DA[redacted]CIENCE 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

Captain: John Plant First Officer: _____
Second Officer: _____ Third Officer: _____
Fishing Master: _____

Mission Participants / Agencies: _____

Scientific Personnel: Chief Scientist: Kelly Young

Name	Watch	Cabin	Name	Watch	Cabin
trip #1 - Glenn Cooper,	Fisher				
trip #2 - Glenn Cooper,	Piper				
trip #3 - Mark Belton,	Jesse				

Second leg of Mission: Chief Scientist: _____

Name	Watch	Cabin	Name	Watch	Cabin

Data logging computer: #13
Data acquisition program: _____
CTD deck unit make: _____ model: _____ serial number: _____

Primary CTD
Make: SBE model: 25 serial number: 0456
Primary temperature serial number: 5130
Primary conductivity serial number: 3500
Secondary temperature serial number: _____
Secondary conductivity serial number: _____
Transmissometer: _____ Model: _____ s/n: _____
Fluorometer: Model Wet labs FLO Cable gain: 13 s/n: 2214 **P, S or NO pump?**
Oxygen sensor: SBE Model: 43 s/n: 1592 **(P), S or NO pump?**
PAR sensor: _____ Model: _____ s/n: _____
Other sensors: pressure 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: _____
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: _____
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): _____

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month Apr 1/MAY | **Year** 2016 | **Ship** Salacia | **Cruise ID** 2016-09

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							
1	GIO1	1741	BE	NET		74	48° 45.84	123° 20.57	65				GC		
		1744	BO				48 45.87	123 20.58		55					
		1745	EN				48 45.82	123 20.58							
1	SC04	1830	BE	CTD		25	48 43.51	123 24.94	90				GC	✓	
		1832	BO				48 43.51	123 24.90		80					
		1835	EN				48 43.31	123 24.94							
1	SC04	1837	EN	BOT	MR	26	48 43.50	123 24.92	90	5		2	GC		Surface 25 m 5 m
1	SC04	1841	RE	NET		27	48 43.45	123 25.00	90				GC		
		1845	BO				48 43.43	123 25.01		80					
		1846	EN				48 43.42	123 25.01							
9	CBC2	LOCAL 10 14	BE	CTD	-	78	48 44 26	123 34 56	65		-	-	MB	✓	Start of Trip.
		1015	BO				48 44 26	123 34 56		55					Sunny, Calm
		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	✓	
		11 28	BO				48 43 48	123 24 96		80					
		11 29	EN				48 43 47	123 24 94							

Yes. Water cut by line?

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

Time Code:
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Transmissometer & Fluorometer are to be cleaned before each cast

Notes: _____

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

Filtered 140mls for chl-a samples Ometer niskin vent leaking.

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month MAY **Year** 2016 **Ship** Sarah **Cruise ID** 2016-09

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information: Latitude	Positional Information: Longitude	Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
9	SG04	1133	EN	BOT	MSG	81	48 43 46	123 24 89	90	5	27-28	2	MB	-	Sample 27 → 5m 60mL A+B Sample 28 → 0m 60mL L+phyto
9	SG04	1137	BE	NET	-	82	48 43 44	123 24 86	90		-	-	MB		
		1142	BO				48 43 43	123 24 84		80					
		1144	EN				48 43 42	123 24 87							
9	GE-01	1315	BE	CTD	-	83	48 45 78	123 23 54	65		-	-	MB	✓	
		1317	BO				48 45 74	123 20 55		55					
		1319	EN				48 45 71	123 20 56							
9	GE-01	1323	BE	NET	-	84	48 45 76	123 20 55	65		-	-	MB		
		1326	BO				48 45 70	123 20 58		55					
		1327	EN				48 45 68	123 20 59							
10	GG01	0716	BE	CTD	MSG	85	49 14 99	123 44 86	400		29	1	MB	✓	SUNNY EACH DAY DEEP SALINITY
		0729	BO				49 15 01	123 44 67		390					BOTTLE ×2
		0744	EN				49 15 02	123 44 50							
10	GG01	0757	EN	BOT	MSG	86	49 15 01	123 44 33	400	5	30-31	2	MB	-	Sample 30-5m 60mL Sample 31-0m 60mL L+phytol
10	GG01	0801	BE	NET	-	87	49 15 01	123 45 11	400		-	-	MB	-	
		0823	BO				49 15 03	123 44 87		390					
		0834	EN				49 15 04	123 44 80							

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Produced by the Water Properties Group, IOS

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QUICK STACKING ON THE WAY DOWN, VERY SLOW, START + STOPPING

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month MAY **Year** 2016 **Ship** Sch **Cruise ID** 2016-09

Day	Station Name	Time Local (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information Latitude	Positional Information Longitude	Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
10	CPF1	1100	BE	CTD	-	88	49 21 99	124 4 94	245		-	-	MB	✓	brown/green water
		1106	BO				49 21 95	124 4 87		235					
		1113	EN				49 21 95	124 4 80							
10	CPF2	1114	BE	NET	-	89	49 21 93	124 4 74	245		-	-	MB		
		1127	BO				49 21 88	124 4 62		255					
		1134	EN				49 21 84	124 4 57							
10	CPF1	1137	EN	BOTTLE	-	90	49 21 84	124 4 57	245	SURFACE	32	-	MB		Phytosample in bleach
10	CPF2	1335	BE	CTD	MSG	91	49 27 97	124 29 96	325		33	1	MB	✓	2x Salinity Bottle
		1343	BO				49 27 96	124 29 94		315					
		1355	EN				49 27 83	124 29 90							
10	CPF2	1357	BE	NET	-	92	49 27 81	124 29 89	325			-	MB		
		1419	BO				49 27 70	124 29 86		315					
		1422	EN				49 27 66	124 29 85							
10	BS-11	1538	BE	CTD	-	93	49 28 99	124 45 98	58		-	-	MB	✓	
		1539	BO				49 28 99	124 45 99		48					
		1541	EN				49 28 99	124 45 99							
10	BS-11	1547	BE	NET	-	94	49 28 98	124 45 99	58	48	-	-	MB		
		1544	BO				49 28 98	124 46 02							
		1546	EN				49 28 99	124 46 02							

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Transmissometer & Fluorometer are to be cleaned before each cast

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Version: 7 July 2014

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month MAY **Year** 2016 **Ship** Sakiz **Cruise ID** 2016-09

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information Latitude	Positional Information Longitude	Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
10	11	1740	BE	CTD	-	95	49 42 38	124 43 26	290		-	-	MS	✓	
		1748	BO				49 42 39	124 43 23		280					
		1756	EN				49 42 40	124 43 18							
10	11	1758	EN	BOT	MSG	96	49 42 40	124 43 15	290	5	34-35	2	MS		34-5m Chl ×2 60mL each 35-0m Chl ×2 +Phyto
10	11	1801	BE	NET	-	97	49 42 42	124 43 12	290		.	.	MS		
		1815	BO				49 42 43	124 43 06		280					
		1824	EN				49 42 43	124 43 03							
11	22	1108	BE	CTD	MSG	98	49 40 28	124 16 48	353		36	1	MS	✓	surface. 2x salinity
		1115	BO				49 40 28	124 16 59		343					bottles
		1131	EN				49 40 37	124 16 66							Wire stalling on way down
11	22	1140	BE	NET		99	49 40 16	124 16 20	353				MS		
		1158	BO				49 40 24	124 16 36		343					
		1209	EN				49 40 28	124 16 39							
11	24	1342	BE	CTD	-	100	49 30 34	124 6 05	425		-	-	MS	✓	
		1354	BO				49 30 36	124 6 11		415					
		1408	EN				49 30 41	124 6 18							
11	24	1410	BE	NET	-	101	49 30 43	124 6 21	425		-	-	MS		
		1430	BO				49 30 49	124 6 27		415					
		1444	EN				49 30 52	124 6 26							

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Notes: _____

Slowed and to get a consistent speed.

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month MAY **Year** 2016-09 **Ship** Sarah **Cruise ID** 2016-09

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							
11	28	1633	BE	CTD	-	102	49 24 09	124 45 29	134				MB	✓	
		1636	BO				49 24 09	124 45 32		124					
		1640	EN				49 24 09	124 45 38							
11	28	1643	BE	NET	-	103	49 24 09	124 45 44	134		-	-	MB		
		1649	BO				49 24 10	124 45 58		124					
		1653	EN				49 24 12	124 45 64							
11	HALIBUT BANK	1734	EN	BOT	MSG	104	49 20 41	123 45 75		5	37-38	2	MB	-	37 - 5m CHLA x2 (one) 38 - 0m CHLA x2 (one)
11	40	1902	BE	CTD	-	105	49 8 66	123 36 82	146		-	-	MB	✓	
		1905	BO				49 8 74	123 36 86		136					
		1909	EN				49 8 80	123 36 90							
11	40	1914	BE		-	106	49 8 56	123 36 76	146		-	-	MB		
		1921	BO				49 8 69	123 36 82		136					
		1925	EN				49 8 74	123 36 83							
12	38	0914	BE	CTD	MSG	107	49 17 16	123 26 36	300		39	1	MB	✓	2x Deep Salinity Sunny, 7kn/s wind Winch start/stop w/ 2410m slowed output - better payout
		0921	BO				49 17 17	123 26 32		290					
		0933	EN				49 12 26	123 26 26							
		0935	BE	NET		108	49 12 30	123 26 26	300				MB		
		0950	BO				49 12 40	123 26 16		290					
		0955	EN				49 12 42	123 26 12							

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Notes: _____

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Page ______ of ______

Month	Year	Ship	Cruise ID

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information Latitude	Positional Information Longitude	Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
12	41	1113	BE	CTD	-	109	49 5 27	123 [illegible] 23	225				MB	✓	
		1120	BO				49 5 25	[illegible] 25		225					
		1127	EN				49 5 21	123 [illegible] 28							
12	41	1130	EN	BOT	US	110	49 5 21	123 [illegible] 27	225	5	40-41	2	MB		40 - 5m Chla ×2 [illegible] 41 - [illegible]
12	[illegible]	1134	BE	NET	-	[illegible]	49 5 21	123 [illegible] 27	225						
		1145	BO				49 5 16	123 [illegible] 27		225					
		1153	EN				49 5 13	123 [illegible] 24							
12	46	1325	BE	CTD	-	112	48 51 36	123 10 83	176		-	-	MB	✓	
		1330	BO				48 51 30	123 10 82		166					
		1335	EN				48 51 29	123 10 82							
12	46	1337	BE	NET	-	113	48 51 21	123 10 83	176		-	-	MB		
		1346	BO				48 51 13	123 10 81		166					
		1351	EN				48 51 09	123 10 76							
13	59	0809	BE	CTD	-	114	48 37 90	123 14 58	225		-		MB	✓	
		0814	BO				48 37 88	123 14 60		215					
		0821	EN				48 37 88	123 14 62							
		0823	BE	NET	-	115	48 37 86	123 14 63	225		-		MB		
		0833	BO				48 37 84	123 14 68		215					
		0841	EN				48 37 88	123 14 70							

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