

DAILY SCIENCE LOG BOOK

CRUISE
NUMBER

2021-069

Mooring
Cruise

DATE:

From:

June 1, 2021

To:

VESSEL:

J P Tully

PROJECT(S):

Water Properties Group
Fisheries and Oceans Canada
Institute of Ocean Sciences
Ocean Sciences Division

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: 10.24.12

Data acquisition program: _____

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

Primary 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?

Secondary CTD

Make: _____ model: _____ serial number: _____

Primary temperature serial number: _____

Primary conductivity serial number: _____

Secondary temperature serial number: _____

Secondary conductivity serial number: _____

Transmissometer: _____ Model: _____ s/n: _____

Transmissometer: _____ Model: _____ s/n: _____

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

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

Oxygen sensor: _____ Model: _____ s/n: _____ P, S or NO pump?

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

Other sensors: _____ s/n: _____ P, S or NO pump?

Other sensors: _____ s/n: _____ P, S or NO pump?

Other sensors: _____ s/n: _____ P, S or NO pump?

Other sensors: _____ s/n: _____ P, S or NO pump?

CTD calibration bottle location (height above CTD in metres): _____

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

Rosette Setup:

Number of bottles: _____
Manufacturer: _____
Volume of bottles (litres): _____

Winches:

1. Make: _____ Model: _____ Serial #: _____ Used for: _____
2. Make: _____ Model: _____ Serial #: _____ Used for: _____
3. Make: _____ Model: _____ Serial #: _____ Used for: _____

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

Salinometer:

Make: _____ Model: _____ Serial Number: _____
Comments on performance during cruise (comments should also be reflected in the post-cruise report):

Oxygen Kit(s):

Make: _____ Model: _____ Kit Number: _____
Make: _____ Model: _____ Kit Number: _____
Comments on performance during cruise (comments should also be reflected in the post-cruise report):

Thermosalinograph System (SBE21):

Program: _____ Version: _____
Sampling interval (seconds): _____
Fluorometer sensor serial number: _____
Comments on performance during cruise (comments should also be reflected in the post-cruise report):

ADCP Setup:

Computer time zone: _____ 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)

Secondary Salinity – Primary Salinity: _____
(Average from the mixed region)

Additional Comments:

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 1 of

Month <u>JUNE</u>			Year <u>2021</u>			Vessel <u>JP TULLY</u>			Cruise ID <u>2021-069</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
							Latitude	Longitude							
001	A1-60	02	18:09	RE	MOR		48°	°			-		DS	☐	
2	A1	02	18:31	BE	ROS	VS	48°32.260	126°11.550	490		1-3	3	SP	☒	
			18:40	BO			°32.240	°11.490		476	-			☐	
			18:49	EN			°32.240	°11.450			-			☐	
3	E03-61	02	22:57	DE	MOR		49°05.694	126°56.065		400	-		DS	☐	
4	E03	02	23:09	BE	ROS	—	49°5.850	126°56.230	403		—	—	SP	☒	
			23:16	BO			°5.850	°56.130		398	-			☐	
			23:22	EN			°5.850	°56.070			-			☐	
5	E01-60	03	01:00	RE	MOR		49°17.450	126°36.360		102	—	—	DS	☐	
6	E01	03	01:34	BE	ROS	VS	49°17.378	126°36.176	101		4-6	3	SP	☒	
			01:35	BO			°17.393	°36.161		98	-			☐	
			01:39	EN			°17.390	°36.127			-			☐	
7	E01-61	03	02:01	DE	MOR	—	49°17.300	126°36.175	102		-			☐	
8	DRF	03	14:40	DE	DRF	—	50°39.843	128°46.771	205		—	—	DS	☐	1262 1266 1257
9	CS02	03	17:50	BE	ROS		50°41.420	129°27.880	1900		7-21		SP/OS	☒	Prifers x3 SCT
			18:24	BO			50°41.430	129°27.900	1903	1908	-			☐	5 mob
			19:07	EN			°41.410	°27.910			-			☐	
10	SCOTT3-1	03	20:21	RE	MOR		°	°			-		DS	☐	
			:				°	°			-			☐	

Event Type:

BOT = Bottle cast (no CTD)
 CTD = Standalone CTD
 ROS = CTD in Rosette
 FT = 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: 6 December 2016

June 2, 2021

This page is for any notes or observations

A1-60 Mooring Recovery

Approaching Station
Send 1A2A

1801 UTC 551 545 525

Traffic in Area but okay move off to release
651 x x 777 782 no response

1808 dunking transducer
810

1809 Send 1A2A + 1A55 received & Executed 810
- on surface

E01-60 Mooring Recovery

0052 Send 16B2

- 381 264

0055 - 231 230 227 224

- 381

0100 - Send 16B2 + 1655 496 424 received & executed
- on surface

Event #9: PAR removed for deep cast (SP)

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 2 of

Month <u>JUNE</u>				Year <u>2021</u>		Vessel <u>TULLY</u>				Cruise ID <u>2021-069</u>					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
11	SCOTT3	03	21:00	BE	ROS	—	50°50.510	129°28.700	240		—	—	SP	☒	
			21:04	BO			°50.520	°28.750		237	-			☐	
			21:09	EN			°50.510	°28.720			-			☐	
12	SCOTT3-2	03	22:02	DE	MOR	—	50°50.464	129°28.760	241		-			☐	
13	SCOTT3	03	22:12	DE	DRF		50°50.477	129°29.530			-		SP	☐	SLT 1259, 1260, 1261
14	CI08	04	00:02	BE	ROS	US	50°53.710	129°52.360	2081		22-44	23	SP	☒	
			00:37	BO			°53.690	°52.230		2092	-			☐	
			01:27	EN			°53.710	°52.020			-			☐	
15	CI07	04	02:13	BO	NET	—	50°56.317	129°48.597		250	-			☐	
			02:18	EN			50°56.253	129°48.627	1550		—	—	CW	☐	short period of 5 m/s for retrieval
16	CI07	04	02:25	BE	ROS	/	50°56.267	129°48.730	1582		/	/	CH	☒	
17	CI07	04	02:56	BO			50°56.262	129°48.492		?	-			☐	
			03:20	EN			50°56.236	129°43.364			-			☐	
17	CI06	04	04:28	BE	ROS	US	51°02.100	129°37.950	821		45-65	21	CH	☒	short stop at 680m to test 1m/s drift
			04:47	BO			51°02.030	129°37.940	7mab	818	-			☐	
			05:20	EN			51°01.880	129°37.710			-			☐	
18	CI056	04	07:35	BE	ROS	/	51°13.194	129°16.150	258		/	/	CH	☒	
			07:42	BO			51°13.166	129°16.135		285	-			☐	
			07:48	EN			51°13.176	129°16.076			-			☐	

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: 6 December 2016

Scott 3-1 Mooring Recover June 3, 2021

2015 UTC

Send 1B3E 377 383 384 381

2021-562

- dunking transducer

- 571

Send 1B3E + 1B55

574 575 received, no executed

On surface

- Hook not fully rotated → no executed reply

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 3 of

Month <u>JUNE</u>			Year <u>2021</u>			Vessel <u>JP 7022Y</u>			Cruise ID <u>2021-069</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
19	C104	04	09:09	BE	ROS	US	51°19.110	129°03.140	259		66-81	16	CH	☒	
			09:19	BO			51°19.050	129°03.190		255	-			☐	
			09:35	EN			51°18.960	129°03.240			-			☐	
20	C104	04	10:46	BO	NET	-	51°19.146	129°03.119	260		-	-	CW	☐	longo VNH
			10:50	EN			51°19.139	129°03.091		250	-			☐	
21	C104	04	10:56	BE	DRF		51°18.932	129°03.139	260		-	-	CH	☐	50T/253, 1258
22	SCOTT 2-S	04	14:05	RE	MOR		°	°			-			☐	
23	SCOTT 2	04	15:11	BE	ROS	US	51°7.710	129°28.420	289		82-98	17	SP	☒	
			15:16	BO			°7.710	°28.380		285	-			☐	
			15:31	EN			°7.740	°28.290			-			☐	
24	SCOTT 2-6	04	16:28	DE	MOR		51°7.632	129°28.486	289		-		CC	☐	
25	C103 b	04	19:21	BE	ROS	-	51°23.011	128°44.976	227		-	-	SP	☒	
			19:29	BO			°23.047	°44.855		224	-			☐	
			19:35	EN			°23.054	°44.833			-			☐	
26	C102	04	20:48	BE	ROS	-	51°27.984	128°29.905	201		-	-	SP	☒	
			20:52	BO			°27.988	°29.905		197	-			☐	
			20:56	EN			°27.962	°29.893			-			☐	
27	LOOP	04	21:40				51°34.035	128°23.510			114-114	1	SP	☐	
28	HAKI-5	04	15:51	RE	MOR		°	°			-			☐	

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: 6 December 2016

June 4, 2021

Scott 2-5 Moving Recover

1337 UTC Send 1B3F 311310

1400 - reposition for release

1405 - 761 765

- 792 800

- sent twice both received & not "executed"

(6.4) 6.7

This page is for any notes or observations

Event 25

- Cast stopped at 70db ^{or downcast} to correct wire angle (1922)
- stopped again or downcast at 110db (1925)
- stopped downcast 205db (1927)
- stopped upcast at 138db
- stopped upcast at 109db
- stopped upcast at 75db
- stopped upcast at 29db

Event 26

- stopped downcast 70db to correct wire angle (2048)

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 4 of

Month JUNE				Year 2021		Vessel JP TULLY				Cruise ID 2021-069					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
29	HAKI	04	23:38	BE	ROS	US	51°42.712	128°14.029	143		99-113	15	SP	☒	
			23:40	BO			°42.716	°14.006		138	-			☐	
			23:50	EN			°42.701	°13.958			-			☐	
30	HAKI-6	05	01:19	DE	MOR		51°42.701	128°14.140			-			☐	
31	CIO1	05	02:34	BO	NET		51°35.684	128°18.002		145	-	-	CW	☐	bongo VNH
			02:37	EN			51°35.674	128°18.014	155		115-128		CH	☒	sample 114
32	CIO1	05	02:58	BE	ROS	US	51°35.700	128°17.940	156		-			☐	15 Loop sample
			:	BO			°	°		?	-			☐	
			:	EN			°	°			-			☐	
33	CIO1	05	03:22		DRF		51°35.700	128°17.940	156		-			☐	SCT 1261, 1255
34	MSO1	05	07:28	BE	ROS	US	52°08.035	128°50.254	216		129-143	15	CH	☒	
			07:37	BO			52°07.987	128°50.273		211	-			☐	
			07:55	EN			52°08.041	128°50.226			-			☐	
35	NORR3	05	10:38	BE	ROS	US	52°14.950	129°23.900	156		149-157	9	CH	☒	
			:	BO			°	°		152	-			☐	
			:	EN			°	°			-			☐	
36	NORR4	05	12:41	BE	ROS	US	52°23.970	129°03.240	59		158-162	5	CH	☒	
			12:44	BO			52°23.970	129°03.220		55	-			☐	
			:	EN			52°23.960	129°03.210			-			☐	

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: 6 December 2016

Notes:

June 4

HAKI-5 Mooring Recovery

2230 Send IB3D

265 - 259 215

2240 Send IB3D + IB55

540 received & executed?

2251 Send IB3D + IB55

998 500 received & Executed

This page is for any notes or observations

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 5 of

Month JUNE				Year 2021		Vessel JP TULLY				Cruise ID 2021-069					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
37	GNO2	05	15:58	BE	ROS	—	52° 10.060	129° 37.490	221		—	—	SP	☒	
			16:01	BO			° 10.050	° 37.470		217	-			☐	
			16:06	EN			° 10.060	° 37.490			-			☐	
38	LOOP	05	20:05				52° .	° .			163-163	1	SP	☐	
39	JUAN2-2	05	22:15	RE	MOR		° .	° .			-			☐	
40	JUAN2	05	22:52	BE	ROS	US	52° 31.199	131° 25.858	223		164-180	17	SP	☐	
			22:56	BO			° 31.165	° 25.872		219	-			☐	
			23:12	EN			° 31.164	° 25.865			-			☐	
41	JUAN2-3		23:41	DE	MOR		52° 31.222	131° 25.886	222		-			☐	
42	JPS1	06	00:58	BO	NET		52° 36.186	131° 40.080	140		-		SP	☐	
			:	EN			52° 36.206	131° 40.087		(135)	-			☐	
43	JPS1	06	01:19	BE	ROS		52° 36.330	131° 39.930	125/130		-		DS	☒	PAR ^{back} On
			01:27	BO			° .	° .		134	-			☐	
			01:38	EN			52° 36.270	131° 40.050			-			☐	
44	JPS2	06	02:09	BE	ROS	/	52° 34.970	131° 37.330	249		/	/	CH	☐	
			02:23	BO			52° 34.970	131° 37.380		247	-			☐	
			02:30	EN			52° 34.980	131° 37.400			-			☐	
			:				° .	° .			-			☐	
			:				° .	° .			-			☐	

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: 6 December 2016

Juan 2-2 Missing Recovery

1510 { send 1800
range 261, 257, 258, 258, 258
note off 2 cables

15 send 1800; range 522, 524, 526
send release; 524 ⊕ response ✓

Event 43: PAR reinstalled before cast

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 6 of

Month <u>JUNE</u>			Year <u>2021</u>			Vessel <u>JP TULLY</u>			Cruise ID <u>2021-069</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
45	JPS3	06	03:13	BE	ROS	/	52°33.210	131°29.920	324		/	/	CH	☒ ☐	
			03:20	BO			52°33.245	131°29.250		323	-			☐ ☐	
			03:27	EN			52°33.220	131°29.930			-			☐ ☐	
46	JPS4	06	04:20	BO	NET		52°30.913	131°23.855		250	/	/	CW	☐ ☐	did not get
			04:25	EN			52°30.913	131°23.855	340		-			☐ ☐	to location properly
47	JPS4	06	04:35	BE	ROS	US	52°31.013	131°23.776	366		195-212		CH	☒ ☐	check after recording
			04:42	BO			52°30.984	°23.836		360	-			☐ ☐	
			05:04	EN			.	.			-			☐ ☐	
48	JPS5	06	05:45	BE	ETD	-	52°31.350	131°18.660	254		/	/	CH	☒ ☐	
			05:50	BO			°31.320	°18.670		250	-			☐ ☐	
			05:55	EN			°31.310	°18.700			-			☐ ☐	
49	JPS6	06	06:38	BE	ROS	-	52°32.069	131°10.699	174		/	/	CH	☒ ☐	
			06:42	BO			°32.040	°10.681		169	-			☐ ☐	
			06:45	EN			°32.028	°10.687			-			☐ ☐	
50	JPS7	06	07:27	BO	NET	-	52°33.989	131°05.978		125	/	/	CW	☐ ☐	
			07:29	EN			52°33.983	131°05.971	135		-			☐ ☐	
51	JPS7	06	07:39	BE	ROS		52°33.990	131°05.930	135		213-226	14	CH	☒ ☐	
			07:43	BO			°34.000	°05.930		134	-			☐ ☐	
			07:56	EN			.	.			-			☐ ☐	

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: 6 December 2016

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 7 of

Month <u>JUNE</u>			Year <u>2021</u>			Vessel <u>JP TULLY</u>			Cruise ID <u>2021-069</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
							Latitude	Longitude							
52	LASKEEK-2	06	14:27	RE	MOR		52° 44.611	130° 52.169	76		-			☐	
53	LASKEEK	06	14:48	BE	ROS	-	52° 44.623	130° 52.175	75		-	-	SP	☒	
			14:49	BO			° 44.630	° 52.200		71	-			☐	
			14:50	EN			° 44.640	° 52.201			-			☐	
54	SRN1-4	06	17:53	RE	MOR		53° 6.6012	130° 23.3658	205		-	-	CC	☐	
55	SRN1	06	19:12	BE	NET		53° 06.642	130° 23.062	205		-		SP	☐	
		06	19:19	BO			° 6.533	° 22.985		200	-			☐	
			19:23	EN			° 6.493	° 22.957			-			☐	
56	SRN1	06	19:46	BE	ROS	US	53° 6.440	130° 22.930	205		277-241	15	SP	☒	
			:51	BO			° 6.390	° 22.890		200	-			☐	
			20:03	EN			° 6.350	° 22.710			-			☐	
57	SRN1-S	06	20:28	DE	MOR		53° 6.499	130° 22.984			-		CC	☐	
58	LOOP	06	21:16				53° 01.480	130° 14.001			242-242	1	SP	☐	
59	HEC1	06	:	BO	NET		° .	° .			-			☐	
			:	EN			° .	° .			-			☐	
60	HEC-1	06	23:42	BE	ROS		52° 49.330	129° 50.958	167		243-244		CF	☒	
			23:49	BO			° 49.320	° 51.000		163	-			☐	
			23:53	EN			° 49.300	° 51.020			-			☐	
			:				° .	° .			-			☐	

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: 6 December 2016

Laskeek-2 Mooring Recovery event 52

EN: 167674 REL: 150301

1415
~~0715~~ - enable code sent; positive response 126, 127, 129
 1425 back off
~~0725~~ - ranges of 461, 462, 464, 464, 464
 1427 send release code; positive response
~~0727~~ - sight on surface

SRN1-4 Mooring Recovery June 6 2021

1745 0954 - 228 230 Sent 16ED 233 235 Both releases responding

1753 Sent 16ED 1655 679 680 received, execute

1754 on surface

Event 56

stopped downcast at 73db for wire angle collection

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 8 of

Month <u>JUNE</u>			Year <u>2021</u>			Vessel <u>JP TULLY</u>			Cruise ID <u>2021-069</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
61	CAM1	07	01:31	BE	ROS	—	52°46.831	129°30.079	430		—	—	SP	☒ ☐	
			01:38	BO			°46.855	°30.142		426	-			☐ ☐	
			01:45	EN			°46.882	°30.205			-			☐ ☐	
62	CAM2	07	03:14	BE	ROS	/	52°54.930	129°15.510	242		—		CH	☒ ☐	
			03:19	BO			°54.930	°15.520		238	-			☐ ☐	
			03:24	EN			°54.940	°15.510			-			☐ ☐	
63	CMP1	07	04:05	BE	ROS	/	53°0.594	129°15.463	371		—		CH	☒ ☐	
			04:12	BO			°0.691	°15.496		369	-			☐ ☐	
			04:19	EN			°0.788	°15.500			-			☐ ☐	
64	SC69	07	04:58	BE	ROS	/	53°04.840	129°19.500	689		—	/	CH	☒ ☐	very high →
			05:11	BO			°04.880	°19.470		688	-			☐ ☐	surface fl.
			05:24	EN			°04.930	°19.400			-			☐ ☐	
65	SC-MB3	07	05:59	BE	GRAB		53°07.809	129°22.871	555		—	/	CW/CH	☐ ☐	
			06:08	BO			°07.748	°22.769		558	-			☐ ☐	definite hit
			6:17	EN			°07.685	°22.685			-			☐ ☐	got mud
66	SCMB2	07	7:03	BE	GRAB		53°10.076	129°24.711	533		-		CW	☐ ☐	
			7:12	BO			°10.009	°24.824		527	-			☐ ☐	
			7:22	EN			°10.097	°24.928			-			☐ ☐	got mud
			:				°	°			-			☐ ☐	

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: 6 December 2016

→ may have put wrong stat name - file
- PRR inser removed

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 9 of

Month JUNE				Year 2021			Vessel JP TULLY			Cruise ID 2021-069					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
67	SC61	07	07:57	BE	ROS	US	53°12.580	129°25.120	505		245-263	19	CH	☒ ☐	
			08:08	BO			°12.590	°25.130		500	-			☐ ☐	
			08:32	EN			°12.580	°25.110			-			☐ ☐	
68	SC58	07	09:13	BE	ROS	US	53°16.430	129°25.720	532		/	/	CH	☒ ☐	→
			09:23	BO			°16.440	°25.700		529	-			☐ ☐	
			09:33	EN			°16.430	°25.710			-			☐ ☐	
69	SQL1	07	10:32	BE	ROS	/	53°20.570	129°18.420	527		-		CH	☐ ☐	→
			10:44	BO			°20.590	°18.430		523	-			☐ ☐	
			10:53	EN			°20.600	°18.420			-			☐ ☐	
70	QdFN-MBI	07	11:12	BE	GRAB		53°20.264	129°15.049	465		-		CW	☐ ☐	
			11:30	BO			°20.266	°15.032	466		-			☐ ☐	got mud!
			11:37	EN			°20.266	°15.019			-			☐ ☐	
71	QdFN-MBI	07	11:54	BE	ROS		53°20.260	129°14.970	468	/	/	-	CH	☒ ☐	
			12:06	BO			°20.250	°14.950		465	-			☐ ☐	
			12:14	EN			°20.250	°14.890			-			☐ ☐	
72	Doug45	07	12:48	BE	ROS	US	53°22.230	129°11.610	443		264-265	2	CH	☒ ☐	→
			13:02	BO			°22.230	°11.580		449	-			☐ ☐	
			13:10	EN			°22.230	°11.580			-			☐ ☐	
			:				°	°			-			☐ ☐	

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: 6 December 2016

Notes:

The small oxygen decline just above 300m corresponds to a scattering layer
or the sounder zooplankton respiration. I took a picture of sounder from

Very fresh at the surface $\sim 15-16$ psu. It has been raining on the rock coast

salinity from 12-24 psu in upper 10m

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 10 of

Month <u>JUNE</u>			Year <u>2021</u>			Vessel <u>JP TULLY</u>			Cruise ID <u>2021-069</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
73	DOUG45	07	13:28	BO	NET	—	53° 22.231	129° 11.581		250	—	—	CW	☐	
			13:32	EN			° 231	° 585	434		-			☐	
74	Doug 40	07	14:28	BE	ROS		53° 26.740	129° 12.430	395		-		4	☒	
			14:36	BO			° 26.740	° 12.430		391	-			☐	
			14:43	EN			° 26.740	° 12.430			-			☐	
75	DOUG36	07	15:27	BE	ROS	—	53° 31.040	129° 12.400	354		—	—	SP	☒	
			15:33	BO			° 31.040	° 12.410		349	-			☐	
			15:39	EN			° 31.040	° 12.410			-			☐	
76	DOUG32	07	16:22	BE	ROS	—	53° 35.550	129° 12.680	250		—	—	SP	☒	
			16:26	BO			° 35.550	° 12.690		246	-			☐	
			16:30	EN			° 35.550	° 12.700			-			☐	
77	DOUG31	07	16:51	BE	ROS	US	53° 36.650	129° 12.750	300		266-267	4	SP	☒	
			16:56	BO			° 36.670	° 12.730		301	-			☐	
			17:03	EN			° 36.670	° 12.730			-			☐	
78	DOUG29	07	17:24	BE	ROS	—	53° 38.190	129° 11.450	387		—	—	SP	☒	
			17:30	BO			° 38.200	° 11.440		385	-			☐	
			17:37	EN			° 38.200	° 11.440			-			☐	
			:				°	°			-			☐	
			:				°	°			-			☐	

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: 6 December 2016

Event 78

- salinity channel #1 reading too high for surface waters.
 - (20 psu, when should be ~ 6 psu).
 - Paired up well with channel 2 at ~20m.
 - Strong freshwater presence

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 11 of

Month <u>JUNE</u>			Year <u>2021</u>			Vessel <u>JP TULLY</u>			Cruise ID <u>2021-069</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
79	DOUG-26	07	18:14	BE	ROS	—	53°40.350	129° 7.440	396		—	—	SP	☒	
			18:20	BO			°40.370	° 7.470		392	-			☐	
			:27	EN			°40.390	° 7.480			-			☐	
80	FOCI-4	07	19:13	RE	MOR		°	°			—		DS	☐	
81	FOCI		20:00	BE	ROS	US	53°44.150	129° 1.630	373		268-285	18	SP	☒	
			20:06	BO			°44.230	° 1.630		369	-			☐	
			20:25	EN			°44.380	° 1.680			-			☐	
82	KITI-1	07	:	RE	MOR		53°56.266	128°41.239	205		-		DS	☐	
83	KITI	07	23:04	BE	ROS	US	53°56.278	128°41.264	208		286-300	15	SP	☒	
			23:07	BO			°56.287	°41.274		204	-			☐	
			23:20	EN			°56.370	°41.359			-			☐	
84	DOUG-4	08	00:36	BE	ROS	—	53°55.620	128°42.250	220		—	—	SP	☒	
			00:39	BO			°55.620	°42.250		216	-			☐	
			00:43	EN			°55.600	°42.244			-			☐	
85	DOUG-6	08	01:15	BE	ROS	US	53°54.150	128°44.140	256		301-302	2	SP	☒	
			01:19	BO			°54.120	°44.140		253	-			☐	
			01:25	EN			°54.090	°44.130			-			☐	
			:				°	°			-			☐	
			:				°	°			-			☐	

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: 6 December 2016

FOCI-4 Mooring Recovery June 7, 2021

1900 Ranges approaching 1175 1135

1906 - on station send 089D - 445 437 434 455 477 864[?] 887[?] 551 634

1913 Se 1089D + 0855 671, 674 r

1914 - on surf

KITI-1 Mooring Recovery June 7 2021

2219 - approaching mooring site, send 1A2C - 659 614

2222 - 257 241 239 244

222

2227 - Send 1A2C + 1A55 455 455 received & executed

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 12 of

Month <u>June</u>			Year <u>2021</u>			Vessel <u>JP Tully</u>			Cruise ID <u>2021-069</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
86	DAUG-8	8	01:55	BE	ROS		53°52.060	128°46.172	301		/	/	CH	☒ ☐	
			02:05	BO			°52.061	°46.219		297	-			☐ ☐	
			02:11	EN			°	°			-			☐ ☐	
87	DAUG-11	8	02:49	BE	ROS	US	53°49.780	128°49.240	329		303-320	18	CH	☒ ☐	→
			02:58	BO			°49.780	°49.270		324	-			☐ ☐	
			03:19	EN			°49.790	°49.290			-			☐ ☐	
88	DAUG-16	8	04:00	BE	ROS	/	53°46.667	128°54.719	378		/	0	CH	☒ ☐	
			04:09	BO			°46.684	°54.748		377	-			☐ ☐	
			:	EN			°	°			-			☐ ☐	
89	DEV-12	8	04:58	BE	ROS	/	53°46.760	128°49.350	295		/	/	CH	☒ ☐	
			05:08	BO			°46.750	°49.310		293	-			☐ ☐	
			05:11	EN			°46.720	°49.280			-			☐ ☐	
90	DEV-15	8	05:50	BE	ROS	—	53°42.72	128°48.62	319		/	—	CW	☒ ☒	
			05:56	BO			°42.69	°48.60		315	-			☐ ☐	
			06:01	EN			°42.58	°48.67			-			☐ ☐	
91	DEV-19	8	06:46	BE	ROS	—	53°39.229	128°52.336	264		/	—	CW	☒ ☒	
			06:50	BO			°39.198	°52.325		260	-			☐ ☐	
			06:55	EN			°39.180	°52.313			-			☐ ☐	
			:				°	°			-			☐ ☐	

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: 6 December 2016

Notes:

Doug 11 BDO profile is probably a mix of Kitimat Arm + Deverstetia Channel.

Doug 11 CH forgot to STEP data acquisition at 10m for 20 extra minutes. completed in upper 50m

Germaine. the surface water was very fresh. I decided to try to capture the upper 5m in some detail.

Procedure: 1) put rosette in at ~1.5-2m; wait 30s
2) down to 10m wait 60s.
3) up to surface 1.5-2m; wait 30s.
4) down to bottom.

The up & down to 10m did not change surface salinity. The surface salinity on 2 sensors can be very sensitive to tip of rosette. Pick 1 or the other, or average them.

Keep the downcast after the 10m soak

Doug 8, 11, 16, Doug 45 (?), and probably 1 with a 7 June

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 13 of

Month <u>June</u>			Year <u>2021</u>			Vessel <u>JP Tully</u>			Cruise ID <u>2021-069</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
92	DEV-26	8	07:39	BE	ROS	/	53°34.250	128°51.020	165		/	/	CH	☒ ☐	
			:	BO			°34.240	°51.010		161	-			☐ ☐	
			07:47	EN			°34.230	°51.000			-			☐ ☐	
93	VP46	8	08:13	BE	ROS	/	53°32.790	128°53.330	212		/	/	CH	☒ ☐	
			08:17	BO			°32.790	°53.330		208	-			☐ ☐	
			08:22	EN			°32.790	°53.350			-			☐ ☐	
94	UC31	8	09:08	BE	ROS	/	53°32.180	128°59.89	410		/	/	CW	☒ ☐	see comment
			09:08	BO			°32.180	°59.90		35	-			☐ ☐	
			09:09	EN			°32.170	°59.91			-			☐ ☐	
95	UC43	08	09:58	BE	ROS	—	53°26.89	128°57.12	244		/	/	CW	☒ ☐	comment
			10:02	BO			°26.89	°57.130		242	-			☐ ☐	
			10:07	EN			°26.90	°57.130			-			☐ ☐	
96	UC45	08	10:28	BE	ROS	/	53°26.040	128°55.477	403		/	/	CH	☒ ☐	
			10:36	BO			°26.070	°55.510		399	-			☐ ☐	
			10:44	EN			°26.080	°55.540			-			☐ ☐	
97	UC50	08	11:29	BE	ROS	/	53°21.074	128°54.365	466		/	/	CH	☒ ☐	
			11:38	BO			°21.080	°54.370		462	-			☐ ☐	
			11:48	EN			°21.088	°54.376			-			☐ ☐	
			:				°	°			-			☐ ☐	

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: 6 December 2016

UC31 maybe accidentally had UC43 entered in station header

The UC43 the Bridge had was further east than on David's Ozi explorer
→ so the UC43 here is where the bridge had the station located, not the
Ozi waypoint.

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 14 of

Month <u>June</u>			Year <u>2021</u>			Vessel <u>JPTully</u>			Cruise ID <u>2021-069</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
							Latitude	Longitude							
98	FR53	8	12:22	BE	ROS	/	53°18.226	128°53.911	357		/	/	CH	☒	
			12:30	BO			°18.242	°53.873		367	-			☐	
			12:37	EN			°18.294	°53.888			-			☐	
99	MKV1	8	13:41	BE	ROS	—	53°17.860	129°6.840	507		/	/	CH	☒	SP took over driving
			13:50	BO			°17.870	°6.790		503	-			☐	
			:58	EN			°17.890	°6.670			-			☐	
100	VP43	8	15:05	BE			53°24.764	129°7.037	319		-		LP	☒	
			15:13	BO			°24.768	°7.037		317	-			☐	
			15:19	EN			°24.769	°7.027			-			☐	
101	CHAT2-3	8	22:31	RE	MOR		.	.			-		CC	☐	
102	CHAT2	8	23:11	BE	ROS	US	54°15.830	130°46.870	197		321-336	16	SP	☒	
			23:15	BO			°15.860	°46.880		194	-			☐	
			23:30	EN			°15.950	°46.910			-			☐	
103	CH21	9	00:37	BE	ROS	US	54°11.840	130°39.262	123		337-350	14	SP	☒	
			00:39	BO			°11.830	°39.270		119	-			☐	
			00:48	EN			°11.831	°39.275			-			☐	
104	MP55	9	02:19	BE	ROS	US	54°04.150	130°16.190	107		351-363	13	CH	☒	
			02:23	BO			°04.160	°16.200		103	-			☐	
			02:33	EN			°04.140	°16.270			-			☐	

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: 6 December 2016

Notes:

Chat 2-3 Mooring Recovery June 8, 2021

2224 - on station send 163F 233 268 290

- relocate - 561 391 - - strangely varying ranges

2231 - Send 163F + 1655 received & executed 381

- on surface

- Top Cluster of Vinies & Cat 5307 missing

This page is for any notes or observations

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 15 of

Month			Year			Vessel				Cruise ID					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
105	OGCH50	9	03:19	BE	ROS	US	53° 59.500	130° 12.760	130		364-378	15	CH	☒ ☐	
			03:23	BO			° 59.520	° 12.760		127	-			☐ ☐	
			03:36	EN			° 59.510	° 12.800			-			☐ ☐	
106	CH26	9	04:50	BE	ROS	US	54° 08.800	130° 21.330	61		379-385	7	CH	☒ ☐	
			04:56	BO			54° 08.810	130° 21.340		58	-			☐ ☐	
			05:04	EN			° .	° .			-			☐ ☐	
107	CHAT1	9	05:49	BE	ROS	US	54° 12.100	130° 27.230	119		386-399	14	CH	☒ ☐	
			05:52	BO			° 12.100	° 27.290		115	-			☐ ☐	
			06:04	EN			° 12.060	° 27.390			-			☐ ☐	
108	CH18	9	06:46	BE	ROS	US	54° 16.340	130° 29.060	41		400-405	6	CH	☒ ☐	
			06:49	BO			° 16.360	° 29.070		35	-			☐ ☐	
			06:55	EN			° 16.350	° 29.060			-			☐ ☐	
109	CH14	9	08:25	BE	ROS	US	54° 20.410	130° 49.710	138		406-419	14	CH	☒ ☐	surface bottle
			08:30	BO			° 20.410	° 49.650		134	-			☐ ☐	bottom →
			08:42	EN			° 20.400	° 49.620			-			☐ ☐	
110	CH16	9	09:37	BE	ROS	US	54° 19.880	130° 37.520	216		420-434	15	CH	☒ ☐	
			09:43	BO			° 19.890	° 37.600		209	-			☐ ☐	
			09:57	EN			° 19.963	° 37.691			-			☐ ☐	
			:				° .	° .			-			☐ ☐	

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: 6 December 2016

This page is for any notes or observations

109 surface bottles broached the surface.

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 16 of

Month <u>June</u>				Year <u>2021</u>			Vessel <u>Tully</u>				Cruise ID <u>2021 069</u>				
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
111	CH13	9	10:43	BE	ROS	US	54° 23.070	130° 38.950	158		435-444	10	CH	☒ ☐	
			10:48	BO			° 23.070	° 38.970		155	-			☐ ☐	
			11:02	EN			° 23.070	° 38.970			-			☐ ☐	
112	CH10	9	11:41	BE	ROS	US	54° 26.800	130° 39.215	85		445-451	7	CW	☒ ☐	
			:42	BO			° 26.80	° 39.125		81.3	-			☐ ☐	
			:	EN			° 26.810	° 39.190			-			☐ ☐	
113	CH11	9	12:23	BE	ROS	US	54° 26.900	130° 33.020	131		452-465	14	CH	☒ ☐	→
			12:27	BO			° 26.900	° 33.020		127	-			☐ ☐	
			12:39	EN			° 26.920	° 33.020			-			☐ ☐	
114	CH05	9	13:34	BE	ROS	US	54° 33.690	130° 37.699	142		466-482	17	CH	☒ ☐	SP took over at 100m up
			13:37	BO			° 33.700	° 37.690		138	-			☐ ☐	
			13:49	EN			° 33.700	° 37.710			-			☐ ☐	
115	CHAT3-2	9	14:23	RE	MOR		° .	° .			-			☐ ☐	
116	CHAT3	9	14:53	BE	ROS	US	54° 31.610	130° 32.530	161		483-496	14	SP	☒ ☐	
			14:56	BO			° 31.610	° 32.510		157	-			☐ ☐	
			15:07	EN			° 31.590	° 32.480			-			☐ ☐	
117	CHAT3-3		15:57	DE	MOR		54° 31.634	130° 32.494	162		-			☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	

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: 6 December 2016

Very prominent 'face' profile: T+DO before 25-50m. I wonder what causes this?

CH11 found fossil fish water ago

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 17 of 17

Month			Year			Vessel			Cruise ID						Page	
JUNE			2021			JP TULLY			2021-069						17 of	
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments	
							Latitude	Longitude								
118	PI 1	09	17:13	BE	ROS	VS	54° 40.520	130° 28.300	509		497-515	19	SP	☒		
			17:22	BO			° 40.580	° 28.380		526	-			☐		
			17:42	EN			° 40.600	° 28.410			-			☐		
119	CH02	09	18:30	BE	ROS	VS	54° 39.822	130° 38.285	308		516-532	17	SP	☒		
			18:35	BO			° 39.817	° 38.306		3051	-			☐		
			18:50	EN			° 39.800	° 38.324			-			☐		
120	CH03	09	20:08	BE	ROS	—	54° 41.330	130° 55.390	560		—	—	SP	☒		
			20:18	BO			° 41.290	° 55.360		568	-			☐		
			20:27	EN			° 41.240	° 55.350			-			☐		
121	DIXON1	09	21:48	BE	ROS	—	54° 41.040	131° 12.620	339		—	—	SP	☒		
			21:54	BO			° 41.050	° 12.660		339	-			☐		
			22:00	EN			° 41.050	° 12.640			-			☐		
122	DIXON1-1	09	22:39	DE	MOR		54° 40.993	131° 12.495	335		-		PS	☐		
123	LOOP	09	22:48				54° 40.480	131° 12.242			533-533			☐		
124	HECS9	10	00:10	BE	ROS	—	54° 31.170	131° 6.320	160		—	—	SP	☐		
			00:12	BO			° 31.170	° 6.320		156	-			☐		
			00:15	EN			° 31.170	° 6.320			-			☐		
125	HECS8		:	BO	NET		° .	° .			-			☐		
			:	EN			° .	° .			-			☐		
							° .	° .			-			☐		
Event Type: LOOP = Sea Water Loop BOT = Bottle cast (no CTD) MOR = Merring																
Bottle Firing Method: Time Code: CTD:																

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: 6 December 2016

June 9, 2021

Chat 3-2 Mooring Recovery

1418 - Send 16BB - 276 271 273 275

1421 - 408 410 41

1423 - Send 16BB + 1655 - 481 - 487 received & executed
- on surface

Event 118

- all stop at 30db to correct ship's heading
- restarted cast due to long wait at 30db
-

This page is for any notes or observations

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 18 of

Month <u>June</u>				Year <u>2021</u>			Vessel <u>Tully</u>			Cruise ID <u>2021-069</u>					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
126	HECS8	10	01:47	BE	ROS		54°23.310	131°05.560	119		-		CP	☒	water depth in
			01:52	BO			°23.350	°05.620		117	-			☐	probably wrong
			02:01	EN			°23.390	°05.640			-			☐	in leader.
127	HECS7	10	03:22	BE	ROS	✓	54°13.880	131°02.050	122		/	/	CH	☒	
			03:25	BO			°13.890	°02.070		119	-			☐	
			03:28	EN			°13.890	°02.040			-			☐	
128	HECS6	10	04:23	BE	ROS	✓	54°07.660	131°02.310	110		/	/	CH	☐	
			04:25	BO			°07.670	°02.260		106	-			☐	
			04:28	EN			°07.660	°02.280			-			☐	
129	HECS5	10	05:53	BE	ROS	✓	53°56.320	131°00.310	89		/	/	CH	☒	
			:	BO			°56.310	°00.320		86	-			☐	
			05:57	EN			°56.310	°00.320			-			☐	
130	HECS4	10	07:17	BE	ROS	/	53°48.300	130°49.340	110		/	/	CH	☐	large surface
			07:19	BO			°48.310	°49.310		107	-			☐	fluorescence
			07:21	EN			°48.320	°49.290			-			☐	
131	SCT	10	08:08		DRF		53°42.082	130°51.479			-			☐	SCT 1 →
132	HECS3	10	08:49	BE	ROS	/	53°41.87	130°43.06	141		/	/	CH	☒	
			08:52	BO			°41.86	°43.04		137	-			☐	
			08:55	EN			°41.86	°43.04			-			☐	

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: 6 December 2016

EVENT 131 SCT deployment 1247 1248 1249
Weather: wind from SSE 20 knots
waves ~ 1m

132 DO nose dives @ 75m

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 19 of

Month <u>June</u>			Year <u>2021</u>			Vessel <u>Tully</u>			Cruise ID <u>2021-069</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
133	HECS2	10	10:08	BE	ROS	-	53° 31.85	130° 43.00	188		-	-	CH	☒	
			10:12	BO			° 31.84	° 43.01		183	-			☐	
			10:16	EN			° 31.84	° 43.00			-			☐	
134	HECS1	10	11:16		ROS	/	53° 23.536	130° 45.463	189		-	-	CH	☒	
			11:21				° 23.525	° 45.440		185	-			☐	
			11:25				° 23.497	° 45.426			-			☐	
135	W007	10	12:27	BE	ROS	/	53° 15.472	130° 40.932	193		-	-	CH	☒	
			12:32	BO			° 15.466	° 40.913		188	-			☐	
			12:36	EN			° 15.434	° 40.894			-			☐	
136	W007	10	12:44		DRF		53° 15.111	130° 40.309			-			☐	→
137	SRN1	10	14:09	BE	ROS	/	53° 6.270	130° 23.260	201		-	-	UP	☒	
			14:15	BO			° 6.250	° 23.270		197	-			☐	
			14:18	EN			° 6.246	° 23.272			-			☐	
138	MT02	10	15:15	BE	ROS	-	53° 1.840	130° 14.790	216		-	-	SP	☒	
			15:19	BO			° 1.840	° 14.760		211	-			☐	
			15:23	EN			° 1.830	° 14.740			-			☐	
139	MT03	10	16:20	BE	ROS		52° 55.590	130° 8.000	243		-	-	SP	☒	
			16:24	BO			° 55.580	° 7.990		239	-			☐	
			16:29	EN			° 55.570	° 7.980			-			☐	

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: 6 December 2016

This page is for any notes or observations

Event 136

SCT

1250, 1251, 1252

Wind 20 knots from SSE, waves low.

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 20 of

Month				Year			Vessel				Cruise ID				
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
140	MT04	10	17:30	BE	ROS		52° 49.211	130° 1.374	260		-		CP	☒	
			17:37	BO			° 49.216	° 1.362		255	-			☐	
			17:41	DN			° 49.216	° 1.369			-			☐	
141	MT05	10	19:16	BE	NET		52° 40.616	129° 59.044	265		-		SP	☐	
			19:20	EN			° 40.608	129° 59.033		250	-			☐	
142	MT05	10	19:33	BE	ROS	US	52° 40.603	129° 59.091	265		-		DS	☐	
			19:39	BO			52° 40.613	° 59.104		262	-			☐	
			:	EN			° 40.602	° 59.062			-			☐	
143	MT06B	10	20:56	BE	ROS		52° 33.440	130° 2.990	284		-		CP	☒	
			21:04	BO			° 33.470	° 2.920		280	-			☐	
			21:09	EN			° 33.470	° 2.900			-			☐	
144	MT07B	10	22:29	BE	ROS		52° 24.070	130° 8.430	331		-		CP	☒	MT07B
			22:37	BO			° 24.070	° 8.420		326	-			☐	But not messy! LP
			22:42	EN			° 24.070	° 8.440			-			☐	
145	MT08B	11	00:15	BE	ROS	US	52° 14.030	130° 11.410	502		563-580	18	SP	☒	
			00:24	BO			° 14.010	° 11.270		500	-			☐	
			00:41	EN			° 13.950	° 11.040			-			☐	
			:				° .	° .			-			☐	
			:				° .	° .			-			☐	

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: 6 December 2016

10-Jun/21 20:30
PAR sensor cleaned on TSG (S. Page)

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 2 of

Month				Year			Vessel				Cruise ID				
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
146	MT09	11	01:43	BE	ROS		52° 7.660	130° 17.210	448		-		4	☒	
			01:53	BO			° 7.660	° 17.130		443	-			☐	
			02:00	EN			° 7.650	° 17.080			-			☐	
147	MT10	11	03:21	BE	ROS	/	51° 58.310	130° 29.350	432		-	/	CH	☒	
			03:29	BO			° 58.330	° 29.260			-			☐	forgot to look
			03:37	EN			° 58.360	° 29.200			-			☐	at depth
148	MT11 B	11	05:27	BE	ROS	US	51° 42.050	130° 33.250	971		581 - 602	22	CH	☒	PAR removed
			05:45	BO			° 42.070	° 33.500		986	-			☐	
			06:18	EN			° 42.103	° 33.478			-			☐	
149	MS05B	11	08:34	BE	ROS	/	51° 36.084	130° 06.070	551		-	/	CH	☐	PAR put back
			08:45	BO			° 36.090	° 06.060		555	-			☐	on
			08:54	EN			° 36.090	° 06.060			-			☐	
150	GT02	11	11:11	BE	ROS	/	51° 29.997	129° 38.051	150		-	/	CH	☒	→
			11:16	BO			° 30.001	° 38.075		145	-			☐	
			:	EN			° 30.002	° 38.063			-			☐	
151	GT02	11	:	BE	ROS	/	° .	° .	150		-	/	CH	☐	→
			11:24	BO			51° 29.998	129° 38.128		146	-			☐	
			11:27	EN			51° 29.994	° 38.132			-			☐	
			:				° .	° .			-			☐	

Event Type:
 NT = Bottle cast (no CTD)
 = Standalone CTD
 CTD in Rosette
 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: 6 December 2016

Event 150

Very strange salinity trace. Huge difference between 51 & 52.

Event 151 Better - but still very odd. Very wiggly salinity trace between 50-75m.

~~Is there a jelly fish in the line?~~

Forgot to turn pump on. 2nd time!!

will not do a third time.
Move on.
Failure.

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 22 of

Month <u>JUNE</u>				Year <u>2021</u>		Vessel <u>JP TULLY</u>		Cruise ID <u>2021-069</u>							
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
152	C104	11	14:01	BE	ROS	/	51° 19.22	129° 3.18	254		/	/	CC	☒	
			14:05	BO			51° 19.25	129° 3.17		255	-			☐	
			14:10	EN			51° 19.26	129° 3.18			-			☐	
153	C509	11	17:08	BE	ROS	-	51° 12.628	128° 28.002	192		-	-	SP	☒	
			17:11	BO			° 12.649	° 27.959		191	-			☐	
			17:14	EN			° 12.656	° 27.942			-			☐	
154	CPE1	11	20:39	BE	NET		50° 59.9138	127° 49.8836	147		-		SP	☐	
			20:41	EN			° 59.895	° 49.873		142	-			☐	
155	CPE1	11	20:58	BE	ROS	US	51° 0.000	127° 49.970	152	152	603-611		✓	☒	
			21:00	BO			50° 59.920	127° 49.940		152	-			☐	
			21:09	EN			50° 59.920	127° 49.830			-			☐	
156	CPE1	11	21:13		DRF		50° 59.884	127° 49.724			-		SP	☐	
157	LOOP	11	21:35				50° 57.570	127° 45.500			612	1	SP	☒	
158	QCS3	12	00:06	BE	ROS	US	50° 43.790	127° 15.110	216		613-628	16	SP	☒	
			00:10	BO			° 43.790	° 15.120		212	-			☐	
			00:22	EN			° 43.800	° 15.130			-			☐	
159	SOGN2-7	12	16:48	RE	MOR		° .	° .			-		DS	☐	
			:				° .	° .			-			☐	
			:				° .	° .			-			☐	

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

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

Notes:

Produced by the Water Properties Group, IOS

WaterProperties.ca
 Version: 6 December 2016

EVENT 156

Drifters 1254, 1256, 1264, 1265, 1267

SOCN2-7 - Mooring Search June 12, 2021

- POT
- 0658-0701 - use dunking transducer; no response ~10 attempts but 1 random reply @ 2409
 - 0706 - turning ship around to try again; ~5 attempts w/o reply
 - 0717 - ship moves 1.5 km N; no response
 - ship moves 1.5 km S of original location

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page _____ of _____

[illegible]

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 Ha
 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: 6 December 2016

SOGN2 - Mooring Search contd. June 12, 2021

This page is for any notes or observations

0737 PDT - 1 km SSE of original position - hull & dunking transducer - no response
 - head to SSE - pinging using hull transducer

0750 - 2.7 km SSE of original position - no response
 - head SSE - pinging en route

0804 - 4.8 km SSE - no response
 - head SSE - pinging en route

0820 6.6 km SSE 4655 4659 4666

- head 1 NM ENE

0835 6.9 km @ 127° from original site 3972 3986 4022 4051

0857 9.7 km @ 130° Fr. 2186 2190 2200

0908 - en route

0915 - 420 401 382 387 387 387 388 388 389 389 391 684 487 471 443 421

0929 - 394 393 392 390 389 390 389 390 390 391 392 393 485, 419, 413 401 401 400

0948 - Send 09BF + 09ES 668 674 650

Send 09 - on surface

