE	CTD		149	48° 24.75	124° 40.14	77			1	HM	✓	T: 9.47 s: 29.65
		1506	BO				48° 24.77	124° 40.15		70					BOT@10m. SAL/CHL/HUTS
		1508	GH				48° 24.80	124° 40.17							
		1513	BE	NET		150	48° 24.80	124° 40.16		67					BONGO
		1533	BE	TRAWL		151	48° 24.74	124° 39.30		Surface tow					TRAWL
17	JFA 02	1702	BE	TRAWL		152	48° 22.48	124° 38.30		Tow @ 15m					TRAWL ONLY
17	JFA 03	1840	BE	CTD		153	48° 17.40	124° 17.82	100			1			T: 9.14 s: 30.45
		1842	BO				48° 17.40	124° 17.84		90					BOT@10m. SAL/CHL/HUTS
		1844	GH				48° 17.41	124° 17.86							
		1847	BE	NET		154	48° 17.41	124° 17.87		90					BONGO
		1906	BE	TRAWL		155	48° 17.24	124° 17.03		Tow @ 30m					TRAWL
17	JFA 04	2027	BE	TRAWL		156	48° 14.40	124° 08.00		Tow @ 0/15m					TRAWL ONLY
17	JFA 05	2151	BE	CTD		157	48° 11.65	123° 54.76	47			1			T: 8.83 s: 30.74
		2152	BO				48° 11.68	123° 54.74		40					BOT@10m. SAL/CHL/HUTS
		2154	GH				48° 11.69	123° 54.73							
		2156	BE	NET		158	48° 11.71	123° 54.66							BONGO
		2212	BE	TRAWL		159	48° 11.65	123° 53.39		Tow @ 15m					TRAWL
		2330	BE	TRAWL		160	48° 10.94	123° 40.57		Tow @ 30m					TRAWL ONLY

Cast Type:

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Bottle Firing Method:

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Notes:

Time Code:

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Transmissometer to be cleaned before each cast, do not use Ammonia products

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DAILY SCIENCE LOG

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Cast Type:

BOT = Bottle cast, no CTD
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Transmissometer to be cleaned before each cast, do not use Ammonia products

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Month <u>FEBRUARY</u>				Year <u>2010</u>			Ship <u>W.E. RICKER</u>				Cruise ID <u>2010-03</u>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
19	VI 02	1621	BE	CTD		170	48° 54.46	125° 12.65	94			1	19.M.		T: 8.25 S: 26.23
		1623	BO				48° 54.43	125° 12.68		85					BOT 10m SAL/CHL/NTS
		1625	EN				48° 54.40	125° 12.70							
		1629	BE	NET		171	48° 54.34	125° 12.79							BONGO
		1647	BE	TRAWL		172	48° 53.613	125° 13.470	90						TRAWL
19	VI 01	1803	BE	CTD		173	48° 47.84	125° 21.89	84			1			T: 9.49 S: 29.77
		1804	BO				48° 47.85	125° 21.90		75					BOT 10m SAL/CHL/NTS
		1806	EN				48° 47.88	125° 21.92							
		1811	BE	NET		174	48° 47.93	125° 21.91		75					BONGO
		1828	BE	TRAWL		175	48° 47.569	125° 22.711	87						TRAWL
19	VI 02	1927	BO	CTD		176	48° 44.83	125° 27.29	107			1			T: 9.42 S: 30.29
		1930	BO				48° 44.83	125° 27.30		100					BOT 10m SAL/CHL/NTS
		1932	EN				48° 44.84	125° 27.30							18CHL - NO BOTTLES
		1948	BE	NET		177	48° 44.85	125° 27.21		85					BONGO
		2007	BE	TRAWL		178	48° 44.381	125° 28.973	115						TRAWL

Cast Type:

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=

Bottle Firing Method:

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Month <u>FEBRUARY</u>				Year <u>2010-03</u>			Ship <u>W.E. RICKER</u>			Cruise ID <u>2010-03</u>					
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
19	VI 03	21 11	BE	CTD		179	48° 40.54	125° 35.66	161			1	H.M.		T: 9.76 S: 31.23
		21 14	BO				48° 40.60	125° 35.67		150					BOTOM. SAL/CHL/NUIS
		21 17	EN				48° 40.64	125° 35.70							
		21 20	BE	NET		180	48° 40.68	125° 35.74	152	140					BONGO
		21 41	BE	TRAWL		181	48° 40.330	125° 36.819	103						TRAWL
19	VI 04	22 45	BE	CTD		182	48° 35.87	125° 42.57	58			1			T: 10.04 S: 32.46
		22 47	BO				48° 35.90	125° 42.57		50					BOTOM. SAL/CHL/NUIS
		22 49	EN				48° 35.92	125° 42.58							
		22 52	BE	NET		183	48° 35.98	125° 42.59		45					BONGO
		23 08	BE	TRAWL		184	48° 35.727	125° 43.333	62						TRAWL
20	VI 05	00 30	BE	CTD		185	48° 29.00	125° 51.05	112			1			T: 10.11 S: 32.49
		00 32	BO				48° 29.02	125° 51.10		100					BOTOM. SAL/CHL/NUIS
		00 35	EN				48° 29.03	125° 51.13							
		00 38	BE	NET		186	48° 29.07	125° 51.20		100					BONGO
		00 57	BE	TRAWL		187	48° 28.402	125° 52.318	126						TRAWL

Cast Type:

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17:17:54
2:58
19:22 4

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Month FEBRUARY				Year 2010			Ship W.E. RICHER				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
20	V1 06	1504	BE	CTD		188	48° 23. 82	125° 57. 22	342			1	H.M.	✓	T: 9.41 S: 32.36
		1509	BO				48° 23. 85	125° 57. 20		250					BOTTOM SAL/CHL/NUIS
		1515	CH				48° 23. 87	125° 57. 22			*				* →
		1518	BE	NET		189	48° 23. 88	125° 57. 23		150					BONGO
		1541	BE	TRAWL		190	48° 23. 166	125° 58. 103	454						TRAWL
20	V1 07	1709	BE	CTD		191	48° 16. 26	126° 06. 14	1000+			2			T: 9.45 S: 32.35
		1720	BO				48° 16. 28	126° 06. 23		500					BOTTOM SAL/CHL/NUIS
		1733	CH				48° 16. 36	126° 06. 31							DEEP SAL CAST
		1738	BE	NET		192	48° 16. 39	126° 06. 37		150					BONGO
		1800	BE	TRAWL		193	48° 15. 832	126° 06. 969	1281						TRAWL
20	V1 08	2219	BE	CTD		194	48° 49. 28	126° 27. 29	193			1			T: 9.86 S: 32.31
		2223	BO				48° 49. 38	126° 27. 29		185					BOTTOM SAL/CHL/NUIS
		2227	CH				48° 49. 41	126° 27. 33							
		2229	BE	NET		195	48° 49. 53	126° 27. 33							BONGO
		2251	BE	TRAWL		196	48° 50. 555	126° 26. 263	171						TRAWL

Cast Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
SET = Fish Set

USW

= Sea Water Loop
MOR = Mooring
NET = Plankton Net Haul
DRF = Drifter
=

Bottle Firing Method:

US = Up / Stop
UN = Up / No stop
DN = Down / No stop

Notes:

Time Code:

BE = Beginning Time of Cast
BO = Bottom Time of Cast
EN = End Time of Cast
DE = Deployment Time
MR = Messenger Release Time
RE = Recover Mooring Time

Transmissometer to be cleaned before each cast, do not use Ammonia products

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VI 06 - O₂ LEVEL Low FROM 90m → 250m

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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Month <u>FEBRUARY</u>				Year <u>2010</u>			Ship <u>W. E. RICKER</u>			Cruise ID <u>2010-03</u>					
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
20	VI 09	2345	BE	CTD		197	48° 53.04	126° 21.61	153			1	H.M.		T: 9.64 S: 31.75
		2348	BO				48° 53.07	126° 21.58		145					BOT@10m. SAL/CHL/NUTS
		2351	EN				48° 53.10	126° 21.58							
		2354	BE	NET		198	48° 53.12	126° 21.57		140					BONGO
		0017	BE	TRAWL		199	48° 54.118	126° 20.819	145						TRAWL
21	VI 10	0223	BE	CTD		200	49° 00.54	126° 13.17	87			1			T: 9.62 S: 30.77
		0225	BO				49° 00.57	126° 13.20		75					BOT@10m. SAL/CHL/NUTS
		0227	EN				49° 00.59	126° 13.21							
		0229	BE	NET		201	49° 00.62	126° 13.23		75					BONGO
		0136	BE	TRAWL		202	48° 58.105	126° 15.332	112						TRAWL
21	EP07	1545	BE	CTD		203	49° 06.02	127° 02.00	766			1		✓	T: 8.55 S: 32.33
		1550	BO				49° 06.80	127° 02.02		250					BOT@10m. SAL/CHL/NUTS
		1556	EN				49° 06.80	127° 01.98						*	→
		1600	BE	NET		204	49° 06.81	127° 01.96		150					BONGO
		1621	BE	TRAWL		205	49° 07.252	127° 00.804	622						TRAWL

Cast Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
SET = Fish Set

USW = Sea Water Loop

MOR = Mooring
NET = Plankton Net Haul
DRF = Drifter

Bottle Firing Method:

US = Up / Stop
UN = Up / No stop
DN = Down / No stop

Notes:

Time Code:

BE = Beginning Time of Cast
BO = Bottom Time of Cast
EN = End Time of Cast
DE = Deployment Time
MR = Messenger Release Time
RE = Recover Mooring Time

Transmissometer to be cleaned before each cast, do not use Ammonia products

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- CALLED EP01 IN FILE - SHOULD BE EP 07

DAILY SCIENCE LOG

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Month <u>FEBRUARY</u>			Year <u>2010</u>			Ship <u>W. G. RICKER</u>			Cruise ID <u>2010-03</u>						
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
21	EP 06	1705	BE	CTD		206	49° 08.90	126° 57.38	202			1	H.M.		T: 8.52 S: 32.32
		1710	BO				49° 08.89	126° 57.36		250					BOT@10m SAL/CHL/NUTS
		1715	EN				49° 08.90	126° 57.36							
		1719	BE	NET		207	49° 08.92	126° 57.37		150					BONGO
		1740	BE	TRAWL		208	49° 09.280	126° 56.525	241						TRAWL
21	EP 05	1829	BE	CTD		209	49° 10.87	126° 52.95	160			1			T: 8.97 S: 32.32
		1832	BO				49° 10.89	126° 52.97		150					BOT@10m SAL/CHL/NUTS
		1835	EN				49° 10.90	126° 53.00							
		1839	BE	NET		210	49° 10.94	126° 52.99		150					BONGO
		1859	BE	TRAWL		211	49° 11.296	126° 52.300	151						TRAWL
21	EP 04	1952	BE	CTD		212	49° 13.26	126° 48.52	130			1			T: 9.03 S: 32.33
		1954	BO				49° 13.28	126° 48.52		120					BOT@10m SAL/CHL/NUTS
		1957	EN				49° 13.31	126° 48.53							
		2012	BE	NET		213	49° 13.43	126° 48.56		120					BONGO
		2035	BE	TRAWL		214	49° 13.630	126° 47.963	130						TRAWL

Cast Type:

BOT = Bottle cast, no CTD
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 ROS = Rosette plus CTD
 SET = Fish Set

USW = Sea Water Loop
 MOR = Mooring
 NET = Plankton Net Haul
 DRF = Drifter
 — = —

Bottle Firing Method:

US = Up / Stop
 UN = Up / No stop
 DN = Down / No stop

Notes: _____

Time Code:

BE = Beginning Time of Cast
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Transmissometer to be cleaned before each cast, do not use Ammonia products

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Month <u>FEBRUARY</u>				Year <u>2010</u>			Ship <u>W.E. RICKER</u>				Cruise ID <u>2010-03</u>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
21	EP 03	2128	BE	CTD		215	49° 15.41	126° 44.09	110			1	H.M.		T: 9.06 S: 32.32
		2130	BO				49° 15.44	126° 44.09		100					BOT@10m - SAL/CAL/NUTS
		2132	EN				49° 15.46	126° 44.11							
		2135	BE	NET		216	49° 15.49	126° 44.13		100					BONGO
		2154	BE	TRAWL		217	49° 16.075	126° 43.477	109						TRAWL
21	EP 02	2248	BE	CTD		218	49° 17.21	126° 39.32	103			1			T: 9.24 S: 30.74
		2250	BO				49° 17.23	126° 39.34		95					BOT@10m - SAL/CAL/NUTS
		2252	EN				49° 17.25	126° 39.36							
		2256	BE	NET		219	49° 17.32	126° 39.41		90					BONGO
		2316	BE	TRAWL		220	49° 18.238	126° 38.690	98						TRAWL
22	EP 01	0020	BE	CTD		221	49° 20.88	126° 32.49	34			1			T: 9.06 S: 29.41
		0021	BO				49° 20.91	126° 32.54		25					BOT@10m - SAL/CAL/NUTS
		0022	EN				49° 20.92	126° 32.56							
		0024	BE	NET		222	49° 20.94	126° 32.64		20					BONGO
		0039	BE	TRAWL		223	49° 20.250	126° 33.144	50						TRAWL

Cast Type:

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Bottle Firing Method:

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Notes:

Time Code:

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Transmissometer to be cleaned before each cast, do not use Ammonia products

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Month <u>FEBRUARY</u>			Year <u>2010</u>			Ship <u>W. E. RICKER</u>			Cruise ID <u>2010-03</u>						
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
22	1V1 03	1505	BE	CTD		224	49° 37.99	126° 29.71	136			1	H.M.	✓	T: 8.39 S: 28.08
		1507	BO				49° 38.02	126° 29.70		125					BOTOM - SAL/CHL/NUIS
		1510	EN				49° 38.05	126° 29.69							
		1514	BE	NET		225	49° 38.08	126° 29.69		125					BONGO
		1534	BE	TRAWL		226	49° 37.916	126° 29.796	158						TRAWL
22	1V1 04	1629	BE	CTD		227	49° 35.24	126° 34.83	53			1			T: 8.47 S: 28.53
		1630	BO				49° 35.24	126° 34.84		45					BOTOM - SAL/CHL/NUIS
		1631	EN				49° 35.24	126° 34.85							
		1634	BE	NET		228	49° 35.24	126° 34.85		45					BONGO
		1650	BE	TRAWL		229	49° 34.652	126° 35.548	60						TRAWL
22	1V1 05	1812	BE	CTD		230	49° 36.50	126° 35.82	124			1			T: 8.30 S: 27.28
		1814	BO				49° 36.49	126° 35.81		115					BOTOM - SAL/CHL/NUIS
		1817	EN				49° 36.50	126° 35.81							
		1820	BE	NET		231	49° 36.45	126° 35.78		115					BONGO
		1839	BE	TRAWL		232	49° 36.942	126° 35.844	162						TRAWL

Cast Type:

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Bottle Firing Method:

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 DN = Down / No stop

Notes:

Time Code:

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 BO = Bottom Time of Cast
 EN = End Time of Cast
 DE = Deployment Time
 MR = Messenger Release Time
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Transmissometer to be cleaned before each cast, do not use Ammonia products

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DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month				Year			Ship				Cruise ID				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
22	1V1 06	1958	BE	CTD		233	49° 40. 21	126° 36. 10	137			1	H.M		T: 9.02 S: 28.08
		2001	BO				49° 40. 22	126° 36. 11		125					BOT@10m - SAL/CHL/NUTS
		2004	EN				49° 40. 23	126° 36. 13							
		2007	BE	NET		234	49° 40. 22	126° 36. 19		125					BONGO
		2026	BE	TRAWL		235	49° 40. 815	126° 34. 891	142						TRAWL
22	1V1 07	2205	BE	CTD		236	49° 47. 30	126° 38. 91	121			1			T: 9.03 S: 28.61
		2208	BO				49° 47. 31	126° 38. 82		110					BOT@10m - SAL/CHL/NUTS
		2214	EN				49° 47. 29	126° 38. 91							* →
		2217	BE	NET		237	49° 47. 29	126° 38. 93	125	115					BONGO
		2235	BE	TRAWL		238	49° 48. 277	126° 39. 268	134						TRAWL
22	1V1 08	2326	BE	CTD		239	49° 51. 56	126° 39. 53	173			1			T: 8.97 S: 28.88
		2330	BO				49° 51. 56	126° 39. 53		165					BOT@10m - SAL/CHL/NUTS
		2333	EN				49° 51. 56	126° 39. 53							
		2337	BE	NET		240	49° 51. 56	126° 39. 53		150					BONGO
		0007	BE	TRAWL		241	49° 53. 331	126° 39. 462	186						TRAWL

This page is for any notes or observations

┐ * LOST A NISKIM - NEW ONE ON, BACK DOWN TO 15m, RETRIEVE AND RECOVER

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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Month <u>FEBRUARY</u>				Year <u>2010</u>			Ship <u>W. E. RICKER</u>				Cruise ID <u>2010-3</u>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
23	101 09	1505	BE	CTD		242	49° 51.62	126° 44.72	243			1	H.M.	✓	T: 8.95 S: 28.75
		1509	BO				49° 51.61	126° 44.73		235					BOTE 10m - SAL/CHL/NUTS
		1514	EN				49° 51.62	126° 44.74							
		1519	BE	NET		243	49° 51.61	126° 44.75		150					BONGO
		1539	BE	TRAWL		244	49° 52.116	126° 45.178	250						TRAWL
23	101 10	1628	BE	CTD		245	49° 54.01	126° 47.20	212			1			T: 8.83 S: 25.91
		1631	BO				49° 53.99	126° 47.19		200					BOTE 10m - SAL/CHL/NUTS
		1636	EN				49° 53.97	126° 47.17							
		1642	BE	NET		246	49° 53.97	126° 47.19		150					BONGO
		1703	BE	TRAWL		247	49° 53.511	126° 47.953	233						TRAWL
23	101 11	1752	BE			248	49° 52.03	126° 51.13	226			1			T: 8.26 S: 26.14
		1756	BO				49° 52.06	126° 51.08		215					BOTE 10m - SAL/CHL/NUTS
		1800	EN				49° 52.07	126° 51.05							
		1804	BE			249	49° 52.10	126° 50.99		150					BONGO
		1825	BE			250	49° 51.939	126° 52.239	176						TRAWL

Cast Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
SET = Fish Set

USW

= Sea Water Loop
MOR = Mooring
NET = Plankton Net Haul
DRF = Drifter

Bottle Firing Method:

US = Up / Stop
UN = Up / No stop
DN = Down / No stop

Notes:

Time Code:

BE = Beginning Time of Cast
BO = Bottom Time of Cast
EN = End Time of Cast
DE = Deployment Time
MR = Messenger Release Time
RE = Recover Mooring Time

Transmissometer to be cleaned before each cast, do not use Ammonia products

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DAILY LOG BOOK

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MISSION
NUMBER

2010-03

DATE:

From: FEB 5 /10 to: MAR 15 /10

VESSEL:

W.E. RICKER

PROJECT:

HI SEAS SALMON - TRUDGEL / SWEETING

INSTITUTE OF OCEAN SCIENCES
OCEAN SCIENCES AND PRODUCTIVITY DIVISION
SIDNEY, BC, CANADA

Captain: ANDY QUAYE First Officer: RYAN HULL
Second Officer: DAVE SIRENKO Third Officer: _____
Mission Participants / Agencies: PBS / IOS

Mission Participants / Agencies: PBS / 105

Scientific Personnel:		Party Chief:	MARY THIESS	
Name		Watch	Cabin	Name
TYLER ZUBOWSKI				
STRAHAN TUCKER				
ED HAMMILL				
HUGH MACLEAN				
MING BENTLEY				
CAPT. SCOTT DUNN				
1 ST DUNCAN M'CALLUM				
2 ND ANDREW COSTA				

[illegible]

Data logging computer:

Data acquisition program: SCASAVE V7

CTD deck unit make: SCADIA model: 11 serial number: 0471

Primary CTD

Make: SEABIRD model: 9 serial number: 595

Primary temperature serial number: 4054

Primary conductivity serial number: 3321

Secondary temperature serial number: 4700

Secondary conductivity serial number: 1766

Transmissometer:	WETLAB	Model:		s/n:	983
Fluorometer:	Model SEAPoint	Cable gain:	10 x .15	s/n:	2223
Oxygen sensor:	SEABIRD	Model:	43	s/n:	1176
PAR sensor:		Model:		s/n:	
Other sensors:				s/n:	P, S or NO pump?
Other sensors:				s/n:	P, S or NO pump?
Other sensors:				s/n:	P, S or NO pump?
Other sensors:				s/n:	P, S or NO pump?

Secondary CTD

Make: _____ model: _____ serial number: _____
Primary temperature serial number: _____
Primary conductivity serial number: _____
Secondary temperature serial number: _____
Secondary conductivity serial number: _____

Transmissometer: _____ Model: _____ s/n: _____

Fluorometer: Model _____ Cable gain: _____ s/n: _____ P, S or NO pump?

Oxygen sensor: _____ Model: _____ s/n: _____ P, S or NO pump?

PAR sensor: _____ Model: _____ s/n: _____

Other sensors: _____ s/n: _____ P, S or NO pump?

Other sensors: _____ s/n: _____ P, S or NO pump?

Other sensors: _____ s/n: _____ P, S or NO pump?

Other sensors: _____ s/n: _____ P, S or NO pump?

CTD calibration bottle location (height above CTD in metres):

26 060

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month FEBRUARY				Year 2010			Ship W.E. RICKER				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
23	VI 12	1913	BE	CTD		251	49° 51.26	126° 55.60	213			1	H.M.		T: 8.47 S: 28.00
		1917	BO				49° 51.29	126° 55.58		200					BOTOM. SAL/CHL/NUTS
		1921	EN				49° 51.31	126° 55.56							
		1924	BE	NET		252	49° 51.35	126° 55.52		150					BONGO
		1943	BE	TRAWL		253	49° 51.180	126° 56.289	268						TRAWL
23	VI 11	2113	BE	CTD		254	49° 47.50	127° 07.91	50			1			T: 8.91 S: 30.04
		2114	BO				49° 47.55	127° 07.90		40					BOTOM. SAL/CHL/NUTS
		2116	EN				49° 47.60	127° 07.90							
		2119	BE	NET		255	49° 47.68	127° 07.91		40					BONGO
		2136	BE	TRAWL		256	49° 48.631	127° 09.096	49						TRAWL
23	VI 12	2233	BE	CTD		257	49° 51.46	127° 14.95	46			1			T: 8.88 S: 29.66
		2234	BO				49° 51.48	127° 14.93		40					BOTOM. SAL/CHL/NUTS
		2236	EN				49° 51.50	127° 14.91							
		2238	BE	NET		258	49° 51.54	127° 14.89							BONGO
		2256	BE	TRAWL		259	49° 52.313	127° 16.305	43						TRAWL

Cast type:

BOT = bottle cast, no CTD
 CTD = CTD without Rosette
 ROS = Rosette plus CTD

USW = sea water loop

MOR = mooring
 NET = net haul
 DRF = drifter

bottle firing method:

US = up/stop
 UN = up/no stop
 DN = down/no stop

Time Code

BE = beginning time of cast
 BO = bottom time of cast
 EN = end time of cast

DE = deployment time
 MR = messenger release time
 RE = recover mooring time

Transmissometer to be cleaned for each cast, do not use Ammonia products

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month FEBRUARY				Year 2010			Ship W.E. RICKER				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
23	VI 13	2351	BE	CTD		260	49° 55.08	127° 22.29	55			1	HM		T: 9.02 S: 30.75
		2352	BO				49° 55.11	127° 22.25		45					BOTOM. SAL/CAL/NUTS
		2354	EN				49° 55.13	127° 22.22							
		2356	BE	NET		261	49° 55.10	127° 22.20		45					BONGO
		0013	BE	TRAWL		262	49° 55.751	127° 23.464	58						TRAWL
24	VI 13	1503	BE	CTD		263	50° 00.45	127° 10.84	161			1		✓	T: 8.61 S: 28.82
		1506	BO				50° 00.45	127° 10.86		150					BOTOM. SAL/CAL/NUTS
		1510	EN				50° 00.45	127° 10.85							
		1513	BE	NET		264	50° 00.45	127° 10.82							BONGO
		1534	BE	TRAWL		265	50° 00.160	127° 11.717	156						TRAWL
24	VI 14	1713	BE	CTD		266	50° 05.26	127° 15.19	179			1			T: 8.51 S: 27.91
		1716	BO				50° 05.25	127° 15.20		170					BOTOM. SAL/CAL/NUTS
		1720	EN				50° 05.25	127° 15.20							
		1722	BE	NET		267	50° 05.24	127° 15.18		150					BONGO
		1744	BE	TRAWL		268	50° 04.618	127° 15.096	208						TRAWL

Cast type:

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USW = sea water loop
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 NET = net haul
 DRF = drifter

bottle firing method:

US = up/stop
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Time Code

BE = beginning time of cast
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Transmissometer to be cleaned for each cast, do not use Ammonia products

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month FEBRUARY				Year 2010			Ship W.E. RICKER				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
24	VI 14	2031	BE	CTD		269	49° 56.86	127° 35.30	66			1	H.M.		T: 8.95 S: 30.15
		2032	BO				49° 56.87	127° 35.29		55					BOTEDON - SAL/CHL/NUTS
		2034	GH				49° 56.86	127° 35.29							
		2037	BE	NET		270	49° 56.83	127° 35.28		55					BONGO
		2057	BE	TRAWL		271	49° 56.901	127° 36.784	83						TRAWL
24	VI 15	2157	BE	CTD		272	49° 58.28	127° 44.60	154			1			T: 9.00 S: 30.22
		2200	BO				49° 58.31	127° 44.57		145					BOTEDON - SAL/CHL/NUTS
		2203	GH				49° 58.34	127° 44.55							
		2206	BE	NET		273	49° 58.36	127° 44.51		140					BONGO
		2232	BE	TRAWL		274	49° 59.336	127° 45.808	321						TRAWL
24	VI 16	2340	BE	CTD		275	50° 01.48	127° 53.79	630			1			T: 9.10 S: 31.09
		2344	BO				50° 01.46	127° 53.75		250	*				BOTEDON - SAL/CHL/NUTS
		2350	GH				50° 01.47	127° 53.68							* →
		2353	BE	NET		276	50° 01.509	127° 53.677	544	150					BONGO
		0019	BE	TRAWL		277	50° 02.126	127° 54.624	243						TRAWL

Cast type:

BOT = bottle cast, no CTD
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USW = sea water loop

MOR = mooring
NET = net haul
DRF = drifter

bottle firing method:

US = up/stop
UN = up/no stop
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Time Code

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Transmissometer to be cleaned for each cast, do not use Ammonia products

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* DRAMATIC T, O₂, S CHANGG @ 150m

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month FEBRUARY				Year 2010			Ship W.E. RICKER				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
25	101 15	1504	BE	CTD		278	50° 28.45	127° 57.26	125			1	H.M.	✓	T: 8.46 S: 29.66
		1506	BO				50° 28.44	127° 57.25		115					Bottle - SAL/CAL/NUTS
		1509	EN				50° 28.43	127° 57.23							
		1512	BE	NET		279	50° 28.41	127° 57.20	137	125					BONGO
		1533	BE	TRAWL		280	50° 27.861	127° 57.127	218						TRAWL
25	101 16	1647	BE	CTD		281	50° 28.02	127° 54.56	157			1			T: 8.43 S: 29.17
		1650	BO				50° 28.03	127° 54.57		145					Bottle - SAL/CAL/NUTS
		1653	EN				50° 28.04	127° 54.56							
		1656	BE	NET		282	50° 28.05	127° 54.55		150					BONGO
		1718	BE	TRAWL		283	50° 28.352	127° 53.518	138						TRAWL
25	101 17	1807	BE	CTD		284	50° 28.59	127° 48.50	120			1			T: 8.40 S: 28.52
		1810	BO				50° 28.59	127° 48.48		110					Bottle - SAL/CAL/NUTS
		1812	EN				50° 28.59	127° 48.46							
		1815	BE	NET		285	50° 28.59	127° 48.43		100					BONGO
		1835	BE	TRAWL		286	50° 28.884	127° 47.866	85						TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month FEBRUARY			Year 2010-03				Ship W.E. RICKER				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
25	1V1 18	1927	BE	CTD		287	50° 29.87	127° 43.18	117			1	11 M.		T: 8.46 S: 28.68
		1929	BO				50° 29.87	127° 43.17		105					BOT@10m. SAL/CHL/NUTS
		1931	EN				50° 29.87	127° 43.17							
		1949	BE	NET		288	50° 29.777	127° 43.400		105					BONGO
		2010	BE	TRAWL		289	50° 30.207	127° 42.805	113						TRAWL
25	1V1 19	2108	BE	CTD		290	50° 30.77	127° 36.42	117			1			T: 8.70 S: 28.31
		2110	BO				50° 30.77	127° 36.40		110					BOT@10m. SAL/CHL/NUTS
		2112	EN				50° 30.77	127° 36.39							
		2115	BE	NET		291	50° 30.77	127° 36.37		115					BONGO
		2241	BE	TRAWL		292	50° 30.280	127° 35.581	153						TRAWL
25	1V1 20	2328	BE	CTD		293	50° 28.24	127° 32.74	176			1			T: 8.66 S: 27.99
		2331	BO				50° 28.23	127° 32.70		165					BOT@10m. SAL/CHL/NUTS
		2335	EN				50° 28.23	127° 32.69			*				* →
		2338	BE	NET		294	50° 28.23	127° 32.68		150					BONGO
		0000	BE	TRAWL		295	50° 27.685	127° 32.061	182						TRAWL

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IVI 19 Delay between bongo & tow to let deep sea tanker pass by.

IVI 20 CALLA IVI 120 IN FILE

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month FEBRUARY			Year 2010				Ship W.E. RICKER				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
26	101 21	1503	BE	CTD		296	50° 23.64	127° 28.64	90			1	H.M.		T: 8.67 S: 28.42
		1504	BO				50° 23.63	127° 28.63		80					BOT@10m. SAL/CHL/NUTS
		1506	EN				50° 23.62	127° 28.63							
		1510	BE	NET		297	50° 23.63	127° 28.60		80					BONGO
		1528	BE	TRAWL		298	50° 24.177	127° 29.268	121						TRAWL
26	101 22	1653	BE	CTD		299	50° 30.27	127° 39.16	110			1			T: 8.46 S: 28.38
		1655	BO				50° 30.28	127° 39.17		100					BOT@10m. SAL/CHL/NUTS
		1657	EN				50° 30.28	127° 39.17							
		1701	BE	NET		300	50° 30.28	127° 39.16		100					NET
		1719	BE	TRAWL		301	50° 30.240	127° 38.338	157						TRAWL
26	101 23	1820	BE	CTD		302	50° 31.82	127° 36.05	54			1			T: 8.65 S: 28.98
		1821	BO				50° 31.81	127° 36.03		45					BOT@10m. SAL/CHL/NUTS
		1823	EN				50° 31.81	127° 36.01							
		1826	BE	NET		303	50° 31.8	127° 35.99		45					BONGO
		1842	BE	TRAWL		304	50° 31.767	127° 36.908	60						TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month				Year				Ship				Cruise ID			
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
26	101 24	1952	BE	CTD		305	50° 34.16	127° 34.38	129			1	H.M.		T: 8.55 S: 27.47
		1955	BO				50° 34.17	127° 34.42		120					BOTEION. SAL/CHL/NUTS
		1957	EN				50° 34.19	127° 34.45							
		2000	BE	NET		306	50° 34.20	127° 34.49		120					BONGO
		2019	BE	TRAWL		307	50° 34.469	127° 35.190	131						TRAWL
26	101 25	2222	BE	CTD		308	50° 35.69	127° 44.21	72			1			T: 8.17 S: 24.76
		2223	BO				50° 35.69	127° 44.21		65					BOTEION. SAL/CHL/NUTS
		2225	EN				50° 35.69	127° 44.21							
		2233	BE	NET		309	50° 35.71	127° 44.19							BONGO
		2250	BE	TRAWL		310	50° 35.582	127° 43.145	86						TRAWL
27	101 26	0018	BE	CTD		311	50° 34.97	127° 28.93	60			1			T: 8.62 S: 28.27
		0020	BO				50° 34.97	127° 28.91		50					BOTEION. SAL/CHL/NUTS
		0021	EN				50° 34.97	127° 28.90							
		0024	BE	NET		312	50° 34.97	127° 28.90		50					BONGO
		0040	BE	TRAWL		313	50° 34.795	127° 29.239	73						TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month FEBRUARY				Year 2010			Ship W.E. RICHGR				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
27	T 07	1502	BE	CTD		314	50° 49.46	129° 14.19	109			1	4.m	✓	T: 8.95 S: 31.52
		1505	BO				50° 49.57	129° 14.37		100					BOT@10m. SAL/CHL/NUTS
		1507	CH				50° 49.63	129° 14.41							
		1511	BE	NET		315	50° 49.63	129° 14.49		95					BONGO
		1531	BE	TRAWL		316	50° 50.766	129° 14.782	95						TRAWL
27	T 06	1707	BE	CTD		317	50° 55.93	129° 00.23	59			1			T: 9.01 S: 31.62
		1709	BO				50° 55.94	129° 00.21		50					BOT@10m. SAL/CHL/NUTS
		1710	CH				50° 55.94	129° 00.20							
		1714	BE	NET		318	50° 55.95	129° 00.18		50					BONGO
		1730	BE	TRAWL		319	50° 56.544	128° 59.270	61						TRAWL
27	T 05	1833	BE	CTD		320	51° 00.13	128° 51.98	62			1			T: 8.94 S: 31.36
		1834	BO				51° 00.15	128° 51.96		50					BOT@10m. SAL/CHL/NUTS
		1836	CH				51° 00.16	128° 51.95							
		1840	BE	NET		321	51° 00.17	128° 51.95		50					BONGO
		1855	BE	TRAWL		322	51° 00.542	128° 50.919	60						TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month FEBRUARY				Year 2010			Ship W. E. RICKER				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
27	T 04	2005	BE	CTD		323	51° 04.43	128° 43.54	63			1	H.M.		T: 9.03 S: 31.56
		2007	BO				51° 04.41	128° 43.53		55					BOTEION - SAL/CAL/NUTS
		2008	EN				51° 04.41	128° 43.54							
		2011	BE	NET		324	51° 04.41	128° 43.55		50					BONGO
		2028	BE	TRAWL		325	51° 04.944	128° 42.277	66						TRAWL
27	T 03	2132	BE	CTD		326	51° 08.33	128° 35.86	126			1			T: 8.47 S: 31.34
		2135	BO				51° 08.33	128° 35.95		125					BOTEION - SAL/CAL/NUTS
		2137	EN				51° 08.33	128° 35.84							
		2140	BE	NET		327	51° 08.33	128° 35.85		125					BONGO
		2202	BE	TRAWL		328	51° 08.813	128° 34.785	146						TRAWL
27	T 02	2305	BE	CTD		329	51° 12.40	128° 28.01	185			1			T: 8.98 S: 31.60
		2309	BO				51° 12.42	128° 28.03		175					BOTEION - SAL/CAL/NUTS
		2313	EN				51° 12.41	128° 28.06							
		2316	BE	NET		330	51° 12.42	128° 28.08		150					BONGO
		2338	BE	TRAWL		331	51° 12.956	128° 27.460	182						TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month FEBRUARY				Year 2010			Ship W.C. RICKER				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
28	T 01	00 52	BE	CTD		332	51° 17.12	128° 20.51	76			1	H.M.		T: 8.19 S: 31.12
		00 54	BO				51° 17.15	128° 20.54		65					BOTEION - SAL/CAL/NUTS
		00 56	EN				51° 17.17	128° 20.57							
		00 58	BE	NET		333	51° 17.20	128° 20.63		65					BONGO
		01 14	BE	TRAWL		334	51° 16.823	128° 20.222	74						TRAWL
28	QCST 01	15 08	BE	CTD		335	50° 57.47	127° 45.99	162			1		✓	T: 8.84 S: 31.12
		15 11	BO				50° 57.48	127° 45.94		150					BOTEION - SAL/CAL/NUTS
		15 15	EN				50° 57.52	127° 45.88							
		15 18	BE	NET		336	50° 57.54	127° 45.87		150					BONGO
		15 39	BE	TRAWL		337	50° 57.227	127° 44.695	404						TRAWL
28	QCST 02	17 13	BE	CTD		338	50° 51.66	127° 32.52	101			1			T: 8.19 S: 31.19
		17 15	BO				50° 51.65	127° 32.38		90					BOTEION - SAL/CAL/NUTS
		17 17	EN				50° 51.63	127° 32.29							
		17 21	BE	NET		339	50° 51.53	127° 32.00		125					BONGO
		17 40	BE	TRAWL		340	50° 50.972	127° 30.214	88						TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month FEBRUARY			Year 2010				Ship W. G. RICHARDS				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
28	QCST 03	1846	BE	CTD		341	50° 48. 27	127° 22. 71	203			1	H.M.		T: 7.72 S: 30.69
		1850	BO				50° 48. 29	127° 22. 69		195					BOTCLIM - SAL/CHL/NUTS
		1854	EN				50° 48. 31	127° 22. 65							
		1958	BE	NET		342	50° 48. 33	127° 22. 64		150					BONGO
		1918	BE	TRAWL		343	50° 48.054	127° 21.679	175						TRAWL
28	QCST 04	2027	BE	CTD		344	50° 42.17	127° 17. 62	98			1			T: 7.91 S: 30.76
		2030	BO				50° 42.20	127° 17. 57		90					BOTCLIM - SAL/CHL/NUTS
		2032	EN				50° 42. 21	127° 17. 57							
		2035	BE	NET		345	50° 42. 25	127° 17. 57							BONGO
		2052	BE	TRAWL		346	50° 41.914	127° 16.602	101						TRAWL
28	QCST 05	2244	BE	CTD		347	50° 44.65	126° 57.88	129			1			T: 7.86 S: 30.71
		2247	BO				50° 44.66	126° 57. 85		120					BOTCLIM - SAL/CHL/NUTS
		2250	EN				50° 44. 67	126° 57. 85							
		2252	BE	NET		348	50° 44. 69	126° 57. 85		105					BONGO
		2310	BE	TRAWL		349	50° 44.734	126° 59.241	130						TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month FEBRUARY/MARCH				Year 2010			Ship W.E. RICKER				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
01	QCST 06	0055	BE	CTD	3 rd	350	50° 44.95	127° 11.90	185			1	H.M.		T: 7.93 S: 30.71
		0059	BO				50° 45.01	127° 11.91		175					BOT@10m. SAL/CHL/NUTS
		0102	EN				50° 45.04	127° 11.92							
		0035	BE	NET	2 nd	351	50° 44.66	127° 11.96		150					BONGO
		0005	BE	TRAWL	1 st	352	50° 44.372	127° 07.925	186						TRAWL
03	H 01	1500	BE	CTD		353	52° 12.90	129° 09.01	164			1		✓	T: 8.57 S: 31.68
		1504	BO				52° 12.88	129° 08.98		155					BOT@10m. SAL/CHL/NUTS
		1507	EN				52° 12.88	129° 08.99							
		1510	BE	NET		354	52° 12.86	129° 09.00		150					BONGO
		1510	BE	TRAWL		355	52 12.9	129 10.46							TRAWL
03	H 02	1713	BE	CTD		356	52° 16.30	129° 26.75	169			1			T: 8.10 S: 31.47
		1716	BO				52° 16.31	129° 26.76		160					BOT@10m. SAL/CHL/NUTS
		1719	EN				52° 16.29	129° 26.84							
		1727	BE	NET		357	52° 16.27	129° 26.78		150					BONGO
		1750	BE	TRAWL		358	52 16 42	129 27.98							TRAWL

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 BE = beginning time of cast
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Transmissometer to be cleaned for each cast, do not use Ammonia products

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30- MAR 14

QCST06: Tow first, then bongo, then GD

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

OCEAN SCIENCES AND PRODUCTIVITY DIVISION																Cruise ID 2010-03	
Month MARCH				Year 2010			Ship W.G. RICKER										
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments		
							Latitude	Longitude									
3	H 03	1914	BE	CTD		359	52° 19.07	129° 41.83	205			1	H.M.		T: 8.26 S: 31.75		
		1918	BO				52° 19.06	129° 41.89		195					BOT@10m. SAL/CHL/NUTS		
		1922	EN				52° 19.07	129° 41.92									
		1927	BE	NET		360	52° 19.07	129° 41.97		150					BONGO		
		1949	BE	TRAWL		361	52 19.55	129 43 45							TRAWL		
3	H 04	2112	BE	CTD		362	52° 22.52	129° 57.61	210			1			T: 8.24 S: 31.76		
		2116	BO				52° 22.52	129° 57.62		200					BOT@10m. SAL/CHL/NUTS		
		2120	EN				52° 22.53	129° 57.65									
		2124	BE	NET		363	52° 22.55	129° 57.63		150					BONGO		
		2145	BE	TRAWL		364	52 23 14	129 59 08							TRAWL		
3	H 05	2310	BE	CTD		365	52° 25.73	130° 13.57	317			1			T: 8.13 S: 31.84		
		2316	BO				52° 25.68	130° 13.58		290					BOT@10m. SAL/CHL/NUTS		
		2322	EN				52° 25.66	130° 13.56									
		2326	BE	NET		366	52° 25.64	130° 13.52		150					BONGO		
		2346	BE	TRAWL		367	52 25 98	130 15.14							TRAWL		

Cast type:

BOT = bottle cast, no CTD
 CTD = CTD without Rosette
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USW = sea water loop
 MOR = mooring
 NET = net haul
 DRF = drifter

bottle firing method:

US = up/stop
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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month				Year			Ship				Cruise ID				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
4	H 06	0129	BE	CTD		368	52° 28.71	130° 28.87	169			1	H.M.		T: 8.65 S: 31.99
		0133	BO				52° 28.67	130° 28.73		160					BOT@10m. SAL/CHL/NUTS
		0139	EN				52° 28.61	130° 28.54							
		01	BE	NET		369	52° 28	130° 28.		150					BONGO
		0159	BE	TRAWL		370	52 28.8	130 29.57							TRAWL
4															
4	HS 01	1459	BE	CTD		371	53° 02.79	130° 53.52	56			1		✓	T: 8.33 S: 32.06
		1501	BO				53° 02.76	130° 53.50		50					BOT@10m. SAL/CHL/NUTS
		1502	GN				53° 02.75	130° 53.47							
		1505	BE	NET		372	53° 02.74	130° 53.45		45					BONGO
		1524	BE	TRAWL		373	53 03.36	130 53.03							TRAWL
4	HS 02	1701	BE	CTD		374	53° 13.15	130° 57.21	87			1			T: 7.99 S: 32.04
		1703	BO				53° 13.17	130° 57.21		80					BOT@10m. SAL/CHL/NUTS
		1705	EN				53° 13.19	130° 57.21							
		1708	BE	NET		375	53° 13.20	130° 57.20		75					BONGO
		1717	BE	TRAWL		376	53 13.90	130 57.22							TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month MARCH				Year 2010				Ship W.E. RICKER				Cruise ID 2010-03			
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
4	HS 03	2357	BE	CTD		377	53°21.11	131°04.68	45			1	Ham.		T: 7.95 S: 31.99
		2358	BO				53°21.13	131°04.69		40					Bottle - SAL/CHL/NUTS
		0000	EN				53°21.16	131°04.73							
5		0003	BE	NET		378	53°21.19	131°04.82		35					BONGO
		0019	BE	TRAWL		379	53°21.93	131°03.75							TRAWL
5	HS 04	0235	BE	CTD	2nd	380	53°31.87	130°57.03	63			1			T: 7.77 S: 31.80
		0237	BO				53°31.89	130°57.09		55					Bottle - SAL/CHL/NUTS
		0239	EN				53°31.87	130°57.11							
		0241	BE	NET	3rd	381	53°31.85	130°57.14		50					BONGO
		0144	BE	TRAWL	1st	382	53°29.33	130°58.23							TRAWL
5	DE 01	1456	BE	CTD		383	54°14.24	131°41.47	107			1		✓	T: 6.77 S: 31.75
		1458	BO				54°14.22	131°41.48		95					Bottle - SAL/CHL/NUTS
		1500	EN				54°14.21	131°41.54							
		1503	BE	NET		384	54°14.21	131°41.59		95					BONGO
		1523	BE	TRAWL		385	54°13.78	131°43.08							TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month MARCH				Year 2010			Ship W.E. RICKER				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
5	DE 02	1643	BE	CTD		386	54° 09.80	131° 56.05	67			1	H.M.		T: 7.05 S: 32.04
		1644	BO				54° 09.78	131° 56.08		60					BOT@10m. SAL/CHL/NUTS
		1645	EN				54° 09.76	131° 56.09							
		1648	BE	NET		387	54° 09.73	131° 56.14		55					BONGO
		1705	BE	TRAWL		388	54 9.84	131 57.68							TRAWL
5	DE 03	1834	BE	CTD		389	54° 10.11	132° 14.04	75			1			T: 7.39 S: 32.18
		1836	BO				54° 10.10	132° 14.03		65					BOT@10m. SAL/CHL/NUTS
		1837	EN				54° 10.10	132° 14.01							
		1840	BE	NET		390	54° 10.09	132° 13.98							BONGO
		1856	BE	TRAWL		391	54 9.82	132 15.02							TRAWL
5	DE 04	2150	BE	CTD		392	54° 08.75	132° 30.97	57			1			T: 7.30 S: 32.07
		2151	BO				54° 08.74	132° 30.87		50					BOT@10m. SAL/CHL/NUTS
		2152	EN				54° 08.73	132° 30.81							
		2156	BE	NET		393	54° 08.71	132° 30.66		45					BONGO
		2211	BE	TRAWL		394	54 9.01	132 31.31							TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month MARCH				Year 2010				Ship W.E. RICHES				Cruise ID 2010-03			
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
5	DE 05	2335	BE	CTD		395	54° 10.85	132° 45.90	67			1	H.M.		T: 7.18 S: 31.96
		2337	BO				54° 10.86	132° 45.91		60					BOT@10m SAL/CHL/NUTS
		2338	EN				54° 10.86	132° 45.91							
		2341	BE	NET		396	54° 10.89	132° 45.91		60					BONGO
		2357	BE	TRAWL		397	54° 11.84	132° 49.94							TRAWL
6	DE 06	0217	BE	CTD		398	54° 16.85	133° 00.89	418			1			T: 7.63 S: 32.10
		0222	BO				54° 16.89	133° 00.87		250					BOT@10m SAL/CHL/NUTS
		0227	EN				54° 16.93	133° 00.90							
		0230	BE	NET		399	54° 16.91	133° 00.93		150					BONGO
		0133	BE	TRAWL		400	54° 15.13	132° 56.10							TRAWL
6	ISSA 01	1457	BE	CTD		401	56° 00.22	133° 48.93	251			1		✓	T: 6.21 S: 31.50
		1502	BO				56° 00.15	133° 48.89		240					BOT@10m SAL/CHL/NUTS
		1507	EN				56° 00.04	133° 48.93							
		1511	BE	NET		402	56° 59.99	133° 48.86							BONGO
		1535	BE	TRAWL		403	56° 00.62	133° 49.33							TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month MARCH				Year 2010			Ship W.E. RICKER				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
6	ISEA 02	1646	BE	CTD		404	56° 06.19	133° 46.27	240			1	H.M.		T: 6.21 S: 31.48
		1651	BO				56° 06.20	133° 46.21		230					BOTEION - SAL/CHL/NUTS
		1655	EN				56° 06.19	133° 46.18							
		—	BE	NET		405	—	CANCELLED BONGO TOW							BONGO
		17106	BE	TRAWL		406	56° 06.68	133° 46.00							TRAWL
6	ISEA 03	1822	BE	CTD		407	56° 13.94	133° 46.76	289			1			T: 6.21 S: 31.46
		1826	BO				56° 13.94	133° 46.72		250					BOTEION - SAL/CHL/NUTS
		1831	EN				56° 13.95	133° 46.69							
		1834	BE	NET		408	56° 13.96	133° 46.66		150					BONGO
		1855	BE	TRAWL		409	56° 14.62	133° 46.35							TRAWL
6	ISEA 04	2027	BE	CTD		410	56° 25.42	133° 44.87	280			1			T: 5.97 S: 31.16
		2033	BO				56° 25.51	133° 44.87		250					BOTEION - SAL/CHL/NUTS
		2038	EN				56° 25.55	133° 44.87							
		2043	BE	NET		411	56° 25.59	133° 44.83	322	150					BONGO
		2104	BE	TRAWL		412	56° 25.29	133° 43.61							TRAWL

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BONGO CARPENTER - HIGH WINDS

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month				Year			Ship				Cruise ID				
MARCH				2010			W.E. RICKER				2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
6	ISEA 05	2212	BE	CTD		413	56° 22.99	133° 33.04	408			1	H.M.		T: 5.95 S: 31.11
		2217	BO				56° 22.93	133° 33.04		250					BOT@10m - SAL/CAL/NUTS
		2222	EN				56° 22.91	133° 33.01							
		2225	BE	NET		414	56° 22.87	133° 32.99		150					BONGO
		2243	BE	TRAWL		415	56 22 58	133 31.44							TRAWL
6	ISEA 06	2339	BE	CTD		416	56° 22.07	133° 23.04	314			1			T: 5.97 S: 31.12
		2344	BO				56° 22.06	133° 23.03		250					BOT@10m - SAL/CAL/NUTS
		2349	EN				56° 22.08	133° 23.03							
		2351	BE	NET		417	56° 22.09	133° 23.02		150					BONGO
7		0011	BE	TRAWL		418	56 22 17	133 21.78							TRAWL
7	ISEA 07	0225	BE	CTD	2ND	419	56' 27.78	133° 00.46	104						T: 5.90 S: 30.83
		0227	BO				56' 27.86	133° 00.41		95					BOT 10m - SAL/CAL/NUTS
		0229	EN				56' 27.89	133° 00.39							
		0232	BE	NET	3RD	420	56' 27.95	133° 00.34		95					BONGO
		0140	BE	TRAWL	1ST	421	56 25.4	133 4.20							TRAWL
 															

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month MARCH				Year 2010			Ship W.E. RICKER				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
7	ISEA 08	1513	BE	CTD		422	56° 29. 39	132° 54. 47	121			1	H.M.	✓	T: 5.69 S: 30.37
		1515	BO				56° 29. 41	132° 54. 52		110					BOT@10m. SAL/CHL/NUTS
		1518	EN				56° 29. 42	132° 54. 57							
		1523	BE	NET		423	56° 29. 46	132° 54. 75		115					BONGO
		1542	RE	TRAWL		424	56 29. 44	132 53. 83							TRAWL
7	ISEA 09	1719	BE	CTD		425	56° 26. 16	132° 36. 40	136			1			T: 5.87 S: 30.66
		1721	BO				56° 26. 15	132° 36. 40		125					BOT@10m. SAL/CHL/NUTS
		1724	EN				56° 26. 15	132° 36. 40							
		1726	BE	NET		426	56° 26. 16	132° 36. 42		125					BONGO
		1747	BE	TRAWL		427	56 25. 43	132 36. 39							TRAWL
7	ISEA 10	1859	BE	CTD		428	56° 19. 12	132° 35. 60	289			1			T: 5.78 S: 30.58
		1903	BO				56° 19. 07	132° 35. 61		250					BOT@10m. SAL/CHL/NUTS
		1908	EN				56° 19. 03	132° 35. 64							
		1911	BE	NET		429	56° 19. 02	132° 35. 62							BONGO
		1931	BE	TRAWL		430	56 18. 37	132 36. 27		150					TRAWL

Cast type: USW = sea water loop
 BOT = bottle cast, no CTD
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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month MARCH				Year 2010			Ship W.E. RICKER				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
7	ISCA 11	2103	BE	CTD		431	56° 11.09	132° 47.09	310			1	H.M.		T: 5.83 S: 30.52
		2108	BO				56° 11.06	132° 47.13		250					BOT@10m. SAL/CHL/NUTS
		2112	EN				56° 11.04	132° 47.14							
		2115	BG	NET		432	56° 11.03	132° 47.13							BONGO
		2136	BE	TRAWL		433	56 10 35	132 46.48							TRAWL
7	ISCA 12	2305	BE	CTD		434	56° 01.42	132° 40.84	162			1			T: 5.65 S: 30.13
		2308	BO				56° 01.44	132° 40.87		150					BOT@10m. SAL/CHL/NUTS
		2312	EN				56° 01.45	132° 40.95							
		2314	BG	NET		435	56° 01.47	132° 41.00		145					BONGO
		2333	BE	TRAWL		436	56 00.97	132 39.86							TRAWL
8	ISCA 13	0222	BG	CTD		437	55° 46.61	132° 21.81	574			1			T: 6.12 S: 30.64
		0227	BO				55° 46.61	132° 21.78		250					BOT@10m. SAL/CHL/NUTS
		0232	EN				55° 46.63	132° 21.75							
		0235	BG	NET		438	55° 46.63	132° 21.72		150					BONGO
		0137	BE	TRAWL		439	55 48.52	132 23.52							TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month MARCH				Year 2010			Ship W.E. RICKER				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
8	15GA 14	1456	BE	CTD		440	55° 58.84	131° 14.04	315			1	H.M.	✓	T: 5.30 S: 26.36
		1501	BO				55° 58.83	131° 14.04		250					BOT@10m SAL/CHL/NUTS
		1506	EN				55° 58.82	131° 14.04							
		1509	BE	NET		441	55° 58.81	131° 14.05		150					BONGO
		1531	BE	TRAWL		442	55 58.15	131 13.37.							TRAWL
8	15GA 15	1650	BE	CTD		443	55° 51.71	131° 04.69	523			1			T: 4.81 S: 25.38
		1655	BO				55° 51.68	131° 04.63		250					BOT@10m SAL/CHL/NUTS
		1700	EN				55° 51.65	131° 04.54							
		1703	BE	NET		444	55° 51.62	131° 04.44		150					BONGO
		1726	BE	TRAWL		445	55 50 58	131 03.46							TRAWL
8	15GA 16	1850	BE	CTD		446	55° 42.68	130° 56.73	512			1			T: 4.77 S: 27.31
		1854	BO				55° 42.65	130° 56.70		250					BOT@10m SAL/CHL/NUTS
		1859	EN				55° 42.67	130° 56.63							
		1902	BE	NET		447	55° 42.68	130° 56.60							BONGO
		1923	BE	TRAWL		448	55 41.84	130 56.24							TRAWL

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Transmissometer to be cleaned for each cast, do not use Ammonia products

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month MARCH				Year 2010				Ship W.C. RICKER				Cruise ID 2010-03			
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
8	156A 17	2040	BE	CTD		449	55° 34.18	130° 54.36	406			1	N.M.		T: 4.82 S: 26.81
		2045	BO				55° 34.17	130° 54.30		250					BOT@ 10m. SAL/CHL/NUTS
		2050	EN				55° 34.19	130° 54.23							
		2053	BE	NET		450	55° 34.20	130° 54.19		150					BONGO
		2113	BE	TRAWL		451	55 33 57	130 55 24							TRAWL
8	156A 18	2227	BE	CTD		452	55° 26.76	130° 57.67	333			1			T: 5.68 S: 29.35
		2232	BO				55° 26.74	130° 57.62		250					BOT@ 10m. SAL/CHL/NUTS
		2236	EN				55° 26.75	130° 57.61							
		2239	BE	NET		453	55° 26.76	130° 57.62		150					BONGO
		2258	BE	TRAWL		454	55 26 07	130 57.12							TRAWL
9	156A 19	0026	BE	CTD		455	55° 17.58	130° 58.64	402			1			T: 5.86 S: 29.79
		0031	BO				55° 17.56	130° 58.61		250					BOT@ 10m. SAL/CHL/NUTS
		0036	EN				55° 17.57	130° 58.59							
		0039	BE	NET		456	55° 17.57	130° 58.56		150					BONGO
		0057	BE	TRAWL		457	55 16.8	130 59.64							TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

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Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
9	IBC 01	1455	BE	CTD		458	55° 15.32	129° 50.16	541			1	H.M.	✓	T: 5.63 S: 29.25
		1500	BO				55° 15.34	129° 50.16		250					BOT@10m SAL/CHL/NUTS
		1505	EN				55° 15.36	129° 50.15							
		1509	BE	NET		459	55° 15.39	129° 50.17		150					BONGO
		1530	BE	TRAWL		460	55 14 95	129 50 43							TRAWL
9	IBC 02	1650	BE	CTD		461	55° 07.25	129° 56.97	405			1			T: 5.62 S: 28.75
		1655	BO				55° 07.29	129° 56.98		250					BOT@10m SAL/CHL/NUTS
		1700	EN				55° 07.30	129° 56.97							
		1703	BE	NET		462	55° 07.32	129° 56.98							BONGO
		1725	BE	TRAWL		463	55 06.62	129 54.39							TRAWL
9	IBC 03	1834	BE	CTD		464	55° 00.21	130° 01.72	186			1			T: 4.90 S: 26.14
		1838	BO				55° 00.22	130° 01.77		175					BOT@10m SAL/CHL/NUTS
		1841	EN				55° 00.19	130° 01.85							
		1844	BE	NET		465	55° 00.21	130° 01.89		150					BONGO
		1905	BE	TRAWL		466	54 59.48	130 02.86							TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

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Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
9	IBC 04	2023	BE	CTD		467	54° 52.06	130° 12.22	421			1	H.M.		T: 6.24 S: 30.67
		2027	BO				54° 52.02	130° 12.24		250					BOT 10m - SAL/CAL/NTS
		2032	EN				54° 52.01	130° 12.30							
		2037	BE	NET		468	54° 51.98	130° 12.27		150					BONGO
		2057	BE	TRAWL		469	54° 51.18	130° 13.18							TRAWL
9	IBC 05	2154	BE	CTD		470	54° 47.77	130° 17.82	459			1			T: 6.10 S: 30.23
		2159	BO				54° 47.74	130° 17.82		250					BOT 10m - SAL/CAL/NTS
		2204	EN				54° 47.74	130° 17.87							
		2207	BE	NET		471	54° 47.74	130° 17.89		150					BONGO
		2226	BE	TRAWL		472	54° 47.22	130° 19.26							TRAWL
9	IBC 06	2325	BE	CTD		473	54° 43.87	130° 25.08	495			1			T: 6.72 S: 30.78
		2330	BO				54° 43.86	130° 25.69		250					BOT 10m - SAL/CAL/NTS
		2335	EN				54° 43.85	130° 25.01							
		2338	BE	NET		474	54° 43.84	130° 24.97							BONGO
		2357	BE	TRAWL		475	54° 43.32	130° 25.36							TRAWL

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— CTD 482 LOST ?? I MUST HAVE NOT ARCHIVED IT ?																													
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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

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							Latitude	Longitude							
10	IBC 10	1825	BE	CTD		485	54° 07.08	130° 25.01	109			1	H.M.		T: 7.12 S: 31.29
		1827	BO				54° 07.10	130° 25.00		100					BOTOM - SAL/CHL/NUTS
		1830	EN				54° 07.12	130° 24.99							
		1832	BE	NET		486	54° 07.13	130° 24.97		95					BONGO
		1850	BE	TRAWL		487	54° 06.85	130° 23.79							TRAWL
10	IBC 11	2025	BE	CTD		488	54° 00.17	130° 12.99	113			1			T: 6.67 S: 30.29
		2027	BO				54° 00.16	130° 12.97		100					BOTOM - SAL/CHL/NUTS
		2030	EN				54° 00.15	130° 12.97							
		2033	BE	NET		489	54° 00.15	130° 12.95		100					BONGO
		2049	BE	TRAWL		490	53° 59.36	130° 12.67							TRAWL
10	IBC 12	2150	BE	CTD		491	53° 54.82	130° 14.14	165			1			T: 6.72 S: 30.76
		2153	BO				53° 54.82	130° 14.07		155					BOTOM - SAL/CHL/NUTS
		2156	EN				53° 54.84	130° 14.03							
		2159	BE	NET		492	53° 54.86	130° 13.94		150					BONGO
		2214	BE	TRAWL		493	53° 54.10	130° 15.06							TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month MARCH				Year 2010				Ship W.E. RICKER				Cruise ID 2010-03			
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
10	IBC 13	2314	BE	CTD		494	53° 50.42	130° 19.55	170			1	H.M.		T: 6.71 S: 30.72
		2317	BO				53° 50.41	130° 19.54		160					BOT@10m - SAL/CHL/NUTS
		2320	EN				53° 50.42	130° 19.52							
		2323	BE	NET		495	53° 50.42	130° 19.48		150					BONGO
		2351	BE	TRAWL		496	53 49.93	130 18.83							TRAWL
11	IBC 14	1457	BE	CTD		497	53° 47.99	128° 51.66	349			1		✓	T: 5.90 S: 26.45
		1501	BO				53° 47.99	128° 51.67		250					BOT@10m - SAL/CHL/NUTS
		1506	EN				53° 47.99	128° 51.68							
		1509	BE	NET		498	53° 47.99	128° 51.68		150					BONGO
		1529	BE	TRAWL		499	53 47.43	128 52.63							TRAWL
11	IBC 15	1642	BE	CTD		500	53° 43.90	129° 03.41	345			1			T: 5.88 S: 27.53
		1647	BO				53° 43.86	129° 03.51		250					BOT@10m - SAL/CHL/NUTS
		1652	EN				53° 43.85	129° 03.53							
		1654	BE	NET		501	53° 43.85	129° 03.52		150					BONGO
		1714	BE	TRAWL		502	53 42.99	129 04.7							TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

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Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
11	IBC 16	1828	BE	CTD		503	53° 38.31	129° 11.91	356			1	11.M.		T: 5.65 S: 27.83
		1833	BO				53° 38.28	129° 11.89		250					BOT@10m SAL/CHL/NUTS
		1838	EN				53° 38.25	129° 11.89							
		1841	BE	NET		504	53° 38.23	129° 11.89		150					BONGO
		1903	BE	TRAWL		505	53 37.43	129 12.04							TRAWL
11	IBC 17	2022	BE	CTD		506	53° 30.81	129° 12.59	347			1			T: 5.72 S: 29.05
		2027	BO				53° 30.81	129° 12.55		250					BOT@10m SAL/CHL/NUTS
		2032	EN				53° 30.83	129° 12.59							
		2035	BE	NET		507	53° 30.85	129° 12.59		150					BONGO
		2055	BE	TRAWL		508	53 30.08	129 12.8							TRAWL
11	IBC 18	2211	BE	CTD		509	53° 23.47	129° 12.24	407			1			T: 6.44 S: 30.23
		2216	BO				53° 23.45	129° 12.24		250					BOT@10m SAL/CHL/NUTS
		2220	EN				53° 23.42	129° 12.22							
		2224	BE	NET		510	53° 23.40	129° 12.16		150					BONGO
		2244	BE	TRAWL		511	53 22.54	129 11.47							TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

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Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
11	IBC 19	2354	BE	CTD		512	53° 18.68	129° 05.19	452			1	H.M.		T:6.39 S:30.13
		2359	BO				53° 18.67	129° 05.12		250					BOT@10m. SAL/CHL/NUIS
12		0004	EN				53° 18.64	129° 05.07							
		0007	BE	NET		513	53° 18.63	129° 05.07		150					BONGO
			BE	TRAWL		514	NO TOW				*				TRAWL
12	IBC 20	0144	BE	CTD	2ND	515	53° 22.83	128° 54.65	318			1			T:6.43 S:29.38
		0149	BO				53° 22.83	128° 54.59		250					BOT@10m. SAL/CHL/NUIS
		0154	EN				53° 22.82	128° 54.55							
		0157	BE	NET	3RD	516	53° 22.81	128° 54.53		150					BONGO
		0059	BE	TRAWL	1ST	517	53 19.64	128 55.12							TRAWL
 															
12	IBC 21	1452	BE	CTD		518	52° 48.04	128° 26.23	515			1		✓	T:6.39 S:29.41
		1457	BO				52° 48.06	128° 26.31		250					BOT@10m. SAL/CHL/NUIS
		1502	EN				52° 48.07	128° 26.38							
		1505	BE	NET		519	52° 48.06	128° 26.40		150					BONGO
		1546	BE	TRAWL		520	52 47.23	128 26.72							TRAWL

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Additional comments

— NO TOW - TO MANY PORPOISES

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month				Year			Ship				Cruise ID				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
12	IBC 22	1658	BE	CTD		521	52° 40.64	128° 27.83	600			1	H.M.		T: 6.81 S: 30.47
		1703	BO				52° 40.68	128° 27.91		250					BOT@10m - SAL/CHL/NUTS
		1708	EN				52° 40.70	128° 27.97							
		1711	BE	NET		522	52° 40.72	128° 28.01		150					BONGO
		1731	BE	TRAWL		523	52 39.82	128 28.47							TRAWL
12	IBC 23	1846	BE	CTD		524	52° 32.68	128° 28.18	636			1			T: 6.95 S: 30.71
		1851	BO				52° 32.73	128° 28.23		250					BOT@10m - SAL/CHL/NUTS
		1856	EN				52° 32.84	128° 28.26							
		1859	BE	NET		525	52° 32.88	128° 28.30		150					BONGO
			BE	TRAWL		526	NO	TOW			*				TRAWL *
12	IBC 24	1950	BE	CTD		527	52° 28.71	128° 26.49	651			1			T: 7.01 S: 30.74
		1955	BO				52° 28.73	128° 26.52		250					BOT@10m - SAL/CHL/NUTS
		2000	EN				52° 28.74	128° 26.55							
		2004	BE	NET		528	52° 28.72	128° 26.58		150					BONGO
		2023	BE	TRAWL		529	52 27.83	128 26.58							TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

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Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
12	IBC 25	2130	BE	CTD		530	52° 23.15	128° 35.13	220			1	H.M.		T: 6.85 S: 30.44
		2135	BO				52° 23.17	128° 35.16		210					BOT 10m SAL/CHL/NUTS
		2139	EN				52° 23.20	128° 35.19							
		2142	BE	NET		531	52° 23.20	128° 35.21		150					BONGO
		2202	BE	TRAWL		532	52 22.17	128 35.43							TRAWL
12	IBC 26	2318	BE	CTD		533	52° 15.69	128° 31.07	147			1			T: 7.47 S: 31.08
		2321	BO				52° 15.71	128° 31.03		135					BOT 10m SAL/CHL/NUTS
		2324	EN				52° 15.72	128° 31.01							
		2327	BE	NET		534	52° 15.74	128° 31.00		140					BONGO
		2347	BE	TRAWL		535	52 15.67	128 29.69							TRAWL
13	IBC 27	0140	BE	CTD	2 nd	536	52° 14.60	128° 16.28	220			1			T: 7.07 S: 30.25
		0145	BO				52° 14.59	128° 16.25		215					BOT 10m SAL/CHL/NUTS
		0149	EN				52° 14.58	128° 16.23							
		0152	BE	NET	3 rd	537	52° 14.58	128° 16.21		150					BONGO
		0056	BE	TRAWL	1 st	538	52 14.77	128 19.85							TRAWL

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month MARCH				Year 2010			Ship W.E. RICKER				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
13	IBC 28	1512	BE	CTD		539	51° 52.26	127° 56.44	309			1	H.M.	✓	T: 7.09 S: 30.43
		1517	BO				51° 52.27	127° 56.46		250					BOT 10m SAL/CHL/NUTS
		1522	CH				51° 52.28	127° 56.47							
		1524	BE	NET		540	51° 52.30	127° 56.47		150					BONGO
		1544	BE	TRAWL		541	51 51.44	127 56.44							TRAWL
13	IBC 29	1715	BE	CTD		542	51° 41.19	127° 55.76	327			1			T: 7.19 S: 30.26
		1720	BO				51° 41.24	127° 55.77		250					BOT 10m SAL/CHL/NUTS
		1725	CH				51° 41.29	127° 55.83							
		1730	BE	NET		543	51° 41.34	127° 55.72		150					BONGO
		1749	BE	TRAWL		544	51 41.06	127 55.32							TRAWL
13	IBC 30	1910	BE	CTD		545	51° 34.43	127° 50.73	210			1			T: 7.20 S: 30.21
		1914	BO				51° 34.47	127° 50.64		200					BOT 10m SAL/CHL/NUTS
		1918	CH				51° 34.50	127° 50.57							
		1921	BE	NET		546	51° 34.53	127° 50.53		150					BONGO
		1941	BE	TRAWL		547	51 33.68	127 50.33							TRAWL

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DE = deployment time
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Transmissometer to be cleaned for each cast, do not use Ammonia products

Daily_log_book.doc

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month MARCH				Year 2010			Ship W.E. RICKER				Cruise ID 2010-03				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
13	IBC 31	20 56	BE	CTD		548	51° 26.99	127° 47.44	137			1	H.M.		T: 7.45 S: 30.70
		20 59	BO				51° 26.97	127° 47.42		125					BOT 10m. SAL/CAL/NUTS
		21 02	EH				51° 26.96	127° 47.42							
		21 04	BE	NET		549	51° 26.95	127° 47.39		125					BONGO
		21 23	BE	TRAWL		550	51° 26.76	127° 46.05							TRAWL
13	IBC 32	22 13	BE	CTD		551	51° 26.00	127° 41.32	325			1			T: 7.13 S: 29.48
		22 18	BO				51° 26.01	127° 41.44		250					BOT 10m. SAL/CAL/NUTS
		22 23	EH				51° 26.02	127° 41.46							
		22 31	BE	NET		552	51° 25.99	127° 41.65		150					BONGO
		22 49	BE	TRAWL		553	51° 26.35	127° 40.84							TRAWL
13	IBC 33	23 36	BE	CTD		554	51° 27.33	127° 37.25	310			1			T: 7.07 S: 29.26
		23 40	BO				51° 27.32	127° 37.22		250					BOT 10m. SAL/CAL/NUTS
		23 45	EH				51° 27.30	127° 37.20							
		23 48	BE	NET		555	51° 27.30	127° 37.23		150					BONGO
14		00 08	BE	TRAWL		556	51° 28.20	127° 36.58							TRAWL

Cast type:

BOT = bottle cast, no CTD
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 ROS = Rosette plus CTD

USW = sea water loop

MOR = mooring
 NET = net haul
 DRF = drifter

bottle firing method:

US = up/stop
 UN = up/no stop
 DN = down/no stop

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Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
14	JS 01	1400	BE	CTD		557	50° 31.74	126° 39.97	441			1	H.M.	✓	T: 7.78 S: 30.31
		1405	BO				50° 31.80	126° 39.97		250					BOT@10m - SAL/CHL/NUTS
		1410	EH				50° 31.83	126° 40.17			*				→
		1413	BE	NET		558	50° 31.82	126° 40.27		150					BONGO
		1433	BE	TRAWL		559	50 31 65	126 39 78							TRAWL
14	JS 02	16 01	BE	CTD		560	50° 30.38	126° 29.82	368			1			T: 7.81 S: 30.27
		16 06	BO				50° 30.40	126° 29.80		250					BOT@10m - SAL/CHL/NUTS
		16 11	EH				50° 30.44	126° 29.81							
		16 14	BE	NET		561	50° 30.47	126° 29.82							BONGO
		16 34	BE	TRAWL		562	50 30 42	126 28.93							TRAWL
14	JS 03	1745	BE	CTD		563	50° 29.42	126° 20.75	363			1			T: 7.85 S: 30.38
		1750	BO				50° 29.44	126° 20.72		250					BOT@10m - SAL/CHL/NUTS
		1755	EH				50° 29.47	126° 20.68							
		1757	BE	NET		564	50° 29.48	126° 20.69		150					BONGO
		1816	BE	TRAWL		565	50 29 54	126 19.66							TRAWL
						END	OF		HS 2010-03						

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