

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

2017-48

DATE:

From:

24 May 2017

To:

24 May 2017

VESSEL:

Neocaligus

PROJECT(S):

Salish Sea - Soft Zooplankton

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: _____

Data acquisition program: _____

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

Primary CTD

Make: SBE model: 25X serial number: 1123

Primary temperature serial number: _____

Primary conductivity serial number: 4880 3396

Secondary temperature serial number: _____

Secondary conductivity serial number: _____

Transmissometer: _____ Model: _____ s/n: _____

Transmissometer: _____ Model: _____ s/n: _____

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

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

Oxygen sensor: ✓ 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?

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

This also includes the bottle location above the CTD on non-rosette casts (e.g., W.E. Ricker)

DAILY SCIENCE LOG

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Month <u>May</u>				Year <u>2017</u>			Vessel <u>Neocalisus</u>			Cruise ID <u>2017-40</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
✓ 1	GEO 1	21	19:19	BE	CTD	US	49° 15.436	123° 45.161	405	400	1 -	1	<u>SA</u>	☒ ☐	Sal * 2 Samples
			19:25	BO			49° 15.436	123° 45.161			-			☐ ☐	<u>~899m</u>
			19:35	EN			49° 15.436	123° 45.161			-			☐ ☐	
2			19:38	BE	BOT		49° 15.436	123° 45.161	405	5	2 -3	2		☐ ☐	chl, ph, to.
			:				°	°			-			☐ ☐	20m, 3-5m
3	GEO 1	21	19:45	BE	NET		49° 15.436	123° 45.161	405	395	-			☐ ☐	
			19:55	BO			49° 15.436	123° 45.161			-			☐ ☐	SCORE Nit
			20:02	EN			49° 15.436	123° 45.161			-			☐ ☐	
✓ 4	CPF 1	21	21:50	BE	CTD		49° 21.997	124° 04.954	246		-			☒ ☐	
			21:54	BO			49° 21.986	124° 04.959		240	-			☐ ☐	
			21:58	EN			49° 21.951	124° 04.986			-			☐ ☐	
5	CPF 1	21	22:04	BE	NET		49° 21.953	124° 04.935	248		-			☐ ☐	
			22:10	BO			49° 21.978	124° 04.935		240	-			☐ ☐	
			22:14	EN			49° 21.972	124° 05.014			-			☐ ☐	
✓ 6	BS 11	22	01:29	BE	CTD		49° 28.935	124° 45.979	60		-			☒ ☐	18:29 local
			01:30	BO			49° 28.976	124° 45.974		55	-			☐ ☐	
			01:31	EN			49° 28.972	124° 45.974			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	

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

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Sal sample @ 1m above CD. 379?

→ Forget flow cap!

x forget to clean flow as well. Found spray in the evening!

← chl samples → ~~100ml~~ filtered
140ml

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Month			May			Year			2017			Vessel			Neo			Cruise ID			2017-43		
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/H Cleaned	Comments								
7	BS11	22	01:36	BE	NET		49° 28.951	124° 45.967	60		-			☐ ☐	18:36 local								
			01:37	BO			49° 28.945	124° 45.966		50	-			☐ ☐									
			01:38	EN			49° 28.943	124° 45.969			-			☐ ☐									
8	CPF2	22	15:20	BE	CTD		49° 27.977	124° 29.765	328		4 -	1		☐ ☒	Sal * 2C								
			15:25	BO			49° 27.963	124° 29.748		323	-			☐ ☐	322m								
			15:33	EN			49° 27.951	124° 29.761			-			☐ ☐	08:20 local								
9	CPF2	22	15:37	BE	NET		49° 27.930	124° 29.957	328		-			☐ ☐									
			15:44	BO			49° 27.910	124° 29.965		318	-			☐ ☐	SCORE NINH								
			15:50	EN			49° 27.910	124° 29.969			-			☐ ☐									
10	11	22	16:57	BE	CTD		49° 42.401	124° 43.397	301		5-6	2		☐ ☐	5-5m								
			17:02	BO			49° 42.404	124° 43.436		296	-			☐ ☒	6-0m								
			17:06	EN			49° 42.410	124° 43.459			-			☐ ☐	1057 local								
11	11	22	17:12	BE	NET		49° 42.402	124° 43.466	301		-			☐ ☐	SCORE UNIT								
			17:19	BO			49° 42.397	124° 43.492		291	-			☐ ☐	11:12 local								
			17:23	EN			49° 42.395	124° 43.493			-			☐ ☐									
12	22	22	21:18	BE	CTD		49° 40.195	124° 16.297	255		-	-		☐ ☒	14:18 local								
			21:23	BO			49° 40.162	124° 16.290		250	-			☐ ☐	→								
			21:25	EN			49° 40.146	124° 16.276			-			☐ ☐									
			:				.	.			-			☐ ☐									

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This page is for any notes or observations

280ml on chl samples 5,6

lots of auriela, denophores in water (pleurobrachia)

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Month <u>May</u>				Year <u>2017</u>			Vessel <u>Neo</u>			Cruise ID <u>2017-48</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
13	22	22	21:28	BE	NET		49° 40.140	124° 16.263	250		-			☐ ☐	14:28/ocul
			21:33	BO			49° 35.940	124° 16.242		245	-			☐ ☐	
			21:37	EN			49° 40.104	124° 16.219			-			☐ ☐	
✓ 14	15-2	22	22:42	BE	CTD		49° 38.189	124° 04.992	29		-			☐ ☒	1542 local
			22:43	BO			49° 38.183	124° 04.995		26	-			☐ ☐	
			22:44	EN			49° 38.182	124° 04.996			-			☐ ☐	
15	15-2	22	22:45	BE	NET		49° 38.176	124° 05.000	29		-			☐ ☐	1545/ocul
			22:46	BO			49° 38.173	124° 05.002		20	-			☐ ☐	
			22:47	EN			49° 38.171	124° 05.005			-			☐ ☐	
✓ 16	24	23	15:21	BE	CTD		49° 30.294	124° 05.958	427		7 -	1		☐ ☒	Sol 08:21/ocul C 421m
			15:28	BO			49° 30.221	124° 05.910		422	-			☐ ☐	
			15:38	EN			49° 30.164	124° 05.945			-			☐ ☐	
17	24	23	15:43	BE	NET		49° 30.284	124° 05.991	427		-			☐ ☐	
			15:51	BO			49° 30.242	124° 05.989		417	-			☐ ☐	
			15:58	EN			49° 30.218	124° 05.979			-			☐ ☐	
✓ 18	28	23	17:52	BE	CTD		49° 24.114	123° 45.385	133		8 - 9			☐ ☒	chl x 2 Omi
			17:54	BO			49° 24.120	123° 45.427		128	-			☐ ☐	5m
			17:56	EN			49° 24.123	123° 45.437			-			☐ ☐	10:52/ocul
			:				.	.			-			☐ ☐	280ml filtered,

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Notes:

all chl samples

→ realized I screwed up on chl samples with No dupls.
these ones have dupls.

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Month <u>May</u>				Year <u>2017</u>			Vessel <u>Neo</u>			Cruise ID <u>2017-48</u>					Comments
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	
19	28	23	18:01	BE	NET		49° 24.142	123° 45.475	131		-			☐ ☐	13:00 local
			18:04	BO			49° 24.153	123° 45.495		128	-			☐ ☐	
			18:06	EN			49° 24.158	123° 45.502			-			☐ ☒	
20	38	23	20:10	BE	CTD		49° 12.025	123° 26.405	309		-			☐ ☐	
			20:14	BO			49° 12.075	123° 26.384		304	-			☐ ☐	
			20:19	EN			49° 12.091	123° 26.358			-			☐ ☐	Score VNH
21	28	23	20:21	BE	NET		49° 12.118	123° 26.344	305		-			☐ ☐	
			20:28	BO			49° 12.139	123° 26.285		299	-			☐ ☐	
			20:34	EN			49° 12.160	123° 26.273			-			☐ ☒	25° wire angle
22	41	23	21:53	BE	CTD		49° 03.295	123° 22.297	243		10-11	2		☐ ☐	added 10m.
			22:03	BO			49° 03.275	123° 22.241		247	-			☐ ☐	140ml filtered
			22:06	EN			49° 03.272	123° 22.224			-			☐ ☐	
23	41	23	22:13	BE	NET		49° 03.236	123° 22.194	236		-			☐ ☐	Score VNH
			22:18	BO			49° 03.193	123° 22.236		228/240	-			☐ ☐	
			22:24	EN			49° 03.185	123° 22.244			-			☐ ☒	0742 local
24	40		14:42	BE	CTD		49° 08.528	123° 36.707	152		-			☐ ☐	rough seas 50
			14:44	BO			49° 08.439	123° 36.668		147	-			☐ ☐	wire angle
			14:47	EN			49° 08.456	123° 36.634			-			☐ ☐	
			:				.	.			-			☐ ☐	

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Notes:

This page is for any notes or observations

→ 140 ml on chl A samples (all)

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Month <u>May</u>				Year <u>2017</u>		Vessel <u>Neo</u>		Cruise ID <u>201740</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/Fl Cleaned	Comments
25	40	24	14:53	BE	NET		49° 08.540	123° 36.725	160 147		-			☐ ☐	0° but rough
			14:56	BO			49° 08.492	123° 36.682		150 137	-			☐ ☐	sees
			14:59	EN			49° 08.471	123° 36.684			-			☐ ☐	
26	46	24	17:31	BE	CTD		48° 51.345	123° 10.773	179		-			☒ ☐	
			17:34	BO			48° 51.290	123° 10.702		174	-			☐ ☐	
			17:37	EN			48° 51.266	123° 10.692			-			☐ ☐	
27	46	24	17:41	BE	NET		48° 51.367	123° 10.725	177		-			☐ ☐	1045 local
			17:45	BO			48° 51.327	123° 10.683		171	-			☐ ☐	
			17:48	EN			48° 51.312	123° 10.678			-			☐ ☐	
28	GS-01	24	20:25	BE	CTD		48° 45.891	123° 20.585	65		-			☒ ☐	1325 local
			20:27	BO			48° 45.939	123° 20.644		60	-			☐ ☐	
			20:28	EN			48° 45.749	123° 20.643			-			☐ ☐	
29	GS-01	24	20:36	BE	NET		48° 45.903	123° 20.591	64		-			☐ ☐	SCOR VNH
			20:37	BO			48° 45.930	123° 20.624		SA	-			☐ ☐	
			20:39	EN			48° 45.942	123° 20.634			-			☐ ☐	
30	SC-04	24	21:13	BE	CTD		48° 43.530	123° 25.042	96		12-13	2		☒ ☐	chl x2, phyto x1
			21:15	BO			48° 43.563	123° 25.074		91	-			☐ ☐	280m (all)
			21:16	EN			48° 43.562	123° 25.103			-			☐ ☐	
			:				.	.			-			☐ ☐	

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Month <u>May</u>				Year <u>2017</u>		Vessel <u>Neo</u>		Cruise ID <u>2017-43</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
31	SC04	24	21:22	BE	NET		48°43.634	123°25.205	8672		-			☒	1422 (2nd)
			21:23	BO			48°43.644	123°25.212		8662	-			☐	
			21:24	EN			48°43.635	123°25.211			-			☐	
32	CBE2	24	22:16	BE	CTD		48°44.237	123°34.406	66		-			☒	1514 (2nd)
			22:18	BO			48°44.235	123°34.400		61	-			☐	
			22:19	EN			48°44.235	123°34.392			-			☐	
33	CBE2	24	22:20	BE	NET		48°44.233	123°34.384	68		-			☐	
			22:22	BO			48°44.235	123°34.373		58	-			☐	
			22:23	EN			48°44.235	123°34.371			-			☐	
			:				°	°			-			☐	
			:				°	°			-			☐	
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