

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

2015-22

DATE:

From: 4 Mar 2015

to:

VESSEL:

Charter - Salacia

PROJECT(S):

SOG Zooplankton

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

WaterProperties.ca

Captain: John Platt
 Second Officer: _____
 Fishing Master: _____
 First Officer: Piper Harris
 Third Officer: _____

Mission Participants / Agencies: PSF DFO

Scientific Personnel:	Chief Scientist:
Name	Name
Watch	Watch
Cabin	Cabin

Kelly Jang

Second leg of Mission:

Name	Chief Scientist:		Cabin	Watch

[illegible]

Data logging computer:

Data acquisition program: _____

CTD deck unit make: 5033 model: 5033 serial number: _____

Primary CTD

Make: Subaru model: Impreza serial number: 2553726-0456

Primary temperature serial number: _____

Primary conductivity serial number:

Secondary temperature serial number:

Secondary conductivity serial number:

Transmissometer: _____ Model: _____ s/n: _____

Fluorometer: Model Net Labs FLR10 Cable gain: _____ s/n: 2214 **P, S or NO pump?** P

Oxygen sensor: SB643 Model: _____ s/n: 431592 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):

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Month <u>Mar</u>				Year <u>2015</u>			Ship <u>Charter - Salacia</u>				Cruise ID <u>2015-22</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							
4	SC-04	21:20	BE	CTD		01	48 43.13	123 24.99	87	82	—		Ky		1st cast →
		21:35	BO	NET		02	48 43.12	123 25.04	85	88					SCOR
		21:51		BOT		03	48 43.17	123 25.02	92	0					phyto samples
4	G1-01	22:27	BE	CTD		04	48 45.87	123 20.45	68	62					cast 2
		22:31	EN				48 45.88	123 20.40							
		22:34	BE	NET		05	48 45.88	123 20.39	69						
			BO				48 45.89	123 20.36		58					
			EN				48 45.90	123 20.35	70						
— Steaming N — put de H ₂ O in CTD (attached syringe for night)															
overnight Silva Bay, Gabriola															

CTD 1+4 → Cap on fluorometer, ops!

Sunny day.

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Month <u>Mar</u>				Year <u>2015</u>			Ship <u>Charter Salacia</u>			Cruise ID <u>2015-22</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							
5	GE01	15:50	BO	NET		06	N491503	W1234498							
		16:03	BO				N491507	W1234490		340*					*No more wire on winch
		16:13	EN				N491508	W1234482							
	GE01	16:33	BO	CTD		07	N491507	W1234487	1500ft	Chart - 1300ft.					cast 4 problems w/ winch
		16:39	BO				N491509	W1234483		290					→
		16:47	EN				N491510	W1234477							
	GE01	17:06	BO	CTD		08	N491504	W1234488							cast 5
	B	17:16	BO				N491505	W1234481		340	SAL #1	1			Niskin Sam 1 above CTD
		17:28	EN				N491506	W1234478							
5	CPF1	19:17	BO	CTD		09	N492200	W1240497	550ft	Chart - 430m					cast 6
		19:23	BO				N492200	W1240498		235					
		19:29	EN				N492200	W1240497							
	CPF1	19:34	BO	NET		10	N492201	W1240497							
		19:48	BO				N492201	W1240497		235					
		19:56	EN				N492200	W1240498							
	CPF1	19:58	MR	BOT		11	4922.0	1240498		surf.					phyto samples (L, f + gunk)

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 & Fluorometer are to be cleaned before each cast

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morning
Weather: partly cloudy

Cast 3 - No. winch power. Recovered CTD + turned off (no useful data) not counted in event #1's

24V (2x12V batteries) not enough? Winch not holding speed, speed slows (almost stops) then picks up again when going down.

Nylon attached after 2 min soak. waited at bottom for messenger before retrieval.

afternoon
weather: overcast / cloudy

winch still acting flakey

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Month <u>March</u>			Year <u>2015</u>			Ship <u>Charley S. Young</u>			Cruise ID <u>2015-22</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							
5	28		BE	CTD		12			135?						No bottom from
		20:13	BO				N49 24 15	W123 45 25		130					Sounder
		20:18	EN				N49 24 18	W123 45 26							cast 7
	28	20:21	BE	NET		13	N49 24 19	W123 45 26	136						Sounder @ 440 ft
		20:28	BO				N49 24 24	W123 45 28		130					
		20:32	EN				N49 24 26	W123 45 28							
5	38			NET		14									
		23:09	BE			3:09	N49 11.97	W123 26.37	?294						No bottom depth
		23:17	BO			3:17	N49 11.95	W123 26.34		285					from sounder
		23:25	EN			3:25	N49 11.93	W123 26.30							
	38	23:30	BE	CTD	#15	3:30	N49 11.91	W123 26.27	?						cast 8
		23:38	BO			3:38	N49 11.88	W123 26.21		285					
		23:46	EN			3:46	N49 11.85	W123 26.21							
	38	23:47	MR	BOT	#16	3:47	N49 11.85	W123 26.20	?	surface					phyto - sample - Lugols only

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 & Fluorometer are to be cleaned before each cast

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WaterProperties.ca
Version: 7 July 2014

Cast Type:	USW = Sea Water Loop	Bottle Firing Method:	Time Code:	Transmissometer & Fluorometer are to be cleaned before each cast
BOT = Bottle cast, no CTD	MOR = Mooring	US = Up / Stop	BE = Beginning Time of Cast	
CTD = CTD without Rosette	NET = Plankton Net Haul	UN = Up / No stop	BO = Bottom Time of Cast	
ROS = Rosette plus CTD	DRF = Drifter	DN = Down / No stop	EN = End Time of Cast	
SET = Fish Set	=			
		Notes:		

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

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Problems uploading last few casts at end of day. When trying to upload, gave error: "Error interpreting Header Message", could only hit OK, and would let you continue the upload. But when data uploading occurred, would stop and give error: "Run-time error 11 - Division by zero", and Seaterm would quit. Re-opening Seaterm, doesn't allow you to re-connect to CTD. Disconnecting everything, restarting computer before trying Seaterm again gave errors "com port 4 already in use", or Seaterm would just show scrolling characters. Restart again, and could establish connection w/ CTD, but would give same errors. Just put CTD in "gs" in hopes it would continue logging. (hex).

- does show all casts in memory, just won't upload full cast. Gives data for download that can be viewed in graphing program, but gives error for upload (scan # not what was expected?).
- Batts at 11.9-12.3 V
- Contacted Scott, said never experienced this - to call SBE directly 425-643-9866 ext 3.
- Think it's an issue with the laptop. Only 3 stations to go, will run as normal & get data off back at 105.

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Month <u>March</u>				Year <u>2015</u>			Ship <u>Charley Salazar</u>			Cruise ID <u>2015-02</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							
<u>6</u>	<u>41</u>										<u>2</u>				<u>Net in 5m above CTD</u>
		<u>16:27</u>	<u>BE</u>	<u>CTD</u>		<u>19</u>	<u>N 49 03.21</u>	<u>W 123 22.22</u>							<u>attached after 2 min</u>
		<u>16:35</u>	<u>BO</u>				<u>N 49 03.11</u>	<u>W 123 22.12</u>		<u>235</u>					<u>Net on surface</u>
		<u>16:42</u>	<u>EN</u>			<u>20</u>	<u>N 49 03.11</u>	<u>W 123 22.01</u>							<u>Net in 40</u>
	<u>41</u>	<u>16:54</u>	<u>BO</u>	<u>NET</u>		<u>20</u>	<u>N 49 03.31</u>	<u>W 123 22.26</u>	<u>245</u>						
		<u>17:04</u>	<u>BE</u>				<u>49 3.27</u>	<u>123 22.27</u>		<u>235</u>					
		<u>17:11</u>	<u>EN</u>				<u>49 3.25</u>	<u>123 22.23</u>							
	<u>41</u>	<u>17:16</u>	<u>MR</u>	<u>BOT</u>		<u>21</u>	<u>49 03.16</u>	<u>123 22.26</u>		<u>surface</u>					<u>phyto sample</u>
<u>6</u>	<u>46</u>														
		<u>18:30</u>	<u>BE</u>	<u>CTD</u>		<u>22</u>	<u>48 51.32</u>	<u>123 10.84</u>	<u>180</u>						<u>cast 11</u>
		<u>18:35</u>	<u>BO</u>				<u>48 51.24</u>	<u>123 10.81</u>		<u>175</u>					
		<u>18:39</u>	<u>LE</u>				<u>48 51.16</u>	<u>123 10.76</u>							
<u>6</u>	<u>46</u>	<u>18:44</u>	<u>BE</u>	<u>NET</u>		<u>23</u>	<u>48 51.83</u>	<u>123 10.80</u>	<u>196</u>						
		<u>18:50</u>	<u>BO</u>				<u>48 51.36</u>	<u>123 10.75</u>	<u>180</u>	<u>170</u>					
		<u>18:55</u>	<u>LE</u>				<u>48 51.31</u>	<u>123 10.72</u>							

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=

Bottle Firing Method:

US = Up / Stop
 UN = Up / No stop
 DN = Down / No stop

Notes:

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Seal at top not great (no o-ring?). Passed check. Not 100% sure bottle/arg. fired at bottom
- touched bottom? No dirt/mud visible on cage/ropes.

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Cast Type:

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* Noticed sediment in tubing when flushing with dH_2O at end of last cart
- may have touched bottom on 1st cart today?