

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][illegible]

Data logging computer: PAC 02328

Data acquisition program: SCA SAVE V 7

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

Primary CTD

Make:	<u>SCABURG</u>	model:	<u>9</u>	serial number:	<u>595</u>
Primary temperature	serial number: <u>4054</u>				
Primary conductivity	serial number: <u>3321</u>				
Secondary temperature	serial number: <u>4700</u>				
Secondary conductivity	serial number: <u>1766</u>				
Transmissometer:	<u>WETLAB</u>	Model:	<u>?</u>	s/n:	<u>983</u>
Fluorometer:	Model <u>SEA-POINT</u>	Cable gain:	<u>10 x .15</u>	s/n:	<u>2223</u>
Oxygen sensor:	<u>SCABURG</u>	Model:	<u>43</u>	s/n:	<u>1176</u>
PAR sensor:	Model:			s/n:	
Other sensors:				s/n:	
Other sensors:				s/n:	
Other sensors:				s/n:	
Other sensors:				s/n:	

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?

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

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

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Month FEBRUARY				Year 2010			Ship W. E. RICHES				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	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:

BOT = Bottle cast, no CTD
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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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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

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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 MOR = Mooring
 NET = Plankton Net Haul
 DRF = Drifter
 — = —

Bottle Firing Method:

US = Up / Stop
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Produced by the Water Properties Group, IOS

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 Version: 06 March 2008

Month		Year		Ship		Cruise ID									
FEBRUARY		2010		W.E. RICKER		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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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							
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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Bottle Firing Method:

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Notes:

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

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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							
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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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							
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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Notes:

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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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Notes:

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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

Produced by the Water Properties Group, IOS

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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° 34.72		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° 29.77	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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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							
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:

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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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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:

BOT = Bottle cast, no CTD
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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:

US = Up / Stop
UN = Up / No stop
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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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Cast Type:

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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

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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

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USW

= Sea Water Loop
MOR = Mooring
NET = Plankton Net Haul
DRF = Drifter
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Bottle Firing Method:

US = Up / Stop
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Notes:

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VI 06 - O₂ LEVEL Low FROM 90m → 250m

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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

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Notes:

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CALLED EP01 IN FILE - SHOULD BE EP 07

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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

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 — = —

Bottle Firing Method:

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Notes: _____

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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

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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

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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

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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

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