

DAILY LOG BOOK

MISSION
NUMBER

2008-01

DATE:

VESSEL:

PROJECT:

From:

29 JANUARY

to:

19 FEBRUARY 2008

JOHN P TULLY

LINE P

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

Captain: BILLY NOON
First Officer: BOB BENNETT
Third Officer: ERIKA BACKMEYER

Mission Participants / Agencies: JFO (IOS), UBC, Uvic, OSU, NOAA, UW

Scientific Personnel:

Party Chief:		Party Chief:	
Name	Watch	Name	Watch
HUGH MACLEOD	0000-1200	ROBERT KAMPMANUS	1800-2400
JOE WRIGHT	0600-1200	CHUCK STUMPF	0600-1200
MARKUS ZIRBEL	1200-1800	AKASH SASTRI	0000-0600
WENDY RICHARDSON		DOUG ANDERSON	1200-2400
MARIA KAMMANUGH	1800-2400	MICHAEL AAYCHUK	
KARINA GIESBRECHT	1200-1800		
RN/ISSA MERZOUK	0000-0600		
DOUG MOORE	1200-2400		
JOHN DOWER	0600-1200		
PATRICK H'HERMAN	0000-0600		

Second leg of Mission:

Party Chief:

Name Watch Cabin Name Watch Cabin

Data logging computer: PAC02570 (HP Compaq #1)

Data acquisition program: Seasave V 7.1

CTD deck unit make: SBE model: 11+ serial number: 0619

Primary CTD

Make: SBE

model: 9.11+ serial number: 0550

Primary temperature serial number: 4752

Primary conductivity serial number: 3321

Secondary temperature serial number: 2968

Secondary conductivity serial number: 3038

Transmissometer: Wetlabs

Model: CStar2 s/n: 100

Fluorometer: Model: Seapoint

Cable gain: 10x s/n: 2229

Oxygen sensor: Seabird

Model: 43 s/n: 0047

PAR sensor: Biospherical

Model: QSP-400 s/n: 4656

Other sensors: Benthos altimeter

s/n: 43281

Other sensors: 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:

Oxygen sensor:

Model: s/n:

PAR sensor:

Model: s/n:

Other sensors:

Other sensors: s/n:

Other sensors: s/n:

Other sensors: s/n:

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

Alkaline Iodide Lab Solution
Supplier/Part No: 83076 -
Lot: 400802/501213
Date made: 13G 281
By: S.S.
Slowly add 320g sodium hydroxide until dissolved; add 600g sodium Top up with MQ to = 1000mL.

005-537
1000mL of MQ and top up to = 1000mL
537g KIO₃ powder and dissolve
Store in dark amber glass bottle.
Sodium Carbonate

Rosette Setup:
Number of bottles: 24
Manufacturer: 105
Volume of Bottles (litres): 10.8

Winches:

1. Make:	Hawboldt
2. Make:	Model:
3. Make:	Model:

Comments on performance during cruise:

Salinometer:

Make: Guildline Model: PRTASAL

Comments on performance during cruise:

SLICATLY

Oxygen Kit # 4

Comments on performance of kit and chemicals:

ALL WENT VERT WELL

ONLY 4 FLAGS ON WHOLE TRIP

Thermosalinograph System:

Program: SCABIA
Sampling interval (seconds): 30
Version: W1H 3 5.37

Fluorometer sensor serial number: WSS-313P

Comments on performance during cruise: TSC Fluorometer seems unresponsive. Possible film buildup on lens.

ADCP Setup:

Computer time zone:

Sampling interval (seconds):

Bin Length (2vx):

Pulse Length:

Buffer (bytes):

Gyro Offset:

Comments:

CTD Test Cast Information

Test Cast at IOS Jetty? (optional)

yes ☐ no ☒

Comments: (i.e. how did everything work?)

Test cast in Saanich Inlet? (recommended)

yes ☒ no ☐

If no, give reason:

Comments: (i.e. how did everything work?)

A - OK

CTD pressure reading on deck (db):

(Should be 0.0 db ± 0.5)

Pumps working?

yes ☒ no ☐

(i.e., Was the red LED display on the deck unit 0011 and not still 0010?)

Secondary Temp- Primary Temp:

0.001

(Average from the Mixed Region)

Secondary Salinity- Primary Salinity:

- 0.002

(Average from the Mixed Region)

Additional Comments:

DAILY LOG

Ocean Sciences and Productivity Division

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Month Jan				Year 2008				Ship Tully				Cruise ID 2008-01				P1	
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments		
							Latitude	Longitude									
31	SIO3	0415	BE	ROS		1	48° 35.59	123° 35.59	225							afternoon!	
		0422	BO				48° 35.59	123° 29.98		215	1-11	11		✓		3rd diff. -0004	
			EN				48° 35.44	123° 29.99								PAR on	
01	IF 1		NOT TAKEN -	MAJOR			WATER LEAK IN TSC will fix overnight										
01	IF 2	0715	BE	Loop			48° 17.91	123° 59.68	157							NOT/cAL/SAL	
01	IF 3	0929	BE	Loop			48° 26.58	124° 28.99	225							NOT/cAL/SAL	
01	IF 4	1154	BE	Loop			48° 32.26	124° 59.05	71							NOT/cAL/SAL	
01	P 1	1545	BE	ROS		2	48° 34.43	125° 32.00	140		12	1	LOTS	✓		PAR on	
		1549	BO				48° 34.46	125° 33.01		130							
		1553	EN				48° 34.47	125° 29.96									
01	P 2	1838	BE	ROS		3	48° 35.90	125° 00.14	119		13-25	13	NO 11 bottles 2007 clean			PAR on	
		1841	BO				48° 35.92	126° 00.17		110							
		1850	EN				48° 35.97	126° 00.13									

Cast type: USW = sea water loop

BOT = bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD

MOR = mooring
NET = net haul
DRF = drifter

bottle firing method:

US = up/stop
UN = up/no stop
DN = down/no stop

Time Code

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

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Month February				Year 2008				Ship J.R. POLLY				Cruise ID 2008-01				P 2			
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments				
							Latitude	Longitude											
1	P2	1902	BE	NET		4	48 35.97	126 00.14							BOMGO				
		1912	BO				48 36.01	126 00.25					4M/3Ks						
		1917	EN				41 36.01	126 00.30											
1	P2	1930	BE	NET		4	48 35.91	126 00.47	120										
		1937	BO				48 35.90	126 00.54		100									
		1940	EN				48 35.91	126 00.57											
2	P3	0107	BE	ROS		5	48 37.57	126 19.94	806										
		0121	BO				48 37.56	126 19.94		805					BOMGO				
		0132	EN				48 37.63	126 20.05			26	1	DA, DM						
2	P4	0320	BE	ROS		6	48 39.00	126 39.93	1317										
		0327	BO				48 39.01	126 39.96											
		0345	EN				48 38.06	126 39.96			27-44	18	DA, DM		DMS cast				
2	P4	0400	BE	NET		7	48 39.04	126 40.01	1317	250									
		0414	BO				48 39.05	126 40.07							BOMGO				
		0420	EN				48 39.05	126 40.07							Shipped @ 25 ~ 2 min ↓				
2	P4	0430	BE	NET		8													
		0434	BO																
		0440	BO				48 39.05	126 40.07	1317	50									

type:

USW = sea water loop
BOT = bottle cast, no CTD
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bottle firing method:
US = up/stop
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Month		Feb		Year		2008		Ship		Tally		Cruise ID		2008-01		P3		INSTITUTE OF OCEAN SCIENCES	
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Latitude	Position	Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments			
2	P4	511	BE	ROS		9	48 39 00		126 40 03.1	1322							UBC CAST		
		532	BO				48 39 05		126 39 98		1310	45-60	16/14	DA DM			PAR OFF		
		600	EN				48 39 05		126 40 01										
2	P4	640	BE	ROS		10/11	48 39 05		126 40 02	1319							IOS-Deep Cast		
		0703	BO				48 39 09		126 40 18		1315	61-79					Water sampler problem		
			EN																
2	P4	0935	BE	ROS		12	48 38 08		126 39 96	1322		61-79	11	DM			105 Deep cast		
		0957	BO				48 38 11		126 40 19		1300						* Changed Rosette pullhead on CTD		
		1041	EN				48 38 15		126 40 11										
2	P5	1307	BE	ROS		13	48 41 50		127 10 14	2096		80		DM/DA/PA			Boie 5m - Sal/CHL/NO3		
		1340	BO				48 41 47		127 09 16		2005								
		1414	EN				48 41 44		127 09 16										
2	P6	1633	BE	ROS		14	48 44 62		127 40 03	2545		81-82	2 (48)				6 bottles closed @ 600m for bulk water. NO SN		
		1706	BO				48 44 59		127 40 04		2005								
		1738	EN				48 44 63		127 40 04										
2	P7	1946	BE	ROS		15	48 46 57		128 10 03	2507		83	1	DM/DA/PA			Boie 5m - Sal/CHL/NO3		
		2018	BO				48 46 65		128 10 10		2005								
		2039	EN				48 46 63		128 10 19										

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

* Lost communication with the water sampler. New file "11" on upcast. "P4-dwp."

* Replaced corroded nozzle conn. connector on CTD. Fingers exposed. DH

* @ 600 - FFFFFF UNSUPPORTED MODERN MESSAGE CO C401 FROM SBT CAROUSEL
COLOURS ON SCREEN CHANGED TEMP RED TO PURP SAT. ROYAL TO SKY BLUE FLOR. YELLOW TO WHITE

- MARIA WANTS 5m SAMPLE @ P6 INSTEAD OF P7 - JOHN WANT @ 600m INSTEAD OF 6

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Month February			Year 2008		Ship J.R. Tully		Cruise ID 2008-01		P 4						
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
2	P8	22:51	BE	NET		16	48 49.03	128 40.10	2518		—		DA DM KS JD + More		UVC Deep Bongo to 800
		23:07	BO				48 48.75	128 39.80		800					
		23:33	EN				48 48.77	128 39.44							
2	P8	23:42	BE	NET		17	48 48.68	128 39.80	2520				DA DM KS		
		23:51	BO				48 48.64	128 39.20		250					
		23:56	EN				48 48.63	128 39.17							Loc Bongo to 250
3	P8	00:24	BE	ROS		18	48 49.03	128 40.01	2518						
		00:54	BO				48 49.03	128 40.07		2005	84-107	24	DA DM KS	✓	
		01:32	EN				48 49.16	128 40.18							
3	P8	01:42		DRF		19	48 49.27	128 40.47							
		03:57	BE	ROS		20	48 51.40	129 09.98	2346						Deploy Plant 3258
		04:28	BO				48 51.43	129 09.96							
		04:49	EN				48 51.42	129 09.98		2005	108	1	DA DM KS MC	✓	
3	P10	07:01	BE	ROS		21	48 53.56	129 40.05	2642						
		07:36	BO				48 53.71	129 39.93		2005	109	1	DA DM KS MC	✓	
		08:10	EN				48 53.67	129 39.78							
3	P11	10:23	BE	ROS		22	48 55.96	130 09.97	2753						
		10:55	BO				48 56.01	130 09.93			110	1	AM/AS/PA	✓	Bore 5m - CHT/MWS/SAK
		11:26	EN				48 55.83	130 09.88							

Cast type:

BOT = bottle cast, no CTD
CTD = CTD without Rosette

USW = sea water loop
MOR = mooring
NET = net haul

bottle firing method:
US = upstop

Time Code
BE = beginning time of cast
DE = deployment time

Cast type:

BOT = bottle cast, no CTD
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bottle firing method:

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UN = up/no stop
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Month February			Year 2008			Ship J. A. Tully			Cruise ID 2008-01					15	
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
3	P12	1347	Be	ROS		23	48 58.22	130 39 92	3228		111-126	16	M/JPA		U&C cast
		1423	Bo				48 58.20	130 40 03		2005					
		1459	En				48 58.21	130 40.09							
3	P12	1538	Be	ROS		24	48 58.25	130 40.03	3220		127-149	23	M/JPA		Deep cast
		1633	Bo				48 58.21	130 39.97		3266					
		1758	En				48 58.28	130 40 02							
3	P12	1809	Be	NET		25	48 58.15	130 39.97	3228						
		18:18	Bo				48 58.11	130 40.00		230					
		18:22	En				48 58.12	130 40.04							
3	P12	1830	Be	ROSENET		26									
		18:35	Bo							50					
		1839	En												
3	P12	1905	Be	ROS		27	48 58.18	130 40 10	3228						PAR ON
		1910	Bo				48 58.13	130 40.17		300	150-170	21			
		1929	En				48 58.13	130 40.07							TSG SEC TEMP
4	P13	0011	Be	ROS		28	49 02.46	131 39 16	3590?						
		0038	Bo				49 02 65	131 39 95		2005	171-172	2		-	PAR OFF
		0108	En				49 02 82	131 40 02							Wind 35-40 knots

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* TSC sec temp has had no flow until

6:20 4-Feb-20 BTC

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month			Year			Ship			Cruise ID			Comments		
Feb 2008			2008			J. P. Tully			2008-1			P.6		
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned
							Latitude	Longitude						
4	P 14	0833	Bc	ROS		29	49° 07.33	132° 31.95	3384	2005	173-177	5	H.M.A./P.A	
		0905	Bo				49° 07.41	132° 40.01						
		0937	GM				49° 07.35	132° 39.98						
4	P 15	1428	Bc	ROS		30	49° 11.98	133° 39.95	3399	2005	178	1	H.M./T.D/s	Notes
		1509	Bo				49° 12.01	133° 40.00						
		1543	GM				49° 12.07	133° 40.01						
4	P 16	2114	Bc	ROS		31	49° 17.04	134° 39.93	3624					DNS cast
		2118	Bo				49° 17.03	134° 39.25			179-199	21	D.A.M/MS	PAR ON
		2134	GM				49° 17.03	134° 40.03						
	P 16	2156	Bc	NET		32	49° 17.01	134° 40.02	3624	250				Bottle
		2205	Bo				49° 17.01	134° 40.06						
		2209	GM				49° 17.00	134° 40.07						
	P 16	2220	Bc	Ring net		33	49° 17.02	134° 40.04	3621					Ring net
		2222	Bo				49° 17.01	134° 40.04		50				
		2228	EN				49° 17.02	134° 40.04						
4	P 16	2237	Bc	ROS		34	49° 17.02	134° 40.04	3380					UBC cast
		2303	Bo				49° 17.10	134° 40.09		2000	200 215	16		PAR OFF
		2339	EN				49° 16.29	134° 40.14						

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Month			Feb		Year		2008		Ship		Tully		Cruise ID		2008-01		P 7	
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Latitude	Position	Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments		
5	P16	0019	BE	ROS		35	49 17 04		134 40.24	3620								
		0116	GE				49 17 04		134 40.50		3672	216-239	24	DA ON MZ	/			
		0243	NH				49 16 44		134 41 34									
	P17			CANCELLED		OUT			TO WEATHER									
6	P18	0534	DE	ROS		36	49 25 44		136 40.03	3504								
		0555	BO				49 25 86		136 40 32			240-244	5	DA ON RC MC	✓	Some large snails Add neg descent rate.		
		0618	EN				49 25 80		136 40 52									
	P19			CANCELLED		OUT			TO WEATHER									
6	P20	1931	BE	ROS		37	49 33 44		138 39.47	3945		245-265	21	DA ON MZ	✓	PAN ON AMS CAST		
		1936	BO				49 34.01		138 39.48		300							
		2000	EN				49 34 00		138 40 01							PAN OFF		
6	P20	2012	BE	NET		38	49 33 44		138 40 04									
		2028	BO				49 33 42		138 40.12		250					Burye		
		2035	EN				49 33 44		138 40.20									
6	P20	2044	BE	NET		39	49 33 44		138 40 19		50					ring net		

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Month February			Year 2008			Ship J.R. Tully			Cruise ID 2008-01					pg 8	
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
6	P20	2049	BO	NET		39	49 33 96	138 40 18		50					mg net
		2015	EN				49 33 99	138 40 18							
6	P20	2112		ROS		40	49 33 99	138 40 08	3945						
		2217					49 33 94	138 40 20		4020	266-289	24	DRM ETAL	✓	
		2319					49 33 99	138 40 60							
7	P21	1507	BS	USW	—	—	49 38.27	139 41.64			—				CAST CANCELLED
8	P22	0147	BF	ROS		41	49 41 98	140 40 13	3915						
		0220	BO				49 42 01	140 40 34		2005	290-294	5	DRM MR		
		0240	EN				49 42 03	140 40 41							
8	P23	0823	BE	ROS		42	49 46.11	141 39.92	4028						lost weight, had a SPAG (make new SPAG)
		0855	BO				49 46.18	141 39.44		2005	295	1	MR/DRM	✓	
		0926	EN				49 46.43	141 38.82							
8	P24	1352	BE	ROS		43	49 50.16	142 40.11	3965		296-300	5	MR/DRM	✓	4 Borel on For use
		1430	BO				49 50.18	142 40.63		2005					
		1504	EN				49 50.26	142 39.77							
8	P25	1857	BE	ROS		44	50 00.03	143 36.33	4119		301-303	3			2451 SAMPLE REWEIGHT
		1931	BO				50 00 00	143 36.28		2005					
		2000	EN				50 00 03	143 36 27							
8	P35	2153					CAN'T RELIABLE DUE TO		TIME	CONSTRAINTS					

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Month		Year		Ship		Cruise ID		Comments							
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Latitude	Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	
8	P35	2313	BE	USW		—	50°00'05"	144°20'48"	4103	—	—	—	—	—	
9	P26	0218	BE	ROS		45	49°59'95"	145°00'24"							
		0223	80				49°59'94"	145°00'19"	4224		304-327	24	DADN MK RC	—	
		0240	EN				49°59'89"	145°00'22"							
9	P26	0334	BE	ROS		46	49°59'89"	145°00'34"							
		0437	80				49°59'89"	145°00'34"	4221	4300	328-351	24	DADN MK RC	✓	PRE SAT PROBLEM OUT UP CAST? (Kim - wipe from cups?)
		0544	EN				49°59'67"	145°00'70"							
10	P26	1609	BE	ROS		47	50°00'30"	145°00'06"	4223		352-374	23	HMSD CS SV	✓	UBC CAST + Loops
		1716	80				50°00'39"	145°00'47"							
		1825	EN				50°00'69"	145°01'16"							
10	P26	1838	BE	NET		48	50°00'75"	145°01'16"	4223						Rins Net
		1840	80				50°00'79"	145°01'12"		50					Net gone, no sample.
		1842	EN				50°00'81"	145°01'09"							
10	P26	1851	BE	NET		49	50°00'57"	145°00'75"	4223						Bottle
		1900	80				50°00'66"	145°00'57"		250					
		1906	EN				50°00'68"	145°00'43"							
10	P26	1940	BE	DRF		50	50°01'28"	145°00'20"	4222						Ango 3266
11	LOOP 1	0344	BE	USW		—	50°58'81"	144°33'57"	3946						LOOP 1
	LOOP 2					—									See next page

Cast type: BOT = bottle cast, no CTD CTD = CTD without Rosette ROS = Rosette plus CTD

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DAILY LOG

Ocean Sciences and Productivity Division

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Month			Year			Ship			Cruise ID			Comments			
Feb 2008			2008			J.P. Tuttle			2008-0			P 10			
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
10	Mooring	2116		ROS		51	50 08 25	144 50 02	4418						
		2120					50 08 25	144 49 48		200	375-388	14	DA DM		
		2129					50 08 20	144 49 89							
11	Loop 1	0344	BE	USW	-	-	50 58.81	144 33 57	3916		-	-	-		
	Loop 2	0803	BE	USW	-	-	51 40 60	144 46.82	3925		-	-	-		
11	Argo	1043				52	52 05.31	144 06.76							Deploy float 3259
11	Loop 3	1401	BE	USW	-	-	52 16.31	143 16 02	3876		-	-	-		
11	Loop 4	2001	BE	USW			52 34 95	142 30 36	3826						2015 Brushed 15g fluorometer.
12	Loop 5	0204	BE	USW			52 51 10	142 05 71	3831		-	-	-		
12	Loop 6	0757	BE	USW	-	-	52 57 03	141 34 86	3720		-	-	-		
12	Loop 7	1400	BE	USW	-	-	52 51 28	140 20 08	3656		-	-	-		
12	Loop 8	2003	BE	USW			52 57 74	139 05 66							
13	Loop 9	0206	BE	USW			53 09 40	138 06 15	3392						
13	Loop 10	0807	BE	USW	-	-	53 16 79	136 44 74	3288						
13	Uvic Net	1135	BE	NET		53	53 20.90	136 03.39	3313				HM/AS/AM		Deep Bongo/Uvic
		1157	BO				53 21.01	136 03.56		1000					
		1226	EN				53 21.11	136 03.73							
13	B51-B	1853	BE	MOR		54	53 18.00	135 39.04	3314	33.14			HM.		PATE Mooring

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DAILY LOG

Ocean Sciences and Productivity Division

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Month February			Year 2008			Ship J.R. Tully			Cruise ID 2008 01			10/11			
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
13	CAL1	1942	BE	ROS		55	53° 21. 81	135° 29.44	1733		389-412	24	M.M./J.D. C.S.		All Bottles @ 1500m
		2005	BO				53 21. 70	135 29. 37		1505					
		2031	CM				53 21 38	135 29 27							
14	Loop 12		DE	USW			53 54 22	134 11. 27	-		-	1	DA		
14	Loop 13	0803	AG	USW	-	-	54°14.42	132° 41.23	317		-	-	M.M.		
14	Loop 14	1400	AG	USW	-	-	54°13.09	131° 55.95	135	-	-	-	M.M.		
14	Loop 15	2008	BC	USW	-	-	54°17.20	130° 47.98	103	-	-		M.M.		
15	Loop 16	0205	BE	USW	-	-	53 39 72	129 45 57	88	-	-	-	DA		
15	Loop 17	0800	BC	USW	-	-	53° 08.75	128° 36.51	400	-			M.M.		
15	Loop 18		BC	USW	-	-	52° 14.46	128° 15.11	315	-	-	-	M.M.		
15	M2	0018	BE	ROS		56	51 46 45	127 53 27	185				DA/JD M.M.		+ Loop
		0024	BO				51 46 43	127 53 27		185	413-421	9		✓	
		0034	EN				51 46 41	127 53 20							
16	M3	0150	BE	ROS		57	51 46. 24	127 54. 56	325					✓	
		0157	BO				51 46 23			300	422-433	12			Bot - 10
		0212	EN				51 46 20	127 54 57							
16	M4	0250	BE	ROS		58	51 44 65	128 00 24	4933						
		0300	BO				51 44 61	128 00 27		425	434-448	15		✓	
		0316	EN				51 44 60	128 00 14							

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DAILY LOG

Ocean Sciences and Productivity Division

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Month			Year		Ship			Cruise ID				Comments			
Feb			2006		Tully			2008-01				p12			
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	
							Latitude	Longitude							
16	N5	0350	BE	ROS		59	51 43 41	128 03 54	340						
		0358	BO				51 43 41	128 03 57		338	449	1		✓	
		0405	EN				51 43 41	128 03 57							
16	N6	0440	BE	ROS		60	51 42 69	128 07 32	240						
		0444	BO				51 42 60	128 07 35		235	450-472	3		✓	Tsc flow interruption =>
		0452	EN				51 42 66	128 07 39							
16	Ri 1	0818	BC	ROS		61	51 26.39	127 38.14	333		453-471	19	UN/AS AN/PA	✓	
		0823	BO				51 26.38	127 38.18		320					
		0840	GM				51 26.30	127 38.25							
	Ri 1	0852	BC	NET		62	51 26.42	127 38.12	333	320					BONGO
16	Ri 1	0921	BE	NET		63	51 26.38	127 38.15	333	50					Ring Net- (FAILED)
	Ri 2	1034	BC	ROS		64	51 31 24	127 33.66	330		472	1	UN/AS AN/PA	✓	Bongo 5m. Sal/calc/mut
		1040	BO				51 31. 22	127 33.67		320					
		1046	GM				51 31. 19	127 33.66							
16	Ri 2	1006	BC	NET		65	51 31.25	127 33.62	330	310					BONGO
		1013	BO				51 31.23	127 33.62							
16	Ri 3	1127	BC	ROS		66	51 35.89	127 32.09	326		473	1	UN/AS AN/PA		Bongo 5m. Sal/calc/mut
		1132	BO				51 35.89	127 32.07		310					
		1138	GM				51 35. 89	127 32. 06							

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* TSC Flow interrupted to clear a blockage in the flowmeter between Julian Day 47.2 and 47.3

DAILY LOG

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Month			Year			Ship			Cruise ID						
February			2008			S. P. MARY			2008-01						
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
16	Ri 3	1146	Bc	NET		67	51° 35.90	127° 32.06	326	310					BONGO
16	Ri 4	1243	Bc	NET		68	51° 38.91	127° 26.66	299	290					BONGO
11	Ri 4	1304	Bc	ROS		69	51° 38.91	127° 26.65	299		474-485	12			* →
		1309	Bo				51° 38.93	127° 26.67		290					* →
		1324	CN				51° 38.98	127° 26.67			NO SAMPLES				
16	Ri 5	1407	Bc	ROS		70	51° 40.72	127° 19.90	201		486	1			* ✓ Bort 054. Sal/cal/mu
		1411	Bo				51° 40.73	127° 19.91		190					* →
		1416	CN				51° 40.74	127° 19.90							
16	Ri 5	1428	Bc	NET		71	51° 40.69	127° 19.94	202	190					BONGO
16	Ri 6	1516	Bo	NET		72	51° 40.53	127° 17.04	142	130					BONGO
16	Ri 6	1531	Bc	ROS		73	51° 40.48	127° 17.04	147		487	1			* ✓ one BOT 1F triggered
		1533	Bo				51° 40.48	127° 17.05							+ 1 BOT FROM LOW
		1536	CN				51° 40.47	127° 17.06							
16	Ri 4	1625	Bc	ROS		74	51° 38.93	127° 26.61	298						* ✓ Ri 4 RE-CAST
		1631	Bo				51° 38.91	127° 26.60			498-499	12			* NO GOOD →
		1645	CN				51° 38.88	127° 26.55							
17	Geo 1	1837	Bc	ROS		75	49° 14.99	123° 44.95	403						✓
		1849	Bo				49° 14.99	123° 44.97		390					
			CN				49° 14.99	123° 44.98							

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— ROSETTE ABORTED. TRIGGERED 1ST 8 BOTTLES, WHEN TRIGGERING BOT[#] 9 SEQUENCE WENT BACK TO BOT[#] 1
WHEN RECOVERED ONLY 8 BOTTLES TRIGGERED. CHARGED ON TO R15 - MABAT READ ON RETURN

* ROSETTE/ALON NOT WORKING - SYSTEM SHOWED NO FIRE AT BOT 1 - BRIGAT ABOARD AND BOT 14 TRIGGERED SO I
SAMPLED 7 - PROBABLY SURFACE AS WAS THE ONLY SPOT TRIGGERED - RUN SAL TO CONFIRM

— OF THE 12 BOTTLE TRIPPED... ALL 15 BOTTLES TRIPPED - SAMPLED ALL TO DETERMINE WHEN & WHERE THEY TRIPPED

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BINGO (250)

DEED BINGO

(400)

[illegible]

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CTD = CTD without Rosette	NET = net haul	UN = up/no stop	BO = bottom time of cast	MR = messenger release time		
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				Transmissometer to be cleaned for each cast, do not use Ammonia products		Daily_log_book.doc