

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

2022-015

DATE:

From:

May 02 / 2022

To:

May 11, 2022

VESSEL:

Franklin

PROJECT(S):

La Perouse.

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: SeaSave Version 7.26, 7.12.1

CTD deck unit make: Seabird model: 11plus serial number: 1043

* May 8/2022 @ 11:00 UTC Changed out p/cons from SPN 215 p/cons to SPN 648.
Primary CTD Error message no longer occurring + spikes have gone away in data.

Make: SBE model: 9 serial number: 585

Primary temperature serial number: 2449

Primary conductivity serial number: 1764

Secondary temperature serial number: 4484

Secondary conductivity serial number: 2128

Transmissometer: Wetlabs Model: CSAR serial: 1201 DR

Transmissometer: _____ Model: _____ serial: _____

Fluorometer: Model Seapoint Cable gain: 10x serial: 2225 P S or NO pump?

Fluorometer: Model _____ Cable gain: _____ serial: _____ P, S or NO pump?

Oxygen sensor: SBE 43 Model: _____ serial: 1186 P, S or NO pump?

PAR sensor: _____ Model: _____ serial: _____ Surface PAR? Y/N

Other sensors: Valeport Altimeter serial: 75321 P, S or NO pump?

Other sensors: SBE ST Pump serial: 1990 P, S or NO pump?

Other sensors: 11 serial: 2779 P, S or NO pump?

Other sensors: _____ serial: _____ 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: _____ serial: _____

Transmissometer: _____ Model: _____ serial: _____

Fluorometer: Model _____ Cable gain: _____ serial: _____ P, S or NO pump?

Fluorometer: Model _____ Cable gain: _____ serial: _____ P, S or NO pump?

Oxygen sensor: _____ Model: _____ serial: _____ P, S or NO pump?

PAR sensor: _____ Model: _____ serial: _____ Surface PAR? Y/N

Other sensors: _____ serial: _____ P, S or NO pump?

Other sensors: _____ serial: _____ P, S or NO pump?

Other sensors: _____ serial: _____ P, S or NO pump?

Other sensors: _____ serial: _____ 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 (typical on small launches).



Rosette Setup:

Number of bottles: 24
Manufacturer: _____
Volume of bottles (litres): 20L

Rosette/Niskin Bottle Serial Numbers:

1:	_____	2:	_____	3:	_____	4:	_____	5:	_____
6:	_____	7:	_____	8:	_____	9:	_____	10:	_____
11:	_____	12:	_____	13:	_____	14:	_____	15:	_____
16:	_____	17:	_____	18:	_____	19:	_____	20:	_____
21:	_____	22:	_____	23:	_____	24:	_____		

Make sure to note any bottle changes or repairs during your cruise in this log book.

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):

Label Printers:

Primary Printer Kit #: _____
Secondary Printer Kit #: _____
Software Version: _____

Thermosalinograph System (SBE21/45):

Program: _____ Version: _____
Sampling interval (seconds): _____
TSG serial number: _____
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: _____	Exit points: _____
Sampling interval (sec): _____	Name: _____	Exit points: _____
Bin Length: (2 [^] x): _____	Name: _____	Exit points: _____
Pulse Length: _____	Work File: _____	
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) 0.000

Secondary Salinity – Primary Salinity: 0.005
(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:

Plankton Nets:

Bongo/SCOR #1

Frame Size: cm

Mesh: μm

Flowmeter:

Bongo/SCOR #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:

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:

Bottle Depth Trip Times: G.C.

First 2 station (LC01/LC02) bottles trip after 30 seconds @ depth. Going forward + all other casts where bottles were trip, from 0-150m (inclusive) sample depth, bottles were trip 60 seconds after reaching depth. Bottles > 150 meters bottles trip after 30 seconds of reaching desired depth.

TSG - Franklin: Forgot to turn on water for TSG until 11/ May / 2022 12:25 UTC time
 Logging from this point on. File name: 2022-015-0002 - restart. Original file names.
 was 2022-015-0001.

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month				Year		Vessel			Cruise ID						
May				2022		Franklin			2022-015						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
1	test	3	03:31	BE	ROS	US	49 ° 10 . 032	124 ° 48 . 750	107		1	24	GC	☒	Port Alberni Inlet
			03:35	BO			° 10 . 026	° 48.737		103	-			☐	test cast
			03:58	EN			° 10 . 022	° 48.728			-			☐	
2	test	3	03:51	BE	NET		49 ° 10 . 027	124 ° 48 . 735	108		-		JN	☐	No cod ends or
			03:54	BO			° 10 . 005	° 48.718		98	-			☐	sample collected
			03:56	EN			° 09.996	° 48.714			-			☐	
3	test	3	04:02	BE			° 09.980	° 48.725	108		-		JN	☐	Test to more weight
			04:06	BO			° 09.978	° 48.731		98	-			☐	
			04:08	EN			° 09.979	° 48.732			-			☐	
4	LC01	3	08:31	BE			48 ° 50 . 422	125 ° 27 . 757	92		1 - 7	7	GC/JN	☒	
			08:33	BO			° 50 . 431	° 27.763		88	-			☐	
			08:45	EN			° 50 . 458	° 27.766			-			☐	
5	LC02	3	09:31	BE			48 ° 48 . 640	125 ° 30 . 961	106		8 - 15	8	GC/JN	☒	
			09:34	BO			° 48.646	° 30 . 958		101	-			☐	
			09:45	EN			° 48.623	° 30 . 947			-			☐	
6	LC03	3	10:46	BE			48 ° 46 . 960	125 ° 34 . 232	131		1	1	GC	☒	
			10:49	BO			° 46 . 966	° 34 . 240		125	-			☐	
			10:51	EN			° 46 . 960	° 34 . 217			-			☐	
			:				° .	° .			-			☐	

Fixed all bottles to check the, all fixed and any leaks. All tripped + no leaks.

Month May			Year 2022			Vessel Franklin			Cruise ID 2022-015						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
							Latitude	Longitude							
7	LC04	3	11:45	BE	NET		48° 43.482	125° 40.728	162		-	-	JW	☐ ☐	
			11:50	BO			° 43.484	° 40.747		153	-			☐ ☐	
			11:52	EN			° 43.471	° 40.741			-			☐ ☐	
8	LC04	3	12:02	BE	ROS	US	48° 43.434	125° 40.771	162		16 - 25	10	GC	☒ ☐	
			12:06	BO			° 43.458	° 40.729		159	-			☐ ☐	
			12:23	EN			° 43.482	° 40.788			-			☐ ☐	
9	LG01	4	03:54	BE	ROS	US	49° 20.476	126° 34.949	50		-	-	GC	☒ ☐	
			03:55	BO			° 20.476	° 34.951		45	-			☐ ☐	
			03:57	EN			° 20.476	° 34.951			-			☐ ☐	
10	LG02	4	:	BE	NET		49° 18.750	126° 38.125	95		-		JW	☐ ☐	These are approximate
			:	BO			° .750	° .125		85	-			☐ ☐	Lat + Longs did not
			:	EN			° .750	° .125			-			☐ ☐	mean cast had started
11	LG02	4	04:35	BE	NET		49° 18.750	126° 38.126	95		-		JW	☐ ☐	
			04:41	BO			° 18.767	° 38.141		85	-			☐ ☐	
			04:42	EN			° 18.771	° 38.144			-			☐ ☐	
12	LG02	4	04:53	BE	ROS	US	49° 18.781	126° 38.117	94		26 - 38	8	GC	☒ ☐	Error on Sample Log
			04:55	BO			49° 18.781	° 38.112		90	-			☐ ☐	Bot #4 not sampled.
			05:07	EN			49° 18.811	° 38.128			-			☐ ☐	
			:				° .	° .			-			☐ ☐	

G.C.

Noticed: Transmissometer was on A/D voltage 4 but unit is on A/D voltage 3. Modified con file + changed Transmissometer to A/D voltage 3. File saved as 9p-0585-Franklin 2022-015.xmlcon.

Disregard above. Ran tests + found on Aux 4 = Transmissometer reverted back to: 9p-0585-Franklin Backup Feb 2022 .xmlcon

Looks okay now. Was using incorrect con file before which had no transmissometer(?)

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month <i>May</i>				Year <i>2022</i>			Vessel <i>Franklin</i>			Cruise ID <i>2022-015</i>					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
13	LG03	4	05:53	BE	ROS	US	49° 15.079	126° 43.648	114.		-	/	GC	☒ ☐	
			05:56	BO			° 15.102	° 43.656		113	-			☐ ☐	
			05:58	EN			° 15.109	° 43.631			-			☐ ☐	
14	LG04	4	06:45	BE	NET		49° 11.333	126° 49.265	140		-		JN	☐ ☐	
			06:55	BO			° 11.335	° 49.146		134	-			☐ ☐	
			06:58	EN			° 11.324	° 49.096			-			☐ ☐	
15	LG04	4	07:06	BE	ROS	US	49° 11.338	126° 49.048	138		39-47	9	GC	☒ ☐	
			07:09	BO			° 11.347	° 49.036		133	-			☐ ☐	
			07:24	EN			° 11.408	° 48.940			-			☐ ☐	
16	LG05	4	08:20	BE	ROS	US	49° 07.463	126° 55.199	266		-	/	GC/JN	☒ ☐	
			08:25	BO			° 07.486	° 55.147		262	-			☐ ☐	
			08:29	EN			° 07.543	° 55.158			-			☐ ☐	
17	LG06	4	09:25	BE	ROS	US	49° 03.466	127° 01.126	970		48-64	17	GC/JN	☒ ☐	
			09:41	BO			° 03.557	° 01.000		950	-			☐ ☐	
			10:17	EN			° 03.718	° 00.730			-			☐ ☐	
18	LG06	4	10:30	BE	NET		° 03.800	° 00.650	970		-		JN	☐ ☐	
			10:40	BO			49° 03.802	127° 00.5360	970	250	-		J	☐ ☐	
			10:45	EN			° 03.817	° 00.477		250	-			☐ ☐	
			:				°	°			-			☐ ☐	

DAILY SCIENCE LOG

Month May			Year 2022		Vessel Franklin		Cruise ID 2022-015								
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
							Latitude	Longitude							
19	LC04	5	03:15	BE	ROS	US	48° 43.421	125° 40.512	161		/	/	GC	☒	
			03:19	BO			° 43.414	° 40.504		157	-			☐	
			03:28	EN			° 43.399	° 40.504			-			☐	
20	LC05	5	04:23	BE	NET		48° 39.930	125° 47.370	59		-		JW	☐	
			04:26	BO			° 39.936	° 47.331		52	-			☐	
			04:28	EN			° 39.932	° 47.318			-			☐	
21	LC05	5	04:39	BE	ROS		48° 39.932	125° 47.332	59		/	/	GC	☒	Originally saved as
			04:40	BO			° 39.934	° 47.314		55	-			☐	event# 20
			04:41	EN			° 39.934	° 47.296			-			☐	
22	LC06	5	05:36	BE	NET		48° 36.484	125° 53.948	88		-		JW	☐	Stopped @ surface
			05:40	BO			° 36.507	° 53.962		80	-			☐	while ship corrected
			05:43	EN			° 36.500	° 53.929			-			☐	position as net was
23	LC06	5	05:55	BE	ROS	US	48° 36.491	125° 53.972	88		65-71	7	GC	☒	
			05:57	BO			° 36.493	° 53.980		84	-			☐	
			06:08	EN			° 36.492	° 53.957			-			☐	
24	LC07	5	07:00	BE	ROS		48° 32.924	126° 00.532	123		/	/	GC	☒	
			07:03	BO			° 32.909	° 00.520		118	-			☐	
			07:05	EN			° 32.900	° 00.509			-			☐	
			:				°	°			-			☐	

LC05- 4 large container vessels anchored nearby station

under the ship

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 5 of

Month			Year				Vessel				Cruise ID					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments	
25	LC08	5	07:50	BE	NET		48 ° 29.380	126 ° 07.138	197		-		JN	☐ ☐		
			07:55	BO			48 ° 29.328	126 ° 07.173		190	-			☐ ☐		
			07:58	EN			48 ° 29.307	126 ° 07.169			-			☐ ☐		
26	LC08	5	08:06	BE	ROS	US	48 ° 29.255	126 ° 07.147	197		-		GC	☒ ☐	5m Sed + DIC not sampled due to →	
			08:10	BO			° 29.220	° 07.147		193	72 - 82	11		☐ ☐		
			08:27	EN			° 29.113	° 07.050			-			☐ ☐		
27	A02	5	09:11	BE	NET		48 ° 22.622	126 ° 03.835	358		-		JN	☐ ☐		
			09:20	BO			° 22.602	° 03.911		250	-			☐ ☐		
			09:25	EN			° 22.582	° 03.949			-			☐ ☐		
28	A02	5	09:34	BE	ROS	US	48 ° 22.505	126 ° 03.990	362		-	/	GC	☒ ☐		
			09:41	BO			° 22.474	° 04.018		367	-			☐ ☐		
			09:46	EN			° 22.457	° 04.049			-			☐ ☐		
29	LC09	5	10:39	BE	NET		48 ° 25.953	126 ° 13.606	600		-		JN	☐ ☐		
			10:48	BO			° 25.936	° 13.659		250	-			☐ ☐		
			10:52	EN			° 25.905	° 13.673			-			☐ ☐		
30	LC09	5	10:59	BE	ROS	US	48 ° 25.868	126 ° 13.717	610		83	1	GC	☒ ☐		
			11:09	BO			° 25.835	° 13.789		616	-			☐ ☐		
			11:20	EN			° 25.760	° 13.849			-			☐ ☐		
			:				°	°			-			☐ ☐		

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
 Version: 17 Feb 2020

This page is for any notes or observations

sample label print error.

LDO1: SN = 49° 00.120' 125° 43.800' / LDO1: Bridge: 49° 01.120' 125° 43.800'

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 6 of

Month May			Year 2022			Vessel Franklin			Cruise ID 2022-015						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
31	LDO1 (a)	6	05:34	BE	ROS		49° 01.085	125° 43.712	18		-	-	GC	☒ ☐	* Error in Latitude
			05:35	BO			° 01.088	° 43.709		14	-			☐ ☐	
			05:36	EN			° 01.091	° 43.712			-			☐ ☐	
32	LDO1	6	06:03	BE	ROS		49° 00.130	125° 43.708	30		-	-	GC	☒ ☐	
			06:04	BO			° 00.125	° 43.711		24	-			☐ ☐	
			06:05	EN			° 00.124	° 43.712			-			☐ ☐	
33	LDO2	6	06:34	BE	NET		48° 58.376	125° 47.057	38		-		JN	☐ ☐	
			06:37	BO			° 58.365	° 47.060		31	84-88	5		☐ ☐	
			06:38	EN			° 58.360	° 47.060			-			☐ ☐	
34	LDO2	6	06:48	BE	ROS	US	48° 58.300	125° 47.118	38		84-88	5	GC	☒ ☐	
			06:49	BO			° 58.296	° 47.128		34	-			☐ ☐	
			06:58	EN			° 58.247	° 47.080			-			☐ ☐	
35	LDO3	6	07:33	BE	ROS		48° 56.592	125° 50.447	42		-	-	GC	☒ ☐	
			07:35	BO			° 56.585	° 50.453		38	-			☐ ☐	
			07:36	EN			° 56.578	° 50.446			-			☐ ☐	
36	LDO4	6	08:19	BE	NET		48° 53.125	125° 57.056	59		-		JN	☐ ☐	
			08:21	BO			° 53.115	° 57.062		52	-			☐ ☐	
			08:22	EN			° 53.111	° 57.060			-			☐ ☐	
			:				°	°			-			☐ ☐	

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: 17 Feb 2020

with what the bridge had + what actual position. So moved to correct position + redid cast.

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month May			Year 2022			Vessel Franklin			Cruise ID 2022-015						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
37	LDO4	6	08:30	BE	ROS	US	48° 53.068	125° 57.012	57		89-93	5	GC	☒	
			08:31	BO			° 53.062	° 57.000		53	-			☐	
			08:39	EN			° 53.032	° 57.010			-			☐	
38	LDO5	6	09:26	BE	ROS		48° 49.712	126° 03.665	87				GC	☒	
			09:28	BO			° 49.720	° 03.660		82	-			☐	
			09:30	EN			° 49.723	° 03.653			-			☐	
39	LDO6	6	10:13	BE	ROS	US	48° 46.253	126° 10.272	134		94-101	8	GC	☒	
			10:16	BO			° 46.254	° 10.255		130	-			☐	
			10:29	EN			° 46.247	° 10.202			-			☐	
40	LDO7	6	11:07	BE	NET		48° 42.690	126° 16.818	492		-		JN	☐	
			11:15	BO			° 42.703	° 16.734		250	-			☐	
			11:20	EN			° 42.683	° 16.670			-			☐	
41	LDO7	6	11:27	BE	ROS		48° 42.648	126° 16.542	422				GC	☒	A
			11:35	BO			° 42.606	° 16.567		420	-			☐	
			11:44	EN			° 42.586	° 16.516			-			☐	
42	Test	6	13:46	BE	ROS		49° 00.841	126° 21.972	129	50		24	GC	☐	Test cast
43	L606	7	01:18	BE	L606		49° 03.491	127° 01.170	980		-			☐	↑ Just looked good
			01:33	BO			° 03.491	° 01.146		960	-			☐	going down but coming
			01:48	EN			° 03.494	° 01.207			-			☐	up the lanes of the

Error message on up cast @ -290 meters. FFFF unsupported carousel.... Upcast looks bad at 290 meters + up.
Seen to start once a spike occurred with SBE 43 DO sensor.

Cleaned DO bulkhead + sensor connectors, Sea Cable connector, pylon connector + bulkhead. Check sea cable + all other connectors. Tested pylon + trigger mechanism. All fine. Performed test cast.
No errors. Sensors fine. All bottles fired. Greenline! Restarted computer. Ensured OS updates not possible.

graph changed colours (line colours) + then there are spikes/differences between 1° + 2° T+C. Cast looks okay but a bit concerning.
Back flushed both pumps w fresh water to ensure no blockage.

DAILY SCIENCE LOG

Month May			Year 2022			Vessel Franklin			Cruise ID						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
							Latitude	Longitude							
44	LG07	7	02:28	BE	NET		48° 59.3980	127° 07.1920	1770		-		JN	☐ ☐	
			02:37	BO			° 59.383	° 07.205		250	-			☐ ☐	
			02:41	EN			° 59.371	° 07.177			-			☐ ☐	
45	LG07	7	02:51	BE	ROS		48° 59.380	127° 07.168	1770		-		GC	☒ ☐	No issues with cast. ☺
			03:19	BO			° 59.398	° 07.228		1766	-			☐ ☐	
			03:46	EN			° 59.410	° 07.204			-			☐ ☐	
46	LG08	7	04:44	BE	ROS		48° 55.206	127° 13.264	2068		-		GC	☒ ☐	
			05:17	BO			° 55.284	° 13.38		2074	-			☐ ☐	
			05:50	EN			° 55.318	° 13.325			-			☐ ☐	
47	LG09	7	06:36	BE	NET		48° 51.150	127° 19.385	2062		-		JN	☐ ☐	
			06:56	BO			° 51.154	° 19.610		250	-			☐ ☐	
			07:01	EN			° 51.159	° 19.663			-			☐ ☐	
48	LG09	7	07:09	BE	ROS		48° 51.158	127° 19.756	2072		-		GC	☒ ☐	
			07:43	BO			° 51.056	° 20.128		2081	-			☐ ☐	
			08:16	EN			° 50.994	° 20.420			-			☐ ☐	
49	LD07	8	02:03	BE	NET		° 42.696	° 16.794	503		-		JN	☐ ☐	
			02:12	BO			° 42.693	° 16.754		250	-			☐ ☐	
			02:16	EN			° 4.645	° 16.798			-			☐ ☐	
			:				°	°			-			☐ ☐	

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month <i>May</i>				Year <i>2022</i>			Vessel <i>Franklin</i>			Cruise ID <i>2022-015</i>					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
50	LD07	08	02:26	BE	ROS	US	48 ° 42.632	126 ° 16.776	441			/	GC	☒ ☐	
			02:33	BO			° 42.630	° 16.764		458	-			☐ ☐	
			02:41	EN			° 42.638	° 16.756			-			☐ ☐	
51	LD08	08	03:30	BE	ROS	US	48 ° 39.197	126 ° 23.338	769		102 - 118	17	GC	☒ ☐	Why not sampled
			03:43	BO			° 39.236	° 23.273		759	-			☐ ☐	
			04:15	EN			° 39.151	° 23.410			-			☐ ☐	
52	LD09	08	05:05	BE	ROS		48 ° 35.705	126 ° 29.989	1054			/	GC	☒ ☐	
			05:21	BO			° 35.718	° 29.977		1058	-			☐ ☐	
			05:37	EN			° 35.701	° 29.976			-			☐ ☐	
53	LD10	08	06:20	BE	NET		48 ° 32.232	126 ° 36.578	1475		-		JN	☐ ☐	
			06:29	BO			° 32.223	° 36.603		250	-			☐ ☐	
			06:33	EN			° 32.239	° 36.594			-			☐ ☐	
54	LD10	08	06:42	BE	ROS		48 ° 32.266	126 ° 36.582	1473			/	GC	☒ ☐	
			06:53	BO			° 32.230	° 36.550		572	-			☐ ☐	
			06:56	EN			° 32.546	° 36.216		296	-			☐ ☐	
55	LD10	08	07:00	BE	ROS		48 ° 32.546	126 ° 36.216	1473		-		GC	☒ ☐	Redo cast.
			07:24	BO			° 32.132	° 36.456		1478	-			☐ ☐	
			07:47	EN			° 32.176	° 36.452			-			☐ ☐	
			:				°	°			-			☐ ☐	

Forgot to wait 60 seconds for depths 150 + 125m. All rest 100 → 5m waited 60 secs. before firing niskin bottle.

FFFFFFFF Unsupported. modern 31 2E 33 SBE Carousel. Error occurred @ 517m. Stopped cast + returned to surface. Stopped cast @ 296m

* Pylon replacement.

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 10 of

Month <u>May</u>			Year <u>2022</u>			Vessel <u>Franklin</u>			Cruise ID <u>2022-015</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
56	LC10	08	09:16	BE	NET		48° 22.390	126° 20.256	1245		-			☐	
			09:26	BO			° 22.373	° 20.242		250	-			☐	
			09:30	EN			° 22.331	° 20.264			-			☐	
57	LC10	08	09:39	BE	ROS	US	48° 22.274	126° 20.188	1245		119 - 136	18	GC	☒	
			09:59	BO			° 22.160	° 20.083		1245	-			☐	
			10:38	EN			° 21.996	° 19.975			-			☐	
58	LC10	08	10:43	BE	NET	-	48° 21.980	126° 19.985	1251		-			☐	genetics +
			10:51	BO			° 21.957	° 19.969		250	-		JN	☐	UVic tower
			10:56	EN			° 21.947	° 20.014			-			☐	Replaced pylon →
59	LB01	09	04:22	BE	ROS	US	48° 40.388	124° 59.419	31		137 - 141	5	GC	☒	
			04:23	BO			° 40.384	° 59.390		25	-			☐	
			04:29	EN			° 40.364	° 59.310			-			☐	
60	LB02	09	05:04	BE	ROS	US	48° 38.976	125° 02.362	51		142 - 146	5	GC	☒	
			05:06	BO			48° 38.974	125° 02.347		46	-			☐	
			05:13	EN			48° 38.965	125° 02.255			-			☐	
61	LB03	09	05:47	BE	ROS	US	48° 37.295	125° 05.512	89		147 -	1	GC	☒	
			05:49	BO			° 37.294	° 05.484		85	-			☐	
			05:52	EN			° 37.295	° 05.474			-			☐	
			:				°	°			-			☐	

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: 17 Feb 2020

Notes: _____

★

May 08/2024

11am UTC

Pylon S/N 215 removed + replaced with Pylon S/N 648. Tested pylon before installing
+ after installing pylon S/N 648. Working both times.

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month May			Year 2022			Vessel Franklin			Cruise ID 2022-015						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
62	1B04	09	06:24	BE	ROS	05	48° 35.682	125° 08.569	108		148 - 154	7	GC	☒	
			06:26	BO			° 35.675	° 08.561		103	-			☐	
			06:28	EN			° 35.677	° 08.566			-			☐	
63	E1	09	07:20	BE	NET		48° 31.697	125° 03.747	111		-		JN	☐	
			07:23	BO			° 31.671	° 03.788		98	-			☐	
			07:25	EN			° 31.661	° 03.763			-			☐	
64	E1	09	07:34	BE	ROS	-	48° 31.630	125° 03.740	112		-		GC	☒	
			07:36	BO			° 31.624	° 03.754		105	-			☐	
			07:38	EN			° 31.624	° 03.762			-			☐	
65	C2	09	08:39	BE	NET		48° 26.204	125° 09.353	155.5		-			☐	
			08:45	BO			° 26.183	° 09.400		149	-			☐	
			08:48	EN			° 26.175	° 09.3910			-			☐	
66	C2	09	08:56	BE	ROS		48° 26.170	125° 09.472	156		-		GC	☒	
			08:59	BO			° 26.165	° 09.487		151	-			☐	
			09:01	EN			° 26.158	° 09.472			-			☐	
67	C1	09	09:41	BE	NET		48° 28.880	125° 15.413	149		-			☐	
			09:46	BO			° 28.851	° 15.421		142	-			☐	
			09:48	EN			° 28.841	° 15.408			-			☐	
			:				°	°			-			☐	

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month <i>May</i>				Year <i>2022</i>			Vessel <i>Franklin</i>			Cruise ID <i>2022-015</i>					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
<i>68</i>	<i>C1</i>	<i>09</i>	<i>09:55</i>	<i>BE</i>	<i>ROS</i>		<i>48° 28.810</i>	<i>125° 15.467</i>	<i>149</i>		<i>-</i>	<i>-</i>	<i>Gc</i>	☒	
			<i>09:58</i>	<i>BO</i>			<i>° 28.786</i>	<i>° 15.462</i>		<i>149</i>	<i>-</i>			☐	
			<i>10:00</i>	<i>EN</i>			<i>° 28.771</i>	<i>° 15.484</i>			<i>-</i>			☐	
<i>69</i>	<i>LB06</i>	<i>09</i>	<i>10:37</i>	<i>BE</i>	<i>ROS</i>	<i>US</i>	<i>48° 32.167</i>	<i>125° 15.541</i>	<i>111</i>		<i>155-162</i>	<i>8</i>	<i>Gc</i>	☒	
			<i>10:39</i>	<i>BO</i>			<i>° 32.160</i>	<i>° 15.569</i>			<i>-</i>			☐	
			<i>10:52</i>	<i>EN</i>			<i>° 32.144</i>	<i>° 15.688</i>			<i>-</i>			☐	
<i>70</i>	<i>LB05</i>	<i>09</i>	<i>11:30</i>	<i>BE</i>	<i>ROS</i>	<i>US</i>	<i>48° 34.106</i>	<i>125° 12.098</i>	<i>100</i>		<i>163</i>	<i>1</i>	<i>Gc</i>	☒	
			<i>11:33</i>	<i>BO</i>			<i>° 34.114</i>	<i>° 12.076</i>			<i>-</i>			☐	
			<i>11:37</i>	<i>EN</i>			<i>° 34.132</i>	<i>° 12.086</i>			<i>-</i>			☐	
<i>71</i>	<i>B8</i>	<i>10</i>	<i>01:55</i>	<i>BE</i>	<i>NET</i>		<i>48° 34.496</i>	<i>125° 29.987</i>	<i>114</i>		<i>-</i>		<i>JW</i>	☐	<i>Found shells + alligator</i>
			<i>02:00</i>	<i>BO</i>			<i>° 34.474</i>	<i>° 29.977</i>		<i>105</i>	<i>-</i>			☐	<i>gun going to red</i>
			<i>02:02</i>	<i>EN</i>			<i>° 34.459</i>	<i>° 29.975</i>			<i>-</i>			☐	<i>two Samples -></i>
<i>72</i>	<i>B8</i>	<i>10</i>	<i>02:10</i>	<i>BE</i>	<i>ROS</i>		<i>48° 34.420</i>	<i>125° 30.016</i>	<i>132</i>		<i>-</i>		<i>Gc</i>	☒	
			<i>02:12</i>	<i>BO</i>			<i>° 34.411</i>	<i>° 30.004</i>		<i>128</i>	<i>-</i>			☐	
			<i>02:15</i>	<i>EN</i>			<i>° 34.402</i>	<i>° 29.992</i>			<i>-</i>			☐	
<i>73</i>	<i>B8</i>	<i>10</i>	<i>02:21</i>	<i>BE</i>	<i>NET</i>		<i>48° 34.381</i>	<i>125° 29.983</i>	<i>132</i>		<i>-</i>		<i>JW</i>	☐	
			<i>02:28</i>	<i>BO</i>			<i>° 34.349</i>	<i>° 29.996</i>		<i>122</i>	<i>-</i>			☐	
			<i>02:29</i>	<i>EN</i>			<i>° 34.340</i>	<i>° 30.012</i>			<i>-</i>			☐	
			<i>:</i>				<i>°</i>	<i>°</i>			<i>-</i>			☐	

This page is for any notes or observations

not kept

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month May				Year 2022			Vessel Franklin			Cruise ID 2022-015					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
74	87	10	03:18	BE	NET		48° 32.041	125° 35.496	75		-		JN	☐ ☐	
			03:21	BO			° 32.027	° 35.502		65	-			☐ ☐	
			03:22	EN			° 32.020	° 35.510			-			☐ ☐	
75	87	10	03:29	BE	ROS	/	48° 31.991	125° 35.500	75		-		GC	☒ ☐	
			03:31	BO			° 31.991	° 35.507		76	-			☐ ☐	
			03:32	EN			° 31.992	° 35.510			-			☐ ☐	
76	LB14	10	06:28	BE	NET		48° 08.525	126° 00.027	1175		-		JN	☐ ☐	
			06:37	BO			° 08.478	° 00.026		250	-			☐ ☐	
			06:41	EN			° 08.453	° 00.026			-			☐ ☐	
77	LB14	10	06:50	BE	ROS	US	48° 08.422	126° 00.058	1177		164-181	18	GC	☒ ☐	
			07:08	BO			° 08.442	° 00.053		1183	-			☐ ☐	
			07:47	EN			° 08.542	° 59.962			-			☐ ☐	
78	LB14	10	07:55	BE	NET		48° 08.551	126° 59.854	1166		-		JN	☐ ☐	
			07:31	BO			° 08.428	° 59.568		1000	-			☐ ☐	
			08:50	EN			° 08.354	° 59.516			-			☐ ☐	
79	LB13	10	09:18	BE	ROS	US	48° 10.588	125° 56.009	912		182	1	GC	☒ ☐	
			09:32	BO			° 10.517	° 55.882		910	-			☐ ☐	
			09:48	EN			° 10.452	° 55.826			-			☐ ☐	
			:				°	°			-			☐ ☐	

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month May			Year 2022			Vessel Franklin			Cruise ID 2022-015						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
80	LB12	10	10:21	BE	ROS	JS	48° 12.814	125° 51.874	509		183 - 197	15	GC	☒	
			10:29	BO			° 12.793	° 51.810		509	-			☐	
			10:55	EN			° 12.749	° 51.532			-			☐	
81	LB11	10	:	BE	Net		°	°	200		-		JW	☐	
			11:32	BO			48° 15.294	125° 47.79		190	-			☐	
			:	EN			°	°			-			☐	
82	LB11	10	11:49	BE	ROS	US	48° 15.262	125° 47.630	200		198 - 208	11	GC	☒	
			11:54	BO			° 15.254	° 47.590		196	-			☐	
			12:12	EN			° 15.239	° 47.434			-			☐	
83	C3	11	02:33	BE	NET		48° 23.450	125° 20.823	118		-		JW	☐	
			02:37	BO			° 23.445	° 20.826		108	-			☐	
			02:38	EN			° 23.437	° 20.831			-			☐	
84	C3	11	02:47	BE	ROS		48° 23.406	125° 20.845	118		-		GC	☒	
			02:49	BO			° 23.404	° 20.833		113	-			☐	
			02:51	EN			° 23.402	° 20.826			-			☐	
85	LB10	11	04:28	BE	ROS	JS	48° 18.580	125° 41.290	149		209	1	GC	☒	
			04:30	BO			° 18.586	° 41.260		143	-			☐	
			04:35	EN			° 18.578	° 41.251			-			☐	
			:				°	°			-			☐	

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 15 of

Month <u>May</u>			Year <u>2022</u>			Vessel <u>Franklin</u>			Cruise ID <u>2022-015</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
86	LB09	11	05:27	BE	ROS	US	48° 21.898	125° 34.805	147		210-218	9	GC	☒	
			05:30	BO			° 21.898	° 34.790		141	-			☐	
			05:48	EN			° 21.916	° 34.788			-			☐	
87	LB08	11	06:32	BE	NET		48° 25.336	125° 28.641	143		-		JN	☐	
			06:37	BO			° 25.339	° 28.650		132	-			☐	
			06:39	EN			° 25.344	° 28.651			-			☐	
88	LB08	11	06:50	BE	NET		° 25.347	125° 28.541	134		-		JN	☒	
			06:54	BO			° 25.341	° 28.553		125	-			☐	
			06:56	EN			° 25.340	° 28.544			-			☐	
89	LB08	11	07:03	BE	ROS	US	48° 25.333	125° 28.489	132		219-	10	GC	☒	
			07:06	BO			° 25.331	° 28.570		132	-			☐	
			07:22	EN			° 25.314	° 28.566			-			☐	
90	LB07	11	08:04	BE	NET		48° 28.732	125° 22.090	151		-		JN	☐	
			08:09	BO			° 28.690	° 22.015			-			☐	
			08:11	EN			° 28.692	° 22.036			-			☐	
91	LB07	11	08:39	BE	ROS	US	48° 28.582	125° 22.012	152		229	1	GC	☒	
			08:42				° 28.538	° 22.002		148	-			☐	
			08:46				° 28.522	° 21.929			-			☐	
			:				°	°			-			☐	

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: 17 Feb 2020

Notes: _____

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 16 of

Month <u>May</u>			Year <u>2022</u>			Vessel <u>Franklin</u>			Cruise ID <u>2022-015</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
92	LBO6	11	09:31	BE	ROS		48° 32.202	125° 15.526	110		-	-	GC	☒	
			09:34	BO			° 32.206	° 15.536		105	-			☐	
			09:36	EN			° 32.214	° 15.545			-			☐	
93	JF2	12	05:03	BE	Net		48° 17.9910	124° 00.077	183		-		JN	☐	
			05:13	BO			° 17.941	123° 59.819		173	-			☐	
			05:16	EN			° 17.917	123° 59.730			-			☐	
94	JF2	12	05:29	BE	ROS		48° 18.618	123° 59.935	183		230-239	10	GC	☒	
			05:34	BO			° 17.978	° 59.848		179	-			☐	
			05:50	EN			° 17.821	° 59.542			-			☐	
			:				° .	° .			-			☐	
			:				° .	° .			-			☐	
			:				° .	° .			-			☐	
			:				° .	° .			-			☐	
			:				° .	° .			-			☐	
			:				° .	° .			-			☐	
			:				° .	° .			-			☐	
			:				° .	° .			-			☐	
			:				° .	° .			-			☐	
			:				° .	° .			-			☐	

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: 17 Feb 2020