

DATA LOG BOOK

2012-14 - Two fluorometers
The FL config is
wrong in the
cruise files. Use
the 2012-01
settings OR
file 2012-14 Venus dual
fluorometers prop st. xmlcon
which is in the raw CTD
data file

MISSION
NUMBER

2012-14

From:

FEB 22, 2012

to:

FEB 27, 2012

VESSEL:

J. P. TULLY

PROJECT(S):

VENUS / Strait of Georgia

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

WaterProperties.ca

Captain: MIKE CORFIELD
Second Officer: SHANE SPROVELACE
Fishing Master:

First Officer: RICH MARRIOT
Third Officer: JIM GARRETT

Mission Participants / Agencies: VENUS / UVIC / DFO

[illegible]

Name	Watch	Cabin	Name	Watch	Cabin
DENIS HEDIN			VERENA TUNNICLIFFE		
CHRIS SUNDSTROM			MARLENE JEFFRIES		
JONATHAN ROS			MARIA BLASE		
CRAIG DAVE			CHRISSE DU PREEZ		
HARRY CASTLE			ANGELICA DENA		
JOSH CHERNOV			NINA NEMCEK		
DEAN JOHNSON					

[illegible]

Data logging computer: ~~_____~~ #3

Data logging computer: #3

Data acquisition program: SEASAVE

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

Primary CTD

Make: Seabird model: 9PLUS serial number: 0443

Primary temperature serial number: 2106

Primary conductivity serial number: 1764

Secondary temperature serial number: 2710

Secondary conductivity serial number: 2178

Transmissometer: 1396 DR Model: WET

Fluorometer: Model	SeaPoint	Cable gain:
--------------------	----------	-------------

Oxygen sensor: SBE Model: 4

PAR sensor:	NONE	Model:
-------------	------	--------

Other sensors: Eco Fluorometer WET

Other sensors:

Other sensors:

Other sensors:

Secondary CTD

Make: _____ model: _____ serial number: _____

Primary temperature serial number:

Primary conductivity serial number:

Secondary temperature serial number:

Secondary conductivity serial number:

Transmissometer: _____

Model: _____

Fluorometer: Model	Cable gain:
--------------------	-------------

Oxygen sensor: _____ Model: _____

PAR sensor: ☒ Model: ☒

Other sensors:

Other sensors:

Other sensors:

Other sensors:

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

Rosette Setup:

Number of bottles: 24
Manufacturer: TOS
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: _____

Rosette Setup:

Number of bottles: 27
Manufacturer: _____
Volume of bottles (litres): _____

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:

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 1 of

Month <u>FEB</u>				Year <u>2012</u>			Ship <u>TULLY</u>				Cruise ID <u>2012-01</u>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
23	SI	02:15	BE	ROS	US	1	48° 39.287	123° 30.242	187	150	1-4	4	N ²	✓	Seapoint fluorometer saturating
		02:21	BO				48° 39.234	123° 30.281							Supposed to be 1-15
		02:25	EN				48° 39.224	123° 30.308							see over →
23	40	06:48	BE	ROS	US	2	49° 8.518	123° 36.848	155	150	5-10	6	N ² /AP	✓	
		06:53	BO				49° 8.524	123° 36.816							
		07:02	EN				49° 8.545	123° 36.786							
23	39	07:49	BE	ROS	US	3	49° 9.790	123° 32.896	374	365	11-22	12	N ² /AP	✓	looks like chl max @ 15m
		07:57	BO				49° 9.767	123° 32.921							
		08:14	EN				49° 9.784	123° 32.951							
23	38	09:02	BE	ROS	US	4	49° 11.993	123° 26.239	303	292	23-28	6	N ² /AP	✓	
		09:09	BO				49° 11.969	123° 26.251							
		09:20	EN				49° 11.978	123° 26.214							
23	37	10:16	BE	ROS	US	5	49° 13.584	123° 20.527	208	200	29-34	6	N ² /AP	✓	
		10:20	BO				49° 13.584	123° 20.532							
		10:31	EN				49° 13.625	123° 20.513							
24	28	06:36	BE	ROS	US	6	49° 24.136	123° 45.229	137	129	35-40	6	N ²	NO	- forgot oops!
		06:40	BO				49° 24.161	123° 45.172							
		06:47	EN				49° 24.162	123° 45.101							

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

Notes:

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

Produced by the Water Properties Group, IOS

WaterProperties.ca
 Version: 16 April 2010

Scapoint and Wetlabs fluorimeters are not in agreement at all, Wetlabs giving values less than $\frac{1}{2}$ of Scapoint

Lanyard on Niskin 1 needs to be longer! impossible to arm!

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 2 of

Month <u>FEB</u>				Year <u>2012</u>			Ship <u>TULLY</u>				Cruise ID <u>2012-14</u>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
24	27B	0725	BE	ROS	US	7	49° 21.436	123° 46.540	128	120	41-46	6	N2	✓	bottom shoaling to 114m by end of cast
		0728	BO				49° 21.420	123° 46.477							
		0735	EN				49° 21.455	123° 46.446							
24	27	0823	BE	ROS	US	8	49° 19.159	123° 48.094	346	340	47-58	12	N2	✓	chl max ~20m
		0831	BO				49° 19.133	123° 48.150							
		0848	EN				49° 19.156	123° 48.142							
24	26B	0941	BE	ROS	US	9	49° 16.601	123° 49.308	411	400	59-64	6	N2		418 on sounder
		0949	BO				49° 16.609	123° 49.309							411 from altimeter
		1002	EN				49° 16.616	123° 49.336							
24	26	1045	BE	ROS	US	10	49° 14.351	123° 50.894	254	244	65-70	6	N2	✓	unstable water @10m bottle
		1050	BO				49° 14.351	123° 50.897							
		1100	EN				49° 14.369	123° 50.892							big Sal, Temp sensor effects
25	24B		BE	ROS	US	11	49°	124°	174		71-76	6	N2	✓	→ see even
			BO				49°	124°							
			EN				49°	124°							
	Saturday morning Feb 25. Hugh came on board to re-terminate cable in SI														
26	47	0610	BE	ROS	US	11	48° 49.288	123° 6.170	186	175	71-76	6	N2	✓	reusing unused sample #'s from last night
		0615	BO				48° 49.296	123° 6.157							
		0623	EN				48° 49.302	123° 6.128							

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

Notes:

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

Produced by the Water Properties Group, IOS

WaterProperties.ca
 Version: 16 April 2010

Problem launching, wire jumped the shieve, heard horrible scraping sound
have noone on board to reterminate

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 3 of

Month				Year			Ship				Cruise ID				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
26	46	0714	BE	ROS	US	12	48° 51.406	123° 10.697	177	168	77-88	12	N ²	✓	
		0717	BO				48° 51.396	123° 10.680							
		0730	EN				48° 51.373	123° 10.726							
26	45	0825	BE	ROS	US	13	48° 53.812	123° 9.010	130	120	89-94	6	N ²	✓	
		0828	BO				48° 53.808	123° 9.040							
		0835	EN				48° 53.777	123° 9.040							
26	AP	1004	BE	ROS	US	14	48° 55.228	123° 18.190	189	180	95-100	6	N ²	no	out of Kinnikinnick
		1009	BO				48° 55.218	123° 18.240							
		1018	EN				48° 55.240	123° 18.244							
26	43	1125	BE	ROS	US	15	49° 0.221	123° 30.125	203	196	101-106	6	N ²		see above
		1129	BO				49° 0.254	123 30.102							
		1138	EN				49° 0.269	123° 30.118							
26	42	1222	BE	ROS	US	16	49° 1.854	123° 26.144	319	310	107-118	12	N ²		
		1229	BO				49° 1.840	123° 26.176							
		1245	EN				49° 1.909	123° 26.191							
26	41	1322	BE	ROS	US	17	49° 3.334	123° 22.240	241	230	119-124	6	N ²		
		1327	BO				49° 3.328	123° 22.228							
		1336	EN				49° 3.355	123° 22.258							

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

Notes: _____

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

Produced by the Water Properties Group, IOS

WaterProperties.ca
Version: 16 April 2010

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 4 of

[illegible]

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

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

maybe we need more weight on rosette, operators say they
have to go slow until 50m due to insufficient weight,
is this messing up data?