

DAILY LOG BOOK

MISSION
NUMBER

2010-36

DATE:

From: 20 JULY to: 17 AUGUST 2010

VESSEL:

J.P. TULLY

PROJECT:

OCEAN ACIDIFICATION

- BOOK 2

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

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

Mission Participants / Agencies:

Scientific Personnel: _____
Name _____
Party Chief: _____

[illegible]

Second leg of Mission:
N

[illegible]

Data logging computer:

Data acquisition program: SEASQUE 117186

CTD deck unit make: SEASAVE V7.18C
 Primary CTD model: SCC serial number: 0476

Make: SCABIRD model: 9 serial number: 6506

Primary temperature serial number: 2449

Primary conductivity serial number: 1764

Secondary temperature serial number: 2038

Secondary conductivity serial number: 3394

Transmissometer:

Fluorometer: Model: WCTLAB s/n: 1005 DR

Oxygen sensor: SBE Cable gain: 340.5 s/n: 2345 P, S or NO pump?

PAR sensor: BOSPHERICAL/LICOR Model: 43 s/n: 1176 P, S or NO pump?

Other sensors: ALTIMETER Model: 4694 s/n: 1029 P, S or NO pump?

Other sensors: PH - SBE s/n: 0692 P, S or NO pump?

Other sensors: s/n: P, S or NO pump?

Other sensors: s/n: P, S or NO pump?

lary CTD

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: _____ P, S or NO pump?

Oxygen sensor: _____ Model: _____ s/n: _____ P, S or NO pump?

PAR sensor: _____ Model: _____ s/n: _____ P, S or NO pump?

Other sensors: _____ s/n: _____ P, S or NO pump?

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Other sensors: _____ s/n: _____ P, S or NO pump?

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

DAILY LOG

Ocean Sciences and Productivity Division

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Month <i>AUGUST</i>				Year <i>2010</i>			Ship <i>TULLY</i>				Cruise ID <i>2010-36</i>				
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							
9	C9	1428	BE	ROS	VS	154	48° 25.900	126° 13.650	610						no sample #1366, N2O
		1440	BO				48° 25.915	126° 13.681		602	1344-1366	23	N ²	Y	fired twice .. oops!
		1512	EN				48° 25.902	126° 13.685							
9	C9	1521	BE	TMR		155	48° 25.91	126° 13.68	600		1367-1378	12	ER, CS, JM		
		1536	BO				48° 25.91	126° 13.68							
			EN												
9	C10	1702	BE	ROS		156	48° 22.42	126° 20.14	1240		Ø	—	TB	Y	PAR+PH off.
		1723	BO				48° 22.40	126° 20.16		1200					
		1744	EN				48° 22.41	126° 20.14							
9	C11	1833	BE	ROS		157	48° 18.99	126° 26.68	1470		Ø	—	TB ^{HM}	Y	
		1858	BO				48° 18.98	126° 26.66		1456					
		1921	EN				48° 19.03	126° 26.69							
9	BC2	2112	BE	VMP		158	48° 18.4744	126° 03.4164	933.7						
10	BC2		EN	VMP			48° 18.	126° 03.25	823						
10	BC2	09:55	BE	ROS		159	48° 18.76	126° 05.37	866		1379-1394				PAR ON
		10:07	BO				48° 18.73	126° 05.45	865	860			D/TB		* altimeter did not
		10:38	EN				48° 18.69	126° 05.72	883						kick in sonar steady
10	LOOP 50	1149		USW			48° 17.21	126° 19.89							-OXY -ONLY

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flow to underway fluorometer back on @ 4:40 local on Aug 16th. Not sure how long it
was off but it wasn't flowing after Wiley had cleaned flow-meter.

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10	LC12	1329	BE	ROS	US	160	48° 15.02	126° 39.95	2520		1395-1404 (1427-1428)	12	TB	✓	Biol Rosette
		1331	BO				48° 15.05	126° 39.93		100					
		1341	EN				48° 15.01	126° 40.05							
10	LC12	1401	BO	NET		161	48° 15.09	126° 40.01			—	—	TB/N ²		DNA BOW GO
		1405	EN				48° 15.13	126° 39.94		250					162 taken when latch on lars froze.
10	LC12	1445	BE	ROS	US	162	48° 15.04	126° 40.00	2512		1405-1426	22	N ² /TB		didn't archive on 162
		1529	BO			164	48° 15.11	126° 40.00		2537					→
		1645	EN				48° 15.06	126° 40.14							
10	LC12	1702	BE	TMR	UN	165	48° 15.000	126° 40.021	2520		1429-1440	12	ER		
		1757	BO				48° 14.902	126° 40.057		2010					
			EN												
10	BC3		BE	VMP		166	48° 19.80N	126° 01.27W	910						PAR/PA ON →
11	BC3	10:08					48° 19.90	126° 01.29							
11	BC3	10:19	BE	ROS		167	48° 19.87	126° 02.53	890		1441-1458				altimeter didn't kick in. Sander bounding quite a bit
		10:39	BO				48° 19.84	126° 02.62	930	915					
		11:12	EN				48° 19.81	126° 02.68	945						
11	MLO	1554	BE	ROS	US	168	47° 51.51	125° 10.47	240		1459-1482	24	TB		
		1559	BO				47° 51.52	125° 10.46		230					
		1624	EN				47° 51.48	125° 10.27							

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- PAR-OFF

→ computer froze @ bottle firing @ 400 m, turned off deck unit, and powered back on, restarted event #164, re-fired bottle 10 and resumed cast.

20:51 10/8/10

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							Latitude	Longitude							
11	WH 1	2247	BE	ROS	U.S.	169	47° 08.47	124° 23.98	50		1483-1493	11	H.A.	✓	
		2249	BO			170	47° 08.47	124° 24.02		43					COMPUTER FREEZE W
		2302	EN			171	47° 08.51	124° 24.11							3 FILES on 1 CAST
11	WH 1	2315	BO	NET	-	172	47° 08.41	124° 24.62							BONGO
		2320	EN				47° 08.41	124° 24.62							
1	WH 2	0010	BE	ROS	-	173	47° 08.35	124° 33.37	73		—	-	H.A.	✓	
		0012	BO				47° 08.34	124° 33.38		67					
		0013	EN				47° 08.32	124° 33.39							
12	WH 3	0105	BE	ROS	U.S.	174	47° 08.44	124° 41.49	104		1494-1510	17		✓	COMPUTER FREEZE
		0107	BO			175	47° 08.44	124° 41.48		100					
		0122	EN				47° 08.45	124° 41.50							
12	WH 4	0214	BE	ROS	-	176	47° 08.46	124° 50.68	143					✓	
		0217	BO				47° 08.45	124° 50.71		138	—				
		0219	EN				47° 08.46	124° 50.71							
12	WH 5	0316	BE	TRR	UN	177	47° 08.490	124° 58.743			1511-1522	12			
		0321	BO				47° 08.485	124° 58.779							
		0332	EN				47° 08.476	124° 58.863							

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12	WH5	0339	BO	ROS		178	47° 08.46	124° 58.76	252		1523-1543	21	H.M.	✓	
		0344	BO				47° 08.46	124° 58.77		245					
		0404	EN				47° 08.47	124° 58.75							
12	WH5	0438	BO	NET		179	47° 08.54	124° 58.74	240	230	—	—	H.M.		BONGO
		0442	EN				47° 08.56	124° 58.76							
12	WH6	0540	BO	ROS		180	47° 08.45	125° 03.92	1102		—		H.M.	✓	PAR/pH OFF
		0600	BO				47° 08.47	125° 03.95		1127					
		0621	EN				47° 08.49	125° 03.90							
12	WH7	0726	BE	ROS		181	47° 08.45	125° 15.29	1520		—	—	TR/DI	✓	Saunders not giving depth
		0757	BO				47° 08.44	125° 15.33		1500					
		0812	EN				47° 08.47	125° 15.33							
12	WH7	0840	BE	TMR		182	47° 08.457	125° 15.364	1530		1544-1555	12	ER		
		0931	BO				47° 08.56	125° 15.37		1455					
		1048	EN				47° 08.46	125° 15.38							
12	WH8	1211	BE	ROS		183	47° 08.45	125° 30.14	1696		—	—	TB		Saunders altimeter working well.
		1239	BO				47° 08.47	125° 30.14		1700					
		1324	EN				47° 08.45	125° 30.15							

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12	WH9	1706	BE	ROS	US	184/185	47° 08.46	126° 12.05	2500		1556-1567 1589	12	TB	✓	comp freeze on H1 4.	
		1709	BO				47° 08.47	126° 12.05		100						
		1721	EN				47° 08.47	126° 11.94								
12	WH9	18:14	BE	ROS	US	186	47° 08.46	126° 12.00	2502		1568-1588	21	DH/HM	✓		
		1909	BO				47° 08.45	126° 11.98								
		1931	EN				47° 08.46	126° 12.07	/							
13	A13	0119	BO	HET		187	47° 21.02	126° 47.98	2541	250			H.M./N.M.		BONGOT DNA	
		0129	EN				47° 21.02	126° 47.98								
13	A13	0146	BE	ROS		188/189	47° 21.01	126° 48.00			1590-1613	24	H.M./N.M.	✓	comp freeze 52026	
		0231	BO				47° 20.99	126° 48.02								
		0340	EN				47° 21.02	126° 48.01								
13	A13	0354	BE	THR	UN	190	47° 21.035	126° 48.018	2540		1614-1625	12	ER			
		0445	BO				47° 21.010	126° 48.033		2010						
		0554	EN				47° 21.023	126° 48.027								
13	A13	0606	BE	DRF		191	47° 21.05	126° 47.99	2541		-		H.M.		ARGOS 4509	
13	A12	0939	BE	ROS		192	47° 41.96	126° 11.91	1570		Ø			✓		
		1010	BO				47° 41.98	126° 11.97		1575					altimeter read 45	
			EN				47° 42.00	126° 12.01							@ 15750.7	
															max depth was 1555	

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13	A11	1246	BE	ROS	-	193	47°53.96	125°54.02	1542		Ø	-	TB	✓		
		1322	BO				47°53.99	125°53.99		1540						
		1352	EN				47°53.99	125°54.04								
13	A11	14:06	BE	ROS	US	194-195	47°54.00	125°54.02	1540		1626-1640	13	TB		BIOL. ROS.	
		14:10	BO				47°54.00	125°54.02		100					PAR ON	
		14:22	EN				47°54.01	125°54.06								
13	A10		BE	TMR	UN	196	47°59.102	125°43.384	910		1641-1652	12	ER			
			BO				47°59.021	125°43.378		851						
			EN				47°59.045	125°43.227								
13	A10	17:00	BE	ROS		197-8	47°59.02	125°43.42	908		1653-1672	20	TB.DI		PH ON	
		17:16	BO				47°59.03	125°43.39		913						
		17:54	EN				47°59.03	125°43.39								
13	A9	1846	BE	ROS		199/200	48°02.34	125°36.81	346		1673-1692	20	H.M.	✓	COMPUTER FROZE	
		1850	BO				48°02.33	125°36.84								
		1913	EN				48°02.31	125°36.85								
13	A9	1923	BE	TMR		201	48.02.312	125°36.856	349		1693-1704	12	ER			
		1932	BO				48.02.294	125°36.898		310						
		1943	EN				48.02.316	125°36.889								

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							Latitude	Longitude							
13	A 9	20:09	BO	NET	—	202	48° 02.34	125° 36.93	350	250	—	—	H.M.		BONGO (R)
		20:13	EN				48° 02.34	125° 36.91							
13	A 8	20:57	BE	ROS	—	203	48° 05.74	125° 30.40	141		φ		H.M.	✓	CALLED A7 in FILE
		21:00	BO				48° 05.73	125° 30.42		142					SHOULD BE A8
		21:02	EN				48° 05.75	125° 30.41							FILE # 202 (NOT 203)
13	A 7	21:48	BE	ROS	U.S	204/205	48° 09.15	125° 23.85	115		1705-1721	17	H.M.	✓	COMPUTER FROZE
		21:50	BO			206	48° 09.16	125° 23.87		110					Twice
		22:06	EN				48° 09.16	125° 23.92							
13	A 7	22:20	BE	TMR	UN	207	48° 09.181	125° 23.929	115		1722-1733	12	E.R.		
		22:22	BO				48° 09.189	125° 23.928		90					
		22:29	EN												
13	A 6	23:31	BE	ROS	—	208	48° 12.69	125° 17.06	114				H.M.	✓	
		23:35	BO				48° 12.70	125° 17.06		108					
		23:37	EN				48° 12.69	125° 17.06							
14	A 5	00:23	BE	ROS	U.S	209/210	48° 16.15	125° 10.36	121		1734-1748	15	H.M.	✓	COMPUTER FROZE
		00:26	BO			211	48° 16.13	125° 10.39		116					
		00:43	EN				48° 16.10	125° 10.43							
14	A 5	00:55	BE	TMR	UN	212	48° 16.043	125° 10.678							
		01:01	BO				48° 16.046	125° 10.679							

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14	A5	0108	EN	TMR	UN	212	48° 15.975	125° 10.756	120	105	1749-1760	12	ER			
14	A4	0155	BO	ROS	US	213	48° 19.34	125° 04.16	203		—	—	H.M.	✓	* CHANGED OUT Pilon	
		0200	BO				48° 19.32	125° 04.21		180					TO CTD CABLE	
		0203	EN				48° 19.32	125° 04.20								
14	A4	0219	BO	NET		214	48° 19.322	125° 04.2403			—	—	H.M.		BONGO	
		0222	EN				48° 19.3245	125° 04.2375								
14	A3	0305	BO	ROS	US	215	48° 22.08	124° 57.66	111		1761-1774	14	H.M.	✓	computer freeze	
		0308	BO			216	48° 22.90	124° 57.65								
		0322	EN				48° 22.88	124° 57.74								
14	A3	0350	BO	NET		217	48° 22.928	124° 57.690	111		—	—	H.M.		BONGO	
		0352	EN				48° 22.926	124° 57.699								
14	A2	0520	BO	ROS		218	48° 26.34	124° 51.52	300		—	—	H.M.			
		0529	BO				48° 26.34	124° 51.57		290						
		0535	EN				48° 26.34	124° 51.58								
14	A2	0556	BO	NET		219	48° 26.40	124° 51.76			—	—	H.M.		BONGO (ANA)	
		0600	EN				48° 26.42	124° 51.81								
14	A1	0703	BO	ROS	US	220	48° 29.21	124° 43.76	263		1775-1791	17	TB	?	comp crash btl 2.	
		0709	BO			221	48° 29.19	124° 43.78		253						
		0742	EN				48° 29.17	124° 43.69								

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Cast 220/221 bottle @ 200m
computer froze on btl 2 so turned deck unit on & off. Didn't turn pumps back on 3 started
going to the surface. Fired bottles 2, 3, 4, 5 & realized pumps were off so turned pump on
and went back down to 200 to make sure we had the CTD data then went
back to 100 to continue bottle firing sequence.

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[illegible]

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