

DAILY LOG BOOK

MISSION
NUMBER

2002-39

DATE:

From: October 15 to: October 21

VESSEL:

Vector

PROJECT:

Paleoceanography

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

Captain: Duke Swider
Second Officer: Mave

First Officer: Steve
Third Officer:

Stave

105/DAC/10merit.01

Scientific Personnel:

Party Chief: _____

2014/10/10

[illegible]

Second leg of Mission:

Party Chief:

[illegible]

Data logging computer:

ACTI

Data acquisition program: Seismic WIN 32 V. 1.1 F. 2.1

CTD deck unit make: Seagave Win 32 Ver 5.26C
 Primary CTD
 model: Seabird serial number: 11 plus 0619

Make: Seabird model: 711 plus serial number: 0585

Primary temperature serial number: 2023 03-May-02

Primary conductivity serial number: 1763 23-Apr-02

Secondary temperature serial number: 2106 19-Apr-02

Secondary conductivity serial number: 1764 23-Apr-02

Transmissometer: Netlabs Model: C-Star s/n: 3330R

Fluorometer: Model Seapoint Cable gain: 10X s/n: 2356 P, S or NO pump?

Oxygen sensor: Seabird Model: SAE 43 s/n: 0047 P, S or NO pump?

PAR sensor: _____ Model: _____ s/n: _____

Other sensors: _____ s/n: _____

Other sensors: _____ s/n: _____

Other sensors: _____ s/n: _____

Other sensors: _____ s/n: _____

_____ary CTD _____ s/n: _____

Secondary CTD

Make: _____ model: _____ serial number: _____
Primary temperature serial number: _____

Primary temperature serial number: _____
 _____ model. _____ serial

Primary conductivity serial number:

Secondary conductivity serial number: _____

Secondary temperature serial number: _____

Secondary temperature serial number: _____
Secondary conductivity serial number: _____

Transmissometer: _____
 Model: _____

Fluorometer: Model _____
 Transmissometer: _____
 Model: _____
 Cable conn: _____

Oxygen sensor: _____ Cable gain: _____
 Model: _____

Oxygen sensor:	Model:
PAR sensor:	Model:

FAK sensor: _____ Model: _____
Other sensors: _____

Other sensors:

Other sensors:

Other sensors:

Other sensors:

Other sensors: _____

Other sensors: _____

Other sensors: _____ s/n: _____

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

Oct 15, 2002

- 0930 - Ship Departs For Safety tests of bow thruster sound proofing
- 1100 - Load Remainder of gear. Departure delayed until 1800 due to timing of slack at Seymour Narrows.
- 1300 - Crew & Ed leave to purchase extra Fuel For late operations - no drums at IOS
- 1500 - try test cast at dock. Problems with GPIB card. If acquisition system is started up with a User other than Fieldmanager, the GPIB driver is not run(?). Pump on/off not available if Session started from Start menu rather than shortcut on desktop.
- 1610 - Conduct test cast at dock. System working ok,
- 1630 - Safety Briefing
- 1830 - Bosun has brought up certification & safety issues raised by captain regarding CTD cable, termination & lifting hardware. Measured cable at 4 places 0.310, 0.312, 0.310, 0.309 - Should be 0.316? No tag on winch
- More 1610 - Temp difference between primary and secondary seemed a bit high ~.1-.8 during cast 1. May be the result of the hot, very sunny, quiescent day, or pump malfunction. Check calibration coefficients and they were correct
- need to check ① serial #
② pump

DAILY LOG

Ocean Sciences and Productivity Division

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Month OCTOBER					Year 2002			Ship VECTOR				Cruise ID 2002-39			
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments	
						Latitude	Longitude								
15	PRL	~1600	CTD		01	51 07 00	127 34 31		5					PAT BAY DOCK TEST	
17	BE01	0357	ROS	BE	02	51 07.696	127 34.316	225	214	Sample				CAT	
		0357	ROS	BO		51 07 709	127 34 34			numbers used		in next		- WATER SAMPLER	
		0407	ROS	EN						cast				DIDN'T FIRE	
17	BE02	0445	ROS	BE	03	51 7.90	127 30.50	197	185	1-10	10			- bottle 11 (surface) did not fire	
		0448		BO		51 7.89	127 30.52							→ OPERATOR ERROR	
		0455		EN		51 7.88	127 30.56							NOT WS ERROR	
17	BE05	1420	ROS	BE	04	51 7.17	127 8.80	280		11-22	11				
		1426		BO		51 7.18	127 8.89		273						
		1437		EN		51 7.20	127 8.98			23-31					
17	ALS2	19:33	Newton Tow		05	51 10.18	127 02.57	130	130					upcast = 1.0 m/sec	
17	ALS03	1358	Newton Deployment		06	51 09.999	126 56.812	136	125					upcast = 0.5 m/sec	
17	ALS1	2140	ROS	BE	08	51 10.10	127 05.80								
		2160		EN		51 10.16	127 05.83	153	148	23-31				Timing not 1Hz	
17	ALS2	2211	ROS	BE	09	51 10.22	127 2.47	110		32-40				Switched pingers	
				EN										HIT BOTTOM	
17	ALS3	2251	ROS	BE	10	51 10.00	126 56.84	136	133	41-49				SEASAVE PROBE	
		2300		EN		51 10.02	126 56.89							AT SURFACE	

Cast type: USW = sea water loop • bottle firing method: • Time Code:

Cast type:

BOT = bottle cast, no CTD
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22 March 2002
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16 / Oct / 2002

2132 PDT

— WATER SAMPLER DID NOT FUNCTION AT STN. BED1. EXAMINED WATER SAMPLER CONFIGURATION AND CHANGE FROM GO 1015(?) TO STE CAROUSEL AND TESTED. SEEM TO CURE THE PROBLEM

DAVE REPORTS THAT CAROUSEL WORKED WITH DOUG AT THE DOCK

OUR TEST OF THE LTD (OUR = STEVE, DAVE, DOUG Y.) ON DEPARTURE DATE INDICATE NO PUMP CONTROL. THIS WAS TRACED BACK TO THE DESKTOP LINK WHERE A /PL WAS NEEDED FOR THE TARGET EXECUTABLE. THIS OCCURED BECAUSE WE SIGNED ON AS SCIENCE NOT FIELD MANAGER AND THE DESKTOPS ARE DIFFERENT → THIS WILL BE A POTENTIAL PROBLEM WITH 2000 AND XP.

WE ALSO HAD AN ERROR WITH THE GPIB CARD AND SWITCH THE COMPUTER INTERFACE IN THE INSTRUMENT CONFIGURATION FILE TO RS 232. AGAIN IT IS THOUGHT THAT THIS MIGHT HAVE SOMETHING TO DO WITH A LOST DRIVER DUE TO WINDOWS 2000'S MULTIUSER ARRANGEMENT.

CURRENTLY ALL PROBLEMS ARE SOLVED WE ARE LOGGED ON AS FIELDMANAGER AND ARE INTERCONNECTED VIA INTERNET TO PACVEL, THE OTHER ACQUISITION SYSTEM DAVE'S LAPTOP, STEVE'S LAPTOP AND PRINTER

Oct 17 - 0850 on Station Alison Mooring Very Foggy!!

- Range 166 m depth 150 m pretty much right on top of it

- Deck crew arranging deck & wind

- ABCD

0914 - Range 362 363

0915 - Release Code ABCD Sent Mooring sighted on surface (Radar)

- mooring not visible but we steam to it using radar

~ 0945 - All on deck

- Service & download 2 Microcats and RCM11 - check timing on RCM4 #8488

1330 - restart Microcats at 1330 PDT

1358 - start deployment

1410 - Alison-B deployed at 51 10.101 127° 06.035 154 m Water

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month					Year			Ship				Cruise ID			
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments	
						Latitude	Longitude								
17	ALS3	23:23	Box		11	51 10.04	126 56.85	133						2 attempts	
18	BE6	0225	CTD	BE	12	51 6.58	127 2.19	333	326	—	—			VECO2 BO1 - Box	
				EN											
18	BE7	0313	ROS	BE	13	51 6.30	126 55.83	253	252	50-62				Pinger Working very poorly (timing better signal worse)	
		0328		EN		51 6.28	126 55.77								
18	BE4	0410	CTD	BE	14	51 7.78	127 15.28	375	365						
		0508		EN		51 7.76	127 15.29								
18	BE3	0541	ROS	BE	15	51 7.85	127 22.22	296	282	63-75				HIT BOTTOM	
		559	ROS	EN		51 7.87	127 22.18								
18	SE3	1403	CTD	BE	16	51 04.29	126 52.40	540	535					Stopped logging before turning pumps off crashed	
				EN											
18	FR10	1749	Neuston		17	51 02.99	126 43.87	215							
18	FR10	1810	Neuston		18	51 02.27	126 43.02	244							
18	FRS2	1906	Neuston		19	51 00.58	126 42.24	214							
18	FRS3	2013	Neuston		20	50 59.91	126 43.64	628							
18	FR60	2334	ROS	BE	21	51 03.75	126 44.50	160	155	76-84	9				
19	FRS/1	0046	ROS	BE	22	51 02.26	126 43.03	245	241	85-96	12			very low Oxygen at bottom	
		0105		EN		2.28	126 43.17		24						
				EN										Bottle 11 bleeder valve knocked off by Bosun (Jamie)	

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129 14 13

Additional comments

October 18

0700 - CTD Cast @ BE06 - Fog choking entrance to Frederick Sound

0800 - Marsh crew departs for Marsh 30 at end of Seymour Inlet with chief mate as bear patrol. Frederick Sound still fog choked

0900 - Frederick Sound Mooring A - very foggy < 100 m visibility
Range 196 m 196 m
- move off to Release

0909 - 349 m

0912 - ADEF sent - Small radar contact - creep up

0917 - sighted on surface

0945 - all on deck - Frantic servicing of Sea cat & Argonaut ensues

~ 1200 - Shore party Returns

~ 1400 - Shore party departs Frederick Sound and Salmon Arm

1606 - Deploy Frederick Sound B Mooring at $51^{\circ}29'33''N$ $126^{\circ}43'883''W$ in 219 m

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19	FRS2	0141	ROS	BE	23	51 0.55	126 47.25	214	208	97-107	11.				
	FRS3	0216	ROS	BE	24	50 59.91	126 43.65	61		109-114	6				
19	FRS3	0303	BOX		25	50 59.898	126 43.66	62		None					
						3 attempts unsuccessful				Captain cancels operations to hit slacks				Trial #1 For a Newton Ton	
19	SE7	0435	ROS	BE	26	51 5.99	126 44.99	261	266	121-133	13			at Eclipse Narrows	
		0453		EN	26	51 5.99	126 45.05								
19	SE7.5	0518	CTD	BE	27	51 8.16	126 41.50	374	361						
		0531		EN		51 8.13	126 41.46								
19	SE8	0557	ROS	BE	28	51 11.02	126 39.51	135	128	134-141	8				
		0606		EN		51 11.00	126 39.48								
19	MeS4	1406	CTD	BE	29	51 07.81	127 25.26	207							
		1413		EN		51 07.82	127 25.35		200						
19	MeS4	1701	ROS	BE	30	51 11.86	127 21.12	167	160	142-151	10.				
		1715		EN		11.85	21.17							Very low oxygen last 5m off of the bottom	
19	MeS4	17:25	Grab		31	51 11.85	127 21.101	168	168					First cast did not trip	
19	MeS4	17:45	Norpac		32	51 11.83	127 21.09	168	150					second 3x a chain	
19	MESS5	18:54	ROS	BE	33	51 11.64	127 16.40	128							
		19:10		EN		51 11.56	127 16.43								
19	MeS5	1215	Grab		34	51 11.56	127 16.41	127	127					- grab aborted problems with trip	

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mech - to shift for
sed

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October 19

~ 0800 Shore Party departs For Moreworth Sound - Tiny Lake site Steve Mihaly goes to assist

0830 Boat sent ashore again with Forgotten Items

1110 Boat sent to pick up Steve Mihaly

1510 Shore party radios that they have drained the batteries on the raft and are not making headway against a light breeze by paddling. We return to the portage site to assist in extracting all of the people & equipment before night fall. Steve Mihaly carries spare batteries to them by hiking around the shoreline in dense undergrowth. The water logged raft sections are barely carried out before dark. Crew, mink & chief scientist assist.

~ 1830-45 All personnel & equipment back on board with ~ 10 to 15 minutes to spare.

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						Latitude	Longitude							
19	MES3	2054	ROS	BE	35	51° 11.59'	127° 24.69'	91	87					Touched down
		2103		EN		51° 11.59'	127° 24.64'							
19	Me83	2105	Grab		36	51 11 57	127 24 60	90						1st cast - X 3X
	MES3		Non-pac		37	51 11 59	127 24 68	90	80					
19	MES2	2205	ROS		38	51 09.96	127 25.17	93	85					Touched again sounding
19	MeS2	2222	Grab		39	51.09 99	127 15.00	86						incurred? Very loose sediment?
20	MES1	0215	ROS		40	51 8.84	127 24.78	84	78					TX dirty from previous cast
		0223				8.85	127 24.81							
20	MeS1	0230	Net		41	51 08 85	127 24 83	81	75					
20	SE5	0608	ROS	BE	42	51 4.30	127 0.73	620	601	181-196	16			
		0638		EN		51 4.24	127 0.68							
20	SE4	0713	CTD	BE	43	51 3.14	127 8.04	540	536					
		0731		EN		51 3.16	127 8.02							
20	SE3	0807	ROS		44	51 2.83	127 15.59	455	441	197-210	14			NO ECHO FROM PINGER
		0825				51 2.83	127 15.68							WIND, PICKED UP; SHIP
20	SE2A	0952	CTD		45	51 2.29	127 19.99		58					DRIETING + UNDER BOTTOM
		0803				51 2.29	127 19.99							MAY NOT HAVE REACHED
20	SE2	1404	ROS		46	51 3.50	127 23.49	99						BOTTOM
20	SE1	1436	CTD		47	51 4.50	127 26.50	105	100					

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20	NS1	1507	ROS		48	51° 5.45	127° 25.82'	69	65	218-223				Very linear Salinity
20	NS2	1546	ROS		49	51° 5.33	127° 20.87'	108		224-230				Not anoxic
20	NS2	1600	Grab		50	51° 05.28	127° 20.87'	108	108					
20	NS3	1640	ROS		51	51° 5.24	127° 13.77'	129	125	231-238				lower O ₂ right at bottom
20	NS3	1655	Grab		52	51° 05.24	127° 13.78'	130	130					Bottle 3 did not trip
20	NS3	1705	Net		53	51° 05.24	127° 13.78'	130	125-0					
20	NSO	2231	ROS	BE	54	51° 5.54	127° 28.69'	88	84	239-245	9	Bottle 3 ✓ did not close		Pinger came in after first haul so we dropped it lower
		2240		EN		5.51	28.70							
20	SC01	2310	ROS	BE	55	51° 5.50	127° 31.47'	83	78					
21	QSC1.5	0455	CTD		56	50° 42.89'	126° 55.60'	139	131	—				
		0500				50° 42.89'	126° 55.62'							
21	QSC1	0550	ROS		57	50° 40.05'	126° 46.27'	160	150					
		0558				50° 40.14'	126° 46.19'							

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Additional comments

- Mark IV goes into Swartzenborg Lagoon and collects 2 Livingstone Coes
hand bombed 74 meters Returns in time to get NSO and slack tide at Nakwattes
- 04 Left - Slingsby Channel ~ 1745 Hundreds if not thousands of Pacific White Sided Dolphins
Groups of Dolphins for 1 hr as far south as