DAILY LOG BOOK

MISSION NUMBER 2005-11

DATE: From: 23 MAY to: 31 MAY 2005

VESSEL: JP Tully

PROJECT: LA PEROUSE

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

Captain: _____ First Officer: _____
Second Officer: _____ Third Officer: _____

Mission Participants / Agencies: _____

Scientific Personnel: Party Chief: _____

Name	Watch	Cabin	Name	Watch	Cabin

Second leg of Mission: Party Chief: _____

Name	Watch	Cabin	Name	Watch	Cabin

Data logging computer: FS03 Shuttle Case
Data acquisition program: Seasave Win32 Version 5.32
CTD deck unit make: Seabird model: 911plus serial number: ~~0543~~ 0508

Primary CTD
Make: Seabird model: 911plus serial number: 0443
Primary temperature serial number: 4484 19-Mar-05
Primary conductivity serial number: 3038 03-Mar-05
Secondary temperature serial number: 2023 07-Apr-05
Secondary conductivity serial number: 2339 07-Apr-05
Transmissometer: Wetlabs Model: CSTAR s/n: 723DR
Fluorometer: Model Seapoint Cable gain: 10X s/n: 2356 **P, S** or **NO** pump?
Oxygen sensor: Sea-bird Model: SBE 43 s/n: 0047 **P, S** or **NO** pump?
PAR sensor: _____ Model: _____ s/n: _____
Other sensors: Pressure Sensor 10 000 psi s/n 63507 s/n: _____ **P, S** or **NO** pump?
Other sensors: Cal'd 25-Oct-04 Offset: 3.0457 dbs 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: Seabird model: 911plus serial number: 0550
Primary temperature serial number: 2106 18-Nov-04
Primary conductivity serial number: 1763 19-Nov-04
Secondary temperature serial number: 2449 16-Oct-04
Secondary conductivity serial number: 1729 03-Feb-05
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?
Other sensors: _____ s/n: _____ **P, S** or **NO** pump?
Other sensors: _____ s/n: _____ **P, S** or **NO** pump?

CTD calibration bottle location (height above CTD in metres): 1.5m

Rosette Setup:
Number of bottles: 24
Manufacturer: General Oceanics (Ocean Test Equip., General Oceanics, IOS) (Rosette 2)
Volume of bottles (litres): 10

Winches:
1. Make: Hawbolt model: _____ serial #: 17026 used for: CTD
2. Make: Hawbolt model: _____ serial #: 17026 used for: CTD back-up / Bioness
3. Make: _____ model: _____ serial #: _____ used for: _____
4. Make: _____ model: _____ serial #: _____ used for: _____
5. Make: _____ model: _____ serial #: _____ used for: _____
6. Make: _____ model: _____ serial #: _____ used for: _____
7. Make: _____ model: _____ serial #: _____ used for: _____

Comments: _____

Salinometer: make: _____ model: _____ serial number: _____
Comments: _____

Thermosalinograph System:
Program: Seasave Version: 5.32
Sampling interval (seconds): 30
Fluorometer sensor serial number: WS3S-713P
Comments: _____

ADCP Setup:
Computer time zone: _____
Sampling interval (sec): _____
Bin Length: (2^x): _____
Pulse Length: _____
Buffer (bytes): _____
Gyro Offset: _____
User Exits: Name: _____ Exit points: _____
Name: _____ Exit points: _____
Name: _____ Exit points: _____
Work File: _____
Comments: _____

Comments:

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month MAY **Year** 2005 **Ship** JP Tully **Cruise ID** 2005-11

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	SIO 1	0200	BE	ROS		1	48 35.97	123 29.81	223						CTD NOTES ⇒
		0207	BO				48 35.98	123 29.84		210	1-12	12	DA MG AK		
		0222	EN				48 36.00	123 29.81							
25	UW	0353	UW	LOOP 1			48 42.191	123 21.128	51						LOOP underway
25	UW	0704	UW	LOOP 2			48 16.127	123 38.226							LOOP 2 " "
25	UW	1056	UW	LOOP 3			48 31.19	124 46.46	203				DA MG AK		LOOP 3 UNDER WAY
25	UW	1505	UW	LOOP 4			48 56.48	125 56.39	105				DM JL		LOOP 4 " "
25	UW	1910	UW	LOOP 5			49 28.91	127 01.19	126				SR DY		" 5 " "
25	UW	2300	UW	LOOP 6			49 59.381	127 57.544	1092				MG AK		LOOP 6 " " CTD NOTES
26	UW	0300	UW	LOOP 7			50 10.11	128 13.24	DEEP		50 38.6 128 51.4		check pos'n — DT		LOOP 7 UW
26	UW	0700	UW	LOOP 8			51 13.600	129 41.809	Deep				DY SR LM		Pos'n suspect
26	UW	1100	UW	LOOP 9			51 52.16	130 35.62	Deep				KT DA MG AK		LOOP 9 — Thermosal UW data ⇒
26	UW	1500	UW	LOOP 10			51 54.23	130 0.54	150m				Acoustics Line SR LM		Underway Loop interruption
26	UW	1900		Loop 11			51 35.272	129 39.894	125M						
26	BIONO1	2001	BE	Net		2	51 35.96	129 44.04	150						BIONESS
26	"	2048	EN	"			51 36.30	129 47.48		145					
	GTOT		DE	ROS		3					13-18	6			CTD/ROS
			BO												
			EN												

Cast type:
BOT = bottle cast, no CTD
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MOR = mooring
NET = net haul
DRF = drifter

bottle firing method:
US = up / stop
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2005/5/25 2:00
CTD NOTES: Primary acquisition computer FS03 shuttle case failed initial test. NMEA interface initialization failure. Switched to back-up FS01 for test cast.

2005/5/25 23:00 Primary acquisition tests OK after reinstalling Seasave.

2005/05/26 11:00 Thermosalinograph time/NMEA not updating. Will reboot / From 0400 (approx) to 1100 May 26 (UTC) thermosal data was interrupted. Some problems were experienced related to setting up real-time data output to the ship's LAN. Data was set to log on 2005-08-0002.hex; mistaken by myself. By the small size of the file I don't think it contains data. I believe this file didn't exist before and no 2005-08 data was overwritten. Main file 2005-08, 2005-08-0001.hex has been backed-up

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

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26	UW	23:00	UW	LOOP 12			51 35.725	129 55.820	231m				DA MG AK KY		Loop 12 under way
27	G102	00:20	BE	ROS		3	51 30.21	129 37 59	146m		13-21	9		–	
		0025	BO				51 30.10	129 37 60		131					
		0037	EN				51 29.91	129 37 .15							
27	G102	0058		Net		4	51 30.0	129 37.67	146	144					BONGO
27	BION 2	1242	BE	NET		5	51 15.96	129 28.52	240	232					BIONESS 2
		1319	EN				51 16.36	129 27.73							
27	CS10	0757	BE	ROS		6	51.16.460	128 20.018	82			–		✓	CTD only
"	"	0802	BO	"		"	51 16.453	128 19.991		75					
"	"	0803	EN	"		"	51 16.458	128 19.974							
27	CS10	0815	BO	NET		7	51 16.473	128 19.920	81	70					BONGO
"	"	0820	EN	"		"	51 16.438	128 19.907							
27	CS09	0918	BO	NET		8	51 12457	128 27.911	196	180				✓	BONGO
"	"	0921	EN	"		"	51 12.452	128 27.910							
27	CS09	0934	BE	ROS		9	51 12.464	128 27.926	196						
"	"	0939	BO	"		"	51 12.457	128 27.911		190	22-32	11			
"	"	0955	EN				51 12.428	128 27.958							
										232					

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27	CS08	10:58	BE	~~CTD~~ ROS		10	51 08 39	128 35 91	145		–	Ø	KY, AC-MC, DA	✓	
		11:01	BO				51 08 39	128 35 91		131					
		11 02	EN				51 08 39	128 35 92							
27	CS08	11 14		NET		11	51 08 39	128 35 92		130					
27	UW	1145	UW	Loop 13			51 07 134	128 38 74	115m						Loop 13 underway
27	CS07	1220	BE	NET		12	51 04.46	128 34.08	65	50					Bongo
27	CS07	1232	BE	NET		13	51 04.46	128 31.08	65	50					Bongo
27	CS07	1245	BE	NET		14	51 04.46	128 44.08	65	20					Bongo
27	CS07	1301	BE	NET		15	51 04.45	128 44.68	65	50					Ring Net
27	CS07	1317	BE	ROS		16	51 04.40	128 44.10	65					✓	bottle 7 no trip
		1319	BO				51 04.36	128 44 10		56	33-42	11			
		1327	EN				5104 34	128 44 09							
27	CS06	1414	BE	~~CTD~~ ROS		17	50 59 85	128 50 26	65			Ø	KY AC MC DA	✓	
		1416	BO				50 59 81	128 50 33		55					
		1417	EN				50 59 78	128 50 87							
27	CS06	1420	BE	Net		18	50 59 63	128 50 83	68	60					VNH
27	CS05	1535	BE	Net		19	50 55 95	128 59 97	63						VVH
27	CS05	1545	BE	ROS		20	50 55 96	128 59 96	62					✓	
		1547	BO				50 55 94	128 59 95		55	43-48	6			

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27	CS05	1555	EN	ROS		20	50 55.98	128 59.91			43-48	6			
	CS04	1719	BE	~~CTD~~		21	50 49.19	129 13.07	93						
	CS04	1721	BO	ROS			50 49.19	129 13.02		86		Ø			
	CS04	1725	EN				50 49.19	129 13.02							
27	CS04	1738	BE	NET		22	50 49.23	129 13.04	93	85					
27	CSØ3	1833	BE	NET		23	50 45.66	129 19.98	232	220					
27	CSØ3	1907	BE	ROS		24	50 45.571	129 20.125	240		49-59	11			Bottle 11 No Sample
1	CSØ3	1913	BO	|		1	50 45.571	129 20.328		225					
	CSØ3	1931	EN	|			50 45.494	129 20.460							
27	CSØ2	2034	BE	ROS		25	50 41.393	129 28.312	1900			Ø			
|	|	2104	BO	|		|	50 41.370	129 28.313		1912					
|	|	2124	EN	|		|	50 41.150	129 28.132							
27	CSØ2		BO	NET		26	50 40.9	129 27.9	~1900	250					
|		2200	EN				50 40.672	129 27.606							
27	CSØ1	2320	BE	NET		27	50 34.90	129 41.18	2112	250					Bongo (250)
27	CS01	2356	BO	NET		28	50 34.64	129 41 05	2116	50					Bongo (50)
28	CS01	0010	BO	NET		29			2116	50					Bongo (50)
28	CS01	0023	BO	NET		30	50 34 53	129 41 09	2116	50					Ring Net (50)
			EN												

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Daily_log_book.doc

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28	CS01	0041	BE	ROS		31	50 34.83	129 41.26	2110				KY MG AG DA DM	✓	
		0114	BO				50 35.12	129 41.09		2000	60-83	24			
		2005	EN				50 35.47	129 40.87							
28	LBP7	0822	BE	ROS		32	49 52.349	128 11.296	2000+						
		0839	BO				49 52.260	128 11.340		1005	84-101	18			
		0915	EN				4952.230	128 11.316							
28	LBP7	0935	BO	NET		33	49 52.21	128 11.33	2000+	250					
			EN												
28	LBP6	1048	DE	ROS		34	49 56.090	128 5.404	?			0			
"	"	1108	BO	"		"	49 56.06	128 05.400		830					
		1129	EN				49 56.06	128 05.41							
28	LBP5	1227	BE	ROS		35	49 59.99	128 00.05	?						
		1251	BO				49 59.99	127 59.96		1000	102-119	18	KY AG MG DA	✓	Some blockage →
		1330	EN				49 59.98	127 59.91							
28	LBP5		BO	NET		36	49 59.90	128 00.21		250					
28	LBP4	1421	BE	ROS		37	50 01.33	127 58.26	1000+						Temp diff →
		1434	BO				50 01.35	127 58.31		1000		0	KT AG MG DA	✓	
		1448	EN				50 01.36	127 58.30							

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Suspect some blockage in the secondary side as when syringes were applied on deck there was some initial resistance to the water. Cleared out apparently.

Temp. difference: A 0.003 temperature sensor drift appears to have happened. Dig. temp?

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28	LBP3	1525	BE	ROS		38	50 03 24	127 55 58	170		120-129	10		✓	
			BO				50 0329	127 55 58		163					
			EN												
28	LBP3	1600	BE	NET		39	50 03.2	127 55 87	170	160					
28	LBP2	1637	BG	Net		40	50° 04.01	127° 54.14	98	90					
28	LBP2	1652	BE	ROS		41	500397	127 54 09	97					✓	
	LBP2	1654	BO				500396	127 54 12		93		0			
	LBP2	1656	EN				50 0398	127 54 14							
28	LG01	2304	BE	ROS		42	49 20.62	126 35.35	54		130-135	6		✓	
		2308	BO				49 20.70	126 35 47		45					
		2315	EN				49 20.82	126 35.60							
28	LG02	2349	BE	ROS		43	49 18.76	126 38.19	98					✓	Temp diff looks ok
		2354	BO				49 18.79	126 38 23			136-142	7			
29		0001	EN				49 18 83	126 38 34							
29	LG02		BO	NET		44			120						
29	LG03	0142	BE	ROS		45	49 15.66	126 43.84	120			0			
		0146	BO				49 15 10	126 43 89		110					
		0149	EN				49 15 12	126 43 91							

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29	LG04	0236	BE	ROS		46	49 11.29	126 49 39	145						
		0240	BO				49 11 28	126 49 39		135	143-151	9	KY AG MG DA		
		0251	EN				49 11 25	126 49 32							
	LG04	0307	BO	NET		47	49 11.17	126 49.22							
	LG5	0356	BE	ROS		48	49 0733	126 55 30	262					✓	
		0403	BO				49 07 32	126 55 37		274		0			
		0407	EN				49 07 32	126 55 39							
	LG06	0451	BE	ROS		49	49 0346	127 12 17	815					✓	
		0507	BO				49 0353	127 12 36		977		0			
		0520	EN				49 0357	127 12 96							
	LG07	0610	BE	ROS		50	48 59 25	127 07 21	1050					✓	
		0630	BO				48 5925	127 07 17		1028	152-169	18			
		0712	EN				48 59.346	127 7105							
29	LG07	0728	BO	NET		51	48 59.37	127 07.00	1050	250					
		0755	EN				48 59.2	127 7.5							
29	LG08	0849	BE	ROS		52	48 55.342	127 13.349	2180						
"	"	0902	BO	"		"	48 55.340	127 13.378				0			
"	"		EN	"											

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29	LG09	1013	BE	ROS		53	48 51.234	127 19.457	2050						⇒
"	"	1028	BO	"		"	48 51.254	127 19.393		1002	170-187	18		✓	Nisk 17 Did not trip
		1105	EN				48 51 24	127 19 41							
29	LG09	1112	BO	NET		54	48 51.24	127 19.41	2050	250					BONGO
	↓	1141	BO	NET		55	48 ↓	127 ↓		50					BONGO
		1155	BO	NET		56				20					BONGO
	↓	1218	BO	NET		57	↓	↓		50					RING
29	LC12	1700	BO	NET		58	48 14.97	126 40.01		250					BONGO
	↓	1711	BE	ROS		59	48 14 97	126 39 94	2510						
		1725	BO	"		"	48 15 01	126 39 99		1005		0			
	↓	1740	EN				48 15 01	126 39 97							
29	LC11	1857	BE	ROS		60	48 18.852	126 26.572	1453						
"	"	1915	BO	"		"	48 18.900	126 26.855		1001	188-205	18			
		1953	EN				48 18.286	126 27.653							
29	LC09	2127	BE	ROS		61	48 25.942	126 13.697	600						
"	"	2140	BO	"		"	48 26.414	126 13.757		600	206-222	17			Bottle 15 empty
		2207	EN				48 26.369	126 13.802							
29	LC09	2232	BO	NET		62	48 26.09	126 13.53	600	250					Bongo
			EN												

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NISK 17 has black power spring. These springs are approx. 40% less powerful than the grey ones. Switched for a grey spring.

NISK 15 - Black spring, adjusted bottle height

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							Latitude	Longitude							
29	LC09	2247		Net		63	48 26.09	126 13.53	600	50			AS DA MG KY		Bongo
		2258		Net		64	↓	↓	600	20					Bongo
		2310		Net		65	↓	↓	600	50					Ring
30	A2	0012		NET		66	48 22.75	126 03.81	400	250					BONGO
30	A2	0032	BE	ROS		67	48 22.69	126 03.77	354				AS KY MG DA		
		0042	BO				48 22.71	126 03 81		345	—	0		-	Trans. decline @ 300 mixed below 40 bot
		0047	EN				48 22.73	126 03 85							REPLACE B SIDE NET ON BONGO
30	LC08	0150	BE	ROS		68	48 29.42	126 07 00	199				MG DA AS KY		
		0155	BO				48 29 41	126 07 02		189	—	0		?	
		0157	EN				48 29 40	126 07 02							
30	LC08	0217	BO	NET		69	48 29 55	126 06 85	199	185					
	LC07	0307	BE	ROS		70	48 32.96	126 00 31	129		223-230	8			
		0309	BO				48 32.98	126 00 26		123					
		0319	EN				48 33 01	126 00 15							
	LC06	0405	BE	ROS		71	48 36 42	125 53 90	93			0			
		0407	BO				48 36 43	125 53 87		85					
		0409	EN				48 36 42	125 53 85							
	LC06	0421	BO	NET		72	48 36 46	125 53 68	93	80					
	LC05	0511	BO	NET		73	48 39 90	125 47 26	65	55					

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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
30	LC05	0524	BE	ROS		74	48 39 86	125 47 24	65			0		✓	
		0526	BO				48 39 83	125 47 21		55					
		0527	EN				48 39 82	125 47 22							
30	LC04	0618	BE	ROS		75	48 43 38	125 40 80	170			10			Bottom contact?
		0623	BO				48 43 37	125 40 76		153					
		0637	EN				48 43 31	125 40 79							
			BE	NET		76									~~ring net~~ bongo
			BE	NET		77									bongo
			BE	NET		78	49 43.213	125 40.929	162	150					bongo OR
			BE	NET		79									~~bongo~~ ring
30	LC02	0906	BE	ROS		80	48 48.708	125 31.002	110						
"	"	0910	BO	"		"	48 48.719	125 30.979		100	241-247	7			
"	"	0917	EN	"		"	48 48.715	125 30.938							
30	LC01	0953	BE	ROS		81	48 50.496	125 27.745	96						NMEA time slow
"	"	0955	BO	"		"	48 50.518	125 27.738							by 13 min
"	"	0957	EN	"		"	48 50.550	125 27.724							(used real)
30	B8	1202	BE	ROS		82	48 34.55	125 29.91	112				KY MC DM DA	✓	
		1205	BO				48 34 53	125 29.88		100		6			
		1208	EN				48 34 51	125 29 85							

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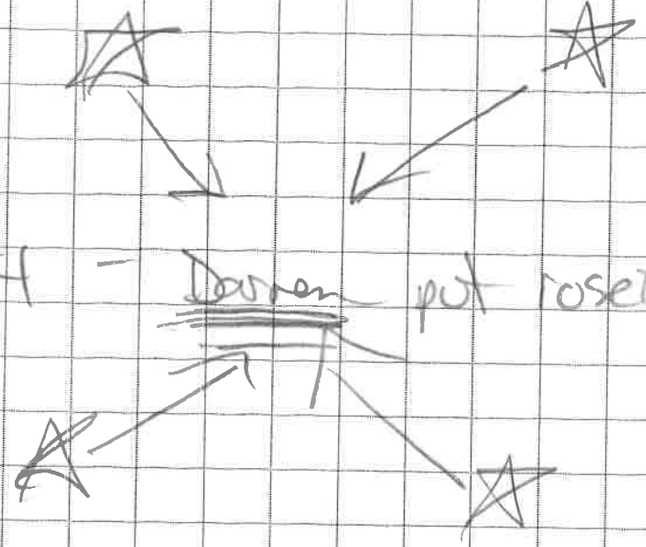

LC04 - Darren put rosette on bottom - Rosette 155m

LC01 - noticed time on NMEA display significantly wrong (pos'n not exact either)
- used navigation computer time + display

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month MAY **Year** 2005 **Ship** J P TULLY **Cruise ID** 2005-11

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
30	B8	1229	BO	NET		83	48 34.55	125 29.90	110	100					BONGO
	B7	1328	BO	NET		84	48 32.03	125 35.54	82	75					BONGO
30	B7	1341	BE	ROS		85	48 32 08	125 35.42	80			∅			
		1343	BO				48 32.08	125 35.40		70	—		KV MG DA DM	✓	
		1345	EN				48 32.08	125 35 34							
30	C3(BA3)	1529	BE	ROS		86	48 23 37	125 20 79	124		248 - 255	8		✓	
	|	1531	BO				48 23 35	125 20 77		110					
	|	1541	EN				48 23 34	125 20 72							
	|	1600	BO	NET		87	48 23 34	125 20 72	124	110					BONGO - Nets torn off frame on first tow
	|	1640	BO	NET		88	48 23 43	125 20 89	120	110					BONGO - 2nd try
30	C1	1747	BO	NET		89	48 28 87	125 15 41	150	150					Bongo - touched bottom
	|	1802	BE	ROS		90	48 28 85	125 15 50	150			∅			
	|	1805	BO				48 2884	125 15 49		140					
	|	1808	EN				48 28 86	125 15 52							
	|	1821	BO	NET		91	48 28 85	125 15 55	152	140					Bongo
30	C2	1924	BO	NET		92	48 25.999	125 08.017	140	125					"
30	C2	1942	BE	ROS		93	48 25.362	125 8.012	149						
		1947	DO				48 25.322	125 8.132			256-262	7			no sample bottle #7
		1956	EN				25.25	8.252							

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C3

Nets on Bongo ~~came~~ ripped off frame... attacked by some unknown sea creature

CARCHARODOSAURUS STRIKES AGAIN

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
30	E1	2100	BE	NOS		94	48 31.772	125 3.936	117						
1	1	2103	BO	1		1	48 31.784	125 3.984		110					
1	1	2105	EN			1	48 31.780	125 3.970							
30	E1	2118	BO	NET		95	48 39.749	125 3.999	119						bongo
1	1		EN	1		1									

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