DAILY LOG BOOK

MISSION NUMBER: 2014 - 36

DATE: From: JULY 8/14 to: JULY 20/14

VESSEL: W.E. RICKER

PROJECT: TRUDEL - HI SEAS SALMON

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

Captain: AL YOUNG / BRIAN TOWNER First Officer: KEVIN MCKECHNIE
Second Officer: CHRIS Third Officer: _____

Mission Participants / Agencies: _____

Scientific Personnel: Party Chief: TYLER ZUBKOWSKI

Name	Watch	Cabin	Name	Watch	Cabin
YEVGENY PACHAMOV					
YOUNGHOU					
STEVE					
JAYME					
ROSEMARY					
HUGH MACLEAN					

Second leg of Mission: Party Chief: _____

Name	Watch	Cabin	Name	Watch	Cabin

Data logging computer: DELL
Data acquisition program: _____
CTD deck unit make: SBE 11 model: 11 serial number: 0424

Primary CTD
Make: SEABIRD model: 9 serial number: 505
Primary temperature serial number: 2710
Primary conductivity serial number: 2128
Secondary temperature serial number: 2374
Secondary conductivity serial number: 3396
Transmissometer: _____ Model: _____ s/n: _____
Fluorometer: Model WET LABS Cable gain: 1.3 X10⁻¹ s/n: 2215 **P, S or NO pump?**
Oxygen sensor: SBE Model: 43 s/n: 1176 **P, S or NO pump?**
PAR sensor: _____ Model: _____ s/n: _____
Other sensors: PH - SEABIRD s/n: 0851 **P, S or NO pump?**
Other sensors: _____ s/n: _____ **P, S or NO pump?**
Other sensors: _____ s/n: _____ **P, S or NO pump?**
Other sensors: _____ s/n: _____ **P, S or NO pump?**

Secondary CTD
Make: _____ model: _____ serial number: _____
Primary temperature serial number: _____
Primary conductivity serial number: _____
Secondary temperature serial number: _____
Secondary conductivity serial number: _____
Transmissometer: _____ Model: _____ s/n: _____
Fluorometer: Model _____ Cable gain: _____ s/n: _____ **P, S or NO pump?**
Oxygen sensor: _____ Model: _____ s/n: _____ **P, S or NO pump?**
PAR sensor: _____ Model: _____ s/n: _____
Other sensors: _____ s/n: _____ **P, S or NO pump?**
Other sensors: _____ s/n: _____ **P, S or NO pump?**
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Other sensors: _____ s/n: _____ **P, S or NO pump?**

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

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month JULY | **Year** 2014 | **Ship** W.E. RICKER | **Cruise ID** 2014-36

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
9	JS01	1307	BG	CTD		001	50 26 58	126 00 39	199			1	H.M		T: 9.77 S: 30.80
		1312	BO				50 26 76	126 00 56		165					BOTE 10m · SAL/CHL/NUTS
		1316	EN				50 26 94	126 00 59							
		1325	BG	NET		002	50 27 34	126 00 82		100					BONGO
		1358	BE	TRAWL		003	50 27 16	126 01 99							TRAWL
9	JS02	1436	BG	CTD		004	50 27 66	126 05 33	277			1			T: 9.74 S: 30.69
		1441	BO				50 27 70	126 05 48		250					BOT@10m · SAL/CHL/NUTS
		1447	EN				50 27 75	126 05 71							
		1451	BG	NET		005	50 27 80	126 05 80		150					BONGO
		1518	BE	TRAWL		006	50 27 64	126 06 03							TRAWL
9	JS03	1600	BG	CTD		007	50 28.84	126 11.77	366			1			T: 9.89 S: 30.69
		1605	BO				50 28.89	126 11.92		250					BOT@10m · SAL/CHL/NUTS
		1611	EN				50 28.93	126 12 02							
		1615	BG	NET		008	50 28.94	126 12 00		150					BONGO
		1640	BE	TRAWL		009	50 29 04	126 12 66							TRAWL

Cast type:
BOT = bottle cast, no CTD
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ROS = Rosette plus CTD
USW = sea water loop
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NET = net haul
DRF = drifter

bottle firing method:
US = up/stop
UN = up/no stop
DN = down/no stop

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BE = beginning time of cast
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RE = recover mooring time

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

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9	JS04	1734	BE	CTD		010	50° 29. 86	126° 20. 80	366			1	H.M.		T: 10.05 S: 30.64
		1739	BO				50° 29. 86	126° 20. 73		250					BOTE 10m - SAL/CHL/NUTS
		1744	EN				50° 29. 86	126° 20. 68							
		1747	BE	NET		011	50 29.86	126 20.63		150					BONGO
		1810	BE	TRAWL		012	50 29 91	126 21 27							TRAWL
9	JS 05	1900	BE	CTD		013	50° 29. 95	126° 25-44	371			1			T: 10.74 S: 30.61
		1906	BO				50° 29. 94	126° 25. 44		250					BOTE 10m - SAL/NUTS/CHL
		1913	EN				50° 29. 91	126° 25. 44							
		1916	BE	NET		014	50° 29. 91	126° 25. 46		150					NET
		1936	BE	TRAWL		015	50 29 96	126 26 34							TRAWL
9	JS 06	2024	BE	CTD		016	50° 30 24	126° 31. 92	404			1			T: 10.30 S: 30.64
		2030	BO				50° 30. 24	126° 31. 96		250					BOTE 10m - SAL/CHL/NUTS
		2035	EN				50° 30. 25	126° 31. 97							
		2038	BE	NET		017	50° 30. 25	126° 31. 97		150					BONGO
		2059	BE	TRAWL		018	50 30 35	126 33 02							TRAWL

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9	IS07	2155	BE	CTD		019	50°30.79	126°38.97				1	H.M.		T: 10.12 S: 30.86
		2200	BO				50°30.75	126°38.94							BOTE 10m. SAL/CAL/NUTS
		2206	EN				50°30.71	126°38.99							
		2208	BE	NET		020	50°30.71	126 38.87							BONGO
		22 29	BE	TRAWL		021	50 31 09	126 39 89							TRAWL
9	IS08	2331	BE	CTD		022	50°33 15	126°46 89				1			T: S:
		2335	BO				50°33 13	126 46 91							BOTE 10m - SAL/CAL/NUT
		2341	EN				50°33 10	126°46 96							
		2347	BE	NET		023	50°33.29	126 47.20							
		0008	BE	TRAWL		024	50 33 45	126 48 21							
10	QCST01	1312	BE	CTD		025	50°36 58	126°53 19	98			1			T: 9.56 S: 31.39
		1314	BO				50°36 58	126°53.16		90					BOTE 10m - SAL/CAL/NUTS
		1317	EN				50°36 56	126°53 14							
		1320	BE	NET		026	50°36 53	126 53.11		90					BONGO
		1340	BE	TRAWL		027	50 36 69	126 52 73							TRAWL
10	QCST02	1442	BE	TRAWL		028	50 41 09	126 48 05							TRAWL

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10	QCST 03	1523	BG	CTD		029	50° 40. 78	126° 51. 39	185			1	4.M.		T: 10.73 S: 30.52
		1526	BO				50° 40. 73	126° 51. 32		175					BOTTOM - SAL/CHL/NUTS
		1530	EN				50° 40. 67	126° 51. 24							
		1532	BG	NET		030	50° 40. 62	126° 51. 17		150					BONGO
		1556	BE	TRAWL		031	50 40. 77	126 51. 57							TRAWL
10	QCST04	1648	BG	TRAWL		032	50 42.73	126 55 96							TRAWL
10	QCST 05	1735	BG	CTD		033	50° 45. 46	126° 50. 22	168			1			T: 10.37 S: 30.69
		1739	BO				50° 45. 46	126° 50. 30		155					BOTTOM - SAL/CHL/NUTS
		1742	EN				50° 45. 46	126 50. 33							
		1745	BG	NET		034	50° 45. 49	126° 50. 37							BONGO
		1808	BE	TRAWL		035	50 45.50	126 51. 98							TRAWL
10	QCST 06	1904	BG	CTD		036	50° 46.49	127° 00. 65	162			1			T: 9.83 S: 30.30
		1907	BO				50° 46 50	127° 00. 70		150					BOTTOM - SAL/CHL/NUTS
		1911	EN				50° 46 50	127° 00. 73							
		1915	BG	NET		037	50° 46. 51	127° 00. 79							BONGO
		1935	BE	TRAWL		038	50 46.05	127 01 47							TRAWL

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10	QCST 07	2022	BG	TRAWL		039	50 42.89	127 05.67							TRAWL
10	QCST 08	2110	BG	CTD		040	50° 40.56	127° 11.37	74			1	H.M.		T: 11.58 S: 30.75
		2112	BO				50° 40.56	127° 11.40		65					BOT@10m. SAL/CHL/NUTS
		2115	EN				50° 40.56	127° 11.44							
		2117	BG	NET		041	50° 40.58	127° 11.49							BONGO
		2135	BG	TRAWL		042	50 40.79	127 12.81							TRAWL
10	QCST 09	2214	BG	TRAWL		043	50 41.80	127 16.98							TRAWL
10	QCST 10	2304	BG	CTD		044	50° 45.28	127° 18.32	279			1			T: 10.73 S: 30.97
		2309	BO				50° 45.30	127° 18.42		250					BOT@10m. SAL/CHL/NUTS
		2314	EN				50° 45.32	127° 18.51							
		2216	BG	NET		045	50° 45.34	127° 18.55							BONGO
		2339	BG	TRAWL		046	50 45.88	127 17.40							TRAWL
~~[illegible]~~															

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11	QCST 11	1302	BG	CTD		047	50° 55.75	127° 29.66	160			1	H.M.		T: 9.51 S: 31.40
		1305	BO				50° 55.84	127° 29.81		150					BOTE 10m. SAL/CHL/NUTS
		1309	EN				50° 55.94	127° 29.95							
		1312	BG	NET		048	50° 56.02	127° 30.05							BONGO
		1345	BE	TRAWL		049	50 56.18	127 30.40							TRAWL
11	QCST 12	1436	BG	CTD		050	50° 57.66	127° 37.28	136			1			T: 9.49 S: 31.78
		1438	BO				50° 57.69	127° 37.29		125					BOT @ 10m - SAL/CHL/NUTS
		1442	EN				50° 57.74	127° 37.32							
		1444	BG	NET		051	50° 57.78	127° 37.34							BONGO
		1505	BE	TRAWL		052	50 57.94	127 38.00							TRAWL
11	QCSD 01	1626	BG	CTD		053	51° 03.68	127° 47.02	99			1			T: 10.83 S: 31.22
		1628	BO				51° 03.68	127° 47.01		90					BOTTOM - SAL/CHL/NUTS
		1631	EN				51° 03.68	127° 47.00							
		1633	BG	NET		054	51° 03 69	127° 47.00							BONGO
		1656	BE	TRAWL		055	51 03.31	127 47.79							TRAWL

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11	QCSD 02	1749	BE	CTD		056	50° 59.91	127° 51.81	134			1	H.M.		T: 10.34 S: 31.34
	*	1752	BO				50° 59.89	127° 51.79		125	*				BOTE 10m - SAL/CHL/NUTS
		1755	EN				50° 59.84	127° 51.76							
		1758	BE	NET		057	50° 59.76	127° 51.73		120					BONGO
		1820	BE	TRAWL		058	50 59.25	127 50.87							TRAWL
11	QCST 13	1939	BE	CTD		059	50° 55.31	127° 39.50	400			1			T: 9.97 S: 32.02
		1944	BO				50° 55.28	127° 39.42		250					BOTE 10m - SAL/CHL/NUTS
		1949	EN				50° 55.25	127° 39.35							
		1951	BE	NET		060	50° 55.22	127° 39.36		150					BONGO
		2014	BE	TRAWL		061	50 54.78	127 38.87							TRAWL
11	QCST 14	2124	BE	CTD		062	50° 48.99	127° 37.59	384			1			T: 11.05 S: 32.01
		2129	BO				50° 49.00	127° 37.64		250					BOTE 10 - SAL/CHL/NUTS
		2134	EN				50° 49.00	127° 37.78							
		2140	BE	NET		063	50° 49.03	127° 37.83		150					BONGO
		2201	BE	TRAWL		064	50 49.16	127 38.77							TRAWL
11	QCST 15	2309	BE	TRAWL		065	50 48.04	127 34.34							TRAWL

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CALLED QCST 13 IN FILE - SHOULD BE QCSD 02

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12	QCST 16	1301	BE	CTD	*	066	50° 47.81	127° 11.36	150		*	1	H.M.		T: 10.66 S: 30.90
		1303	BO				50° 47.82	127° 11.40		140	→				BOTTOM - SAL/CHL/NUTS
		1307	EN				50° 47.84	127° 11.44							
		1310	BE	NET		067	50° 47 88	127° 11.47							BONGO
		1333	BE	TRAWL		068	50 48.33	127 10.82							TRAWL
12	QCST 17	1430	BE	CTD		069	50° 51.05	127° 11.43	121			1			T: 10.20 S: 30.95
		1432	BO				50° 51.06	127° 11.49		110					BOTTOM - SAL/CHL/NUTS
		1434	EN				50° 51.06	127° 11.52							
		1437	BE	NET		070	50° 51.09	127° 11.56							BONGO
		1457	BE	TRAWL		071	50 51.36	127 12.68							TRAWL
12	QCST 18	1551	BE	CTD		072	50° 51.37	127° 18.14	122			1			T: 10.63 S: 30.83
		1553	BO				50° 51.36	127° 18.15		110					BOTTOM - SAL/CHL/NUTS
		1556	EN				50° 51.37	127° 18.17							
		1557	BE	NET		073	50° 51.40	127° 18.20							BONGO
		1619	BE	TRAWL		074	50 50.90	127 19.16							TRAWL

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* CALLED QEST15 IN FILE - SHOULD BE QEST16

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12	QCST 19	1710	BE	CTD		075	50° 48.34	127° 23.66	246			1	H.M.		T: 10.83 S: 31.01
		1715	BO				50° 48.32	127° 23.62		235					BOT@10m · SAL/CHL/NUTS
		1719	EN				50° 48.29	127° 23.57							
		1722	BE	NET		076	50° 48.28	127° 23.50		150					BONGO
		1744	BE	TRAWL		077	50 41.74	127 24.25							TRAWL
13	T07	1259	BE	CTD		078	50° 49.16	129° 13.51	100			1			T: 13.21 S: 31.45
		1302	BO				50° 49.16	129° 13.62		90					BOT@10m · SAL/CHL/NUTS
		1305	EN				50° 49.14	129° 13.71							
		1308	BE	NET		079	50° 49.10	129° 13.80		90					BONGO
		1329	BE	TRAWL		080	50 49.44	129 13.90							TRAWL
13	T06	1511	BE	CTD		081	50° 55.95	129° 00.32	56			1			T: 13.07 S: 31.06
		1512	BO				50° 55.98	129° 00.36		50					BOT@10m · SAL/CHL/NUTS
		1514	EN				50° 56.01	129° 00.38							
		1516	BE	NET		082	50° 56.00	129° 00.00		50					BONGO
		1535	BE	TRAWL		083	50 56.75	128 59.74							TRAWL

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13	T05	1637	BE	CTD		084	51° 00.23	128° 52.09	58			1	H.M.		T: 12.95 S: 30.65
		1638	BO				51° 00.25	128° 52.11		50					BOT@10m - SAL/CHL/NUTS
		1639	EN				51° 00.29	128° 52.13							
		1642	BG	NET		085	51° 00.37	128° 52.17							BONGO
		1659	BE	TRAWL		086	51 01.13	128 51.45							TRAWL
13	T04	1758	BE	CTD		087	51° 04.44	128° 43.28	60			1			T: 12.46 S: 30.60
		1759	BO				51° 04.44	128° 43.27		50					BOT@10m - SAL/CHL/NUTS
		1801	EN				51° 04.45	128° 43 23							
		1803	BG	NET		088	51° 04.41	128° 43 17							BONGO
		1822	BE	TRAWL		089	51 05.00	128 42.53							TRAWL
13	T03	1920	BE	CTD		090	51° 08.32	128° 35.79	137			1			T: 14.80 S: 31.02
		1923	BO				51° 08.32	128° 35.78		130					BOT@10m - SAL/CHL/NUTS
		1926	EN				51° 08.32	128° 35.79							
		1928	BG	NET		091	51° 08.32	128° 35.79							BONGO
		1948	BG	TRAWL		092	51 08.93	128 34.72							TRAWL

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MOR = mooring
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US = up/stop
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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month JULY **Year** 2014 **Ship** W.E. RICKER **Cruise ID** 2014-36

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
13	T02	2049	BG	CTD		093	51°12.45	128°27.72	187			1	H.M		T: 14.34 S: 30.85
		2052	BO				51°12.45	128°27.73		175					BOT@10m - SAL/CHL/NUTS
		2056	EN				51°12.44	128°27.72							
		2058	BG	NET		094	51°12.44	128°27.74		150					BONGO
		2126	BG	TRAWL		095	5113.04	128 26.57							TRAWL
13	T01	2228	BG	CTD		096	51°16.55	128°19.92	75			1			T: 13.50 S: 30.97
		2229	BO				51°16.56	128°19.91		65					BOT@10m - SAL/CHL/NUTS
		2232	EN				51°16.58	128°19.91							
		2234	BG	NET		097	51°16.60	128°19.92		65					BONGO
		2251	BG	TRAWL		098	51 16.88	128 20.65							TRAWL
14	H01	1305	BG	CTD		099	52°12.35	129°11.56	160			1			T: 14.84 S: 31.76
		1308	BO				52°12.37	129°11.59		150					BOT@10m - SAL/CHL/NUTS
		1312	EN				52°12.41	129°11.62							
		1314	BG	NET		100	52°12.45	129°11.64		150					BONGO
		1336	BG	TRAWL		101	52 12.70	129 12.48							TRAWL

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14	H 02	1511	BE	CTD		102	52° 15.88	129° 28.22	185			1	H.M.		T: 14.47 S: 31.79
		1514	BO				52° 15.85	129° 28.28		175					BOT @ 10m · SAL/CHL/NUTS
		1518	EN				52° 15.80	129° 28.37							
		1520	BE	NET		103	52° 15.76	129° 28.42		150					BONGO
		1542	BE	TRAWL		104	52 15.69	129 29.74							TRAWL
14	H 03	1704	BE	CTD		105	52° 19.42	129° 42.80	205			1			T: 14.70 S: 31.37
		1708	BO				52° 19.43	129° 42.81		195					BOT @ 10m · SAL/CHL/NUTS
		1712	EN				52° 19.45	129° 42.86							
		1715	BE	NET		106	52° 19.49	129° 42.87		150					BONGO
		1738	BE	TRAWL		107	52 19.87	129 43.74							TRAWL
14	H 04	1912	BE	CTD		108	52° 22.73	129° 59.49	232			1			T: 14.74 S: 31.63
		1915	BO				52° 22.81	129° 59.50		220					BOT @ 10m · SAL/CHL/NET
		1920	EN				52° 22.91	129° 59.53							
		1922	BE	NET		109	52° 22.98	129° 59.54		150					BONGO
		1945	BE	TRAWL		110	52 23.59	130 00.59							TRAWL

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14	H 05	2102	BE	CTD		111	52° 25.67	130° 12.99	320		*	1	H.M.		T: 15.08 S: 31.94
		2106	BO				52° 25.76	130° 13.06		250	→				BOT @ 10m - SAL/CHL/NUTS
		2112	EN				52° 25.87	130° 13.13							
		2114	BE	MET		112	52° 25.91	130° 13.16		150					BONGO
		2137	BE	TRAWL		113	52 26.17	130 14.47							TRAWL
14	H 06	2302	BE	CTD		114	52° 28.64	130° 28.80	171			1			T: 15.60 S: 31.95
		2305	BO				52° 28.60	130° 28.82		160					BOT @ 10m - SAL/CHL/NUTS
		2309	EN				52° 28 53	130° 28. 85							
		2313	BE	MET		115	52° 28 47	130° 28. 89		150					BONGO
			BE	TRAWL		116	CANCELLED - PORPOISES								TRAWL
15	H 07	0135	BE	CTD	2ND	117	52° 30.71	130° 50.74	129			1			T: 13.86 S: 31.68
		0138	BO				52° 30.70	130° 50.73		120					BOT @ 10m - SAL/CHL/NUTS
		0141	EN				52° 30.69	130° 50.70							
		0143	BE	MET	3RD	118	52° 30.69	130° 50.70		120					BONGO
		0042	BE	TRAWL	1ST	119	52 31.49	130 47.28							TRAWL
													↓		

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CALLED H04 - SHOULD BE H05

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Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
15	IBC 01	1303	BE	CTD		120	53° 05.07	129° 12.63	321			1	H.M		T: 10.53 S: 28.71
		1308	BO				53° 05.10	129° 12.71		250					BOT @ 10m. SAL/CHL/NUTS
		1313	EN				53° 05.09	129° 12.82							
		1316	BE	NET		121	53° 05.09	129° 12.89		150					BONGO
		1356	BE	TRAWL		122	53 05.19	129 12.14							TRAWL
15	IBC 02	1515	BE	CTD		123	53° 09.87	129° 07.48	563			1			T: 12.04 S: 27.06
		1519	BO				53° 09.83	129° 07.52		250					BOTE 10m. SAL/CHL/NUTS
		1524	EN				53° 09.78	129° 07.57							
		1527	BE	NET		124	53° 09.76	129° 07.59		156					BONGO
		1550	BE	TRAWL		125	53 10.16	129 07.79							TRAWL
15	IBC 03	1703	BE	CTD		126	53° 16.94	129° 08.88	517			1			T: 13.48 S: 24.38
		1708	BO				53° 16.95	129° 08.92		250					BOT @ 10m. SAL/CHL/NUTS
		1714	EN				53° 16.98	129° 08.89							
		1717	BE	NET		127	53° 16.98	129° 08.94		150					BONGO
		1740	BE	TRAWL		128	53 17.60	129 09.06							TRAWL

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Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
15	IBC 04	1901	BE	CTD		129	53° 20.43	129° 18.24	516			1	H.M.		T: 10.95 S: 27.70
		1905	BO				53° 20.41	129° 18.23		250					BOT@10m - SAL/CHL/NUTS
		1911	EN				53° 20.38	129° 18.23							
		1913	BE	NET		130	53° 20.37	129° 18.24		150					BONGO
		1935	BE	TRAWL		131	53 20.35	129 17.29							TRAWL
15	IBC 05	2055	BG	CTD		132	53° 23.22	129° 11.10	373			1			T: 10.52 S: 26.74
		2100	BO				53° 23.20	129° 11.12		250					BOT@10m - SAL/CHL/NUTS
		2105	EN				53° 23.19	129° 11.12							
		2110	BE	NET		133	53° 23.17	129° 11.13		150					BONGO
		2149	BE	TRAWL		134	53 23.74	129 11.45							TRAWL
15	IBC 06	2251	BG	CTD		135	53° 29.31	129° 12.45	373			1			T: 13.33 S: 23.45
		2256	BO				53° 29.29	129° 12.45		250					BOT@10m - SAL/CHL/NUTS
		2301	EN				53° 29.26	129° 12.45							
		2303	BG	NET		136	53° 29.25	129° 12.46		150					BONGO
		2324	BE	TRAWL		137	53 29.71	129 12.33							TRAWL

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Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
16	IBC 07	0130	BE	CTD	2ND	138	53° 37.52	129° 12.59	379			1	H.M.		T: 15.93 S: 19.37
		0134	BO				53° 37.50	129° 12.56		250					BOT @ 10m · SAL/CHL/NUTS
		0140	EN				53° 37.49	129° 12.53							
		0142	BE	NET	3RD	139	53° 37.49	129° 12.51		150					BONGO
		0043	BE	TRAWL	1ST	140	53 35.26	129 13.16							TRAWL
16	IBC 08	1301	BE	CTD		141	53° 38.84	129° 10.47	374			1			T: 15.15 S: 20.67
		1306	BO				53° 38.81	129° 10.55		250					BOT @ 10m · SAL/CHL/NUTS
		1312	EN				53° 38.77	129° 10.65							
		1315	BE	NET		142	53° 38 73	129° 10.72		150					BONGO
		1338	BE	TRAWL		143	53 39.18	129 10.16							TRAWL
16	IBC 09	1439	BE	CTD		144	53° 43.10	129° 03.29	355			1			T: 15.25 S: 20.35
		1444	BO				53° 43.09	129° 03.36		250					BOT @ 10m · SAL/CHL/NUTS
		1449	EN				53° 43.08	129° 03.42							
		1452	BE	NET		145	53° 43.07	129° 03.46		150					BONGO
		1515	BE	TRAWL		146	53 43.47	129 02.87							TRAWL

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Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
16	IBC 10	16 27	BE	CTD		147	53° 46. 67	128° 55. 02	374			1	H.M.		T: 16.31 S: 15.94
		16 32	BO				53° 46. 65	128° 55. 08		250					BOTTOM. SAL/CHL/NUTS
		16 38	EN				53° 46 63	128° 55. 10							
		16 40	BE	NET		148	53° 46. 63	128° 55. 11		150					BONGO
		1703	BE	TRAWL		149	53 46.89	128 54.36							TRAWL
16	IBC 11	1759	BG	CTD		150	53° 49. 00	128° 48 63	344			1			T: 17.09 S: 13.46
		18 04	BO				53° 48. 98	128° 48. 71		250					BOTTOM. SAL/CHL/NUTS
		18 10	EN				53° 48. 95	128° 48. 79							
		18 13	BE	NET		151	53° 48. 93	128° 48. 90		150					BONGO
		1836	BE	TRAWL		152	53 49.54	128 48.64							TRAWL
16	IBC 12	2010	BE	CTD		153	53° 56. 84	128° 41. 09	191						T: 19.04 S: 6.98
		20 14	BO				53° 56. 81	128° 41. 11		180					BOTTOM. SAL/CHL/NUTS
		20 19	EN				53° 56 77	128° 41. 14							
		20 21	BE	NET		154	53° 56 75	128° 41 18		150					BONGO
		2045	BE	TRAWL		155	53 56.02	128 41.83							TRAWL

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16	IBC13	2229	BE	CTD		156	53° 46.02	128° 49.39	264			1	H.M.		T:17.11 S:13.71
		2236	BO				53° 45.98	128° 49.34		250					BOTE 10m SAL/CAL/NUTS
		2232	EN				53° 45.94	128° 49.29							
		2239	BE	NET		157	53° 45.59	128° 49.83		150					BONGO
		2304	BE	TRAWL		158	53 44.95	128 49.55							TRAWL
17	IBC 14	0132	BE	CTD		159	53° 35.23	128° 50.91	123			1			T: 15.28 S: 15.25
		0134	BO				53° 35.21	128° 50.94		115					BOTE 10m SAL/CAL/NUTS
		0137	EN				53° 35.18	128° 50.98							
		0140	BE	NET		160	53° 35.16	128° 51.02	147	135					BONGO
		0042	BE	TRAWL		161	53 38.01	128 51.37							TRAWL
17	IBC 15	1302	BE	CTD		162	53° 22.03	129° 09.88	401			1			T:11.52 S:26.77
		1307	BO				53° 21.97	129° 09.96		250					BOTE 10m SAL/CAL/NUTS
		1313	EN				53° 21.91	129° 10.06							
		1315	BE	NET		163	53° 21.88	129° 10.14		150					BONGO
		1337	BE	TRAWL		164	53 22.16	128 09.61							TRAWL

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17	IBC 16	1457	BG	CTD		165	53° 28.96	129° 04.58	175			1	H.M.		T: 12.24 S: 26.25
		1500	BO				53° 28.89	129° 04.55		165					BOT@10m. SAL/CHL/NUTS
		1504	EN				53° 28.82	129° 04.52							
		1507	BG	NET		166	53° 28.77	129° 04.48		150					BONGO
		1531	BE	TRAWL		167	53 29.14	129 04.46							TRAWL
17	IBC 17	1642	BG	CTD		168	53° 31.65	128° 59.45	70			1			T: 11.52 S: 26.35
		1643	BO				53° 31.65	128° 59.45		60					BOT@ 10m - SAL/CHL/NUTS
		1645	EN				53° 31.66	129° 59.44							
		1640	BG	NET		169	53° 31.66	128° 59.34		60					BONGO
		1708	BE	TRAWL		170	53 30.99	128 59.24							TRAWL
17	IBC 18	1829	BG	CTD	2ND	171	53° 24.48	128° 54.24	400			1			T: 12.59 S: 27.43
		1834	BO				53° 24.46	129° 54.24		250					BOT@10m. SAL/CHL/NUTS
		1839	EN				53° 24.41	128° 54.22							
		1813	BG	NET	1ST	172	53° 24.58	128° 54.36		150					BONGO
		1855	BE	TRAWL	3RD	173	53 24.08	128 54.52							TRAWL

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17	IBC 19	2000	BG	CTD		174	53° 18.67	128° 54.34	320			1	H.M.		T: 11.94 S: 27.81
		2005	BO				53° 18.66	128° 54.37		250					BOTTLE 10m - SAL/CHL/NUTS
		2010	EN				53° 18.62	128° 54.42							
		2013	BE	NET		175	53° 18.59	128° 54.46		150					BONGO
		2035	BE	TRAWL		176	53 18.29	128 55.88							TRAWL
~~17~~															
18	R1 01	1318	BG	TRAWL		177	51 29.99	127 34.93							TRAWL
18	R1 02	1359	BG	TRAWL		178	51 26.98	127 38.18		110					TRAWL
18	R1 03	1443	BG	TRAWL		179	51 26.26	127 43.82							TRAWL
18	R1 04	1603	BG	TRAWL		180	51 30.82	127 45.15							
18	R1 05	1731	BG	CTD		181	51° 23.68	127° 53.16	118			1			T: 10.95 S: 30.12
		1734	BO				51° 23.67	127° 53.17		110					BOTTLE 10m - SAL/CHL/NUTS
		1737	EN				51° 23.66	127° 53.18							
		1740	BG	NET		182	51° 23.66	127° 53.18							BONGO
		1759	BE	TRAWL		183	51 24.09	127 52.89							TRAWL
18	R1 06	1927	BG	TRAWL		184	51 30.26	127 48.28							TRAWL

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

bottle firing method:
US = up/stop
UN = up/no stop
DN = down/no stop

Time Code
BE = beginning time of cast
BO = bottom time of cast
EN = end time of cast
DE = deployment time
MR = messenger release time
RE = recover mooring time

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

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month JULY **Year** 2014 **Ship** W.E. RICKER **Cruise ID** 2014-36

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
													4 m.		T: 12.32 S: 29.39
18	IBC 20	2036	BG	CTD		185	51° 36. 22	127° 52. 62	199			1			
		2039	BO				51° 36 21	127° 52 63		190					BOT @ 10m - SAL/CHL/NUTS
		2043	EN				51° 36. 20	127° 52 64							
		2046	BG	NET		186	51° 36. 20	127° 52. 64		150					BONGO
		2109	BG	TRAWL		187	51 36.85	127 53.06							TRAWL
												1			T: 10.77 S: 30.23
18	IBC 21	2223	BG	CTD		188	51° 43. 03	127° 58. 45	347						BOT @ 10m - SAL/CHL/NUTS
		2227	BO				51° 43. 05	127° 58. 42		250					
		2232	EN				51° 43. 08	127° 58. 37							BONGO
		2242	BG	NET		189	51° 43. 09	127° 58. 31		150					TRAWL
		2257	BG	TRAWL		190	51 43.70	127 58.47							
						END	OF	CRUISE							

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