DAILY SCIENCE LOG BOOK

MISSION NUMBER: 2010-16

DATE: From: April 3, 2010 to: April 6 2010

VESSEL: VECTOR

PROJECT(S): SOG MOORINGS / AMP ERI

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

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

Mission Participants / Agencies: _____

Scientific Personnel: Chief Scientist: Sophia Johannessen

Name	Watch	Cabin	Name	Watch	Cabin
Cindy Wright					
Melissa Kienast					
Dave Spear					
Lucas Perrault					
Mary O'Brien					

Second leg of Mission: Chief Scientist: _____

Name	Watch	Cabin	Name	Watch	Cabin

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

Primary CTD
Make: SBE model: 9 serial number: _____
Primary temperature serial number: 4883
Primary conductivity serial number: 1763
Secondary temperature serial number: 2095
Secondary conductivity serial number: 2754
all pumped
✓ Transmissometer: Wetlab Model: _____ s/n: 1005dr
✓ Fluorometer: Model Seapoint Cable gain: 30x(0-5) s/n: ? **P, S or NO pump?**
✓ Oxygen sensor: SBE Model: SBE43 s/n: 1119 **P, S or NO pump?**
PAR sensor: Biospherical Model: _____ s/n: 4565
Other sensors: altimer s/n: 1252. **P, S or NO pump?**
Other sensors: PH s/n: 0691 **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: SBE 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 each.

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):

Salinometer: N/A
Make: _____ Model: _____ Serial Number: _____
Comments on performance during cruise (comments should also be reflected in the post-cruise report):

Oxygen Kit(s): N/A
Make: _____ Model: _____ Kit Number: _____
Make: _____ Model: _____ Kit Number: _____
Comments on performance during cruise (comments should also be reflected in the post-cruise report):
DO analyzed onshore Kit # 2

Thermosalinograph System (SBE21): N/A
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 - no problems

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

CTD pressure reading on deck (db), before cast: _____ after cast: _____

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:
- seemed to be a leaky connection - spiky data - see log book

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page _____ of _____

Month April **Year** 2010 **Ship** VECTOR **Cruise ID** 2010-16

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
4	FR1	0245	BO	ROS	US	001	49 6.821	123 16.652	shallow	Surf	001	2.	cw/DS	✓	
	FR2.	0311				002	49 6.802	123 18.025	11.5m	"	002			✓	-.3 surface pressure
	FR3	0330				003	49 6.388	123 19.561	89	"	003			✓	
	FR4	0348				004	49 6.666	123 20.957	150.6	"	004			✓	See note on next page
	FR5	0410				005	49 7.056	123 22.381	183	"	005			✓	
	FR6	0434				006	49 7.374	123 23.783	210	"	006			✓	
	FR7	0458				007	49 8.034	123 26.196	282	"	007			✓	
	FR8	0517				008	49 8.695	123 28.592	321	"	008			✓	
	FR9	0537				009	49 9.324	123 30.918	349	"	009			✓	
	FR10	0558				010	49 9.90	123 32.872	373	"	010			✓	
5	SOGN	0007	BO	ROS	US	011	49° 49.988'	124° 51.802	330	200	011				← water collection
5	SOGN	0122	BE	ROS	US	012	49 49.925	124 52.172	336		012-023"	1-3 mab			for Mary
		0130	BO				49 49.916	124 52.182		335					Wind came up quickly
		0152	EN				49 49.736	124 52.190							Bottle 23 leaks
	SOGS	1423	BE	ROS		013	49	123	316		024-034.				
		1433	BO				49 1.901	123 25.903		314					5 mab
		1453	EN				49	123							diffusive steps?

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

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

water chemistry - 2 bottles (#1; #2) fired @ surface

BOT 1; DO
DIC/Alk.
HPLC
Chl
nuts

BOT 2; pH
Toc
Doc
CDOM
δ18O
Sal.

} Fraser River transect only.

Note: Dect unit fails to initiate communications with CTD periodically. Restarting logging appears to fix this.

Cast #11: On the way up, the Numerous spikes occur in the data. Shut down CTD & brought it to the surface
Cast #12 - released main data cable
- started spiking again - more spikes @ depth
- got progressively worse throughout the cast

Cast # 13 - cleaned and lubed sea cable wet end & slipring connectors prior to cast. no obvious problems
- Cable tied sea-cable to CTD Frame

This page is for any notes or observations

SOGN-F Mooring Recovery April 4, 2010 PDT

On station 0700 PDT - get equipment ready, move roselle etc

0737 - Range B533 - 326 327 328

0745 - B533 - 385 396 402

0747 - B534 - Release - 420
- On surface

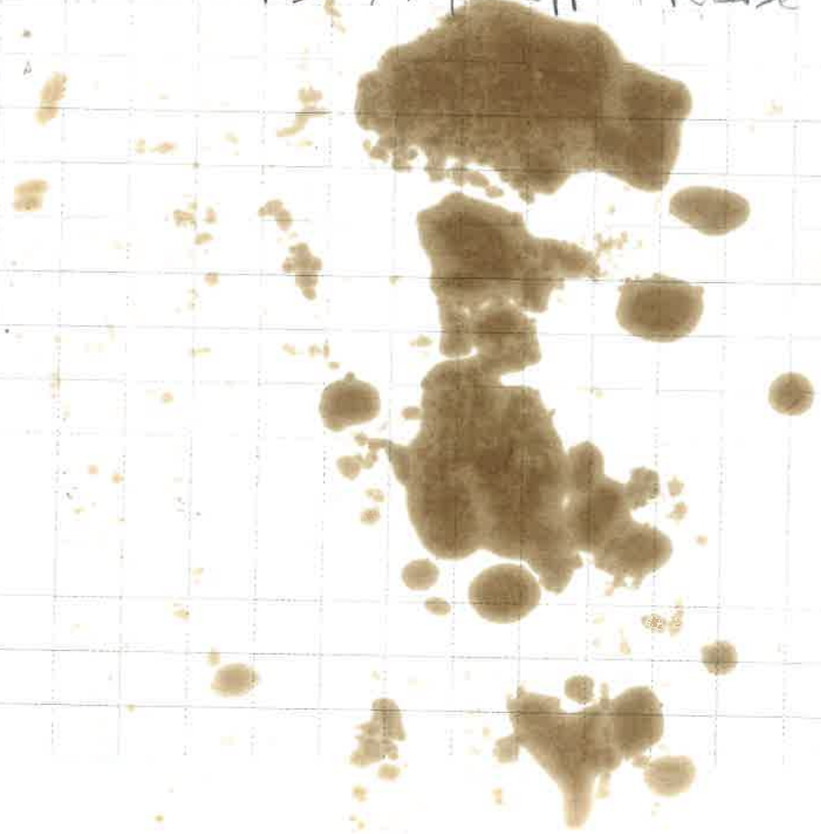
0754 - top recovered
0802 - traps
0809 - Sonde
0820 - ADCP
0826 - μCat/RBR & Release

* Cover was left on RBR PH sensor For deployment

This page is for any notes or observations

SOGS-F Mooring Recovery April 5, 2010 PDT

0915 - On Station
- Range B537 645 646 648 607
0919 - Release B538 675 Received & executed
0920 - On surface
0934 - Traps on deck & 19+
0945 - Sonde
0952 - RBR / Aquadopp & Release on deck



Chemicals for DO

Nina gave me $MgCl_2$, NaI/NaOH & H_2SO_4
but no Id associated
MnCl: ___ (??

KI standard, Batch # 090256400N
normality; 0.011938ON May 22, 2009
Opened Feb 12, 2010
for 2010-01

Thiosulphate March 26, 2009b
March 31, 2009b