

DAILY LOG BOOK

MISSION
NUMBER

2006-08

DATE:

From: 30 JANUARY 2006 to: 19 FEBRUARY 2006

VESSEL:

JOHN P TULLY

PROJECT:

LINE P

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

Captain: Bill Noon
First Officer: Kent Reid
Second Officer: Shane Lovelace
Third Officer: Dave

Mission Participants / Agencies: IOS, URC, CWS

Scientific Personnel:			
Name		Party Chief:	Watch
Hugh MacLean		4-8	B
Doug Anderson		12-4	C
DARREN TURE		8-12	D
WENDY RICHARDSON		-	E
DOUG MOORE		4-8	F
MAUREEN SOON		4-8	G
MARTY DAUGLAR		8-12	H
TIMOTHY KANE		4-8	Up-St
MICHAEL BENLEY		-	Up Flt

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month January				Year 2006				Ship JOHN PULLY				Cruise ID 2006-08			
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
31	ST03	2104	BE	ROS		1	48 35 66	123 30.067	226	217	1-11	11	DA/DA		No O2 Sensor.
		2110	B6				48 35 65	123 30 66							
		2127	EH				48 35 63	123 30 02							
01	LO0P1	0355		USW			49 22 670	124 09 940	358				ZLE		Loop 1
01	LO0P2	0807		USW			49 47 48	124 53 24					DA		Loop 2
01	LO0P3	1356		USW			50 02 88	125 4 72	76				H.M.		Loop 3
01	LO0P4	1600		USW			50 20 534	125 26 655	309				ZLE		Loop 4
01	LO0P5	2012		USW			50 35 60	126 42.876	140				DA		Loop 5
02	LO0P6	0059		USW			50 57 27	127 50 13	110				H.M.		Loop 6
02	LO0P7	0400		USW			51 03 640	128 39 961	72				ZLE		Loop 7
02	LO0P8	0800		USW			51 09 87	129 36 64	278				DA		Loop 8
02	351	1015		ROS		2	51 12 14	130 00 17	490				DA		
		1022		ROS			51 12 15	130 00 28		490	12-25	14			25 knot wind
02	SS2	1227	B6	CTD		3	51 13 01	129 42 92	447				H.M.		Some swell
		1230	B0				51 13 01	129 42 97		400			DA/TM		
		1238	EN				51 13 02	129 42 98							
	SS2	1257	B6	NET		4	51 13 07	129 32 86	447	250			H.M. DA		Bongo to 250 m
													TM		

Cast type: USW = sea water loop

BOT = bottle cast, no CTD

CTD = CTD without Rosette

ROS = Rosette plus CTD

bottle firing method:

US = up/stop

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Time Code

BE = beginning time of cast

BO = bottom time of cast

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MR = messenger release time

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

Jan 31 / Feb 1 2006

AQW ST03 (~1335, 31 Jan, local time) Start ADCP + EK60
2000 (0400 UTC) Loop #1 underway. Heading to Rivers Inlet up inside passage

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Month Feb			Year 2006			Ship TULLY			Cruise ID 2006-08						
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
02	SS3	1451	BC	ROS		5	51 15 04	129 21 35	293	280	26-37	12	AM/TH		* called cast
		1456	Bo				51 15 04	129 21 30							5004 in SEASTAR
		1516	EN				51 15 06	129 21 29							
02	SS4	1703	RE	ROS		6	51 21.012	128 59 988	238					✓	
		1708	Bo				51 20.987	129 00 016		225	38	1			ZLE/MARTY
		1713	EN				51 20 978	129 00 002							
02	SS4	NET	BE	NET		8	51 20 917	129 00 092	240	240					Bottle to 200 m
		1730	Bo						200						
			EN												
02	SS5	2011	BE	ROS		7	51 27 98	128 29 90	200						
		2014	Bo				51 28 00	128 29 78		190	39-48	10	DR/DN	✓	Mixed layer to 80 m
		2027	EN				51 28 00	128 29 43							
02	SS6	2313	BE			9	51 20 11	127 59 85	179						
		2317	Bo				51 20 14	127 59 83		170	49	1	DR/DN	✓	
		2320	EN				51 20 15	127 59 78							
03	SS6	0040	Bo	NET		10	51 20 04	127 59 93	179	160			DM.		Bottle to 160 m

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Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month Feb			Year 2006			Ship TULST			Cruise ID 2006-08						
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
03	SS 7	0103	BE	R05		11	51 24 72	127 47 62			50-56	7	HM/TM/MS		
		0106	BO				51 24 72	127 47 66							
		0116	EN				51 24 66	127 47 61							
03	R11	0226	BE	R05		12	51 26 42	127 38 09	320		57-69	13	HM/TM/MS		
		0231	BO				51 26 48	127 38 26		310					
		0249	EN				51 26 39	127 38 50							
03	R12	0346	BE	CTD		13	51 31' 24	127 33 61	330		70	1	HM/TM/MS		
		0351	BO				51 31 24	127 33 62		320					
		0357	EN				51 31 225	127 33 630							
03	R13	0447	BE	R05		14	51 35 87	127 31 999	325						
		0453	BO				51 35 910	127 31 942		311	71	1	MD BT		
		0502	EN				51 35 922	127 31 846							
03	RI 4	0553	BE	R05		15	51 38 922	127 26 759	298						
		0556	BO				51 38 930	127 26 734		285	72-83	12	DT		
		0615	EN				51 38 969	127 26 705							

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							Latitude	Longitude							
03	RI 5	0703	BE	ROS		16	51 40 714	127 19 914	199				MD		
		0706	BO				51 40 726	127 19 910		185	84	1	DT		
		0711	EN				51 46 744	127 19 913							
03	LOOP 9	0800		USW			51 38 059	127 29 569		314			DWL		Loop 9
03	M2	1146	BE	ROS		17	51 46 46	127 53 21	187						
	1	1151	BO				51 46 52	127 53 26		163	85-92	8		-	
		1201	EN				51 46 63	127 53 28							
03	M3	1225	BE	ROS		18	51 46 28	127 54 62	320		93-107	15	HM	-	
		1230	BO				51 46 26	127 54 65		320					
		1243	EN				51 46 22	127 54 66							
03	M4	1332	BE	ROS		19	51 44 66	128 00 22	436		108-122	15	HM	✓	
		1340	BO				51 44 65	128 00 22							
		1404	EN				51 44 69	128 00 22							
03	M5	1440	BE	CTD		20	51 43 40	128 03 59	338		123	1	HM	✓	
		1446	BO				51 43 40	128 03 54		325					
		1452	EN				51 43 39	128 03 53							

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Feb 2, 2006

Dona Rivers Inlet 1 mi 2320 local 0720 UTC off M2

DAILY LOG

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Month FEBRUARY				Year 2006		Ship JOHN P TULLY			Cruise ID 2006-08						
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
03	M6	1530	Be	CTD ROS		21	51 42 67	128 07 39	250		124	1			
		1534	Bo				51 42 70	128 07 40							
		1538	EN				51 42 72	128 07 42							
04	L00P10	0845	BE	USW		-	50 30 32	126 34.87			L00P10				L00P10 (45 min late) SAL, NUT, CHL
04	L00P11	1245	BE	USW			50 22 242	125 44.902			L00P11		D.M.		L00P11
04	L00P12	2045	BE	USW			50 00 61	125 12.71			L00P12		DA		L00P12 Grushed TSC Fluorometer
05	L00P13	0512	BE	USW			48 57 235	123 18 701			L00P13		D.M.		L00P13
05	L00P14	0800	BE	USW			48 37 535	123 14 465			L00P14		D.M.		L00P14
05	JF1		BE	USW			48 16 016	123 29 850			L00P		D.M.		L00P JF1
05	JF2	1340	BE	USW			48 42 07	123 09 82			L00P		H.M.		L00P JF2
05	JF3	1550	BE	USW			48 26 924	124 29 992			L00P		DT		L00P JF3
05	JF4	1745	BE	USW			48 32 300	124 58 254			L00P		DT		L00P JF4
5	P1	1934	Be	ROS		22	48 34.43	125 30.12	133					X	
		1938	Bo				48 34.42	125 30.04		125	125	1	DT/MR		
		1941	EN				48 34.41	125 29.96							
5	P2	2155		ROS		23	48 35 99	126 00 12	114						
		2158					48 36 00	126 00 18		105	126-133	8	DA/DA	✓	
		2206					48 36 02	126 00 27							
5	P2	2226	Bo	NET		24	48 36 00	126 00 25	117	110			D.M.		BOW GO to 110 m

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~1305, 4 Feb. local.

Rodhamine in double test.

50 sec. for 3 ml.

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month Feb			Year 2006			Ship Tally			Cruise ID 2006-08						
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	P3	0003	BE	ROS		25	48 37 53	126 19 45	810				H.M.		
		0025	BO				48 37 60	126 19 00		800	134	1			1 bot @ 5m
		0036	EN				48 37 67	126 19 75							
6	P4	0222	BE	ROS		26	48 39 05	126 40 03	1327		135-153	19	H.M.	✓	ALARM Sounded
		0240	BO				48 39 11	126 39 03		1290					@ 1150m for 30 sec.
		0323	EN				48 39 14	126 40 32							
6	P4	0343	BE	NET		27	48 39 05	126 40 28	1320	250			H.M.		BONGO to 250m
6	Pt	0409	BE	ROS		28	48 39 06	126 40 02	1320		154-166	13			DMS CAST
		0415	BO				48 39 08	126 39 98		200					
		0429	EN				48 39 13	126 39 85							
6	P5	0650	BE	ROS		29	48 41 48	127 10 05	2099					✓	
		0733	BO				48 41 51	127 09 94		2006	167	1			
		0756	EN				48 41 54	127 09 95							
6	P6	1006	BE	ROS		30	48 44 64	127 39 98	2045						
		1033	BO				48 44 63	127 40 03		2005	168	1		✓	ALARM DISABLED ③
		1053	EN				48 44 63	127 39 94							

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P-4 - Shallow cast - Pylon #13 latch hand to re-arm

P4: Deep cast: Alarm went off ~ 1000 dbar. Data looks ok

P5: Alarm went off @ 1320 ^{on way down}. No spikes on screen ~ 5-6 "beeps", ~ 30 sec.

Again @ 1790 on way down,

Receive "light humps" on when it beeps

Again @ 1300 on way up.

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month February			Year 2006			Ship J.P. Tuttle			Cruise ID 2006-08						
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	P7	1305	Be	CTD ROS		31	48 46 60	128 09 96	2066		169	1	H.H.	☒	WELER RINDY ALTIMETER NOT WORKING
		1340	Bo				48 46 59	128 09 95		2050					
		1401	EN				48 46 60	128 09 94							
6	P8	1615	Be	ROS		32	48 49 03	128 40 00	2532		170-189	20	DT/HR	☒	+LOOP (05)
		1645	Bo				48 48 99	128 40 05		2005					
		1725	EN				48 48 97	128 40 28							
6	P8	1743	Bo	NET		33	48 48 93	128 40 13		250					Bottle to 250m
6	P9	2005	Be	ROS		34	48 51 44	129 07 99						☒	
		2033	Bo				48 51 30	129 10 27	2005		190	1			Org min @ 900m
		2055	EN				48 51 14	129 10 11							
6	P10	2332	BE	ROS		35	48 53 96	129 40 05	2450?						Wind 25 knots & building
7		0003	Bo				48 53 75	129 39 64			191	1		☒	Borne swell. 4 min wait at surface
		0024	EN				48 53 59	129 38 99							
7	P11	0404	Be	USN		36	48 55 48	130 10 027	2760						Loop
			Bo												
			EN												
			GM					CANCELLED			#192 NOT USED.				
8	P12	next page													

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P13:

Trans. goes crazy @ 1300 ↓

Trans goes to -1.16 @ 1300 ↑
steady

Removed trans prior to cast no. 42 / P15

11:14:11

11:14:11

11:14:11

11:14:11

11:14:11

9 Feb, ~ 0600 UTC Re-start SCS

SCS anemometer not working since ~ 9 Feb am local?

Cast 44: Few "beeps" + ERROR LIGHT @ 125 m

Cast 48 0585 stand alone CTD. 498 DR TRANS MOUNTED ON 0585.

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Month			Year			Ship Tally			Cruise ID						
Feb			2006			Tally			2006-08						
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	P18	8:37	BE	CTD		49	49 26.04	136 40.07	3833		-		DM/DT/DA	-	More weight on CTD Faster down descent rate Loop at 5 dm upcast
		10:07	BO				49 25.99	136 40.01		2020					
		10:27	EN												
10	P19	14:44	BE	CTD		49	49 29.98	137 40.04	3925				HM TK		Loop @ 5 dm upcast
		15:16	BO				49 30.00	137 40.02		2005					
		15:34	EN				49 29.96	137 38.92							
10	P20	19:35	BE	ROS		50	49 34.03	138 39.98	3965					✓	DHS cast
		19:41	BO				49 34.03	138 39.96		200	267-279	13	DT/TK		
		19:56	EN				49 34.05	138 39.94							
10	P20	20:16	BO	NET		51	49 34.05	138 39.600		250			D.M		Bottom to 250 m
		20:39	BE	ROS		52	49 34.05	138 39.37	3964						
		21:29	BO				49 33.99	138 38.87		4021-	280-303	24	DM/DA		Swells, some pretty big. @ 100m → reversed direction to 1120 →
		23:05	EN				49 33.56	138 38.61							
11	P21	03:15	BE	CTD		53	49 38.01	138 40.16	3947				HM/TK	-	Loop samples @ 5 m
		03:52	BO				49 37.98	138 40.03							on upcast
		04:13	EN				49 38.01	138 39.97							

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

P20 - Removed stand alone CTD from sea cable
P20 - Switched transducer from stand alone CTD back to Rosette & hooked up ballast weights
P20 - reload CON file 0443. CTD for confile

Stn 52 P20 ship cast. On upcast, recovered climacter at 1000 m to 1120 m
went out a lead upcast on current. Then down again to 1500

11 FEB 2100 PDT - BEGIN HEADING TOCOPAS STN. PAPY @ 7 KTS - SETS MONITORING ROUGH - MUCH ROLLING

11 FEB

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FEBRUARY			2006			JOHN P. TULLY			2006-08						
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
12	L00P15	0800	8E	USW		54	49 08.95	139 13.47	3770		L00P		D.W.		L00P
12	L00P16	1208	8E	USW		55	49 00 870	139 50 41	3822		L00P		M.M.		L00P
12	L00P17	1558	8E	USW			49 03.72	140 26.82	4042		L00P		M.R.		
12	L00P18	2012	8E	USW			49 10.92	141.5.11	4102		L00P		D.W.		L00P
13	L00P19	0003	8E	USW			49 17.05	141 50.93	4155		L00P		D.A.		L00P swell lots of bubbles in TSG
13	L00P20	0400	8E	USW			49 26.70	142 33.98	4033		L00P		M.R.		
13	L00P21	0800	8E	USW			49 36.74	143 20.23	4133		L00P		D.W.		
13	L00P22	1212	8E	USW			49 48.44	144 14.16	4162		L00P		TK		
13	P26	1606	8E	RDS		54	50 00.06	145 00.06	4242			19	07M.R.	✓	DMSD + vbc Swallow
		1619	80				50 00.08	145 00.02		700	304-322				
		1643	EN				50 00.00	144 59.95							
13	P26	1726	8E	RDS		55	50 00.00	145 00.09	4243			24			UBC Deep cast.
		1825	80				50 00.05	144 59.98		4314	—				
		1935	EN				50 00.04	145 00.04							
13	P26	2016	8E	RDS		56	50 06.35	145 00.23	4243						
		2117	80				50 00.29	145 00 50		4315	323-346	24	DW/DA	✓	TOS Deep Cast
		2225	EN				50 00 35	145 00 73							
13	P26	2245	80	NET		57	50 00.25	145 00.96	4315	250			DW		BONUS To 250m

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13	P26	2343	BE	ROS		58	50 00 .32	145 01 .32		4246										
		2347	BO				50 00 29	145 01 35				347-359	13	DH/DA	✓					
		0000	EN				50 00 33	145 01 43												
14	Loop 23	0400	BE	USW		—	50 35 .08	144 33 .70				Loop								
14	Loop 24	0800	BE	USW			51 13 .22	144 7 .18				Loop		DW.						
14	Loop 25	1013	BE	USW			51 53 .07	143 41 .90		2141		Loop		TK						
14	Loop 26	1600	BE	USW			52 26 805	143 16 624		3891		Loop				Loop 26				
14	Loop 27	2025	BE	USW			53 10 .04	142 45 .83		3848		Loop		DW.						
15	Loop 28	0000	BE	USW			53 45 .33	142 19 .59		3856		Loop		DW						
15	Loop 29	0400	BE	USW			54 22 551	141 53 122		3734		Loop				Loop 29				
15	Loop 30	0800	BE	USW			54 59 .43	141 24 .09		3521		Loop		DW						
15	ARC02	1130	BE	ROS		59	55 30 01	140 59 97		3540						+ Loop @ 2000.				
		1157	BO				55 29 .99	141 00 02			2000	360 - 383	24							
		1220	EN				55 30 .00	140 59 .99												
15	Argo 2	1230	DE	DRF		60	55 29 .970	141 00 .135		3540						Deploy Argo 2058				
15	Loop 31	1600	BE	USW			56 00 257	140 30 834		3528						Loop 31				
15	Loop 32	20 17	BE	USW			56 39 93	139 52 31		3444						Loop 32				
15	Loop 33	24 00	BE	USW			57 13 .10	139 16 .61		3317		Loop		DW						

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

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month February				Year		2006				Ship J P Tully				Cruise ID 2006-08			
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	ARCO 3	0158	BE	ROS		61	57 30 03	138 59 80	3138				M/T/H/S	✓			
		0228	BO				57 29 93	139 00 14			384-403	20			Loop @ 5m on WPCAST		
		0314	EN				57 29 91	139 00 09									
16	ARCO 3	0325	DE	DRF		62	57 29 81	139 00 25	3142				M/T/H/S		Deploy ARCO # 2059		
16	LOOP 34	0800	EN				56 58.16	137 59.49	2312		LOOP		D.W.				
16	LOOP 35	1200	BE	USW			56 28 04	137 05 91	2406				M.T.		Loop # 35		
16	LOOP 36	1602	BE	USW			55 58.85	136 07.37	2400				M.R.				
16	LOOP 37	2009	BE	USW			55 27.15	135 09.00	1185		LOOP		D.W.				
17	LOOP 38	0800	BE	USW			54 59.34	134 16.69	213		LOOP		TR				
17	LOOP 39	0400	BE	USW			54 36 104	133 22 976	340		LOOP				Loop 39		
17	LOOP 40	0805	BE	USW			54 26.89	132 07.37	343		LOOP		D.W.				
17	LOOP 41	1200	BE	USW			54 14 144	131 03 49	90		Loop		M.T.		Loop 41		
17	LOOP 42	1558	BE	USW			53 32.08	130 50 42	88		"		M.R.				
19	SI 03	1316	BE	ROS		63	48 35 59	123 30 04	227		?		M.T./D.T.H/S	✓	WBC CAST		
		1320	BO				48 35 59	123 30 05					M.D		#13 NO fire!		
		1341	EN				48 35 62	123 30 05							No OL sensor		

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