

DAILY SCIENCE LOG BOOK

CRUISE
NUMBER

2017-07

DATE:

From:

20-26
March
2017

To:

VESSEL:

Salacia

PROJECT(S):

Strait of Georgia Zooplankton

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

WaterProperties.ca

**** 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: #32

Data acquisition program: Seasave

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

Primary CTD Cruise #1

Make: SBE ~~201~~ 25+ model: 25+ serial number: 1123

Primary temperature serial number: 4888

Primary conductivity serial number: 4513

Secondary temperature serial number: _____

Secondary conductivity serial number: _____

Transmissometer: _____ Model: _____ s/n: _____

Transmissometer: _____ Model: _____ s/n: _____

Fluorometer: Model ECD Cable gain: 13 s/n: 2214 P, S or NO pump?

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

Oxygen sensor: SBE Model: 43 s/n: 3234 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?

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?

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-rossette casts (e.g., W/E. Ricker)

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Month <u>MARCH</u>			LOCAL		Year <u>2017</u>		Vessel <u>Salacia</u>		Cruise ID <u>2017-07</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
<u>22</u>	<u>GI-01</u>	<u>20</u>	<u>08:44</u>	<u>BE</u>	<u>CTD</u>	<u>-</u>	<u>48° 45.88</u>	<u>123° 20.55</u>	<u>65</u>		<u>-</u>	<u>-</u>	<u>MB</u>	☒	<u>Start of Leg #2</u>
			<u>08:45</u>	<u>BO</u>			<u>48° 45.87</u>	<u>123° 20.53</u>		<u>55</u>	<u>-</u>			☐	<u>OVERCAST</u>
			<u>08:46</u>	<u>CU</u>			<u>48° 45.86</u>	<u>123° 20.52</u>			<u>-</u>			☐	
<u>23</u>	<u>GI-01</u>	<u>20</u>	<u>08:48</u>	<u>BE</u>	<u>NET</u>	<u>-</u>	<u>48° 45.84</u>	<u>123° 20.50</u>	<u>65</u>		<u>-</u>	<u>-</u>	<u>MB</u>	☐	
			<u>08:49</u>	<u>BO</u>			<u>48° 45.83</u>	<u>123° 20.51</u>		<u>55</u>	<u>-</u>			☐	
			<u>08:50</u>	<u>CU</u>			<u>48° 45.83</u>	<u>123° 20.51</u>			<u>-</u>			☐	
<u>24</u>	<u>41</u>	<u>20</u>	<u>11:14</u>	<u>BE</u>	<u>CTD</u>		<u>49° 3.31</u>	<u>123° 22.35</u>	<u>245</u>		<u>9-</u>	<u>1</u>	<u>MB</u>	☒	<u>DEEP SAL x2</u>
			<u>11:18</u>	<u>BO</u>			<u>49° 3.29</u>	<u>123° 22.32</u>		<u>235</u>	<u>-</u>			☐	<u>BROWN WATER</u>
			<u>11:28</u>	<u>CU</u>			<u>49° 3.28</u>	<u>123° 22.31</u>			<u>-</u>			☐	
<u>25</u>	<u>41</u>	<u>20</u>	<u>11:29</u>	<u>BE</u>	<u>BAT</u>	<u>MSG</u>	<u>49° 3.24</u>	<u>123° 22.28</u>	<u>245</u>	<u>5m</u>	<u>10-11</u>	<u>2</u>	<u>MB</u>	☐	<u>Om - 10A+B Chlphy</u>
														☐	<u>Sm - 11A+B Chl</u>
														☐	<u>100mLS each</u>
<u>26</u>	<u>41</u>	<u>20</u>	<u>11:33</u>	<u>BE</u>	<u>NET</u>	<u>-</u>	<u>49° 3.19</u>	<u>123° 22.23</u>	<u>245</u>		<u>-</u>			☐	
			<u>11:38</u>	<u>BO</u>			<u>49° 3.17</u>	<u>123° 22.21</u>		<u>235</u>	<u>-</u>			☐	
			<u>11:44</u>	<u>CU</u>			<u>49° 3.15</u>	<u>123° 22.18</u>			<u>-</u>			☐	
<u>27</u>	<u>38</u>	<u>20</u>	<u>13:01</u>	<u>BE</u>	<u>CTD</u>	<u>-</u>	<u>49° 11.93</u>	<u>123° 26.39</u>	<u>300</u>		<u>-</u>	<u>-</u>	<u>MB</u>	☒	<u>BROWN WATER</u>
			<u>13:06</u>	<u>BO</u>			<u>49° 11.91</u>	<u>123° 26.35</u>		<u>290</u>	<u>-</u>			☐	
			<u>13:11</u>	<u>CU</u>			<u>49° 11.88</u>	<u>123° 26.31</u>			<u>-</u>			☐	
<u>28</u>	<u>38</u>	<u>20</u>	<u>13:13</u>	<u>BE</u>	<u>NET</u>	<u>-</u>	<u>49° 11.87</u>	<u>123° 26.28</u>	<u>300</u>		<u>-</u>	<u>-</u>	<u>MB</u>	☐	<u>WENCH CUTTING</u>
			<u>13:18</u>	<u>BO</u>			<u>49° 11.83</u>	<u>123° 26.22</u>		<u>290</u>	<u>-</u>			☐	<u>ON-WAY UP</u>
			<u>13:23</u>	<u>CU</u>			<u>49° 11.79</u>	<u>123° 26.19</u>			<u>-</u>			☐	

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

BO = Bottom Time of Cast

EN = End Time of Cast

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

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Month <u>MARCH</u>			Year <u>2017</u>			Vessel <u>SALVIA</u>			Cruise ID <u>2017-07</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
29	40	20	14:23	BE	CTD		49° 8.54	123° 36.84	146		-	-	MB	☐	
			14:25	BO			49° 8.52	123° 36.83		136	-			☐	
			14:27	EN			49° 8.50	123° 36.81			-			☐	
30	40	20	15:28	BE	NET		49° 8.49	123° 36.79	146		12-	-	MB	☐	
			15:31	BO			49° 8.47	123° 36.76		136	-			☐	
			15:33	EN			49° 8.46	123° 36.74			-			☐	
31	GE01	20	15:48	BE	CTD	MSG	49° 15.05	123° 44.96	400		-		MB	☐	Bottle on 1-2m algae CTD.
			15:50	BO			49° 15.05	123° 45.83		390	12-	1		☐	DEEP SALTY #12
			16:00	EN			49° 15.05	123° 45.72			-			☐	
32	GE01	20	16:05	BE	DOT	MSG	49° 15.05	123° 44.68	400	5	13-14	2	MB	☐	2xchl rhy → 0m #13 2xchl → 5m #14 140ml each
33	GE01	20	16:10	BE	NET		49° 14.99	123° 44.98	400		-		MB	☐	
			16:20	BO			49° 14.98	123° 44.92		390	-			☐	STILL COMING UP
			16:30	EN			49° 14.99	123° 44.84			-			☐	@ N 300
34	HAIRY Bnk	21	08:27	BE	BOT	MSG	49° 20.40	123° 43.69	-	5	15-16	2	MB	☐	2xchl → 0m #15 RAGNOL 2xchl → 5m #16 140ml each.
35	28	21	09:09	BE	CTD	-	49° 24.11	123° 45.30	134		=	-	MB	☐	
			09:11	BO			49° 24.11	123° 45.31		124	-			☐	
			09:13	EN			49° 24.11	123° 45.32			-			☐	
			:				°	°			-			☐	
			:				°	°			-			☐	

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This page is for any notes or observations

Checked batteries @ end of day 15.9 V

Mister broke stick on the bottle, replaced.

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Month <u>MARCH</u>			Year <u>2017</u>			Vessel <u>SALASOA</u>			Cruise ID <u>2017-07</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
36	28	21	09:14	BE	NET	-	49° 24.17	123° 45.34	134		-	-	MB	☐	
			09:18	BO			49° 24.12	123° 45.35		124	-			☐	
			09:19	EN			49° 24.12	123° 45.35			-			☐	
37	24	21	10:59	BE	CTD		49° 30.30	124° 5.99	425		-	-	MB	☒	
			11:06	BO			49° 30.27	124° 6.03		415	-			☐	
			11:13	EN			49° 30.28	124° 6.07			-			☐	
38	24	21	11:15	BE	NET	-	49° 30.27	124° 6.08	425		-	-	MB	☐	WINDY STALLING
			11:25	BO			49° 30.25	124° 6.13		415	-			☐	UP
			11:36	EN			49° 30.22	124° 6.17			-			☐	
39	22	21	13:16	BE	CTD	MSG	49° 40.25	124° 16.35	353		17	1	MB	☒	2x DEEP SALINITY
			13:23	BO			49° 40.25	124° 16.40		343	-			☐	NIM 2500 CTD
			13:30	EN			49° 40.26	124° 16.41			-			☐	
40	22	21	13:34	BE	NET	-	49° 40.30	124° 16.41	353		-			☐	
			13:43	BO			49° 40.32	124° 16.36		343	-			☐	
			13:50	EN			49° 40.32	124° 16.34			-			☐	
41	BS-11	22	10:50	BE	CTD	-	49° 29.02	124° 46.04	58		-	-	MB	☒	CLOUDY, RAIN
			10:51	BO			49° 29.03	124° 46.07		48	-			☐	STRONG WINDS
			10:57	EN			49° 29.02	124° 46.09			-			☐	
			:				.	.			-			☐	

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Checked batteries on CTD @ end of day 15.9V

ATTEMPTED STN 11 ~ 0830; ABORTED, CONDITIONS TOO ROUGH, HEAD SOUTH, TRY FOR BS-11

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Month <u>MARCH</u>			Local		Year <u>2017</u>		Vessel <u>SALACIA</u>			Cruise ID <u>2017-07</u>					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
							Latitude	Longitude							
42	BS-11	22	10:54	RE	NET	-	49° 29.02	124° 46.11	58		-	-	MB	☐	
			10:55	BO			49° 29.02	124° 46.12		418	-			☐	
			10:56	EN			49° 29.01	124° 46.13			-			☐	
43	CPF2	25	09:04	RE	CTD	MSC	49° 28.04	124° 30.00	325		18	1	MB	☒	2x DEEP SAL. CTD 1m above
			09:10	BO			49° 28.07	124° 30.02		315	-			☐	
			09:18	EN			49° 28.10	124° 30.07			-			☐	
44	CPF2	25	09:21	RE	NET	-	49° 28.12	124° 30.09	325		-		MB	☐	
			09:29	BO			49° 28.14	124° 30.13		315	-			☐	
			09:36	EN			49° 28.15	124° 30.12			-			☐	
45	CPF1	25	11:30	RE	CTD	-	49° 21.99	124° 5.07	245		-	-	MB	☒	
			11:35	BO			49° 21.97	124° 5.09		235	-			☐	
			11:39	EN			49° 21.95	124° 5.11			-			☐	
46	CPF1	25	11:41	RE	NET	-	49° 21.93	124° 5.12	245		-	-	MB	☐	
			11:48	BO			49° 21.89	124° 5.17		235	-			☐	
			11:53	EN			49° 21.87	124° 5.18			-			☐	
47	46	25	16:42	RE	CTD	-	48° 51.38	123° 10.92	176		-	-	MB	☒	
			16:46	BO			48° 51.38	123° 10.92		166	-			☐	
			16:49	EN			48° 51.37	123° 10.95			-			☐	
			:				.	.			-			☐	

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Notes:

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WEATHER DATA IN COMOX MARCH 23 + 24, HEAVY WINDS FROM THE SE 20 → 40 Kts
MARCH 25 - CLEAR + CALM DEPART COMOX.

CHECKED BATTERIES ON INSTRUMENT 16.0 V

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Month <u>MARCH</u>			Year <u>2017</u>		Vessel <u>SALACTA</u>			Cruise ID <u>2017-07</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
							Latitude	Longitude						
48	46	25	16:50	BC	NET	-	48° 51.37	123° 10.97	176		-	-	☐	
			16:54	BO			48° 51.38	123° 10.98		169	-	MB	☐	
			16:58	EN			48° 51.37	123° 10.99			-		☐	
49	HAROSS	26	08:05	BC	CTD	-	48° 36.92	123° 14.93	225		-	MB	☐	
			08:09	BO			48° 36.80	123° 14.86		215	-		☐	Cloudy, slightly
			08:13	EN			48° 36.72	123° 14.83			-		☐	RAINING
50	HAROSS	26	08:19	BC	NET	-	48° 36.06	123° 15.00	225		-	MB	☐	
			08:24	BO			48° 36.93	123° 14.92		215	-		☐	
			08:29	EN			48° 36.82	123° 14.91			-		☐	
51	SC-04	26	09:46	BC	CTD	-	48° 43.57	123° 24.96	90		-	MB	☐	
			09:42	BO			48° 43.53	123° 24.95		80	-		☐	
			09:44	EN			48° 43.53	123° 24.94			-		☐	
52	SC-04	26	09:46	BC	ROS	MSG	48° 43.55	123° 24.91	90	5	19-20	2	MB	☐
53	SC-04	26	09:49	BC	NET	-	48° 43.58	123° 24.86	90		-		☐	2xchl + phy On #19
			09:51	BO			48° 43.59	123° 24.85		80	-		☐	2xchl + phy On #20
			09:52	EN			48° 43.59	123° 24.85			-		☐	140ml each
54	CBC2	26	10:47	BC	CTD	-	48° 44.25	123° 34.48	65		-	MB	☐	
			10:48	BO			48° 44.25	123° 34.49		55	-		☐	
			10:49	EN			48° 44.26	123° 34.50			-		☐	

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