DAILY LOG BOOK

MISSION NUMBER 2003 - 36

DATE: From: OCT 6 to: ~~NOV 4~~ OCT 29

VESSEL: W.E. RICKER

PROJECT: HI SEAS SALMON

DAVID WELCH

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

Captain: SID WEB First Officer: MARC MEESTER
Second Officer: WILEY Third Officer: _____

Mission Participants / Agencies: _____

Scientific Personnel: Party Chief: JOHN MORRIS

Name	Watch	Cabin	Name	Watch	Cabin
MARY THIESS					
TYLER ZUBKOWSKI					
MARC TRUDEL					
KEVIN BUTTERWORTH					
HUGH MACLEAN					

Second leg of Mission: Party Chief: JOHN MORRIS

Name	Watch	Cabin	Name	Watch	Cabin

Data logging computer: _____
Data acquisition program: _____
CTD deck unit make: SBE model: 911 + serial number: 11P18377-0471

Primary CTD
Make: SBE model: 911+ serial number: 0550
Primary temperature serial number: 2668
Primary conductivity serial number: 2424
Secondary temperature serial number: 2374
Secondary conductivity serial number: 2399
Transmissometer: _____ Model: _____ s/n: 197
Fluorometer: Model SEAPOINT Cable gain: 10 x 0.15 s/n: 2228 **P, S or NO pump?**
Oxygen sensor: _____ Model: _____ s/n: _____ **P, S or NO pump?**
PAR sensor: _____ Model: _____ s/n: _____
Other sensors: _____ s/n: _____ **P, S or NO pump?**
Other sensors: _____ s/n: _____ **P, S or NO pump?**
Other sensors: _____ s/n: _____ **P, S or NO pump?**
Other sensors: _____ s/n: _____ **P, S or NO pump?**

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

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INSTITUTE OF OCEAN SCIENCES

Month OCT **Year** 2003 **Ship** W.E. RICKER **Cruise ID** 2003-36

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	IVI 01	1655	BE	CTD		001	48 52 16	125 07 70	113			1	H.M	✓	T: 10.56 S: 31.86
	CTD 01	1657	BO				48 52 16	125 07 69		100					T: 8.13 S: 32.94
		1701	GH				48 52 13	125 07 68							SAL/CHL/NUTS@ 10m
		1709	BE	NET		002	48 52 12	125 07 59		100					BONGO
		1739	BE	TRAWL		003	48 51 92	125 07 28							
9	IVI 02	1848	BE	CTD		004	48 54 17	125 02 80	190			1			T: 11.54 S: 30.58
	CTD 02	1854	BO				48 54 19	125 02 81		180					T: 8.11 S: 33.05
		1900	EN				48 54 20	125 02 83							SAL/CHL/NUTS@ 10m
		1904	BE	NET		005	48 54 21	125 02 88		150					BONGO
		1934	BE	TRAWL		006	48 54 99	125 02 88							
9	IVI 03	2048	BE	CTD		007	48 5790	125 05 95	100			1			T: 11.73 S: 30.93
		2050	BO				48 57 98	125 05 94		90					T: 8.12 S: 32.95
	CTD 03	2053	EN				48 57 85	125 05 91							SAL/CHL/NUTS @ 10m
		2055	BE	NET		008	48 57 83	125 05 93		90					BONGO
		2121	BE	TRAWL		009	48 57 25	125 06 84							

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

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

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9	IVI 04	2223	BE	CTD		010	48 56 19	125 11 30	95			1	H.M.		T: 11.94 S: 30.70
	CTD 04	2225	BO				48 56 17	125 11 28		90					T: 8.15 S: 32.99
		2228	EN				48 56 16	125 11 26							SAL/CHL/NUTS @ 10 m
		2233	BE	NET		011	48 56 13	125 11 23		85					BONGO
		2256	BE	TRAWL		012	48 55 47	125 11 90							
9	IVI 05	2350	BE	CTD		013	48 52 29	125 14 58	91			1	H.M.		T: 11.45 S: 31.53
	CTD05	2353	BO				48 52 29	125 14 53		85					T: 8.22 S: 32.87
		2355	EN				48 52 27	125 14 51							SAL/CHL/NUTS@ 10m
		2359	BE	NET		014	48 52 28	125 14 51		85					BONGO
		0021	BE	TRAWL		015	48 51 63	125 15 06							
10	IVI 06	1436	BE	CTD		016	49 51 66	126 44 45	229	209		1	H.M.	✓	T: 12.24 S: 28.29
		1440	BO				49 51 62	126 44 45		200					T: 9.14 S: 32.42
	CTD06	1446	EN				49 51 60	126 44 53							SAL/CHL/NUTS@ 10 m
		1454	BE	NET		017	49 51 68	126 44 50		150					BONGO
		1522	BE	TRAWL		018	49 51 75	126 44 65							

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10	IVI 07	1713	BE	CTD		019	49 53 49	126 47 02	146			1	H.M.		T: 12.37 S: 31.01
	CTD 07	1716	BO				49 53 48	126 46 98		140					T: 9.14 S: 32.41
		1720	EN				49 53 47	126 46 93							SAL/CHL/NUTS @ 10m
		1724	BE	NET		020	49 53 45	126 46 78							BONGO
		1750	BE	TRAWL		021	49 53 56	126 46 99							
10	IVI 08	1908	BE	CTD		022	49 52 71	126 49 14	224			1	H.M.		T: 12.44 S: 30.37
	CTD 08	1913	BO				49 52 61	126 49 18	215						T: 9.18 S: 32.46
		1919	EN				49.52 58	126 49 14							SAL/CHL/NUTS @ 10m
		1924	BE	NET		023	49 52 56	126 49 24		150					BONGO
		1947	BE	TRAWL		024	49 52 12	126 50 67							
10	IVI 09	2041	BE	CTD		025	49 51 35	126 54 79	191			1	H.M.		T: 12.42 S: 29.96
		2045	BO				49 51 32	126 54 81		180					T: 9.24 S: 32.43
	CTD 09	2049	EN				49 51 30	126 54 82							SAL/CHL/NUTS @ 10m
		2054	BE	NET		026	49 51 28	126 54 82		150					BONGO
		2118	BE	TRAWL		027	49 51 37	126 55 72							

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10	VI 01	2226	BE	CTD		028	49 47 25	127 03 21	39			1	H.M.		T: 12.41 S: 31.51
	CTD 10	22 28	BO				49 47 25	127 03 25							T: 11.20 S: 31.90
		2229	EN				49 47 24	127 03 30							SAL/CHL/NUTS @ 10m
		2233	BE	NET		029	49 47 26	127 03 34	28						BONGO
		2256	BE	TRAWL		030	49 47 24	127 05 01							
10	VI 02	2337	BE	CTD		031	49 47 02	127 10 11	35			1	W.M.		T: 12.20 S: 31.68
	CTD 11	2338	BO				49 47 03	127 10 15		30					T: 11.78 S: 31.93
		23 41	EN				49 47 04	127 10 20							SAL/CH/NUTS @ 10 m
		2344	BE	NET		032	49 47 06	127 10 26		25					BONGO
		00 04	BE	TRAWL		033	49 47 19	127 12 46							
11	IVI 10	1415	BE	CTD		034	50 06 38	127 07 06		169		1	H.M	✓	T: 13.02 S: 27.74
	CTD 034	1418	BO				50 06 40	127 06 97		166					T: 7.47 S: 3321
		1423	EN				50 06 41	127 06 91							SAL/CHL/NUTS @ 10m
		1429	BE	NET		035	50 06 37	127 06 71							BONGO
		1455	BE	TRAWL		036	50 06 18	127 07 40							

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11	LVI 11	1609	BE	CTD		037	50 05 71	127 14 93	90			1	H.M.		T: 13.58 S: 29.20
		1611	BO				50 05 69	127 14 81		80					T: 8.70 S: 32.75
		1615	EN				50 05 69	127 14 78							SAL/CHL/NUTS @ 10m
		1618	BE	NET		038	50 05 67	127 14 73	116	105					BONGO
		1642	BE	TRAWL		039	50 05 15	127 15 09							
11	LVI 12	1734	BE	CTD		040	50 03 15	127 14 94	220			1	H.M.		T: 13.36 S: 28.92
		1738	BO				50 03 18	127 14 92		210					T: 7.43 S: 33.23
		1743	EN				50 03 21	127 14 91							SAL/CHL/NUTS @ 10m
		1747	BE	NET		041	50 03 27	127 14 82		150					BONGO
		1811	BE	TRAWL		042	50 02 63	127 15 16							
11	LVI 13	1920	BE	CTD		043	50 01 21	127 09 84	98			1	H.M.		T: 12.23 S: 28.01
		1922	BO				50 01 24	127 09 87		90					T: 8.22 S: 32.93
		1924	EN				50 01 26	127 09 89							SAL/CHL/NUTS @ 10m
		1931	BE	NET		044	50 01 18	127 09 80		84					BONGO
		1949	BE	TRAWL		045	50 00 68	127 10 46							

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11	VI 14	2139	BE	CTD		046	50 00 65	127 10 33	113			1	H.M	1	T: 12.56 S: 29.16
	(2ND)	2142	BO				50 00 68	127 10 27		100					T: 8.57 S: 32.81
		2145	EN				50 00 70	127 10 24							SAL/CHL/NUTS @ 10m
	(3RD)	2149	BE	NET		047	50 00 72	127 10 14		96					BONGO
	(1ST)	2054	BE	TRAWL		048	49 58 76	127 14 97							
12	VI 03	1530	BE	CTD		049	49 55 90	127 20 00	61			1	H.M	✓	T: 11.79 S: 31.40
		1534	BO				49 55 90	127 20 10		55					T: 11.71 S: 31.67
		1536	EN				49 55 90	127 20 13							~~SAL/CHL/NUTS @ 10m~~
*	→		BE	TRAWL	CANCELLED		TRAWL & BONGO - WEATHER								NO BONGO
12	VI 15	2154	BE	CTD		050	50 28 22	127 56 36	230			1	H.M		T: 12.26 S: 29.99
		2159	BO				50 28 18	127 56 44		220					T: 8.15 S: 32.99
		2205	EN				50 28 14	127 56 44							SAL/CHL/NUTS @ 0m
		2208	BE	NET		051	50 28 11	127 56 46		150					BONGO
		2235	BE	TRAWL		052	50 28 17	127 56 20							

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12	VI 16	2324	BE	CTD		053	50 29 24	127 51 83	148	138		1	H.M.		T: 11.46 S: 28.64
		2327	BO				50 29 24	127 51 81		130					T: 8.48 S: 32.86
		2330	EN				50 29 24	127 51 80							SAL/CHL/NUTS @ 10m
		2333	BE	NET		054	50 29 22	127 51 81	144	134					BONGO
		2357	BE	TRAWL		055	50 28 99	127 50 94							
13	VI 17	0045	BE	CTD		056	50 29 63	127 46 27	207			1	H.M.		T: 11.54 S: 29.75
		0049	BO				50 29 63	127 46 25		200					T: 8.29 S: 32.92
		0053	EN				50 29 64	127 46 25							SAL/CHL/NUTS @ 10m
		0057	BE	NET		057	50 29 66	127 46 21		150					BONGO
		0122	BE	TRAWL		058	50 29 59	127 46 10							
13	VI 18	1402	BE	CTD		059	50 23 78	127 29 14	106			1	H.M	✓	T: 11.05 S: 28.08
		1405	BO				50 23 79	127 29 19		100					T: 8.15 S: 32.91
		1408	EN				50 23 79	127 29 21							SAL/CHL/NUTS @ 10m
		1412	BE	NET		060	50 23 79	127 29 15		98					BONGO
		1434	BE	TRAWL		061	50 24 47	127 29 64							

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13	VI 19	1601	BE	CTD		062	50 26 30	127 30 92	135			1			T: 11.04 S: 28.75
		1604	BO				50 26 28	127 30 88		180					T: 7.15 S: 33.36
		1608	EN				50 26 25	127 30 84							SAL/CHL/NUTS @ 10 m
		1612	BE	NET		063	50 26 22	127 30 76		150					BONGO
		1635	BE	TRAWL		064	50 26 75	127 31 48							
13	VI 20	1750	BE	CTD		065	50 29 81	127 41 24	105			1			T: 11.10 S: 29.09
		1752	BO				50 29 80	127 41 26		100					T: 8.69 S: 32.75
		1755	EN				50 29 79	127 41 29							SAL/CHL/NUTS @ 10m
		1759	BE	NET		066	50 29 78	127 41 28		91					BONGO
		1821	BE	TRAWL		067	50 29 75	127 42 36							
13	VI 04	2003	BE	CTD		068	50 25 22	127 58 85	132			1			T: 12.57 S: 30.93
		2006	BO				50 25 23	127 58 88		120					T: 8.21 S: 32.94
		2010	EN				50 25 23	127 58 93							SAL/CHL/NUTS @ 10m
		2013	BE	NET		069	50 25 24	127 58 93		121					BONGO
		2057	BE	TRAWL		070	50 24 98	128 00 10							

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							Latitude	Longitude							
13	VI 05	2144	BE	CTD		071	50 23 87	128 04 84	78			1	H.M.		T: 12.47 S: 30.70
		2146	BO				50 23 86	128 04 84		70					T: 7.48 S: 32.50
		2149	EN				50 23 87	128 04 81							SAL/CHL/NUTS @ 10 m
		2152	BE	NET		072	50 23 88	128 04 74							BONGO
		2214	BE	TRAWL		073	50 24 30	128 06 11							
13	VI 06	2300	BE	CTD		074	50 25 94	128 10 36	91			1			T: 12.63 S: 31.26
		2302	BO				50 25 91	128 10 38		85					T: 8.04 S: 32.77
		2304	EN				50 25 89	128 10 39							SAL/CHL/NUTS @ 10m
		2307	BE	NET		075	50 25 87	128 10 37		78					BONGO
		0028	BE	TRAWL		076	50 26 35	128 11 61							
14	VI 07	0036	BE	CTD		077	50 27 94	128 16 85	123			1			T: 13.06 S: 31.69
		0039	BO				50 27 90	128 16 92		115					T: 7.13 S: 33.35
		0042	EN				50 27 89	128 16 81							SAL/CHL/NUTS @ 10m
		0045	BE	NET		078	50 27 86	128 16 77		112					BONGO
		0112	BE	TRAWL		079	50 29 40	128 17 81							

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15	IBC 01	1919	BE	CTD		080	51 40 92	127 54 94	340			1	H.M.	✓	T: 10.10 S: 28.70
		1923	BO				51 40 92	127 54 95		250					T: 6.78 S: 33.24
		1930	EN				51 40 91	127 54 97							SAL/CHL/NUTS @ 10 m
		2024	BE	NET		081	51 41 05	127 54 97		150					BONGO
		2056	BE	TRAWL		082	51 43 49	127 55 49							
15	IBC 02	2241	BE	CTD		083	51 48 85	127 56 38	314			2			T: 10.02 S: 28.77
		2246	BO				51 48 85	127 56 36		250					T: 6.76 S: 33.26
		2253	EN				51 48 86	127 56 32						*	SAL/CHL/NUTS @ 10 m
		2301	BE	NET		084	51 48 82	127 56 24		150				*	BONGO / SAL @ 250 m
		2333	BE	TRAWL		085	51 49 91	127 56 77							
16	IBC 03	0056	BE	CTD		086	51 57 15	127 56 02	330			1			T: 10.07 S: 25.68
		0101	BO				51 57 07	127 56 09		250					T: 6.76 S: 33.24
		0106	EN				51 57 05	127 56 15							SAL/CHL/NUTS @ 10 m
		0111	BE	NET		087	51 56 96	127 56 26		150					BONGO
		0141	BE	TRAWL		088	51 55 41	127 56 77							

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
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Time Code
BE = beginning time of cast
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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month OCT **Year** 2003 **Ship** W E RICKER **Cruise ID** 2003-36

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
16	IBC 04	1715	BE	CTD		089	53 25 68	129 55 41	270			1	H.M.	✓	T: 10.54 S: 29.03
		1720	BO				53 25 72	129 55 43		250					T: 7.48 S: 32.82
		17 25	EN				53 25 71	129 55 40							SAL/CHL/NUTS @ 10 m
		17 31	BE	NET		090	53 25 70	129 55 37		150					BONGO
		1756	BE	TRAWL		091	53 26 43	129 57 07							
16	IBC 05	21 24	BE	CTD		092	53 50 25	130 18 42	196			1			T: 10.17 S: 29.77
		21 28	BO				53 50 25	130 18 41		185					T: 9.67 S: 31.72
		21 34	EN				53 50 27	130 18 39							SAL/CHL/NUT @ 10 m
		2142	BE	NET		093	53 50 28	130 18 36		150					BONGO
		2208	BE	TRAWL		094	53 51 47	130 19 38							
17	DE 01	1409	BE	CTD		095	54 10 50	131 50 70	71			1	H.M.	✓	T; 10.50 S: 31.53
		14 11	BO				54 10 50	131 50 66		65					T: 8.85 S: 32.43
		14 13	EN				54 10 48	131 50 57							SAL/CHL/NUTS @ 10 m
		1418	BE	NET		096	54 10 46	131 50 40		60					BONGO
		1438	BE	TRAWL		097	54 10 25	131 51 00							

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17	DE 02	1545	BE	CTD		098	54 09 49	131 59 37	66			1	H.M		T: 10.44 S: 31.52
		1546	BO				54 09 49	131 59 38		60					T: 8.33 S: 32.63
		15 48	EN				54 09 49	131 59 38							SAL/CHL/NUTS @ 10m
		15 54	BE	NET		099	54 09 55	131 59 44		56					BONGO
		16 11	BE	TRAWL		100	54 09 92	132 00 35							
17	DE03	1719	BE	CTD		101	54 09 19	132 11 47	55			1			T: 10.93 S: 30.73
		1720	BO				54 09 19	132 11 47		50					T: 10.17 S: 32.14
		1722	EN				5409 19	132 11 46							SAL/CHL/NUTS @ 10m
		1725	BE	NET		102	5409 18	132 11 37		44					BONGO
		1742	BE	TRAWL		103	54 09 14	132 12 73							
17	DE 04	1900	BE	CTD		104	54 09 59	132 24 93	93			1			T: 10.96 S: 30.94
		1902	BO				54 09 61	132 24 93		85					T: 9.27 S: 32.49
		1904	EN				54 09 62	132 24 94							SAL/CHL/NUTS @ 10m
		1909	BE	NET		105	54 09 62	132 24 95		80					BONGO
		1929	BE	TRAWL		106	54 09 92	132 26 15							

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Month OCT | **Year** 2003 | **Ship** W E RICKER | **Cruise ID** 2003-36

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
17	DE 05	20 33	BG	CTD		107	54 10 81	132 34 29	93			1	H.M.		T: 10.95 S: 31.70
		20 35	BO				54 10 80	132 34 26		85					T: 10.04 S: 32.32
		20 37	GN				54 10 79	132 34 23							SAL/CHL/NUTS @ 10 m
		2041	BE	NET		108	54 10 77	132 34 11		83					BONGO
		2100	BE	TRAWL		109	54 10 87	132 34 95							
17	DE 06	2208	BG	CTD		110	54 10 80	132 43 92	61			1			T: 12.26 S: 31.85
		2209	BO				54 10 78	132 43 79		55					T: 11.05 S: 32.14
		2211	GN				54 10 77	132 43 73							SAL/CHL/NUTS @ 10 m
		2214	BG	NET		111	54 10 75	132 43 55		50					BONGO
		2232	BE	TRAWL		112	54 10 70	132 44 15							
17	DE 07	2332	BG	CTD		113	54 10 71	132 51 09	63			1			T: 12.52 S: 31.78
		2333	BO				54 10 70	132 51 06		55					T: 11.15 S: 31.96
		2335	GN				54 10 70	132 51 03							SAL/CHL/NUTS @ 10 m
		2338	BG	NET		114	54 10 67	132 50 95		53					BONGO
		0024	BE	TRAWL		115	54 11 04	132 51 01							

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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
18	DE 08	0120	BE	TRAWL		116	54 14 28	132 55 05							
		0156	BE	CTD		117	54 15 35	132 57 08	272	220	(BAD CURRENTS)	1	4.M		T: 12.59 S: 31.77
			BO				?	?			ABORT @ 220 m				T: ? S: ?
		0205	EN				54 15 26	132 56 99							SAL/CHL/NUTS @ 10m
		0214	BE	NET		118	55 15 17	132 56 69		150					BONGO
19	F 01	1417	BE	CTD		119	54 47 22	133 02 99	121			1	4.M.	✓	T: 10.88 S: 30.82
		1420	BO				54 47 27	133 02 98		115					T: 8.00 S: 32.73
		1422	EN				54 47 31	133 02 93							SAL/CHL/NUTS @ 10m
		1427	BE	NET		120	54 47 37	133 02 59		112					BONGO
		1453	BE	TRAWL		121	54 47 64	133 03 09							
19	F 02	1559	BE	CTD		122	54 46 68	133 11 00	209			1			T: 11.30 S: 31.78
		1603	BO				54 46 72	133 10 96		200					T: 6.39 S: 33.38
		1607	EN				54 46 75	133 10 91							SAL/CHL/NUTS @ 10m
		1610	BE	NET		123	54 46 78	133 10 82		150					BONGO
		1636	BE	TRAWL		124	54 46 87	133 11 81							

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18	F 03	1733	BE	CTD		125	54 45 88	133 19 19	114			1			T: 10.99 S: 31.96
		1736	BO				54 45 88	133 19 18		105	112				T: 7.54 S: 32.91
		1738	EN				54 45 87	133 19 20							SAL/CHL/NUTS @ 10 m
		1740	BE	NET		126	54 45 88	133 19 22							BONGO
		1804	BE	TRAWL		127	54 45 75	133 20 41							
	(SHIPPED 4)														
18	F 05	1940	BE	CTD		128	54 44 33	133 34 41	197			1			T: 11.22 S: 31.91
		1943	BO				54 44 36	133 34 40		190					T: 6.14 S: 33.40
		1947	EN				54 44 35	133 34 39							SAL/CHL/NUTS @ 10m
		1952	BE	NET		129	54 44 35	133 34 38		150					BONGO
		2022	BE	TRAWL		130	54 44 40	133 35 30							
18	F 06	2129	BE	CTD		131	54 43 47	133 42 22	225	215		1			T: 12.09 S: 31.88
		2133	BO				54 43 49	133 42 19							T: 6.15 S: 33.47
		2137	EN				54 43 48	133 42 16							SAL/CHL/NUTS @ 10 m
		2142	BE	NET		132	54 43 47	133 42 11		150					BONGO
		2212	BE	TRAWL		133	54 43 42	133 43 30							

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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
18	F 07	2309	BE	CTD		134	54 43 00	133 50 08	225	215		1			T: 12.26 S: 31.87
		2313	BO				54 43 00	133 50 03							T: 5.87 S: 33.65
		23 17	EN				54 43 00	133 50 04							SAL/CHL/NUTS @ 10 m
		2321	BE	NET		135	54 43 00	133 50 09		150					BONGO
		23 52	BE	TRAWL		136	54 42 65	133 51 25							
19	F 08	0059	BE	CTD		137	54 42 23	133 57 93	209			1			T: 12.21 S: 31.87
		0102	BO				54 42 28	133 57 87		195					T: 5.63 S: 33.78
		0106	EN				54 42 30	133 57 84							SAL/CHL/NUTS @ 10 m
		0111	BE	NET		138	54 42 33	133 57 78		150					BONGO
		0141	BE	TRAWL		139	54 42 33	133 58 58							
19	F 09	0236	BE	CTD		140	54 41 48	134 05 32	223			1			T: 11.93 S: 31.99
		0240	BO				54 41 48	134 05 74		210					T: 5.84 S: 33.77
		0244	EN				54 41 46	134 05 67							SAL/CHL/NUT @ 10 m
		0249	BE	NET		141	54 41 48	134 05 62							BONGO
	→		NO	TRAWL											
		~~BE~~ on		THERMOSALINOGRAPH SAMPLE TAKEN.					# AT	CONS	# 140.				

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142/3 144/5 146/7

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19	F 10	0426	BE	CTD		142	54 39 98	134 21 75	>2000			1			T: 11.62 S: 32.04
		0430	BO				54 39 93	134 21 68		250					T: 5.84 S: 33.87
		04 36	EN				54 39 90	134 21 62							SAL/CHL/NUTS @ 10m
NO	TRAWL	04 42	BE	NET		143	54 39 82	134 21 59		150					BONGO
19	F 11	0621	BE	CTD		144	54 38 35	134 38 17	>2000			1			T: 11.39 S: 32.02
		0626	BO	"			54 38 33	134 38 09		250					T: 5.59 S: 33.85
NO	TRAWL	0631	EN				54 38 32	134 38 03							SAL/CHL/NUTS @ 10m
		0637	BE	NET		145	54 38 81	134 37 93		150					BONGO
19	LSEA 01	1505	BE	CTD		146	55 52 73	134 03 05	230			1	H.M	✓	T: 10.82 S: 31.39
		1510	BO				55 52 76	134 02 91		220					T: 6.32 S: 33.31
		1515	EN				55 52 79	134 02 84							SAL/CHL/NUTS @ 10m
		1519	BE	NET		147	55 52 86	134 02 77		150					BONGO
		1549	BE	TRAWL		148	55 53 87	134 01 54							

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19	ISEA 02	1651	BE	CTD		149	55 59 20	133 58 48	180			1			T: 8.28 S: 30.54
		1654	BO				55 59 17	133 58 40		170					T: 6.42 S: 33.24
		1658	EN				55 59 15	133 58 35							SAL/CHL/NUTS @ 10m
		1703	BE	NET		150	55 59 14	133 58 35		150					BONGO
		1731	BE	TRAWL		151	55 59 64	133 57 50							
19	ISEA 03	1831	BE	CTD		152	56 03 20	133 54 52	87			1			T: 8.44 S: 30.28
		1833	BO				56 03 17	133 54 53		80					T: 7.99 S: 31.35
		1835	EN				56 03 13	133 54 51							SAL/CHL/NUTS @ 10m
		1903	BE	NET		153	56 03 24	133 54 67							BONGO
		1923	BE	TRAWL		154	56 03 55	133 54 12							
19	ISEA 04	2052	BE	CTD		155	56 08 96	133 43 60	245			1			T: 9.76 S: 31.18
		2056	BO				56 08 99	133 43 53		230					T: 7.08 S: 32.64
		2100	EN				56 08 99	133 43 51							SAL/CHL/NUTS @ 10m
		2103	BE	NET		156	56 08 98	133 43 47		150					BONGO
		2128	BE	TRAWL		157	56 09 54	133 43 54							

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19	ISEA 05	2249	BG	CTD		158	56 16 60	133 48 50	290			1	H.M.		T: 8.95 S: 29.25
		2253	BO				56 16 58	133 48 38		250					T: 7.05 S: 3.69
		2258	EN				56 16 57	133 48 32							SAL/CHL/NUTS @ 10m
		2301	BG	NET		159	56 16 53	133 48 24		150					BONGO
		2326	BE	TRAWL		160	56 16 97	133 47 80							
20	ISEA 06	0106	BG	CTD		161	56 22 77	133 35 96	358			1			T: 9.16 S: 29.66
		0111	BO				56 22 78	133 35 94		250					T: 7.41 S: 32.17
		0115	EN				56 22 80	133 35 93							SAL/CHL/NUTS @ 10m
		0118	BG	NET		162	56 22 82	133 35 93		150					BONGO
		0143	BE	TRAWL		163	56 22 67	133 34 94							
20	ISEA 07	1403	BE	CTD		164	56 21 85	133 25 71	376			1	H.M	✓	T: 9.22 S: 29.55
		1409	BO				56 21 87	133 25 68		250					T: 7.35 S: 32.27
		1414	EN				56 21 89	133 25 66							SAL/CHL/NUTS @ 10m
		1418	BG	NET		165	56 21 91	133 25 56		150					BONGO
		1442	BE	TRAWL		166	56 21 84	133 24 34							

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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
20	ISEA 08	1651	BE	CTD		167	56 27 01	133 01 25	165			1			T: 9.68 S: 26.87
		1654	BO				56 27 05	133 01 22		155					T: 7.94 S: 31.37
		1657	EN				56 27 08	133 01 21							SAL/CHL/NUTS @ 10m
		1701	BE	NET		168	56 27 13	133 01 24	141	135					BONGO
		1723	BE	TRAWL		169	56 27 70	133 00 30							
20	ISEA 09	1908	BE	CTD		170	56 28 94	132 49 36	116			1			T: 9.32 S: 24.71
	(2ND)	1910	BO				56 28 94	132 49 38		105					T: 7.61 S: 31.56
		1912	EN				56 28 95	132 49 40							SAL/CHL/NUTS @ 10m
	(3RD)	1920	BE	NET		171	56 28 93	132 49 52		105					BONGO
	(1ST)	1822	BE	TRAWL		172	56 29 15	132 53 44							
20	ISEA 10	2035	BE	CTD		173	56 26 82	132 39 24	100			1			T: 9.62 S: 25.59
		2037	BO				56 26 84	132 39 27		90					T: 7.29 S: 31.96
		2039	EN				56 26 85	132 39 29							SAL/CHL/NUTS @ 10m
		2046	BE	NET		174	56 26 93	132 39 25		90					BONGO
		2107	BE	TRAWL		175	56 26 42	132 38 55							

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20	ISEA 11	2202	BG	CTD		176	56 24 65	132 34 26	241			1			T: 10.32 S: 27.51
		2206	BO				56 24 69	132 34 30		230					T: 5.85 S: 33.51
		2210	EN				56 24 72	132 34 33							SAL/CHL/NUTS @ 10 m
		2214	BG	NET		177	56 24 80	132 34 39		150					BONGO
		2240	BG	TRAWL		178	56 24 39	132 34 84							
20	ISEA 12	2348	BG	CTD		179	56 19 60	132 35 86	290			1			T: 10.13 S: 29.01
		2352	BO				56 19 66	132 35 94		250					T: 5.84 S: 33.52
		2357	EN				56 19 69	132 36 00							SAL/CHL/NUTS @ 10 m
			BG	NET		180									BONGO
		0059	BG	TRAWL		181	56 19 18	132 36 27							
21	ISEA 13	1415	BE	TRAWL		182	56 01 59	132 42 77			NO CTD/BONGO - WEATHER 60+				TRAWL ONLY
21	ISEA 14	1533	BE	TRAWL		183	55 58 59	132 36 70			NO CTD/BONGO - WEATHER				TRAWL ONLY
21	ISEA 15	1705	BE	TRAWL		184	55 54 77	132 29 57			NO CTD/BONGO - WEATHER				TRAWL ONLY
21	ISEA 16	2105	BE	TRAWL		185	55 41 62	132 17 55			NO CTD/BONGO - WEATHER				TRAWL ONLY

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
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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month OCT **Year** 2003 **Ship** W.E. RICKER **Cruise ID** 2003-36

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
21	ISEA 17	2159	BE	TRAWL		186	55 46 64	132 22 30			NO CTD/BONGO - WEATHER				TRAWL ONLY
21	ISEA 18	2249	BE	TRAWL		187	55 51 39	132 27 03			NO CTD/BONGO - WEATHER				TRAWL ONLY
22	ISEA 19	0052	BE	CTD		188	55 49 12	132 26 42	560			1	H.M.	✓	T: 10.05 S: 29.19
		0057	BO				55 49 14	132 26 41		250					T: 5.72 S: 33.55
		0101	EN				55 49 16	132 26 38							SAL/CHL/NUTS @ 10 m
		0105	BE	NET		189	55 49 18	132 26 33		150					BONGO
		0135	BE	TRAWL		190	55 48 64	132 25 67							
22	ISEA 20	1409	BE	CTD		191	55 11 06	131 52 88	445			1	H.M	✓	T: 10.41 S: 29.62
		1414	BO				55 11 09	131 52 84		250					T: 5.67 S: 33.57
		1419	EN				55 11 13	131 52 81							NO SAL/CHL/NUTS @ 10 m
		1427	BE	NET		192	55 11	131 52		150					BONGO
		1447	BE	TRAWL		193	55 10 31	131 52 41							

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month OCT **Year** 2003 **Ship** WE RICKER **Cruise ID** 2003-36

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
22	ISEA 21	1607	BE	CTD		194	55 03 98	131 55 61	346	300		2	H.M.		T: 10.38 S: 29.14
		1614	BO				55 04 03	131 55 75							T: 5.66 S: 33.59
		16 24	EN				55 04 09	131 56 01							SAL @ 300 H CHL/NUTS @ 10m
		16 27	BE	NET		195	55 04 12	131 56 07	150						BONGO
		16 49	BE	TRAWL		196	55 03 68	131 56 45							
22	ISEA 22	1853	BE	CTD		197	54 48 55	131 54 61	417			1			T: 10.63 S: 30.21
		1857	BO				54 48 59	131 54 67		250					T: 5.68 S: 33.57
		1901	EN				54 48 60	131 54 72							CHL/NUTS @ 10 m
		1906	BE	NET		198	54 48 63	131 54 80							BONGO
		19 30	BE	TRAWL		199	54 48 30	131 54 03							
22	ISEA 23	2101	BE	CTD		200	54 38 18	132 01 62	156			1			T: 10.81 S: 30.82
		2104	BO				54 38 65	132 01 76		145					T: 6.35 S: 33.23
		2107	EN				54 37 97	132 01 91							CHL/NUTS @ 10 m
		2110	BE	NET		201	54 37 90	132 02 10		140					BONGO
		21 36	BE	TRAWL		202	54 37 41	132 01 93							

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month OCT **Year** 2003 **Ship** W E RICHER **Cruise ID** 2003-36

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
22	ISEA 24	2240	BE	CTD		203	54 38 90	132 15 40	129			1	H.M.		T: 10.67 S: 30.55
		2243	BO				54 38 95	132 15 38		120					T: 8.17 S: 32.41
		2245	GH				54 38 98	132 15 38							CHL/NUTS @ 10 m
		2249	BE	NET		204	54 39 03	132 15 36		113					BONGO
		2311	BE	TRAWL		205	54 39 12	132 16 02							
23	ISEA 25	0023	BE	CTD		206	54 40 25	132 28 93	171			1			T: 10.83 S: 31.03
↑		0031	BO				54 40 28	132 29 86		160					T: 6.47 S: 33.21
*		0034	GH				54 40 29	132 29 82							SAL/CHL/NUTS @ 10m
		0043	BE	NET		207	54 40 23	132 29 79		150					BONGO
		0111	BE	TRAWL		208	54 39 85	132 29 88							
23	HS 1	1402	BE	CTD		209	53 52 16	130 58 91	66			1	H.M.	✓	T: 11.41 S: 31.38
		1404	BO				53 52 16	130 58 90		60					T: 11.15 S: 31.86
		1405	GH				53 52 16	130 58 89							SAL/CHL/NUTS @ 10m
		1409	BE	NET		210	53 52 12	130 58 87		55					BONGO
		1428	BE	TRAWL		211	53 51 58	130 57 92							

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* - 23 OCT - COMPUTER NMEA CAME UP WITH '28 JANUARY'?

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month | **Year** | **Ship** | **Cruise ID**

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keepers	Trans. cleaned	Comments
23	HS 02	1547	BE	CTD		212	53 47 72	130 48 13	136			1	H.M.		T: 11.46 S: 31.69
		1550	BO				53 47 74	130 48 13		125					T: 8.15 S: 32.74
		1553	EN				53 47 75	130 48 14							CHL/NUTS @ 10 m
		1557	BE	NET		213	53 47 75	130 48 15	125						BONGO
		16 18	BE	TRAWL		214	53 47 42	130 47 36							
23	HS 03	1734	BE	CTD		215	53 44 79	130 37 47	98			1			T: 11.50 S: 31.61
		17 36	BO				53 44 78	130 37 45		90					T: 10.99 S: 31.87
		17 38	EN				53 44 77	130 37 43							CHL/NUTS @ 10 m
		17 42	BE	NET		216	53 44 78	130 37 37		85					BONGO
		18 00	BE	TRAWL		217	53 44 41	130 36 21							
23	IBC 06	19 19	BE	CTD		218	53 39 80	136 27 63	127			1			T: 10.87 S: 29.89
		19 22	BO				53 39 82	130 27 62		120					T: 7.89 S: 32.59
		19 24	EN				53 39 84	130 27 60							CHL/NUTS @ 10 m
		19 28	BE	NET		219	53 39 86	130 27 55		115					BONGO
		19 50	BE	TRAWL		220	53 39 56	130 26 83							

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month OCT **Year** 2003 **Ship** W E RICKER **Cruise ID** 2003-36

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
23	IBC 07	2240	BG	CTD		221	53 28 09	129 59 49	301			1	H.M.		T: 10.51 S: 28.43
		2245	BO				53 28 05	129 59 48		250					T: 7.59 S: 32.76
		2250	EN				53 28 02	129 59 45							CHL/NUTS @ 10 m
		2257	BG	NET		222	53 27 81	129 59 27		150					BONGO
		2322	BE	TRAWL		223	53 26 96	129 58 08							
24	IBC 08	0039	BG	CTD		224	53 21 66	129 49 16	188			1			T: 10.42 S: 27.64
		0043	BO				53 21 65	129 49 12		180					T: 7.51 S: 32.80
		0046	EN				53 21 65	129 49 06							SAL/CHL/NUTS @ 10 m
		0051	BG	NET		225	53 21 61	129 48 93		150					BONGO
		0117	BG	TRAWL		226	5321 02	129 47 94							
24	IBC 09	1403	BG	CTD		227	53 05 72	129 07 29	490			1	H.M	✓	T: 9.81 S: 26.08
		1408	BO				53 05 74	129 07 21		250					T: 6.98 S: 33.07
		1413	EN				53 05 76	129 07 17							SAL/CHL/NUTS @ 10 m
		1418	BG	NET		228	53 05 76	129 07 06	150						BONGO
		1440	BE	TRAWL		229	53 06 48	129 06 81							

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Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month OCT **Year** 2003 **Ship** W.E. RICKER **Cruise ID** 2003-36

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
24	IBC 10	1559	BE	CTD		230	53 13 96	129 05 94	490		*	V	M		T: 9.74 S: 25.20
		1607	BO				53 14 00	129 05 95		400					T: 6.82 S: 33.14
		1621	EN				53 14 01	129 05 92							CHL/NUTS @ 10 m
		1628	BE	NET		231	53 14 01	129 05 89		150				*	BONGO SAL @ 400. SAL @ T. SALIN
		1651	BE	TRAWL		232	53 14 72	129 05 86							
24	IBC 11	1805	BE	CTD		233	53 20 52	129 11 34	430			1			T: 9.34 S: 24.43
		1810	BO				53 20 56	129 11 45		250					T: 6.90 S: 33.04
		1815	EN				53 20 60	129 11 50							CHL/NUTS @ 10 m
		1819	BE	NET		234	53 20 70	129 11 57		150					BONGO
		1910	BE	TRAWL		235	53 20 55	129 12 42							
24	IBC 12	2101	BE	CTD		236	53 15 37	129 26 07	520			1			T: 9.92 S: 26.22
		2105	BO				53 15 37	129 26 08		250					T: 7.08 S: 33.05
		2110	EN				53 15 40	129 26 14							CHL/NUTS @ 10 m
		2114	BE	NET		237	53 15 42	129 26 22		150					BONGO
		2142	BE	TRAWL		238	53 14 85	129 26 33							

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month OCT **Year** 2003 **Ship** W E RICKER **Cruise ID** 2003-36

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
24	IBC 13	2251	BE	CTD		239	53 08 55	129 23 56	482			1			T: 10.77 S: 28.97
		2255	BO				53 08 55	129 23 54		250					T: 7.12 S: 33.05
		2259	EN				53 08 56	129 23 51							CHL/NUTS @ 10m
		2303	BE	NET		240	53 08 55	129 23 46		150					BONGO
		2323	BE	TRAWL		241	53 08 19	129 23 19							
25	IBC 14	0050	BE	CTD		242	53 01 50	129 15 90	382			1			T: 11.10 S: 30.09
		0054	BO				53 01 45	129 15 80		250					T: 7.12 S: 33.04
		0059	EN				53 01 40	129 15 74							SAL/CHL/NUTS @ 10m
		0102	BE	NET		243	53 01 32	129 15 65		150					BONGO
		0126	BE	TRAWL		244	53 00 25	129 15 61							
25	IBC 15	1404	BE	CTD		245	53 10 56	129 38 78	154			1	H.M	✓	T: 10.68 S: 30.54
		1407	BO				53 10 57	129 38 75		145					T: 7.98 S: 32.41
		1410	EN				53 10 58	129 38 71							SAL/CHL/NUTS @ 10m
		1414	BE	NET		246	53 10 59	129 38 67		142					BONGO
		1440	BE	TRAWL		247	53 10 07	129 37 96							

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25	IBC 16	1557	BE	CTD		248	53 04 82	129 32 92	145			1	H.M.		T: 10.59 S: 30.82
		1600	BO				53 04 85	129 32 93		140					T: 7.76 S: 32.64
		1603	EN				53 04 92	129 32 94							CHL/NUTS @ 10m
		1607	BE	NET		249	53 04 98	129 32 93		125					BONGO
		1627	BE	TRAWL		250	53 04 74	129 32 33							
25	IBC 17	1826	BE	CTD		251	52 56 70	129 24 09	170			1			T: 11.02 S: 31.16
		1829	BO				52 56 75	129 24 03		160					T: 7.87 S: 32.66
		1833	EN				52 56 91	129 24 02							CHL/NUTS @ 10m
		1856	BE	NET		252	52 56 78	129 23 63							BONGO
		1922	BE	TRAWL		253	52 56 11	129 22 93							
25	IBC 18	2024	BE	CTD		254	52 53 13	129 16 27	240			1			T: 10.95 S: 31.16
		2028	BO				52 53 14	129 16 16		230					T: 7.14 S: 33.08
		2032	EN				52 53 14	129 16 12							CHL/NUTS @ 10m
		2037	BE	NET		255	52 53 13	129 16 04		150					BONGO
		2059	BE	TRAWL		256	52 52 43	129 15 15							

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Month OCT **Year** 2003 **Ship** W E RICKER **Cruise ID** 2003-36

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
25	IBC 19	2221	BE	CTD		257	52 46 64	129 08 37	205			1	H.M		T: 10.87 S: 30.67
		22 24	BO				52 46 67	129 08 33		200					T: 9.31 S: 32.19
		22 28	EN				52 46 68	129 08 25							CHL/NUTS @ 10m
		22 31	BE	NET		258	52 46 67	129 08 19		150					BONGO
		22 53	BE	TRAWL		259	52 46 09	129 07 60							
26	T 01	1508	BE	CTD		260	51 16 56	128 19 88	75			1	H.M	✓	T: 12.24 S: 31.86
		15 10	BO				51 16 59	128 19 84		70					T: 11.84 S: 31.96
		15 12	EN				51 16 60	128 19 81							SAL/CHL/NUTS @ 10m
		15 16	BE	NET		261	51 16 59	128 19 62		60					BONGO
		15 33	BE	TRAWL		262	51 16 29	128 20 42							
26	T 02	1650	BE	CTD		263	51 12 51	128 27 85	191			1			T: 12.14 S: 31.86
		1654	BO				51 12 50	128 27 75		180					T: 6.80 S: 33.53
		1657	EN				51 12 50	128 27 69							SAL/CHL/NUTS @ 10m
		1702	BE	NET		264	51 12 48	128 27 57		150					BONGO
		1729	BE	TRAWL		265	51 12 22	128 28 05							TS SALINITY SAMPLE.
															NUMBERED CONST 263
															TS B

Cast type:
BOT = bottle cast, no CTD
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Additional comments

(*) - CANNOT COPY CTD257.DAT TO ZIP DISK - WILL NOT CREATE FILE? - NEW ZIP DISC OK

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month OCT **Year** 2003 **Ship** W.E. RICKER **Cruise ID** 2003-36

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
26	T 03	1842	BE	CTD		266	51 08 55	128 35 70	144			1	H.M.		T: 11.89 S: 31.88
		1845	BO				51 08 56	128 35 58		135					T: 8.09 S: 32.62
		1848	EN				51 08 58	128 35 47							SAL/CHL/NUTS @ 10 m
		1852	BE	NET		267	51 08 50	128 35 32		133					BONGO
		1911	BE	TRAWL		268	51 08 22	128 33 72							
26	T 04	2022	BE	CTD		269	51 04 49	128 4382	63			1			T: 11.95 S: 31.82
		2024	BO				51 04 47	128 43 79		55					T: 11.45 S: 31.92
		2025	EN				51 04 46	128 43 75							SAL/CHL/NUTS @ 10m
		2029	BE	NET		270	51 04 43	128 43 73		50					BONGO
		2053	BE	TRAWL		271	51 03 21	128 44 44							
26	T 05	2158	BE	CTD		272	51 00 07	128 52 09	62			1			T: 11.82 S: 31.85
		2159	BO				51 00 05	128 52 09		55					T: 11.76 S: 31.86
		2201	EN				51 00 03	128 52 09							SAL/CHL/NUTS @ 10m
		2204	BE	NET		273	50 59 97	128 52 09		50					BONGO
		2221	BE	TRAWL		274	50 59 28	128 53 07							

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Month OCT **Year** 2003 **Ship** W E RICKER **Cruise ID** 2003-36

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
26	T 06	23 18	BE	CTD		275	50 55 86	128 59 73	60			1			T: 12.03 S: 31.90
		23 19	BO				50 55 81	128 59 74		50					T: 11.30 S: 31.88
		23 20	EN				50 55 79	128 59 74							SAL/CHL/NUTS @ 10 m
		23 26	BE	NET		276	50 55 61	128 59 78		45					BONGO
		23 53	BE	TRAWL		277	50 55 18	129 01 19							
27	T 07	0135	BE	CTD		278	50 48 94	129 13 39	110			1			T: 12.23 S: 31.88
		01 37	BO				50 48 93	129 13 38		100					T: 10.52 S: 32.15
		01 39	EN				50 48 93	129 13 37							SAL/CHL/NUTS @ 10 m
		01 43	BE	NET		279	50 48 90	129 13 38		95					BONGO
		02 05	BE	TRAWL		280	50 49 56	129 14 31							
27	T 08	0344	BE	CTD		281	50 42 06	129 29 01	≈1900			1			T: 12.17 S: 31.90
		0349	BO				50 42 06	129 28 98		250					T: 6.51 S: 33.96
		0353	EN				50 42 06	129 28 98							SAL/CHL/NUTS @ 10 m
		0358	BE	NET		282	50 42 09	129 28 99		150	NO TRAWL				BONGO

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 OCT **Year** 2003 **Ship** W E RICKER **Cruise ID** 2003-36

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
27	T 09	0511	BE	CTD		283	50 37 39	129 39 03	2000+			1	H.M.		T: 12.65 S: 31.93
		0516	BO				50 37 38	129 39 02		250					T: 5.96 S: 33.83
		0520	EN				50 37 37	129 39 04							SAL/CHL/NUTS @ 10 m
		0524	BE	NET		284	50 37 37	129 39 07		150	NO TRAWL				BONGO
27	T 10	0637	BE	CTD		285	50 32 25	129 49 27	2000+			1			T: 12.70 S: 32.12
		0641	BO	.			50 32 24	129 49 30		250					T: ? S: ?
		0646	EN				50 32 23	129 49 34							SAL/CHL/NUTS @ 10m
		0652	BE	NET		286	50 32 22	129 49 36		150	NO TRAWL				BONGO
27	T 11	0803	BE	CTD		287	50 27 56	129 59 58	2000+			1			T: 12.70 S: 32.08
		0808	BO				50 27 50	129 59 68		250					T: 5.65 S: 33.86
		0813	EN				50 27 47	129 59 73							SAL/CHL/NUTS @ 10 m
		0819	BE	NET		288	50 27 42	129 59 82		150	NO TRAWL				BONGO
27	T 12 (2ND)	0939	BE	CTD		289	50 22 50	130 09 77	2000+			1			T: 12.61 S: 31.99
		0949	BO				50 22 41	130 09 74		500					T: ? S: ?
		1000	EN				50 22 32	130 09 71			DEEP SAL		+ SURF SAL		SAL/CHL/NUTS @ 10m
	(1ST)	0922	BE	NET		290	50 22 66	130 09 68			NO TRAWL				BONGO

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