

DAILY LOG BOOK

MISSION
NUMBER

2004-11

DATE:

From: APRIL 13 to: APRIL

VESSEL:

VECTOR

PROJECT:

Thomson / Inlets

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

Captain: Gleason Armstrong First Officer: Daryl
Second Officer: Bill Third Officer: _____

Mission Participants / Agencies: I05 / PGc

Scientific Personnel: 12-19/06 Party Chief: David Spear 19-23/02

Name	Signature	Room #	Watch	Cabin
Steve Mihaly	[Signature]	4		STB
Audrey Dallimore	[Signature]			LAD
Sheila Toews	[Signature]			LAD
Constantino Thomas	[Signature]			PRT
Maxim Krassovski	[Signature]			STB
Willem Van Voort	[Signature]			PRT

[illegible]

Data logging computer: F502
 Data acquisition program: Seasave Win32 5.30a
 CTD deck unit make: Seabird model: 11P_{ULS} serial number: 0424

Primary CTD

Make:	<u>Seabird</u>	model:	<u>9</u>	serial number:	_____
Primary temperature	serial number: _____				
Primary conductivity	serial number: <u>1222</u>				
Secondary temperature	serial number: <u>2222</u>				
Secondary conductivity	serial number: _____				
Transmissometer:	<u>Wetlabs</u>	Model:	<u>Seastar</u>	s/n:	_____
Fluorometer:	Model _____	Cable gain:	_____	s/n:	_____
Oxygen sensor:	<u>Seabird</u>	Model:	<u>022</u>	s/n:	_____
PAR sensor:	<u>—</u>	Model:	<u>—</u>	s/n:	_____
Other sensors:	_____ s/n: _____				
Other sensors:	_____ s/n: _____				
Other sensors:	_____ s/n: _____				
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: _____ P, S or NO pump? _____

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

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

April 13 - Load & set up CTD Test Cast okey

Depart IOS 0000 hrs April 14

1230 Fire & Boat Drill

Steve trying to get deck units networked with No Success

David trying to get Oziexplorer working with No Success - MMA Input not working

APRIL 14 1900h - changed all 3 small O-rings on all 24 spigots (S.T.)
with help of Constantine + Max.

April 15 0700 CTD cast prior to entering Slingsby channel - Unpleasant Swell ~2m
0716 tug & barge exiting Slingsby - We have to wait and miss slot
Head for shelter bay to get out of swell

~ 0930 Send Zodiac to pick up Paul Nicholas at God's Pocket. Steve M &
Jeff M. They do photos of Natuwatka

1100 Head back up to Slingsby

1200 Rubber boat returns with Steve Jeff & Paul

1330 Clear Natuwatka Rapids after doing SCOT

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <u>APRIL</u>				Year <u>2004</u>			Ship <u>Vector</u>			Cruise ID <u>2004-11</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							
15	FOX1		BE	Ros	US	1	51 4.261	127 41.492	148		1-9	9	Steve	✓	LUMPY SWELL CTD WENT IN WITH SYRINGES ON - BROUGHT BACK ON DECK WITH PUMP OFF - NO NEW FILE - wrong leader in file
	1410	0210	BO				51 4.291	127 41.677							
		1416	EN				51 4.308	127 41.796							
	SCO1	2013	BE	CTD		2	51'05.54	127'31.49	83				ST	✓	
		2016	BO				51'05.55	127'31.49		64			↓		- hit bottom
		2018	EN				51'05.55	127'31.51							
	BE01	2113	BE	Ros	US	3	51'07.68	127'34.27	220						
		2119	BO				51'07.69	127'34.20		199	10-21	12			
		2132	EN				51'07.72	127'34.18							
15	BE02	2158	BE	CTD		4	51'07.84	127'30.68	201				ST	✓	
		2203	BO				51'07.84	127'30.78		185					
		2207	EN				51'07.85	127'30.78							
	BE03	2248	BE	Ros	US	5	51'07.84	127'22.12	290		22-34	13	ST	✓	taking a while for temperature diff to get close to 0, got better once we started heading down. (ST)
		2256	BO				51'07.82	127'22.07		272					
			EN												
15	BE04	2352	BE	CTD		6	51 07.78	127 15.33	378						
16		0000	BO				51 07.798	127 15.386							
16		00721	EN				51 7.807	127 15.448							

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
BO = bottom time of cast
EN = end time of cast

DE = deployment time
MR = messenger release time
RE = recover mooring time

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

28 May 2003
Daily_log_book.doc

15 Apr 2004 ~ 1600 - On cast TSE03 when we stopped for the 10 m bottle it was noticed the salinity secondary temperature jumped to a mainly erroneous value, oscillated intermittently back and forth and eventually settled on the wrong value. It returned when we began back. Termination at the winch didn't show any intermittency. Connectors were tightened but not reconnected. - problem did not reoccur on next station (TSE04)

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

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							
16	BE05	0039	BE	ROS	US	7	51 07.183	127 09.089	300	298	35-47	13			Calm, overcast light
		0046	BO				51 07.168	127 09.125							drizzle
		0059	EN				51 07.174	127 09.210							
16	BE06	0157	BE	ROS		8	51 06.534	127 02.082	334						
		0204	BO				51 06.527	127 02.036		327					3.0m alvinex
		0211	EN				51 06.523	127 02.004							
16	BE07	0243	BE	ROS		9	51 06.320	126 55.844	241		48-60				
			BO				51 06.330	126 55.789		250					
		0308	EN				51 06.349	126 55.724							
16	ALS4	1702	BE	ROS		10	51 10.837	126 55.462		74	61-67				find 2 bottles @ bottom
		1709	BO				51 10.802	126 55.456		70					2.5m off bottom
		1716	EN				51 10.784	126 55.460							H ₂ S below 2 bottles
16	ALS3	1735	BE	ROS		11	51 9.996	126 56.819	136		68-76				O ₂ at 50m
		1741	BO				10002	56809		131					2.5m off
		1751	EN				51 10.012	126 56.785							
16	ALS2	1823	BE	ROS		12	51 10.207	127 2.480	109		77-84				find 2 bottles at bottom
		1829	BO				51 10.207	127 2.480		104.9					
		1834	EN				51 10.231	127 2.508							
16	ALS1														

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
 BO = bottom time of cast
 EN = end time of cast

DE = deployment time
 MR = messenger release time
 RE = recover mooring time

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

28 May 2003
 Daily_log_book.doc

← Windy's fall

April 16 - Alison - O Recover

0835 - On Station Range 155 153 153
Move to a safe distance

0844 Range 230m 232

0846 - BDEF sent - on surface

0905 - mooring recovered. → to head of Alison

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month		Year		Ship		Cruise ID									
APRIL		2004		Vector		2004-11									
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							
16	ALSI	1906	BE	ROS	US	13	51°10.14	127°05.78	156				ST	✓	
		1913	BO				51°10.14	127°05.79		148	85-94	10			3 m off bottom
		1923	EN				51°10.16	127°05.78							- cool oxy profile!
16	MEO	2059	BE	ROS	US	14	51°07.77	127°25.32	215	215	105				
		2105	BO				51°7.77	127°25.399			95-107	11			
		2115	EN				51°7.78	127°25.469							
	MES1	2144	BE	ROS	US	15	51°8.855	127°24.821	85	80					
		2148	BO				51°8.851	127°24.818			106-113	7			
		2154	EN				51°8.845	127°24.808							
	MES2	2211	BE	ROS		16	51°9.912	127°25.105	91	84					
		2216	BO				51°9.919	127°25.076			114-120	87			
		2222	EN				51°9.917	127°25.072							
16	MS3	2242	BE			17	51°11.58	127°24.748	92						
		2247	BO				51°11.58	127°24.746			121-27	7			
		2252	EN				51°11.575	127°24.756							
16	MES4	2320	BE	ROS		18	51°11.832	127°21.121	165	16	108-132				
		2326	EN				51°11.834	127°21.113		164					
17	MES5	0010	BE			19	51°11.628	127°16.250	133		138-145				
		0017	BO				51°11.616	127°16.225							

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
BO = bottom time of cast
EN = end time of cast
DE = deployment time
MR = messenger release time
RE = recover mooring time

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

28 May 2003
Daily_log_book.doc

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <u>APRIL</u>				Year <u>2004</u>			Ship <u>VECTOR</u>				Cruise ID <u>2004-11</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)	(MEST)	0024	EN	ROS		(19)	51°11.611	127°16.213	137	131					
17	NSO	0327		CTD		20	51 5.601	127 28.992					STEVE		TIME AND DATE
17		0330		No bottles			51 5.597	127 28.867		91					OFF ON NMEA FEED LAT/LONG SEEM TO COINCIDE WITH
17	SE1	0354		ROS		21	51 4.500	127 26.432	104						THE READOUT ON THE LAB NOOTHSINK ON THE BRIDGES
		0403					51 4.513	127 26.49			146-152	7			GPS - TIME SLOW ~ 3 MIN DATE OFF 5 JAN 2004
17	SE3	0501	BE	CTD /		22	51 2.844	127 15.437			153-167	15			~ 2030 PDT
		0511	BO	BOTTLES			51 2.822	127 15.433	450	439					
		0531	EN	ROS			51 2.774	127 15.474							
17	SE4	0607	BE			23	51 3.180	127 7.987							
		0625	BO				51 3.163	127 7.913	550	545					
		0632	EN				51 3.167	127 7.883							
17	SE5	0715	BE	ROS	US	24	51 04.16	127 00.54	621						
		0724	BO				51 04.104	127 0.319		610	168-183	16	ST/SM		
17	FDS3	1915				25	50 59.916	126 43.750							
		1917					50 59.916	126 43.748	60	53	184-189	6			
		1921					50 59.944	126 43.757							

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
 BO = bottom time of cast
 EN = end time of cast

DE = deployment time
 MR = messenger release time
 RE = recover mooring time

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

28 May 2003

Daily_log_book.doc

2041 16/04/2004 PDT : NMEA FEED SEEMED TO DELIVER AN ERRONEOUS TIME STAMP.
CORRECT DATES AND TIMES ARE IN THE LOG BOOK. HEADER IN
2004-11-2020.dat PROBABLY NEEDS TO BE CORRECTED

17/04/2004 0800 PDT On Station Fied - 0

Range 228 232 236

Move off station

Range 231 236 ?

Move further

400 408

0810 BEFG Sent - no response

Range 398 399

CDFG sent

Range 416 418

BEFG sent - no response

Move closer

0826 - Range 309 310

BEFG Sent - No response

Move closer

0833 - Range -226 -224 223

Try different command unit - no difference

Try different transducer

151.03.023
126 43

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month APRIL				Year 2004				Ship VECTOR				Cruise ID 2004-11			
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							
17	FRS2			ROS/		26	51	126							Bottom 4
		2003		HYDRO			51 0.515	126 42.181	210	206					bottles with
		2016					51 0.462	126 42.123			205-216	12			strong H ₂ S odor
17	FRS1	2052		ROS/		27	51 2.25	126 43.010							
		2056		HYDRO			51 2.249	126 43.000	241	238	193-204	12			Bottom 3
		2108					51 2.227	126 42.979							bottles with
17	FRS0	2137		ROS/		28	51 3.744	126 44.743							H ₂ S odor
		2140		HYDRO			51 3.751	126 44.762	153		217-225	9			No H ₂ S smell
		2149					51 3.758	126 44.797		150					noticed
17	SE08	2258		ROS/		29	51 11.027	126° 39.516			226-233	8			1m off bottom
		2305		HYDRO			51° 11.010	126° 39.467	132						very calm
		2312					↓	↓		130					Secondary Temp 98°?
17	SE7.5	2340		ROS		30	51° 8.100	126° 41.538	376						- starting upwards again
		2348					51° 8.072	126° 41.622		368					sorted it out
		2356					51° 8.050	126° 41.671							2.4m off bottom
18	SE7	0021		ROS/Hydro		31	51° 5.980	126° 44.885	268						lots of O ₂ structure
		0028					51° 5.971	126° 44.964		267	233-245				2m off bottom
		0045					51° 5.978	126° 45.080							1 nutrient tube
18															split when frozen

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
 BO = bottom time of cast
 EN = end time of cast

DE = deployment time
 MR = messenger release time
 RE = recover mooring time

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

(glass) Forgot to note #
 18 May 2004
 Daily_log_book.doc

Fred-D recovery

0900 Set up for drag - Sincerely hope it's not a code thing again

1050 Mooring recovered by drag

Code incorrect

BEEH



DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

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							
18	SE6	0123	BE	ROS		32	51°4.302	126°52.392	542						2.5m off
		0138	BO				51°4.254	126°52.284		533					
		0152	EN				51°4.229	126°52.222							
18	SE2A	0338		CTD		33	51 2.276	127 19.914							
		0342					51 2.221	127 19.986	84	70					1m off
18	NS3	1607	BE	ROS		34	51 3.201	127 13.825	130		245-252				1.2m off bottom.
		1617	BO				51 5.185	127 13.842		125					bottle 5 not sampled
		1626	EN				51 5.160	127 13.906							to correct labelling
18	NS2	1703	BE	ROS		35	51 5.298	127 20.759	109		253-259				Midwater oxy min
		1707	BO				5.280	127 20.757		102					2m off bottom
		1714	EN				5.262	20.786							
18	NS1	1747	BE	ROS		36	51°5.453	127°25.826	72		260-265				
		1750	BO				51 5.461	127°25.848		65.9					
		1757	EN				51°5.470	127°25.89							
18	NS4	1820	BE	ROS		37	51°5.538	127°28.74	88						
			BO				51 5.526	127°28.77		84	266-272	6			
			EN				51°5.524	127°28.79							

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
 BO = bottom time of cast
 EN = end time of cast
 DE = deployment time
 MR = messenger release time
 RE = recover mooring time

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

28 May 2003

Daily_log_book.doc

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <u>APRIL</u>				Year <u>2004</u>			Ship <u>VECTOR</u>			Cruise ID <u>2004-11</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							
18	TS4	1959		ROS		38	51 7.037	127 32.737							SHIP DRIFT SIGNIFICANT
		2002		CTD		38	51 7.052	127 32.782	76	79		—			1.7 off bottom
		2004					51 7.063	127 32.814							
18	TS2	2024				39	51 6.509	127 31.294			1/3 NM DRIFT UPSTREAM (1?)				1.1 off bottom
		2026					51 6.494	127 31.234	86		—	—			SHIP DRIFT SIGNIFICANT
		2028					51 6.479	127 31.206							
18	TS0	2042				40	51 6.205	127 30.402							
		2044					51 6.210	127 30.404							
		2046					51 6.211	127 30.402							
18	US0	2056				41	51 5.587	127 28.829	91						Wrong date on (5/0/0)
		2059					51 5.570	127 28.842		88	1.3 off bottom				NMEA output on deck computer
		2101					51 5.555	127 28.848							3 minutes slow
18	TS1	2115				42	51 5.129	127 27.944	75	74					on time
		2118					51 5.148	127 27.974							ditto ↑
		2120					51 5.155	127 27.992							except only 1 minute
18	NS0	2136				43	51 5.533	127 28.742							GPS Date + Time
		2139					51 5.551	127 28.780							back to Normal
		2141					51 5.551	127 28.830							or "correct"

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
 BO = bottom time of cast
 EN = end time of cast

DE = deployment time
 MR = messenger release time
 RE = recover mooring time

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

28 May 2003

Daily_log_book.doc

18 April 2004 - The GPS readout showed 5 Jan 2004 and the time in UTC was 3 minutes slow on cast 41. This also occurred on cast 20. Interestingly enough, both casts were at NSP. Cast 42 (0.75 mi) away also exhibited this phenomenon. When doing MultiBeam surveys there were (anecdotally) some GPS jumps in this region. However, all this may be coincidence and the Seymour Triangle doesn't exist.

18 April - 3.5 Hz omnidirectional developed problems with pulse strength and frequency.
→ after much fiddling with key and scan settings, on EPC, a complete shut-down and start up of the transducer. Bob MacDonald unscrewed the top of the transducer unit and closed and fiddled until it worked.

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <i>APRIL</i>			Year <i>2004</i>				Ship <i>VECTOR</i>				Cruise ID <i>2004-1</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							
18	TSØ	2155		CTD		44	51 6.204	127 30.289							
		2200					51 6.227	127 30.174							
		2202					51 6.211	127 30.17							
18	TS2	2215		CTD		45	51 6.500	127 30.198							
		2218					51 6.496	127 31.128		85					
		2220					51 6.478	127 31.078							
20	SM5A	1809	BE	ROS	US	46	51 21.104	127 04.024	66		273-278	6	JE/AD		
		1811	BO				51 21.104	127 04.018		61					
		1816	EN				51 21.110	127 04.000							
20	SM5	1835	BE	ROS	US	47	51 21.301	127 06.179	110		279-285	7			layer @ 85m
		1839	BO				21.307	06.199		105					H ₂ S smell in bottle 1
		1846	EN				51 21.314	127 06.224							
20	110p in BOCA			10/570m CORE			51 21.310	127 06.300	120						110' piston core
20	SM4	2108	BE	ROS	US	48	51 21.522	127 09.118	190		285-294	10	JE	✓	layer @ 92m
		2114	BO				21.523	09.126		186					H ₂ S smell in bottle 1
		2126	EN												Bottle 3 misfired @ bottom cap
20	SM4A	2155	BE	ROS	US	49	51 21.576	127 07.165	79		295-300	6	JE		
		2157	BO				21.546	07.170		73					
		2202	EN				21.536	07.132							

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
 BO = bottom time of cast
 EN = end time of cast
 DE = deployment time
 MR = messenger release time
 RE = recover mooring time

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

28 May 2003

Daily_log_book.doc

April 19 - noon

- swimmer crew change @ Port Hardy

- leaving Victor - Constantine Thomas, Dave Spica, Steve Mihalg, Martin Krassowski.

- joining Victor - Tim Carway, Bob MacDonald, James Wilcox, Jan Turt.

- high winds so departed for Smith Strait after midnight;
commenced multi-beam proceeded to core site 1.

- 3 sound velocity profiles performed.

- ran 3.5 kHz sounder line to check core sites 1 and 2, 3

- coring operation went smoothly with no problems, all
cores recovered 40' of soft, gasless sediments.

- with core #3, when core catcher was loosened the
core shot out of the barrel and lodged in the scupper.

- mud in water from core washing as Rosette came up to surface

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <i>APRIL</i>				Year <i>2004</i>			Ship <i>VECTOR</i>				Cruise ID <i>2004-11</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>20</i>		<i>22:43</i>		<i>Piston</i>		<i>50</i>	<i>51° 21.399</i>	<i>127° 06.858</i>	<i>87.3m</i>						<i>Piston core #2</i> <i>40' depth</i>
<i>20</i>	<i>SM3A</i>	<i>2334</i>	<i>BE</i>	<i>ROS</i>	<i>US</i>	<i>51</i>	<i>51 19.278</i>	<i>127 11.011</i>	<i>233</i>		<i>301-312</i>	<i>12</i>	<i>JE</i>	☒	
		<i>2340</i>	<i>BO</i>				<i>19.268</i>	<i>11.024</i>		<i>226</i>					
		<i>2356</i>	<i>EN</i>				<i>51 19.220</i>	<i>127 11.076</i>							
<i>21</i>	<i>SM3B</i>	<i>0022</i>	<i>BE</i>	<i>ROS</i>		<i>52</i>	<i>51 19.999</i>	<i>127 10.800</i>	<i>77</i>		<i>313-318</i>	<i>6</i>	<i>JE</i>		
		<i>0024</i>	<i>BO</i>				<i>19.998</i>	<i>10.801</i>		<i>72</i>					
		<i>0030</i>	<i>EN</i>				<i>19.993</i>	<i>10.802</i>							
<i>21</i>		<i>0111</i>		<i>Piston core</i>		<i>53</i>	<i>51° 21.616</i>	<i>127° 09.02</i>	<i>189</i>		<i>319-330</i>				<i>-40' piston core #3</i>
	<i>SM3A</i>	<i>1421</i>	<i>BE</i>	<i>ROS</i>	<i>US</i>	<i>54</i>	<i>51° 18.83</i>	<i>127° 33.11</i>					<i>ST</i>		
		<i>1428</i>	<i>BO</i>				<i>51° 18.78</i>	<i>127° 33.04</i>	<i>234</i>			<i>12</i>			
		<i>1442</i>	<i>EN</i>				<i>51 18.886</i>	<i>127 33.126</i>		<i>240</i>					
	<i>SM1</i>	<i>1522</i>	<i>BE</i>	<i>ROS</i>	<i>US</i>	<i>55</i>	<i>51 18.654</i>	<i>127 30.049</i>	<i>207</i>		<i>331-341</i>	<i>11</i>	<i>JE/ST</i>		<i>secondary salinity</i>
		<i>1527</i>	<i>BO</i>				<i>51 18.708</i>	<i>127 30.014</i>		<i>205</i>					<i>spikes on upcast</i>
		<i>1539</i>	<i>EN</i>				<i>51 18.793</i>	<i>127 30.155</i>							
	<i>NS1</i>	<i>1722</i>	<i>BE</i>	<i>ROS</i>	<i>US</i>	<i>56</i>	<i>51 18.931</i>	<i>127 20.927</i>	<i>74</i>		<i>342-347</i>	<i>6</i>	<i>JE/ST</i>	☒	<i>changed bottom O-ring</i>
		<i>1725</i>	<i>BO</i>				<i>18.960</i>	<i>20.930</i>		<i>68</i>					<i>on bottles before cast -</i>
		<i>1730</i>	<i>EN</i>				<i>18.976</i>	<i>20.948</i>							<i>no leaks</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
BO = bottom time of cast
EN = end time of cast

DE = deployment time
MR = messenger release time
RE = recover mooring time

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

28 May 2003
Daily_log_book.doc

- multi-beam throughout night in Walkum Bay and Smith's light. 3rd sound velocity profiles performed.
- CTD's commenced at first light.
- proceeded to core site 4, ran 3.5 kHz sounder line to check location, successful recovery of 40' of soft gasless mud.

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month APRIL				Year 2004			Ship VECTOR				Cruise ID 2004-11				
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							
21	SM2	1753	BE	ROS	US	57	51 17.986	127 22.176	368		348-361	14	JE/ST	✓	
		1802	BO				51 17.975	127 22.290		365					
		1820	EN				18.005	22.420							
21	SM3	1911	BE	ROS	US	58	51 18.493	127 14.610	324		362-374	13	JE/ST		
		1919	BO				18.491	14.663		320					
		1937	EN				51 18.485	127 14.729							
21	SM4	2031		Piston		59	51°19'11.9	127 11.269	249m						piston core #4 - 40
22	SMO	0044	BE	ROS	US	60	51 18.238	127 36.932	268		375-386	12	JE/ST	-	water shallowed during
		0051	BO				18.251	36.847		257	- ran out of glass				downcast
		0105	EN				51 18.283	127 36.706			put valves only 9 left				spout leak Bot 6
22	MES5	2145		Piston		61	51 11.845	127 21.125	164						- piston core #5-40
	April 22 p.m. Proceeded through Narrows Rapids at 6:30 p.m. PST slack, arrived IOS April 23, 7pm PST.														
	Successful cruise!														

Cast type: USW = sea water loop
 BOT = bottle cast, no CTD
 CTD = CTD without Rosette
 ROS = Rosette plus CTD

bottle firing method:
 US = up / stop
 UN = up / no stop
 DN = down / no stop

Time Code
 BE = beginning time of cast
 BO = bottom time of cast
 EN = end time of cast

DE = deployment time
 MR = messenger release time
 RE = recover mooring time

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

28 May 2003
 Daily_log_book.doc

April 22 pm and throughout night - multi-beamed mouth of
Smith Strait Rockfish Conservation area.

- first night proceeded to Natwaka Rapids

- boat away with Audrey and Willem at 11⁰⁰ a.m. to
 rendezvous with Bruce Gillard, Fisheries Conservation
Office (1-800-465-4336) and Mapperton for ROO Survey of
~MES4 and MES5 in Huron Sound

- ROO survey was successful. Black and blue soft
sediments @ MES5 with bacterial mats at sediment-H₂O
interface. Many small (2-3cm) shrimp. Fecal pellets
several mm in diameter visible on the sediment-H₂O
interface

Bruce commented that the bottom was as soft as he has seen
and the vegetation seemed "dead" similar to marine
areas affected by logging or industrial waste.
- only 1st fish observed in 1 hour dive.

- Dive site 2 at ~MES4 - sediments soft and unconsolidated,
"crust" on the top, no bacterial mats evident.
- many shrimp 2-3cm on bottom