DAILY SCIENCE LOG BOOK

MISSION NUMBER: 2010 -73

DATE: From: OCT 29 2010 to: NOV 1, 2010

VESSEL: CCGS VECTOR

PROJECT(S): SOG MOORINGS

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

WaterProperties.ca

Captain: Kent First Officer: _____
Second Officer: _____ Third Officer: _____
Fishing Master: _____

Mission Participants / Agencies: _____

Scientific Personnel: Chief Scientist: _____

Name	Watch	Cabin	Name	Watch	Cabin
Chief Robie Macdonald					
Lucio Perrault					
Drue Spear					
Linda White					
Mary O'Brien					
Cindy Wright					

Second leg of Mission: Chief Scientist: _____

Name	Watch	Cabin	Name	Watch	Cabin

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

Primary 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?**

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: _____
Volume of bottles (litres): 10L

Winches:
1. Make: _____ Model: _____ Serial #: _____ Used for: _____
2. Make: _____ Model: _____ Serial #: _____ Used for: _____
3. Make: _____ Model: _____ Serial #: _____ Used for: _____

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

See log book for electrical malfunction. @ SOG N cast
Tom Juhasz is aware

Salinometer:
Make: N/A Model: _____ Serial Number: _____

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

_____

Oxygen Kit(s): Chemicals only
Make: _____ Model: _____ Kit Number: _____
Make: _____ Model: _____ Kit Number: _____

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

_____
_____

Thermosalinograph System (SBE21): NA
Program: _____ Version: _____
Sampling interval (seconds): _____
Fluorometer sensor serial number: _____

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

_____

ADCP Setup: N/A
Computer time zone: _____ User Exits: Name: _____ Exit points: _____
Sampling interval (sec): _____ Name: _____ Exit points: _____
Bin Length: (2^x): _____ Name: _____ Exit points: _____
Pulse Length: _____ Work File: _____
Buffer (bytes): _____
Gyro Offset: _____

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

_____
_____

CTD Test Cast Information

Test Cast along side? Yes ☑ No ☐
Comments seemed OK

Test Cast in Saanich Inlet or other location? Yes ☐ No ☑
Comments _____

CTD pressure reading on deck (db), before cast: _____ after cast: _____ unknown Scott did test

Pumps working? Yes ☑ (0011) No ☐ (0010)

Secondary Temp – Primary Temp: —
(Average from the mixed region)

Secondary Salinity – Primary Salinity: —
(Average from the mixed region)

Additional Comments:

_____
_____
_____
_____

Sampling Fraser River (FR1-10) surface casts only

Bottle 1 = pH, DOC, POC/TOC /CDOM
Bottle 2 = DO (dups)
nuts
sals
$\delta^{18}O$
DIC/ALK

SOG-N 2 bottles/depth
Odd numbered niskins = pH, DOC, TOC, CDOM
Even numbered niskins = DO (in duplicate)
nuts
Sal
$\delta 18O$
DIC/ALK

dups were usually taken @ surface, bottom, 100m.

⁂ ↓ different

SOG-S 2 bottles/depth
Odd # bottles; pH, DOC, TOC, CDOM, Sal, nuts, $\delta 18O$
Even # bottles; DO (duplicates all depth
DIC/ALK
- again, duplicates were taken @ surface, 100m, bottom (except DO done at all depth)

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page _____ of _____

Month Oct **Year** 2010 **Ship** VECTOR **Cruise ID**

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
30	FR1	0519	BO	ROS		01	49° 6.733'	123° 16.711'	11.5	1.5	001-002	2	CW DS KB	✓	Pump not on for this cast operator error
30	FR2	0539	BO	ROS		02	49° 6.167'	123° 18.035'	12.5	1.2	003-004	2		✓	
30	FR3	0601	BO	ROS		03	49° 6.418'	123° 19.573'	91	1.3	5-6	2		✓	
30	FR4	0613	BO	ROS		04	49° 6.665'	123° 20.927'	146	1.6	7-8	2		✓	
30	FR5	0637	BO	ROS		05	49° 7.013'	123° 22.440'	183	1.4	9-10	2		✓	
30	FR6	0651	BO	ROS		06	49° 7.337'	123° 23.804'	218	1.3	11-12	2		✓	
30	FR7	0708	BO	ROS		07	49° 8.029'	123° 26.214'	283	1.3	13-14	2		✓	
30	FR8	0725	BO	ROS		08	49° 8.658'	123° 28.697'	321	1.6	15-16	2		✓	
30	FR9	0740	BO	ROS		09	49° 9.385'	123° 30.992'	347	1.6	17-18	2		✓	
30	FR10	0754	BO	ROS		10	49° 10.006'	123° 32.893'	370	1.5	19-20	2		✓	
30	SOGN	1445	BE	ROS		11	49 49.406	124 51.497	337	320	21-44	2		✓	16 mab
		1454	BO	ROS			49° 49.332	124 51.589							computer crashed
30	SOGN	1506	BE	ROS		12	49 49.267	124 51.748	300		45-68	24		✓	start new cast @300
		1523	EN	ROS											bottles 1-4 Fired @300
31	SOGS	1421	BE	ROS		13	49° 1.514	123° 26.852	328			24			1&2 will be from last cast
		1429	BO	ROS			49° 1.526	123° 26.887		320					Slip Ring has
		1447	EN	ROS			49° 1.447	123° 27.166							broken Pin!

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
EN = End Time of Cast
DE = Deployment Time
MR = Messenger Release Time
RE = Recover Mooring Time

Notes: _____

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

Produced by the Water Properties Group, IOS

WaterProperties.ca
Version: 16 April 2010

Casts 11 & 12 - Weather rough wind ~ 20-25 knots

The computer crashed on cast 11 & rebooted at 300m stop. Bottles 1 & 2 had already been Fired. Cast 12 was started at 300 m and bottles 1 & 2 were Fired again and then 3 & 4 at 300 The cast then proceeded upwards as per normal although there were numerous spikes. Samples in bottles 1&2 will be from cast 11 & 3-24 will be from cast 12.

Slip Ring - A pin was broken off on the slip ring; the likely cause of these problems. This has been a recurring problem with this slip ring and a more permanent fix is required. Lucius has done a "temporary" repair to the pin.

Sea-cable splice kit not loaded with CTD/Rosette gear.

SOGN-H Recovery October 30, 2010

POT
1017 - On Station Wind 20-25 kn
- Range B533 325 325
- Back off to a comfortable distance

1026 - 4.5 cables off
- Range 906 906 902
- move closer

1030 - Range 505 510 515

1031 - Release B533 + B534

1033 - On surface

SOGN-I Deployment

49°50.200' N
124°52.144' W
330 m Depth

2357 UTC 30/10/2010

SOGS-H Mooring Recovery 31/10/2010 - seas calm

0903 Pot On Station
- Range B537 296 295 297 308 300
- Move off to a safe distance

0909 - Range 428 424 423 423

0910 - B538 - Release - 422
- on surface

0947 - on deck

SOGS-I Mooring Deployment

49° 1.550'N
123° 25.786'W
314m
2129 UTC 31/10/2010