DAILY LOG BOOK

MISSION NUMBER 2007-61

DATE: From: 1 OCT 2007 to: 5 OCT 2007

VESSEL: VECTOR

PROJECT: SoG - JdF

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

Captain: DON HARDY First Officer: _____
Second Officer: _____ Third Officer: _____

Mission Participants / Agencies: IOS

Scientific Personnel: Party Chief: PETER CHANDLER

Name	Watch	Cabin	Name	Watch	Cabin
LIZETTE BEAUCHEMIN	4-8	2			
DAVID TIMOTHY	4-8	3			
VALERIE FORSLAND	8-12	4			
RICHARD KARSTEN	8-12	3			
SHEILA SLOMAN	12-4	4			
NILGUN CETIN	12-4	2			

Second leg of Mission: Party Chief: _____

Name	Watch	Cabin	Name	Watch	Cabin

Data logging computer: PAC 02570
Data acquisition program: SEASAVE
CTD deck unit make: SEABIRD model: 911 serial number: 0619

Primary CTD
Make: SEABIRD model: 911 serial number: _____
Primary temperature serial number: 2106
Primary conductivity serial number: 1766
Secondary temperature serial number: 4752
Secondary conductivity serial number: 2399
Transmissometer: CHELSEA Model: _____ s/n: 953 DR
Fluorometer: Model SEAPOINT Cable gain: 10X 0-15μg s/n: 2228 **P, S or NO pump?**
Oxygen sensor: _____ Model: SBE s/n: 1119 **P, S or NO pump?**
PAR sensor: _____ Model: LICOR s/n: 4615
Other sensors: ALTIMETER s/n: 1252 **P, S or NO pump?**
Other sensors: SPAR s/n: 16504 **P, S or NO pump?**
Other sensors: _____ s/n: _____ **P, S or NO pump?**
Other sensors: _____ s/n: _____ **P, S or NO pump?**

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): _____

Rosette Setup:
Number of bottles: 24
Manufacturer: Ocean Sc.
Volume of Bottles (litres): 20

Winches:
1. Make: Model: Serial #: used for:
2. Make: Model: Serial #: used for:
3. Make: Model: Serial #: used for:

Comments on performance during cruise:

Salinometer: No
Make: Model: Serial #:

Comments on performance during cruise:

Oxygen Kit # 4

Comments on performance of kit and chemicals:
Fine

Thermosalinograph System: No
Program: Version:
Sampling interval (seconds):
Fluorometer sensor serial number:

Comments on performance during cruise:

ADCP Setup: NO
Computer time zone:
Sampling interval (seconds):
Bin Length (2^x):
Pulse Length:
Buffer (bytes):
Gyro Offset:

User Exits: Name: Exit Points:
Name: Exit Points:
Name: Exit Points:

Work File:

Comments:

CTD Test Cast Information

Test Cast at IOS Jetty? (optional) yes ☐ no ☑

Comments: (i.e. how did everything work??)

Test cast in Saanich Inlet? (recommended) yes ☑ no ☐
If no, give reason:

Comments: (i.e. how did everything work??)
Fine

CTD pressure reading on deck (db): 0.3
(Should be 0.0 db ± 0.5)

Pumps working? yes ☑ no ☐
(i.e.. Was the red LED display on the deck unit 0011 and not still 0010?)

Secondary Temp- Primary Temp: close to 0
(Average from the Mixed Region)

Secondary Salinity- Primary Salinity: close to 0
(Average from the Mixed Region)

Additional Comments:

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month 10 | **Year** 2007 | **Ship** Vector | **Cruise ID** 2007-61

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
01	SI	2235	BE	ROS	UP	1	48 39.38	123 30.05	180		1-2	2	JF	✓	2 flicks 1 up
		2242	BO			2	48°39.40	123°30.07		171	–				1 down
		2249	EN				48 39402	123 30.150				–			
2	58	00:22	BE	CTD	–	3	48 4300	12314 255	338		–		TH/DT	✓	
		00:29	BO				4843.021	123 14.245		325		–			
		00 37	EN				48 42 997	123 14.228							
2	59	120	BE	ROS	UP	4	48 37 789	123 14 570		232	3-16	14	MA	✓	
		126	BO				48 37739	123 14 557							
		140	EN				48 37.7	12.3 14.472							
3	60	210	BE	CTD	–	5	48 33.919	123 12.790	290		–	–	TH/DT	✓	
		217	BO				48 33.866	123 12.726							
		225	EN				48 33 848	123 12.726							
2	61	0314	BE	CTD	–	6	48 29.297	123 9.260	270		–	–	VF/RK	✓	forgot depth in Header file
		0320	BO				48 29.323	123 9.300		260					
		0326	EN				48 29.293	123 9.335							
2	101	1721	BE	CTD	–	7	48 25.420	124 45.108	237		–	–	VF/RK	✓	
		1727	BO				48 25.412	124 45.125							
		1733	EN				48 25.445	124 45.140		230					

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

* left the syringes off the CTD in between the stations. Oxy sensor cover not used either.

S.S.

1505 PDT DEPART PAT BAY - PROCEED TO SAANICH INLET STATION

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month 10 **Year** 2007 **Ship** VECTOR **Cruise ID** 2007-61

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
2	102	18:14	BE	ROS	US	8	48 30.007'	124 43.950'	256		18-31	14	VF/RK	✓	Bot. 9 did not
		1820	BO				48 30.055	124 43.976		250					trip - trigger arm not set properly, clicked down when pushed
		1837	EN				48 30,110	124 43.892							RK.
2	103	1913	BE	CTD	—	9	48°33.23	124°42.98	112	106	—	—	ST/NC	✓	* →
		1917	BO				48°33.27	124° 43.02							
		1919	EN				48°33.31	124°43.03							
2	76	2028	BE	CTD	—	10	48.31.28	124.30.15	97		—	—	ST/NC	✓	took altimeter off for repair + to change cables. Pins are really crooked. (no, not because I bent them!) SS
		2032	BO				48°31.28	124°30.12		90					
		2034	EN				48°31.28	124°30.11							
2	75	2107	BE	ROS	US	11	48°28.25	124°32.78	220		32-45			✓	
		2114	BO				48°28.30	124°32.78		215					
		2129	EN				48°28.39	124°32.78							
2	74	2203	BE	CTD	—	12	48°25.11	124°35.60	192		—		ST	✓	
		2208	BO				48°25.10	124°35.61		185					
		2212	EN				48°25.10	124°35.60							
3	73	00:35	BE	CTD	—	13	48 15.002	124 6.684	160		—		TB/DT	✓	altimeter
		00:39	BO				48 15.007	124 6.647		160					worked fine
		00:43	EN				48 15,010	124 6.650							

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

- no samples #17 - depth different from anticipated depth

* altimeter not working well - bouncing around a lot all the way to the bottom. I've checked + re-greased both cable ends + washed + bottomed the transducer. See if that helps.

S.S.

Better but still not great. Will replace cable. ss

(after cast 76) Can't get new cable to fit - put old one back on. Re-greased & cleaned altimeter connections etc. Maybe that'll help.

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month 10 | **Year** 2007 | **Ship** Vector | **Cruise ID** 2007-61

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
2	72	1:14	BE	ROS	UP	14	48 18.594	124 3.967	188		46-58	13	P/bt	✓	ignore 10014A
		1:20	BO				48 18.575	124 3.983		182					see note on rosette log
		1:35	EN				48 18.503	124 3.974							
3	71	2:12	BE	CTD	—	15	48 22.163	123.59.351	108		—	—	RB/DT	✓	
		12:15	BO				48 22.147	123 59.332		106					
		2:18	EN				48 22 141	123 59.324							
3	70	0334	BE	CTD	—	16	48 19.301	123 43.207	145		—	—	VF/RK	✓	
		0338	BO				48 19.351	123 43.177		140					
		0342	EN				48 19.361	123 43.166							
3	69	0416	BE	ROS	UP	17	48 15.625	123 43.168	180		59-69	11	VF/RK	✓	BOTTLE 11 – SPRING
		0421	BO				48 15.586	123 43.135		175					LET GO WHILE
		0432	EN				48 15.611	123 43.195							COCKING BOTTLES
3	68	0505	BE	CTD	—	18	48 12.224	123 42.986	138		—	—	VF/RK	✓	
		0509	BO				48 12.233	123 42.988		136					
		0513	EN				48 12.236	123 42.994							
3	105	0721	BE	CTD	—	19	48'10.90	123'19.24	83		—	—	VF/RK	✓	Bottle 11 fixed up.
		0724	BO				48'10.89	123'19.35		78			S.S/NC		Altimeter working
		0725	EN				48'10.89	123'19.40							YAH!

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

72 - forgot to fire bottle 1 - obtained surface water from bucket 72 → Phyto Station

- no 50 m bottle - discovered while firing -
- Rosette 69 → oxygen & salinity - large rapid oscillations on down cast - 3/4 depth change

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month 10 **Year** 2007 **Ship** VECTOR **Cruise ID** 2007-61

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
3	ADCP	0801	BE	ROS	US	20	48'13.88	123'18.34	113		70-79	10	SS/NC	✓	
		0805	BO				48'13.84	123'18.52		108					
		08184	EN				48'13.59	123'18.40							
3	104	0907	BE	CTD	—	21	48'19.88	123'18.27	86		—	—		✓	
		0910	BO				48'19.82	123'18.42		76					
		0912	EN				48'19.78	123'18.51							
3	67	0942	BE	CTD	—	22	48'22.84	123'17.94	100		—	—		✓	
		0946	BO				48'22.85	123'17.95		95					
		0948	EN				48'22.86	123'17.95							
3	66	1021	BE	CTD	—	23	48'19.23	123'14.26	100		—	—		✓	
		1024	BO				48'19.19	123'14.37		96					
		1027	EN				48'19.17	123'14.42							
3	65	1103	BE	ROS	UP	24	48 15 857	123 9 882	124		80-89	10	TP/DT	✓	
		1106	BO				48 15 850	123 9 918		122					
		1115	EN				48 15 834	123 10 028							
3	64	1153	BE	CTD	—	25	48 12 770	123 5923	109		—	—	TP/DT	✓	
		1157	BO				48 12 809	123 5987		108					
		1200	EN				48 12 841	123 6.006							

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

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month 3 **Year** 2007 **Ship** Vector **Cruise ID** 2007-61

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
3	63	1241	BE	CTD	—	26	48 14.808	122 58.699	148		—		JB/DT	✓	- stopped early due to different depth showing on winch & altimeter
		1247	BO				48 14.923	122 58.804		138		—			
		1251	EN				48 14.995	122 58.844							
3	62	1359	BE	ROS	UP	27	4822.865	1232.669	146		90-100	11	JB/DT	✓	
		1404	BO				4822.939	123 2.701		140					
		1413	EN				4823.136	123 2.606							
3	54	1500	BE	CTD	—	28	48 26.618	122 44.316	77		—	—	VF/RK	✓	
		1556	BO				48 26.617	122 44.333		74					
		1558	EN				4826.635	122 44.429							
3	53	1640	BE	CTD	—	29	48 33.330	122 45.016	61		—	—	VF/RK	✓	
		1642	BO				48 33.351	122 45.014		58					
		1644	EN				48 33.551	122 45.042							
3	52	1715	BE	CTD	—	30	48 38.942	122 43.316	85		—	—	VF/RK	✓	
		1717	BO				48 39.053	122 43.279		81					
		1720	EN				48 39.185	122 43.234							
3	52	1733	BE	CTD	—	31	48 39.823	122 43.289	85		—	—	VF/RK	✓	redo 52 - no
		1736	BO				48 39.023	122 43.242							Temp/Sal Diff
		1739	EN				48 39.116	122 43.204							(well mixed!)

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

Beautiful day - sun & cloud - lots of tide

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month 10 **Year** 2007 **Ship** VECTOR **Cruise ID** 2007-61

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
3	51	1843	BE	CTD	—	32	48 46.681	122 51.706	163		—	—	VF/RK	✓	
		1847	BO				48 46.698	122 51.779							
		1851	EN				48 46.717	122 51.830							
3	56	1950	BE	ROS	US	33	48'46.43	123'01.54	211		101-114	14	SS/NC	✓	
		1956	BO				48'46.45	123'01.52		205					
		2009	EN				48'46.42	123'01.46							
3	57	2047	BE	CTD		34	48'43.99	123'08.08	160		—	—		✓	few porpoises
		2051	BO				48'43.97	123'08.06		151					
		2054	EN				48'43.98	123'08.07							→
3	47	2218	BE	CTD		35	48'49.29	123'06.19	186		—	—	✓	✓	
		2224	BO				48'49.28	123'06.20		181					
		2228	EN				48'49.29	123'06.19							
3	48	2253	BE	CTD		36	48 51.713	123 3.216	229		—	—	TD/MC SS	✓	VF
		2259	BO				48 51.718	123 3.252		225					
		2304	EN				48 51.704	123 3.262							
3	49	2336	BE	CTD		37	4854.979	122 59.609	131		—	—	TD/DT	✓	
		2340	BO				4854.997	122 59.604		127					
		2343	EN				48 55.003	122 59.611							

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

Daily_log_book.doc

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

HPLC from last cassette left out for ~ 15 min prior to filtering

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month 10 **Year** 2007 **Ship** Vector **Cruise ID** 2007-61

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
4	44	00:38	BE	CTD	—	38	48 56 744	123 5964	119				YP/DT	✓	Stn 50 not done
		00:41	BO				48 56 723	123 5 948		115	—	—			too many crab traps
		00:44	EN				48 56 713	123 5959							
4	45	1:09	BE	CTD	—	39	48 53912	123 8.401	127		—	—	YP/DT	✓	
		1:12	BO				48 53902	123 8.390		124					
		1:15	EN				48 53.885	123 8.408							
4	46	1:37	BE	ROS	UP	40	48 51 403	123 10.774	177		115-126	12	YP/DT	✓	
		1:42	BO				48 51 390	123 10 768		172					
		1:53	EN				4851 394	123 10 782							
4	43	0332	BE	CTD	—	41	49 0.220	123 30.074	201		—	—	VF/RK	✓	
		0337	BO				49 0.221	123 30.089		195					
		0342	EN				49 0.226	123 30.088							
4	42	0407	BE	ROS	UP	42	49 1.796	123 26.171	320		127-142	16	VF/RK	✓	Fluor. > 3
		0415	BO				49 1.798	123 26.204		316					
		0433	EN				49 1.777	123 26.126							
4	41	0527	BE	CTD	—	43	49 3.286	123 22.300	242		—	—	VF/RK	✓	Fluor. N4
		0533	BO				49 3.281	123 22.296		238					
		0538	EN				49 3.283	123 22.313							

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

- did not fill surface bottle - samples from bucket.

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month 10 **Year** 2007 **Ship** VECTOR **Cruise ID** 2007-61

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
4	37	0704	BE	CTD	–	44	49 13.54	123' 20.82	216		–	–	VF/RK		
		0710	BO				49' 13.56	123 ' 20.79		211			SS/NC	✓	
		0715	EN				49' 13.58	123' 20.77							
4	38	0745	BE	CTD	–	45	49 11.95	123' 26.51	308		–	–		✓	
		0753	BO				49' 11.97	123 ' 26.52		300					
		0759	EN				49' 11.99	123' 26.53							
4	39	0834	BE	ROS	UP	46	49' 09.97	123' 33.07	374		143-159	17		✓	Phyto station
		0845	BO				49 09 10.00	123' 33.02		368					
4		0905	EN				49' 10.01	123' 32.87							
	40	0950	BE	CTD		47	49' 08.60	123' 36.89	142 (138)					✓	
		0955	BO				49' 08.62	123' 36.95		130					
		0958	EN				49' 08.62	123' 36.95							
4	26	11:10	BE	CTD		48	49 14 377	123 50 815	251				VF/DT	✓	
		11 18	BO				49 14 385	123 50 804		258					
		11 24	EN				49 14 408	123 50 755							
4	27	1201	BE	ROS		49	49 19 162	123 47 959	344		160-175	16	VF/DT	✓	
		1209	BO				49 19 186	123 48008		340					altimeter
		1225	EN				49 19188	123 48056							wind

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

Daily_log_book.doc

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 Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
4	29	1317	BE	CTD	—	50	49 24 390	123 45 308	152		—	—	VF/RK	✓	alt meter
		1321	BO				49 24 389	123 45 313		150					flickering from 98 depth
		1325	EN				49 24383	123 45 322							
4	24	1458	BE	CTD	—	51	49 30.299	124 6.005	425		—	—	VF/RK	✓	Fluor 3.5 @ surface
		1508	BO				49 30.316	124 6.053		420					
		1518	EN				49 30.340	124 6.082							
4	25	1542	BE	CTD	—	52	49 27.703	124 4.508	320		—	—	VF/RK	✓	- barge passed
		1553	BO				49 27.674	124 4.619		317					
		1600	EN				49 27.682	124 7.552							
4	2	1630	BE	ROS	UP	53	49 24.114	124 9.337	275		176-190	15	VF/RK	✓	
		1636	BO				49 24.131	124 9.356							
		1653	EN				49 24.086	124 9.427							
4	1	1727	BE	CTD	—	54	49 20.414	124 12.089	255		—	—	VF/RK	✓	
		1733	BO				49 20.422	124 12.106		250					
		1739	EN				49 20.438	124 12.086							
4	4	1830	BE	CTD	—	55	49 24.548	124 22.081	348		—	—	VF/RK	✓	
		1838	BO				49 24.590	124 22.123		343					
		1846	EN				49 24.606	124 22.111							

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

→ cast in wake of quarry barge - mixing event @ surface? VF

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month 10 **Year** 2007 **Ship** VECTOR **Cruise ID** 2007-61

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
4	3	1907	BE	ROS	UP	56	49 26 629	124 20.250	323		191-206	16	NC/PC	✓	
		1914	BO				49 26.628	124 20.628		318					
		1932	EN				49 26.609	124 20.231							
4	5	2022	BE	CTD	—	57	49 27.386	124 30.816	315		—	—	NC/PC	✓	Calm seas
		2030	BO				49 27.398	124 30 854		310					light scattered cloud
		2038	EN				49 27.404	124 30.856							
4	6	2108	BE	ROS	UP	58	49°30.57	124°27.79	193		207-219	13	SS/NC		
		2113	BO				49°30.56	124°27.76		186					
		2125	EN				49°30.59	124°27.80							
4	7	2155	BE	CTD	—	59	49°34.40	124°24.17	353		—	—	SS/NC		
		2205	BO				49°34.43	124°24.02		350				✓	
		2213	EN				49° 34.43	124° 23.97							
4	8	2302	BE	CTD	—	60	49 39 276	124 33 006	338		—	—	TM/DT	✓	
		2310	BO				49 39 270	124 33 036		332					
		2318	EN				49 39 287	124 33 057							
4	9	2353		ROS	—	61	49 35501	124 38 298	168		220-231	12	TM DT	✓	
		2357					49 35491	124 38 285		163					
5		0007					49 35506	124 38 311							

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

Daily_log_book.doc

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

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 Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
5	10	101	BE	CTD	—	62	49 40732	124 47 220	100		—	—	MM/DT	✓	
		104	BO				49 40728	124 47 150		98					
		107	EN				49 40730	124 47 144							
5	11	131	BE	CTD	—	63	49 42 386	124 43 349	300		—	—	MM DT	✓	
		139	BO				49 42 389	124 43 307		295					
		146	EN				49 42 409	124 43 304							
5	12	205	BE	ROS	up	64	49 43607	124 40 813	355		232-247	14	MM DT	✓	
		2:14	BO				49 43621	124 40 799		350					
		231	EN				49 43600	124 40 776							
5	13	0405	BE	CTD	—	65	49 55.272	124 55.187	234				VF/RK	✓	
		0411	BO				49 55.294	124 55.194							
		0416	EN				49 55.302	124 55.184							
5	14	0448	BE	ROS	up	66	49 52.979	124 59.610	315		248 - 263		VF/RK	✓	
		0456	BO				49 52.981	124 59.616		310					
			EN				49 53.000	124 59.598							
5	15	0541	BE	CTD	-	67	49 51.667	125 1.631	138		—	—	VF/HC	✓	
		0544	BO				49 51.642	125 1.633		123					
		0547	EN				49 51.618	125 1.630							

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

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month Oct **Year** 2007 **Ship** VECTOR **Cruise ID** 2007-61

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
5	16	0803	BE	ROS	UP	69	49°57.73	125°08.80	154		264-274	11	SS/NC	✓	
		0808	BO				49 57.76	125° 08.72							
		0818	EN				49 57.73	125° 08.71							
5	21	0718	BE	CTD	—	68	50° 02.00	125° 13.61	78		—	—		✓	I ended up doing
		0720	BO				50° 02.01	125° 13.62		70					this before
		0722	EN				50° 02.01	125° 13.62							Stn. 16.)
5	17	0858	BE	CTD		70	49° 58.83	125° 04.27	262					✓	Beautiful calm
		0905	BO				49° 58.86	125° 04.26		255					night - lights
		0911	EN				49° 58.86	125° 04.26							of Campbell River
5	18	0938	BE	CTD		71	49° 59.19	124° 59.00	145						look pretty!
		0941	BO				49°59.18	124°58.98		140					
		0946	EN				49°59.16	124°58.92							
5	19	1021	BE	CTD		72	50° 01.16	124° 52.94	272					✓	Altimeter does not detect
		1028	BO				50° 01.16	124° 52.95		267					bottom > 10m.
		1035	EN				50° 01.18	124° 52.91							
5	20	1243	BE	CTD		73	49° 47.79	124° 32.26	310				UP/DT		
		1251	BO				49° 47.37	124° 32.19		305					
		1259	EN				49° 47.14	124° 32.20							

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

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 Latitude	Position Longitude	Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
5	22	1419	BE	CTD		74	4940 199	124 16 291	352				JP/DT	✓	great cruise
		1427	BO				49 40 223	124 16 297		347					
		1436	EN				49 40 220	124 16 304							
							CREDITS	LA DOYENNE	-	LIZETTE BOUCHARD-KIN					

The End

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