DAILY SCIENCE LOG BOOK

MISSION NUMBER: 2009 - 07

DATE: From: 30/08/2009 to: /09/2009

VESSEL: CCGS Sir Wilfrid Laurier

PROJECT(S): C30 - Bellot strait

Water Properties Group
Fisheries and Oceans Canada
Institute of Ocean Sciences
Ocean Sciences Division
Sidney, BC, Canada

Captain: Mark Taylor First Officer: Simon Dockrill
Second Officer: _____ Third Officer: _____
Fishing Master: _____

Mission Participants / Agencies: DFO / CNS

Scientific Personnel: Chief Scientist: Svein Vagle

Name	Watch	Cabin	Name	Watch	Cabin
Svein Vagle					
Mike Dempsey					
Bob Fudge					

Second leg of Mission: Chief Scientist: _____

Name	Watch	Cabin	Name	Watch	Cabin

Data logging computer: _____
Data acquisition program: _____
CTD deck unit make: SBE model: 11 serial number: 0800

Primary CTD
Make: Seabird model: 9plus serial number: 0941
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: Seabird Model: 43 s/n: 1117 (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?

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

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month September **Year** 2009 **Ship** Sir Wilfrid Laurier **Cruise ID** 2009-07

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information: Latitude	Positional Information: Longitude	Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
1	BEL1	1854	BE	ROS	US	001	71 56.957	95 25.211	196 m	178	001		sulmahe		ADCP/sounder in water
		1857	BO				71°56.950	95° 25.206							drift bottles
		1901	EN				71°56.952	95° 25.207							

Cast Type:
BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
SET = Fish Set
USW = Sea Water Loop
MOR = Mooring
NET = Plankton 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
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DE = Deployment Time
MR = Messenger Release Time
RE = Recover Mooring Time

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

Notes: _____

Produced by the Water Properties Group, IOS

WaterProperties.ca
Version: 06 March 2008

0.22 0.04 0.03 start scan. 7000 5600

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month September **Year** 2009 **Ship** SWL **Cruise ID** 2009-07

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information: Latitude	Positional Information: Longitude	Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
3	PRV-1	04:13	BE	ROS	US	002	71 55.105	93 35.144	122	119	002	1	SV/MD/KE	✓	Drift Bottles 100
		04:16	BO				71°55.099	93°35.132							
		04:20	EN				71 55 090	93° 35.150							
4	BEL9	1615	BE			003	71°57.454	94°16.055	85	83	003	1	SV/MD/KE		Drift Bottles 102
		1618	BO				71 57, 443	94°16. 064							103 & 105
		1621	EN				71 57 442	94°16 .064							
	BEL8	1943	BE			004	71 57. 807	94 25.040	98	86	004				104 & 106
		1945	BO				831	092							
		1948	EN				861	138							
5	Bel7	0153				005	72 0,155	94 39.933	26	21	—				107 & 108 Drift
		154					72 0.127	94 29 452							Bottles.
		55					0,110	94 29,184							
	Bel6	0248				006	72 248	94 35.984	150	80	—				
		53					0,390	35,686							

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Notes: _____

ship's shipper reads ~ 5m deep!

6kts of current to E in Narrows!
- drifting towards Magpie rock
- boiling!
- No SAL taken.

pair start 0.04
end 0.08
start scan 9000.

---

start scan 5800
pair start 0.22
0.08

current running at 2.5kts
- terminated by bridge.

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5	Bel-6	0317	BE	ROS	US	007	72 0.504	94 36.908	170	136	005	1	SV/MD	✓	
		20	BO				72 0.440	94 35.801							
		24	EN				72 0.380	94 35.276							
	Bel			~~ROS~~		~~008~~									
5	BEL-5	0603	DE	ROS	US	008	72 0.330	94 41.336	81	76	006	1	SV/MD/RF		Drift 60 kts
		0406	BO				72 0.364	94 41.058							107 E110
		0410	EN				0.385	40.806							
5	BEL 4	0510	DE	ROS	US	009	71 59.234	94 50.884	296	284	007	1	SV/MD/RF		
		0516					71 59.250	94 50.695							
		0523					71 59.251	94 50.678							
5	Bel-2	1324	BE	ROS	US	010	71 57.914	95 13.040	125	119	008	1	SV/MD/RF		DE 111 E112
		28	BO				544	95 12.941							
		32	EN				557	95 12.824							

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shoaling rapidly to 140m. station drifting at 2 knots
start scan 4000 pair end 0.08

pair start 0.07 start scan 3500
end 0.02 depth increasing rapidly over sill

pair 0.04 start start scan 2100 Repeated From 300m
0.04 end — MD forgot to log

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Month | **Year** | **Ship** | **Cruise ID**

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~	Bef 3	1734	BE	ROS	US	11	71 58.488	95 2.684	388	381	009	1	SV/MD	RF ✓	
		1441	BO				71 58.517	95 2.243							
		51	EN				71 58.526	95 1.807							

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Salinity inversion ~35-40 on downcast,
real? winch was a little fast (1.3 ms^{-1}) at the time