

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

2017-42

DATE:

July 8 2017

From:

To:

July 17 2017

VESSEL:

Sea Crest

PROJECT(S):

Integrated Pelagics Ecosystem Survey

CS: King

WK: Maclean

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

Book 1 of

WaterProperties.ca

**** Chief Scientist to complete section below OR cut and tape from cruise plan ****

Mission Participants / Agencies: ILES DFO

Captain:	NATHAN DORIE
Second Officer:	
Fishing Master:	
First Officer:	
Third Officer:	
Chief Engineer:	

Handwritten: good luck

1 st Leg Scientific Personnel:		Chief Scientist:	
NAME	WATCH CABIN	NAME	WATCH CABIN
		KING	+ BORDY

Name	Watch	Cabin	Name	Watch	Cabin
2nd Leg Scientific Personnel:					
Chief Scientist:					

This image shows a blank sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

**** 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: 25 serial number: 404

Primary temperature serial number: 2449

Primary conductivity serial number: 1764

Secondary temperature serial number: _____

Secondary conductivity serial number: _____

Transmissometer: _____ Model: _____ s/n: _____

Transmissometer: _____ Model: _____ s/n: _____

Fluorometer: Model FLRTD Cable gain: ? s/n: 4185 P, S or NO pump?

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

Oxygen sensor: SBE Model: 43 s/n: 1176 P, S or NO pump?

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

Other sensors: SBE 18 s/n: 6852 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-rosette casts (e.g., W.E. Ricker)

Rosette Setup:

Number of bottles:

Manufacturer:

Volume of bottles (litres):

N/A

Winches:

1. Make:

Model:

Serial #:

Used for:

2. Make:

Model:

Serial #:

Used for:

3. Make:

Model:

Serial #:

Used for:

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

Salinometer:

Make:

Model:

Serial Number:

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

Oxygen Kit(s):

Make:

Model:

Kit Number:

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

Thermosalinograph System (SBE21):

Program:

Version:

Sampling interval (seconds):

Fluorometer sensor serial number:

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

ADCP Setup:

Computer time zone:

Sampling interval (sec):

Bin Length: (2^x):

Pulse Length:

Buffer (bytes):

Gyro Offset:

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

CTD Test Cast Information

Test Cast along side? Yes ☐ No ☒

Comments

Test Cast in Saanich Inlet or other location? Yes ☐ No ☒

Comments

CTD pressure reading on deck (db), before cast: _____ after cast: _____

Pumps working? Yes ☐ (0011) No ☐ (0010)

Secondary Temp - Primary Temp:

(Average from the mixed region)

Secondary Salinity - Primary Salinity:

(Average from the mixed region)

Additional Comments:

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: _____

RBR on trawl + RBR solo on Bongo

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: _____
_____ Frame Size: _____ cm Mesh: _____ μ m 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: Marport on doors + headline

Acoustics:

Echosounder #1 Small 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. _____

Month			Year			Vessel			Cruise ID					
JULY			2017			SEACREST			2017-42					
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	Tms/FI Cleaned	Comments
1001	11170	8	17:50	BE	CTD		51° 4' 316 127° 44' 030	100	90	-	1	HM	☒	CAS 1
			17:52	BO			° ° °			-			☐	
			17:54	EN			° ° °			-			☐	
2001	11170	8	18:00	BE	NET		° ° °	95	90	-	1	HM	☐	BON 160
			18:03	BO			51° 4' 316 127° 47' 719			-			☐	
			18:05	EN			51° 4' 320 127° 47' 049			-			☐	
1002	11041	8	20:18	BE	CTD		51° 2' 007 127° 54' 955	141	130	-	1	HM	☒	CAS 1
			21:15	BO			51° 1' 986 127° 58' 005			-			☐	
			20:25	EN			° ° °			-			☐	
2002	11041	8	20:29	BE	NET		° ° °	142	130	-		HM	☐	BONG 0
			20:32	BO			51° 1' 918 127° 58' 210			-			☐	
			20:35	EN			51° 1' 911 127° 58' 255			-			☐	
1003	11668	8	23:53	BE	CTD		51° 13' 095 127° 51' 497	117	105	-	1	HM	☒	CAS 2
			23:57	BO			51° 13' 140 127° 51' 534			-			☐	
			23:58	EN			° ° °			-			☐	
2003	11668	9	0:36	BE	NET		51° 13' 277	117	105	-	1	HM	☐	BONG 0
			0:36	BO			51° 13' 277 127° 51' 084			-			☐	
			0:37	EN			51° 13' 806 127° 51' 596			-			☐	
			:				° ° °			-			☐	

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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 Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Tms/Fl Cleaned	Comments
1004	10657	9	17:14	BE	CTD		50° 59.918	50° 54.909	76	65	-	1	Hy	☐	CAST 3
			17:15	BO			128° 29.945	128° 29.954			-			☐	
			:	EN			° . .	° . .			-			☐	
2004	10657	9	17:20	BE	NET		° . .	° . .	74	65	-		HM	☐	BONGED
			17:22	BO			50° 54.850	128° 30.001	71		-			☐	
			17:24	EN			50° 54.837	128° 30.012			-			☐	
1005	10528	9	21:15	BE	CTD		50° 53.853	128° 41.800	83	70	-	1	HM	☐	CAST 4
			21:17	BO			50° 53.852	128° 41.772			-			☐	
			21:19	EN			° . .	° . .			-			☐	
2005	10528	9	21:23	BE	NET		° . .	° . .	82	70	-		HM	☐	BONGED
			21:25	BO			50° 53.849	128° 41.162			-			☐	
			21:26	EN			50° 53.848	128° 41.592			-			☐	
1006	11647	10	16:59	BE	CTD		51° 12.454	129° 2.842	161	150	-	1	HM	☐	CAST 5
			17:02	BO			51° 12.418	129° 2.842			-			☐	
			17:06	EN			° . .	° . .			-			☐	
2006	11647	10	17:09	BE	NET		° . .	° . .	155	150	-		HM	☐	BONGED
			17:14	BO			51° 12.276	129° 2.855			-			☐	
			17:17	EN			51° 12.235	129° 2.858			-			☐	
			:				° . .	° . .			-			☐	

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

Notes:

Produced by the Water Properties Group, IOS

WaterProperties.ca

Version: 14 February 2013

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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 Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Tms/FI Cleaned	Comments
1007	11650	10	19:15	BE	CTD		51° 12.323	128° 53.130	121	110	-	1	HM	☐	Cast 6.
			19:17	BO			51° 12.291	128° 53.162			-			☐	
			19:20	EN			° .	° .			-			☐	
2007	11650	10	19:23	BE	NET		° .	° .	122	110	-		HM	☐	Bongo
			19:26	BO			51° 12.184	128° 53.269			-			☐	
			19:29	EN			51° 12.155	128° 53.300			-			☐	
1008	11399	10	22:20	BE	CTD		51° 8.092	128° 55.596	112	100	-	1	HM	☐	Cast 7
			22:22	BO			51° 8.111	128° 55.606			-			☐	
			22:25	EN			° .	° .			-			☐	
2008	11399	10	22:31	BE	NET		° .	° .	113	100	-		HM	☐	Bongo
			22:34	BO			51° 8.232	128° 55.668			-			☐	
			22:36	EN			51° 8.254	128° 55.682			-			☐	
1009	11783	11	16:19	BE	CTD		51° 15.804	128° 25.337	125	110	-	1	HM	☐	Cast 8
			16:21	BO			51° 15.836	128° 25.295			-			☐	
			16:23	EN			° .	° .			-			☐	
2009	11783	11	16:28	BE	NET		° .	° .	122	110	-		HM	☐	Bongo
			16:31	BO			51° 15.966	128° 25.078			-			☐	
			16:32	EN			51° 15.989	128° 25.044			-			☐	
			:				° .	° .			-			☐	

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

Notes:

Produced by the Water Properties Group, IOS

WaterProperties.ca

Version: 14 February 2013

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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 Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
1010	11408	11	18:31	BE	CTD		51° 8.400	128° 24.158	189	150	-	1	Hm	☐	Cast 1
			18:33	BO			51° 8.392	128° 24.142			-			☐	
			18:35	EN			° .	° .			-			☐	
2010	11408	11	18:39	BE	NET		° .	° .	189	150	-		Hm	☐	Bongo
			18:41	BO			51° 8.370	128° 24.087			-			☐	
			18:45	EN			51° 8.366	128° 24.083			-			☐	
1011	10903	11	21:24	BE	CTD		50° 59.908	128° 42.200	66	55	-	1	Hm	☐	Cast 2
			21:25	BO			50° 59.912	128° 42.202			-			☐	
			21:26	EN			° .	° .			-			☐	
2011	10903	11	21:31	BE	NET		° .	° .			-		Hm	☐	Bongo
			21:34	BO			50° 59.986	128° 42.207			-			☐	
			21:35	EN			51° 0.001	128° 42.207			-			☐	
1012	10269	12	17:03	BE	CTD		50° 49.265	129° 13.471	106	95	-	1	Hm	☐	Cast 3
			17:05	BO			50° 49.249	129° 13.438			-			☐	
			17:07	EN			° .	° .			-			☐	
2012	10269	12	17:11	BE	NET		° .	° .	100	90	-		Hm	☐	Bongo
			17:13	BO			50° 49.166	129° 13.255			-			☐	
			17:16	EN			50° 49.150	129° 13.222			-			☐	
			:				° .	° .			-			☐	

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

Notes:

Produced by the Water Properties Group, IOS

WaterProperties.ca

Version: 14 February 2013

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

DAIJI SCIENCE LOG															
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 Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Tms/FI Cleaned	Comments
1013	10524	12	21:19	BE	CTD		50°54.191	128°58.098	66	55	-	1	HM	☐	Cast 4
			21:24	BO			50°54.192	128°58.138			-			☐	
			21:22	EN			°	°			-			☐	
2013	10524	12	21:26	BE	NET		°	°	66	55	-		HM	☐	Bong 2
			21:29	BO			50°54.238	128°58.373			-			☐	
			21:30	EN			50°54.247	128°58.423			-			☐	
1014	10275	13	4:35	BE	CTD		50°49.100	128°51.662	63	50	-	1	HM	☐	Cast 5
			4:36	BO			50°49.085	128°51.650			-			☐	
			4:37	EN			°	°			-			☐	
2014	10275	13	4:39	BE	NET		°	°	69	50	-		HM	☐	Bong 5
			4:42	BO			50°48.920	128°51.558			-			☐	
			4:44	EN			50°48.878	128°51.541			-			☐	
1015	10405	13	16:55	RE	CTD		50°52.179	128°37.263	55	45	-	1	HM	☐	Cast 6
			16:57	BO			50°52.186	128°37.277			-			☐	
			16:58	EN			°	°			-			☐	
2015	10405	13	17:02	RE	NET		°	°	54	45	-		HM	☐	Bong 6
			17:03	BO			50°52.537	128°37.386			-			☐	
			17:04	EN			50°52.245	128°37.410			-			☐	
			:				°	°			-			☐	
do not use Ammonia products															

Event Type: LOOP = Sea Water Loop BOT = Bottle cast (no CTD) CTD = Standalone CTD ROS = CTD in Rosette SET = Fish Set

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

Notes: _____

WaterProperties.ca
Version: 14 February 2013

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 6 of 10

Month				Year			Vessel			Cruise ID						
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	Tms/FI Cleaned	Comments
1016	10277	13	19:39	BE	CTD			50° 48.502	128° 47.427	55	45	-	1	HM	☐	Cast 7
			18:40	BO				50° 48.493	128° 47.430			-			☐	
			18:41	EN				°	°			-			☐	
2016	10277	13	18:45	BE	NET			°	°			-		HM	☐	Bongu
			18:46	BO				50° 48.433	128° 47.481	58	45	-			☐	
			18:47	EN				50° 48.428	128° 47.484			-			☐	
1017	9901	13	20:34	BE	CTD			50° 42.119	128° 51.242	179	150	-	1	HM	☐	Cast 8
			20:37	BO				50° 42.126	128° 51.313			-			☐	Phyto. Inqols
			20:40	EN				°	°			-			☐	taken
207	9901	13	20:43	BE	NET			°	°	180	150	-		HM	☐	Bongu
			20:48	BO				50° 42.129	128° 51.517			-			☐	
			20:50	EN				50° 42.129	128° 51.559			-			☐	
1018	9035	14	16:49	BE				50° 28.074	128° 20.413	168	150	-	1	HM	☐	Cast 9
			16:52	BO				50° 28.074	128° 20.414			-			☐	Phyto. Inqols
			16:55	EN				°	°			-			☐	taken
2018	9035	14	16:59	BE				°	°			-		HM	☐	Bongu
			17:02	BO				50° 28.065	128° 20.364	168	150	-			☐	
			17:05	EN				50° 28.062	128° 20.354			-			☐	
			:					°	°			-			☐	

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

Notes: _____

Produced by the Water Properties Group, IOS
 WaterProperties.ca
 Version: 14 February 2013

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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 Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Tms/FI Cleaned	Comments	
1019	9283	14	18:24	BE	CTD		50° 32.454	128° 27.446	182	150	-	1	HM	☐	Cast 1	
.			18:27	BO			50° 32.458	128° 27.477			-			☐		
.			18:30	EN			° .	° .			-			☐		
2019	9283	14	18:33	BE	NET		° .	° .	182	150	-		HM	☐	Bongos	
			18:37	BO			50° 32.496	128° 27.489			-			☐		
			18:41	EN			50° 32.508	128° 27.493			-			☐		
1020	9281	14	20:07	BE	CTD		50° 32.838	128° 34.297	194	150	-	1	HM	☐	Cast 2	
			20:10	BO			50° 32.831	128° 34.317			-			☐		
			20:14	EN			° .	° .			-			☐		
2020	9281	14	20:19	BE	NET		° .	° .	195	150	-		HM	☐	Bongos	
			20:22	BO			50° 32.894	128° 34.373			-			☐		
			20:25	EN			50° 32.905	128° 34.377			-			☐		
1021	8413	15	17:36	BE	CTD		50° 17.775	128° 8.325	152	140	-	1	HM	☐	Cast 3	
			17:38	BO			50° 17.793	128° 8.292			-			☐		
			17:41	EN			° .	° .			-			☐		
2021	8413	15	17:45	BE	NET		° .	° .	149	140	-		HM	☐	Bongos	
			17:48	BO			50° 17.919	128° 8.165			-			☐		
			17:50	EN			50° 17.951	128° 8.131			-			☐		
			:				° .	° .			-			☐		

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

Notes:

Produced by the Water Properties Group, IOS

WaterProperties.ca
Version: 14 February 2013

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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 Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Tms/FI Cleaned	Comments
1022	8166	15	21:30	BE	CTD		50°13.142	127°58.706	57	45	-	1	Hm	☐	Cast 4
			21:32	BO			50°13.145	127°58.683			-			☐	Phytoplankton
			21:33	EN			° .	° .			-			☐	Water taken
2022	8166	15	21:37	BE	NET		° .	° .	56	45	-		Hm	☐	Bongo
			21:38	BO			50°13.145	127°58.606			-			☐	
			21:39	EN			50°13.148	127°58.594			-			☐	
1023	8042	15	23:42	BE	CTD		50°10.700	127°55.541	65	55	-	1	Hm	☐	Cast 5
			23:44	BO			50°10.712	127°55.539			-			☐	Phytoplankton
			23:46	EN			° .	° .			-			☐	Water taken
2023	8042	15	23:48	BE	NET		° .	° .	50	40	-		Hm	☐	Bongo
			23:51	BO			50°10.756	127°55.525			-			☐	
			23:52	EN			50°10.763	127°55.523			-			☐	
1024	7548	16	16:51	BE	CTD		50°0.878	127°34.867	56	45	-	1	Hm	☐	Cast 0
			16:52	BO			50°0.881	127°34.853			-			☐	Phytoplankton
			16:53	EN			° .	° .			-			☐	Water taken
2024	7548	16	16:57	BE	NET		° .	° .	55	45	-		Hm	☐	Bongo
			16:58	BO			50°0.927	127°34.809			-			☐	
			16:59	EN			50°0.925	127°34.811			-			☐	
			:				° .	° .			-			☐	

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

Notes:

Produced by the Water Properties Group, IOS
WaterProperties.ca
Version: 14 February 2013

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month				Year				Vessel				Cruise ID			
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Latitude	Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Tms/Fl Cleaned	Comments
1025	7424	16	18:15	BE	CTD		49°59.882	127°32.647	52	40	-	1	Hm	☐	Cast 1
			18:16	BO			49°59.886	127°32.636			-			☐	
			18:16	EN			°	°			-			☐	
2025	7424	16	18:20	BE	NET		°	°	52	40	-		Hm	☐	Borgo
			18:22	BO			49°59.925	127°32.596			-			☐	
			18:23	EN			49°59.934	127°32.589			-			☐	
1026	7174	16	20:06	BE	CTD		49°53.796	127°32.482	75	65	-	1	Hm	☐	Cast 2
			20:07	BO			49°53.783	127°32.470			-			☐	
			20:09	EN			°	°			-			☐	
2026	7174	16	20:14	BE	NET		°	°	75	65	-		Hm	☐	Borgo
			20:16	BO			49°53.754	127°32.379			-			☐	
			20:18	EN			49°53.749	127°32.365			-			☐	
1027	6429	17	16:55	BE	CTD		49°42.047	127°15.785	125	115	-	1	Hm	☐	Cast 3
			16:58	BO			49°42.063	127°15.789			-			☐	
			17:00	EN			°	°			-			☐	
2027	6429	17	17:03	BE	NET		°	°	125	115	-		Hm	☐	Borgo
			17:06	BO			°	°			-			☐	
			17:09	EN			49°42.123	127°15.845			-			☐	
			:				49°42.139	127°15.825			-			☐	

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

Notes: _____

Produced by the Water Properties Group, IOS

WaterProperties.ca
Version: 14 February 2013

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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 Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Tms/FI Cleaned	Comments
1028	6676	17	18:52	BE	CTD		49° 46.447	127° 27.858	82	72	-	1	HM	☐ ☐	Cast 4
			18:53	BO			49° 46.449	127° 27.853			-			☐ ☐	
			18:55	EN			° . .	° . .			-			☐ ☐	
2028	6676	17	18:59	BE	NET		° . .	° . .	82	72	-		HM	☐ ☐	Bongo
			19:00	BO			49° 46.477	127° 27.823			-			☐ ☐	
			19:02	EN			49° 46.480	127° 27.819			-			☐ ☐	
1029	7053	17	21:08	BE	CTD		49° 52.600	127° 21.343	70	60	-	1	HM	☐ ☐	Cast 5
			21:11	BO			49° 52.600	127° 21.424			-			☐ ☐	
			21:13	EN			° . .	° . .			-			☐ ☐	
2029	7053	17	21:15	BE	NET		° . .	° . .	70	60	-		HM	☐ ☐	Bongo
			21:17	BO			49° 52.636	127° 21.461			-			☐ ☐	
			21:19	EN			49° 52.656	127° 21.469			-			☐ ☐	
1030	5182	18	17:14	BE	CTD		49° 20.424	127° 6.120	156	140	-	1	HM	☐ ☐	Cast 6
			17:18	BO			49° 20.410	127° 6.022			-			☐ ☐	
			17:19	EN			° . .	° . .			-			☐ ☐	
2030	5182	18	17:24	BE	NET		° . .	° . .	157	140	-		HM	☐ ☐	Bongo
			17:27	BO			49° 20.400	127° 5.715			-			☐ ☐	
			17:30	EN			49° 20.398	127° 5.646			-			☐ ☐	
			:				° . .	° . .			-			☐ ☐	

do not use Ammannia products

Event Type: LOOP = Sea Water Loop BOT = Bottle cast (no CTD) MOR = Mooring CTD = Standalone CTD NET = Plankton Net Haul ROS = CTD in Rosette DRF = Drifter SET = Fish Set

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

Notes: _____

WaterProperties.ca
Version: 14 February 2013

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

2017-42

DATE:

July 18 2017

From:

To:

VESSEL:

Sea Crest

PROJECT(S):

Integrated Pelagics Ecosystem Survey

CS: King
CS: Boldt

WK: MacLean

WK: Fitzpatrick

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

WaterProperties.ca

Book 2 of

[illegible]

**** 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: N/A

CTD deck unit make: Seabird model: 25 serial number: 404

Primary CTD

Make: SBE model: 25 serial number: 404

Primary temperature serial number: 2449

Primary conductivity serial number: 1764

Secondary temperature serial number: _____

Secondary conductivity serial number: _____

Transmissometer: N/A Model: _____ s/n: _____

Transmissometer: _____ Model: _____ s/n: _____

wealabs Fluorometer: Model FLRTD Cable gain: ? s/n: 4185 P, S or NO pump?

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

Oxygen sensor: SBE Model: 43 s/n: 1176 P/S or NO pump?

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

Other sensors: PIT SBE18 s/n: 0852 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-rosette casts (e.g., W.E. Ricker)

Rosette Setup:

Number of bottles: _____

Manufacturer: _____

Volume of bottles (litres): _____

Winches:

1. Make: _____

Model: _____

Serial #: _____

Used for: _____

2. Make: _____

Model: _____

Serial #: _____

Used for: _____

3. Make: _____

Model: _____

Serial #: _____

Used for: _____

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

Salinometer:

Make: _____

Model: _____

Serial Number: _____

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

Oxygen Kits:

Make: _____

Model: _____

Kit Number: _____

Make: _____

Model: _____

Kit Number: _____

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

Thermosalinograph System (SBE21):

Program: _____

Sampling interval (seconds): _____

Fluorometer sensor serial number: _____

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

ADCP Setup:

Computer time zone: _____

User Exits: Name: _____

Name: _____

Exit points: _____

Sampling interval (sec): _____

Bin Length: (2^x): _____

Pulse Length: _____

Buffer (bytes): _____

Gyro Offset: _____

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

CTD Test Cast Information

Test Cast along side? Yes ☐ No ☒

Comments

Test Cast in Saanich Inlet or other location? Yes ☐ No ☐

Comments

CTD pressure reading on deck (db), before cast: _____

after cast: _____

Pumps working? Yes ☐ (0011) No ☐ (0010)

Secondary Temp - Primary Temp: _____

(Average from the mixed region)

Secondary Salinity - Primary Salinity: _____

(Average from the mixed region)

Additional Comments:

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:

RBR on trawle RBR solo on Bongo

Plankton Nets:

Bongo #1 Frame Size: _____ cm Mesh: _____ μm Flowmeter: _____
Bongo #2 Frame Size: _____ cm Mesh: _____ μm Flowmeter: _____
_____ Frame Size: _____ cm Mesh: _____ μm Flowmeter: _____
_____ 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: marport

Acoustics:

Echosounder #1 Simrad 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

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 Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Tms/FI Cleaned	Comments
1031	5560	18	19:19	BE	CTD		49° 27.117	126° 57.143	118	105	-	1	HM	☐	Cast 7
			19:22	BD			49° 27.166	126° 57.113			-			☐	
			19:24	EN			° . .	° . .			-			☐	
2031	5560	18	19:28	BE	NET		° . .	° . .	118	105	-		HM	☐	Bongo
			19:31	BD			49° 27.307	126° 57.125			-			☐	
			19:33	EN			49° 27.328	126° 57.123			-			☐	
1032	5932	18	21:36	BE	CTD		49° 32.863	127° 05.885	128	115	-	1	HM	☐	Cast 8
			21:39	BD			49° 32.854	127° 05.863			-			☐	
			21:42	EN			° . .	° . .			-			☐	
2032	5932	18	21:45	BE	NET		° . .	° . .			-		HM	☐	Bongo
			21:48	BD			49° 32.879	127° 05.816			-			☐	
			21:51	EN			49° 32.888	127° 05.802			-			☐	
1033	3957	20	16:49	BE	CTD		48° 56.611	125° 48.162			-		LF	☐	Cast 9
			16:50	BD			48° 56.621	125° 48.159			-			☐	
			16:51	EN			48° 56.621	125° 48.159			-			☐	
2033	3957	20	16:55	BE	NET		48° 56.639	125° 48.137			-		LF	☐	Bongo
			16:56	BD			48° 56.640	125° 48.128			-			☐	
			16:57	EN			48° 56.640	125° 48.128			-			☐	
			:				° . .	° . .			-			☐	

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

Notes:

Produced by the Water Properties Group, IOS
WaterProperties.ca
Version: 14 February 2013

WK: L. Fitzpatrick on July 20
CS: Jennifer Boldt

NOTE: ON JARS + BAGS CARELS
Event + set # are the last two or three
digits of Event #
eg. Event 1031
Label was 31
eg. Event 2032
Label was 32

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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 Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
1034	3830	20	18:57	BE	CTD		48° 54.789	125° 53.706			-		LF	☐	Cast 1
			18:58	BO			° .	° .			-			☐	
	/		18:59	EN			° 54.787	° 53.703			-			☐	
2034	3830	20	19:02	BE	NET		° .	° .			-		LF	☐	Borgo
			19:03	BO			48° 54.784	125° 53.686			-			☐	
			19:05	GN			48° 54.782	125° 53.680			-			☐	
1035	3706	20	20:31	BE	CTD		48° 51.524	125° 51.055	51	40	-		LF	☐	Cast 2
			20:32	BO			48° 51.521	125° 51.052			-			☐	
			20:33	GN			° .	° .	51		-			☐	
2035	3706	20	20:36	BE	NET		° .	° .	51	40	-		LF	☐	Borgo
			20:37	BO			48° 51.516	125° 51.047			-			☐	
			20:39	GN			48° 51.519	125° 51.044	51		-			☐	
1036	3455	20	18:32	BE	CTD		48° 48.164	125° 52.479	61.5	50	-		CW	☐	Cast 0
			18:32	BO			48° 48.164	125° 52.463			-			☐	
			18:34	GN			° .	° .			-			☐	
2036	3455	20	18:37	BE	NET		° .	° .			-			☐	Borgo
			18:39	BO			48° 48.143	125° 52.366	61.5	50	-		CW	☐	
			18:40	EN			48° 48.141	125° 52.347			-			☐	
			:				° .	° .			-			☐	

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

Notes:

Produced by the Water Properties Group, IOS
WaterProperties.ca
Version: 14 February 2013

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 3 of 3

Month			JULY		Year		2017		Vessel		Sea Crest		Cruise ID		2017-42	
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	Tms/FI Cleaned	Comments	
1037	3207	26	20:29	BE	CTD		48° 42.570	125° 46.887	80	70	-		CW	☐	Cast 01	
			20:30	BO			48° 42.557	125° 46.889			-			☐		
			20:32	EN			° .	° .			-			☐		
2037	3207	26	20:33	BE	NET		° .	° .	80	70	-		CW	☐	Bongo	
			20:35	BO			48° 42.525	125° 46.809			-			☐		
			20:37	EN			48° 42.515	125° 46.785			-			☐		
1038	2209	27	15:58	BE	CTD		48° 24.783	125° 40.671	113	100	-		CW	☐	Cast 0	
			16:00	BO			48° 24.775	125° 40.640	116		-			☐		
			16:02	EN			° .	° .			-			☐		
2038	2209	27	16:06	BE	NET		° .	° .	114	100	-		CW	☐	Bongo	
			16:09	BO			48° 26.736	125° 40.506			-			☐		
			16:11	EN			48° 26.726	125° 40.472			-			☐		
1039	2588	27	18:20	BE	CTD		48° 32.123	125° 27.376	119	110	-		CW	☐	Cast 1	
			18:22	BO			48° 32.106	125° 27.359			-			☐	phytopl. Lugels	
			18:24	EN			° .	° .			-			☐	Collected @ surface FOR PERRY	
2039	2588	27	18:39	BE	NET		° .	° .	196	85	-		CW	☐	Bongo	
			18:43	BO			48° 31.916	125° 27.191			-			☐		
			18:45	EN			48° 31.896	125° 27.171			-			☐		
			:				° .	° .			-			☐		

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

Notes:

Produced by the Water Properties Group, IOS

WaterProperties.ca
Version: 14 February 2013

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 4 of 4

Month			Year		Vessel		Cruise ID		Page					
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	Tms/FI Cleaned	Comments
1040	2468	27	21:09	BE	CTD		48° 28.878 125° 11.505	143	130	-		CW	□□	cast-2
			21:12	BO			48° 28.874 125° 11.450	.		-			□□	
			:	EN			° .			-			□□	
2040	2468	27	21:17	BE	NET		° .			-			□□	Bergo
			21:21	BO			48° 28.831 125° 11.240	143	130	-			□□	
			21:24	EN			48° 28.817 125° 11.175			-			□□	
1041	2204	28	17:00	BE	CTD		48° 27.332 125° 57.240	152	140	-			□□	cast-0
			17:03	BO			48° 27.361 125° 57.218	152		-			□□	
			17:05	EN			° .			-			□□	
2041	2204	28	17:09	BE	NET		° .	151	140	-			□□	Bergo
			17:13	BO			48° 27.434 125° 57.128	.		-			□□	
			17:16	BN			48° 27.438 125° 57.106	150		-			□□	
1042	1833	28	19:37	BE	CTD		48° 19.645 125° 44.700	149	140	-			□□	cast 01
			19:39	BO			48° 19.615 125° 44.668	.		-			□□	
			19:41	EN			° .	149		-			□□	
2042	1833	28	19:44	BE	NET		° .	149.5	140	-			□□	Bergo
			19:48	BO			48° 19.529 125° 44.517	.		-			□□	
			19:51	GN			48° 19.507 125° 44.481	149.6		-			□□	
			:				° .			-			□□	

Event Type:

LOOP = Sea Water Loop

Bottle Ejection Method:

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

Notes:

Produced by the Water Properties Group, IOS
 WaterProperties.ca
 Version: 14 February 2013

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month			07		Year		2017		Vessel			Sea Grest		Cruise ID			2017-42	
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	Trms/FI Cleaned	Comments			
1043	1835	28	21:11	BE	CTD		48° 19.957	125° 37.821	140	130	-		CW	☐	cast 2			
			21:14	BO			48° 19.919	125° 37.772			-			☐				
			21:16	EN			°	°	139		-			☐				
2043	1835	28	21:19	BE	NET		°	°	139	130	-			☐	Bongo			
			21:23	BO			48° 19.812	125° 37.542			-			☐				
			21:25	EN			48° 19.782	125° 37.484	139		-			☐				
1044	4567	29	17:07	BE	CTD		49° 8.814	126° 36.657	129	120	-			☐	cast 0			
			17:09	BO			49° 8.831	126° 36.682			-			☐	mixed swell			
			17:11	EN			°	°			-			☐				
2044	4567	29	17:15	BE	NET		°	°	129	120	-			☐	Bongo			
			17:18	BO			49° 8.909	126° 36.759			-			☐				
			17:20	EN			49° 8.926	126° 36.771			-			☐				
1045	5067	29	19:14	BE	CTD		49° 17.575	126° 35.637	96	85	-			☐	cast 1			
			19:15	BO			49° 17.587	126° 35.629			-			☐				
			19:17	EN			°	°			-			☐				
2045	5067	29	19:20	BE	NET		°	°			-			☐				
			19:25	BO			49° 17.706	126° 35.651	96	85	-			☐	Bongo			
			19:26	EN			49° 17.712	126° 35.647			-			☐				
			:				°	°			-		↓	☐				

Event Type: LOOP = Sea Water Loop BOT = Bottle cast (no CTD) CTD = Standalone CTD ROS = CTD in Rosette SET = Fish Set

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

WaterProperties.ca

Version: 14 February 2013

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 6 of 6

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 Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
1046	S070	29	21:22	BE	CTD		49° 17.791	126° 23.590	47	35	-		CW	☐	cast 2
			21:23	BO			49° 17.794	126° 23.584			-			☐	
			21:24	EN			°	°			-			☐	
2046	S070	29	21:27	BE	NET		°	°	47	35	-			☐	Bongo
			21:29	BO			49° 17.815	126° 23.537			-			☐	
			21:30	EN			49° 17.818	126° 23.526			-			☐	
1047	2952	30	16:59	BE	CTD		48° 40.035	126° 2.765	114	105	-			☐	cast 0
			17:00	BO			48° 40.025	126° 2.725			-			☐	
			17:02	EN			°	°			-			☐	
2047	2952	30	17:04	BE	NET		°	°	114	105	-			☐	Bongo
			17:08	BO			48° 39.991	126° 2.586			-			☐	
			17:10	EN			48° 39.982	126° 2.546			-			☐	
1048	3323	30	19:49	BE	CTD		48° 46.072	126° 15.328	165	155	-			☐	Cast 1
			19:52	BO			48° 46.047	126° 15.283			-			☐	
			19:54	EN			°	°			-			☐	
2048	3323	30	19:57	BE	NET		°	°			-			☐	Bongo
			20:02	BO			48° 45.952	126° 15.094	165	155	-			☐	Net @ 245°
			20:05	EN			48° 45.923	126° 15.035			-			☐	angle
			:				°	°	165		-			☐	

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

Notes:

Produced by the Water Properties Group, IOS

WaterProperties.ca
Version: 14 February 2013

Ocean Sciences Division, Institute of Ocean Sciences

DAILY SCIENCE LOG

Cruise ID 2017-42

Vessel Sea Quest

Year 2017

Month 07

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Latitude	Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Tms/Fl Cleaned	Comments
1049	3451	30	22:00	BE	CTD	:	48° 47.480	126° 06.258	106	95	-	-	CW	☐	Cast 2
			22:02	BO			48° 47.462	126° 06.242			-	-		☐	+ phyto sample
			22:03	EN		1	°	°			-	-		☐	Wugli's fortran
2049	3451	30	22:06	BE	NET		°	°			-	-		☐	Bongo
			22:10	BO			48° 47.400	126° 06.150	106	95	-	-		☐	
			22:12	EN			48° 47.381	126° 06.129			-	-		☐	
1050	2585	31	16:36	BE	CTD		48° 31.721	125° 38.667	80	70	-	-		☐	Cast 0
			16:37	BO			48° 31.703	125° 38.648			-	-		☐	Phyto collected in Wugli's fortran
			16:39	EN			°	°			-	-		☐	Bongo
2050	2585	31	16:40	BE	NET		°	°			-	-		☐	
			16:42	BO			48° 31.634	125° 38.595	80	70	-	-		☐	
			16:44	EN			48° 31.614	125° 38.577			-	-		☐	
1051	2580	31	19:21	BE	CTD		48° 32.568	125° 53.248	87	75	-	-		☐	Cast 1
			19:23	BO			48° 32.553	125° 53.219			-	-		☐	
			19:24	EN			°	°			-	-		☐	
2051	2580	31	19:27	BE	NET		°	°	87	75	-	-		☐	Bongo
			19:29	BO			48° 32.489	125° 53.108			-	-		☐	
			19:31	EN			48° 32.472	125° 53.078			-	-		☐	
			:				°	°			-	-		☐	

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

WaterProperties.ca
 Version: 14 February 2013

Notes: