

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

2021-032

DATE:

From: 8 Mar 2021

To: 12 Mar 2021

VESSEL:

CCGS Neocaligus

PROJECT(S):

SOG Plankton

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: Seaturn/Seasave

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

Primary CTD

Make: SBE model: 25 serial number: 456

Primary temperature serial number: 5130

Primary conductivity serial number: 3500

Secondary temperature serial number: _____

Secondary conductivity serial number: _____

Transmissometer: _____ Model: _____ s/n: _____

Transmissometer: _____ Model: _____ s/n: _____

Fluorometer: Model ECO Cable gain: 13 s/n: 4185 P, S or NO pump?

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

Oxygen sensor: SBE Model: 43 s/n: 3234 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?

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): 2

This also includes the bottle location above the CTD on non-rosette casts (e.g., W.E. Ricker)

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 #1 Frame Size: cm Mesh: μm Flowmeter:
 Bongo #2 Frame Size: cm Mesh: μm Flowmeter:
 SLOP Frame Size: 56 cm Mesh: 236 μm Flowmeter: 7057 (TSK)
 spare SLOP Frame Size: 56 cm Mesh: 236 μm Flowmeter: TSK 5294

Multinet BIONESS Neuston Others:

RBR soloD on net (serial# 108)

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:

1. label printer kit - Brady # 5

2.

3.

4.

5.

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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Month <u>MARCH</u>				Year <u>2021</u>		Vessel <u>NEOCALZUS</u>				Cruise ID <u>2021-032</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
1	GE01	8	20:02	BE	CTD/BOT	MSG	49° 15.042	123° 45.391	405		1	1	MB	☒	UPLOAD: 2021-032-0001
			20:09	BO			49° 15.053	123° 45.413		395	-			☐	
			20:20	EN			49° 15.034	123° 45.505			-			☐	
2	GE01	8	20:21	BE	BOT	MSG	49° 15.034	123° 45.505	465	Ø	2	1	MB	☐	HPIC 1040ml
3	GE01	8	20:25	BE	NET	-	49° 15.962	123° 45.391	465		-	-	MB	☐	
			20:37	BO			49° 15.965	123° 45.426		395	-			☐	
			20:41	EN			49° 15.962	123° 45.424			-			☐	
4	3	8	23:24	BE	CTD	-	49° 26.640	124° 26.247	323		-	-	MB	☒	2021-032-0004
			23:30	BO			49° 26.645	124° 26.257		313	-			☐	
			23:35	EN			49° 26.651	124° 26.269			-			☐	
5	3	8	23:36	BE	BOT	MSG	49° 26.655	124° 26.276	323	Ø	3	1	MB	☐	HPIC 1040ml
6	6	9	00:21	BE	CTD	-	49° 30.570	124° 27.773	193		-			☒	2021-032-0006
			00:24	BO			49° 30.570	124° 27.777		183	-			☐	
			00:27	EN			49° 30.570	124° 27.776			-			☐	
7	6	9	00:28	BE	BOT	MSG	49° 30.571	124° 27.773	193	Ø	4	1	MB	☐	HPIC 1040ml
8	CF2	9	15:44	BE	CTD		49° 27.988	124° 30.034	325		-	-	MB	☒	2021-032-0008.1167
			15:49	BO			49° 27.970	124° 30.036		319	-			☐	
			15:55	EN			49° 27.960	124° 30.026			-			☐	
			:				°	°			-			☐	

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
DE = Deployment Time
MR = Messenger Release Time
RE = Recover Mooring Time

CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

Produced by the Water Properties Group, IOS

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Version: 20 April 2016

Notes:

DAY 1: JOINED NEOCALICUS @ ~ 10:30 LOCAL

* ~~CTD~~ Bottom Niskin attached to wire at rail with CTD sitting just at surface = 2m above, approx.

END OF DAY 2 ANCHORED OFF LESQUETS ISL

DAY 2: CALM MORNING

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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
9	CPF2	9	15:58	BE	NET	-	49°28.024	124°30.003	329		-	-	MB	☐ ☐	
			16:06	BO			49°28.001	124°29.985		319	-			☐ ☐	
			16:11	EN			49°27.994	124°29.973			-			☐ ☐	
10	BS11	9	17:24	BE	CTD	-	49°28.979	124°45.997	60		-			☐ ☒	2021-032-0010.16Y
			17:25	BO			49°28.978	124°45.996		50	-			☐ ☐	
			17:26	EN			49°28.975	124°45.995			-			☐ ☐	
11	BS11	9	17:26	BE	BOT	MSC	49°28.975	124°45.995	60	Ø	5-	1	MB	☐ ☐	HPLC 1040mL
12	BS11	9	17:28	BE	NET	-	49°28.967	124°45.990	60		-			☐ ☐	
			17:30	BO			49°28.961	124°45.985		50	-			☐ ☐	
			17:31	EN			49°28.960	124°45.985			-			☐ ☐	
13	9	9	18:59	BE	CTD	-	49°35.489	124°38.301	169		-	-	MB	☐ ☒	2021-032-0013.16Y
			19:02	BO			49°35.477	124°38.287		159	-			☐ ☐	
			19:04	EN			49°35.469	124°38.280			-			☐ ☐	
14	9	9	19:04	BE	BOT	-	49°35.469	124°38.280	169	Ø	6	1	MB	☐ ☐	HPLC 1040mL
15	11	9	20:03	BE	CTD	-	49°42.405	124°43.451	303		-	-		☐ ☒	2021-032-0015.16Y
			20:08	BO			49°42.405	124°43.452		293	-			☐ ☐	
			20:12	EN			49°42.403	124°43.465			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	

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Month <u>MARCH</u>			Year <u>2021</u>			Vessel <u>NEOCALIGUS</u>			Cruise ID <u>2021-032</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
16	11	9	20:14	BE	NET	-	49° 42.396	124° 43.461	303		-	-	MB	☐	
			20:21	BO			° 42.374	° 43.479		293	-	-		☐	
			20:26	EW			° 42.366	° 43.488			-	-		☐	
17	12	9	20:46	BE	CTD	-	49° 43.603	124° 40.777	357		-	-	MB	☒	2021-032-0017 HEX
			20:51	BO		MSG	° 43.586	° 40.789		347	7	1	MB	☐	BOTTOM SAL
			20:59	EW			° 43.575	° 40.783			-	-		☐	
18	12	9	21:00	BE	BOT	MSG	49° 43.575	124° 40.783	357		8	1	MB	☐	HPLC 1040mL
19	12	9	21:02	BE	NET	-	49° 43.556	124° 40.786	357		-	-	MB	☐	
			21:10	BO			° 43.539	° 40.771		347	-	-		☐	
			21:17	EW			° 43.528	° 40.806			-	-		☐	
20	20	9	22:21	BE	CTD	-	49° 47.194	124° 32.289	315		-	-	MB	☒	2021-032-0020 HEX
			22:26	BO			° 47.191	° 32.273		305	-	-		☐	
			22:32	EW			° 47.182	° 32.246			-	-		☐	
21	22	9	23:54	BE	CTD		49° 40.201	124° 16.255	355		-	-		☒	2021-032-0021 HEX
		10	00:00	BO		MSG	49° 40.185	° 16.220		345	9	1	MB	☐	DEEP SAL
			00:08	EW			° 40.136	° 16.153			-	-		☐	
22	22		00:10	BE	BOT	MSG	49° 40.134	124° 16.152	355		10	1	MB	☐	
			:				° .	° .			-	-		☐	
			:				° .	° .			-	-		☐	

Event Type:

BOT = Bottle cast (no CTD)
 CTD = Standalone CTD
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 DRF = Drifter
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Bottle Firing Method:

US = Up / Stop (default)
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Notes:

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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
23	22	10	00:14	BE	NET	-	49° 40.258	124° 16.360	355		-	-	MB	☐	
			00:23	BO			° 40.222	° 16.320		345	-			☐	
			00:29	EW			° 40.200	° 16.285			-			☐	
41 24	IS-2	10	15:26	BE	CTD	-	49° 38.190	124° 5.014	29		-	-	MB	☐	2021-032-0024.14x
			15:27	BO			° 38.190	° 5.015		19	-			☐	
			15:27	EW			° 38.189	° 5.015			-			☐	
25	IS-2	10	15:28	BE	NET	-	49° 38.186	124° 5.014	29		-	-	MB	☐	
			:29	BO			° 38.186	° 5.014		19	-			☐	
			:29	EW			° 38.186	° 5.014			-			☐	
42 26	24	10	16:24	BE	CTD	-	49° 30.288	124° 5.986	428		-	-	MB	☐	2021-032-0026.14x
			16:31	BO			° 30.268	° 5.958		418	-			☐	
			16:39	EW			° 30.254	° 5.935			-			☐	
27	24	10	16:42	BE	NET	-	49° 30.342	124° 6.010	428		-	-	MB	☐	
			:53	BO			° 30.339	° 5.981		418	-			☐	
			17:00	EW			° 30.319	° 5.950			-			☐	
43 28	2	10	17:48	BE	CTD		49° 24.125	124° 9.294	278		-	-	MB	☐	2021-032-0028.14x
			17:52	BO			° 24.137	° 9.251		268	-			☐	
			17:56	EW			° 24.141	° 9.199			-			☐	
29	2	10	17:56	BE	BOT	MSG	49° 24.141	124° 9.199	278	Ø	11-	1	MB	☐	1102C 626 mL

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Bottle Firing Method:

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Notes:

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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
44 30	CPF1	10	18:23	BC	CTD	-	49° 22.005	124° 4.965	246		-	-	MB	☒	2021-032-0030 HCY
			:27	BO			° 22.005	° 4.924		236	-			☐	
			:31	EN			° 22.007	° 4.885			-			☐	
31	CPF1	10	18:30	BC	NET	-	49° 22.019	124° 5.098	246		-		MB	☐	
			18:42	BO			° 22.021	° 5.036		236	-			☐	
			18:46	EN			° 22.031	° 5.018			-			☐	
45 32	28	10	20:13	BC	CTD	-	49° 24.121	123° 45.339	135		-	-	MB	☒	2021-032-0032 HCY
			20:15	BO			° 24.134	° 45.339		125	-			☐	
			20:17	EN			° 24.139	° 45.341			-			☐	
33	28	10	20:18	BC	NET	-	49° 24.147	123° 45.339	135		-		MB	☐	
			20:22	BO			° 24.174	° 45.337		125	-			☐	
			20:24	EN			° 24.182	° 45.329			-			☐	
46 34	27	10	21:04	BC	CTD		49° 19.113	123° 48.007	347		-		MB	☒	2021-032-0034 HCY
			21:10	BO	BOT	MSG	° 19.135	° 48.008		337	12	1		☐	DEEP SAL
			21:16	EN			° 19.140	° 48.001			-			☐	
35	27	10	21:16	BC	BOT	MSG	49° 19.140	123° 48.001			13	1	MB	☐	HPSC 620 mL
47 36	40	10	22:41	BC	CTD		49° 8.596	123° 36.805	147		-	-	MB	☒	2021-032-0036 HCY
			22:43	BO			° 8.580	° 36.795		137	-			☐	10m SHORT 7
			22:45	EN			° 8.574	° 36.790			-			☐	

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Bottle Firing Method:

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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	40	10	22:47	BE	NET	-	49° 8.564	123° 36.781	159		-	-	MB	☐	
			22:50	BO			° 8.566	° 36.777		149	-			☐	
			22:52	EW			° 8.548	° 36.771			-			☐	
38	39	10	23:15	BE	CTD	-	49° 9.806	123° 33.029	380		-	-	MB	☒	2021-032-038.Hor
			23:21	BO			° 9.798	° 33.014		370	-			☐	
			23:27	EW			° 9.773	° 32.980			-			☐	
39	39	10	23:27	BE	BOT	MOR	49° 9.773	123° 33.980	380	0	14-	1	MB	☐	
40	38	11	00:03	BE	CTD	-	49° 12.003	123° 26.410	310		-	-	MB	☒	2021-032-040.Hor
			00:07	BO			° 11.980	° 26.387		300	-			☐	
			00:11	EW			° 11.976	° 26.380			-			☐	
41	38	11	00:13	BE	NET	-	49° 12.945	123° 26.361	308		-	-	MB	☐	
			00:20	BO			° 11.940	° 26.360		298	-			☐	
			00:25	EW			° 11.930	° 26.342			-			☐	
42	108	11	15:58	BE	CTD	-	49° 4.360	123° 19.135	92		-	-	MB	☒	2021-032-042.Hor
			:59	BO			° 4.346	° 19.132		82	-			☐	
			16:00	EW			° 4.340	° 19.129			-			☐	
43	41	11	16:20	BE	CTD	-	49° 3.294	123° 22.354	247		-	-	MB	☒	2021-032-043.Hor
			:23	BO			° 3.270	° 22.348		237	-			☐	
			:26	EW			° 3.250	° 22.329			-			☐	

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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	41	11	16:31	BE	NET	-	49° 3' .333	123° 27' .270	247		-	-	MB	☐ ☐	
			:36	BO			° 2' .298	° 27' .237		237	-			☐ ☐	
			:40	EN			° 3' .286	° 27' .212			-			☐ ☐	
45	42	11	17:04	BE	CTD	-	49° 1' .785	123° 26' .250	322		-		MB	☐ ☒	2021-032-0045 HGT
			17:09	BO			° 1' .755	° 26' .217		312	-			☐ ☐	
			17:14	EN			° 1' .718	° 26' .186			-			☐ ☐	
46	42	11	17:14	BE	BOT	MSG	49° 1' .718	123° 26' .186	322	0	15 -	1	MB	☐ ☐	
47	42	11	17:18	BE	NET	-	49° 1' .812	123° 26' .204	321		-	-	MB	☐ ☐	
			17:26	BO			° 1' .745	° 26' .168		311	-			☐ ☐	
			17:30	EN			° 1' .724	° 26' .144			-			☐ ☐	
48	46	11	19:05	BE	CTD		48° 51' .382	123° 10' .847	180		-		MB	☐ ☒	2021-032-0048 HGT
			19:07	BO	BOT	MSG	° 51' .371	° 10' .853		170	16 -	1	MB	☐ ☐	DEEP SAL
			19:09	EN			° 51' .369	° 10' .855			-			☐ ☐	
49	46	11	19:09	BE	BOT	MSG	48° 51' .365	123° 10' .867	180	0	17 -	1	MB	☐ ☐	
50	46	11	19:13	BE	NET	-	48° 51' .419	123° 10' .778	179		-	-	MB	☐ ☐	
			19:17	BO			° 51' .403	° 10' .777		169	-			☐ ☐	
			19:19	EN			° 51' .406	° 10' .788			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	

Event Type:

BOT = Bottle cast (no CTD)
 CTD = Standalone CTD
 ROS = CTD in Rosette
 SET = Fish Set

LOOP = Sea Water Loop
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 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
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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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DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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Month <u>MARCH</u>				Year <u>2021</u>		Vessel <u>NEOCALIGUS</u>		Cruise ID <u>2021-032</u>							
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							
51	S6	11	20:22	BE	CTD	.	48° 46.418	123° 1.859	214		-			☒	2021-032-0051.Hex
			20:25	BO			° 46.466	° 1.455		204	-		MB	☐	
			20:28	EN			° 46.504	° 1.401			-			☐	
52	S6	11	20:28	BE	BOT	MSG	48° 46.504	123° 1.401	214		-			☐	
53	S9	11	22:14	BE	CTD	.	48° 36.927	123° 14.989	238		18-	1	MB	☐	
			22:18	BO			° 36.972	° 15.006			-		MB	☒	2021-032-0053.Hex
			22:21	EN			° 37.000	° 15.016		228	-			☐	
54	S9	11	22:31	BE	BOT	MSG	48° 37.000	123° 15.016	238		-			☐	
55	S9	11	22:26	BE	NET	.	48° 36.921	123° 14.980	238		19-	1	MB	☐	
			22:32	BO			° 36.968	° 14.995			-		MB	☐	
			22:35	EN			° 36.987	° 15.011		228	-			☐	
56	GI-01	11	23:45	BE	CTD	.	48° 45.844	123° 20.525	65		-			☐	
			23:45	BO			° 45.841	° 20.524			-		MB	☒	2021-032-0056.Hex
			23:46	EN			° 45.840	° 20.523		55	-			☐	
57	GI-01	11	23:47	BE	NET	.	48° 45.825	123° 20.526	65		-			☐	
			23:49	BO			° 45.813	° 20.523			-		MB	☐	
			23:50	EN			° 45.	° 20.		55	-			☐	
			:				° .	° .			-			☐	
			:				° .	° .			-			☐	

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DAILY SCIENCE LOG

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Month MARCH Year 2021 Vessel NEOCALIGUS Cruise ID 2021-037 Page 9 of

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
58	SC-04	12	00:21	BE	CTD	-	48° 43.528	123° 25.864	86		-	-	MB	☐ ☒	2021-032-0058.HK2
			00:22	BO			° 43.534	° 25.854		76	-	-		☐ ☐	
			00:24	EN			° 43.535	° 25.851			-	-		☐ ☐	
59	SC-04	12	00:24	BE	BOT	MSG	48° 43.535	123° 25.851	86	Ø	20	1	MB	☐ ☐	
60	SC-04	12	00:27	BE	NET	-	48° 43.502	123° 25.909	86	76	-	-	MB	☐ ☐	
			00:29	BO			° 43.508	° 25.901			-	-	MB	☐ ☐	
			00:30	EN			° 43.512	° 25.888			-	-		☐ ☐	
61	CBE2	12	01:16	BE	CTD	-	48° 44.232	123° 34.470	65		-	-	MB	☐ ☐	2021-032-0061.HK2
			01:18	BO			° 44.233	° 34.470		55	-	-		☐ ☐	
			01:19	EN			° 44.233	° 34.471			-	-		☐ ☐	
62	CBE2	12	01:19	BE	NET	-	48° 44.221	123° 34.492	65		-	-	MB	☐ ☐	
			01:20	BO			° 44.221	° 34.492		55	-	-		☐ ☐	
			01:21	EN			° 44.231	° 34.493			-	-		☐ ☐	
			:				° .	° .			-	-		☐ ☐	
			:				° .	° .			-	-		☐ ☐	
			:				° .	° .			-	-		☐ ☐	
			:				° .	° .			-	-		☐ ☐	
			:				° .	° .			-	-		☐ ☐	
			:				° .	° .			-	-		☐ ☐	
			:				° .	° .			-	-		☐ ☐	
			:				° .	° .			-	-		☐ ☐	

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