

DAILY SCIENCE LOG BOOK

Trip 6

28 Aug - 1 Sept

2017-07

DATE:

To: 1 SEPT 2017

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+2 6-10 Mar, 20-24 Mar

Make: SBE ~~2011~~ 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 ECO 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 #3-5-9 June, #4 30 July-4 Aug, #5 + #6

Make: SBE model: 25+ serial number: 1123

Primary temperature serial number: 4888

Primary conductivity serial number: 3396

Secondary temperature serial number: _____

Secondary conductivity serial number: _____

Transmissometer: _____ Model: _____ s/n: _____

Transmissometer: _____ Model: _____ s/n: _____

Fluorometer: Model ECO 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?

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CTD calibration bottle location (height above CTD in metres): 1.2 m (see notes)

This also includes the bottle location above the CTD on non-rosette 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: μm Flowmeter:
Bongo #2 Frame Size: cm Mesh: μm Flowmeter:
SOP Frame Size: 60 cm Mesh: 236 μm Flowmeter: TSK
Frame Size: cm Mesh: μm Flowmeter:

Multinet BIONESS Neuston Others:

Trawl Gear:

Midwater Trawls: SOG Highseas Pelagic Other:

Bottom Trawls: Atlantic Western IIA 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.

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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Month			Year			Vessel				Cruise ID					
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
164	G101	18	06:53	BE	NET		48° 45.699	123° 20.552	65		-		sn	☒ ☐	Scan
			06:55	BO			48° 45.665	123° 20.552		55	-			☐ ☐	
			06:56	EN			48° 45.657	123° 20.556			-			☐ ☐	
165	SC4	18	07:38	BE	CTD		48° 43.488	123° 24.991	90		63-64	2	82	☒ ☐	(86) - 140wl
			07:41	BO			48° 43.456	123° 24.935		85	-			☐ ☐	Filtered
			07:43	EN			48° 43.446	123° 24.925			-			☐ ☐	
166	SC4	18	07:43	BE	NET		48° 43.357	123° 24.841	90		-			☐ ☐	
			07:50	BO			48° 43.379	123° 24.757		80	-		82	☐ ☐	
			07:54	EN			48° 43.359	123° 24.747			-			☐ ☐	
167	CB2	18	08:47	BE	CTD		48° 44.266	123° 34.549	65		-		82	☒ ☐	(87) -
			08:50	BO			48° 44.275	123° 34.513		60	-			☐ ☐	
			08:51	EN			48° 44.275	123° 34.503			-			☐ ☐	
168	CB2	18	08:53	BE	NET		48° 44.275	123° 34.470	65		-			☐ ☐	Scan
			08:55	BO			48° 44.280	123° 34.468		55	-			☐ ☐	
			08:56	EN			48° 44.283	123° 34.462			-			☐ ☐	
169	SI test	28	08:43	BE	CTD		48° 39.389	123° 27.868	~30		-			☐ ☒	test cast to
			08:45	BO			48° 39.389	123° 27.868		25	-	0	N ²	☐ ☐	check data
			08:47	EN			48° 39.389	123° 27.868			-			☐ ☐	uploads ok
			:				.	.			-			☐ ☐	times approx.

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

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

Produced by the Water Properties Group, IOS

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Notes:

This page is for any notes or observations

⇒ START OF TRIP #6

DAILY SCIENCE LOG

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Month <u>AUGUST</u> <u>LOCAL</u>			Year <u>2017</u>			Vessel <u>SALACIA</u>			Cruise ID <u>2017-07</u>						
Event Number	Station Name	Day	Time <u>(UTC)</u>	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
170	59	28	10:31	BE	CTD		48° 36.923	123° 14.930	225		/	/	N2	☐ ☒	
			10:35	BO			48° 36.934	123° 14.919		220	-			☐ ☐	
			10:41	EN			48° 36.938	123° 14.904			-			☐ ☐	
171	59	28	10:44	BE	NET		48° 36.918	123° 14.896	225		-		N2	☐ ☒	SLOK VNH
			10:48	BO			48° 36.930	123° 14.881		215	-			☐ ☐	
			10:55	EN			48° 36.961	123° 14.865			-			☐ ☐	
172	46	28	13:13	BE	CTD		48° 51.319	123° 10.651	176		/	/	N2	☐ ☒	
			13:17	BO			48° 51.288	123° 10.617		171	-			☐ ☐	
			13:21	EN			48° 51.267	123° 10.591			-			☐ ☐	
173	46	28	13:26	BE	NET		48° 51.366	123° 10.788	176		-		N2	☐ ☐	~35° wire angle
			13:33	BO			48° 51.331	123° 10.749		166	-			☐ ☐	big net
			13:36	EN			48° 51.327	123° 10.767			-			☐ ☐	
✓ 174	40	28	16:38	BE	CTD		49° 08.619	123° 36.728	146		/	/	N2	☐ ☒	
			16:40	BO			49° 08.617	123° 36.686		141	-			☐ ☐	
			16:44	EN			49° 08.613	123° 36.628			-			☐ ☐	
175	40	28	16:48	BE	NET		49° 08.589	123° 36.843	146		-		N2	☐ ☐	~5° wire angle
			16:52	BO			49° 08.554	123° 36.815		136	-			☐ ☐	
			16:58	EN			49° 08.551	123° 36.814			-			☐ ☐	
			:				°	°			-			☐ ☐	

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Notes:

DAILY SCIENCE LOG

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Month <u>AUGUST</u>			Year <u>2012</u>			Vessel <u>SAL ALFA</u>			Cruise ID <u>2012-07</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
✓ 176	GEO1	28	15:14	BE	CTD	US	49° 14.983	123° 44.985	400		65	1	N ²	☒ ☐	SAL x 2
			18:11	BO			49° 14.983	123° 44.985		395	-			☐ ☐	wind start/stop
			18:24	EN			49° 14.983	123° 44.985			-			☐ ☐	way down after
177	GEO1	28	18:29	MR	BOT		49° 14.899	123° 44.712	400		-			☐ ☐	300m
			:				.	.		5	66-67	2	N ²	☐ ☐	66-5m 67 0m
178	GEO1	28	18:35	BE	NET		49° 15.031	123° 45.016	400		-			☐ ☐	CHL x 2, PHYTO
			18:47	BO			49° 14.988	123° 44.995		390	-			☐ ☐	
			18:56	EN			49° 14.972	123° 45.005			-			☐ ☐	
179	CPF1	29	07:56	BE	CTD		49° 22.037	124° 04.968	245		-		N ²	☒ ☐	flat calm
			08:00	BO			49° 22.027	124° 04.980		240	-			☐ ☐	sunny
			08:06	EN			49° 22.022	124° 05.004			-			☐ ☐	
180	CPF1	29	08:08	BE	NET		49° 22.015	124° 05.007	245		-		N ²	☐ ☐	
			08:14	BO			49° 22.017	124° 05.016		235	-			☐ ☐	
			08:20	EN			49° 22.015	124° 05.030			-			☐ ☐	
181	CPF2	29	10:23	BE	CTD		49° 28.000	124° 29.969	325		68-	1	N ²	☒ ☐	SAL x 2 319m
			10:29	BO			49° 27.985	124° 29.928		320	-			☐ ☐	
			10:40	EN			49° 27.948	124° 29.903			-			☐ ☐	
182	CPF2	29	10:41	BE	NET		49° 27.943	124° 29.897	325		-		N ²	☐ ☐	
			10:49	BO			49° 27.905	124° 29.892		315	-			☐ ☐	

Event Type:

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=

Bottle Firing Method:

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Notes:

Time Code:

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→ END OF DAY 1 - all files uploaded, renamed by Cast ID and viewed in SEASAVE
PORT: NANAIMO

DAILY SCIENCE LOG

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Month <u>AUGUST</u>			Year <u>2012</u>			Vessel <u>SARACIA</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
182	CPF2	29	10:57	EN	NET		49°27.881	124°29.916			-			☐ ☐	
183	BS11	29	12:15	BE	CTD		49°28.992	124°45.995	58		-		N2	☐ ☒	
			12:16	BO			49°28.994	124°46.000		53	-			☐ ☐	
			12:17	EN			49°28.997	124°46.008			-			☐ ☐	
184	BS11	29	12:19	BE	NET		49°29.002	124°46.017	58		-		N2	☐ ☐	
			12:20	BO			49°29.008	124°46.011		48	-			☐ ☐	
			12:22	EN			49°29.010	124°46.014			-			☐ ☐	
185	11	29	14:27	BE	CTD		49°42.403	124°43.399	290		-		N2	☐ ☒	
			14:32	BO			49°42.424	124°43.386		285	-			☐ ☐	
			14:39	EN			49°42.439	124°43.366			-			☐ ☐	
186	11	29	14:42	MR	BOT		49°42.458	124°43.372	290	5	69-70	2	N2	☐ ☐	69-70ml 2x CTD, photo
187	11	29	14:44	BE	NET		49°42.471	124°43.389	290		-		N2	☐ ☐	
			14:52	BO			49°42.507	124°43.385		280	-			☐ ☐	
			14:59	EN			49°42.520	124°43.380			-			☐ ☐	
188	22	30	16:29	BE	CTD		49°40.247	124°16.416	353		-		N2	☐ ☒	swell
			16:36	BO		MR	49°40.280	124°16.512		347	71-	1		☐ ☐	1 deep str x2
			16:49	EN			49°40.319	124°16.667			-			☐ ☐	much bogging down after 30m
189	22	30	16:54	BE	NET		49°40.190	124°16.301	353		-		N2	☐ ☐	
			17:05	BO			49°40.189	124°16.433		343	-			☐ ☐	

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-This page is for any notes or observations

⇒ END OF DAY 2 - all files uploaded ✓
PORT: POWELL RIVER

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Month <u>AUGUST</u>				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
189	22	30	17:15	EN	NET		49° . .	124° . .			-			☐ ☐	missed end pos.
190	24	30	18:45	BE	CTD		49°30.366	124°05.960	425		-		N2	☐ ☐	not cleaned filter
			18:54	BO			49°30.435	124°05.980		420	-			☐ ☐	
			19:04	EN			49°30.500	124°05.936			-			☐ ☐	
191	24	30	19:09	BE	NET		49°30.339	124°05.972	425		-		N2	☐ ☐	~5° wire angle
			19:19	BO			49°30.474	124°05.950		415	-			☐ ☐	
			19:29	EN			49°30.500	124°05.910			-			☐ ☐	
192	28	31	07:31	BE	CTD		49°24.130	123°45.282	134		-		N2	☐ ☒	big swells
			07:34	BO			49°24.115	123°45.266		129	-			☐ ☐	
			07:37	EN			49°24.101	123°45.241			-			☐ ☐	
193	28	31	07:38	BE	NET		49°24.989	123°45.236	134		-		N2	☐ ☐	
			07:42	BO			49°24.066	123°45.215		124	-			☐ ☐	
			07:45	EN			49°24.054	123°45.212			-			☐ ☐	
194	28	31	08:24	MR	BOT		49°20.352	123°43.603	134		72-73	2	N2	☐ ☐	72.5m 73-0m 70ml 90ml
			:				.	.		5	-			☐ ☐	CH2 x 2 + photo
195	38	31	10:16	BE	CTD		49°12.008	123°26.369	300		74-	1	N2	☐ ☒	
			10:22	BO			° 11.995	° 26.345		295	-			☐ ☐	2x SAL @ 295m
			10:31	EN			° 11.989	° 26.347			-			☐ ☐	
			:				.	.			-			☐ ☐	

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Month <u>AUGUST / SEPT</u>			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							
196	38	31	10:34	BE	NET		49° 11.985	123° 26.338	300		-		N2	☐	
			10:41	BO			49° 11.970	123° 26.333		290	-			☐	
			10:49	EN			49° 11.982	123° 26.311			-			☐	
197	41	31	11:58	BE	CTD		49° 03.249	123° 22.450	245		-		N2	☐	
			12:04	BO			° 03.200	° 22.539		240	-			☐	
			12:09	EN			° 03.181	° 22.625			-			☐	
198	41	31	12:12	MR	BOT		49° 03.123	123° 22.687	245		75-76	2	N2	☐	75-5m 76-0m DSCM + phyto
			:				° .	° .		5	-			☐	140ml filtered
199	41	31	12:19	BE	NET		49° 03.273	123° 22.267	245		-		N2	☐	
			12:28	BO			49° 03.239	123° 22.430		240	-			☐	10-15° angle
			12:34	EN			49° 03.266	123° 22.517			-			☐	added 5m to cast +
200	GI-01	01	08:19	BE	CTD		48° 45.854	123° 20.569	65		-		N2	☐	25 min. soak
			08:20	BO			48° 45.847	123° 20.572		60	-			☐	flat calm
			08:22	EN			48° 45.837	123° 20.575			-			☐	
201	GI-01	01	08:23	BE	NET		48° 45.854	123° 20.576	65		-		N2	☐	
			08:24	BO			48° 45.828	123° 20.583		55	-			☐	
			08:26	EN			48° 45.823	123° 20.587			-			☐	
202	SC-04	01	09:00	BE	CTD		48° 43.464	123° 25.011	90		-		N2	☐	flat calm
			09:02	BO			° 43.448	° 25.043		85	-			☐	

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Month SEPTEMBER				Year 2017		Vessel SARACIA			Cruise ID 2017-07						
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
202	SC04	01	09:04	EN	CTD		48° 43.434	123° 25.063			-		N ²	☐ ☐	
203	SC04	01	09:07	MR	BOT		48° 43.414	123° 25.109	90		77-78		N ²	☐ ☐	77-5m/78-0m
			:				°	°		5	-			☐ ☐	140ml phyto @ 0m
204	SC04	01	09:09	BE	NET		48° 43.396	123° 25.143	90		-		N ²	☐ ☐	
			09:12	BO			48° 43.374	123° 25.173		80	-			☐ ☐	~ 5° angle
			09:14	EN			48° 43.368	123° 25.189			-			☐ ☐	
205	CBE2	01	10:10	BE	CTD		48° 44.215	123° 34.430	65		-		N ²	☐ ☐	flat calm
			10:12	BO			48° 44.214	123° 34.412		60	-			☐ ☐	
			10:13	EN			48° 44.212	123° 34.410			-			☐ ☐	
206	CBE2	01	10:15	BE	NET		48° 44.209	123° 34.398	65		-		N ²	☐ ☐	
			10:16	BO			48° 44.214	123° 34.388		55	-			☐ ☐	
			10:18	EN			48° 44.215	123° 34.380			-			☐ ☐	
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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

Produced by the Water Properties Group, IOS

WaterProperties.ca
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