

DAILY SCIENCE BOOK

MISSION
NUMBER

2015-22

book 2

DATE:

VESSEL:

PROJECT(S):

From:

To:

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

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: Notebook #13

Data acquisition program: Seasave

CTD deck unit make: N/A model: serial number:

Primary CTD

Make: SBE model: 25 serial number: 0456

Primary temperature serial number: 5130

Primary conductivity serial number: 3560

Secondary temperature serial number:

Secondary conductivity serial number:

Transmissometer: Model: s/n:

Transmissometer: Model: s/n:

Fluorometer: Model ECO (wet lab) 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: 1592 P, S or NO pump?

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

Other sensors: Pressure, SBE 29 s/n: 0668 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-rossette casts (e.g., W.E. Ricker)

Scientific Equipment Used During Cruise

This sheet allows you to enter all of the equipment used while on board. Please use the separate CTD sheet for entry for SBE 9/16/19/25.

Other CTD units:

RBR Serial Number: _____ Sensors: _____

Others: _____

Plankton Nets:

Bongo #1 Frame Size: _____ cm

Mesh: _____ μ m Flowmeter: _____

Bongo #2

Frame Size: _____ cm

Mesh: _____ μ m Flowmeter: _____

Frame Size: _____ cm

Mesh: _____ μ m Flowmeter: _____

Multinet ☐ BIONESS ☐ Neuston ☐ Others: _____

Trawl Gear:

Midwater Trawls: SOG ☐ Highseas ☐ Pelagic ☐ Other: _____

Bottom Trawls: Atlantic Western I/A ☐ Yankee 36 Hard & Soft Bottom ☐ Other: _____

American Shrimp Trawl ☐

Notes: _____

Trawl Doors: USA Jet ☐ Tyburon ☐ _____

Sounders : Wesmar 380 ☐ Others: _____

Acoustics:

Echosounder #1 _____ Frequencies (KHz): 12 ☐ 18 ☐ 38 ☐ 70 ☐ 120 ☐ 200 ☐

Others: _____

Echosounder #2 _____ Frequencies (KHz): 12 ☐ 18 ☐ 38 ☐ 70 ☐ 120 ☐ 200 ☐

Others: _____

Software & Notes: _____

Other Gear in Operation:

1. _____
2. _____
3. _____
4. _____
5. _____

Trip #4 Salacia 2015-22: 1) CTD lowered into the water to 10 meters, back to surface + let sit for total time of 2 mins before full cast.

2) Net tow descent rate $\approx 0.5 \text{ m/sec}$. Ascent rate $\approx 0.8 \text{ m/sec}$ which is the max rate the electric winch can attain.

Captain: John Plant
Crew: Piper Harris

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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Month <u>May</u>			Local		Year <u>2015</u>	Vessel <u>Salacia</u>		Cruise ID <u>2015-22</u>		Trip # <u>4</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/FI Cleaned	Comments
99	59	4	10:07	BE	CTD		48° 37.72	123° 14.51	225		-		GC	☒	Sunny w clouds
			10:14	BO			48° 37.46	123° 14.40		215	-			☐	calm.
			10:17	EN			48° 39.31	123° 14.31			-			☐	
100	59		10:26	BE	NET		48° 37.78	123° 14.56	225		-			☐	
			10:33	BO			48° 37.61	123° 14.44		215	-			☐	
			10:37	EN			48° 34.99	123° 14.35			-			☐	
101	46		12:36	BE	CTD		48° 51.38	123° 10.77	178		-		GC	☒	
			12:40	BO			48° 51.38	123° 10.73		168	-			☐	
			12:44	EN			48° 51.38	123° 10.72			-			☐	
102	46		12:46	BE	NET		48° 51.38	123° 10.69	178		-			☐	Sunny w clouds
			12:52	BO			48° 51.37	123° 10.67		165	-			☐	~ 7 kts wind SE
			12:58	EN			48° 51.37	123° 10.64			-			☐	slight chop.
103	41		14:24	BE	CTD		49° 03.34	123° 22.24	245		-		GC	☒	
			14:30	BO		MR	49° 03.38	123° 22.25		235	26 (arb)	1		☐	Salinity 235 meters
			14:36	EN			49° 03.43	123° 22.25			-			☐	
104	41		14:49	MR	Bot	MR	49° 03.34	123° 22.35	245	5	27-28	2		☐	27 = 5m 60ml filtered 28 = 6m 60ml filtered
			14:47	BE	NET		49° 03.41	123° 22.40	245		-			☐	
			14:55	BO			49° 03.45	123° 22.42		235	-			☐	
			15:01	EN			49° 03.52	123° 22.41			-			☐	

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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 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>May</u>			Year <u>2015</u>			Vessel <u>Salvador</u>			Cruise ID <u>2015-22</u>						
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/Fl Cleaned	Comments
							Latitude	Longitude							
105	40	4	16:13	BE	CTD		49° 08.65	123° 36.73	146		-		GC	☐ ☐	Cloudy, windy
			16:15	BO			49° 08.69	123° 36.69		136	-			☐ ☐	15 knts SW
			16:17	EN			49° 08.72	123° 36.66			-			☐ ☐	
106	40	4	16:20	BE	NET		49° 08.61	123° 36.76	146		-			☐ ☐	
			16:26	BO			49° 08.66	123° 36.72		136	-			☐ ☐	
			16:28	EN			49° 08.70	123° 36.69			-			☐ ☐	
End of day			Wind too high.		Heading for Namaia.						-			☐ ☐	
			:				.	.			-			☐ ☐	
107	GEO 1	5	7:00	BE	CTD		49° 15.04	122° 44.92	400		-		G.C.	☒ ☒	
			7:07	BO		MR	49° 15.04	123° 44.84		390	29-	1		☐ ☐	Salinity at 6
			7:15	EN			49° 15.04	122° 44.80			-			☐ ☐	
108	GEO 1	5	7:24	BO		MR	49° 14.96	123° 44.98	400	5	30-31	2		☐ ☐	30-0m } 120mls filtered 31-8m }
109	GEO 1	5	7:30	BE	NET		49° 14.92	123° 44.84	400		-			☐ ☐	
			7:43	BO			49° 14.88	123° 44.72		390	-			☐ ☐	
			7:51	EN			49° 14.85	123° 44.69			-			☐ ☐	
			:				.	.			-			☐ ☐	
110	CPF1	5	9:34	BE	CTD		49° 22.02	124° 04.95	245		-		G.C.	☒ ☐	
			9:37	BO			49° 21.99	124° 04.91		235	-			☐ ☐	
			9:42	EN			49° 21.92	124° 04.87			-			☐ ☐	

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 DRF = Drifter

Bottle Firing Method:

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 DN = Down / No stop

Notes:

Time Code:

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 EN = End Time of Cast

CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

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Month <i>May</i>				Year <i>2015</i>			Vessel <i>Salacia</i>			Cruise ID <i>2015-22</i>					
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							
111	CPF1	5	0:44	BE	NET		49 ° 21.9	124 ° 04.86	245		-			☐ ☐	
			9:51	BO			49 ° 21.94	124 ° 04.79		235	-			☐ ☐	
			9:56	EN			49 ° 21.91	124 ° 04.73			-			☐ ☐	
			:				.	.			-			☐ ☐	
112	CPF2	5	11:47	BE	CTD		49 ° 27.98	124 ° 29.99	325		-		GC	☒ ☐	Sknt NW Overcast
			11:52	BO			49 ° 27.96	124 ° 29.93		315	-			☐ ☐	Wchwere
			11:59	EN			49 ° 27.95	124 ° 29.89			-			☐ ☐	
113	CPF2	5	12:03	BE	NET		49 ° 27.98	124 ° 29.96	325		-			☐ ☐	
			12:13	BO			49 ° 27.97	124 ° 29.91		315	-			☐ ☐	
			12:20	EN			49 ° 27.95	124 ° 29.88			-			☐ ☐	
			:				.	.			-			☐ ☐	
114	BS-11	5	13:38	BE	CTD		49 ° 29.01	124 ° 46.01	60		-		GC	☒ ☐	Calm, Sunny
			13:39	BO			49 ° 29.01	124 ° 46.01		50	-			☐ ☐	
			13:40	EN			49 ° 29.01	124 ° 46.01			-			☐ ☐	
115	BS-11	5	13:42	BE	NET		49 ° 29.01	124 ° 46.01	60		-			☐ ☐	
			13:44	BO			49 ° 29.01	124 ° 46.01		50	-			☐ ☐	
			13:48	EN			49 ° 29.01	124 ° 46.01			-			☐ ☐	
	Finished. heading for Conox harbour for fuel.		:				.	.			-			☐ ☐	
			:				.	.			-			☐ ☐	

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Month <u>May</u>				Year <u>2015</u>		Vessel <u>Salacia</u>		Cruise ID <u>2015-22</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/FI Cleaned	Comments
116	11	6	7:09	BE	CTD		49° 42.37	124° 43.40	290		-		GC	☒	15kt winds No 2
			7:14	BO			49° 42.35	124° 43.40		280	-			☐	1 meter Sec.
			7:19	EN			49° 42.31	124° 43.40			-			☐	
117	11	6	7:23	BOT		MR	49°	124°	290	5	32-33	2		☐	32-5m 180m filtered 33-0m 180m filtered
118	11	6	7:28	BE	NET		49° 42.49	124° 43.46	290		-			☐	
			7:42	BO			49° 42.57	124° 43.46		280	-			☐	
			7:46	EN			49° 42.58	124° 43.46			-			☐	
			:				°	°			-			☐	
119	22	6	10:22	BE	CTD		49° 40.25	124° 16.32	353		-			☒	Sunny at sea
			10:29	BO		MR	49° 40.22	124° 16.35		343	34-45	1		☐	Salinity 33.6m ?
			10:35	EN			49° 40.20	124° 16.38			-			☐	Practiced up by accident
120	22	6	10:41	BE	NET		49° 40.20	124° 16.40	353		-			☐	before sending messenger
			10:50	BO			49° 40.15	124° 16.42		343	-			☐	Stopped CTD
			10:55	EN			49° 40.17	124° 16.41			-			☐	sent messenger.
			:				°	°			-			☐	
121	24	6	12:12	BE	CTD		49° 30.32	124° 05.95	425		-			☒	
			12:19	BO			49° 30.29	124° 05.91		415	-			☐	
			12:28	EN			49° 30.28	124° 05.90			-			☐	
			:				°	°			-			☐	

Event Type:
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 DRF = Drifter

Bottle Firing Method:
 US = Up / Stop (default)
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 DN = Down / No stop

Notes:

Time Code:
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CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products
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Month <u>Mar</u>			Year <u>2015</u>			Vessel <u>Sabreia</u>			Cruise ID <u>2015-15</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/FI Cleaned	Comments
122	24	6	12:30	BE	NET		49° 30.27	124° 05.91	425		-		6e	☐ ☐	
			12:40	BO			49° 30.25	124° 05.83		415	-		1	☐ ☐	
			12:50	EN			49° 30.11	124° 05.68			-			☐ ☐	
			:				.	.			-			☐ ☐	
123	28	6	14:20	BE	CTD		49° 24.16	123° 45.44	134		-			☒ ☐	
			14:24	BO			49° 24.18	123° 45.45		124	-			☐ ☐	
			14:27	EN			49° 24.20	123° 45.51			-			☐ ☐	
124	28	6	14:28	BE	NET		49° 24.22	123° 45.53	134		-			☐ ☐	5435
			14:33	BO			49° 24.25	123° 45.58		124	-			☐ ☐	
			14:36	EN			49° 24.26	123° 45.62			-			☐ ☐	
125	Halibut buoy	6	15:08	EN	Bo	MR	49° 20.43	123° 43.66			35-36	2		☐ ☐	35.5m 60mols filtered 30.0m chlorophyll
			:				.	.			-			☐ ☐	
126	38	6	16:32	BE	CTD		49° 11.99	123° 26.73	300		-			☐ ☐	
			16:38	BO			49° 11.98	123° 26.39		290	-			☐ ☐	
			16:42	EN			49° 11.95	123° 26.39			-			☐ ☐	
127	38	6	16:45	BE	NET		49° 11.95	123° 26.39	300		-			☐ ☐	
			16:56	BO			49° 12.00	123° 26.40		290	-			☐ ☐	
			17:02	EN			49° 12.02	123° 26.41			-			☐ ☐	
			:				.	.			-			☐ ☐	

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Notes:

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Distance 20 : 2000 2.23 km

Distance : 20.5 : 2000 2.23 km

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Month <i>May</i>				Year <i>2015</i>		Vessel <i>Salmon</i>		Cruise ID <i>2015-22</i>							
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/FI Cleaned	Comments
29. 128	GI-01	8	8:11	BE	CTD		48° 45.78	123° 20.57	67		-		GC	☒	
			8:12	BO			48° 45.77	123° 20.57		57	-			☐	
			8:13	EN			48° 45.72	123° 20.56			-			☐	
129	GI-01	8	8:15	BE	NET		48° 45.77	123° 20.56			-			☐	
			8:17	BO			48° 45.76	123° 20.55			-			☐	
			8:18	EN			48° 45.76	123° 20.55			-			☐	
30. 130	SC-04	8	8:54	BE	CTD		48° 43.57	123° 24.92	100		-		GC	☒	
			8:56	BO			48° 43.57	123° 24.90		90	-			☐	
			8:58	EN			48° 43.58	123° 24.91			-			☐	
131	SC-04	8	9:04	EN	BOT	MR	48° 43.50	123° 24.92	100	5	37-38	2		☐	37-5m 2-filled 60mbs 38-0m
132	SC-04	8	9:08	BE	NET		48° 43.54	123° 24.87	86		-			☐	
			9:13	BO			48° 43.55	123° 24.86		76	-			☐	
			9:15	EN			48° 43.56	123° 24.84			-			☐	
			:				°	°			-			☐	
			:				°	°			-			☐	
			:				°	°			-			☐	
			:				°	°			-			☐	
			:				°	°			-			☐	
			:				°	°			-			☐	
			:				°	°			-			☐	

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