

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

2014-03

DATE:

From: 4 MARCH 2014

To: 11 MARCH 2014

VESSEL:

J.P. Tully

PROJECT(S):

NRCAN / OCEAN NETWORKS CANADA
(VENUS)

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

WaterProperties.ca

Captain: Mike McCulloch
 Second Officer: Ryan Gurr
 Fishing Master: _____
 First Officer: Joody Heske
 Third Officer: Kevin Naphthal
 Chief Engineer: Ryan Braidwood

Mission Participants / Agencies:

NRCan, Ocean Networks Canada (VENUS)

**** Chief Scientist to complete section below OR cut and tape from cruise plan ****

1st Leg Scientific Personnel: Chief Scientist: Paul Macoun

Name	Watch	Cabin	Name	Watch	Cabin
Steve Mihaly		E	Dave Tetorenko		
Akash Sastri		E	Josh Tetorenko		
Meghan Tomlin			Kim Wallace		
Marja Blasé			Mike Hannaford		
Denis Hedji					
Chris Sundstrom					
Ian Belliveau					
Jonathon Miller					
Dirk Brussow					
Albert Puskey					

2nd Leg Scientific Personnel: Chief Scientist:

[illegible]

**** The following 3 pages are VERY IMPORTANT as they document equipment and settings used on board ****



These pages are to be completed by the CTD Technician setting up the equipment, the Watch Leader on board, and the Chief Scientist **MUST** verify that all relevant sections are completed prior to leaving the vessel. Any mid-cruise changes to be noted by watch leader in the notes.

Data logging computer: #3

Data acquisition program: Seasave

CTD deck unit make: SBE model: 11+ serial number: 0471

Primary CTD

Make: SBE model: 9+ serial number: _____

Primary temperature serial number: 4054

Primary conductivity serial number: 1766

Secondary temperature serial number: 4700

Secondary conductivity serial number: 3321

Transmissometer: Wetlabs Model: C-Star s/n: 1396DR

Transmissometer: _____ Model: _____ s/n: _____

Fluorometer: Model WL ECD Cable gain: 13 s/n: 2216 P, S or ☒ NO pump?

Fluorometer: Model _____ Cable gain: _____ s/n: _____ P, S or NO pump?

Oxygen sensor: SBE Model: 43 s/n: 1119 ☒ P, S or NO pump?

PAR sensor: _____ Model: _____ s/n: _____ Surface PAR? Y / N

Other sensors: PH s/n: 0692 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: _____

Transmissometer: _____ Model: _____ s/n: _____

Fluorometer: Model _____ Cable gain: _____ s/n: _____ P, S or NO pump?

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: _____ Surface PAR? Y / 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): _____

This also includes the bottle location above the CTD on non-rosette casts (e.g., W.E. Ricker)

Rosette Setup:

Number of bottles: 24

Manufacturer: 105

Volume of bottles (litres): 10 L

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:

Make: _____ Model: _____ Serial Number: _____

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

Oxygen Kit(s):

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):~~

~~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:

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 _____

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:

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Month <u>MARCH</u>				Year <u>2014</u>			Vessel <u>JP TULLY</u>			Cruise ID <u>2014-03</u>					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
1	SI-VIP	6	5:07	BE	ROS	US	48°39.108	123°29.213	93	95	-	4	AS, SM	☒ ☒	1.7 mab
	SI-VIP	6	5:11	BO	ROS	US	48°39.110	123°29.206			-		DIRK	☐ ☐	FLAT CALM
	SI-VIP	6	5:13	EN	ROS	US	48°39.112	123°29.204			-			☐ ☐	WT'S OF RAIN
2	SI-BPS	6	5:55	BE	ROS	US	48°37.066	123°30.064	213	211	-			☒ ☒	5 mab
	SI-BPS	6	6:00	BO	ROS	US	48°37.062	123°30.060			-			☐ ☐	mixed 150
	SI-BPS	6	6:05	EN	ROS	US	48°37.050	123°30.060			-			☐ ☐	down. O ₂ = 0
3	QA1	7	4:10	BE	ROS	US	49°0.917	123°13.390	90	86	-	2		☒ ☒	at > 180
	QA1	7	4:12	BO	ROS	US	49°0.940	123°13.400			-		5 and surf	☐ ☐	
	QA1	7	4:16	EN	ROS	US	49°0.991	123°13.414			-			☐ ☐	FLAT CALM
4	QA2	7	4:52	BE	ROS	US	49°2.851	123°18.559	146	143	-		5 and surf	☐ ☐	
	QA2	7	4:56	BO	ROS	US	49°2.854	123°18.576			-			☐ ☐	clouds +
	QA2	7	5:00	EN	ROS	US	49°2.836	123°18.616			-			☐ ☐	stars
5	QA3	7	5:39	BE	ROS	US	49°5.150	123°23.428	221	1.1	-		5 and surf	☒ ☒	
	QA3	7	5:45	BO	ROS	US	49°	123°			-			☐ ☐	
	QA3	7	5:51	EN	ROS	US	49°5.126	123°23.489			-			☐ ☐	
6	QA4	7	6:38	BE	ROS	US	49°7.328	123°28.764	346	343	-4-		5 and surf	☒ ☒	cast repeated
	QA4	7	6:44	BO	ROS	US	49°7.326	123°28.75			-			☐ ☐	due to lock
	QA4	7	7:04	EN	ROS	US	49°7.758	123°28.662			-			☐ ☐	of archiving
			:				.	.			-			☐ ☐	:)

Event Type:

BOT = Bottle cast (no CTD)
 CTD = Standalone CTD
 ROS = CTD in Rosette
 SET = Fish Set

LOOP = Sea Water Loop
 MOR = Mooring
 NET = Plankton Net Haul
 DRF = Drifter

Bottle Firing Method:

US = Up / Stop (default)
 UN = Up / No stop
 DN = Down / No stop

Notes:

Time Code:

BE = Beginning Time of Cast
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CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

DE = Deployment Time
 MR = Messenger Release Time
 RE = Recover Mooring Time

Produced by the Water Properties Group, IOS

WaterProperties.ca
 Version: 14 February 2013

Sample 10:00

This page is for any notes or observations

Surface 10:05

10:11 — picked bottle 1

6 min

10 min

— bottle 1

10:55

55 min

— actually fixed @ 2300

11:40

100 min

morning

Cast 7 repeated because anchoring started on the way up.

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Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments	
							Latitude	Longitude								
7	QA5	7	7:53	BE	ROS	US	49° 9.091	123° 33.55	2 ?		- 2	5 + surf		☒ ☒		
	QA5	7	7:59	BO	ROS	US	49° 9.090	123° 33.540			-			☐ ☐		
	QA5	7	8:07	EN	ROS	US	49° 9.064	123° 33.520			-			☐ ☐		
8	QA6	7	8:52	BE	ROS	US	49° 10.921	123° 38.939	266		- 2 -	5 + surf		☒ ☒		
	QA6	7	9:03	BO	ROS	US	49° 10.933	123° 38.942			-			☐ ☐		
	QA6	7	9:08	EN	ROS	US	49° 10.954	123° 39.011			-			☐ ☐		
9	QA7	7	9:44	BE	ROS	US	49° 12.665	123° 44.480	299	300	- 4	5 + surf		☒ ☒	full no "file"	
	QA7	7	9:52	BO	ROS	US	49° 12.686	123° 44.422			-			☐ ☐	**	
	QA7	7	9:59	EN	ROS	US	49° 12.660	123° 44.405			-			☐ ☐		
10	HB	7	11:	BE	ROS	US	49°	123°	50		-	5 + surf		☒ ☒		
	HB	7	:	BO	ROS	US	49°	123°			-			☐ ☐		
	HB	7	11:25	EN	ROS	US	49° 19.938	123° 43.690			-		SPM+AS	☐ ☐		
11	CNODE	8	5:04	BE	ROS	US	49° 2.464	123° 25.618	300	2 mob	-	4 bottles		☒ ☒	FLAT CALM JUST DUE	
	CNODE	8	5:15	BO	ROS	US	49° 2.448	123° 25.610			-	on bottom		☐ ☐	NORTH OZ NOD	
	CNODE	8	5:20	EN	ROS	US	49° 2.456	123° 25.615			-			☐ ☐		
12	ENODE	8	6:14	BE	ROS	US	49° 2.536	123° 19.192	175	1 mob	-	4 bottles		☐ ☐		
	ENODE	8	6:20	BO	ROS	US	49° 2.581	123° 19.200			-	on bottom		☐ ☐		
	ENODE	8	6:23	EN	ROS	US	49° 2.572	123° 19.204			-			☐ ☐		
			:				°	°			-			☐ ☐		

SPM+AS

FLAT CALM
JUST DUE
NORTH OZ
NOD

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*+ EVENT N° 9: no cost data. Archiving only, turned on, to trip bottles
at surface. :C

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							Latitude	Longitude							
13	DDL	9	3:10	BE	CTD	US	49° 5.128	123° 19.744	104	3 mcb	-	-		☐ ☐	
			3:13	BO	CTD	US	49° 5.128	123° 19.744			-			☐ ☐	
			3:15	ON	CTD	US	49° 5.129	123° 19.744			-			☐ ☐	
14	38	9	4:33	BE	CTD	US	49° 10.075	123° 32.808	3.68	3 mcb	-			☐ ☐	175
			:	BO	CTD	US	49° 10.	123° .			-			☐ ☐	Strong
			4:51	EN	CTD	US	49° 10.036	123° 32.830			-			☐ ☐	Trans change
15	GEO-1	10	1:46	BE	NET		49° 14.9529	123° 44.7872	407	390	mesh	236		☐ ☐	53130
			2:08	BO	NET		49° 14.9875	123° 44.6417			50R			☐ ☐	55585
			2:17	EN	NET		49° 14.9848	123° 44.6438			Flowmeter Serial # TSK = 304			☐ ☐	2455
16	GEO-1	10	02:25	BE	CTD	US	49° 14.978	123° 44.6412	400	2.4 Ma	-		SEM	☒ ☒	~ 80 fup to
			02:33	BO	CTD	US	49° 14.958	123° 44.614			-			☐ ☐	bottom
			02:41	EN	CTD	US	49° 14.948	123° 44.660			-			☐ ☐	
17	45	10	6:21	BE	CTD		48° 53.999	123° 8.508	129	2 mcb	-		AS	☒ ☒	
			6:25	BO	CTD		48° 54.004	123° 8.519			-		SEM	☐ ☐	
			6:27	EN	CTD		48° 54.001	123° 8.519			-		Dirk	☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	

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