

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

2013-10

DATE:

VESSEL:

PROJECT(S):

From:

to:

W.E. Ricker

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

Captain: _____

Second Officer: _____

Fishing Master: _____

First Officer: _____

Third Officer: _____

Mission Participants / Agencies:

Scientific Personnel:

[illegible]

Second leg of Mission:

[illegible]

Data logging computer:

Data acquisition program: SEASAVE V7 32.4

CTD deck unit make: _____ model: _____ serial number: _____

Primary CTD

Make: SB E model: 9+ serial number: 506

Primary temperature serial number: 2106

Primary conductivity serial number: 1764

Secondary temperature serial number: 2663

Secondary conductivity serial number: 2424

Transmissometer:

Fluorometer: Model Wetlabs Eco Cable gain: 13 s/n: 13

Fluorometer: Model WetLabs ECO Cable gain: 13 s/n: 2215 P. S or NO pump? (S)

Oxygen sensor: SBE Model: 43 s/n: 13

Oxygen sensor: SBE Model: 43 s/n: 1119 P S or NO pump? P

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

Other sensors: _____ s/n: _____

Other sensors: _____

Other sensors: _____

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

Other sensors: _____ s/n: _____

Other sensors: _____ s/n: _____

Other sensors: _____ s/n: _____

S/II:

Secondary CTD

Make: _____ model: _____ serial number: _____

Primary temperature serial number: _____

Primary conductivity serial number:

Secondary temperature serial number:

Secondary conductivity serial number:

Transmissometer: Model:

Fluorimeter: Model	Model	S/n:
Cable gain:	Cable gain	s/n:

Oxygen sensor: _____
 Model: _____
 s/n: _____
 Cable gmm: _____
 S/n: _____

only Gen sensor: _____ SILL: _____
 PAR sensor: _____ Model: _____
 _____ s/n: _____

Other sensors: _____
Model: _____ S/n: _____
c/w: _____

Other sensors:

Other sensors: _____ s/n: _____
Other sensors: _____ / _____

Other sensors: _____ s/n: _____
Other sensors: _____ / _____

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

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Ocean Sciences Division, Institute of Ocean Sciences

Month				Year				Ship				Cruise ID			
MARCH				2013				W. E. RICKER				2013-10			
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							
1	GS-01	2320	BE	CTD		001	49° 11.98	123° 44.42	203			1	H.M.	✓	T: 7.86 S: 29.18
		2324	BO				49° 11.93	123° 44.33		190		OVER	→	*	BOT@10m - SAL/CHL/NOTS
		2329	EN				49° 11.91	123° 44.27						*	PARTIALLY ARCHIVED
		2336	BE	NET		002	49° 11.96	123° 44.26		150					BONGO
		0036	BE	TRAWL		003	49° 11.5	123° 43.0							TRAWL
3	GS 02	2207	BE	CTD		004	48° 42.20	123° 29.43	70			1	H.M.	✓	T: 8.07 S: 27.86
		2208	BO				48° 42.23	123° 29.33		60					BOT@10m - SAL/CHL/NOTS
		2210	EN				48° 42.23	123° 29.29							
		2216	BE	NET		005	48° 42.27	123° 29.14		60					BONGO
		2239	BE	TRAWL		006	48° 43.62	123° 31.82							TRAWL
3	GS 03	2235	BE	TRAWL			48° 42.61	123° 27.98			TRAWL ONLY				TRAWL ONLY
4	GS 04	0034	BE	CTD		007	48° 48.93	123° 20.53	100			1	H.M.	✓	T: 7.67 S: 29.34
*	(CALLED GS03 IN FILE)	0036	BO				48° 48.90	123° 20.54		90					BOT@10m - SAL/CHL/NOTS
		0039	EN				48° 48.87	123° 20.55							
		0045	BE	NET		008	48° 48.74	123° 20.71		90					BONGO
		0016	BE	TRAWL		009	48° 45.80	123° 21.60							TRAWL

This page is for any notes or observations

* NO SAMPLE - NISKIN LEAKED OUT WHILE I BONGO'D
- PARTIALLY ARCHIVED - TEST CAST - NOT WORTH RE-DOING

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							Latitude	Longitude							
4	FR-1	1502	BC	CTD		010	49° 04.64	123° 29.98	294			1	4.m.	✓	T: 6.59 S: 26.19
		1508	BC				49° 04.67	123° 30.05		280					Bottle 10 - SAL/CHL/NUIS
		1513	CH				49° 04.75	123° 30.16							
		1525	BC	NET		011	49° 04.76	123° 30.17		50					Bongo
		1533	BC	NET		012	49° 04.75	123° 30.23		275					Bongo to 50m
			BC	TRAWL		013									TRAWL
4	GS 5		BC	TRAWL		013	49° 06.80	123° 19.41							TRAWL ONLY
							49° 09.30	123° 19.05							
4	GS 6		BC	TRAWL		014	49° 10.45	123° 18.69							TRAWL ONLY
							49° 12.54	123° 18.23							
4	GS 7		BC	TRAWL		015	49° 12.00	123° 18.26							TRAWL ONLY
							49° 14.15	123° 17.89							
4	GS 8	2010	BC	CTD		016	49° 14.54	123° 23.82	243			1		✓	T: 6.93 S: 27.25
		2014	BC				49° 14.50	123° 23.85		230					Bottle 10 - SAL/CHL/NUIS
		2019	CH				49° 14.46	123° 23.90							
		2025	BC	NET		017	49° 14.41	123° 23.83		150					Bongo
			BC	TRAWL		018	49° 13.98	123° 26.12							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
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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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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							
4	GS 9		BE	TRAWL		019	49° 13.77	123° 33.22					4 m.		TRAWL ONLY
	GS 10		BE	TRAWL		020	49° 14.35	123° 39.38							TRAWL ONLY
5	GEO 1	1728	BE	CTD		021	49° 14.97	123° 45.06	399			1		✓	T: 7.19 S: 28.24
		0136	BO				49° 14.86	123° 45.09		390					BOTOM. SAL/CAL/NOTS
		0144	EN				49° 14.79	123° 45.06							
		0020	BE	NET		022	49° 14.98	123° 44.96		50					BONGO 50m
		0026	BE	NET		023	49° 14.99	123° 45.02		390					BONGO B-10
			BE	TRAWL		024									
5	GS 11	1508	BE	CTD		025	49° 13.77	123° 53.61	124			1		✓	T: 7.10 S: 27.96
		1511	BO				49° 13.78	123° 53.60		115					BOTOM. SAL/CAL/NOTS
		1513	EN				49° 13.79	123° 53.59							
		1518	BE	NET		026	49° 13.77	123° 53.59		115					BONGO
		1538	BE	TRAWL		027	49° 13.95	123° 52.58							TRAWL
5	GS 12	1647	BE	TRAWL		028	49° 16.98	123° 44.17							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							
5	GS 13	1749	BE	CTD		029	49° 19.55	123° 37.36	261			1	H.M.	✓	T: 6.94 S: 26.54
		1753	BO				49° 19.55	123° 37.46		250					BOTE on - SAL/CAL/NUTS
		1758	EN				49° 19.55	123° 37.50							
		1807	BE	NET		030	49° 19.53	123° 37.74		150					BONGO
		1829	BE	TRAWL		031	49° 20.16	123° 37.83							TRAWL
5	GS 14	1926		TRAWL		032	49° 24.16	123° 40.10							TRAWL
5	GS 15	2031	BE	CTD		033	49° 26.22	123° 46.02	164			1		✓	T: 7.05 S: 26.58
		2034	BO				49° 26.24	123° 46.04		155					BOTE on - SAL/CAL/NUTS
		2037	EN				49° 26.25	123° 46.05							
		2042	BE	NET		034	49° 26.24	123° 46.03		150					BONGO
		2102	BE	TRAWL		035	49° 26.41	123° 46.87							TRAWL
5	GS 16	2200	BE	TRAWL		036	49° 27.13	123° 54.09							TRAWL
5	GS 17	2259	BE	TRAWL		037	49° 24.68	124° 00.48							TRAWL
6	GS 18	0003	BE	TRAWL		038	49° 22.48	124° 06.37							

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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							
6	CPF1	0122	BE	CTD		039	49° 21.99	124° 05.15	240			1	H.M.	✓	T: 7.08 S: 28.00
		0127	BO				49° 22.00	124° 05.25		230					BOTELON - SAL/CAL/HUTS
		0132	EN				49° 22.01	124° 05.35							
		0137	BE	NET		040	49° 22.01	124° 05.42	260	50					BONGO to 50m
		0143	BE	NET		041	49° 22.03	124° 05.53		250					BONGO to B-10
6	GS 19	1504	BE	CTD		042	49° 31.39	124° 03.87	209			1		✓	T: 7.12 S: 27.00
		1509	BO				49° 31.40	124° 03.75		200					BOTELON - SAL/CAL/HUTS
		1513	EN				49° 31.40	124° 03.76							
		1518	BE	NET		043	49° 31.38	124° 03.76		150					BONGO
		1539	BE	TRAWL		044	49° 30.90	124° 03.47							TRAWL
6	GS 20	1648	BE	TRAWL		045	49° 25.00	124° 06.14							TRAWL
6	GS 21	1751	BE	CTD		046	49° 25.22	124° 14.08	213			1		✓	T: 7.25 S: 28.49
		1755	BO				49° 25.23	124° 14.16		200					BOTELON - SAL/CAL/HUTS
		1800	EN				49° 25.24	124° 14.21							
		1803	BE	NET		047	49° 25.24	124° 14.22		150					BONGO
		1824	BE	TRAWL		048	49° 25.70	124° 15.17							TRAWL

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Month <u>MARCH</u>				Year <u>2013</u>			Ship <u>W.E. RICKER</u>				Cruise ID <u>2013-10</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							
6	CPF 2	2005	BC	CTD		049	49° 27.99	124° 29.96	325			1	A.M.	✓	T: 7.42 S: 28.84
		2010	BO				49° 28.02	124° 29.99		315					BOT@10m - SAL/CHL/NUTS
		2017	EN				49° 28.03	124° 29.97							
	MOD VAC	2021	BC	NET		050	49° 28.01	124° 29.96		50					BONGO TO 50m
		2153	BC	NET		051	49° 27.93	124° 29.92		325					BONGO TO B-10
												*			
8	IS01	1523	BC	CTD		052	50° 26.80	126° 01.31	180			1		✓	T: 7.53 S: 30.37
		1526	BO				50° 26.83	126° 01.33		170					BOT@10m - SAL/CHL/NUTS
		1531	EN				50° 26.86	126° 01.34							
		1536	BC	NET		053	50° 26.83	126° 01.33		150					BONGO
		1600	BC	TRAWL		054	50° 27.64	126° 03.00							TRAWL @ Surface
8	IS 02	1650	BC	CTD		055	50° 28.33	126° 08.67	322			1		✓	T: 7.51 S: 30.47
		1655	BO				50° 28.39	126° 08.65		250					BOT@10m - SAL/CHL/NUTS
		1701	EN				50° 28.39	126° 08.72							
		1705	BC	NET		056	50° 28.41	126° 08.71		150					BONGO
		1725	BC	TRAWL		057	50° 28.70	126° 07.00							TRAWL @ 15m

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* - REPAIR STRAP HOLDING COND/TEMP SENSORS (BLOCK STRIPPED) DIFF IN SAL/COND BETWEEN SENSORS is Now 0.09 (BOTH)

T = 0.094

C = 0.088

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							Latitude	Longitude							
8	JS 03	1809	BE	CTD		058	50° 29. 22	126° 14. 47	380			1	H.M.	✓	T: 7.49 S: 30.44
		1814	BO				50° 29. 21	126° 14. 51		250					BOT@10m - SAL/CAL/NUTS
		1819	EN				50° 29. 21	126° 14. 54							
		1824	BE	NET		059	50° 29. 22	126° 14. 57		150					BONGO
		1844	BE	TRAWL		060	50° 24. 4	126° 14. 9							TRAWL @ 30m
8	JS 04	1953	BE	CTD		061	50° 29. 84	126° 20. 94	366			1		✓	T: 7.53 S: 30.46
		1958	BO				50° 29. 85	126° 20. 94		250					BOT@10m - SAL/CAL/NUTS
		2003	EN				50° 29. 85	126° 20. 94							
		2008	BE	NET		062	50° 29. 86	126° 20. 91		150					BONGO
		2025	BE	TRAWL		063	50° 29. 8	126° 22. 25							TRAWL @ surface
8	JS 05	2118	BE	CTD		064	50° 29. 69	126° 27. 15	388			1		✓	T: 7.55 S: 30.46
		2123	BO				50° 29. 66	126° 27. 21		250					BOT@10m - SAL/CAL/NUTS
		2128	EN				50° 29. 62	126° 27. 27							
		2133	BE	NET		065	50° 29. 59	126° 27. 32		150					BONGO
		2152	BE	TRAWL		066	50° 28. 75	126° 28. 70							TRAWL @ 15m

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							Latitude	Longitude							
8	JS 06	2238	BE	CTD		067	50° 30.26	126° 33.85	453			1	H.M.	✓	T: 7.55 S: 30.46
		2242	BO				50° 30.26	126° 33.95		250					BOTE 10m - SAL/CAL/NTS
		2248	EN				50° 30.28	126° 34.04							
		2252	BE	NET		068	50° 30.29	126° 34.11		150					BONGO
		2310	BE	TRAWL		069	50° 30.54	126° 35.75							TRAWL @ 30m
8	JS 07	2356	BE	CTD		070	50° 31.58	126° 40.69	480			1		✓	T: 7.69 S: 30.47
9		0001	BO				50° 31.61	126° 40.78		250					BOTE 10m - SAL/CAL/NTS
		0006	EN				50° 31.63	126° 40.89							
		0010	BE	NET		071	50° 31.68	126° 40.99		150					BONGO
		0030	BE	TRAWL		072	50° 32.21	126° 43.86							TRAWL @ Surface
9	JS 08	0230	BE	CTD		073	50° 33.64	126° 48.28	455			1		✓	T: 7.60 S: 30.49
		0235	BO				50° 33.71	126° 48.41		250					BOTE 10m - SAL/CAL/NTS
		0240	EN				50° 33.77	126° 48.54							
		0245	BE	NET		074	50° 33.86	126° 48.68		150					BONGO
		0143	BE	TRAWL		075	50° 33.9	126° 51.5							TRAWL @ 15m

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							Latitude	Longitude							
9	T 1	1501	BC	CTD		076	51° 16. 48	128° 19. 38	69			1	14.00	✓	T: 7.24 S: 30.83
		1503	BO				51° 16. 50	128° 19. 40		60					BOT ON - SAL/CHL/NUIS
		1505	CH				51° 16. 52	128° 19. 40							
		1510	BC	NET		077	51° 16. 57	128° 19. 39		60					BONGO
		1528	BE	TRAWL		078	51° 16.2	128° 20.5							TRAWL @ 5m
9	T 2	1629	BC	CTD		079	51° 13.20	128° 27.07	187			1		✓	T: 7.35 S: 31.67
		1633	BO				51° 13.21	128° 26.99		175					BOT ON - SAL/CHL/NUIS
		1637	CH				51° 13.22	128° 26. 91							
		1642	BC	NET		080	51° 13. 26	128° 26. 82		150					BONGO
		1703	BE	TRAWL		081	51° 13.07	128° 27.22							TRAWL @ 15m
9	T 3	1815	BC	CTD		082	51° 08. 99	128° 34. 87	153			1		✓	T: 7.37 S: 31.73
		1818	BO				51° 08. 95	128° 34. 88		140					BOT ON - SAL/CHL/NUIS
		1822	CH				51° 08. 94	128° 34. 84							
		1826	BC	NET		083	51° 08. 95	128° 34. 78		140					BONGO
		1849	BE	TRAWL		084	51° 08.45	128° 35.47							TRAWL @ 30m

Cast Type:

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 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		MARCH		Year		2013		Ship		W. E. RICHER		Cruise ID		2013-10		Page 10 of	
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	T-4	2003	BE	CTD		085	51° 05.07	128° 42.74	65			1	H.M.	✓	T: 7.44 S: 31.58		
		2005	BO				51° 05.04	128° 42.77		55							
		2007	EN				51° 05.01	128° 42.80							BOT @ 10m SAL/CHL/NUIS		
		2012	BE	NET		086	51° 04.97	128° 42.86		55				*	BROKEN NISHIN		
		2027	BE	TRAWL		087	51° 04.35	128° 44.03							BONGO		
															TRAWL @ 15m		
9	T-5	2143	BE	CTD		088	51° 00.36	128° 51.64	62			1			T: 7.28 S: 31.52		
		2144	BO				51° 00.35	128° 51.65		50					BOT @ 10m SAL/CHL/NUIS		
		2146	EN				51° 00.33	128° 51.70									
		2151	BE	NET		089	51° 00.32	128° 51.80		50					BONGO		
			BE	TRAWL		090	CANCELLED								TRAWL		
10	W1 01	1628	BE	CTD		091	50° 27.85	127° 57.91	105			1		✓	T: 7.96 S: 29.59		
		1630	BO				50° 27.85	127° 57.92		95					BOT @ 10m SAL/CHL/NUIS		
		1633	EN				50° 27.85	127° 57.94									
		1638	BE	NET		092	50° 27.82	127° 57.86		95					BONGO		
		1658	BE	TRAWL		093	50° 28.05	127° 57.16							TRAWL 1 @ surface		
10	W1 02	1737	BE	TRAWL		094	50° 28.33	125° 55.10							TRAWL 2 @ 15m		
10	W1 03	1814	BE	TRAWL		095	50° 28.13	125° 56.37							TRAWL 3 @ 30m		

Cast Type:

NET

USW = Sea Water Loop

Bottle Firing Method:

Time Code:

Cast Type:

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ROS = Rosette plus CTD
SET = Fish Set

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Bottle Firing Method:

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Time Code:

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— NISKIN SHATTERED ON SIDE OF SHIP (I HAVE 1 EXTRA)

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Month <u>MARCH</u>				Year <u>2013</u>			Ship <u>W.E. RICKER</u>			Cruise ID <u>2013-10</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	1V1 04	1903	BE	CTD		096	50° 29.14	127° 51.89	175			1	H.M.	✓	T: 8.04 S: 29.37
		1906	BO				50° 29.16	127° 51.86		165					BOT@10m - SAL/CHL/NOTS
		1911	EN				50° 29.18	127° 51.86							
		1915	BE	NET		97	50° 29.18	127° 51.86		150					Bongo
		1934	BE	TRAWL		98	50° 29.06	127° 50.94							TRAWL 1 @ Surface
10	1V1 05	2010	BE	TRAWL		99	50° 28.69	127° 49.27							TRAWL 2 @ 15m
10	1V1 06	2045	BE	TRAWL		100	50° 28.91	127° 50.52							TRAWL 3 @ 30m
10	1V1 07	2121	BE	TRAWL		101	50° 28.58	127° 49.10							TRAWL 4 @ 45m
10	1V1 08	2221	BE	CTD		102	50° 29.54	127° 45.85	104			1		✓	T: 8.49 S: 29.08
		2223	BO				50° 29.56	127° 45.82		95					BOT@10m - SAL/CHL/NOTS
		2225	EN				50° 29.58	127° 45.80							
		2230	BE	NET		103	50° 29.61	127° 45.78		95					Bongo
		2249	BE	TRAWL		104	50° 29.75	127° 45.07							TRAWL 1 @ Surface
10	1V1 09	2325	BE	TRAWL		105	50° 30.11	127° 42.99							TRAWL 2 @ 15m
11	1V1 10	0000	BE	TRAWL		106	50° 28.77	127° 44.32							TRAWL 3 @ 30m
11	1V1 11	0055	BE	TRAWL		107	50° 28.90	127° 44.20							TRawl 4 @ 45m

Cast Type:

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 DRF = Drifter

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 <u>MARCH</u>				Year <u>2013</u>			Ship <u>W.E. RICKER</u>				Cruise ID <u>2013-10</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							
11	1V112	1452	BE	CTD		108	50° 34.62	127° 31.42	94			1	4-1	✓	T: 8.24 S: 26.75
		1454	BO				50° 34.62	127° 31.43		85					BOTOM - SAL/CAL/HOTS
		1457	CT				50° 34.61	127° 31.45							
		1501	BE	NET		109	50° 34.62	127° 31.46		85					BONGO
		1525	BE	TRAWL		110	50° 34.7	127° 30.5							TRAWL 1 @ Surface
11	1V113	1550	BE	TRAWL		111	50° 34.87	127° 28.83							TRAWL 2 @ 15m
11	1V114	1633	BE	TRAWL		112	50° 34.77	127° 30.14							TRAWL 3 @ 30m
11	1V115	1714	BE	TRAWL		113	50° 34.81	127° 29.00							TRAWL 4 @ 45m
11	1V116	1808	BE	CTD		114	50° 34.73	127° 35.45	128			1		✓	T: 8.32 S: 26.53
		1811	BO				50° 34.74	127° 35.46		120					BOTOM - SAL/CAL/HOTS
		1814	CT				50° 34.75	127° 35.48							
		1818	BE	NET		115	50° 34.75	127° 35.48		120					BONGO
		1903	BE	TRAWL		116	50° 35.03	127° 36.64							TRAWL 1 @ Surface
11	1V117	1939	BE	TRAWL		117	50° 35.37	127° 38.35							TRAWL 2 @ 15m
11	1V118	2014	BE	TRAWL		118	50° 35.21	127° 36.83							TRAWL 3 @ 30m
11	1V119	2052	BE	TRAWL		119	50° 35.35	127° 37.97							TRAWL 4 @ 45m

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Month <u>MARCH</u>				Year <u>2013</u>			Ship <u>W. E. RICKER</u>				Cruise ID <u>2013-10</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							
11	1V1 20	2210	BE	CTD		120	50° 30.64	127° 36.17	147			1	4.m.	✓	T: 8.18 S: 28.59
		2213	BO				50° 30.64	127° 36.15		135			1		BOT@10m. SAL/CH/NOTS
		2217	EM				50° 30.65	127° 36.14							NO BONGO →
		2226	BE	TRAWL		121	50° 30.23	127° 35.47							TRAWL 1 @ surface
11	1V1 21	2304	BE	TRAWL		122	50° 28.70	127° 34.60							TRAWL 2 @ 15m
11	1V1 22	2336	BE	TRAWL		123	50° 28.94	127° 35.03							TRAWL 3 @ 30m
12	1V1 23	0040	BE	TRAWL		124	50° 29.58	127° 34.38							TRAWL 4 @ 45m
12	1V1 24	1431	BE	CTD		125	50° 23.99	127° 29.12	115			1		✓	T: 8.86 S: 29.32
		1434	BO				50° 23.97	127° 29.14		105					BOT@10m. SAL/CH/NOTS
		1437	EM				50° 23.96	127° 29.14							
		1442	BE	NET		126	50° 23.96	127° 29.15		105					BONGO (FIXED)
		1500	BE	TRAWL		127	50° 24.40	127° 29.7							TRAWL 1 @ surface
12	1V1 25	1538	BE	TRAWL		128	50° 25.56	127° 30.42							TRAWL 2 @ 15m
12	1V1 26	1613	BE	TRAWL		129	50° 25.2	127° 30.2							TRAWL 3 @ 30m
12	1V1 27	1650	BE	TRAWL		130	50° 25.9	127° 30.8							TRAWL 4 @ 45m

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- BONGO HAS HOLE IN SOCK - REPAIR TAKES 12 HRS (GLUE TO DRY)

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Month				Year				Ship				Cruise ID			
MARCH				2013				W.E. RICKER				2013-0			
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	1V1 28	1757	BE	NET	NET	131	50° 29.27	127° 34.02					4.11		Bongo @ 1V1 20 SITE
		1818	BE	TRAWL		132	50° 29.85	127° 34.88							Trawl @ 60m
12	1V1 29	1922	BE	TRAWL		133	50° 30.07	127° 42.38							Trawl @ 60m
12	1V1 30	2020	BE	TRAWL		134	50° 28.48	127° 48.80							Trawl @ 60m
12	1V1 31	2110	BE	TRAWL		135	50° 28.23	127° 53.58							Trawl @ 45m
12	1V1 32	2149	BE	TRAWL		136	50° 28.25	127° 54.25							Trawl @ 60m
13	QCST01	1417	BE	CTD		137	50° 56.81	127° 43.34	400			1		✓	T: 7.27 S: 32.93
		1422	BO				50° 56.84	127° 43.36		250					Bottom: Silt/clay/muds
		1427	EN				50° 56.88	127° 43.41							
		1432	BE	NET		138	50° 56.82	127° 43.38		150					Bongo
		1455	BE	TRAWL		139	50° 56.55	127° 42.6							TRAWL @ 30m
13	QCST02	1555	BE	TRAWL		140	50° 54.9	127° 37.8							TRAWL @ 15m
13	QCST 03	1657	BE	TRAWL		141	50° 56.55	127° 31.29							TRAWL @ 30m

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Month MARCH				Year 2013			Ship W.E. RICKER			Cruise ID 2013-10					
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	QCST 4	1845	BE	CTD		142	50° 56.34	127° 19.57	144			1	H.m	✓	T: 7.30 S: 31.02
		1848	BO				50° 50.33	127° 19.58		135					BOT 10m - SAL/CAL/NOTS
		1851	EN				50° 50.31	127° 19.53							
		1855	BE	NET		143	50° 50.28	127° 19.46	150	140					BONGO
		1915	BE	TRAWL		144	50° 49.76	127° 19.94							TRAWL @ 45m
13	QCST 5	2011	BE	TRAWL		145	50° 47.52	127° 23.05							TRAWL
13	QCST 6	2112	BE	TRAWL		146	50° 46.4	127° 17.1							TRAWL
13	QCST 7	2202	BE	TRAWL		147	50° 49.07	127° 15.94							TRAWL
13	QCST 8	2303	BE	TRAWL		148	50° 49.21	127° 08.12							TRAWL @ 0m
14	QCST 9	0027	BE	CTD		149	50° 46.14	127° 01.48	176			1		✓	T: 7.38 S: 31.22
		0030	BO				50° 46.08	127° 01.44		165					BOT 10m - SAL/CAL/NOTS
		0034	EN				50° 46.06	127° 01.46							
		0038	BE	NET		150	50° 46.06	127° 01.50		150					BONGO
		0101	BE	TRAWL		151	50° 45.44	127° 02.82							TRAWL @ 15m

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Month				Year				Ship				Cruise ID				Page 16 of	
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	QCST10	1445	BC	CTD		152	50°42.34	127°08.60	132			1	Hm	✓	T: 7.39 S: 31.27		
		1447	BO				50°42.33	127°08.59		120					BOT CION - SAL/CAL/MOTS		
		1451	CH				50°42.34	127°08.62									
		1455	BC	NET		153	50°42.35	127°08.71		120					BONGO		
		1516	BC	TRAWL		154	50°42.53	127°07.96							TRAWL @ 0m		
14	QCST11	1614	BC	TRAWL		155	50°43.2	127°01.5							TRAWL @ 15m		
14	QCST12	1743	BC	TRAWL		156	50°43.2	126°54.7							TRAWL @ 0m		
14	QCST13	1811	BC	CTD		157	50°45.18	126°50.24	168			1		✓	T: 7.39 S: 31.00		
		1814	BO				50°45.20	126°50.28		160					BOT CION - SAL/CAL/MOTS		
		1818	CH				50°45.21	126°50.30									
		1821	BC	NET		158	50°45.19	126°50.26		150					BONGO		
		1935	BC	TRAWL		159	50°44.44	126°49.44							TRAWL @ 30m		
14	QCST14	2057	BC	TRAWL		160	50°40.86	126°48.06							TRAWL @ 0m		
14	QCST15	2156	BC	TRAWL		161	50°39.7	126°49.8							TRAWL @ 15m		

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