

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

2014-17

DATE:

From: 24 JUN 2014

To: 08 JUL 2014

VESSEL:

W.E. RICKER

PROJECT(S):

SoG Juvenile Salmon

C. NEVILLE (Book 1 of 2)

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

WaterProperties.ca

A Young

Karin McKechnie

Chris Wynn

UNIVERSITY OF TORONTO LIBRARY

Les Hand

Rick Horbas

DFo / NDAA

1st Leg Scientific Personnel:

Dave Preikshot

Cabin

Chelsea Adam

Bryan Recalma

Meredith Journey

Cassandra Storey

Katarina Wild

many times

Carol Cooper

Chief Scientist:

Cabin

=====

[illegible]

.....

=====0:ASISAAAAAAAAAAAAAAASIS=====

.....

.....

[illegible]

.....

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100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0%

These pages are to be completed by the CTD Technician setting up the equipment, the Watch Leader on board, and the Chief Scientist MUST verify that all relevant sections are completed prior to leaving the vessel. Any mid-cruise changes to be noted by watch leader in the notes.

CTD deck unit make: SBE model: 11plus serial number: 04224

Make: S&E model: 9 serial number: 550

Primary temperature serial number: 2710

Primary conductivity serial number: 2128

Secondary temperature serial number: 2374

Secondary conductivity serial number: 3396

Secondary CTD

Make: _____ model: _____ serial number: _____

Primary temperature serial number: _____

Primary conductivity serial number: _____

Secondary temperature serial number: _____

Secondary conductivity serial number: _____

[illegible]

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

This also includes the bottle location above the CTD on non-rossette casts (e.g., W.E. Ricker)

The IOS cruise number for this survey is 2014-17. The Neville/PBS cruise number is 2014-1D (for all fish samples).

There is also ERB CTD data available for all sets and GoPro video for some sets. Contact Chris Neville (250-756-7185) for more information.

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Month JUNE				Year 2014			Vessel WE RICKER			Cruise ID 2014-17					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
							Latitude	Longitude							
001	Set 1	25	13:18	BE	SET		48°17.148	123°39.392	178		-			☐ ☐	TRAWL - SURFACE
			:				°	°			-			☐ ☐	
002		25	14:15	BE	CTD		48°17.537	123°46.045	170		-	—	MT	☐ ☐	
			14:18	BO			48°17.562	123°46.092		160	-			☐ ☐	
			14:22	EN			48°17.585	123°46.254			-			☐ ☐	
			:				°	°			-			☐ ☐	
003	↓	25	14:31	BE	NET		48°17.633	123°46.903	170	150	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
004	Set 2	25	14:49	BE	SET		48°18.194	123°49.813	172		-			☐ ☐	TRAWL-30m
			:				°	°			-			☐ ☐	
005	Set 3	25	15:45	BE	SET		48°20.608	123°57.974	134		-			☐ ☐	TRAWL-15m
			:				°	°			-			☐ ☐	
006	Set 4	25	16:41	BE	SET		48°22.951	124°05.625	123		-			☐ ☐	TRAWL-SURFACE
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	

CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

Event Type:

BOT = Bottle cast (no CTD)
CTD = Standalone CTD
ROS = CTD in Rosette
SET = Fish Set

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

Bottle Firing Method:

US = Up / Stop (default)
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

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RE = Recover Mooring Time

Produced by the Water Properties Group, IOS

WaterProperties.ca
Version: 14 February 2013

Notes:

Procedure: CTD in water, pump on, down to 10m & back to surface. Wait ~ 1 min. Start archiving. Send to depth

Set 1: Current running @ 3kts. Descent rate averaging 0.7m/s

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Month JUNE			Year 2014			Vessel W.E. RICKER			Cruise ID 2014-17						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
007	Set 5	25	:	BE	SET		48°25.078	124°12.477	111		-			☐ ☐	TRAWL-45m
			:				°	°			-			☐ ☐	
008		25	18:43	BE	CTD		48°26.161	124°16.244	107		-	—	MT	☐ ☐	T:10.5 S:31.54
			18:45	BO			48°26.144	124°16.250		100	-			☐ ☐	
			18:47	EN			48°26.134	124°16.246			-			☐ ☐	
			:				°	°			-			☐ ☐	
009	↓	25	18:31	BE	NET		48°26.128	124°16.307	111	100	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
010	Set 6	25	19:18	BE	SET		48°26.30	124°17.54	117		-			☐ ☐	TRAWL-SURFACE
			:				°	°			-			☐ ☐	
011	Set 7	25	20:18	BE	SET		48°27.765	124°22.699	146		-			☐ ☐	TRAWL-15m
			:				°	°			-			☐ ☐	
012	Set 8	25	21:15	BE	SET		48°29.036	124°26.795	160		-			☐ ☐	TRAWL-30m
			:				°	°			-			☐ ☐	
013	Set 9	25	22:06	BE	SET		48°29.673	124°30.050	177		-			☐ ☐	TRAWL-SURFACE
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	

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 =

Bottle Firing Method:

US = Up / Stop (default)
 UN = Up / No stop
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Notes:

Time Code:

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Set 5: To avoid conflict with lunch time, bongo completed first then CTS. Consecutive numbers not changed.

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Month <u>JUNE</u>			Year <u>2014</u>			Vessel <u>WE RICKER</u>			Cruise ID <u>2014-17</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
014	Set 10	25	22:56	BE	SET		48°30.525	124°33.918	187		-			☐ ☐	TRAWL - 15m
			:				°	°			-			☐ ☐	
015		25	23:46	BE	CTD		48°30.781	124°37.007	200		-	-	MT	☐ ☐	
			23:50	BO			48°30.805	124°37.007		190	-			☐ ☐	
			23:55	EN			48°30.800	124°36.962			-			☐ ☐	
			:				°	°			-			☐ ☐	
016	✓	26	00:03	BE	NET		48°30.794	124°36.907	200	150	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
= END OF DAY			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
017	Set 11	26	13:50	BE	SET		48°38.697	123°30.315	198		-			☐ ☐	TRAWL-SURFACE
			:				°	°			-			☐ ☐	
018		26	14:33	BE	CTD		48°41.135	123°30.544	74		-			☐ ☒	T:13.0 S:29.0
			14:34	BO			48°41.130	123°30.553		65	-			☐ ☐	
			14:36	EN			48°41.128	123°30.560			-			☐ ☐	
			:				°	°			-			☐ ☐	
019	✓	26	14:42	BE	NET		48°41.131	123°30.574	65	55	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	

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Bottle Firing Method:

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 UN = Up / No stop
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Notes:

Time Code:

BE = Beginning Time of Cast
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CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

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Month JUNE				Year 2014				Vessel WE RICKER				Cruise ID 2014-17			
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
020	Set 12	26	15:20	BE	SET		48°43.158	123°26.429	64		-			☐ ☐	TRAWL-SURFACE
			:				.	.			-			☐ ☐	
021	Set 13	26	17:06	BE	SET		48°44.865	123°36.131	57		-			☐ ☐	TRAWL-15m
			:				.	.			-			☐ ☐	
022		26	19:16	BE	CTD		48°44.506	123°34.700	59		-	—	MT	☐ ☐	T:12.1 S:29.05
			19:18	BO			48°44.507	123°34.693		49	-			☐ ☐	
			19:19	EN			48°44.504	123°34.685			-			☐ ☐	
			:				.	.			-			☐ ☐	
023	↓	26	19:24	BE	NET		48°44.494	123°34.682	59	50	-			☐ ☐	BONGO
			:				.	.			-			☐ ☐	
024	Set 14	26	20:36	BE	SET		48°43.767	123°25.257	59		-			☐ ☐	TRAWL-30m
			:				.	.			-			☐ ☐	
025	Set 15	26	21:44	BE	SET		48°46.086	123°19.736	99		-			☐ ☐	TRAWL-15m
			:				.	.			-			☐ ☐	
026	Set 16	26	23:22	BE	SET		48°45.880	123°12.034	93		-			☐ ☐	TRAWL-SURFACE
027		27	00:34	BE	CTD		48°45.324	123°10.056	121		-	—	MT	☐ ☐	T:11.8 S:27.2
			00:37	BO			48°45.316	123°10.034		110	-			☐ ☐	
			00:39	EN			48°45.299	123°10.008			-			☐ ☐	
028	↓		00:46	BE	NET		48°45.244	123°09.932	121	115	-			☐ ☐	BONGO

Event Type:

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Bottle Firing Method:

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CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

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END
OF
DAY

Notes:

Set 13: CTD/Bongo did not take place immediately after trawl, due to operational requirements.

Set 16: CTD /Bongo took place after dinner.

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Month <u>JUNE</u>				Year <u>2014</u>		Vessel <u>WE RICKER</u>				Cruise ID <u>2014-17</u>					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
029	Set 17	27	13:13	BE	SET		48°48.510	123°02.934	101		-			☐ ☐	TRAWL-SURFACE
			:				.	.			-			☐ ☐	
030		27	14:03	BE	CTD		48°49.031	123°06.181	167		-	—	MT	☐ ☒	T:14.6 S:19.4
			14:07	BO			48°49.045	123°06.079		160	-			☐ ☐	
			14:10	EN			48°49.049	123°06.063			-			☐ ☐	
			:				.	.			-			☐ ☐	
031	✓	27	14:17	BE	NET		48°49.019	123°05.720	176	150	-			☐ ☐	BONGO
			:				.	.			-			☐ ☐	
032	Set 18	27	15:10	BE	SET		48°49.561	123°04.176	195		-			☐ ☐	TRAWL-30m
			:				.	.			-			☐ ☐	
033	Set 19	27	16:03	BE	SET		48°49.548	123°07.895	163		-			☐ ☐	TRAWL-SURFACE
			:				.	.			-			☐ ☐	
034	Set 20	27	16:57	BE	SET		48°51.363	123°13.051	124		-			☐ ☐	TRAWL-30m
			:				.	.			-			☐ ☐	
035	Set 21	27	17:51	BE	SET		48°53.128	123°14.256	197		-			☐ ☐	TRAWL-SURFACE
			:				.	.			-			☐ ☐	
			:				.	.			-			☐ ☐	
			:				.	.			-			☐ ☐	
			:				.	.			-			☐ ☐	

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 DRF = Drifter
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Bottle Firing Method:
 US = Up / Stop (default)
 UN = Up / No stop
 DN = Down / No stop
 Notes:

Time Code:
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 DE = Deployment Time
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CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

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Set 18: First attempt at this station was aborted after 7min. due to killer whales.

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Month <u>JUNE</u>			Year <u>2014</u>			Vessel <u>WE RICKER</u>			Cruise ID <u>2014-17</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
036	Set 22	27	19:11	BE	SET		48°52.017	123°07.671	137		-			☐ ☐	TRAWL-15m
			:				.	.			-			☐ ☐	
037		27	20:02	BE	CTD		48°54.023	123°10.182	125		-	—	MT	☐ ☐	T:16.3 S:14.3
			20:03	BO			48°54.049	123°10.139		115	-			☐ ☐	
			20:06	EN			48°54.074	123°10.109			-			☐ ☐	
			:				.	.			-			☐ ☐	
038	↓	27	20:16	BE	NET		48°54.107	123°10.055	125	115	-			☐ ☐	BONGO
			:				.	.			-			☐ ☐	
039	Set 23	27	21:03	BE	SET		48°54.817	123°19.555	156		-			☐ ☐	TRAWL-SURFACE
			:				.	.			-			☐ ☐	
040	Set 24	27	21:54	BE	SET		48°56.991	123°25.494	131		-			☐ ☐	TRAWL-15m
			:				.	.			-			☐ ☐	
041	Set 25	27	22:43	BE	SET		48°58.966	123°28.635	165		-			☐ ☐	TRAWL-45m
			:				.	.			-			☐ ☐	
042	Set 26	27	23:33	BE	SET		49°03.833	123°26.597	325		-			☐ ☐	TRAWL-SURFACE
043		28	00:49	BE	CTD		49°04.069	123°27.485	321		-	—	MT	☐ ☐	T:15.3 S:20.4
			00:54	BO			49°04.056	123°27.505		250	-			☐ ☐	
			01:00	EN			49°04.046	123°27.534			-			☐ ☐	
044	↓	28	01:08	BE	NET		49°04.042	123°27.556	323	150	-			☐ ☐	BONGO

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Bottle Firing Method:

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Notes:

Time Code:

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END OF DAY

This page is for any notes or observations

Set 26. CTD/ Bongo took place after dinner

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Month <u>JUNE</u>			Year <u>2014</u>			Vessel <u>WE RICKER</u>			Cruise ID <u>2014-17</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
045	Set 27	28	13:12	BE	SET		49° 01.278	123° 14.610	90		-			☐ ☐	TRAWL - SURFACE
			:				° .	° .			-			☐ ☐	
046		28	14:02	BE	CTD		49° 03.218	123° 17.795	86		-	-	MT	☐ ☐	T:15.9 S:12.9
			14:03	BO			49° 03.210	123° 17.774		75	-			☐ ☐	
			14:04	EN			49° 03.202	123° 17.760			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
047	✓	28	14:09	BE	NET		49° 03.200	123° 17.743	83	73	-			☐ ☐	BONGO
			:				° .	° .			-			☐ ☐	
048	Set 28	28	14:45	BE	SET		49° 07.293	123° 19.941	112		-			☐ ☐	TRAWL - SURFACE
			:				° .	° .			-			☐ ☐	
049	Set 29	28	15:46	BE	SET		49° 11.941	123° 18.814	123		-			☐ ☐	TRAWL - 30m
			:				° .	° .			-			☐ ☐	
050	Set 30	28	17:01	BE	SET		49° 16.439	123° 18.313	79		-			☐ ☐	TRAWL - 15m
			:				° .	° .			-			☐ ☐	
051	Set 31	28	17:55	BE	SET		49° 17.447	123° 21.669	233		-			☐ ☐	TRAWL - SURFACE
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	

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Month JUNE			Year 2014			Vessel WE RICKER			Cruise ID 2014-17						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
052	Set 32	28	19:15	BE	SET		Latitude	Longitude							
			:												TRAWL-15m
053		28	20:04	BE	CTD										
			20:10	BO									MT		T:15.6 S:11.0
			20:15	EN						250					
			:												
054	↓	28	20:22	BE	NET										
			:							150					BONGO
055	Set 33	28	20:38	BE	SET										
			:												TRAWL-45m
056	Set 34	28	21:33	BE	SET										
			:												TRAWL-SURFACE
057		28	23:42	BE	CTD										
			23:47	BO						250					T:16.6 S:14.9
			23:52	EN											
			:												
058	↓	29	00:00	BE	NET										
			:							150					BONGO
059	Set 35	29	00:51	BE	SET										
															TRAWL-SURFACE

Event Type:

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MOR = Mooring
NET = Plankton Net Haul
DRF = Drifter

Bottle Firing Method:

US = Up / Stop (default)
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

CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

Notes:

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END
OF
DAY

Set 34: Strong current — trawl was aborted due to net problems (door caught in current).
CTD/Bongo was completed after repairs were made to 3rd wire (severed by door during trawl)

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Month <u>JUNE</u>			Year <u>2014</u>			Vessel <u>WE RICKER</u>			Cruise ID <u>2014-17</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
060	Set 36	29	13:11	BE	SET		49°24.283	123°18.205	237		-			☐ ☐	TRAWL-SURFACE
			:				.	.			-			☐ ☐	
061	Set 37	29	13:48	BE	SET		49°26.785	123°17.461	239		-			☐ ☐	TRAWL-15m
062	↓	29	14:34	BE	CTD		49°28.864	123°16.218	243		-	—	MT	☐ ☒	T:17.8 S:12.2
			14:39	BO			49°28.826	123°16.206		235	-			☐ ☐	
			14:43	EN			49°28.786	123°16.204			-			☐ ☐	
063	↓	29	14:49	BE	NET		49°28.722	123°16.201	244	150	-			☐ ☐	BONGO
			:				.	.			-			☐ ☐	
064	Set 38	29	15:18	BE	SET		49°26.231	123°19.266	225		-			☐ ☐	TRAWL-30m
			:				.	.			-			☐ ☐	
065	Set 39	29	16:12	BE	SET		49°24.684	123°23.997	226		-			☐ ☐	TRAWL-SURFACE
			:				.	.			-			☐ ☐	
066	Set 40	29	17:21	BE	SET		49°18.639	123°26.672	165		-			☐ ☐	TRAWL-45m
067	↓	29	18:08	BE	CTD		49°16.451	123°27.982	200→203		-	—	MT	☐ ☐	T:15.3 S:14.4
			18:11	BO			49°16.435	123°27.948		193	-			☐ ☐	
			18:15	EN			49°16.417	123°27.926			-			☐ ☐	
068	↓	29	18:22	BE	NET		49°16.402	123°27.885	200	150	-			☐ ☐	BONGO
			:				.	.			-			☐ ☐	
069	Set 41	29	19:12	BE	SET		49°15.000	123°28.528	303		-			☐ ☐	TRAWL-SURFACE

Event Type:
 BOT = Bottle cast (no CTD)
 CTD = Standalone CTD
 ROS = CTD in Rosette
 SET = Fish Set
 LOOP = Sea Water Loop
 MOR = Mooring
 NET = Plankton Net Haul
 DRF = Drifter
 — = —

Bottle Firing Method:
 US = Up / Stop (default)
 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

CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products
 DE = Deployment Time
 MR = Messenger Release Time
 RE = Recover Mooring Time

Notes: _____

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Month JUNE				Year 2014			Vessel W.E. RICKER				Cruise ID 2014-17				
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
070	Set 42	29	20:03	BE	SET		49°11.828	123°31.219	348		-			☐ ☐	TRAWL - 15m
			:				°	°			-			☐ ☐	
071	Set 43	29	20:56	BE	SET		49°08.370	123°33.599	296		-			☐ ☐	TRAWL - SURFACE
			:				°	°			-			☐ ☐	
072	Set 44	29	21:58	BE	SET		49°04.678	123°34.240	227		-			☐ ☐	TRAWL - 30m
			:				°	°			-			☐ ☐	
073	Set 45	29	22:56	BE	SET		49°00.782	123°31.516	192		-			☐ ☐	TRAWL - 15m
074		29	23:44	BE	CTD		48°58.312	123°29.376	77		-	—	MT	☐ ☐	
			23:46	BO			48°58.292	123°29.340		65	-			☐ ☐	
			23:49	EN			48°58.270	123°29.315			-			☐ ☐	
075	↓	29	23:54	BE	NET		48°58.245	123°29.278	71	61	-			☐ ☐	BONGO
= END OF DAY			:				°	°			-			☐ ☐	
076	Set 46	30	13:09	BE	SET		49°19.617	123°27.710	216		-			☐ ☐	TRAWL - SURFACE
077		30	13:57	BE	CTD		49°20.902	123°31.289	190		-	—	MT	☐ ☒	T:15.2 S:9.3
			14:01	BO			49°20.903	123°31.301		180	-			☐ ☐	
			14:04	EN			49°20.910	123°31.316			-			☐ ☐	
078	↓	30	14:12	BE	NET		49°20.911	123°31.315	190	150	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
079	Set 47	30	14:30	BE	SET		49°21.660	123°33.358	187		-			☐ ☐	TRAWL - 30m

Event Type:

BOT = Bottle cast (no CTD)
CTD = Standalone CTD
ROS = CTD in Rosette
SET = Fish Set

LOOP = Sea Water Loop

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

Bottle Firing Method:

US = Up / Stop (default)
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

CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

DE = Deployment Time
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RE = Recover Mooring Time

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Set 45: CTD held at depth (65m) for ~ 30 sec. Some difficulty maintaining ship's position

The IOS Cruise number for this survey is 2014-7. The Neville/PBS cruise number is 2014-10 (for all fish samples).

There is also RBR CTD data available for all sets and GoPro video for select sets. Contact Chrys Neville (250-756-7185) for more information.

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Month <u>JUNE</u>			Year <u>2014</u>			Vessel <u>W.E. RICKER</u>			Cruise ID <u>2014-17</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
080	Set 48	30	15:27	BE	SET		49° 22.985	123° 39.238	171		-			☐ ☐	TRAWL-SURFACE
			:				° .	° .			-			☐ ☐	
081	Set 49	30	16:22	BE	SET		49° 18.918	123° 40.304	168		-			☐ ☐	TRAWL-45m
			:				° .	° .			-			☐ ☐	
082	Set 50	30	17:19	BE	SET		49° 15.245	123° 40.391	387		-			☐ ☐	TRAWL-15m
083	↓	30	18:05	BE	CTD		49° 12.701	123° 40.330	388		-	-	MT	☐ ☐	r: 13.0 S: 26.6
			18:09	BO			49° 12.714	123° 40.316		250	-			☐ ☐	
			18:14	EN			49° 12.744	123° 40.297			-			☐ ☐	
084	↓	30	:	BE	NET		49° 12.798	123° 40.275	385	150	-			☐ ☐	BONGO
			:				° .	° .			-			☐ ☐	
085	Set 51	30	19:01	BE	SET		49° 11.242	123° 41.325	213		-			☐ ☐	TRAWL-15m
			:				° .	° .			-			☐ ☐	
086	Set 52	30	19:57	BE	SET		49° 13.250	123° 46.339	198		-			☐ ☐	TRAWL-SURFACE
			:				° .	° .			-			☐ ☐	
087	Set 53	30	21:02	BE	SET		49° 16.686	123° 50.615	408		-			☐ ☐	TRAWL-30m
			:				° .	° .			-			☐ ☐	
088	Set 54	30	22:11	BE	SET		49° 22.918	123° 47.087	188		-			☐ ☐	TRAWL-15m
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	

Event Type:

BOT = Bottle cast (no CTD)
 CTD = Standalone CTD
 ROS = CTD in Rosette
 SET = Fish Set

LOOP = Sea Water Loop

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

Bottle Firing Method:

US = Up / Stop (default)
 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

CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

DE = Deployment Time
 MR = Messenger Release Time
 RE = Recover Mooring Time

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Month <u>JUNE/JULY</u>				Year <u>2014</u>		Vessel <u>W.E. RICKER</u>				Cruise ID <u>2014-17</u>					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
089	Set 55	30	22:53		SET		49°25.930	123°46.581	175		-			☐ ☐	TRAWL-SURFACE
090		30	23:42		CTD		49°25.915	123°51.463	209		-	-	MT	☐ ☐	T:17.6 S:16.7
			23:46				49°25.876	123°51.540		200	-			☐ ☐	
			23:50				49°25.837	123°51.617			-			☐ ☐	
091	↓	30	23:58		NET		49°25.777	123°51.711	211	150	-			☐ ☐	BONGO
=END OF DAY			:				.	.			-			☐ ☐	
092	Set 56	01	13:06	BE	SET		49°20.835	123°50.218	395		-			☐ ☐	TRAWL-SURFACE
093		01	13:54	BE	CTD		49°20.840	123°54.538	378		-			☒ ☐	T:16.5 S:14.2
			13:58	BO			49°20.808	123°54.577		250	-			☐ ☐	
			14:03	EN			49°20.794	123°54.600			-			☐ ☐	
094	↓	01	14:09	BE	NET		49°20.782	123°54.598	373	150	-			☐ ☐	BONGO
			:				.	.			-			☐ ☐	
095	Set 57	01	16:01	BE	SET		49°23.038	123°55.390	431		-			☐ ☐	TRAWL-30m
			:				.	.			-			☐ ☐	
096	Set 58	01	17:19	BE	SET		49°26.492	123°53.176	220		-			☐ ☐	TRAWL-15m
			:				.	.			-			☐ ☐	
097	Set 59	01	18:24	BE	SET		49°27.218	123°58.432	209		-			☐ ☐	TRAWL-SURFACE
	CONT		:				.	.			-			☐ ☐	
	↓		:				.	.			-			☐ ☐	

Event Type:

BOT = Bottle cast (no CTD)
 CTD = Standalone CTD
 ROS = CTD in Rosette
 SET = Fish Set

LOOP = Sea Water Loop

MOR = Mooring
 NET = Plankton Net Haul
 DRF = Drifter

Bottle Firing Method:

US = Up / Stop (default)
 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

CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

DE = Deployment Time
 MR = Messenger Release Time
 RE = Recover Mooring Time

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Set 56: Set name originally saved as Set 53 in .hdr and .hex file. Changed afterwards (Note time/date stamp on those 2 files is much later than .XMLCON file)

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Month JULY			Year 2014			Vessel WERICKER			Cruise ID 2014-17						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
098	Set 59	01	19:14	BE	CTD		49°28.362	124°02.122	161		-	—	MT	☐ ☐	T:17.9 S:19.0
			19:17	BO			49°28.367	124°02.120		150	-			☐ ☐	
			19:20	EN			49°28.360	124°02.119			-			☐ ☐	
099	↓	01	19:28	BE	NET		49°28.346	124°02.113	160	150	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
100	Set 60	01	19:45	BE	SET		49°28.174	124°02.941	275		-			☐ ☐	TRAWL-15m
			:				°	°			-			☐ ☐	
101	Set 61	01	20:40	BE	SET		49°24.655	124°07.436	230		-			☐ ☐	TRAWL-SURFACE
			:				°	°			-			☐ ☐	
102	Set 62	01	21:35	BE	SET		49°21.683	124°11.728	298		-			☐ ☐	TRAWL-30m
			:				°	°			-			☐ ☐	
103	Set 63	01	22:27	BE	SET		49°21.439	124°14.985	280		-			☐ ☐	TRAWL-SURFACE
104		01	23:17	BE	CTD		49°24.154	124°16.324	336		-	—	MT	☐ ☐	T:18.0 S:19.4
			23:23	BO			49°24.127	124°16.267		250	-			☐ ☐	
			23:28	EN			49°24.097	124°16.219			-			☐ ☐	
105	↓	01	23:36	BE	NET		49°24.072	124°16.145	340	150	-			☐ ☐	BONGO
=END OF DAY			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	

Event Type:

BOT = Bottle cast (no CTD)
 CTD = Standalone CTD
 ROS = CTD in Rosette
 SET = Fish Set

LOOP = Sea Water Loop

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

Bottle Firing Method:

US = Up / Stop (default)
 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

CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

DE = Deployment Time
 MR = Messenger Release Time
 RE = Recover Mooring Time

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Month <u>JULY</u>			Year <u>2014</u>			Vessel <u>WE RICKER</u>			Cruise ID <u>2014-17</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
							Latitude	Longitude							
106	Set 64	02	13:11	BE	SET		49°25.421	124°15.067	238		-			☐ ☐	TRAWL-SURFACE
			:				.	.			-			☐ ☐	
107	Set 65	02	14:06	BE	SET		49°24.476	124°21.265	323		-			☐ ☐	TRAWL-15m
108	↓	02	14:56	BE	CTD		49°23.736	124°24.984	194		-	-	MT	☐ ☒	T:18.4 S:18.4
			14:59	BO			49°23.750	124°25.033		185	-			☐ ☐	
			15:03	EN			49°23.736	124°25.063			-			☐ ☐	
109	↓	02	15:08	BE	NET		49°23.741	124°25.123	192	150	-			☐ ☐	BONGO
			:				.	.			-			☐ ☐	
110	Set 66	02	15:30	BE	SET		49°24.339	124°27.998	200		-			☐ ☐	TRAWL-45m
			:				.	.			-			☐ ☐	
111	Set 67	02	16:17	BE	SET		49°26.107	124°33.454	134		-			☐ ☐	TRAWL-SURFACE
			:				.	.			-			☐ ☐	
112	Set 68	02	17:16	BE	SET		49°28.358	124°38.846	136		-			☐ ☐	TRAWL-15m
			:				.	.			-			☐ ☐	
113	Set 69	02	18:11	BE	SET		49°29.285	124°33.529	148		-			☐ ☐	TRAWL-30m
114	↓	02	19:01	BE	CTD		49°30.302	124°29.843	174		-	-	MT	☐ ☐	T:15.3 S:26.3
			19:05	BO			49°30.263	124°29.831		165	-			☐ ☐	
			19:08	EN			49°30.221	124°29.822			-			☐ ☐	
115	↓	02	19:16	BE	NET		49°30.203	124°29.784	166	150	-			☐ ☐	BONGO

Event Type:

BOT = Bottle cast (no CTD)
 CTD = Standalone CTD
 ROS = CTD in Rosette
 SET = Fish Set

LOOP = Sea Water Loop

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

Bottle Firing Method:

US = Up / Stop (default)
 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

CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

DE = Deployment Time
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 RE = Recover Mooring Time

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This page is for any notes or observations

Set 69: Strong wind, white caps, low swell

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Month JULY				Year 2014		Vessel WERICKER			Cruise ID 2014-17						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
116	Set 70	02	19:32	BE	SET		49°31.051	124°29.253	147		-			☐ ☐	TRAWL-SURFACE
			:				°	°			-			☐ ☐	
117	Set 71	02	20:31	BE	SET		49°36.170	124°27.681	274		-			☐ ☐	TRAWL-30m
			:				°	°			-			☐ ☐	
118	Set 72	02	21:34	BE	SET		49°40.044	124°33.065	251		-			☐ ☐	TRAWL-SURFACE
			:				°	°			-			☐ ☐	
119	Set 73	02	22:36	BE	SET		49°42.105	124°38.886	335		-			☐ ☐	TRAWL-15m
120		02	23:27	BE	CTD		49°39.916	124°40.440	164		-	—	MT	☐ ☐	T:17.7 S:23.0
			23:30	BO			49°39.919	124°40.406		155	-			☐ ☐	
			23:33	EN			49°39.924	124°40.363			-			☐ ☐	
121	↓	02	23:40	BE	NET		49°39.927	124°40.338	163	150	-			☐ ☐	BONGO
= END OF DAY			:				°	°			-			☐ ☐	
122	Set 74	03	13:10	BE	SET		49°38.462	124°40.649	104		-			☐ ☐	TRAWL-SURFACE
			:				°	°			-			☐ ☐	
123	Set 75	03	14:05	BE	SET		49°36.698	124°45.458	72		-			☐ ☐	TRAWL-30m
124		03	14:50	BE	CTD		49°38.572	124°46.856	53		-	—	MT	☐ ☐	T:15.9 S:26.1
			14:51	BO			49°38.573	124°46.859		45	-			☐ ☐	
			14:52	EN			49°38.574	124°46.862			-			☐ ☐	
125	↓	03	14:56	BE	NET		49°38.563	124°46.895	52	42	-			☐ ☐	BONGO

Event Type:

BOT = Bottle cast (no CTD)
 CTD = Standalone CTD
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 SET = Fish Set

LOOP = Sea Water Loop

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 DRF = Drifter
 — =

Bottle Firing Method:

US = Up / Stop (default)
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Time Code:

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CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

DE = Deployment Time
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Notes:

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Month <u>JULY</u>				Year <u>2014</u>			Vessel <u>WE RICKER</u>				Cruise ID <u>2014-17</u>				
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
							Latitude	Longitude							
126	Set 76	03	15:09	BE	SET		49°39.462	124°47.329	81		-			☐ ☐	TRAWL-15m
			:				°	°			-			☐ ☐	
127	Set 77	03	16:08	BE	SET		49°43.212	124°46.808	220		-			☐ ☐	TRAWL-SURFACE
			:				°	°			-			☐ ☐	
128	Set 78	03	17:08	BE	SET		49°45.126	124°43.067	354		-			☐ ☐	TRAWL-45m
			:				°	°			-			☐ ☐	
129	Set 79	03	18:12	BE	SET		49°48.585	124°42.886	173		-			☐ ☐	TRAWL-SURFACE
130	↓	03	19:03	BE	CTD		49°50.266	124°46.334	183		-	—	MT	☐ ☐	T:16.2 S:25.4
			19:06	BO			49°50.239	124°46.315		175	-			☐ ☐	
			19:10	EN			49°50.215	124°46.286			-			☐ ☐	
131	↓	03	19:17	BE	NET		49°50.212	124°46.272	187	150	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
132	Set 80	03	19:33	BE	SET		49°49.484	124°46.540	199		-			☐ ☐	TRAWL-15m
			:				°	°			-			☐ ☐	
133	Set 81	03	20:33	BE	SET		49°45.627	124°47.456	318		-			☐ ☐	TRAWL-SURFACE
			:				°	°			-			☐ ☐	
134	Set 82	03	21:34	BE	SET		49°45.884	124°54.188	62		-			☐ ☐	TRAWL-30m
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	

Event Type:

BOT = Bottle cast (no CTD)
CTD = Standalone CTD
ROS = CTD in Rosette
SET = Fish Set

LOOP = Sea Water Loop

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

Bottle Firing Method:

US = Up / Stop (default)
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

CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

DE = Deployment Time
MR = Messenger Release Time
RE = Recover Mooring Time

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Month JULY				Year 2014			Vessel WE RICKER			Cruise ID 2014-17					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
135	Set 83	03	22:33	BE	SET		49°48.848	124°58.546	83		-			☐ ☐	TRAWL-15m
136		03	23:23	BE	CTD		49°50.600	125°00.792	93		-	—	MT	☐ ☐	T: 16.0 S: 25.3
			23:25	BO			49°50.605	125°00.762		90	-			☐ ☐	
			23:27	EN			49°50.609	125°00.731			-			☐ ☐	
137	↓	03	23:32	BE	NET		49°50.634	125°00.712	105	95	-			☐ ☐	BONGO
END OF DAY			:				°	°			-			☐ ☐	
138	Set 84	04	13:10	BE	SET		49°48.955	124°33.884	217		-			☐ ☐	TRAWL-SURFACE
139		04	13:56	BE	CTD		49°46.339	124°32.674	289		-	—	MT	☐ ☒	T: 17.9 S: 22.3
			14:00	BO			49°46.334	124°32.657		250	-			☐ ☐	
			14:05	EN			49°46.344	124°32.650			-			☐ ☐	
140	↓	04	14:11	BE	NET		49°46.357	124°32.628	292	150	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
141	Set 85	04	14:27	BE	SET		49°46.013	124°31.557	292		-			☐ ☐	TRAWL-30m
			:				°	°			-			☐ ☐	
142	Set 86	04	15:31	BE	SET		49°45.296	124°23.809	224		-			☐ ☐	TRAWL-SURFACE
			:				°	°			-			☐ ☐	
143	Set 87	04	16:28	BE	SET		49°44.519	124°19.502	141		-			☐ ☐	TRAWL-15m
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	

Event Type:

BOT = Bottle cast (no CTD)
 CTD = Standalone CTD
 ROS = CTD in Rosette
 SET = Fish Set

LOOP = Sea Water Loop

MOR = Mooring
 NET = Plankton Net Haul
 DRF = Drifter

Bottle Firing Method:

US = Up / Stop (default)
 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

CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

DE = Deployment Time
 MR = Messenger Release Time
 RE = Recover Mooring Time

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Set 83: Surface temp highly variable.

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Month JULY				Year 2014			Vessel WE RICKER			Cruise ID 2014-17					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
144	Set 88	04	17:22	BE	SET		49°42.333	124°19.909	311		-			☐ ☐	TRAWL-60m
145		04	18:10	BE	CTD		49°41.598	124°17.760	175		-	-	MT	☐ ☐	T:18.5 S:19.2
			18:13	BO			49°41.594	124°17.747		165	-			☐ ☐	
			18:16	EN			49°41.612	124°17.747			-			☐ ☐	
146	↓	04	18:23	BE	NET		49°41.639	124°17.753	180	150	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
147	Set 89	04	19:15	BE	SET		49°45.173	124°14.246	346		-			☐ ☐	TRAWL-SURFACE
			:				°	°			-			☐ ☐	
148	Set 90	04	20:09	BE	SET		49°41.226	124°15.674	152		-			☐ ☐	TRAWL-15m
			:				°	°			-			☐ ☐	
149	Set 91	04	20:59	BE	SET		49°38.565	124°13.285	359		-			☐ ☐	TRAWL-45m
			:				°	°			-			☐ ☐	
150	Set 92	04	21:50	BE	SET		49°36.417	124°12.720	316		-			☐ ☐	TRAWL-15m
			:				°	°			-			☐ ☐	
151	Set 93	04	22:44	BE	SET		49°35.905	124°07.368	266		-			☐ ☐	TRAWL-SURFACE
			:				°	°			-			☐ ☐	
152	Set 94	04	23:23	BE	SET		49°33.513	124°05.418	285		-			☐ ☐	TRAWL-30m
			:				°	°			-			☐ ☐	
END OF DAY			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	

Event Type:

BOT = Bottle cast (no CTD)
CTD = Standalone CTD
ROS = CTD in Rosette
SET = Fish Set

LOOP = Sea Water Loop

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

Bottle Firing Method:

US = Up / Stop (default)
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

CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

DE = Deployment Time
MR = Messenger Release Time
RE = Recover Mooring Time

Produced by the Water Properties Group, IOS

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Month JULY				Year 2014			Vessel W E RICKER			Cruise ID 2014-17					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
153	Set 95	05	13:13	BE	SET		50°26.621	126°02.446	73		-			☐ ☐	TRAWL-SURFACE
			:				°	°			-			☐ ☐	
154	Set 96	05	13:52	BE	SET		50°28.174	126°04.407	261		-			☐ ☐	TRAWL-SURFACE
155	↓	05	14:21	BE	CTD		50°28.060	126°06.732	311		-	—	MT	☐ ☒	T:9.5 S:30.7
			14:26	BO			50°28.057	126°06.786		250	-			☐ ☐	
			14:31	EN			50°28.039	126°06.775			-			☐ ☐	
156	↓	05	14:38	BE	NET		50°28.002	126°06.841	312	150	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
157	Set 97	05	16:37	BE	SET		50°22.218	125°43.244	184		-			☐ ☐	TRAWL-SURFACE
158	↓	05	17:05	BE	CTD		50°22.328	125°41.448	210		-	—	MT	☐ ☐	T:10.4 S:29.7
			17:09	BO			50°22.328	125°41.412		200	-			☐ ☐	
			17:13	EN			50°22.337	125°41.345			-			☐ ☐	
159	↓	05	17:20	BE	NET		50°22.328	125°41.318	221	150	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
160	Set 98	05	18:54	BE	SET		50°20.365	125°28.200	301		-			☐ ☐	TRAWL-SURFACE
			:				°	°			-			☐ ☐	
161	Set 99	05	20:23	BE	SET		50°26.373	125°18.567	321		-			☐ ☐	TRAWL-SURFACE
	↓ ⊗ CONT'D		:				°	°			-			☐ ☐	
	↓		:				°	°			-			☐ ☐	

Event Type:

BOT = Bottle cast (no CTD)
CTD = Standalone CTD
ROS = CTD in Rosette
SET = Fish Set

LOOP = Sea Water Loop

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

Bottle Firing Method:

US = Up / Stop (default)
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

CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

Notes:

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Set 96 Salinity spike @ ~160m on downcast.

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Month JULY			Year 2014			Vessel WE. RICKER			Cruise ID 2014-17						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
162	Set 99	05	20:52	BE	CTD		50°25.220	125°18.852	297		-	—	MT	☐ ☐	T: 10.4 S: 29.0
			20:57	BO			50°25.262	125°18.841		250	-			☐ ☐	
			21:02	EN			50°25.292	125°18.805			-			☐ ☐	
163	↓	05	21:08	BE	NET		50°25.318	125°18.791	297	150	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
164	Set 100	05	21:24	BE	SET		50°24.873	125°19.427	286		-			☐ ☐	TRAWL-SURFACE
			:				°	°			-			☐ ☐	
165	Set 101	05	23:17	BE	SET		50°18.412	125°17.823	115		-			☐ ☐	TRAWL-SURFACE
166		05	23:46	BE	CTD		50°18.157	125°19.760	77		-	—	MT	☐ ☐	T: 11.5 S: 28.6
			23:47	BO			50°18.161	125°19.734		67	-			☐ ☐	
			23:49	EN			50°18.164	125°19.720			-			☐ ☐	
167	↓	05	23:53	BE	NET		50°18.167	125°19.677	78	68	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
168	Set 102	06	00:43	BE	SET		50°16.618	125°23.769	227		-			☐ ☐	TRAWL-SURFACE
END OF DAY			:				°	°			-			☐ ☐	
169	Set 103	06	13:12	BE	SET		50°22.740	125°04.360	510		-			☐ ☐	TRAWL-SURFACE
170		06	13:49	BE	CTD		50°21.016	125°06.696	622		-	—	MT	☐ ☒	T: 16.8 S: 20.1
	CONT'D		13:54	BO			50°21.017	125°06.644		250	-			☐ ☐	
	↓		13:59	EN			50°21.034	125°06.583			-			☐ ☐	

Event Type:

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 CTD = Standalone CTD
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 SET = Fish Set

LOOP = Sea Water Loop

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

Bottle Firing Method:

US = Up / Stop (default)
 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

CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

DE = Deployment Time
 MR = Messenger Release Time
 RE = Recover Mooring Time

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Month <u>JULY</u>			Year <u>2014</u>			Vessel <u>WE RICKER</u>			Cruise ID <u>2014-17</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
171	Set 103	06	14:05	BE	NET		50°21.026	125°06.593	622	150	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
172	Set 104	06	14:24	BE	SET		50°19.637	125°05.791	347		-			☐ ☐	TRAWL-15m
			:				°	°			-			☐ ☐	
173	Set 105	06	15:07	BE	SET		50°18.709	125°02.530	271		-			☐ ☐	TRAWL-SURFACE
			:				°	°			-			☐ ☐	
174	Set 106	06	15:55	BE	SET		50°19.854	124°59.043	289		-			☐ ☐	TRAWL-30m
175	↓	06	16:34	BE	CTD		50°18.877	124°57.071	509		-	-	MT	☐ ☐	T:17.0 S:17.9
			16:39	BO			50°18.895	124°57.107		250	-			☐ ☐	
			16:44	EN			50°18.918	124°57.114			-			☐ ☐	
176	↓	06	16:50	BE	NET		50°18.904	124°57.127	506	150	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
177	Set 107	06	17:10	BE	SET		50°17.588	124°57.453	510		-			☐ ☐	TRAWL-15m
			:				°	°			-			☐ ☐	
178	Set 108	06	17:54	BE	SET		50°16.164	125°00.859	404		-			☐ ☐	TRAWL-SURFACE
			:				°	°			-			☐ ☐	
179	Set 109	06	19:08	BE	SET		50°18.298	125°04.137	319		-			☐ ☐	TRAWL-30m
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	

Event Type:

BOT = Bottle cast (no CTD)
 CTD = Standalone CTD
 ROS = CTD in Rosette
 SET = Fish Set

LOOP = Sea Water Loop

MOR = Mooring
 NET = Plankton Net Haul
 DRF = Drifter

Bottle Firing Method:

US = Up / Stop (default)
 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

CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

DE = Deployment Time
 MR = Messenger Release Time
 RE = Recover Mooring Time

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Month JULY				Year 2014			Vessel WERICKER			Cruise ID 2014-17					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
180	Set 110	06	19:53	BE	SET		50°15.365	125°00.764	445		-			☐ ☐	TRAWL - SURFACE
181	↓	06	20:40	BE	CTD		50°13.576	125°01.584	484		-	—	MT	☐ ☐	T:17.3 S:22.9
			20:45	BO			50°13.621	125°01.570		250	-			☐ ☐	
			20:49	EN			50°13.661	125°01.562			-			☐ ☐	
182	↓	06	20:56	BE	NET		50°13.730	125°01.539	487	150	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
183	Set 111	06	21:26	BE	SET		50°11.291	124°59.660	567		-			☐ ☐	TRAWL - 30m
			:				°	°			-			☐ ☐	
184	Set 112	06	22:09	BE	SET		50°08.911	125°03.086	423		-			☐ ☐	TRAWL - SURFACE
			:				°	°			-			☐ ☐	
185	Set 113	06	23:06	BE	SET		50°04.991	125°05.915	237		-			☐ ☐	TRAWL - 15m
186	↓	06	23:43	BE	CTD		50°03.252	125°05.653	205		-	—	MT	☐ ☐	T:17.4 S:23.5
			23:46	BO			50°03.209	125°05.624		195	-			☐ ☐	
			23:50	EN			50°03.169	125°05.597			-			☐ ☐	
187	↓	06	23:57	BE	NET		50°03.098	125°05.549	206	150	-			☐ ☐	BONGO
= END OF DAY			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	

Event Type:

BOT = Bottle cast (no CTD)
 CTD = Standalone CTD
 ROS = CTD in Rosette
 SET = Fish Set

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 NET = Plankton Net Haul
 DRF = Drifter

Bottle Firing Method:

US = Up / Stop (default)
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 DN = Down / No stop

Notes:

Time Code:

BE = Beginning Time of Cast
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Month JULY				Year 2014			Vessel WE RICKER			Cruise ID 2014-17					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
188	Set 114	07	13:08	BE	SET		49°59.560	125°05.136	250		-			☐ ☐	TRAWL-SURFACE
189	↓	07	14:04	BE	CTD		50°01.715	125°01.908	76		-	-	MT	☐ ☒	T:17.9 S:23.3
			14:05	BO			50°01.715	125°01.914		65	-			☐ ☐	
			14:07	EN			50°01.714	125°01.924			-			☐ ☐	
190	↓	07	14:12	BE	NET		50°01.706	125°01.928	76	66	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
191	Set 115	07	14:29	BE	SET		50°00.521	125°02.091	106		-			☐ ☐	TRAWL - 30m
			:				°	°			-			☐ ☐	
192	Set 116	07	16:35	BE	SET		49°57.881	124°58.244	140		-			☐ ☐	TRAWL - SURFACE
			:				°	°			-			☐ ☐	
193	Set 117	07	16:35	BE	SET		49°55.050	124°55.501	227		-			☐ ☐	TRAWL - 15m
194	↓	07	17:22	BE	CTD		49°52.853	124°57.464	225		-			☐ ☐	T:16.2 S:25.2
			17:26	BO			49°52.873	124°57.485		215	-			☐ ☐	
			17:30	EN			49°52.882	124°57.504			-			☐ ☐	
195	↓	07	17:39	BE	NET		49°52.884	124°57.550	224	150	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
196	Set 118	07	17:56	BE	SET		49°52.238	124°57.931	297		-			☐ ☐	TRAWL - 45m
			:				°	°			-			☐ ☐	
197	Set 119	07	19:22	BE	SET		49°49.819	124°58.399	161		-			☐ ☐	TRAWL-SURFACE

Event Type:

BOT = Bottle cast (no CTD)
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ROS = CTD in Rosette
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LOOP = Sea Water Loop

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DRF = Drifter

Bottle Firing Method:

US = Up / Stop (default)
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Notes:

Time Code:

BE = Beginning Time of Cast
BO = Bottom Time of Cast
EN = End Time of Cast

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DE = Deployment Time
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COMMENT ON REVERSE.

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Month JULY				Year 2014			Vessel WE RICKER			Cruise ID 2014-17					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
198	Set 120	07	:	BE	SET		49°54.343	124°47.162	101		-			☐ ☐	TRAWL-15m
			:				.	.			-			☐ ☐	
199	Set 121	07	21:52	BE	SET		49°53.707	124°38.701	93		-			☐ ☐	TRAWL-30m
			:				.	.			-			☐ ☐	
200	Set 122	07	22:46	BE	SET		49°56.065	124°43.388	149		-			☐ ☐	TRAWL-SURFACE
201		07	23:27	BE	CTD		49°57.534	124°45.602	79		-	—	MT	☐ ☐	T: 18.9 S: 14.6 (*)
			23:28	BO			49°57.536	124°45.617		70	-			☐ ☐	
			23:30	EN			49°57.541	124°45.638			-			☐ ☐	
202	✓	07	23:34	BE	NET		49°57.543	124°45.662	82	72	-			☐ ☐	BONGO
END OF DAY			:				.	.			-			☐ ☐	
203	Set 123	08	13:09	BE	SET		49°58.402	124°47.931	169		-			☐ ☐	TRAWL-SURFACE
204		08	13:47	BE	CTD		49°58.875	124°50.724	241		-	—	MT	☒ ☐	T: 18.5 S: 22.4
			13:51	BO			49°58.890	124°50.725		230	-			☐ ☐	
			13:56	EN			49°58.910	124°50.731			-			☐ ☐	
205	✓	08	14:03	BE	NET		49°58.912	124°50.737	243	150	-			☐ ☐	BONGO
			:				.	.			-			☐ ☐	
206	124	08	14:52	BE	SET		50°04.256	124°50.749	420		-			☐ ☐	TRAWL-15m
			:				.	.			-			☐ ☐	
207	125	08	15:45	BE	SET		50°07.704	124°46.280	439		-			☐ ☐	TRAWL-SURFACE

Event Type:

BOT = Bottle cast (no CTD)
 CTD = Standalone CTD
 ROS = CTD in Rosette
 SET = Fish Set

LOOP = Sea Water Loop

MOR = Mooring
 NET = Plankton Net Haul
 DRF = Drifter

Bottle Firing Method:

US = Up / Stop (default)
 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

CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

DE = Deployment Time
 MR = Messenger Release Time
 RE = Recover Mooring Time

Produced by the Water Properties Group, IOS

WaterProperties.ca
 Version: 14 February 2013

Set 122: pH buffer solⁿ bottle left off since previous cast.

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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⊗ COMMENT ON REVERSE.

Month JULY			Year 2014			Vessel WE RICKER			Cruise ID 2014-17						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
208	Set 126	08	16:50	BE	CTD		50° 11.060	124° 38.357	628		-	-	MT	☐ ☐	T: 19.3 S: 20.9 ⊗
	↓		16:54	BO			50° 11.050	124° 38.388		250	-			☐ ☐	
			16:59	EN			50° 11.051	124° 38.434			-			☐ ☐	
209		08	17:07	BE	NET		50° 11.025	124° 38.439	650	150	-			☐ ☐	BONGO
210	↓	08	17:24	BE	SET		50° 10.608	124° 39.183	600		-			☐ ☐	TRAWL-30m
			:				°	°			-			☐ ☐	
211	Set 127	08	18:55	BE	SET		50° 12.701	124° 47.129	290		-			☐ ☐	TRAWL-SURFACE
212	↓	08	19:37	BE	CTD		50° 11.179	124° 44.868	389	150	-	-	MT	☐ ☐	T: 19.8 S: 22.2
			19:42	BO			50° 11.137	124° 44.850		250	-			☐ ☐	
			19:48	EN			50° 11.095	124° 44.831			-			☐ ☐	
213	↓	08	19:54	BE	NET		50° 11.050	124° 44.815	416	150	-			☐ ☐	BONGO
			:				°	°			-			☐ ☐	
214	Set 128	08	20:29	BE	SET		50° 09.157	124° 43.212	635		-			☐ ☐	TRAWL-15m
END OF SURVEY							°	°			-			☐ ☐	
							°	°			-			☐ ☐	
							°	°			-			☐ ☐	
							°	°			-			☐ ☐	
							°	°			-			☐ ☐	

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⑦ Set 126: CTD/Bongo completed before tow rather than after.