

DAILY LOG BOOK

MISSION
NUMBER

2002-35

DATE:

From: AUG 14 to: AUG 29

VESSEL:

W.E. RICKER

PROJECT:

WELCH - HI SEAS SALMON

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

Captain: DAVE WENSLEY First Officer: KEVIN McKEEHRIS
Second Officer: GARY Third Officer: _____

Second Officer: GARY Third Officer: _____

Mission Participants / Agencies: PBS-105

Scientific Personnel:

Party Chief:

[illegible]

Second leg of Mission:

Party Chief:

[illegible]

Data logging computer:

Data acquisition program: SEASAVE

CTD deck unit make: SEA model: 911+ serial number: 11818377-0471

Primary CTD

Primary CTD

Make: SAAB model: 900 serial number: 911

Primary temperature serial number: 2095 serial number: _____

Primary conductivity serial number:	2280
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Secondary temperature serial number: 2710

Secondary conductivity serial number: 2278

Transmissometer:

Transmissometer: _____
Model: _____

Fluorometer: Model _____ Cable gain: _____

Oxygen sensor: _____
Model: _____

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

Other sensors: _____
 _____ model: _____ S/N: _____

Other sensors: _____ s/n: _____

Other sensors: _____ s/n: _____

Other sensors: _____ s/n: _____

Other sensors: _____ s/n: _____

Secondary CTD

Make: _____ model: _____ serial number: _____

Primary temperature serial number: _____

Primary conductivity serial number: _____

Secondary temperature serial number:

Secondary conductivity serial number: _____

Transmissometer: _____
Model: _____
s/n: _____

Fluorometer: Model _____ S/n _____
Cable gain: _____ s/n _____

Oxygen sensor: _____
Cable gum: _____
Model: _____
S/n: _____

PAR sensor: _____ Model: _____ s/n _____

Other sensors: _____

_____ s/n

_____ s/n

Other sensors: s/n

Other sensors:

Other sensors: _____ s/n: _____

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

DAILY LOG

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Month <i>August</i>					Year			Ship				Cruise ID		
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments
						Latitude	Longitude							
15	E 01		CTD	BG	001	49 20 35	126 33 21	50	40					NOT
				BO	001									WORKING
				EN	001									
	(LOCAL)	0615	NET	BG	002	49 20.346	126 33 214	51	45					BONGO
		0643	TRAWL		003	49 19.89	126 34.463	66						TRAWL
15	E 02	0754	NET	BG	004	49 19.438	126 35.135	70	55					BONGO
			TRAWL		005									TRAWL - HEADROPE AT 3.5m
		(UTC)												
15	E 03	1719	CTD	BG	006	49 17 07	126 40 12	106	95					T: 11.29 S: 31.83
		1721		BO	006	49 17 10	126 40 14							SAL / CHT / NUTS @ 20m
		1723		EN	006	49 17 11	126 40 16							
		1732	NET	BG	007	49 17 191	126 40 160		95					BONGO
		1800	TRAWL	BG	008	49 16.849	126 40.642		107.					TRAWL - HEADROPE AT 3.5m
15	E 04	1804	CTD	BG	009	49 15 08	126 44 42	112	100		1			T: 12.10 S: 31.19
	1807	1812	CTD	BO	009	49 15 08	126 44 44							SAL / CHT / NUTS @ 20m
		1815	CTD	EN	009	49 15 08	126 44 47							
		1821	NET	BG	010	49 15 07	126 44 54		105					BONGO
		1903	TRAWL	BG	011	49 15.293	126 46.129		119					TRAWL - HEADROPE AT 3.5m

Cast type:

BOT = bottle cast, no CTD
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bottle firing method:
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Time Code

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MR = messenger release time
RE = recover mooring time

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

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Month <i>August</i>					Year <i>2002</i>			Ship			Cruise ID			
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						Latitude	Longitude							
15	E 05	2019	CTD	BE	012	49 12 42	126 49 92	144	135		1			T: 11.97 S: 31.33
		2022		BO	012	49 12 42	126 49 96							BOT @ 20 m FOR CHL/S/MUT
		2025		CM	012	49 12 42	126 50 02							
		2032	NET	BE	013	49 12 44	126 50 156		130					BONGO
		2052	TRAWL	BE	014	49 11.889	126 50 290	141	14					TRAWL - HANDS OFF AT 3.5m
15	E 06	2242	CTD	BE	015	49 10 13	126 53 87	179			1			T: S:
		2246		BO		49 10 14	126 53 98		165					BOT @ 20m FOR CHL/S/MUT
		2249		CM		49 10 13	126 53 90							
			NET	BE	CANCELLED									BONGO - BAD WEATHER
		2304	TRAWL	BE	016	49 09.801	126 52.645	167						TRAWL - HANDS OFF AT 3.5m
16	E 07	1304	CTD	BE	017	49 08 01	126 59 99	458			1			T: 11.13 S: 31.08
		1308		BO		49 07 99	126 59 00		200					BOT @ 20 m - S/CHL/MUT
		1314		CM		49 07 96	126 59 00							
		1319	NET	BE	018	49 07 952	126 50 009		150					BONGO
		1349	TRAWL	BE	019	49 07.445	126 59.926		536					TRAWL - HANDS OFF AT 3.5m

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						Latitude	Longitude								
16	E08	1515	CTD	BE	020	49 02 07	127 10 09	>1000			1			T: 10.89 S: 32.22	
		1519		BO		49 02 03	127 10 14		200					20m BOT - CHL/S/NUT	
		1523		EN		49 02 00	127 10 19								
		1527	NET	BE	021	49 01 995	127 10 243		150					BONGO	
		1547	TRAWL	BE	022	49 02.549	127 10.806	71500	1					TRAWL - HADOPRO AT 3.5m	
16	E09	1759	CTD	BE	023	48 53 87	127 25 74	>1000						T: 11.30 S: 32.23	
		1803		BO		48 53 88	127 25 81		200		1			20m BOT - CHL/S/NUTS	
		1808		EN		48 53 89	127 25 88							MIXED TO 30m	
		1812	NET	BE	024	48 53 895	127 25 923		150					BONGO	
		1902	TRAWL	BE	025	48 54.621	127 27.566	72000						TRAWL - HADOPRO AT 3.5m	
	E10	2106	CTD	BE	026	48 45 84	127 41.09	72000						T: 12.49 S: 32.18	
		2110		BO		48 45 84	127 41 15		200		1			20m BOT - CHL/S/NUTS	
		2113		EN		48 45 84	127 41 23							MIXED TO 40m	
		2120	NET	BE	027	48 45 831	127 41 325		150					BONGO	
		2145	TRAWL	BE	028	48 46 314	127 42.700	72000						TRAWL - HADOPRO AT 3.5m	

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Cruise ID 2002-35

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Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments	
						Latitude	Longitude								
17	E 11 <i>3rd</i>	0051	CTD	BC	029*	48 39 24	127 58 60							T: 13.15 S: 32.27	
		0115		BO		48 39 29	127 58 79	>2500	1100		1			DEEP CAST FOR SAL & NUTS = 29A	
	<i>*SEE NOTES</i>	0147		EN		48 39 42	127 59 20								
	<i>2nd</i>	0016	NET	BC	030*	48 39 .076	127 58 .281		150					BONGO * NOTE ORDER	
	<i>1st</i>	2340	TRAWL	BC	031*	48 37.983	127 56 129	72500						TRAWL - HARD ROPE AT 3.5m	
17	VI 01	1400	CTD	BC	032	50 04 63	128 02 35	585			1			T: 10.56 S: 32.41	
		1404		BO		50 04 64	128 02 43		200					20 BOT - CHL/S/NUTS	
		1408		EN		50 04 63	128 02 47							MIXED TO 35m	
		1413	NET	BC	033	50 04 .596	128 02 .530		150					BONGO	
		1544	TRAWL	BC	034	50 05 .307	128 02 .660	386						TRAWL - HARD ROPE AT 3.5m	
17	VI 02	1558	CTD	BC	035	50 11 85	128 01 60	99			1			T: 9.74 S: 32.67	
		1600		BO		50 11 89	128 01 62		90					20m BOT - CHL/S/NUT	
		1603		EN		50 11 84	128 01 64								
		1607	NET	BC	036	50 11 82	128 01 663		90					BONGO	
		1630	TRAWL	BC	037	50 12 501	128 01.528	79						TRAWL - HARD ROPE AT 3.5	

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Additional comments

OH CAST

0009 (E11)

1100 m OF WIRE WAS OUT - ON UPCAST WIRE WAS WOUND SLOWLY BACK ONTO DRUM WITH MANY STOPS TO LET SOME OUT AND RE-WRAP IT - HENCE "UPCAST" IS VERY IRREGULAR

- ALSO BECAUSE OF THE TIME INVOLVED IT WAS DECIDED TO DO THE CTD CAST LAST BUT I DIDN'T CHANGE THE CONSECUTIVE NUMBERS

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						Latitude	Longitude							
17	VI 03	1742	CTD	BC	038	50 18 21	128 04 87	90			1			T: 9.72 S: 32.57
		1744		BO		50 18 22	128 04 90		85					20m BOT - SAL/CHL/NUT
		1746		EN		50 18 21	128 04 91							
		1750	NET	BC	039	50 18 209	128 04 930		85					BONGO
		1812	TRAWL	BC	040	50 18 814	128 05 363	95						TRAWL - HEADROPE AT SURFACE
17	VI 04	1906	CTD	BC	041	50 23 61	128 07 61	85			1			T: 9.80 S: 32.63
		1908		BO		50 23 61	128 07 62		80					20m BOT - SAL/CHL/NUT
		1910		EN		50 23 59	128 07 63							
		1915	NET	BC	042	50 23 534	128 07 633		80					BONGO
		1939	TRAWL	BC	043	50 24 154	128 07 478	80						TRAWL - HEADROPE AT SURFACE
17	VI 05	2038	CTD	BC	044	50 28 13	128 13 15	77			1			T: 10.10 S: 32.19
		2040		BO		50 28 12	128 13 14		70					20m BOT - SAL/CHL/NUT
		2042		EN		50 28 13	128 13 17							
		2046	NET	BC	045	50 28 069	128 13 189		70					BONGO
		2107	TRAWL	BC	046	50 28 647	128 14 049	63						TRAWL - HEADROPE AT SURFACE

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						Latitude	Longitude								
17	VI 06	2207	CTD	BG	047	50 32 83	128 20 17	86						T:10.06 S: 32.17	
		2209		BO		50 32 81	128 20 16		80		1			20m Bot. SAL/CHL/NUTS	
		2210		EN		50 32 81	128 20 15								
		2215	NET	BG	048	50 32 795	128 20 158		80					BONGO	
		2238	TRAWL	BE	049	50 33 31	128 20 264	80						TRAWL HEADROPE AT SURFACE	
17	VI 07	2335	CTD	BE	050	50 37 94	128 25 22	77			1			T:10.16 S: 32.15	
		2337		BO		50 37 95	128 25 24		70					20m Bot. SAL/CHL/NUTS	
		2339		EN		50 37 95	128 25 26								
		2343	NET	BE	051	50 37 935	128 25 268		70					BONGO	
18		0006	TRAWL	BE	052	50 38 254	128 26 426	88						TRAWL HEADROPE AT SURFACE	
18	T 07	1302	CTD	BG	053	50 49 56	129 12 82	88			1			T:13.04 S: 31.71	
		1304		BO		50 49 57	129 12 83		80					20m Bot - SAL/CHL/NUTS	
		1306		EN		50 49 59	129 12 85							Mixed - 25m	
		1316	NET	BG	054	50 49 706	129 12 904		79					BONGO	
		1341	TRAWL	BE	055	50 49 601	129 13 946		102					TRAWL HEADROPE AT SURFACE	

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						Latitude	Longitude								
18	T 08	1530	CTD	BC	056	50 42 04	129 29 27	>1000			1			T: 12.89 S: 31.77	
	(0018)	1534		BO		50 42 06	129 29 30		200					20m BOT - SAL/CHL/NOTS	
		1539		EN		50 42 10	129 29 34								
		1542	NET	BC	057	50 42 092	129 29 334		156					BONGO	
		16:00	TRAWL	BC	058	50 41 786	129 30 431	>1500						TRAWL - HEADROPE AT SURFACE	
18	T 09	1729	CTD	BC	059	50 37 19	129 39 25	>1000			1			T: 15.08 S: 31.67	
	0019	1733		BO		50 37 18	129 39 31		200					20m BOT - SAL/CHL/NOTS	
		1737		EN		50 37 17	129 39 31								
		1741	NET	BC	060	50 37 148	129 39 319		150					BONGO	
		18:18	TRAWL	BC	061	50 35 822	129 40 379	>2000						TRAWL - HEADROPE AT SURFACE	
18	T 10	1934	CTD	BC	062	50 32 45	129 49 69	>1000						T: 15.16 S: 31.79	
	0020	1938		BO		50 32 45	129 49 63		200		1			20m BOT - SAL/CHL/NOTS	
		1942		EN		50 32 43	129 49 65							MOVED to 27m	
		1946	NET	BC	063	50 32 467	129 49 625							BONGO	
		20:13	TRAWL	BC	064	50 32 262	129 50 407	>2000						TRAWL - HEADROPE AT SURFACE	

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						Latitude	Longitude								
18	T11	2115	CTD	BC	065	50 27 74	129 59 30	>1000			1			T: 15.89 S: 31.80	
	0021	2129		BO		50 27 75	129 59 29		200					20m BOT - SAL/CHL/NUTS	
		2133		EM		50 27 77	129 59 29								
		2136	NET	BC	066	50 27 785	129 59 297		150					BOMBO	
		2203	TRAWL	BC	067	50 27 368	129 59 938	71000						TRAWL - HEADROPE AT SURFACE	
18	T12	2312	CTD	BC	068	50 22 85	130 09 33	>1000			1			T: 16.01 S: 31.87	
*	0022	2316		BO		50 22 85	130 09 36		200					20m BOT - SAL/CHL/NUTS *	
		23		EM		50 22	130 09							MIXED @ 30m	
		2224	NET	BC	069	50 22 846	130 09 359		150						
		2350	TRAWL	BC	070	50 22 448	130 10 653	71000						TRAWL - HEADROPE AT SURFACE	
19	T13	0106	TRAWL	BC	71	50 18 676	130 19 403	71000						TRAWL - HEADROPE AT SURFACE	
	0023	0138	NET	BC	72	50 18 019	130 21 949		150						
		0155	CTD	BC	73	50 18 08	130 22 27	7200						T: 15.83 S: 31.28	
				BO		50 17 09			1000		1			DEEP BOT (1000m) FOR SAL	
		0240		EM		50 17 96	130 22 41								

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2:20:30

Additional comments

T12 - PUMPS NOT TURNED ON UNTIL 30m OF UPEAST - NO TIME TO RECAST X

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						Latitude	Longitude								
19	T 06	1259	CTD	BC	74	50 56 10	129 00 02	57	50		1			T: 12.92 S: 30.41	
	0024	1300		BO		50 56 15	129 00 03							20m BOT - SAL/CHL/NUTS	
		1302		EN		50 56 18	129 00 03							MIXED TO 10	
		1307	NET	BC	75	50 56 271	128 59 994		50					BONGO	
		1313	TRAWL	BC	76	50 57 534	128 58.386							TRAWL - HEADROPE AT SURFACE	
19	T 05	1433	CTD	BC	77	51 00 75	128 51 59	59			1			T: 12.89 S: 31.20	
	0025	1434		BO		51 00 75	128 51 57		50					20m BOT - SAL/CHL/NUTS	
		1436		EN		51 00 76	128 51 55							MIXED TO 10	
		1440	NET	BC	78	51 00 804	128 51 444		50					BONGO	
		1504	TRAWL	BC	79	51 01 657	128 49 921	57						TRAWL - HEADROPE DEPTH = 3.6m	
19	T 04	1600	CTD	BC	80	51 04 43	128 43 82	60			1			T: 13.45 S: 31.37	
	0026	1602		BO		51 04 43	128 43 79		55					20m BOT - SAL/CHL/NUTS	
		1603		EN		51 04 48	128 43 76							MIXED TO 20	
		1607	NET	BC	81	51 04 479	128 43 639		50					BONGO	
		1626	TRAWL	BC	82	51 04.954	128 42 280	63						TRAWL HEADROPE DEPTH = 3.6m	

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						Latitude	Longitude								
19	T03	1730	CTD	BC	83	51 08 49	128 35 69	138			1			T:13.31 S:31.31	
	0027	1733		BO		51 08 49	128 35 70		130					20m BOT - SAL/CHL/NUTS	
		1736		EN		51 08 48	128 35 72								
		1741	NET	BC	84	51 08 478	128 35 770		130					BONGO	
		1804	TRAWL	BC	85	51 08 964	128 34 941							TRAWL HEADROPE DEPTH = 3.6	
19	T02	1904	CTD	BC	86	51 12 49	128 27 90	187						T:12.65 S:31.13	
	0028	1908		BO		51 12 50	128 27 89		180					BOTE 20m - SAL/CHL/NUTS	
		1911		EN		51 12 49	128 27 88								
		1916	NET	BC	87	51 12 452	128 27 861		150					BONGO	
		1941	TRAWL	BC	88	51 12 987	128 27 78	183						TRAWL HEADROPE DEPTH = 3.6 m	
19	T01	2042	CTD	BC	89	51 16 55	128 20 15	75						T:13.20 S:30.94	
	0029	2044		BO		51 16 54	128 20 18		70					BOTE 20m - SAL/CHL/NUTS	
		2046		EN		51 16 53	128 20 20								
		2050	NET	BC	90	51 16 496	128 20 307		70					BONGO	
		2111	TRAWL	BC	91	51 15 739	128 19 629	75						TRAWL HEADROPE DEPTH = 3.6	

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Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments	
						Latitude	Longitude								
21	HS 01	1503	CTD	BC	92	52 31 75	129 51 88	218			1			T: 13.64 S: 31.55	
	0030	1509		BO		52 31 75	129 51 95		200					BOT 20m - SAL/CHL/NUIS	
		1514		EN		52 31 79	129 51 96							* PUMPS OFF (MY FAULT)	
		1519	NET	BC	93	52 31 896	129 51 974		150					BONGO	
		1554	TRAWL	BC	94	52 33.760	129 53.560	237						TRAWL HEADROPE DEPTH 3.6m	
21	HS 02	2004	CTD	BC	95	52 59 83	130 27 98	120			1			T: 12.73 S: 31.30	
	0031	2008		BO		52 59 87	130 27 86		110					BOT 20m - SAL/CHL/NUIS	
		2011		EN		52 59 93	130 27 77								
		2018	NET	BC	96	53 00 018	130 27 579		110					BONGO	
		2041	TRAWL	BC	97	53 00.99	130 28.600	119						TRAWL HEADROPE A 3.6m	
21	HS 03	2238	CTD	BC	98	53 13 27	130 43 54	160			1			T: 13.25 S: 30.05	
	0032	2243		BO		53 13 26	130 43 41		150					BOT 20m - SAL/CHL/NUIS	
		2246		EN		53 13 25	130 43 34							MUGA - 12m	
		2256	NET	BC	99	53 13 284	130 43 244		150					BONGO	
		2316	TRAWL	BC	100	53 13 985	130 43 719	162						TRAWL HEADROPE A 3.6m	

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						Latitude	Longitude								
22	FI 01	1307	CTD	BG	101	54 47 41	133 01 04	210			1			T: 12.01 S: 30.41	
	0033	1312		BO		54 47 40	133 01 06		200					BOT@ 20m - SAL/CHL/NUTS	
		1317		EN		54 47 42	133 01 21								
		1323	NET	BG	102	54 47 434	133 01 322		150					BONGO	
		1353	TRAWL	BG	103	54 47 210	133 03 600	140						TRAWL HEADROPE DEPTH AT 3.0	
22	FI 02	1444	CTD	BG	104	54 46 49	133 11 17	199			1			T: 11.89 S: 31.11	
	0034	1449		BO		54 46 50	133 11 21		190					BOT@ 20m - SAL/CHL/NUTS	
		1453		EN		54 46 50	133 11 24							MIXED to 17m	
		1457	NET	BG	105	54 46 532	133 11 365		150					BONGO	
		1526	TRAWL	BG	106	54 46 564	133 14. 244	175						TRAWL HEADROPE DEPTH AT 3.6m	
22	FI 03	1613	CTD	BG	107	54 45 78	133 19 04	113			1			T: 11.38 S: 31.56	
	0035	1616		BO		54 45 79	133 19 07		100					BOT@ 20m - SAL/CHL/NUTS	
		1619		EN		54 45 81	133 19 10								
	16	1623	NET	BG	108	54 45 874	133 19 117		95					BONGO	
		1647	TRAWL	BG	109	54 45 954	133 20. 690	126						TRAWL HEADROPE DEPTH AT 3.6m	

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						Latitude	Longitude								
22	FI 04	1741	CTD	BE	110	54 45 11	133 26 41	145			1			T: 11.06 S: 31.58	
	0036	1744		BO		54 45 14	133 26 35		135					BOT @ 20m - SAL/CHL/NUTS	
		1748		EN		54 45 15	133 26 36								
		1752	NET	BE	111	54 45 17	133 26 36		136					BONGO	
		1816	TRAWL	BE	112	54 44 809	133 27 733	139						HEADROPE DEPTH AT 3.6m	
22	FI 05	1917	CTD	BE	113	54 44 33	133 34 56	195			1			T: 12.09 S: 31.60	
	0037	1922		BO		54 44 37	133 34 41		195					BOT @ 20m - SAL/NUT/CHL	
		1927		EN		54 44 41	133 34 35							MIXED TO 13m	
		1941	NET	BE	114	54 44 409	133 34 039		150					BONGO	
		2005	TRAWL	BE	115	54 44 171	133 35 565	193						TRAWL HEADROPE DEPTH AT 3.6m	
22	FI 06	2118	CTD	BE	116	54 43 46	133 41 95	222			1			T: 13.28 S: 31.43	
	0038	2122		BO		54 43 44	133 41 79		200					BOT @ 20m - SAL/NUT/CHL	
		2130		EN		54 43 44	133 41 56								
		2134	NET	BE	117	54 43 410	133 41 441		150					BONGO	
		2203	TRAWL	BE	118	54 43.317	133 43 568							TRAWL HEADROPE DEPTH AT 3.6m	

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DAILY LOG

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Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments	
						Latitude	Longitude								
22	FI 07	2301	CTD	BE	119	54 42 92	133 50 44	228			1			T: 13.18 S: 31.36	
	0039	2305		BO		54 42 90	133 50 32		200					BOT@ 20m - SAL/NUT/CHL	
		2310		EN		54 42 89	133 50 25								
		2313	NET	BE	120	54 42 867	133 50 306		150					BONGO	
		2343	TRAWL	BE	121	54 42.387	133 52.672	222						TRAWL HEADROPE DEPTH AT 3.6m	
23	FI 13	1211	CTD	BE	122	54 34 98	135 10 34	72800			1			T: 13.93 S: 31.69	
	0040	1235		BO		54 34 99	135 10 32		1000					BOT@ 1000m FOR SAL	
		1249		EN		54 34 99	135 10 17								
		1311	NET	BE	123	54 34 955	135 10 408		150					BONGO	
		1344	TRAWL	BE	124	54 35.149	135 7.890	2640						TRAWL HEADROPE DEPTH AT 3.6m	
23	FI 12	1454	CTD	BE	125	54 36 66	134 54 11	2651			1			T: 14.08 S: 31.82	
	0041	1459		BO		54 36 67	134 54 10		200					BOT@ 20m FOR SAL/CHL/NUTS	
		1503		EN		54 36 67	134 54 09							MIXED - 18m	
		1507	NET	BE	126	54 36 669	134 54 11		150					BONGO	
		1538	TRAWL	BE	127	54 36.926	134 51.013	2545						TRAWL HEADROPE DEPTH AT 3.6	

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Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments	
						Latitude	Longitude								
23	FI 11	1649	CTD	BG	128	54 38 24	134 38 00	2334			1			T: 13.19 S: 31.82	
	0042	1654		BO		54 38 20	134 3 16		200					BOTE 20m - SAL / CHL / NUTS	
		1659		CH		54 38 21	134 38 36								
		1707	NET	BG	129	54 38 195	134 38 350		150					BONGO	
		1730	TRAWL	BG	130	54 38 785	134 36 866	2344						TRAWL - HEADROPE DEPTH 23.6m	
23	FI 10	1904	CTD	BG	131	54 40 07	134 21 93	>2000			1			T: 12.89 S: 31.66	
	0043	1908		BO		54 40 10	134 21 87		200					BOTE 20m - SAL / NUT / CHL	
		1913		CH		54 40 14	134 21 90								
		1918	NET	BG	132	54 40 084	134 22 106		150					BONGO	
		1947	TRAWL	BG	133	54 40 698	134 19 452	1927						TRAWL - HEADROPE DEPTH 23.6m	
23	FI 09	2101	CTD	BG	134	54 41 41	134 05 96	223			1			T: 13.35 S: 31.39	
	0044	2106		BO		54 41 44	134 05 94		200					BOTE 20m - SAL CHL NUT	
		2110		CH		54 41 46	134 05 86								
		2116	NET	BG	135	54 41 374	134 05 769		150					BONGO	
		2144	TRAWL	BG	136	54 41 814	134 04 092	215						TRAWL - HEADROPE 13.6m	

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						Latitude	Longitude							
23	FI 08	2240	CTD	BG	137	54 42 17	133 59 40		208		1			T: 13.51 S: 31.34
	0045	2245		BO		54 42 15	133 58 51			195				BOT 20m - SAL/CAL/NUIS
		2249		GM		54 42 15	133 58 62							
		2254	NET	BG	138	54 42 163	133 58 744			150				BONGO
		2320	TRAWL	BE	139	54 42 175	133 57 046		215					TRAWL HEADROPE 23.6m
23														
24	ISEA 01	1309	CTD	BG	140	54 52 04	132 34 92	413			1			T: 12.29 S: 29.88
	0046	1314		BO		54 52 01	132 35 04		200					BOT 20m - SAL/CAL/NUIS
		1319		GM		54 52 01	132 35 11							NO MIXING
		1323	NET	BG	141	54 52 021	132 35 244		150					BONGO
		1350	TRAWL	BG	142	54 50 940	132 35 252		396					TRAWL HEADROPE 23.6m
24	ISEA 02	1443	CTD	BG	143	54 46 61	132 33 66	360			1			T: 12.69 S: 29.51
	0047	1447		BO		54 46 53	132 33 77		200					BOT 23m - SAL/CAL/NUIS
		1452		GM		54 46 50	132 33 05							NO MIXING
		1456	NET	BG	144	54 46 442	132 33 019		150					BONGO
		1520	TRAWL	BG	145	54 45 347	132 33 682	389						TRAWL HEADROPE 23.6m

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						Latitude	Longitude								
24	ISCA 03	1637	CTD	BG	146	54 40 97	132 21 44	137			1			T: 11.06 S: 30.17	
	0048	1641		BO		54 40 97	132 21 37		133					Bot@ 20m - SAL/CAL/NOTS	
		1644		GN		54 40 95	132 21 32							NOT MIXED	
		1647	NET	BG	147	54 40 938	132 21 284		130					BONGO	
		1712	TRAWL	BG	148	54 40 604	132 19 559							TRAWL HEADROPE 23.6m	
24	ISCA 04	1855	CTD	BG	149	54 40 86	131 58 73	181			1			T: 10.09 S: 30.49	
	0049	1859		BO		54 40 95	131 58 54		170					Bot@ 20m - SAL/MVT/CAL	
		1904		GN		54 41 04	131 58 38							MIXED TO 10	
		1908	NET	BG	150	54 41 124	131 58 191		150					BONGO	
		1922	TRAWL	BG	151	54 42 498	131 56 425	367						TRAWL HEADROPE 23.6m	
24	ISCA 05	2010	CTD	BG	152	54 45 33	131 54 50	413	200		1			T: 11.10 S: 29.98	
	0050	2016		BO		54 45 40	131 54 30							Bot@ 20m - SAL/CAL/NOT	
		2020		GN		54 45 48	131 54 12							NOT MIXED	
		2026	NET	BG	153	54 45 568	131 53 946		150					BONGO	
		2055	TRAWL	BG	154	54 46 835	131 52 737							TRAWL HEADROPE 23.6m	

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						Latitude	Longitude								
24	ISEA 06	2148	CTD	BE	155	54 50 29	131 54 95	416			1			T: 10.67 S: 29.72	
	0051	2153		BO		54 50 28	131 54 81		200					Bot @ 20m - SAL/CHL/NUTS	
		2158		GM		54 50 32	131 54 71								
		2202	NET	BE	156	54 50 292	131 54 579		150					BONGO	
		2228	TRAWL	BE	157	54 51 482	131 54 460	400						TRAWL Haul depth 43.6m	
24	ISEA 07	2321	CTD	BE	158	54 55 45	131 55 37	430			1			T: 11.38 S: 29.47	
	0052	2326		BO		54 55 41	131 55 31		200					Bot @ 20m - SAL/CHL/NUTS	
		2331		GM		54 55 35	131 55 26								
		2335	NET	BE	159	54 55 299	131 55 256		150					BONGO	
25		0000	TRAWL	BE	160	54 56 540	131 55 762	380						TRAWL Haul depth 43.6m	
25	DE 05	1309	CTD	BE	161	54 10 51	132 40 54	50			1			T: 11.34 S: 31.67	
	0053	1311		BO		54 10 55	132 40 56		45					Bot @ 20m - SAL/CHL/NUTS	
		1313		GM		54 10 59	132 40 60								
		1318	NET	BE	162	54 10 695	132 40 731		40					BONGO	
		1340	TRAWL	BE	163	54 10 887	132 39, 315							TRAWL Haul depth 43.6m	

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						Latitude	Longitude							
25	DE 04	1503	CTD	BG	164	54 09 05	132 24 97	83			1			T: 11.28 S: 31.78
	0054	1505		BO		54 09 05	132 24 94		75					BOT@20m - SAL/CAL/AUTS
		1508		EN		54 09 04	132 24 93							
		1514	NET	BG	165	54 09 030	132 24 913		75					BONGO
		1537	TRAWL	BG	166	54 08 708	132 22 947	85						TRAWL HEADROPE 23.6
25	DE 03	1646	CTD	BG	167	54 08 24	132 11 60	41			1			T: 11.03 S: 31.66
	0055	1648		BO		54 08 24	132 11 58		35					BOT@20m - SAL/CAL/AUTS
		1649		EN		54 08 24	132 11 53							
		1655	NET	BG	168	54 08 200	132 11 46		30					BONGO
		1717	TRAWL	BG	169	54 08 229	132 08 559	38						TRAWL HEADROPE 23.6m
25	DE 02	1959	CTD	BG	170	54 09 73	131 56 45	70			1			T: 11.13 S: 31.69
	0056	2002		BO		54 09 74	131 56 38		60					BOT@20m - SAL/CAL/AUTS
		2003		EN		54 09 75	131 56 29							
		2007	NET	BG	171	54 09 792	131 56 165		60					BONGO
		2025	TRAWL	BG	172	54 10 348	131 53 683	77						TRAWL HEADROPE 23.6m

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						Latitude	Longitude								
26	H-08	1300	CTD	BG	173	52 35 56	131 00 19	113			1			T: 13.62 S: 31.40	
*	0057	1303		BO		52 35 55	131 00 22		105					BOT@ 20m - SAL/CAL/NUTS	
		1306		CH		52 35 52	131 00 22							MIXED to 20m	
		1313	NET	BG	174	52 35 522	131 00 201		100					BONGO	
		1340	TRAWL	BG	175	52 34 940	130 57 930	108						TRAWL HANDROPE 13.6	
26	H-07	1546	CTD	BG	176	52 32 18	130 44 50	114			1			T: 13.82 S: 31.44	
*	0058	1549		BO		52 32 14	130 44 43		105					BOT@ 20m - SAL/CAL/NUTS	
		1552		CH		52 32 07	130 44 42							MIXED - 20m	
		1556	NET	BG	177	52 32 040	130 44 461		115					BONGO	
		1623	TRAWL	BG	178	52 31 280	130 43 044	122						TRAWL HANDROPE 13.6m	
26	H-06	1751	CTD	BG	179	52 28 96	130 28 88	173			1			T: 13.93 S: 31.42	
*	0059	1756		BO		52 29 05	130 28 77		165					BOT@ 20m - SAL/CAL/NUTS	
		1800		CH		52 29 10	130 28 72								
		1805	NET	BG	180	52 29 221	130 28 643		150					BONGO	
		1803	TRAWL	BG	181	52 29 874	130 27 346	181						TRAWL HANDROPE 13.6m	

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 of cast time

DE = deployment time
 MR = messenger release time
 RE = recover mooring time

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

22 March 2002
 Daily_log_book.doc

Additional comments

* NOTE CAST 0057 - 0061 ON FLOPPY - NOT ZIP

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <i>August</i>					Year <i>2002</i>			Ship				Cruise ID <i>2002-35</i>			
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments	
						Latitude	Longitude								
26	H-05	2036	CTD	BO	182	52 25 95	130 12 17	314			1			T: 13.98 S: 31.71	
*	0060	2041		BO		52 26 01	130 12 09		200					BOT @ 20m - SAL/CHL/NUTS	
		2045		EN		52 26 07	130 12 01							MIXED → 16m	
		2051	NET	BO	183	52 26 112	130 11 094		150					BONGO	
		21 17	TRAWL	BO	184	52 25 255	130 10.070	300						TRAWL HEADROPS 13.6m.	
26	H-04	2300	^{2nd} CTD	BO	185	52 22 70	129 58 15	227			1			T: 13.96 S: 31.57	
*	0061	2305		BO		52 22 70	129 58 08		200					BOT @ 20m - SAL/CHL/NUTS	
		2310		EN		52 22 71	129 58 03								
		2314	^{3rd} NET	BO	186	52 22 637	129 57 945		150					BONGO	
		2311	^{1st} TRAWL	BO	187	52 23 697	130 03 306	267						TRAWL HEADROPS 13.6m.	

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 of cast time

DE = deployment time MR = messenger release time RE = recover mooring time

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