

DAILY SCIENCE LOG BOOK

25 pg.

MISSION
NUMBER

2019-014

DATE:

From: 16 July 2019

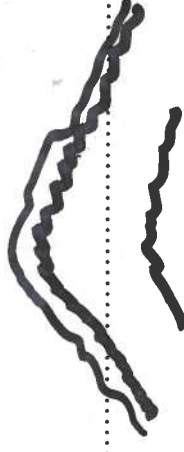
To:

VESSEL:

JPTully

PROJECT(S):

Seamounts 2019



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: Tully Laptop

Data acquisition program: Seasave

CTD deck unit make: _____ model: _____ serial number: _____

Primary CTD

Make: SBE model: 9+ serial number: 506

Primary temperature serial number: 2023

Primary conductivity serial number: 1763

Secondary temperature serial number: 5013

Secondary conductivity serial number: 3374

Transmissometer: Wetlabs Model: C-Star s/n: 1185DR

Transmissometer: Wetlabs Model: C-Star s/n: 1883DG

Fluorometer: Model Seapoint Cable gain: 10x s/n: 3640 ☒ P, ☐ S or NO pump?

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

Oxygen sensor: SBE Model: 43 s/n: 3734 ☒ P, ☐ S or NO pump?

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

Other sensors: Altimeter 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?

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)

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DAILY SCIENCE LOG

Month			Year			Vessel			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/Fl Cleaned	Comments
							Latitude	Longitude							
01	TEST	17	17:51	BE	ROS	US	48° 39.500	123° 30.240	178		φ	24	D.	☒	TEST CAB
			17:55	BO			48° 39.500	123° 30.240			-			☐	
			17:58	EN			48° 39.500	123° 30.260			-			☐	
02	ES03	19	15:46	BE	ROS	US	49° 00.700	130° 38.380	3229		1-21	21	D.	☒	Bottle 17 came up w/ opa spiza
			16:43	BO			49° 00.640	130° 38.340			-			☐	
			17:54	EN			49° 00.720	130° 38.280			-			☐	
03	BO-04		:	BE	CAM		.	.			-			☐	BOOTS DIVE
			:	BO			.	.			-			☐	
			:	EN			.	.			-			☐	
04	SO	20	00:35	BE	ROS	US	49° 02.430	130° 50.480	2387		22-22	1	D.	☒	
			01:19	BO			49° 02.420	130° 50.500		2400	-			☐	
			01:55	EN			49° 02.440	130° 50.370			-			☐	
05	ES01	20	02:51	BE	ROS	US	49° 03.500	130° 56.680			23-36		TF	☒	
			03:10	BO			49° 03.500	130° 56.670			-			☐	
			:	EN			.	.			-			☐	
06	ES01	20	03:45	BE	NET		49° 00.3820	130° 38.7500	914		-			☐	
			03:53	BO			49° 0.3820	130° 38.7500		250	-			☐	
			03:58	EN			49° 00.3820	130° 38.7500			-			☐	
07	ES91	20	04:12	BE	NET		49° 00.3820	130° 38.7500	936		-		D/K	☐	

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
CAM = Camera

Bottle Firing Method:
US = Up / Stop (default)
UN = Up / No stop
DN = Down / No stop

Time Code:
BE = Beginning Time of Cast
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CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

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✓ Filled All Bottles as a Test + To Get Water for Training
→ Cast Looked Good, no Spikes; no samples taken

DAILY SCIENCE LOG

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Month July			Year 2019		Vessel TULLY		Cruise ID 2019-14							
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/Fl Cleaned	Comments
07 (cont'd)	E501 (cont'd)		04:42	BO			49° 00.382 130° 38.7500		850	-			☐	
			04:56	EN			49° 00.382 130°			-			☐	
08	E505	20	05:44	BE	ROS	US	48° 58.620 130° 51.330	1560.		37-37	1	JS	☒	
			06:15	BO			48° 58.660 130° 57.330		1633	-			☐	
			06:41	EN			48° 58.660 130° 57.320			-			☐	
09	E50	20	07:13	BE	ROS	US	48° 56.840 130° 56.990	2139		38-57	20	TF	☒	
			07:50	BO			48° 56.860 130° 56.940		2162	-			☐	winch operator did up/down @ 5m
			08:49	EN			48° 56.820 130° 56.900			-			☐	
10	E506	20	10:03	BE	NET		48° 57.204 130° 57.057	2045		-			☐	
			10:12	BO			48° 57.314 130° 56.946		250	-			☐	
			10:17	EN			48° 57.318 130° 56.880			-			☐	
11	E507	20	12:04	BE	ROS	US	48° 47.070 130° 53.400	2815		58-79	22	TF/CL	☒	
			12:52	BO			48° 47.150 130° 53.200		2883	-			☐	
			13:58	EN			48° 47.120 130° 53.070	2798		-			☐	
12	E507	20	14:16	BE	NET	-	48° 47.1085 130° 53.1444	2815		-	-	TF/AN	☐	
			4:29	BO			48° 47.1531 ° 53.1069	2811	250	-			☐	
			14:33	EN			48° 47.1637 ° 53.0786	2826		-			☐	
			:				° °			-			☐	
			:				° °			-			☐	

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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

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Month			Year		Vessel			Cruise ID			2019-014				
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
13	BOBS	20	:	BE	CAM	-	°	°			-			☐	BOBS DIVE 2
			:	EN			°	°			-			☐	
14	ES08	21	01:17	BE	ROS	US	49° 03.390	130° 56.470	823		80-80	1	CS	☒	
			01:33	BO			49° 03.390	130° 56.470		835	-			☐	
			01:46	EN			49° 03.390	130° 56.470			-			☐	
15	ES09		02:38	BE	ROS	US	49° 00.290	131° 02.000	1766		81-81	1	TF	☐	
			03:10	BO			49° 00.300	131° 02.000		1702	-			☐	
			:	EN			49° 00.	131° 02.			-			☐	
16	ES12		04:34	BE	ROS	US	49° 06.110	130° 56.860	1384		82-82	1	TF	☐	
			05:00	BO			49° 06.130	130° 56.860		1408	-			☐	
			05:23	EN			49° 06.130	130° 56.860			-			☐	
17	ES16		05:49	BE	NET		49° 07.2474	130° 57.0933	1300		-	-	TF	☐	
			05:57	BO			49° 07.2464	130° 57.1073		250	-			☐	
			06:02	EN			49° 07.2486	130° 57.1124			-			☐	
18	ES16		06:25	BE	ROS	-	49° 07.250	130° 57.100	1424		83-97	15	TF	☐	
			06:52	BO			49° 07.240	130° 57.010		1425	-			☐	
			07:31	EN			49° 07.340	130° 57.020			-			☐	
			:				°	°			-			☐	
			:				°	°			-			☐	

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Notes:

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Ocean Sciences Division, Institute of Ocean Sciences

Month			July		Year		2019		Vessel		JP Tully		Cruise ID				2019-014	
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			
19	ES17	21	08:24	BE	NET	-	49° 06.593	131° 04.421	1685		-		TF	☐				
			08:33	BO			49° 06.563	131° 04.372		250	-			☐				
			08:38	EN			49° 06.547	131° 04.296			-			☐				
20	ES17	21	09:04	BE	ROS	US	49° 06.610	131° 04.550	1750		98-112	15	TF	☒				
			09:35	BO			49° 06.580	131° 04.580		1768	-			☐				
			10:18	EN			49° 06.510	131° 04.660			-			☐				
21	ES28	21	11:48	BE	NET	-	49° 14.458	131° 11.510	1422		-			☐	lots of debris			
			11:49	BO			49° 14.401	131° 11.738		250	-	-	TF	☐				
			11:54	EN			49° 14.380	131° 11.765			-			☐				
22	FS28	21	12:19	BE	ROS	US	49° 14.380	131° 11.765			113-122	20	TF	☒	forgot to			
			:	BO			49° 14.380	131° 11.765			-			☐	start archiving -			
			:	EN			49° 14.380	131° 11.765			-		update archived	☐	will do again.			
23	BO66	21	:	BE	CAM		49° 14.380	131° 11.765			-			☐	→ 2 BOOTS			
			:	EN			49° 14.380	131° 11.765			-			☐	DIVES IN ONE CAST			
24	MPS1	22	01:14	BE	NET	-	49° 09.574	130° 57.810	1505		-			☐	MPS.			
			01:35	BO			49° 09.473	130° 57.035	1790	500	-			☐				
			01:55	EN			49° 09.378	130° 56.308	2000		-			☐				
			:				49° 09.378	130° 56.308			-			☐				
			:				49° 09.378	130° 56.308			-			☐				

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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 Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
25	ES23	22	04:24	BE	NET	-	49° 26.644	130° 53.200	2341		-	-	TF-CE	☐	bongo
			04:37	BO			° 6.664	130° 53.100		250	-			☐	
			04:47	EN			49° 26.675	0° 53.088			-			☐	
26	ES23	22	04:56	BE	NET	-	49° 26.695	130° 53.245	2326		-	-	TF-CE	☐	deep bongo
			06:08	BO			49° 26.561	130° 53.024		2000	-			☐	
			06:36	EN			49° 26.545	130° 53.639			-			☐	
27	ES23	22	07:01	BE	ROS	US	49° 26.680	130° 53.190	2341		113 - 133	21	TF	☒	one bucket 5 cups attached
			07:43	BO			49° 26.730	130° 53.140		2423	-			☐	
			08:46	EN			49° 26.150	130° 53.160			-			☐	
28	ES21	22	0:53	BE	NET	-	49° 12.400	130° 54.947	1858		-	-	TF-AC	☐	
			11:01	BO			49° 12.326	130° 54.816		250	-			☐	
			11:06	EN			49° 12.302	130° 54.778			-			☐	
29	ES21	22	11:34	BE	ROS	US	49° 12.440	130° 55.040	2034		134 - 153	20	TF	☒	
			12:08	BO			49° 12.430	130° 54.960		2016	-			☐	
			12:58	EN			49° 12.400	130° 54.970			-			☐	
30	MOC01	22	15:02	BE	NET	-	48° 57.013	130° 56.920	2052		-			☐	MOCHE88
			15:29	BO			48° 56.761	130° 57.695		750	-			☐	
			15:50	EN			48° 56.585	130° 58.744	2112		-			☐	
31	B067	22	:	BE	CHA		°	°			-			☐	B068 DUE

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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 Information	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
32	ES15	23	03:49	BE	NET	-	49° 05.394 130° 26.329	2550		-		KG, TF	☐	
		"	03:57	BO			° °							

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Notes:

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DAILY SCIENCE LOG

Month			Year		Vessel		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										
38	B068	23	:	BE			°	°			-			☐	B068 DE			
			:	DN			°	°			-			☐				
39	UN10	24	04:10	BE	NET	-	49° 15.793	131° 07.805	1820		-	-	TF, CF	☐				
			04:18	BO			49° 15.780	131° 07.832		250	-			☐	bongo.			
			04:23	EN			49° 15.786	131° 07.852			-			☐	-lack ptoped!			
40	UN10	24	04:42	BE	ROS	US	49° 15.780	131° 07.870	1824		215-232	18	TF	☒				
			05:16	BO			49° 15.780	131° 07.850		1892	-			☐				
			06:02	EN			49° 15.740	131° 07.890			-			☐				
41	ES18	24	07:37	BE	ROS	US	49° 06.270	131° 15.640	3160		233-233	1	TF	☒	cup bucket attached			
			08:34	BO			49° 06.160	131° 15.770		3217	-			☐				
			09:23	EN			49° 06.050	131° 15.930			-			☐				
42	ES10	24	10:48	BE	NET	-	48° 55.809	131° 10.730	3136		-	-	TF, CF	☐	bongo			
			10:58	BO			48° 55.000	131° 10.707		250	-			☐				
			11:02	EN			48° 55.776	131° 10.772			-			☐				
43	ES10	24	11:22	BE	ROS	US	48° 55.820	131° 10.560	3138		234-254	21	TF	☒	cup bucket attached			
			12:18	BO			48° 55.770	131° 10.710		3185	-			☐				
			13:30	EN			48° 55.840	131° 10.680			-			☐				
44	B070		:				°	°			-			☐				
			:				°	°			-			☐				

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

OCEAN SCIENCES DIVISION										Cruise ID		Vessel		Year		Month		Daily Science Log	
										2019-014		Tully		2019		July			
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					
45	MOC02	25	23:02	BE	NET	-	47°33.922 130°18.687	916		-			☐	MOC02					
			23:27	BO			47°33.220 130°19.276	1343	800	-		☐							
			23:51	BN			47°32.604 130°19.778	1710		-		☐							
46	UN01	26	01:05	BE	NET	-	47°34.0105 130°18.340	935		-			☐	B020					
			01:15	BO			47°34.0099 130°18.3389	936	250	-		☐							
			01:19	BN			47°34.0104 130°18.3408	936		-		☐							
47	UN01	26	01:34	BE	RIS	US	47°34.010 130°18.340	953		255-267	13	Q	☐						
			01:48	BO			47°34.010 130°18.340		956	-		☐							
			02:18	BN			47°34.010 130°18.340			-		☐							
48	UN06	26	03:03	BE	NET	-	47°34.0220 130°10.928	2840		-			☐	B020					
			03:13	BO			47°34.0246 130°10.8711		250	-		☐							
			03:17	BN			47°34.0210 130°10.8486			-		☐							
49	UN06	26	03:37	BE	ROS	US	47°33.990 130°10.870	2841		268-282	20	TF	☒						
			04:28	BO			47°33.980 130°11.000		2872	-		☐							
			05:30	BN			47°34.020 130°10.870			-		☐							
50	SP01	26	12:10	BE	NET	-	48°04.075 130°11.748	953		-			☐						
			12:20	BO			48°04.063 130°11.790		250	-		☐							
			12:24	BN			48°04.062 130°11.791			-		☐							
													☐						

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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	Tms/Fl Cleaned	Comments
51	SPO1	26	12:43	BE	ROS	US	48° 04' . 080	130° 11' . 770	934		283 - 295	13	TF	☒	
			13:02	BO			48° 04' . 080	130° 11' . 780		1000	-			☐	
			13:28	EN			48° 04' . 080	130° 11' . 780			-			☐	
52	MOL03	26	14:24	BE	NET	-	48° 05' . 821	130° 07' . 537	2485		-		DS	☐	MOLNESS
			14:49	BO			48° 05' . 334	130° 08' . 260		1000	-			☐	
			15:14	EN			48° 04' . 987	130° 08' . 890			-			☐	
53	BOTH	26	:	BE			° . .	° . .			-			☐	boots camera
			:	DN			° . .	° . .			-			☐	
54	SPO2	27	02:30	BE	NET	-	48° 05' . 962	130° 01' . 3293	2846		-		TF	☐	bongo
			:	BO			° . .	° . .		250	-			☐	
			2:43	EN			48° 05' . 9033	130° 01' . 3268			-			☐	
55	SPO2	27	03:01	BE	ROS	US	48° 05' . 920	130° 01' . 340	2843		296 - 315	20	TF	☒	
			03:51	BO			48° 05' . 910	130° 01' . 350		2880	-			☐	
			04:54	EN			48° 05' . 900	130° 01' . 330			-			☐	
56	HSO3	27	10:11	BE	NET	-	48° 23' . 858	129° 29' . 99	2500		-			☐	
			10:26	BO			48° 24' . 029	029° 29' . 95		250	-		OK, TF	☐	Bottle
			10:31	EN			48° 24' . 058	129° 29' . 884			-			☐	
			:				° . .	° . .			-			☐	
			:				° . .	° . .			-			☐	

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:

