

DAILY LOG

CRUISE
NUMBER

2002-01

INSTITUTE OF OCEAN SCIENCES

OCEAN SCIENCES AND PRODUCTIVITY DIVISION

DATE

5 FEB -22 FEB 2002

VESSEL

JOHN P TULLY

PROJECT

LINE P - ARGO

Captain: MURRAY Mc GEEBOR **First Officer:** MIKE McCULLAGH

Second Officer: JULIE GASCON **Third Officer:** SHANE LOVELAKE

Mission Participants / Agencies: IOS

Scientific Personnel:

Party Chief: MARIE ROBERTSON

[illegible]

Second leg of Mission: Party Chief;

[illegible]

Data logging computer: FS02

Data acquisition program:

CTD deck unit make: _____ model: _____ serial number: _____

Primary CTD

Make: SEABIRD 911 model: 0585 serial number: 09220754 0535

Primary temperature sensor serial number: 2038 Calibration date: _____

Primary conductivity sensor serial number: 1729 Calibration date: _____

Secondary temperature sensor serial number: 2968 Calibration date: _____

Secondary conductivity sensor serial number: 2664 Calibration date: _____

Other sensors: FLUOROMETER-SEAPoint s/n: 2356 10X

Other sensors: TRANSMISSOMETER s/n: 498 DR

Other sensors: SDF 43 0X150N s/n: 47

Other sensors: _____ s/n: _____

Secondary CTD

Make: _____ model: _____ serial number: _____

Primary temperature sensor serial number: _____ Calibration date: _____

Primary conductivity sensor serial number: _____ Calibration date: _____

Secondary temperature sensor serial number: _____ Calibration date: _____

Secondary conductivity sensor serial number: _____ Calibration date: _____

Other sensors: _____ s/n: _____

Other sensors: _____ s/n: _____

Other sensors: _____ s/n: _____

ents: _____

Comments:

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Year 2002					Month FEBRUARY			Ship JOHN P TULLY				Cruise I.D. 2002-01		
Day	Station I.D.	Cast Type	Time (UTC)	Time Code	Consec. Number	Latitude	Longitude	Position Code	Bottom Depth	Max Depth	Consec Sample #	# of Bottles	initials	Comments
6	SI03	ROS	0457	BE	1	48 35.55	123 30.06		221					
			0505	BO		48 35.56	123 30.05							
			0521	EN		48 35.56	123 30.02				1-12	12	MR	
6	JF1	LOOP	1034			48 15.970	123 29.995							
6	JF2	LOOP	1230			48 18.02	124 00.38		183				H.M.	LOOP
6	JF3	LOOP	1442			48 27.12	124 30.58		224				D.A.	LOOPS TAKEN
6	JF4	LOOP	1642			48 32.29	125 00.23		~50				M.H.	LOOP TAKEN
6	P1	CTD/ROS	1855	BE	2	48 34.54	125 30.41		133					LOOPS TAKEN
			1859	BO		48 34.54	125 30.45							
			1902	EN		48 34.53	125 30.48			127	13	1	MR	1 NISKAN FOR SURFACE SAMPLE
6	P2	CTD/ROS	2118	BE	3	48 36.04	126 00.32		114					
			2121	BO		48 36.07	126 00.40							
			2123	EN		48 36.08	126 00.44			105	14	1	H.M.	SURFACE NISKAN
6	P2	NET	2200	BE	4	48 35.97	126 00.044		120	110	15		H.M.	
6	P3	CTD/ROS	2337	BE	5	48 37.48	126 19.94		804					NORPAC FOR MOYRA
			2350	BO		48 37.53	126 20.00							Called 4 in G61
7			0001	EN		48 37.49	126 20.12				16	1	H.M.	SURFACE NISKAN
7	P3	NET	0012		6	48 37.52	126 20.22						H.M.	NORPAC OFFSHELF

Cast type:

BOT = otter cast
CTD = CTD
MOR = mooring

ROS = Rosette
NET = net haul
DRF = drifter

USW = sea water loop

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* FILLED TANKS STARTING MIDWAY BETWEEN P8 1/2 & P9 - FLUSHED TWICE (1/2 FULL) USING FIRE HOSE
TOOK OFF PVC FITTINGS & SHIP FIREHOSE SYSTEM FITS PERFECTLY - TAKES ABOUT 10 min. TO FILL
FLUSHING TOOK 5m TO 1/2 FILL AND 10-15m TO EMPTY. FINISHED FILLING BOTH TANKS ABOUT
1 MILE BEFORE P9

H.M.

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Day	Station I.D.	Cast Type	Time (UTC)	Time Code	Consec. Number	Latitude	Longitude	Position Code	Bottom Depth	Max Depth	Consec Sample #	# of Bottles	initials	Comments
7	P4	ROS	0205		7	48 39.04	126 39.99		1312				DA	
	P4	ROS	0230		7	48 38.96	126 40.04			1315	17-37	21		2 bot. for UBC
	P4	ROS	0314		7	48 39.03	126 40.01							
7	P4	NET	0352		8	48 38.95	126 40.13		1312	150			H.M./DA	BONGO NETS
7	P5	CTD/ROS	0648	BE	9	48 41.48	127 10.08		2087				MR	
			0710	BO		48 41.43	127 10.17			1505	38	1		
			0731	EN		48 41.51	127 10.26							
7	P6	CTD/ROS	1010	BE	10	48 44.71	127 39.94		2543					
			1025	BO		48 44.64	127 40.06			1505	39	1	H.M.	V. ROUGH - STIFF SYSTEM BUT
			1041	EN		48 44.60	127 40.26							SURFACE HUSKIN STILL HITTING TOP TO BOTTOM
7	P7	CTD/ROS	1336	BE	11	48 46.55	128 10.04		2503					
			1416	BO		48 46.48	128 10.13			1505	40	1	DA	Rough - 35-40 k winds
			1438	EN		48 46.58	128 10.27							SURFACE HUSKIN
7	P8 *	CTD *	1826	BE	12	48 48.96	128 40.02		2516				MR	SEE NOTES →
			1848	BO		48 48.92	128 39.99			1510		Ø		LOOPS TAKEN @ BO
			1901	EN		48 48.98	128 40.02							
7	P9	CTD	2141	BE		48 51.38	129 10.00		2351					
			2200	BO	13	48 51.37	129 10.02			1502				Loop taken - BO
			2221	EN		48 51.39	129 10.05							

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P8: CAST 12: Weather getting too rough

Change to stand alone CTD. → SAME CTD

Have to use different mount for transmissometer: it does not fit in CTD "cage"

Take LOOP sample from inside lab

Cancel Bongo @ P8

TRANSMISSOMETER CLEANED

DAILY LOG

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Year 2002					Month February			Ship TULLY				Cruise I.D. 2002-01		
Day	Station I.D.	Cast Type	Time (UTC)	Time Code	Consec. Number	Latitude	Longitude	Position Code	Bottom Depth	Max Depth	Consec Sample #	# of Bottles	initials	Comments
8	P10	CTD	00:52	BE		48 53.55	129 40.04						DA	Transmitter Circled
			01:11	BO	14	48 53.58	129 40.03		2637	1501		Ø		LOOPS TAKEN 3M (INSIDE)
			01:29	EN		48 53.57	129 40.06							
		CTD BASIC IN ROSETTE FRAME												
8	P11	CTD/ROS	0425	BE	15	48 55.97	130 10.15		2752				MR	
			0455	BO		48 56.26	130 10.32			1503	41	1		
			0514	EN		48 56.60	130 10.15							
8	P12	BONGO	0747	BO	16	48 58.30	130 40.01		3237	150			M.R.	
8	P12	ROS	0812	BE	17	48 58.31	130 40.12		3236					
		ROS	0855	BO		48 58.28	130 40.10			3230	42-64	23	J.T.	NOT x see back re: TOC page
			0959	EN		48 58.25	130 40.10							
8	P13	CTD/ROS	1517	BE	18	49 02.70	131 39.98		2996					
			1533	BO		49 02.79	131 40.00			1508	65	1	DA	SURF SAMPLE AND LOOP SAMPLE
			1549	EN		49 02.97	131 40.05							
8	P14	CTD/ROS	2042	BE	19	49 07.29	132 40.06		3316					LOOPS TAKEN
			2101	BO		49 07.33	132 39.94			1501	66	1	H.M.	SURFACE NISKAN ALSO ✓
			2120	EN		49 07.37	132 39.97							

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I didn't realize the tops had to be put on right
away for the TOC's bottles - so for the first
14 samples, the lids weren't put on immediately, but after Hugh pointed
it out to me during sampling of Niskin 15.
Shaila

42 → 55

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Day	Station I.D.	Cast Type	Time (UTC)	Time Code	Consec. Number	Latitude	Longitude	Position Code	Bottom Depth	Max Depth	Consec Sample #	# of Bottles	initials	Comments
9	P15	CTD/ROS	1:48	BE	20	49 11.96	133 40.04						DA	Oceanel Xmiss
9	P15	CTD/ROS	2:09	BO	20	49 11.94	133 40.03		3410	1501	67	1		Surface Sample Taken
9	P15	CTD/ROS	0232	EN	20	49 11 82	133 40.04							
10	P16	CTD	1839	BE	21	49 17.04	134 40.00		3638				HK	STAND-ALONE CTD
			1854	BO	21	49 16 27	134 39.98			1009				Loops taken @ BO
			1911	EN	21	49 17.04	134 40.00							
11	P17	CTD	0145	BE	22	49 21 05	135 40 01		4038					STAND ALONE
			0210	BO	22	49 21 02	135 40.04			1501			DA	Loops taken @ BO
			0241	EN	22	49 21 02	135 40.07							Seas still a bit rough Occasional 5-7 m swells
11	P18	CTD	0740	BE	23	49 26.01	136 39.98		3835					
			0759	BO	23	49 26.01	136 40.00			1507			H.M.	Loops taken @ BO
			08	EN	23	49	136							CRASHED @ SURFACE - REBOOT →
11	P19	CTD	1340	BE	24	49 30.02	137 39.95		3929				DA	
			1403	BO	24	49 29.97	137 40.03			1516				LOOP TAKEN @ START
			1427	EN	24	49 30.00	137 40.01							5-7 m swells
11	P20	CTD	1944	BE	25	49 34.02	138 40.06		3968				HK	
			2004	BO	25	49 33.99	138 40.02			1541			ST	loops taken at BO.
			2026	EN	25	49 33.98	138 40.01							
11	P20	NET	2044	BE	26	49 33 97	138 40 05		3968	150				BONGO

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P 10 - WHEN CTD BROKE SURFACE, COMPUTER CRASHED, DATA WAS ALL THERE BUT HAD TO TURN OFF AQ UNIT TO TURN OFF PUMPS
BACKED UP IMMEDIATELY, ALL LOOKS GOOD BUT NO END POSITION FOR LOG

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Day	Station I.D.	Cast Type	Time (UTC)	Time Code	Consec. Number	Latitude	Longitude	Position Code	Bottom Depth	Max Depth	Consec Sample #	# of Bottles	initials	Comments
12	P21	CTD	2:08	BE	26a	49 38.05	139 40.14							Wind 30 knots 4-7 m seas, occasional big ones
			2:25	BO	26a	49 37.82	139 40.32		3958	1501			DA	Stomd alone CTD
			2:41	EN	26a	49 37.84	139 40.64							Loops taken @ BO
					↳	SHOULD BE 27!								
12	P23	CTD	1826	BE	28	49 46.01	141 40.04		4053				MR	
			1844	BO	28	49 45.97	141 40.14			1509				Loops taken @ BO
			1857	EN	28	49 46.00	141 40.17							
12	P24	CTD	2336	BE	29	49 50.20	142 40.05		3987					
			2352	BO	29	49 50.21	142 40.04			1500			H-M	Loops TAKEN @ BO
			0010	EN	29	49 50.21	142 40.04							14 knot wind, 1 seas calmer
13	P25	CTD	0424	BE	30	50 00.07	143 36.34		4144				MR	
			0444	BO	30	50 00.00	143 36.30			1503				Loops TAKEN @ BO
			0506	EN	30	50 00.00	143 36.51							
13	P35	CTD	0819	BE	31	50 00.07	144 18.19		4154				ST	Loops taken at BO
			0841	BO	31	50 00.01	144 18.22			1502				
			0903	EN	31	50 00.02	144 18.19							
		ROS												Wind 35-40 knot
		Tart	cast											Cancelled. DA

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Go - Floz:

13 Feb 2002, Start 1420 end 1450

50°00.00N 145°00.00W

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Year 2002					Month FEBRUARY			Ship JOHN P. TULLY				Cruise I.D. 2002-01		
Day	Station I.D.	Cast Type	Time (UTC)	Time Code	Consec. Number	Latitude	Longitude	Position Code	Bottom Depth	Max Depth	Consec Sample #	# of Bottles	initials	Comments
13	P26	DRF	16 56	IN	32	50 02.163	144 59.234							
			2215	Out		50 02.964	144 57.748							Deploy
14	P26	ROS	0033	BE	33	49 59.97	145 00 07		4283					Recover
			0119	BO	33	49 59.96	145 00 03			4200	68-91	24	DA	35k mixed
			0245	EN	33	49 00 00	145 00 02							Occasional neg. descent rate
14	P26	NET	0300	BE	34	50 00 03	145 00 02		4283	150				Loops taken @ EN
														BONGO
14	Loop 1	Loop	0502			50 00.48	145 54.95		4324					Loop #1
14	Loop 2	Loop	1203			49 59.69	147 03.94		4175					Loop #2
14	Loop 3	Loop	1600			50 00.17	147 33.74		4380					Loop #3
14	Argo 1	DRF	1802	DE	35	50 00.83	147 59 23						MR	Argo Float 220
14	Argo 1	ROS	1826	BE	36	50 00.07	147 59.17		4492				MR	
			1847	BO		50 00.28	147 59.28			2000	92-11)	20		
			1929	EN		50 00 59	147 59 55							
14	Argo 1	NET	1947	BO	37	50 00 77	147 59 92			150				BONGO
15	Loop 4	Loop	0440			49 59.92	149 38.89		4072					Loop 4
15	Argo 2	DRF	0841		38	50 00.02	150 58.42		4949				MR	ARGO Float #277
													H.M.	

Cast type:

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Day	Station I.D.	Cast Type	Time (UTC)	Time Code	Consec. Number	Latitude	Longitude	Position Code	Bottom Depth	Max Depth	Consec Sample #	# of Bottles	initials	Comments
15	ARGO 2	ROS	0905	BE	39	50 00 01	150 59 99		4940				H.M	
			0935	BO		50 00 01	150 59 95			2000	112-131	20		
			1033	EN		50 00 02	151 00 06							
15	ARGO 2	NET	1116	BE	40	50 00 00	150 59 96			150			H.M	BONGE
15	Loop 5	Loop	1556		-	49 08.13	150 59.07		4355?				MR	Loop 5
15	Loop 6	Loop	20 07			48 19 37	150 58.22		-?				H.M.	Loop 6
15 ¹⁵	ARGO 3	NET	0256	BE	41	47 00 00	150 59.96		4872					BONGO
15 ¹⁶	ARGO3	ROS	0316	BE	42	46 59.99	150 59.99		4872				DA	
15 ¹⁶	"	ROS	0335	BO	42	46 59.99	151 00.01				132-151	20		Loop 7 - BO
15 ¹⁶	"	ROS	0416	EN	42	47 00.02	151 00.02							
15 ¹⁶	Argo 3	DRF	0426		43	47 00.03	150 59 82							FLOAT #320
16	Loop 8	Loop	0729		-	46 59.90	149 51.08						S.T	Loop 8
16	Loop 9	Loop	1220			47 00 24	148 34.57						H.M.	Loop 9
16	ARGO 4	NET	1416	BE	44	47 00.00	148 00.023		4665					No sample from Net A -> *
16	"	ROS	1446	BE	45	46 59.99	148 00.02		4665					
16	"	ROS	1511	BO	45	46 59.95	148 00.03			2002	152-175	24	D.A	Loop 10 @ BO
16	"	ROS	1554	EN	45	46 59.90	147 59.95							
16	Argo 4	DRF	1605		46	47 00.00	147 59.97						MR	Deploy Float 321

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* Codend from net A spilled on a big roll while setting up for rosette. DA

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16	Loop 11	Loop	2016			47° 00' 19"	147° 00' 32"		4896				H.M.	Loop 11
17	Loop 12	Loop	0206			47° 00' 10"	145° 36' 48"						H.M.	Loop 12 (6 PM)
17	Argo 5	Net	0442	BO	47	47° 00' 03"	144° 59' 96"	4704 →	150				MR	
17	Argo 5	ROS	0503	BO	48	47° 00' 01"	144° 59' 98"		4704		176-195	20	MR	
			0527	BO	48	47° 00' 00"	145° 00' 01"			2000				
			0602	EN	48	47° 00' 02"	145° 00' 02"							
17	Argo 5	DRF	0610		49	46° 59' 99"	145° 00' 04"						MR	Deploy Float 333
17	Loop 13	Loop	0807			46° 57' 83"	144° 33' 45"						ST	Loop 13
17	Loop 14	Loop	1552			46° 52' 01"	142° 42' 76"		4504				MR	Loop 14
17	Argo 6	DRF	1919		50	46° 45' 89"	142° 00' 57"		4456					Deploy Float # 332
17	Argo 6	NET	1941	BO	51	46° 45' 01"	142° 00' 01"		4454	150			MR	
17	Argo 6	ROS	2001	BO	52	46° 45' 03"	141° 59' 95"							
			2024	BO	52	46° 45' 00"	142° 00' 00"		4454	2000	196-215	20		Loop 15 at BO
			2105	EN	52	46° 44' 98"	141° 59' 99"							
18	Loop 16	Loop	0233			46° 46' 17"	140° 56' 56"		4950				MR	Loop 16
18	Loop 17	Loop	0353			46° 39' 56"	140° 41' 76"		4230?				MR	Loop 17
18	Loop 18	Loop	0759			46° 36' 99"	139° 56' 12"		4256				H.M.	Loop 18

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18	ARGO 7	DRIF.	1241		53	46 35 03	138 59 71						H.M.	ARGO #7 #318
	11	NET	1249		54	46 34.52	138 59.79			150				Large tear in Net A
18	11	ROS	13:26	BE	55	46 33.95	138 59.92		4235					
	11	ROS	13:45	BO	55	46 33.98	138 59.98			2002	216-235	20	DA	35-40 knot wind
	11	ROS	14:23	EN	55	46 34.01	138 59.94							Loop 19 @ 30
18	Loop 20	Loop	20:24			46 28 84	137 38.73		3982					Loop 20
19	Loop 21	Loop	0347			46 21.01	136 00.06						MR	Loop 21
19	Argo 8	DRF	0356		56	46 21.02	136 00.09		4193					Deploy float #319
19	Loop 22	loop	0730			46 16.64	134 59.70		4026				S.T	loop 22
19	Argo 9	NET	1649		57	46 07.06	133 00.07		3776				MR	
19	Argo 9	ROS	1715	BE	58	46 07.04"	133 00.00"		3773		236-255	20	MR	
19	Argo 9	ROS	1735	BO	58	46 07.02"	132 60.00"			2000				
19	Argo 9	ROS	1822	EN	58	46 07.04	132 59.99							Loop 23 @ 10m
19	Argo 9	DRF	1834		59	46 07.09	133 00.14							Float 336
19	Loop 24	Loop	2013			46 06.50	132 43.98		3585				ST	loop 24
20	Loop 25	Loop	0357			45 59.77	131 07.83		?				MR	Loop 25
20	Loop 26	Loop	0755			45 57.42	130 23.18						H.M.	Loop 25 45.956.98 130.38641
20	ARGO 10	DRF	1017		60	45 55.56	130 04.22		4774 (1618)				H.M.	ARGO 10 # 134
20	ARGO 10	NET	1042		61	45 55 93	129 59.92		1530	150			H.M.	BONGU

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OCEAN SCIENCES AND PRODUCTIVITY DIVISION														INSTITUTE OF OCEAN SCIENCES			
Year					Month			Ship					Cruise I.D.				
Day	Station I.D.	Cast Type	Time (UTC)	Time Code	Consec. Number	Latitude	Longitude	Position Code	Bottom Depth	Max Depth	Consec Sample #	# of Bottles	initials	Comments			
20	ARGO 10	ROS	11 13	BE	62	45 56 05	129 59 95		1531								
			11 37	BO		45 55 99	129 59 96										
			12 14	EN		45 56 03	129 59 75			1500	256-274	19	H.M.				
20	Loop 27	Loop	15 44			45 52 11	129 16 60										
20	Loop 28	Loop	20 16			45 48.50	128 23 65		2753				H.M.	Loop 27			
21	Loop 29	Loop	00 03			45 45.00	127 37 20		2829				H.M.	Loop 28			
21	Argo 11	NET	02 50	BE	63	45 42 00	127 00 00			150			I.B.	Loop 29			
21	Argo 11	ROS	03 24	BE	64	45 42.00	126 59.99		2806								
"	"	"	03 39	BO	"	45 42.00	127 00 00										
"	"	"	04 12	EN	"	45 41 99	127 00 02			1502	275-293	19		Loop 30 @ BO			
21	Test	ROS	05 07	BE	65	45 42 01	127 00 03		2806								
			05 11	BO	65	45 41 99	127 00 00						M.R.	Test rosette			
			05 19	EN	65	45 41 99	127 00 02			400	294-311	18					
21	Argo 11	DRF	05 27		66	45 41 98	126 59 98										
														Argo float 135			