

DAILY SCIENCE LOG BOOK

Version FEB2023

Water Properties Group
Fisheries and Oceans Canada
Institute of Ocean Sciences
Ocean Sciences Division
Norh Saanich, BC, Canada
www.waterproperties.ca

Launch Daily Science
Log Userform

Print Daily Science Log
WorkBook



Cruise Number	2023-007
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Start Date	22-Feb-23
End Date	10-Mar-23

Vessel	Franklin
Project(s)	SoG Pelagic Eco Survey

Mission Participants (Department/Agencies):	
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Ship Personnel:

Name	Role
	Captain
	Chief Engineer
	Bosun

Scientific Personnel:

Name	Role	Watch	Cabin	Name	Role	Watch	Cabin
Stephane Gauthier	Chief Scientist						
Daniel Williams							
Nicholas Ens							
Micah Quindazzi							
John Dower							
Julian Smith							
Chelsea Stanley							
Leah Walker							
Cindy Wright							
Eleanor Hobson							

Scientific Equipment:

CTD

	Primary						Secondary					
Equipment	Make	Model	Serial Number	Pump (P, S or No)	Depth Rating (m)	Comment	Make	Model	Serial Number	Pump (P, S or No)	Depth Rating (m)	Comment
Data Logging Computer			103									
Data Acquisition Program	Seasave											
CTD Deck Unit			1043									
CTD	SBE	9					9					
Temperature Sensor			2023	y		cant see serial number, so relying on xlmcon			6565	y		
Conductivity Sensor			3500	y					5043	y		
Transmissometer		TRG	1183DR	n								
Fluorometer		TRR	1185DR	n					3641	y		
Fluorometer Gain Cable									1.5			
Oxygen Sensor									3038???			cant see serial number, so relying on xlmcon
Par Sensor												
Additional Sensors...	altimeter		75321			but xlmcon says 76341						

Rosette

Setup

Number of Bottles	24
Manufacturer	
Volume of Bottles (L)	

Bottles Serial Numbers

1		9		17		25	
2		10		18		26	
3		11		19		27	
4		12		20		28	

5		13		21		29	
6		14		22		30	
7		15		23		31	
8		16		24		32	

Salinometer

Make	Model	Serial Number	Comments on Performance During Cruise

ADCP

		User Exits	
		Name	Exit Points
Computer Time Zone			
Sampling Interval (sec)			
Bin Length: (2^x)			
Pulse Length			
Buffer (bytes)			
Gyro Offset			
Work File			

Thermosalinograph System

Make	Model	Serial/kit Number	Program	Version	Comments on Performance During Cruise

Oxygen kit

Make	Model	Serial/kit Number	Comments on Performance During Cruise
N/A			

Winches

	Make	Model	Serial Number	Comment (Describe Application and Performance)
Winch 1				
Winch 2				
Winch 3				
Winch 4				

CTD Test Cast Information

	CTD Pressure Reading on Deck		Pumps Working (Y = 0011/N = 0010)	2 ° Temp - 1° Temp (Avg. from mixed layer)	2 ° Sal - 1° Sal (Avg. from mixed layer)	Additional Comments
Cast Location	Before Cast	After Cast				

Acoustics

			Frequencies (kHz) - Check Applicable						Comments on Performance During Cruise
Make	Model	Software	12	18	38	70	120	200	

Other Scientific Equipment Used Throughout this Cruise

Additional Equipment Comments During Cruise

Additional Cruise Comments

Pictures (Equipment, Setups etc.)

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences



Cruise Number:
Vessel:

2023-007
Franklin

Launch Daily
Science Log

Print Daily Science
Log WorkBook

Vessel:			Franklin		Source Log		Log Workbook					CTD/Rosette Status			Institute of Ocean Sciences			
Event Number	Station Name	Cast Type	Firing Method	Time Code	Date Time (UTC) Computer ("dd-mm-yyyy hh:mm:ss")	Date Time (UTC) GPS ("dd-mm-yyyy hh:mm:ss")	Positional Information (DDD MM.MMM)		Sounder Depth (m)	Max Sampling Pressure	Sample Number		# of Bottles	Watch Keepers	Trans. Cleaned	Fluoromet er Cleaned	PAR Status	Comments
							Latitude	Longitude			Start	End						
1 SI	ROS		BE		23-02-2023 22:19:51	23-02-2023 22:19:46	48 36.567 N	123 30.116 W	222				Chelsea Stanley	yes	no			
1 SI	ROS		BO		23-02-2023 22:23:55	23-02-2023 22:23:53	48 36.558 N	123 30.081 W	222	211			Chelsea Stanley				stopped at 50m to trip bottles	
1 SI	ROS		EN		23-02-2023 22:31:34	23-02-2023 22:31:30	48 36.55 N	123 30.065 W					Chelsea Stanley					
2	2	206 b-5	✓		17-08-1901 00:00:00	24-02-2023 03:26:52	48 43.451 N	123 25.135 W	96	86			Julian Smith	NA	NA			
2	2	206 b-5	✓		17-08-1901 00:00:00	24-02-2023 03:31:28	48 43.441 N	123 25.161 W	96	86			Julian Smith					
2	2	206 b-5	✓		17-08-1901 00:00:00	24-02-2023 03:37:35	48 43.422 N	123 25.13 W	96	86			Julian Smith					
3 SC-04	ROS	US	BE		24-02-2023 03:45:47	24-02-2023 03:45:46	48 43.427 N	123 25.088 W	93		1	1	1 Cindy Wright	yes	no			
3 SC-04	ROS	US	BO		24-02-2023 03:47:37				93	85	1	1	1 Cindy Wright				Need to get BO lat/lon from seasave	
3 SC-04	ROS	US	EN		24-02-2023 03:59:49	24-02-2023 03:59:49	48 43.584 N	123 24.675 W	93	85	1	1	1 Cindy Wright				EN is late vs. seasave	
4 GI-01	ROS	N/A	BE		24-02-2023 04:44:31	24-02-2023 04:44:30	48 45.816 N	123 20.6 W	63				Julian Smith	yes	no			
4 GI-01	ROS	N/A	BO		24-02-2023 04:45:50	24-02-2023 04:45:48	48 45.811 N	123 20.596 W	63	56			Julian Smith					
4 GI-01	ROS	N/A	EN		24-02-2023 04:47:16	24-02-2023 04:47:14	48 45.801 N	123 20.59 W	63	56			Julian Smith					
5 GI-01	NET		BE		24-02-2023 04:57:08	24-02-2023 04:57:04	48 45.778 N	123 20.614 W	64	54			Julian Smith	NA	NA			
5 GI-01	NET		BO		24-02-2023 04:59:30	24-02-2023 04:59:28	48 45.759 N	123 20.627 W	64	54			Julian Smith					
5 GI-01	NET		EN		24-02-2023 05:03:58	24-02-2023 05:03:56	48 45.762 N	123 20.622 W	64	54			Julian Smith					
6	59 NET		BE		24-02-2023 06:34:25	24-02-2023 06:34:21	48 36.855 N	123 14.656 W	225	215			Julian Smith	NA	NA			
6	59 NET		BO		24-02-2023 06:41:44	24-02-2023 06:41:40	48 36.847 N	123 14.648 W	220	215			Julian Smith					
6	59 NET		EN		24-02-2023 06:45:25	24-02-2023 06:45:21	48 36.838 N	123 14.633 W	220	215			Julian Smith					
7	59 ROS	US	BE		24-02-2023 07:19:10	24-02-2023 07:19:09	48 36.607 N	123 14.505 W	217		2	13	12 Cindy Wright	yes	no			
7	59 ROS	US	BO		24-02-2023 07:23:12	24-02-2023 07:23:08	48 36.601 N	123 14.502 W	217	211	2	13	12 Cindy Wright					
7	59 ROS	US	EN		24-02-2023 07:40:31	24-02-2023 07:40:28	48 36.604 N	123 14.504 W	217	211	2	13	12 Cindy Wright					
8	56 ROS	US	BE		24-02-2023 09:45:36	24-02-2023 09:45:35	48 46.395 N	123 1.783 W	199		14	16	3	yes	no			
8	56 ROS	US	BO		24-02-2023 09:49:18	24-02-2023 09:49:18	48 46.422 N	123 1.779 W	199	192	14	16	3					
8	56 ROS	US	EN		24-02-2023 09:57:37	24-02-2023 09:57:35	48 46.409 N	123 1.769 W	199	192	14	16	3 Julian Smith					
9	46	109	200	✓	18-07-1900 00:00:00	24-02-2023 11:14:58	48 51.428 N	123 10.873 W	176	166			Julian Smith	NA	NA			
9	46 NET		BO		24-02-2023 11:21:31	24-02-2023 11:21:30	48 51.432 N	123 10.879 W	175	166			Julian Smith					
9	46 NET		EN		24-02-2023 11:24:37	24-02-2023 11:24:33	48 51.437 N	123 10.921 W	175	166			Julian Smith					
10	46 ROS	US	BE		24-02-2023 11:35:51	24-02-2023 11:35:49	48 51.387 N	123 10.867 W	176		17	19	3 Cindy Wright	yes	no			
10	46 ROS	US	BO		24-02-2023 11:39:05	24-02-2023 11:39:04	48 51.409 N	123 10.857 W	176	169	17	19	3 Cindy Wright					
10	46 ROS	US	EN		24-02-2023 11:46:26	24-02-2023 11:46:24	48 51.428 N	123 10.867 W	176	169	17	19	3 Cindy Wright					
11	42 NET		BE		25-02-2023 03:35:47	25-02-2023 03:35:46	49 1.952 N	123 26.356 W	316	306			Julian Smith	NA	NA			
11	42 NET		BO		25-02-2023 03:46:17	25-02-2023 03:46:14	49 1.951 N	123 26.387 W	316	306			Julian Smith					
11	42 NET		EN		25-02-2023 03:55:07	25-02-2023 03:55:03	49 1.94 N	123 26.383 W	316	306			Julian Smith					

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences



Cruise Number:
Vessel:

2023-007
Franklin

Launch Daily
Science Log

Print Daily Science
Log WorkBook

Vessel:			Franklin		Sample Log		Log Workbook							CTD/Rosette Status			Institute of Ocean Sciences	
Event Number	Station Name	Cast Type	Firing Method	Time Code	Date Time (UTC) Computer ("dd-mm-yyyy hh:mm:ss")	Date Time (UTC) GPS ("dd-mm-yyyy hh:mm:ss")	Positional Information (DDD MM.MMM)		Sounder Depth (m)	Max Sampling Pressure	Sample Number		# of Bottles	Watch Keepers	Trans. Cleaned	Fluorometer Cleaned	PAR Status	Comments
							Latitude	Longitude			Start	End						
																		148db half speed/ altimeter really confused by thick scattering layer, back to full speed at 206db
12	42	ROS	US	BE	25-02-2023 04:01:58	25-02-2023 04:01:56	49 1.931 N	123 26.365 W	317		20	35	16	Cindy Wright	yes	no		
12	42	ROS	US	BO	25-02-2023 04:10:00	25-02-2023 04:09:57	49 1.926 N	123 26.357 W	317	311	20	35	16	Cindy Wright				
12	42	ROS	US	EN	25-02-2023 04:36:12	25-02-2023 04:36:10	49 1.89 N	123 26.31 W	317	311	20	35	16	Cindy Wright				
13	38	ROS	N/A	BE	25-02-2023 05:51:31	25-02-2023 05:51:29	49 11.985 N	123 26.28 W	303					Cindy Wright	yes	no		
13	38	ROS	N/A	BO	25-02-2023 05:56:35	25-02-2023 05:56:31	49 11.992 N	123 26.275 W	303	297.5				Cindy Wright				
13	38	ROS	N/A	EN	25-02-2023 06:01:45	25-02-2023 06:01:44	49 11.989 N	123 26.275 W	303	297.5				Cindy Wright				
14	38	NET		BE	25-02-2023 06:07:49	25-02-2023 06:07:48	49 11.981 N	123 26.275 W	301	292				Julian Smith	NA	NA		
14	38	NET		BO	25-02-2023 06:18:30	25-02-2023 06:18:26	49 11.976 N	123 26.277 W	301	292				Julian Smith				
14	38	NET		EN	25-02-2023 06:26:35	25-02-2023 06:26:31	49 11.97 N	123 26.283 W	301	292				Julian Smith				
15	39	ROS	US	BE	25-02-2023 08:39:25	25-02-2023 08:39:23	49 9.768 N	123 32.927 W	371		36	38	3	Julian Smith	yes	no		
15	39	ROS	US	BO	25-02-2023 08:45:55	25-02-2023 08:45:54	49 9.76 N	123 32.918 W	371	366	36	38	3	Julian Smith				
15	39	ROS	US	EN	25-02-2023 08:56:31	25-02-2023 08:56:30	49 9.767 N	123 32.969 W	371	366	36	38	3	Julian Smith				
16	40	NET		BE	25-02-2023 09:29:50	25-02-2023 09:29:46	49 8.655 N	123 36.617 W	133	124				Julian Smith	NA	NA		
16	40	NET		BO	25-02-2023 09:34:23	25-02-2023 09:34:21	49 8.646 N	123 36.586 W	133	124				Julian Smith				
16	40	NET		EN	25-02-2023 09:36:41	25-02-2023 09:36:40	49 8.647 N	123 36.558 W	133	124				Julian Smith				
17	40	ROS	N/A	BE	25-02-2023 09:47:27	25-02-2023 09:47:24	49 8.614 N	123 36.657 W	146					Cindy Wright	yes	no		
17	40	ROS	N/A	BO	25-02-2023 09:49:54	25-02-2023 09:49:52	49 8.599 N	123 36.642 W	146	139.5				Cindy Wright				
17	40	ROS	N/A	EN	25-02-2023 09:52:40	25-02-2023 09:52:37	49 8.621 N	123 36.615 W	146	139.5				Cindy Wright				
18	GEO1	NET		BE	25-02-2023 10:52:29	25-02-2023 10:52:27	49 15.062 N	123 44.952 W	397	387				Julian Smith	NA	NA		
18	GEO1	NET		BO	25-02-2023 11:06:29	25-02-2023 11:06:25	49 15.071 N	123 44.94 W	397	387				Julian Smith				
18	GEO1	NET		EN	25-02-2023 11:13:38	25-02-2023 11:13:37	49 15.071 N	123 44.951 W	397	387				Julian Smith				
19	GEO1	ROS	US	BE	25-02-2023 11:25:52	25-02-2023 11:25:47	49 15.083 N	123 44.977 W	397		39	48	10	Cindy Wright	yes	no		
19	GEO1	ROS	US	BO	25-02-2023 11:32:40	25-02-2023 11:32:37	49 15.089 N	123 44.972 W	397	392.8	39	48	10	Cindy Wright				
19	GEO1	ROS	US	EN	25-02-2023 11:53:07	25-02-2023 11:53:06	49 15.094 N	123 45.004 W	397	392.8	39	48	10	Cindy Wright				
20	27	ROS	US	BE	25-02-2023 12:35:08	25-02-2023 12:35:06	49 19.161 N	123 47.954 W	343		49	51	3	Cindy Wright	yes	no		
20	27	ROS	US	BO	25-02-2023 12:42:35	25-02-2023 12:42:33	49 19.153 N	123 47.964 W	342	337	49	51	3	Cindy Wright				
20	27	ROS	US	EN	25-02-2023 12:51:07	25-02-2023 12:51:05	49 19.143 N	123 47.971 W	342	337	49	51	3	Cindy Wright				
21	MPS1	NET		BE	2023-02-25 19:29:07 PM	25-02-2023 19:29:05	49 14.711 N	123 41.781 W	389	370				Chelsea Stanley			MPS	
21	MPS1	NET		BO	2023-02-25 19:32:07 PM	25-02-2023 19:32:05	49 14.573 N	123 41.954 W	389	370				Chelsea Stanley				
21	MPS1	NET		EN	2023-02-25 19:59:07 PM	25-02-2023 19:59:05	49 14.364 N	123 42.253 W	389	370				Chelsea Stanley				
22	MPS1	NET		BE	25-02-2023 20:30:27	25-02-2023 20:30:23	49 14.293 N	123 42.223 W	389	370				Nicholas Ens	NA	NA		Tucker
22	MPS1	NET		BO	25-02-2023 20:49:37	25-02-2023 20:49:33	49 13.899 N	123 42.701 W	389	370				Nicholas Ens				
22	MPS1	NET		EN	25-02-2023 21:08:09	25-02-2023 21:08:06	49 14.068 N	123 43.504 W	389	370				Nicholas Ens				
23	CT04	NET		BE	26-02-2023 02:28:41	26-02-2023 02:28:36	49 15.039 N	123 52.811 W	252					Nicholas Ens	NA	NA		

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences



Cruise Number: 2023-007
Vessel: Franklin

Launch Daily
Science Log

Print Daily Science
Log WorkBook

Vessel:			Franklin		Source Log		Log Workbook								CTD/Rosette Status			Institute of Ocean Sciences
Event Number	Station Name	Cast Type	Firing Method	Time Code	Date Time (UTC) Computer ("dd-mm-yyyy hh:mm:ss")	Date Time (UTC) GPS ("dd-mm-yyyy hh:mm:ss")	Positional Information (DDD MM.MMM)		Sounder Depth (m)	Max Sampling Pressure	Sample Number		# of Bottles	Watch Keepers	Trans. Cleaned	Fluorometer Cleaned	PAR Status	Comments
							Latitude	Longitude			Start	End						
23	CT04	NET		BO	26-02-2023 02:35:12	26-02-2023 02:35:08	49 15.023 N	123 52.58 W	252	225			Nicholas Ens				TUCKER	
23	CT04	NET		EN	26-02-2023 02:41:11	26-02-2023 02:41:08	49 15.015 N	123 52.432 W	252	225			Nicholas Ens					
24	CPF1	ROS	US	BE	26-02-2023 04:23:37	26-02-2023 04:23:32	49 22.107 N	124 4.992 W	243		52	52	1 Cindy Wright	yes	no			
24	CPF1	ROS	US	BO	26-02-2023 04:27:47	26-02-2023 04:27:42	49 22.084 N	124 5.04 W	243	236.5	52	52	1 Cindy Wright					
24	CPF1	ROS	US	EN	26-02-2023 04:32:58	26-02-2023 04:32:56	49 22.069 N	124 5.041 W	243	236.5	52	52	1 Cindy Wright					
25	CPF1	NET		BE	26-02-2023 04:40:44	26-02-2023 04:40:41	49 22.044 N	124 5.05 W	242	232			Julian Smith	NA	NA			
25	CPF1	NET		BO	26-02-2023 04:49:50	26-02-2023 04:49:48	49 22.04 N	124 4.984 W	242	232			Julian Smith					
25	CPF1	NET		EN	26-02-2023 04:55:09	26-02-2023 04:55:08	49 22.068 N	124 5.037 W	242	232			Julian Smith					
26	2	ROS	US	BE	26-02-2023 05:37:10	26-02-2023 05:37:08	49 24.227 N	124 9.022 W	291		53	55	3 Cindy Wright	yes	no			
26	2	ROS	US	BO	26-02-2023 05:42:02	26-02-2023 05:42:02	49 24.242 N	124 9.064 W	291	282	53	55	3 Cindy Wright					
26	2	ROS	US	EN	26-02-2023 05:50:52	26-02-2023 05:50:51	49 24.197 N	124 9.15 W	291	282	53	55	3 Cindy Wright					
27	3	ROS	US	BE	26-02-2023 07:06:44	26-02-2023 07:06:40	49 26.625 N	124 20.622 W	325		56	58	3 Julian Smith	yes	no			
27	3	ROS	US	BO	26-02-2023 07:12:37	26-02-2023 07:12:36	49 26.63 N	124 20.632 W	325	321	56	58	3 Julian Smith					
27	3	ROS	US	EN	26-02-2023 07:22:37	26-02-2023 07:22:35	49 26.637 N	124 20.636 W	325	321	56	58	3 Julian Smith					
28	6	ROS	US	BE	26-02-2023 09:09:07	26-02-2023 09:09:03	49 30.599 N	124 27.932 W	190		59	61	3 Cindy Wright	yes	no			
28	6	ROS	US	BO	26-02-2023 09:12:20	26-02-2023 09:12:18	49 30.592 N	124 27.931 W	190	182	59	61	3 Cindy Wright					
28	6	ROS	US	EN	26-02-2023 09:19:36	26-02-2023 09:19:31	49 30.606 N	124 27.895 W	190	182	59	61	3 Cindy Wright					
29	CPF2	NET		BE	26-02-2023 10:03:48	26-02-2023 10:03:46	49 28.004 N	124 30.022 W	323	313			Julian Smith	NA	NA			
29	CPF2	NET		BO	26-02-2023 10:16:14	26-02-2023 10:16:13	49 28.027 N	124 30.012 W	323	313			Julian Smith					
29	CPF2	NET		EN	26-02-2023 10:22:37	26-02-2023 10:22:33	49 28.027 N	124 30.043 W	323	313			Julian Smith					
30	CPF2	ROS	N/A	BE	26-02-2023 10:36:59	26-02-2023 10:36:57	49 27.986 N	124 29.994 W	323				Cindy Wright	yes	no			
30	CPF2	ROS	N/A	BO	26-02-2023 10:42:44	26-02-2023 10:42:41	49 27.997 N	124 29.977 W	323	317.5			Cindy Wright					
30	CPF2	ROS	N/A	EN	26-02-2023 10:48:21	26-02-2023 10:48:20	49 27.98 N	124 29.944 W	323	317.5			Cindy Wright				surface bottle tripped for eDNA for Cat. No sample ID assigned	
31	CT05	NET		BE	26-02-2023 22:08:57	26-02-2023 22:08:55	49 21.08 N	124 6.994 W	409	0			Chelsea Stanley	NA	NA		Net 1	
31	CT05	NET		BO	26-02-2023 22:25:01	26-02-2023 22:24:58	49 21.143 N	124 7.366 W	409	400			Chelsea Stanley				Net 2	
31	CT05	NET		BO	26-02-2023 22:28:22	26-02-2023 22:28:21	49 21.148 N	124 7.447 W	409	300			Chelsea Stanley				Net 3	
31	CT05	NET		BO	26-02-2023 22:33:07	26-02-2023 22:33:04	49 21.136 N	124 7.523 W	409	200			Chelsea Stanley				Net 4	
31	CT05	NET		BO	26-02-2023 22:37:35	26-02-2023 22:37:31	49 21.148 N	124 7.611 W	409	100			Chelsea Stanley				Net 5	
31	CT05	NET		EN	26-02-2023 22:42:02	26-02-2023 22:42:01	49 21.171 N	124 7.713 W	409	0			Chelsea Stanley				sfc	
32	CT05	NET		BE	26-02-2023 23:01:08	26-02-2023 23:01:06	49 21.228 N	124 8.042 W	409	400			Nicholas Ens	NA	NA			
32	CT05	NET		BO	26-02-2023 23:10:51	26-02-2023 23:10:47	49 21.401 N	124 8.37 W	409	400			Nicholas Ens					
32	CT05	NET		EN	26-02-2023 23:20:12	26-02-2023 23:20:09	49 21.555 N	124 8.612 W	409	400			Nicholas Ens					
33	BS-11	NET		BE	27-02-2023 03:22:09	27-02-2023 03:22:06	49 28.984 N	124 45.902 W	60	55			Julian Smith	NA	NA			
33	BS-11	NET		BO	27-02-2023 03:24:29	27-02-2023 03:24:27	49 28.984 N	124 45.906 W	60	55			Julian Smith					
33	BS-11	NET		EN	27-02-2023 03:25:52	27-02-2023 03:25:49	49 28.982 N	124 45.907 W	60	55			Julian Smith					

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences



Cruise Number:
Vessel:

2023-007
Franklin

Launch Daily
Science Log

Print Daily Science
Log WorkBook

Vessel:			Franklin		Sample Log		Log Workbook							CTD/Rosette Status			Institute of Ocean Sciences	
Event Number	Station Name	Cast Type	Firing Method	Time Code	Date Time (UTC) Computer ("dd-mm-yyyy hh:mm:ss")	Date Time (UTC) GPS ("dd-mm-yyyy hh:mm:ss")	Positional Information (DDD MM.MMM)		Sounder Depth (m)	Max Sampling Pressure	Sample Number		# of Bottles	Watch Keepers	Trans. Cleaned	Fluorometer Cleaned	PAR Status	Comments
							Latitude	Longitude			Start	End						
34	BS-11	ROS	US	BE	27-02-2023 03:38:31	27-02-2023 03:38:27	49 28.973 N	124 45.914 W	60	55	62	62	1	Cindy Wright	yes	no		
34	BS-11	ROS	US	BO	27-02-2023 03:39:45	27-02-2023 03:39:45	49 28.973 N	124 45.915 W	60	57.5	62	62	1	Cindy Wright				
34	BS-11	ROS	US	EN	27-02-2023 03:42:17	27-02-2023 03:42:16	49 28.973 N	124 45.915 W	60	57.5	62	62	1	Cindy Wright				
35	9	ROS	US	BE	27-02-2023 06:01:27	27-02-2023 06:01:24	49 35.442 N	124 38.242 W	167		63	65	3	Julian Smith	yes	no		
35	9	ROS	US	BO	27-02-2023 06:04:46	27-02-2023 06:04:44	49 35.443 N	124 38.242 W	167	159	63	65	3	Julian Smith				
35	9	ROS	US	EN	27-02-2023 06:11:35	27-02-2023 06:11:32	49 35.449 N	124 38.246 W	167	159	63	65	3	Julian Smith				
36	12	NET		BE	27-02-2023 07:27:46	27-02-2023 07:27:43	49 43.493 N	124 40.885 W	350	340				Julian Smith	NA	NA		
36	12	NET		BO	27-02-2023 07:40:53	27-02-2023 07:40:49	49 43.49 N	124 40.892 W	350	340				Julian Smith				
36	12	NET		EN	27-02-2023 07:48:53	27-02-2023 07:48:51	49 43.496 N	124 40.9 W	350	340				Julian Smith				
37	12	ROS	US	BE	27-02-2023 07:58:30	27-02-2023 07:58:28	49 43.489 N	124 40.902 W	350		66	81	16	Julian Smith	yes	no		
37	12	ROS	US	BO	27-02-2023 08:04:54	27-02-2023 08:04:51	49 43.482 N	124 40.902 W	350	344	66	81	16	Julian Smith				
37	12	ROS	US	EN	27-02-2023 08:32:35	27-02-2023 08:32:31	49 43.42 N	124 40.96 W	350	344	66	81	16	Julian Smith				
38	14	NET		BE	27-02-2023 10:11:25	27-02-2023 10:11:21	49 53.001 N	124 59.56 W	312	302				Julian Smith	NA	NA		
38	14	NET		BO	27-02-2023 10:22:49	27-02-2023 10:22:46	49 53 N	124 59.549 W	312	302				Julian Smith				
38	14	NET		EN	27-02-2023 10:28:41	27-02-2023 10:28:40	49 53.027 N	124 59.555 W	312	302				Julian Smith				
39	14	ROS	US	BE	27-02-2023 10:38:43	27-02-2023 10:38:41	49 52.993 N	124 59.601 W	312		82	84	3	Cindy Wright	yes	no		
39	14	ROS	US	BO	27-02-2023 10:44:05	27-02-2023 10:44:03	49 53.002 N	124 59.626 W	312	306	82	84	3	Cindy Wright				
39	14	ROS	US	EN	27-02-2023 10:53:32	27-02-2023 10:53:28	49 53.02 N	124 59.65 W	312	306	82	84	3	Cindy Wright				
40	CT06	NET		BE	27-02-2023 22:59:34	27-02-2023 22:59:30	49 44.595 N	124 42.774 W	352	325				Nicholas Ens	NA	NA		
40	CT06	NET		BO	27-02-2023 23:09:16	27-02-2023 23:09:12	49 44.753 N	124 43.145 W	352	330				Nicholas Ens			TUCKER	
40	CT06	NET		EN	27-02-2023 23:20:21	27-02-2023 23:20:17	49 44.895 N	124 43.437 W	352	330				Nicholas Ens				
41	20	ROS	N/A	BE	28-02-2023 03:00:50	28-02-2023 03:00:48	49 47.239 N	124 32.336 W	303					Cindy Wright	yes	no		
41	20	ROS	N/A	BO	28-02-2023 03:05:51	28-02-2023 03:05:50	49 47.241 N	124 32.338 W	303	300.8				Cindy Wright				
41	20	ROS	N/A	EN	28-02-2023 03:11:01	28-02-2023 03:10:56	49 47.239 N	124 32.336 W	303	300.8				Cindy Wright				
42	22	NET		BE	28-02-2023 04:45:33	28-02-2023 04:45:31	49 40.096 N	124 16.375 W	348	337				Julian Smith	NA	NA		
42	22	NET		BO	28-02-2023 04:58:44	28-02-2023 04:58:42	49 39.97 N	124 16.376 W	348	337				Julian Smith				
42	22	NET		EN	28-02-2023 05:05:09	28-02-2023 05:05:09	49 39.923 N	124 16.323 W	348	337				Julian Smith				
43	22	ROS	US	BE	28-02-2023 05:16:01	28-02-2023 05:15:57	49 39.917 N	124 16.262 W	344		85	87	3	Cindy Wright	yes	no		
43	22	ROS	US	BO	28-02-2023 05:21:48	28-02-2023 05:21:47	49 39.916 N	124 16.259 W	344	338	85	87	3	Cindy Wright				
43	22	ROS	US	EN	28-02-2023 05:31:24	28-02-2023 05:31:20	49 39.938 N	124 16.243 W	344	338	85	87	3	Cindy Wright				
44	JE01	ROS	US	BE	28-02-2023 06:10:58	28-02-2023 06:10:57	49 42.278 N	124 14.616 W	265		88	100	13	Cindy Wright	yes	no	no	surface soak (=no 10m soak)
44	JE01	ROS	US	BO	28-02-2023 06:15:23	28-02-2023 06:15:21	49 42.274 N	124 14.579 W	268	266.5	88	100	13	Cindy Wright				
44	JE01	ROS	US	EN	28-02-2023 06:30:57	28-02-2023 06:30:54	49 42.262 N	124 14.506 W	268	266.5	88	100	13	Cindy Wright				
45	JE02	ROS	N/A	BE	28-02-2023 07:42:21	28-02-2023 07:42:17	49 46.26 N	124 9.289 W	598					Julian Smith	yes	no	no	
45	JE02	ROS	N/A	BO	28-02-2023 07:53:03	28-02-2023 07:52:59	49 46.252 N	124 9.258 W	598	600				Julian Smith				
45	JE02	ROS	N/A	EN	28-02-2023 08:03:22	28-02-2023 08:03:20	49 46.24 N	124 9.232 W	598	600				Julian Smith				
46	JE03	NET		BO	28-02-2023 09:17:27	28-02-2023 09:17:24	49 47.993 N	124 2.463 W	668	658				Julian Smith				

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Cruise Number:

Vessel:

2023-007

Franklin

Launch Daily Science Log

Print Daily Science Log Workbook



Vessel:			Franklin		Science Log		Log Workbook								CTD/Rosette Status			Institute of Ocean Sciences
Event Number	Station Name	Cast Type	Firing Method	Time Code	Date Time (UTC) Computer ("dd-mm-yyyy hh:mm:ss")	Date Time (UTC) GPS ("dd-mm-yyyy hh:mm:ss")	Positional Information (DDD MM.MMM)		Sounder Depth (m)	Max Sampling Pressure	Sample Number		# of Bottles	Watch Keepers	Trans. Cleaned	Fluorometer Cleaned	PAR Status	Comments
							Latitude	Longitude			Start	End						
46	JE03	NET		EN	28-02-2023 09:31:41	28-02-2023 09:31:39	49 48.005 N	124 2.481 W	668	658				Julian Smith				
47	JE03	ROS	US	BE	28-02-2023 09:43:24	28-02-2023 09:43:21	49 48.007 N	124 2.507 W	668		101	120	20	Cindy Wright	yes	no	no	
47	JE03	ROS	US	BO	28-02-2023 09:55:02	28-02-2023 09:54:59	49 48.007 N	124 2.522 W	668	678	101	120	20	Cindy Wright				sounder is giving a false reading so not entirely sure of start sounder depth.
47	JE03	ROS	US	EN	28-02-2023 10:22:17	28-02-2023 10:22:15	49 48.005 N	124 2.567 W	668	678	101	120	20	Cindy Wright				
48	BU04	NET		BE	01-03-2023 03:10:31	01-03-2023 03:10:28	50 35.36 N	124 53.869 W	626	621				Julian Smith	NA	NA		
48	BU04	NET		BO	01-03-2023 03:34:11	01-03-2023 03:34:07	50 35.332 N	124 53.92 W	626	621				Julian Smith				
48	BU04	NET		EN	01-03-2023 03:46:46	01-03-2023 03:46:44	50 35.319 N	124 53.944 W	626	621				Julian Smith				
49	BU04	ROS	N/A	BE	01-03-2023 03:57:35	01-03-2023 03:57:32	50 35.32 N	124 53.929 W	626	621				Julian Smith	yes	no	no	
49	BU04	ROS	US	BO	01-03-2023 04:08:17	01-03-2023 04:08:12	50 35.317 N	124 53.904 W	626	630	121	139	19	Cindy Wright				
																		when I removed the DO from this rosette log, I forgot to remove all midwater column sampling. I originally wanted to just change sequence and go from bot3 to bot 10, but Seasave wouldn't let me, so I tripped 4-9 at 100m but no samples taken
49	BU04	ROS	US	EN	01-03-2023 04:31:27	01-03-2023 04:31:25	50 35.317 N	124 53.923 W	626	630	121	139	19	Cindy Wright				
50	BU05	ROS	N/A	BE	01-03-2023 05:18:10	01-03-2023 05:18:09	50 40.482 N	124 53.176 W	562					Julian Smith	yes	no	no	
50	BU05	ROS	N/A	BO	01-03-2023 05:27:50	01-03-2023 05:27:48	50 40.493 N	124 53.15 W	562	566				Julian Smith				
50	BU05	ROS	N/A	EN	01-03-2023 05:37:49	01-03-2023 05:37:44	50 40.499 N	124 53.142 W	562	566				Julian Smith				
51	BU06	ROS	N/A	BE	01-03-2023 06:53:28	01-03-2023 06:53:27	50 45.221 N	124 53.871 W	473					Cindy Wright	yes	no	no	
51	BU06	ROS	N/A	BO	01-03-2023 07:01:20	01-03-2023 07:01:17	50 45.197 N	124 53.867 W	473	474				Cindy Wright				
51	BU06	ROS	N/A	EN	01-03-2023 07:09:18	01-03-2023 07:09:14	50 45.198 N	124 53.858 W	473	474				Cindy Wright				
52	BU07	ROS	US	BE	01-03-2023 08:16:34	01-03-2023 08:16:33	50 49.728 N	124 53.424 W	355		140	152	13	Cindy Wright	yes	no	no	
																		noticed that weird zigzag pattern on temp/DO on the upcast again
52	BU07	ROS	US	BO	01-03-2023 08:22:33	01-03-2023 08:22:31	50 49.728 N	124 53.43 W	355	354	140	152	13	Cindy Wright				
52	BU07	ROS	US	EN	01-03-2023 08:40:14	01-03-2023 08:40:12	50 49.713 N	124 53.463 W	355	354	140	152	13	Cindy Wright				
53	BU08	ROS	N/A	BE	01-03-2023 09:29:58	01-03-2023 09:29:52	50 53.265 N	124 50.473 W	221					Julian Smith	yes	no	no	
53	BU08	ROS	N/A	BO	01-03-2023 09:33:50	01-03-2023 09:33:47	50 53.247 N	124 50.444 W	221	219				Julian Smith				
53	BU08	ROS	N/A	EN	01-03-2023 09:38:17	01-03-2023 09:38:12	50 53.243 N	124 50.45 W	221	219				Julian Smith				
54	BU08	NET		BE	01-03-2023 09:48:02	01-03-2023 09:48:00	50 53.262 N	124 50.463 W	221	216				Julian Smith	NA	NA		
54	BU08	NET		BO	01-03-2023 09:57:47	01-03-2023 09:57:42	50 53.27 N	124 50.479 W	221	216				Julian Smith				

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences



Cruise Number:
Vessel:

2023-007
Franklin

Launch Daily
Science Log

Print Daily Science
Log WorkBook

Vessel:			Franklin		Station Log		Log Workbook						CTD/Rosette Status			Institute of Ocean Sciences		
Event Number	Station Name	Cast Type	Firing Method	Time Code	Date Time (UTC) Computer ("dd-mm-yyyy hh:mm:ss")	Date Time (UTC) GPS ("dd-mm-yyyy hh:mm:ss")	Positional Information (DDD MM.MMM)		Sounder Depth (m)	Max Sampling Pressure	Sample Number		# of Bottles	Watch Keepers	Trans. Cleaned	Fluorometer Cleaned	PAR Status	Comments
							Latitude	Longitude			Start	End						
54	BU08	NET		EN	01-03-2023 10:01:41	01-03-2023 10:01:37	50 53.28 N	124 50.47 W	221	216			Julian Smith					
55	CT08	NET		BE	01-03-2023 18:11:43	01-03-2023 18:11:41	50 40.072 N	124 53.657 W	556	5			Chelsea Stanley	NA	NA		MPS - Net 1	
55	CT08	NET		BO	01-03-2023 18:33:10	01-03-2023 18:33:09	50 39.636 N	124 53.561 W	556	5			Chelsea Stanley				Net 2	
55	CT08	NET		BO	01-03-2023 18:41:53	01-03-2023 18:41:51	50 39.524 N	124 53.502 W	556	5			Chelsea Stanley				Net 3	
55	CT08	NET		BO	01-03-2023 18:49:41	01-03-2023 18:49:36	50 39.424 N	124 53.468 W	556	5			Chelsea Stanley				Net 4	
55	CT08	NET		BO	01-03-2023 18:54:04	01-03-2023 18:54:02	50 39.384 N	124 53.465 W	556	5			Chelsea Stanley				Net 5	
55	CT08	NET		EN	01-03-2023 18:58:56	01-03-2023 18:58:54	50 39.346 N	124 53.437 W	556	5			Chelsea Stanley				sfc	
56	CT08	NET		BE	01-03-2023 19:12:55	01-03-2023 19:12:53	50 39.224 N	124 53.404 W	556	525			Nicholas Ens	NA	NA		TUCKER - no fin	
56	CT08	NET		BO	01-03-2023 19:32:55	01-03-2023 19:32:51	50 38.548 N	124 53.284 W	556	525			Nicholas Ens					
56	CT08	NET		EN	01-03-2023 19:49:52	01-03-2023 19:49:49	50 38.15 N	124 53.226 W	556	525			Nicholas Ens					
57	CT08	NET		BE	01-03-2023 20:08:26	01-03-2023 20:08:22	50 37.929 N	124 53.218 W	603	550			Nicholas Ens	NA	NA			
57	CT08	NET		BO	01-03-2023 20:35:50	01-03-2023 20:35:47	50 36.849 N	124 53.473 W	603	550			Nicholas Ens				Fin on	
57	CT08	NET		EN	01-03-2023 20:59:20	01-03-2023 20:59:18	50 36.02 N	124 53.692 W	603	550			Nicholas Ens					
58	DS2	ROS	N/A	BE	02-03-2023 03:32:38	02-03-2023 03:32:36	50 9.121 N	124 44.157 W	563				Julian Smith	yes	no	no		
58	DS2	ROS	N/A	BO	02-03-2023 03:42:25	02-03-2023 03:42:21	50 9.078 N	124 44.166 W	563	580			Julian Smith					
58	DS2	ROS	N/A	EN	02-03-2023 03:52:16	02-03-2023 03:52:13	50 9.077 N	124 44.162 W	563	580			Julian Smith					
59	HC1	ROS	N/A	BE	02-03-2023 04:46:40	02-03-2023 04:46:37	50 12.722 N	124 37.981 W	707				Cindy Wright	yes	no	no		
																	6 mab: soft bottom and noisy altimeter and unreliable sounder seeing sidewalls	
59	HC1	ROS	N/A	BO	02-03-2023 04:58:21	02-03-2023 04:58:17	50 12.702 N	124 38.022 W	707	719			Cindy Wright					
59	HC1	ROS	N/A	EN	02-03-2023 05:10:09	02-03-2023 05:10:07	50 12.714 N	124 38.037 W	707	719			Cindy Wright					
60	HC2	NET		BE	02-03-2023 06:05:08	02-03-2023 06:05:07	50 17.695 N	124 40.1 W	705	700			Julian Smith	NA	NA			
60	HC2	NET		BO	02-03-2023 06:32:09	02-03-2023 06:32:06	50 17.682 N	124 40.1 W	705	700			Julian Smith					
60	HC2	NET		EN	02-03-2023 06:46:04	02-03-2023 06:46:01	50 17.691 N	124 40.143 W	705	700			Julian Smith					
61	HC2	ROS	US	BE	02-03-2023 06:53:52	02-03-2023 06:53:50	50 17.698 N	124 40.148 W	706		153	165	13	Cindy Wright	yes	no	no	
61	HC2	ROS	US	BO	02-03-2023 07:05:50	02-03-2023 07:05:47	50 17.702 N	124 40.167 W	706	709	153	165	13	Cindy Wright				
61	HC2	ROS	US	EN	02-03-2023 07:27:45	02-03-2023 07:27:42	50 17.683 N	124 40.206 W	706	709	153	165	13	Cindy Wright				
62	T01	ROS	N/A	BE	02-03-2023 08:09:31	02-03-2023 08:09:30	50 18.15 N	124 46.272 W	495				Julian Smith	yes	no	no		
62	T01	ROS	N/A	BO	02-03-2023 08:18:22	02-03-2023 08:18:20	50 18.141 N	124 46.281 W	495	497			Julian Smith					
62	T01	ROS	N/A	EN	02-03-2023 08:26:48	02-03-2023 08:26:44	50 18.147 N	124 46.221 W	495	497			Julian Smith					
63	T02A	ROS	US	BE	02-03-2023 09:08:01	02-03-2023 09:07:58	50 21.671 N	124 42.398 W	497		166	178	13	Cindy Wright	yes	no	no	
63	T02A	ROS	US	BO	02-03-2023 09:16:40	02-03-2023 09:16:36	50 21.682 N	124 42.383 W	497	498	166	178	13	Cindy Wright				
63	T02A	ROS	US	EN	02-03-2023 09:35:11	02-03-2023 09:35:08	50 21.684 N	124 42.388 W	497	498	166	178	13	Cindy Wright				

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences



Cruise Number:

Vessel:

2023-007

Franklin

Launch Daily Science Log

Print Daily Science Log WorkBook

Vessel:			Franklin		Source Log		Log Workbook								CTD/Rosette Status			Institute of Ocean Sciences
Event Number	Station Name	Cast Type	Firing Method	Time Code	Date Time (UTC) Computer ("dd-mm-yyyy hh:mm:ss")	Date Time (UTC) GPS ("dd-mm-yyyy hh:mm:ss")	Positional Information (DDD MM.MMM)		Sounder Depth (m)	Max Sampling Pressure	Sample Number		# of Bottles	Watch Keepers	Trans. Cleaned	Fluorometer Cleaned	PAR Status	Comments
							Latitude	Longitude			Start	End						
																		restarted event after forgetting to hit start archive until ~10 m. Came back to surface and waited for ~2min before re-deploying. Overwrote file
64	T03A	ROS	N/A	BE	02-03-2023 10:16:39	02-03-2023 10:16:36	50 24.57 N	124 38.012 W	471					Julian Smith	yes	NA	no	
64	T03A	ROS	N/A	BO	02-03-2023 10:24:50	02-03-2023 10:24:47	50 24.563 N	124 37.948 W	471	473				Julian Smith				
64	T03A	ROS	N/A	EN	02-03-2023 10:32:51	02-03-2023 10:32:47	50 24.575 N	124 37.899 W	471	473				Julian Smith				
65	T04A	ROS	US	BE	02-03-2023 11:12:04	02-03-2023 11:12:01	50 25.649 N	124 30.93 W	371		179	191	13	Cindy Wright	yes	no	no	
65	T04A	ROS	US	BO	02-03-2023 11:18:19	02-03-2023 11:18:16	50 25.654 N	124 30.923 W	371	370.85	179	191	13	Cindy Wright				
65	T04A	ROS	US	EN	02-03-2023 11:34:33	02-03-2023 11:34:29	50 25.655 N	124 30.951 W	371	370.85	179	191	13	Cindy Wright				
66	T05	ROS	N/A	BE	02-03-2023 12:23:35	02-03-2023 12:23:34	50 27.742 N	124 23.887 W	189					Julian Smith	yes	no	no	
66	T05	ROS	N/A	BO	02-03-2023 12:27:08	02-03-2023 12:27:06	50 27.734 N	124 23.903 W	189	187				Julian Smith				
66	T05	ROS	N/A	EN	02-03-2023 12:30:29	02-03-2023 12:30:27	50 27.734 N	124 23.893 W	189	187				Julian Smith				
67	T05	NET		BE	02-03-2023 12:40:04	02-03-2023 12:40:04	50 27.732 N	124 23.873 W	190	180				Julian Smith	NA	NA		
67	T05	NET		BO	02-03-2023 12:47:36	02-03-2023 12:47:33	50 27.75 N	124 23.855 W	190	180				Julian Smith				
67	T05	NET		EN	02-03-2023 12:51:09	02-03-2023 12:51:07	50 27.753 N	124 23.841 W	190	180				Julian Smith				
68	Toba1	NET		BE	02-03-2023 16:42:35	02-03-2023 16:42:34	50 21.876 N	124 42.144 W	495	475				Chelsea Stanley	NA	NA		MPS-Net 1
68	Toba1	NET		BO	02-03-2023 17:00:57	02-03-2023 17:00:53	50 21.692 N	124 42.449 W	495	475				Chelsea Stanley				Net 2
68	Toba1	NET		BO	02-03-2023 17:04:28	02-03-2023 17:04:27	50 21.672 N	124 42.503 W	495	475				Chelsea Stanley				Net 3
68	Toba1	NET		BO	02-03-2023 17:08:09	02-03-2023 17:08:05	50 21.599 N	124 42.596 W	495	475				Chelsea Stanley				Net 4
68	Toba1	NET		BO	02-03-2023 17:13:13	02-03-2023 17:13:12	50 21.501 N	124 42.732 W	495	475				Chelsea Stanley				Net 5
68	Toba1	NET		EN	02-03-2023 17:16:34	02-03-2023 17:16:32	50 21.438 N	124 42.843 W	495	475				Chelsea Stanley				sfc
69	Toba1	NET		BE	02-03-2023 17:29:39	02-03-2023 17:29:37	50 21.289 N	124 42.982 W	495	475				Nicholas Ens	NA	NA		TUCKER
69	Toba1	NET		BO	02-03-2023 17:41:58	02-03-2023 17:41:57	50 20.999 N	124 43.332 W	495	475				Nicholas Ens				
69	Toba1	NET		EN	02-03-2023 17:54:19	02-03-2023 17:54:19	50 20.807 N	124 43.58 W	495	475				Nicholas Ens				
70	CT10	NET		BE	02-03-2023 23:12:05	02-03-2023 23:12:01	50 1.285 N	124 53.015 W	273					Nicholas Ens	NA	NA		
70	CT10	NET		BO	02-03-2023 23:18:34	02-03-2023 23:18:30	50 1.172 N	124 52.808 W	273	250				Nicholas Ens				
70	CT10	NET		EN	02-03-2023 23:24:50	02-03-2023 23:24:47	50 1.054 N	124 52.615 W	273	250				Nicholas Ens				
71	CT10	NET		BE	02-03-2023 23:36:38	02-03-2023 23:36:34	50 1.048 N	124 52.345 W	273	250				Chelsea Stanley	NA	NA		
71	CT10	NET		BO	02-03-2023 23:45:27	02-03-2023 23:45:22	50 1.286 N	124 52.474 W	273	250				Chelsea Stanley				
71	CT10	NET		BO	02-03-2023 23:49:17	02-03-2023 23:49:15	50 1.403 N	124 52.538 W	273	250				Chelsea Stanley				
71	CT10	NET		BO	02-03-2023 23:51:17	02-03-2023 23:51:15	50 1.489 N	124 52.584 W	273	250				Chelsea Stanley				
71	CT10	NET		BO	02-03-2023 23:53:28	02-03-2023 23:53:27	50 1.569 N	124 52.632 W	273	250				Chelsea Stanley				
71	CT10	NET		EN	02-03-2023 23:55:48	02-03-2023 23:55:47	50 1.656 N	124 52.679 W	273	250				Chelsea Stanley				
72	DS1	ROS	US	BE	03-03-2023 03:48:46	03-03-2023 03:48:43	50 4.787 N	124 49.376 W	505		192	204	13	Julian Smith	yes	no	no	
72	DS1	ROS	US	BO	03-03-2023 03:57:14	03-03-2023 03:57:12	50 4.793 N	124 49.382 W	505	507	192	204	13	Julian Smith				

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences



Cruise Number: 2023-007
Vessel: Franklin

Launch Daily
Science Log

Print Daily Science
Log WorkBook

Vessel:			Franklin		Source Log		Log Workbook							CTD/Rosette Status			Institute of Ocean Sciences	
Event Number	Station Name	Cast Type	Firing Method	Time Code	Date Time (UTC) Computer ("dd-mm-yyyy hh:mm:ss")	Date Time (UTC) GPS ("dd-mm-yyyy hh:mm:ss")	Positional Information (DDD MM.MMM)		Sounder Depth (m)	Max Sampling Pressure	Sample Number		# of Bottles	Watch Keepers	Trans. Cleaned	Fluorometer Cleaned	PAR Status	Comments
							Latitude	Longitude			Start	End						
72	DS1	ROS	US	EN	03-03-2023 04:18:08	03-03-2023 04:18:03	50 4.798 N	124 49.382 W	505	507	192	204	13	Julian Smith				
73	LE CHAN	ROS	N/A	BE	03-03-2023 05:19:40	03-03-2023 05:19:37	50 10.592 N	124 54.724 W	246					Julian Smith	yes	no	no	
73	LE CHAN	ROS	N/A	BO	03-03-2023 05:23:57	03-03-2023 05:23:53	50 10.6 N	124 54.729 W	246	245				Julian Smith				
73	LE CHAN	ROS	N/A	EN	03-03-2023 05:28:14	03-03-2023 05:28:13	50 10.603 N	124 54.73 W	246	245				Julian Smith				
74	CALM1	ROS	N/A	BE	03-03-2023 06:35:21	03-03-2023 06:35:18	50 16.466 N	125 1.725 W	437					Cindy Wright	yes	no	no	
74	CALM1	ROS	N/A	BO	03-03-2023 06:42:36	03-03-2023 06:42:35	50 16.472 N	125 1.762 W	437	438				Cindy Wright				
74	CALM1	ROS	N/A	EN	03-03-2023 06:49:57	03-03-2023 06:49:54	50 16.471 N	125 1.766 W	437	438				Cindy Wright				
75	BU01	ROS	US	BE	03-03-2023 07:44:58	03-03-2023 07:44:56	50 22.069 N	125 5.05 W	586		205	217	13	Julian Smith	yes	no	no	
75	BU01	ROS	US	BO	03-03-2023 07:55:26	03-03-2023 07:55:22	50 22.157 N	125 4.994 W	586	594	205	217	13	Julian Smith				
75	BU01	ROS	US	EN	03-03-2023 08:16:13	03-03-2023 08:16:08	50 22.18 N	125 4.981 W	586	594	205	217	13	Julian Smith				
76	BU02	ROS	N/A	BE	03-03-2023 09:02:56	03-03-2023 09:02:55	50 28.114 N	125 4.696 W	645					Julian Smith	yes	no	no	
76	BU02	ROS	N/A	BO	03-03-2023 09:14:02	03-03-2023 09:14:01	50 28.123 N	125 4.688 W	645	649				Julian Smith				
76	BU02	ROS	N/A	EN	03-03-2023 09:24:55	03-03-2023 09:24:54	50 28.14 N	125 4.673 W	645	649				Julian Smith				
77	QU36	ROS	N/A	BE	03-03-2023 11:18:17	03-03-2023 11:18:12	50 11.507 N	125 0.112 W	455					Cindy Wright	yes	no	no	sounder indicates shallowing up through downcast
77	QU36	ROS	N/A	BO	03-03-2023 11:26:22	03-03-2023 11:26:18	50 11.503 N	125 0.15 W	455	446				Cindy Wright				
77	QU36	ROS	N/A	EN	03-03-2023 11:33:46	03-03-2023 11:33:42	50 11.478 N	125 0.13 W	455	446				Cindy Wright				
78	CT11	NET		BE	03-03-2023 18:26:03	03-03-2023 18:26:00	49 43.55 N	124 21.638 W	315	300				Nicholas Ens	NA	NA		Tucker
78	CT11	NET		BO	03-03-2023 18:33:35	03-03-2023 18:33:31	49 43.502 N	124 21.356 W	315	300				Nicholas Ens				
78	CT11	NET		EN	03-03-2023 18:40:50	03-03-2023 18:40:47	49 43.459 N	124 21.096 W	315	300				Nicholas Ens				
79	CT12	NET		BE	04-03-2023 00:25:20	04-03-2023 00:25:19	49 31.54 N	124 6.496 W	410	400				Nicholas Ens	NA	NA		
79	CT12	NET		BO	04-03-2023 00:37:41	04-03-2023 00:37:38	49 31.248 N	124 6.013 W	410	400				Nicholas Ens				
79	CT12	NET		EN	04-03-2023 00:49:48	04-03-2023 00:49:46	49 31.066 N	124 5.708 W	410	400				Nicholas Ens				
80	CT12	NET		BE	04-03-2023 01:18:29	04-03-2023 01:18:27	49 31.932 N	124 7.511 W	410	400				Chelsea Stanley	NA	NA		MPS - net 1
80	CT12	NET		BO	04-03-2023 01:31:54	04-03-2023 01:31:49	49 31.528 N	124 7.162 W	410	400				Chelsea Stanley				Net 2
80	CT12	NET		BO	04-03-2023 01:34:40	04-03-2023 01:34:37	49 31.44 N	124 7.091 W	410	400				Chelsea Stanley				Net 3
80	CT12	NET		BO	04-03-2023 01:39:08	04-03-2023 01:39:06	49 31.284 N	124 7.015 W	410	400				Chelsea Stanley				Net 4
80	CT12	NET		BO	04-03-2023 01:47:17	04-03-2023 01:47:14	49 31.023 N	124 7.032 W	410	400				Chelsea Stanley				Net 5
80	CT12	NET		EN	04-03-2023 01:51:55	04-03-2023 01:51:52	49 30.992 N	124 7.122 W	410	400				Chelsea Stanley				sfc
81	24	ROS	N/A	BE	04-03-2023 02:23:36	04-03-2023 02:23:34	49 30.336 N	124 6.165 W	422					Cindy Wright	yes	no	no	
81	24	ROS	N/A	BO	04-03-2023 02:30:42	04-03-2023 02:30:37	49 30.325 N	124 6.154 W	422	418				Cindy Wright				
81	24	ROS	N/A	EN	04-03-2023 02:37:51	04-03-2023 02:37:49	49 30.325 N	124 6.128 W	422	418				Cindy Wright				
82	24	NET		BE	04-03-2023 02:45:44	04-03-2023 02:45:42	49 30.314 N	124 6.114 W	422	412				Julian Smith	NA	NA		
82	24	NET		BO	04-03-2023 03:01:45	04-03-2023 03:01:42	49 30.307 N	124 6.101 W	422	412				Julian Smith				
82	24	NET		EN	04-03-2023 03:09:39	04-03-2023 03:09:37	49 30.304 N	124 6.108 W	422	412				Julian Smith				
83	JE01	ROS	N/A	BE	04-03-2023 04:45:42	04-03-2023 04:45:38	49 42.348 N	124 14.511 W	253					Julian Smith	yes	no	no	

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences



Cruise Number: 2023-007
Vessel: Franklin

Launch Daily
Science Log

Print Daily Science
Log WorkBook

Vessel:			Franklin		Source Log		Log Workbook					CTD/Rosette Status				Institute of Ocean Sciences		
Event Number	Station Name	Cast Type	Firing Method	Time Code	Date Time (UTC) Computer ("dd-mm-yyyy hh:mm:ss")	Date Time (UTC) GPS ("dd-mm-yyyy hh:mm:ss")	Positional Information (DDD MM.MMM)		Sounder Depth (m)	Max Sampling Pressure	Sample Number		# of Bottles	Watch Keepers	Trans. Cleaned	Fluorometer Cleaned	PAR Status	Comments
							Latitude	Longitude			Start	End						
83	JE01	ROS	N/A	BO	04-03-2023 04:50:07	04-03-2023 04:50:05	49 42.355 N	124 14.535 W	253	253			Julian Smith					
83	JE01	ROS	N/A	EN	04-03-2023 04:54:38	04-03-2023 04:54:33	49 42.365 N	124 14.552 W	253	253			Julian Smith				comparison cast	
84	JE04	ROS	N/A	BE	04-03-2023 06:56:43	04-03-2023 06:56:40	49 49.455 N	123 54.399 W	662				Julian Smith	yes	no	no		
84	JE04	ROS	N/A	BO	04-03-2023 07:07:57	04-03-2023 07:07:52	49 49.455 N	123 54.398 W	662	666			Julian Smith					
84	JE04	ROS	N/A	EN	04-03-2023 07:19:13	04-03-2023 07:19:07	49 49.461 N	123 54.407 W	662	666			Julian Smith					
85	JE05	ROS	N/A	BE	04-03-2023 08:05:22	04-03-2023 08:05:17	49 54.259 N	123 55.402 W	648				Julian Smith	yes	no	no		
85	JE05	ROS	N/A	BO	04-03-2023 08:16:33	04-03-2023 08:16:27	49 54.263 N	123 55.416 W	648	652			Julian Smith					
85	JE05	ROS	N/A	EN	04-03-2023 08:27:26	04-03-2023 08:27:22	49 54.256 N	123 55.392 W	648	652			Julian Smith					
86	JE06	ROS	N/A	BE	04-03-2023 09:15:24	04-03-2023 09:15:22	49 59.088 N	123 59.314 W	541				Cindy Wright	yes	no	no	BE is late timewise ~3min	
86	JE06	ROS	N/A	BO	04-03-2023 09:21:07	04-03-2023 09:21:02	49 59.09 N	123 59.314 W	541	542			Cindy Wright					
86	JE06	ROS	N/A	EN	04-03-2023 09:30:09	04-03-2023 09:30:04	49 59.102 N	123 59.294 W	541	542			Cindy Wright					
87	JE07	ROS	N/A	BE	04-03-2023 10:19:34	04-03-2023 10:19:32	50 2.502 N	123 51.129 W	535				Julian Smith	yes	no	no		
87	JE07	ROS	N/A	BO	04-03-2023 10:28:55	04-03-2023 10:28:51	50 2.493 N	123 51.076 W	535	537			Julian Smith					
87	JE07	ROS	N/A	EN	04-03-2023 10:38:12	04-03-2023 10:38:08	50 2.506 N	123 50.971 W	535	537			Julian Smith					
88	JE08	ROS	N/A	BE	04-03-2023 11:13:42	04-03-2023 11:13:41	50 5.251 N	123 46.746 W	465				Cindy Wright	yes	no	no		
88	JE08	ROS	N/A	BO	04-03-2023 11:21:38	04-03-2023 11:21:33	50 5.281 N	123 46.722 W	465	470			Cindy Wright					
88	JE08	ROS	N/A	EN	04-03-2023 11:29:35	04-03-2023 11:29:32	50 5.269 N	123 46.724 W	465	470			Cindy Wright					
89	JE09	ROS	US	BE	04-03-2023 12:10:03	04-03-2023 12:10:00	50 8.23 N	123 50.038 W	354		218	230	13	Julian Smith	yes	no	no	
89	JE09	ROS	US	BO	04-03-2023 12:16:58	04-03-2023 12:16:56	50 8.253 N	123 50.038 W	354	352	218	230	13	Julian Smith				7m above bottom Bottle 2 didn't fire- all Bot 2 samples were taken from Bot 3, but sample IDs were not changed
89	JE09	ROS	US	EN	04-03-2023 12:33:40	04-03-2023 12:33:37	50 8.255 N	123 50.045 W	354	352	218	230	13	Julian Smith				
90	JE10	ROS	N/A	BE	04-03-2023 13:24:15	04-03-2023 13:24:13	50 11.356 N	123 57.377 W	264				Julian Smith	yes	no	no		
90	JE10	ROS	N/A	BO	04-03-2023 13:28:50	04-03-2023 13:28:46	50 11.355 N	123 57.402 W	264	261			Julian Smith					
90	JE10	ROS	N/A	EN	04-03-2023 13:33:26	04-03-2023 13:33:23	50 11.362 N	123 57.396 W	264	261			Julian Smith					
91	JE10	NET		BE	04-03-2023 13:38:54	04-03-2023 13:38:51	50 11.369 N	123 57.382 W	261	252			Julian Smith	NA	NA			
91	JE10	NET		BO	04-03-2023 13:48:36	04-03-2023 13:48:35	50 11.377 N	123 57.38 W	261	252			Julian Smith					
91	JE10	NET		EN	04-03-2023 13:54:14	04-03-2023 13:54:12	50 11.362 N	123 57.368 W	261	252			Julian Smith					
92	CT13	NET		BE	04-03-2023 17:25:26	04-03-2023 17:25:23	50 3.358 N	123 49.204 W	527	500			Chelsea Stanley	NA	NA		MPS - net 1	
92	CT13	NET		BO	04-03-2023 17:44:19	04-03-2023 17:44:17	50 3.939 N	123 48.604 W	527	500			Chelsea Stanley				Net 2	
92	CT13	NET		BO	04-03-2023 18:00:54	04-03-2023 18:00:48	50 4.416 N	123 48.152 W	527	500			Chelsea Stanley				Net 3	
92	CT13	NET		BO	04-03-2023 18:06:03	04-03-2023 18:05:59	50 4.557 N	123 48.001 W	527	500			Chelsea Stanley				Net 4	
92	CT13	NET		BO	04-03-2023 18:08:46	04-03-2023 18:08:45	50 4.653 N	123 47.919 W	527	500			Chelsea Stanley				Net 5	
92	CT13	NET		EN	04-03-2023 18:14:09	04-03-2023 18:14:04	50 4.808 N	123 47.734 W	527	500			Chelsea Stanley				sfc	
93	CT13	NET		BE	04-03-2023 18:28:50	04-03-2023 18:28:48	50 4.875 N	123 47.628 W	511	500			Nicholas Ens	NA	NA		TUCKER	
93	CT13	NET		BO	04-03-2023 18:45:17	04-03-2023 18:45:15	50 4.453 N	123 48.153 W	511	500			Nicholas Ens					

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Cruise Number: 2023-007

Vessel: Franklin

Launch Daily Science Log

Print Daily Science Log WorkBook



Vessel:			Franklin		Science Log		Log Workbook				CTD/Rosette Status				Institute of Ocean Sciences			
Event Number	Station Name	Cast Type	Firing Method	Time Code	Date Time (UTC) Computer ("dd-mm-yyyy hh:mm:ss")	Date Time (UTC) GPS ("dd-mm-yyyy hh:mm:ss")	Positional Information (DDD MM.MMM)		Sounder Depth (m)	Max Sampling Pressure	Sample Number		# of Bottles	Watch Keepers	Trans. Cleaned	Fluoromet er Cleaned	PAR Status	Comments
							Latitude	Longitude			Start	End						
93	CT13	NET		EN	04-03-2023 19:01:23	04-03-2023 19:01:20	50 4.237 N	123 48.498 W	511	500			Nicholas Ens					
94	CT13	NET		BE	04-03-2023 23:41:55	04-03-2023 23:41:51	49 52.957 N	123 53.474 W	668				Nicholas Ens	NA	NA			
94	CT13	NET		BO	05-03-2023 00:02:46	05-03-2023 00:02:42	49 52.221 N	123 53.572 W	656	600			Nicholas Ens					
																	Picked 20x PATEL in EtOH for Cat DNA; 2x 18mm THYSP, 1x 14mm THYSP, 1x 13mm THYSP, 1x 15mm THYSP, 1x 19mm THYSP, 5x 17mm EUPPA, 5x 19mm EUPPA, 5x 16mm EUPPA, 5x 15mm EUPPA for length-biomass	
94	CT13	NET		EN	05-03-2023 00:23:18	05-03-2023 00:23:15	49 51.614 N	123 53.755 W	656	600			Nicholas Ens					
95	28	NET		BE	05-03-2023 04:53:09	05-03-2023 04:53:07	49 24.073 N	123 45.252 W	131	121			Cindy Wright	NA	NA			
95	28	NET		BO	05-03-2023 04:57:51	05-03-2023 04:57:47	49 24.085 N	123 45.285 W	131	121			Cindy Wright					
95	28	NET		EN	05-03-2023 05:00:43	05-03-2023 05:00:40	49 24.105 N	123 45.246 W	131	121			Cindy Wright					
96	28	ROS	N/A	BE	05-03-2023 05:11:25	05-03-2023 05:11:23	49 24.165 N	123 45.234 W	131				Cindy Wright	yes	no	no		
96	28	ROS	N/A	BO	05-03-2023 05:13:35	05-03-2023 05:13:34	49 24.173 N	123 45.235 W	131	123			Cindy Wright					
																	3 bottles (bot-10, 2 x surface) for separate non-DFO purposes. No sample IDs assigned. Bottle 2 didn't fire again. Will need to consider this for other cast	
96	28	ROS	N/A	EN	05-03-2023 05:16:03	05-03-2023 05:16:01	49 24.178 N	123 45.242 W	131	123			Cindy Wright					
97	HS3	ROS	N/A	BE	05-03-2023 07:22:21	05-03-2023 07:22:17	49 25.369 N	123 22.419 W	243				Julian Smith	yes	no	no		
97	HS3	ROS	N/A	BO	05-03-2023 07:26:35	05-03-2023 07:26:33	49 25.377 N	123 22.433 W	243	242			Julian Smith					
97	HS3	ROS	N/A	EN	05-03-2023 07:30:49	05-03-2023 07:30:47	49 25.388 N	123 22.418 W	243	242			Julian Smith					
98	HS4	ROS	N/A	BE	05-03-2023 08:13:56	05-03-2023 08:13:53	49 27.12 N	123 16.752 W	243				Julian Smith	no	no	yes		
98	HS4	ROS	N/A	BO	05-03-2023 08:18:23	05-03-2023 08:18:19	49 27.119 N	123 16.777 W	243	242			Julian Smith					
98	HS4	ROS	N/A	EN	05-03-2023 08:22:43	05-03-2023 08:22:42	49 27.114 N	123 16.777 W	243	242			Julian Smith					
99	HS6	NET		BE	05-03-2023 09:01:16	05-03-2023 09:01:13	49 30.523 N	123 16.708 W	234	223			Julian Smith	NA	NA			
99	HS6	NET		BO	05-03-2023 09:09:33	05-03-2023 09:09:30	49 30.503 N	123 16.726 W	234	222			Julian Smith					
99	HS6	NET		EN	05-03-2023 09:14:04	05-03-2023 09:14:00	49 30.5 N	123 16.734 W	234	223			Julian Smith					
100	HS6	ROS	US	BO	05-03-2023 09:26:26	05-03-2023 09:26:23	49 30.542 N	123 16.726 W	233	231	231	243	13	Cindy Wright				
100	HS6	ROS	US	EN	05-03-2023 09:40:00	05-03-2023 09:39:58	49 30.522 N	123 16.768 W	233	231	231	243	13	Cindy Wright				
101	HS7	ROS	N/A	BE	05-03-2023 10:46:03	05-03-2023 10:45:59	49 32.641 N	123 23.102 W	223				Julian Smith	yes	no	no		
101	HS7	ROS	N/A	BO	05-03-2023 10:49:46	05-03-2023 10:49:43	49 32.644 N	123 23.106 W	223	222			Julian Smith					
101	HS7	ROS	N/A	EN	05-03-2023 10:53:29	05-03-2023 10:53:26	49 32.648 N	123 23.116 W	223	222			Julian Smith					

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Cruise Number: 2023-007
Vessel: Franklin

Launch Daily
Science Log

Print Daily Science
Log WorkBook



Vessel:			Franklin		Sample Log		Log Workbook							CTD/Rosette Status			Institute of Ocean Sciences	
Event Number	Station Name	Cast Type	Firing Method	Time Code	Date Time (UTC) Computer ("dd-mm-yyyy hh:mm:ss")	Date Time (UTC) GPS ("dd-mm-yyyy hh:mm:ss")	Positional Information (DDD MM.MMM)		Sounder Depth (m)	Max Sampling Pressure	Sample Number		# of Bottles	Watch Keepers	Trans. Cleaned	Fluoromet er Cleaned	PAR Status	Comments
							Latitude	Longitude			Start	End						
102	HS9	ROS	N/A	BE	05-03-2023 11:45:47	05-03-2023 11:45:43	49 35.464 N	123 14.52 W	281					Julian Smith	yes	no	no	
102	HS9	ROS	N/A	BO	05-03-2023 11:50:37	05-03-2023 11:50:33	49 35.45 N	123 14.541 W	281	279				Julian Smith				
102	HS9	ROS	N/A	EN	05-03-2023 11:55:25	05-03-2023 11:55:21	49 35.459 N	123 14.531 W	281	279				Julian Smith				
103	HS10	ROS	N/A	BE	05-03-2023 12:17:58	05-03-2023 12:17:55	49 36.979 N	123 14.268 W	271					Julian Smith	yes	no	no	
103	HS10	ROS	N/A	BO	05-03-2023 12:22:45	05-03-2023 12:22:42	49 36.993 N	123 14.285 W	271	270				Julian Smith				
103	HS10	ROS	N/A	EN	05-03-2023 12:27:21	05-03-2023 12:27:20	49 36.993 N	123 14.286 W	271	270				Julian Smith				
104	HS11	NET		BE	05-03-2023 12:54:03	05-03-2023 12:54:02	49 39.268 N	123 14.393 W	222	212				Julian Smith	NA	NA		
104	HS11	NET		BO	05-03-2023 13:02:17	05-03-2023 13:02:13	49 39.282 N	123 14.412 W	222	212				Julian Smith				
104	HS11	NET		EN	05-03-2023 13:06:38	05-03-2023 13:06:34	49 39.286 N	123 14.417 W	222	212				Julian Smith				
105	HS11	ROS	US	BE	05-03-2023 13:17:56	05-03-2023 13:17:52	49 39.319 N	123 14.425 W	223		244	256	13	Cindy Wright	yes	no	no	
105	HS11	ROS	US	BO	05-03-2023 13:21:55	05-03-2023 13:21:53	49 39.312 N	123 14.423 W	223	222	244	256	13	Cindy Wright				
105	HS11	ROS	US	EN	05-03-2023 13:36:34	05-03-2023 13:36:31	49 39.341 N	123 14.378 W	223	222	244	256	13	Cindy Wright				
106	HS12	ROS	N/A	BE	05-03-2023 14:04:38	05-03-2023 14:04:36	49 40.591 N	123 10.399 W	62					Julian Smith	yes	no	no	
106	HS12	ROS	N/A	BO	05-03-2023 14:05:56	05-03-2023 14:05:53	49 40.589 N	123 10.399 W	62	57				Julian Smith				
106	HS12	ROS	N/A	EN	05-03-2023 14:07:10	05-03-2023 14:07:07	49 40.585 N	123 10.401 W	62	57				Julian Smith				
107	CT15	NET		BE	05-03-2023 18:43:17	05-03-2023 18:43:13	49 27.219 N	123 17.357 W	244					Nicholas Ens	NA	NA		
107	CT15	NET		BO	05-03-2023 18:51:11	05-03-2023 18:51:08	49 27.058 N	123 16.984 W	244	225				Nicholas Ens				TUCKER
107	CT15	NET		EN	05-03-2023 18:58:54	05-03-2023 18:58:52	49 26.917 N	123 16.739 W	244	225				Nicholas Ens				
108	VAN1	ROS	N/A	BE	05-03-2023 21:05:29	05-03-2023 21:05:26	49 18.873 N	123 15.922 W	113					Chelsea Stanley	yes	no	no	
108	VAN1	ROS	N/A	BO	05-03-2023 21:07:24	05-03-2023 21:07:23	49 18.874 N	123 15.923 W	113	110				Chelsea Stanley				
108	VAN1	ROS	N/A	EN	05-03-2023 21:09:18	05-03-2023 21:09:13	49 18.875 N	123 15.922 W	113	110				Chelsea Stanley				
109	VAN2	ROS	N/A	BE	05-03-2023 21:36:46	05-03-2023 21:36:42	49 19.454 N	123 13.85 W	65					Chelsea Stanley	yes	no	no	
109	VAN2	ROS	N/A	BO	05-03-2023 21:37:57	05-03-2023 21:37:53	49 19.452 N	123 13.848 W	65	62				Chelsea Stanley				
109	VAN2	ROS	N/A	EN	05-03-2023 21:39:21	05-03-2023 21:39:17	49 19.449 N	123 13.846 W	65	62				Chelsea Stanley				
110	VAN0	ROS	N/A	BE	05-03-2023 22:17:14	05-03-2023 22:17:11	49 17.788 N	123 13.874 W	46					Chelsea Stanley	yes	no	no	
110	VAN0	ROS	N/A	BO	05-03-2023 22:18:12	05-03-2023 22:18:09	49 17.784 N	123 13.869 W	46	43				Chelsea Stanley				
110	VAN0	ROS	N/A	EN	05-03-2023 22:19:05	05-03-2023 22:19:04	49 17.776 N	123 13.864 W	46	43				Chelsea Stanley				
111	CT16	NET		BE	05-03-2023 23:54:12	05-03-2023 23:54:10	49 17.27 N	123 22.003 W	253					Nicholas Ens	NA	NA		
111	CT16	NET		BO	06-03-2023 00:03:18	06-03-2023 00:03:16	49 16.957 N	123 22.26 W	253	225				Nicholas Ens				
111	CT16	NET		EN	06-03-2023 00:11:11	06-03-2023 00:11:09	49 16.761 N	123 22.348 W	253	225				Nicholas Ens				