

DAILY LOG BOOK

MISSION
NUMBER

2005 - 07

DATE:

From: April 18/2005 to: April 22/2005

VESSEL:

CCGS Vector

PROJECT:

Effingham Inlet / Clayquot Sound
Anoxic culets project. LAUDREY
DALLIMORE-NRCON

Rick Thomson -
DFO

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

Captain: Brian Pennel First Officer: _____
Second Officer: _____ Third Officer: _____

Mission Participants / Agencies: POS/IOS/CHS

Scientific Personnel: _____
Party Chief: Audrey Dallimore

[illegible][illegible]

Data logging computer: F802
 Data acquisition program: SeaSave win 32 5:30a
 CTD deck unit make: Seabird model: 11 Plus serial number: 0424
 Primary: CTD

Make: Seabird model: 9 serial number: _____
 Primary temperature serial number: _____
 Primary conductivity serial number: _____
 Secondary temperature serial number: _____
 Secondary conductivity serial number: _____
 Transmissometer: Wetlabs Model: SeaStar s/n: _____
 Fluorometer: Model _____ Cable gain: _____ s/n: _____
 Oxygen sensor: _____ Model: _____ s/n: _____
 PAR sensor: _____ Model: _____ s/n: _____
 Other sensors: _____ s/n: _____
 Other sensors: _____ s/n: _____
 Other sensors: _____ s/n: _____
 Other sensors: _____ s/n: _____

Secondary CTD

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

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: _____

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

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

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

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

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

April 15 - Load at 70S.

April 18 - Service party joins ship at Port Albano.

Depart Port Albano at 13:30 → proceed down Albani Strait
Starboard side, for multi-beam survey

- High working with malfunctioning oxygen sensor on oxygen kit.

14:00 - Sound velocity profile (SVP) cast

CTD Depth

5

10

20

30

50

75

100

125

150

175

200

250

DAILY LOG

Ocean Sciences and Productivity Division

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Month				Year				Ship				Cruise ID			
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							
10/08	Shirazi Inlet	14:05		SVP		1	49° 11' 60.2	124° 49' 09.7	71						
10/08	"	15:51		SVP		2	49° 03' 89.7	124° 50' 97.9	249						
10/08	"	16:24		SVP		3	49° 03' 86.3	124° 50' 90.4	236						
19	EF 13	0227	BC	ROS	U.S.	004	48 56 39	125 10 70	103		1-7	7	H.M.	✓	SWOOLD 08 205-07-004
		0230	BO				48 56 39	125 10 70		98					
		0239	EN				48 56 35	125 10 70							
19	EF 12	0257	BC	ROS	U.S.	005	48 57 98	125 10 52	93		8-14	7	H.M.	✓	
		0259	BO				48 57 98	125 10 52		90					
		0308	EN				48 57 98	125 10 52							
19	EF 11	0330	BC	ROS	U.S.	006	48 59 14	125 11 04	95		15-21	7	H.M.	✓	
		0333	BO				48 59 14	125 11 04		85					
			EN				48 59	125 11							
	EF 10	0400	BC	ROS	U.S.	007	48 59 82	125 11 23	100		22-28	7	H.M.	✓	T: 9.89 51 21.76
		0404	BO				48 59 81	125 11 23		95					
			EN												
19	EF 10	0413		SVP		008	48 59 79	125 11 23	100						

Cast type:

BOT = bottle cast, no CTD
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USW = sea water loop
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bottle firing method:
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21:25 PS7 - proceed to south end of Ettingham Inlet running multi-beam.

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Month <u>APRIL</u>				Year <u>2005</u>			Ship <u>VECTOR</u>			Cruise ID <u>2005-07</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							
19		8:30 AM 1530		Mooring		009	49° 04' 29.28	125° 09' 43.9	117						Freeze date * VEC007-01
19		10:00 AM 1700		SVP		010	49° 04' 29.4	125° 09' 33	115						
19		12:00 PM 1900		Freeh.		011	49° 04' 29.5	125° 09' 46	117						Freeze date VEC007-02
19	EF01	2053	BE	ROS	US	012	49 05 54	125 11 64	32		29-34	6	H.M.	✓	T: 10.09 S: 21.40
		2055	BO				49 05 54	125 11 64		30					
		2100	EN				49 05 55	125 11 64							
19	EF02	2115	BE	ROS	U.S.	013	49 04 99	125 10 31	67		35-41	7	H.M.	✓	T: 10.10 S: 19.07
		2117	BO				49 04 99	125 10 29		64					
		2124	EN				49 04 96	125 10 28							
19	EF2A	2145	BE	ROS	U.S.	014	49 04 49	125 09 76	101		42-49	8	H.M.	✓	T: 10.24 S: 22.75
		2148	BO				49 04 49	125 09 78		95					
		2156	EN				49 04 47	125 09 79							
20	JALAP BOIA	(50m) 000		Long Sample		015	49 04 28	125 09 43							Freeze date VEC007-03
20		(60m) 0100		SVP		016	49 04 35	125 09 46							

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7:30 a.m PST Randy and Willem away in the Zodiac to the mark at the head of the melt to dig for tsunami deposits.

② freeze core traditional with 30 lb lead bar and lead weights

- in mud 8:50 PST; 1 hour to thaw

- 1.75 m recovery - excellent core length and quality.

- 9:30 - 12 noon - multi-beam of inner basin

- 11:50 - Zodiac away with Willem and Randy; digging for tsunami deposits north end of outer basin.

③ freeze core VEC07-02; 10 lbs more shot length than 001, drop more quickly to side mark. - full recovery 19m.
2.0 m/sec drop.

④ VEC07-03 - extension freeze core; filled 1st barrel with 2-30' steel bars + ice; added extension filled 2nd barrel with dry ice + lead shot; used crane to 26 m/sec drop.
2. - 3 m recovery

14:00 PST - multi-beam outer basin

- Zodiac launched away with Randy, Willem & Rudy
outer basin shore to look for tsunami deposits

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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							
20	EF 03	0409	BG	ROS	U.S.	017	49 04 22	125 09 35	117		50-58	9	H.M.	✓	T:10.04 S:17.78
		0412	BO			016	49 04 20	125 09 32		110					
		0422	GM				49 04 19	125 09 26							
20	EF 03A	0453	BG	ROS	U.S.	018	49 03 78	125 09 09	86		59-66	8	H.M.	✓	T:10.14 S:15.35
		0456	BO				49 03 78	125 09 10		81					
		0505	GM				49 03 78	125 09 13							
20	EF 04	0525	BG	ROS	U.S.	019	49 03 07	125 08 58	58		67-73	7	H.M.	✓	T:10.25 S:20.18
		0527	BO				49 03 07	125 08 58		54					
		0535	GM				49 03 05	125 08 60							
20	EF 04A	0600	BG	ROS	U.S.	020	49 03 00	125 08 84	105		74-81	8	H.M.	✓	T:10.31 S:19.85
		0603	BO				49 03 01	125 08 83		100					
		0611	GM				49 03 00	125 08 82							
20	~EF 11	1530		SVP		021	48 59 05	125 10 37	100						

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April 20 a.m.
7³⁰ PST leave head of Effingham Strait for middle bar
and mouth to finish Mullikissam survey.
- Randy and Willem away in Zodiac to looking board for
Kuranui deposit search.
- 8⁰⁰ PST : Zodiac returns - engine problems.
8⁴⁵ PST Zodiac away again.

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Month APR				Year 2005			Ship VECTOR				Cruise ID 2005-17				
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							
20	EF 05	1836	BG	ROS	U.S.	022	49 02 61	125 09 11	206		82-93	12	H.M.	✓	T: 10.36 S: 23.36
		1842	BO				49 02 65	125 09 11		197					
		18 55	EN				49 02 74	125 09 07							
20	EF 05A	1915	BE	ROS	U.S.	023	49 02 74	125 09 17	197		94-105	12	H.M.	✓	T: 10.49 S: 22.12
		19 21	BO				49 02 72	125 09 17		190					
		19 36	EN				49 02 63	125 09 18							
20	EF 06	2000	BE	ROS	U.S.	024	49 01 85	125 09 20	163		106-115	10	H.M.	✓	T: 10.33 S: 23.40
		20 04	BO				49 01 85	125 09 21							
		20 16	EN				49 01 87	125 09 22							
20	EF 07	2036	BE	ROS	U.S.	025	49 01 25	125 09 45	119		116-124	9	H.M.	✓	T: 10.42 S: 21.39
		20 39	BO				49 01 26	125 09 43		115					
		20 49	EN				49 01 23	125 09 46							
20	EF 07A	2109	BE	ROS	U.S.	026	49 00 86	125 09 91	96		125-132	8	H.M.	✓	T: 10.54 S: 20.91
		21 12	BO				49 00 87	125 09 89							
		21 20	EN				49 00 87	125 09 84							

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							Latitude	Longitude							
20	EF 08	2144	BG	ROS	U.S.	027	49 00 69	125 10 23	84		133-140	8	H.M.	✓	T: 10.68 S: 19.72
		2146	BO				49 00 69	125 10 22		80					
		2154	EN				49 00 70	125 10 26							
20	EF 09	2215	BG	ROS	U.S.	028	49 00 10	125 10 84	60		141-147	7	H.M.	✓	T: 10.62 S: 21.32
		2217	BO				49 00 10	125 10 84		55					
		2224	EN				49 00 10	125 10 84							
21		1545		SUP		028	49 12 22	125 56 01	62						
21		1745		SUP		029	49 14 56	125 49 30	113						
21	CL 01	1758	BG	ROS	U.S.	030	49 14 47	125 49 23	98		148-156	9	H.M.	✓	T: 10.54 S: 21.11
		1801	BO				49 14 46	125 49 21		91					
		1811	EN				49 14 43	125 49 16							
21		1904		SUP		031	49 13 97	125 45 58	149						
21	CL 02	1920	BG	ROS		032	49 13 99	125 45 49	146		157-166	10	H.M.	✓	T: 10.93 S: 18.74
		1923	BO				49 14 00	125 45 50		140					
		1934	EN				49 13 97	125 45 53							

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5pm PST

Depart Ettingham Strait for Clayquot Sound

8pm PST - arrive Tofino → tie up at government wharf.

April 21

8am - begin clockwise circumnavigation of Meares Island for multi-beam survey.

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							Latitude	Longitude							
21	CL 03	21 21	BE	ROS	U.S.	033	49 11 54	125 45 75	108		167-175	9	H.M.	✓	T: 10.30 S: 19.75
		21 23	BO				49 11 55	125 45 74							
		21 31	EN				49 11 61	125 45 69							
21	4	22 15	BE	FREEZE CORE		034	49 11.81	125 46 83	12						Full core VECH05-04
22	CL 04	0102	BE	ROS	U.S.	035	49 10 68	125 40 81	57		176-181	6	H.M.	✓	T: 11.69 S: 5.44
		0104	BO				49 10 68	125 40 82							NOTE ↗
		01 11	EN				49 10 68	125 40 82							
22	5	0130	BE	FREEZE CORE		036	49 10 69	125 40 79	57						VECH05-05
22		1330		SUPD			48 53 85	125 03 00							
	</														

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- frize core VEC005-04 - 30 lb bar + 20' lead shot,
dropped from surface $\rightarrow$ 12 m @ 2 m/sec.
- 1 m interval of unlaminated clay.
- 30 min in bottom.
- 4³⁰ PST - proceed 3 multi-beam line up
Tofino Strait to 0104.
- 6³⁰ PST - frize core 30 lb bar + 20' lead shot,
dropped 2 m/sec 57 m depth
- 30 min in sediment
- 7³⁰ PST - proceed back to Tofino for multi-beam
survey.
- 11³⁰ pm PST - depart Tofino overnight to mouth of Trewa Channel.
- 6 am PST - begin multi-beam survey of Trewa Channel to
Pat Harbour.
- 12 pm PST - arrive Pat Harbour; science crew departs;
ship returns to Pat Bay.