

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

2021-076

DATE:

From: Oct 11/2021

To:

VESSEL:

CCGS John P Tully

PROJECT(S):

Quatsino Sound Moorings

Water Properties Group
Fisheries and Oceans Canada
Institute of Ocean Sciences
Ocean Sciences Division
North Saanich, BC, Canada

WaterProperties.ca

Captain: Mike Corfield First Officer: David Rapsch

Second Officer: _____ Third Officer: _____

Fishing Master: _____ Chief Engineer: _____

DFD

**** Chief Scientist to complete section below OR cut and tape from cruise plan ****

1st Leg Scientific Personnel: Chief Scientist: Chris Clark

Name	Watch	Cabin	Name	Watch	Cabin
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Chris Clarke Day A

2nd Leg Scientific Personnel: Chief Scientist:

Name	Watch	Cabin	Name	Watch	Cabin
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[illegible]

[illegible]

**** 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: Water Properties #102

Data acquisition program: Seasave V7.26.7.121

CTD deck unit make: 11+; Seabird model: 11+ serial number: 0425

Primary CTD

Make: Seabird model: 911+ serial number: 0443

Primary temperature serial number: 4700

Primary conductivity serial number: 3531

Secondary temperature serial number: 4848

Secondary conductivity serial number: 4513

Transmissometer: Wetlabs Model: C-Star s/n: 1483 DG

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

Fluorometer: Model Seapoint Cable gain: 3x s/n: 3950 P, S or NO pump?

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

Oxygen sensor: Seabird Model: SBE43 s/n: 3791 P, S or NO pump?

PAR sensor: Biospherical Model: QSP200L45 s/n: 4565 Surface PAR? Y/N

Other sensors: PH sensor, Seabird 18-I s/n: 1806A1 P, S or NO pump?

Other sensors: altimeter, Valeport V4500 s/n: 76341 P, S or NO pump?

Other sensors: Biospherical SPAR s/n: 20518 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: 24
Manufacturer: _____
Volume of bottles (litres): 10L x 24

Winches:

1. Make: _____ Model: _____ Serial #: _____ Used for: LARS CTD winch
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 see below

Test Cast in Saanich Inlet or other location? Yes No

Comments see below

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:

CTD remained onboard w/ no changes from previous
cruise -> SAG survey 2021-022

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:
Frame Size: cm Mesh: μm Flowmeter:
Frame Size: cm Mesh: μm Flowmeter:

Multinet BIONESS Neuston Others:

Trawl Gear:

Midwater Trawls: SOG Highseas Pelagic Other:

Bottom Trawls: Atlantic Western IIA Yankee 36 Hard & Soft Bottom Other:

American Shrimp Trawl

Notes:

Trawl Doors: USA Jet Tyburon

Sounders : Wesmar 380 Others:

Acoustics:

Echosounder #1 EK60 Frequencies (KHz): 12 18 38 70 120 200

Others:

Echosounder #2 EK40 Frequencies (KHz): 12 18 38 70 120 200

Others:

Software & Notes:

Other Gear in Operation:

- 1. Mooring operation; x2 deployments using ships crane
- 2.
- 3.
- 4.
- 5.



DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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Month <u>Oct</u>				Year <u>2021</u>		Vessel <u>Tully</u>				Cruise ID <u>2021-076</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	<u>Quat 2-1</u>	13	16:09	DE	MOR	—	50° 28.5033	127° 49.2672	133		-		CC	☐	
2	IV104	13	16:29	BE	ROS	—	50° 28.530	127° 48.320	125		-		CC	☒	use as Quat 2-1 cast; within Yanm.
			16:32	BO		—	50° 28.550	127° 48.340		123	-			☐	
			16:34	EN		—	50° 28.560	127° 48.350			-			☐	
3	IV115	13	17:02	BE	ROS	—	50° 29.320	127° 45.620	107		-		CC	☒	
			17:05	BO		—	50° 29.340	127° 45.620		103	-			☐	
			17:07	EN		—	50° 29.340	127° 45.630			-			☐	
4	IV109	13	17:27	BE	ROS	—	50° 29.900	127° 43.870	120		-		CC	☒	
			17:29	BO		—	50° 29.900	127° 43.880		116	-			☐	
			17:31	EN		—	50° 29.910	127° 43.870			-			☐	
5	IV103	13	17:55	BE	ROS	—	50° 30.370	127° 41.580	140		-		CC	☒	
			17:58	BO		—	50° 30.360	127° 41.580		139	-			☐	
			18:01	EN		—	50° 30.350	127° 41.570			-			☐	
6	Q4	13	18:32	BE	ROS	—	50° 31.708	127° 38.747	120		-		CC	☒	
			18:34	BO		—	50° 31.709	127° 38.750		117	-			☐	
			18:36	EN		—	50° 31.715	127° 38.747			-			☐	
7	Quat 1-1	13	20:44	DE	MOR	—	50° 24.7945	128° 00.3493	188		-		CC	☐	
			:				°	°			-			☐	
			:				°	°			-			☐	

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

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8	Q1	13	21:09	BE	ROS	/	50°25.051	127°59.998	166		-		CC	☒ ☐	use as Quatl-1 calib.
			21:13	BO		/	50°25.048	128°00.0013		166	-			☐ ☐	cast; ~0.35mm buoy
			21:16	EN		/	50°25.037	128°00.0005			-			☐ ☐	
9	N119	13	22:01	BE	ROS	/	50°21.680	128°06.060	90		-		CC	☒ ☐	
			22:03	BO		/	50°21.680	128°06.030		88	-			☐ ☐	
			22:05	EN		/	50°21.670	128°06.010			-			☐ ☐	
10	N17	14	14:54	BE	ROS	/	50°25.640	127°30.491	169		-		CC	☒ ☐	
			14:57	BO		/	50°25.642	127°30.491		165	-			☐ ☐	
			15:00	EN		/	50°25.639	127°30.496			-			☐ ☐	
11	RU3	14	17:16	BE	ROS	/	50°35.260	127°26.540	65		-		CC	☒ ☐	
			17:18	BO		/	50°35.260	127°26.540		61	-			☐ ☐	
			17:20	EN		/	50°35.260	127°26.530			-			☐ ☐	
12	HOL1	14	18:00	BE	ROS	/	50°33.880	127°33.620	129		-		CC	☒ ☐	
			18:03	BO		/	50°33.870	127°33.630		126	-			☐ ☐	
			18:05	EN		/	50°33.870	127°33.620			-			☐ ☐	
13	HOL2	14	19:05	BE	ROS	/	50°35.840	127°44.020	75		-		CC	☒ ☐	
			19:07	BO		/	50°35.840	127°44.020		72	-			☐ ☐	
			19:08	EN		/	50°35.840	127°44.010			-			☐ ☐	
			:				.	.			-			☐ ☐	

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14	H014	14	19:46	BE	ROS	—	50° 37.000	127° 51.200	56		-		CC	☒	
			19:47	BO			50° 36.995	127° 51.198		53	-			☐	
			19:49	EN			50° 36.994	127° 51.200			-			☐	
15	H012	14	21:16	BE	ROS	—	50° 35.290	127° 39.100	115		-		CC	☒	
			21:19	BO			50° 35.290	127° 39.100		112	-			☐	
			21:21	EN			50° 35.290	127° 39.110			-			☐	
16	N105	14	23:02	BE	ROS	—	50° 31.710	127° 36.680	54		-		CC	☒	
			23:03	BO			50° 31.700	127° 36.680		51	-			☐	
			23:05	EN			50° 31.700	127° 36.680			-			☐	
17	N22	14	23:30	BE	ROS	—	50° 30.481	127° 35.898	152		-		CC	☒	
			23:33	BO			50° 30.475	127° 35.897		149	-			☐	
			23:36	EN			50° 30.470	127° 35.892			-			☐	
18	N18	14	23:58	BE	ROS	—	50° 28.880	127° 33.530	194		-		CC	☒	
		15	00:02	BO			50° 28.880	127° 33.530		192	-			☐	
			00:06	EN			50° 28.900	127° 33.540			-			☐	
19	N105	15	01:37	BE	ROS	—	50° 28.080	127° 53.320	165		-		CC	☒	different loc'n from event 16 loc'n
			01:41	BO			50° 28.090	127° 53.350		163	-			☐	
			01:44	EN			50° 28.100	127° 53.360			-			☐	
			:				END OF CRUISE				-			☐	

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