

DAILY LOG BOOK

MISSION
NUMBER

2004-37

DATE:

From: 6 Dec to: 11 Dec

VESSEL:

Vector

PROJECT:

U2F - SOG

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

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

Mission Participants / Agencies:

[illegible][illegible]

Data logging computer: FS03 - shuttle case

Data acquisition program: Seasave Win 32 Ver 5.32

CTD deck unit make: Seabird model: 11plus serial number: 0508

Primary CTD

Make: Seabird model: 911 plus serial number: 0443

Primary temperature serial number: 2668

Primary conductivity serial number: 2399

Secondary temperature serial number: 2038 → 2106 (cf. Incast'),

Secondary conductivity serial number: 2173 $\rightarrow$ 1763 (after cash)

Transmissometer: Wetlabs Model: CSTAR s/n: 496 DR

Fluorometer: Model Seacount Cable gain: 10x s/n: 2229 P S or NO pump?

Oxygen sensor: SBE Model: 43 s/n: 766 P/S or NO pump?

PAR sensor: Biospherical Model: 190 s/n: 14652

Other sensors: Ben has a Himeitec
s/n: 1024 P, S or NO pump?
1638

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

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

Other sensors: _____ s/n: _____

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: _____
P. S or NO pump? _____

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

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

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

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

Other sensors: _____ s/n: _____

Other sensors: _____ s/n: _____

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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OCEAN SCIENCES AND PRODUCTIVITY DIVISION															
Month <i>Dec</i>				Year <i>2004</i>			Ship <i>Vector</i>			Cruise ID <i>2004-37</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							
<i>1</i>	<i>SI</i>	<i>0134</i>	<i>BE</i>	<i>ROS</i>		<i>1</i>	<i>48 39.15</i>	<i>123 29.55</i>	<i>121</i>		<i>1-4</i>	<i>4</i>	<i>LD</i>	☒	<i>Sal diff Δ -0.006 suspect sec memory die</i>
		<i>0136</i>	<i>BO</i>				<i>48 39.13</i>	<i>123 29.53</i>		<i>110</i>					<i>sec drain</i>
		<i>0142</i>	<i>EN</i>				<i>48 39.10</i>	<i>123 29.50</i>							<i>switched sec ^{T+C} sensors to 1763 & 2106</i>
<i>7</i>	<i>59</i>	<i>351</i>	<i>BE</i>	<i>ROS</i>		<i>2</i>	<i>48 37.752</i>	<i>123 14.438</i>	<i>238</i>						<i>C T</i>
		<i>357</i>	<i>BO</i>				<i>48 37.73</i>	<i>123 14.43</i>		<i>231</i>	<i>5-18</i>				<i>rain</i>
		<i>411</i>	<i>EN</i>				<i>48 37.656</i>	<i>123 14.212</i>							
<i>7</i>	<i>60</i>	<i>455</i>	<i>BE</i>	<i>CTD</i>		<i>3</i>	<i>48 33.871</i>	<i>123 12.656</i>	<i>283</i>						<i>overcast, no rain</i>
		<i>506</i>	<i>BO</i>				<i>48 33.830</i>	<i>123 12.533</i>	<i>2</i>	<i>280</i>					
		<i>514</i>	<i>EN</i>				<i>48 33.175</i>	<i>123 12.407</i>							
<i>7</i>	<i>61</i>	<i>607</i>	<i>BE</i>	<i>CTD</i>		<i>4</i>	<i>48 29.130</i>	<i>123 9.271</i>	<i>268</i>						
		<i>614</i>	<i>BO</i>				<i>48 29.056</i>	<i>123 9.362</i>		<i>276</i>					
		<i>622</i>	<i>EN</i>				<i>48 28.988</i>	<i>123 9.428</i>							
<i>1</i>	<i>101</i>	<i>1423</i>	<i>BE</i>	<i>CTD</i>		<i>5</i>	<i>48 25.536</i>	<i>124 45.074</i>	<i>239</i>						
		<i>1432</i>	<i>BO</i>				<i>48 25.642</i>	<i>124 45.078</i>		<i>246</i>			<i>W</i>		
		<i>1440</i>	<i>EN</i>				<i>48 25.70</i>	<i>124 45.131</i>					<i>1</i>		
	<i>102</i>	<i>1523</i>	<i>BE</i>	<i>ROS</i>		<i>6</i>	<i>48 30.077</i>	<i>124 43.910</i>	<i>257</i>		<i>19-33</i>	<i>15</i>	<i>LD</i>		<i>*Bot 6 was</i>
		<i>1531</i>	<i>BO</i>				<i>48 30.174</i>	<i>124 43.78</i>		<i>247</i>					<i>half closed at the</i>
		<i>1550</i>	<i>EN</i>				<i>48 30.307</i>	<i>124 43.483</i>							<i>top *</i>

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

28 May 2003

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(Dec 6/04)

Dec 7/04 - Oxygen system first calibration → blanks 0.003 standards 0.725

The ^{xP} system is dispensing sodium this very fast when doing standards - especially once it gets to .400 ml volume - goes too fast + overshoots. We turned up the stir bar speed quite significantly and this seems to have solved the problem.

ST

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							Latitude	Longitude								
7	103	16 ²⁰	BE	CTD		7	48 32.88	124 43.03	126						low swell light rain	
		16 ²³	BO				48 32.86	124 43.05		124						
		16 ²⁸	EN				48 32.83	124 43.05								
7	76	17 ²⁷	BE	CTD		8	48 31.35	124 29.984	90							
		17 ³⁰	BO				48 31.31	124 29.914		89						
		17 ³²	EN				48 31.25	124 29.864								
7	75	18:03	BE	Ros.	US	9	48 28.147'	124° 32.797	225		34-47	15			sun!	
		18 11	BO				48 28.064	124° 32.616'		221						
		18:24	EN				48 27.977	124 32.38								
	74	18 56	BE	CTD		10	48 25.109	124 35.768	185						overcast light swell	
		19 01	BO				48 25.060	124 35.712		180						
		19 06	EN				48 25.020	124 35.678								
	73	21 44	BE	CTD		11	48 14.92	124 06.54	160						ST ✓	
		21 49	BO				48 14.87	124 06.51		155						
		21 53	EN				48 14.83	124 06.49								
	72	22 34	BE	Ros	us	12	48 18.67	124 04.10	186						ST ↓	
		22 40	BO				48 18.70	124 04.28								
		22 55	EN				48 18.76	124 04.57		184						

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Re:
Cast 12 → The Oxygen kit is titrating almost twice as fast as the old system, now that we are using Windows XP. I was concerned that we may be missing the endpoint with the titration proceeding so quickly. We took a few oxygen sample duplicates to run on the old Computer which I brought with us. We acidified 3 of the rep. samples too quickly (forgot to look at label!) + only had 2 to run on the old computer. Oh well - see if it tells us anything.
S.F.

12/12/2004

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							Latitude	Longitude							
07	71	2343	BE	CTD		13	48° 22.20	123° 59.55	108				ST		
		2347	BO				48° 22.24	123° 59.70		106					
		2350	EN				48° 22.24	123° 59.83							
8	70	123	BE	CTD		14	48° 19.242	123° 43.178	148						
		127	BO				48° 19.288	123° 43.244		136					
		130	EN				48° 19.326	123° 43.328							
8	69	211	BE	ROS		15	48° 15.625	123° 43.388	176						
		216	BO				48° 15.572	123° 43.438		170	61-72	12	LY	✓	
		229	EN				48° 15.484	123° 43.283							
8	68	309	BE	CTD		16	48° 12.097	123° 42.919	136					✓	
		313	BO				48° 12.091	123° 42.952		130					
		316	EN				48° 12.095	123° 42.982							
8	105	5:20	BE	CTD		17	48° 11.012	123° 18.185	85						
		5:23	BO				48° 11.017	123° 18.767		82					
		5:26	EN				48° 11.020	123° 18.090							
	ADCP	6:12	BE	ROS		18	48° 13.778	123° 16.562	80		73-81	9			long swell
		6:16	BO				48° 13.830	123° 16.484		78					
		6:22	EN				48° 13.854	123° 16.358							stormy.

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							Latitude	Longitude							
8	54	0936	BE	CTD		19	48'26.61	122'44.30	78				ST		about 1m above rosette
		0938	BO				48'26.60	122'44.26		73			↓		slight kink in wire - doesn't look like anything to be concerned about - yet.
		0941	EN				48'26.60	122'44.26							
	53	1628	BE	CTD		20	48'33.18	122'44.98	62						
		1030	BO				48'33.18	122'44.97							
		1032	EN				48'33.17	122'44.96		658					
	52	1115	BE	CTD		21	48'38.90	122'43.30	87				ST		
		1119	BO				48'38.87	122'43.23		82					
		1121	EN				48'38.86	122'43.21							
8	51	1237	BE	CTD		22	48 46 657	122 51 587	165				TH		
		1242	BO				48 46 616	122 51 562		150					
		1246	EN				48 46 598	122 51 540							
8	56	1343	BE	ROS		23	48 46 369	123 1 547	213		82-95	14	TH	✓	no bottle at 20m ROT 9-10 at 40m
		1350	BO				48 46 391	123 1 476		210					
		1407	EN				48 46 434	123 1 300							
8	57	1451	BE	CTD		24	48 44 080	123 8 201	155						
		1456	BO				48 44 044	123 8 201		150					
		1501	EN				48 43 974	123 8 316							

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Month <u>December</u>				Year <u>2004</u>				Ship <u>VECTOR</u>				Cruise ID <u>2004-36</u>			
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							
8	56	1537	BE	CTD		25	48 43.044	123 14 222	335				71	✓	
		15 47	BO				48 43.087	123 14 082		330					
		15 56	EN				48 43 120	123 13 952							
	47	17:35	BE	CTD		26	48 49.285	123 6.199	185						
		17:41	BO				48 49.224	123 6.238		179					
		17:46	EN				48 49.120	123 6.244							
	48	18:19	BE	CTD		27	48 51.682	123 3.252	229						
		18:25	BO				48 51.631	123 3.258		225					
		18:31	EN				48 51.586	123 3.236							
	49	19:05	BE	CTD		28	48 54.997	122 59.615	135						
		19:09	BO				48 54.970	122 59.638		130					
		19:13	EN				48 54.966	122 59.650							
	50	19:47	BE	CTD		29	48 57.624	122 56.126	30						
		19:49	BO				48 57.618	122 56.135		25					
		19:50	EN				48 57.612	122 56.143							
	44	2044	BE	CTD		30	48 56 77	123 06.10	120						
		2048	BO				48 56.80	123 06.08		115					
		2051	EN				48 56.81	123 06.44							

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							Latitude	Longitude							
08	45	2123	BE	CTD	48	31	48°53.83	123°08.48	129				ST	✓	fixed 3 bottles -
		2127	BO				48°53.78	123°08.52		125					thought it was
		2131	EN				48°53.77	123°08.53							a rosette...
	46	2202	BE	ROS US		32	48°51.31	123°10.80	178						put wrong station
		2209	BO				48°51.31	123°10.72		175					name in header
		2223	EN				48°51.280	123°10.524							bite.
9	43	0:16	BE	CTD		33	49°02.10	123°30.152	195				P	✓	
		0:22	BO				49°02.26	123°30.151		190					
		0:26	EN				49°02.33	123°30.133							
9	42	0:56	BE	ROS		34	49°17.72	123°26.096	320		108-123	16	P	✓	
		1:04	BO				49°17.78	123°26.038		310					
		1:23	EN				49°17.24	123°26.030							
	41	1:55	BE	CTD		35	49°3.26	123°22.36	242						
		2:00	BO				49°3.160	123°22.423							
		2:16	EN				49°3.050	123°22.448							
9	37	3:32	BE	CTD		36	49°13.655	123°20.776	212				P	✓	
		3:37	BO				49°13.704	123°20.826		205					
		3:42	EN				49°13.715	123°20.834							

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							Latitude	Longitude							
9	38	4:18	BE	CTD		38*	49° 13.910	123° 26.587	308						*no 37*
		4:29	BO				49° 11.886	123° 26.678		305					
		4:35	EN				49° 11.856	123° 26.724							
	39	5:17	BE	ROS	<i>pydredge</i>	39	49° 9.839	123° 33.079	375						
		5:26	BO		<i>canon</i>		49° 9.824	123° 33.012		373					
		5:40	EN				49° 9.797	123° 33.067							
	40	6:13	BE	CTD		40	49° 8.638	123° 36.935	130						
		6:17	BO				49° 8.664	123° 37.032		121					
		6:21	EN				49° 8.698	123° 37.145							<i>may have touched bottom due to drift when @ depth</i>
	26	7:47	BE	CTD		41	49° 14.350	123° 50.915	251						
		7:56	BO				49° 14.477	123° 51.006		259					
		8:02	EN				49° 14.574	123° 51.073							
	27	8:42	BE	ROS	<i>US</i>	42	49° 19.110	123° 47.96	345		141-156	16	ST	✓	
		8:52	BO				49° 19.068	123° 47.96		340					
		9:12	EN				49° 18.95	123° 47.96							
	28	0955	BE	CTD		43	49° 24.11	123° 45.29	133				ST	✓	
		0959	BO				49° 24.10	123° 45.28		130					
		1002	EN				49° 24.08	123° 45.28							

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							Latitude	Longitude							
9	2	1144	BE	ROS	US	44	49°24.08	124°09.30	277		157-171	15	S.S.		
		1152	BO				49°24.07	124°09.37		275					
	1	1202	EN				49 24 068	124 9 499					70		
9	1	1233	BE	CTD		45	49 20 299	124 2 126	247				70	✓	
		1239	BO				49 20 272	124 12 142		240			70	✓	
		1245	EN				49 20 321	124 12 145							
9	4	1337	BE	CTD		46	49 24 548	124 23 166	342				P	✓	
		13 45	BO				49 24 666	124 22 330		340					
		13 53	EN				49 24 750	124 22 482							
9	3	1415	BE	ROS		47	49 26 600	124 20 166	323				70	✓	
		14 23	BO				49 26 602	124 20 119		317	172-187	17			→ bottles 4 & 5
		14 41	EN				49 26 602	124 20 000							fixed at 200
9	5	1532	BE	CTD		48	49 27 379	124 30 802	314				70	✓	so sequence goes
		1540	BO				49 27 377	124 30 787		305					to ^{bottle} 17 - no sample
		15 47	EN				49 27 383	124 30 766							from 6075
9	6	16:12	BE	ROS		49	49 30.569	124 27.810	191						
		16:22	BO				49 30.565	124 27.794		189	188-206	13			
		16:30	EN				49 30.546	124 27.750							

Cast type: LISW = sea water loop, bottle firing method: T1 = C1

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month				Year			Ship				Cruise ID				
Dec				2004			Vector				2004-37				
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	7	17:02	BE	CTD		50	49 34.402	124 24.186	351						
		17:11	BO				49 34.375	124 24.168		349					
		17:20	EN				49 34.338	124 24.086							
	8	18:10	BE	CTD		51	49 39.346	124 33.022	339						
		18:18	BO				49 39.371	124 32.976		337					
		18:25	EN				49 39.360	124 32.918							
	9	19:12	BE	ROS		52	49 35.454	124 38.203	167						
		19:16	BO				49 35.437	124 38.153		165					
		19:23	EN				49 35.370	124 37.992							
9	10	2019	BE	CTD		53	49 40.72	124 47.26	98				JT	✓	
		2022	BO				49 40.74	124 47.28		95					
		2024	EN				49 40.74	124 47.23							
	11	2051	BE	CTD		54	49 42.38	124 43.31	302					✓	
		2059	BO				49 42.33	124 43.25		297					
		2104	EN				49 42.32	124 43.24							
	12	2125	BE	ROS	us	55	49 43.55	124 40.80	357		213-229			✓	
		2134	BO				49 43.52	124 40.88		350					
		2150	EN				49 43 46	124 40.41 003							

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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	13	2336	BE	CTD		56	49°55.30	124°55.10	235				ST		
		2342	BO				49°55.33	124°55.066							
		2345	EN				49°55.36	124°55.03		230					
10	14	00:22	BE	ROS		57	49°53.029	124°59.496	315		230-245	16	RN	✓	
		00:30	BO				49°53.084	124°59.357		312					
		00:41	EN				49°53.222	124°59.317							
10	15	1:15	BE	CTD		58	49°51.606	125°1.397	125				W	✓	stormy
		1:19	BO				49°51.643	125°1.346		125					
		1:23	EN				49°51.680	125°1.265							
10	16	2:22	BE	ROS		59	49°57.730	125°8.821	154		246-256	11	B	✓	Rain
		2:26	BO				49°57.726	125°8.809		145					
		2:32	EN				49°57.713	125°8.768							
10	21	3:17	BE	CTD		60	50°2.053	125°13.784	61				W	✓	
		3:20	BO				50°2.116	125°13.824		57					
		3:21	EN				50°2.152	125°13.826							
10	23	4:45	BE	ROS		61	50°14.927	125°23.026	237		257-270	14			
		4:51	BO				50°15.004	125°23.052		231					
		5:00	EN				50°15.049	125°23.111							

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							Latitude	Longitude							
10	17	0715	BE	CTD		62	49 58.926	125 4.307	260						
		0729	BO				49 59.020	125 4.387		255					
		0734	EN				49 59.107	125 4.405							
10	18	0811	BE	CTD		63	49 59.21	124 58.87	146				ST.		
		0815	BO				49 59.24	124 58.89		140					
		0818	EN				49 59.25	124 58.89							
	19	0857	BE	CTD		64	50 01.21	124 52.89	271					✓	
		0904	BO				50 01.17	124 52.91		265					
		0909	FN				50 01.12	124 52.96							
	20	1118	BE	CTD		65	49 47.21	124 32.32	317						
		1126	BO				49 47.22	124 32.30		310					
		1132	EN				49 47.22	124 32.28							
	22	1302	BE	CTD		66	49 40 205	124 16 301	354					✓	
		1310	BO				49 40 178	124 16 292		345					
		1317	EN				49 40 135	124 16 261							
	24	1439	BE	CTD		67	49 30 287	124 6 006	427					✓	
		1450	BO				49 30 348	124 5 960		418					
		1458	EN				49 30 290	124 6 006							

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[illegible]

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