

DATA SCIENCE LOG BOOK

MISSION
NUMBER

2016-09



DATE:

From: 23 Feb 2016

to:

VESSEL:

Salacia

PROJECT(S):

Strait of Georgia Zooplankton

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

WaterProperties.ca

Band 4800, 7, 1, E

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 7 of

Month <u>March</u>				Year <u>2016</u>				Ship <u>Salacia</u>				Cruise ID <u>2016-09</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							
28	CBE2	1616	BE	CTD		41	48° 44.22	123° 34.38	65				GC	✓	
		1618	BO				48° 44.23	123° 34.37		55					
		1619	EN				48° 44.23	123° 34.36							
28	CBE2	1634	BE	NET		42	48° 44.22	123° 34.43	65				GC		Sunny to cloudy, 5-10 knots wind, seas calm.
		1638	BO				48° 44.21	123° 34.41		55					
		1639	EN				48° 44.21	123° 34.41							
29	CPF1	1610	BE	CTD		43	49° 21.99	124° 04.98	245				GC	✓	
		1616	BO				49° 21.96	124° 04.91		235					
		1621	EN				49° 21.95	124° 04.87							
29	CPF1	1626	BE	NET		44	49° 22.05	124° 05.20	245				GC		15 knots wind 0.5m seas
		1638	BO				49° 22.03	124° 04.95		235					Sunny to few clouds
		1644	EN				49° 22.01	124° 04.91							Murky water w/ phyto.
29	CPF2	1849	BE	CTD		45	49° 27.87	124° 30.06	325				GC	✓	Delayed cast by 500s out with bottle on wire.
		1856	BO		MR		49° 27.84	124° 30.04		315	14	1			Deep salinity sample
		1906	EN				49° 27.77	124° 30.00							
29	CPF2	1920	BE	NET		46	49° 27.96	124° 30.01	325				GC		
		1932	BO				49° 27.88	124° 29.95		315					
		1939	EN				49° 27.86	124° 29.94							

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
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Transmissometer & Fluorometer are to be cleaned before each cast

Produced by the Water Properties Group, IOS

WaterProperties.ca
 Version: 7 July 2014

* time out 1 hr - has it recorded as local + 7
should be local + 8
eg: event 41 BE should be 17:16, not 16:16

Not damaged during cast, torn in 2 places. Chopped out nets, transferred over RBR to spare nets.

DAILY SCIENCE LOG

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Page 8 of

Month		Year		Ship		Cruise ID									
March		2016		Salacia		206-09									
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							
29	BS-11	2102	BE	CTD		47	49 29.01	124 46.05	58						
		2104	BO				49 29.01	124 46.05		42			GC	✓	
		2105	BN				49 29.01	124 46.06							Supposed to be 48 but communication error
29	BS11	2106	BE	NET		48	49 29.02	124 46.06	58						
		2109	BO				49 29.01	124 46.06		48					
		2110	BN				49 29.01	124 46.06							
29	11	2309	BE	CTD		49	49 42.37	124 43.58	290				GC	✓	Problems with winch controller on down cast causing winch to stop + start. Winch fine on upcast in a load.
		2317	BO				49 42.35	124 43.38		280					
		2322	BN				49 42.34	124 43.36							
29	11	2325	BN	BOT		50	49 42.33	124 43.34	290	5	15-16 (a+b)	2	GC		Sample 15 = 0m 16 = 5m
30	11	2329	BE	NET		51	49 42.30	124 43.33	290						
		2339	BO				49 42.30	124 43.30		280					
		2345	BN				49 42.28	124 43.30							
30	22	1912	BE	CTD		52	49 40.21	124 16.37	353				GC	✓	Having problems still with winch stopping + starting on down cast.
		1924	BO		MR		49 40.17	124 16.43		343	17	1			Deep water salinity
		1934	BN				49 40.13	124 16.48							
30	22	1940	BE	NET		53	49 40.21	124 16.28	353				GC		Sunny, high cirrus cloud
		1953	BO				49 40.16	124 16.31		343					flat calm.
		2001	BN				49 40.16	124 16.33							

st Type:

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USW = Sea Water Loop

Bottle Firing Method:

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Transmissometer & Fluorometer are to be cleaned before each cast

Produced by the Water Properties Group, IOS

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* time out, need to ADD +1 hr to correct

Filtered 140 ml for chl *a* samples

DAILY SCIENCE LOG

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Page 9 of

Month <u>March</u>				Year <u>2016</u>			Ship <u>Salucia</u>			Cruise ID <u>2016-09</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							
30	24	2113	BE	CTD		54	49° 30.25	124° 05.94	425				GC	✓	
		2124	BO				49° 30.17	124° 05.95		415					
		2132	EN				49° 30.12	124° 05.96							
30	24	2138	BE	NET		55	49° 30.34	124° 06.04	425				GC		
		2154	BO				49° 30.27	124° 06.00		415					
		2204	EN				49° 30.21	124° 06.00							
30	28	2337	BE	CTD		56	49° 24.09	123° 45.29	134				GC	✓	
		2340	BO				49° 24.10	123° 45.30		124					
		2343	EN				49° 24.09	123° 45.30							
30	28	2347	BE	NET		57	49° 24.08	123° 45.32	134				GC		
		2351	BO				49° 24.07	123° 45.33		124					
		2353	EN				49° 24.07	123° 45.35							
31	1100m Benthic	00:25	EN	BOT	MR	58	49° 20.38	123° 43.68		5	18+19 (arb)	2	GC		Sample # 18 = 0m 19 = 5m
31	Geo1	1434	BE	CTD		59	49° 14.98	123° 44.99	400				GC	✓	300m go down which started doing the starts
		1447	BO		MR		49° 14.91	123° 44.97		390	20	1			Deep water salinity
		1457	EN				49° 14.86	123° 44.98							
31	Geo1	1506	EN	BOT	MR	60	49° 14.79	123° 44.96	400	5	21+22	2	GC		Sample # 21 = 0m 22 = 5m

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* time out, need to ADD + 1 hr to correct

filtered 140mls for chl a samples

stop. Did this all the way to 370 meters depth.

filtered 140mls for chl a samples*

DAILY SCIENCE LOG

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Page 10 of

Month <u>March</u>		Year <u>2016</u>		Ship <u>Salvin</u>		Cruise ID <u>2016-09</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							
31	GRO1	1515	BE	NET		61	49° 15.03	123° 45.01	400				GC		Sunny, calm, lots of
		1528	BO				49° 14.97	123° 45.01		390					photo in water.
		1537	EN				49° 14.95	123° 45.01							Large bloom.
31	40	1651	BE	CTD		62	49° 8.54	123° 36.79	146				GC	✓	
		1655	BO				49° 8.51	123° 36.77		136					
		1658	EN				49° 8.49	123° 36.77							
31	40	1659	BE	NET		63	49° 8.48	123° 36.76	146				GC		Below sunny.
		1704	BO				49° 8.44	123° 36.73		136					
		1707	EN				49° 8.43	123° 36.74							
31	38	1816	BE	CTD		64	49° 12.04	123° 26.38	300				GC	✓	
		1824	BO				49° 12.06	123° 26.38		290					
		1830	EN				49° 12.08	123° 26.36							
31	38	1832	BE	NET		65	49° 12.10	123° 26.33	300				AC.		Calm sunny, murky water.
		1843	BO				49° 12.12	123° 26.32		290					
		1849	EN				49° 12.13	123° 26.30							
31	41	2004	BE	CTD		66	49° 3.29	123° 22.32	245				GC	✓	
		2010	BO				49° 3.27	123° 22.39		235					
		2015	EN				49° 3.25	123° 22.44							
31	41	2019	EN	BOT	MR	67	49° 3.24	123° 22.48	245	5	23-24	2	GC		Sampler 23-24m 24-25m

Cast Type:

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___ =

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* time out, need to ADD + 1 hr to correct

filled tank for China samples.

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Page 11 of

Month <u>March / April</u>				Year				Ship				Cruise ID			
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							
31	41	2026	BE	NET		68	49 3.30	123 22.34	245				GC		
		2036	BO				49 3.26	123 22.40		235					
		2041	EN				49 3.23	123 22.45							
31	46	2221	BE	CTD		69	48 51.29	123 10.72	176				GC	✓	This cast slightly off from actual station position.
		2226	BO				48 51.25	123 10.69		166					
		2229	EN				48 51.21	123 10.66							
31	46	2236	BE	NET		70	48 51.42	123 10.81	176				GC		Calm, sunny.
		2243	BO				48 51.35	123 10.74		166					
		2246	EN				48 51.33	123 10.71							
1	59	1543	BE	CTD		71	48 37.79	123 14.66	225				GC	✓	
		1550	BO				48 37.75	123 14.69		215					
		1554	EN				48 37.73	123 14.71							
1	59	1656	BE	NET		72	48 37.72	123 14.72	225				GC		Clear sunny calm
		1605	BO				48 37.69	123 14.76		215					for bank on Juan de Fuca
		1609	EN				48 37.69	123 14.78							Encounter with whale
1	6101	1736	BE	CTD		73	48 45.86	123 20.53	65				GC	✓	Havo.
		1738	BO				48 45.86	123 20.54		55					
		1739	EN				48 45.85	123 20.55							

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This page is for any notes or observations

* add +1hr to time

DAILY SCIENCE LOG

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Page 12 of

Month			Year		Ship		Cruise ID								
Day	Station Name	Time (UTC) ^x	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							
1	GID1	1241	BE	NET		74	48° 45.84	123° 20.57	65				GC		
		1244	BO				48 45.82	123 20.58		55					
		1245	EN				48 45.82	123 20.58							
1	SC04	1830	BE	CTD		75	48 43.51	123 24.94	90				GC	✓	
		1832	BO				48 43.51	123 24.94		80					
		1835	EN				48 43.51	123 24.94							
1	SC04	1837	EN	BOT	MR	76	48 43.50	123 24.92	90	5	25.2	2	GC		Sample 25.2g/L 2.2 = 5m
1	SC04	1841	BE	NET		77	48 43.45	123 25.00	90				GC		
		1844	BO				48 43.45	123 25.01		80					
		1846	EN				48 43.47	123 25.01							
9	CBC2	^{LOCAL} 10 14	BE	CTD	-	78	48 44 26	123 34 56	65		-	-	MB	✓	Start of Trip. Sunny, Calm
		1015	BO				48 44 26	123 34 56		55					
		1017	EN				48 44 26	123 34 58							
9	CBC2	1019	BE	NET	-	79	48 44 26	123 34 57	65		-	-	MB		
		1023	BO				48 44 26	123 34 60		55					
		1025	EN				48 44 26	123 34 61							
9	SC04	11 25	BE	CTD	-	80	48 43 47	123 24 99	90		-	-	MB	✓	
		1128	BO				48 43 48	123 24 96		80					
		1129	EN				48 43 47	123 24 94							

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WATCH OUT BY 1HR? yes.

1 April, events 74-77 add + 1 hr to correct UTC time.

Filtered 140mls for chl-a samples Ometronken vent leaking.