

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

2018-090

DATE:

From:

AUG 15/18

To:

AUG 21/18

VESSEL:

VECTOR

PROJECT(S):

OPP-MEQ

SVEIN VAGLE

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: #10 Laptop

Data acquisition program: Seasave

CTD deck unit make: N/A model: serial number:

Primary CTD

Make: SBE model: 25+ serial number:

Primary temperature serial number: 2968

Primary conductivity serial number: 2173

Secondary temperature serial number:

Secondary conductivity serial number:

Transmissometer: Model: s/n:

Transmissometer: Model: s/n:

Fluorometer: Model WetlabsECO Cable gain: 13 s/n: 2214 P, S or NO pump?

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

Oxygen sensor: SBE Model: 43 s/n: 0799 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?

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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)

2018-90

Date: 08/14/2018

July 2018 1123.txt

Instrument configuration file: P:\Cruise_Data_Processing\2018-090\July 2018 1123.xmlcon

Configuration report for SBE 25plus Sealogger CTD

Usage: Process .XML file uploaded from CTD memory.
External voltage channels : 8

1) Frequency 0, Temperature

```

Serial number : 2968
Calibrated on : 22-Feb-17
G : 4.30535958e-003 ✓
H : 6.39798216e-004 ✓
I : 2.19306163e-005 ✓
J : 1.97019170e-006 ✓
F0 : 1000.000
Slope : 1.000000000
Offset : 0.0000
  
```

2) Frequency 1, Conductivity

```

Serial number : 2173
Calibrated on : 23-Feb-17
G : -1.01676051e+001 ✓
H : 1.39410479e+000 ✓
I : -2.69269723e-003 ✓
J : 2.58106152e-004 ✓
CTcor : 3.2500e-006
CPCor : -9.57000000e-008
Slope : 1.000000000
Offset : 0.00000
  
```

3) Count, Pressure, Strain Gauge

```

Serial number : 1123
Calibrated on : 11-Nov-15
PA0 : 6.96112196e-001 ✓
PA1 : 5.49972465e-004
PA2 : 1.53175364e-013
PTEMPPA0 : -9.28335614e+001
PTEMPPA1 : 4.14914260e+001
PTEMPAA2 : 1.52870082e+000
PTCA0 : 8.37081850e+006
PTCA1 : -8.59654618e+001
PTCA2 : 5.90656907e+000
PTCB0 : 1.04072526e+002
PTCB1 : -8.96132376e-003
PTCB2 : 0.00000000e+000
Offset : 0.000000
  
```

4) A/D voltage 0, Oxygen, SBE 43

```

Serial number : 0766
Calibrated on : 01-Mar-17 ✓
Equation : Sea-Bird ✓
Soc : 4.32010e-001 ✓
Offset : -5.24000e-001 ✓
A : -4.44170e-003 ✓
B : 2.54970e-004 ✓
C : -3.90300e-006 ✓
E : 3.60000e-002 ✓
Tau20 : 1.29000e+000 ✓
D1 : 1.92634e-004 ✓
D2 : -4.64803e-002 ✓
H1 : -3.30000e-002 ✓
  
```

H2 : 5.00000e+003 ✓
H3 : 1.45000e+003 ✓

5) A/D voltage 1, Fluorometer, WET Labs ECO-AFL/FL

Serial number : FLRTD-2214
Calibrated on : 2/6/2017
Dark output : 0.0310
Scale factor : 1.300000000e+001

- 6) Unknown 2, Free
- 7) Unknown 3, Free
- 8) Unknown 4, Free
- 9) Unknown 5, Free
- 10) Unknown 6, Free
- 11) Unknown 7, Free

Serial Sensor data not processed in this version of Seasoft.
Sample interval : 6.250000000e-002
Scan length : 72

DAILY SCIENCE LOG

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Month <u>AUGUST</u>			Year <u>2018</u>			Vessel <u>VICTOR</u>			Cruise ID <u>2018-90</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
							Latitude	Longitude							
1	SWIFTSUR	16	14:35		MOOR		48° 30.946	124° 56.034	76		-			☐ ☐	Release mooring
2	DEPLOY SWIFTSUR	16	16:04		MOOR		48° 30.91	124° 56.18	77		-			☐ ☐	DEPLOY AMAR
3	SWIFT SUR	16	16:16	BC	CTD		48° 30.86	124° 56.34	77	65	- 2 minute wait			☐ ☐	CTD 25
4	SWIFT SUR	17	14:35		MOOR		48° 17.386	123° 39.019	166		-			☐ ☐	Release mooring
5	SOOK	17	16:03		MOOR		48° 17.37	123° 39.29	170		-			☐ ☐	DEPLOY SOOK
6	SOOK	17	16:11	BC	CTD		48° 17.44	123° 39.34	170	160	- 2 minute wait			☐ ☐	CTD 25
7	AMAR JORDIN	17	19:15		MOOR		48° 23.82	124° 07.96	120		-			☐ ☐	Release mooring
8	JORDIN	17	20:10		MOOR		48° 23.81	124° 08.05	121		-			☐ ☐	DEPLOY mooring
9	JORDIN	17	20:26	BC	CTD		48° 23.82	124° 08.04	121	110	-			☐ ☐	CTD 25
10	HFTA 0001	17	20:57	BC	TA		48° 22.65	124° 10.06	174	6.3m	-			☐ ☐	TOWED ARRAY
11	HFTA 0001	17	23:02	BC	TA		48° 24.99	124° 19.34			-			☐ ☐	RECOVER ARRAY
12	HFTA 0001	17	23:05	BC	CTD		48° 24.99	124° 19.34	194	185	-			☐ ☐	CTD 25
13	HFTA 0002	17	:	BC	TA		48° 24.98	124° 19.27	197		-			☐ ☐	TOWED ARRAY
14	HFTA 0002	18	01:09	BC	TA		48° 26.98	124° 26.37			-			☐ ☐	TOWED RECOVER
15	---	18	01:10	BC	CTD		48° 26.976	124° 26.361	200	190	-			☐ ☐	CTD 25
16	HFTA 0003	18	01:38	BC	TA		48° 27.09	124° 26.84			-			☐ ☐	DEPLOY ARRAY
17	HFTA 0003	18	03:01	BC	TA		48° 28.58	124° 32.16			-			☐ ☐	RECOVER ARRAY
18	HFTA 0003	18	03:08	BC	CTD		48° 28.585	124° 32.157	216	205	-			☐ ☐	CTD 25
19	HFTA 0004	18	03:33	BC	TA		48° 28.67	124° 32.58			-			☐ ☐	DEPLOY ARRAY

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

TA = TOWED ARRAY

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

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Month				Year			Vessel			Cruise ID					
AUGUST				2018			VECTOR			2018-90					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
20	HFTA 0004	18	05:00	BE	TA		48° 30.31	124° 38.48			-			☐ ☐	RECOVER 0004
21	HFTA 0004	18	05:07	BE	CTD		48° 30.36	124° 38.67	232	220	-			☐ ☐	CTD 25
22	HFTA 0005	18	05:27	BE	TA		48° 30.49	124° 37.16			-			☐ ☐	DEPLOY ARRAY
23	HFTA 0005	18	07:10	BE	TA		48° 32.68	124° 47.01			-			☐ ☐	RECOVER ARRAY
24	HFTA 0005	18	07:13	BE	CTD		48° 32.69	124° 47.01	147	135	-			☐ ☐	CTD
25	HFTA 0006	18	7:29	BE	TA		48° 32.81	124° 47.73	1112		-			☐ ☐	Deploy array
26	HFTA 0006	18	9:02	BE	TA		48° 32.91	124° 58.43			-			☐ ☐	Recover Array
27	HFTA 0006	18	09:10	BE	CTD		48° 33.02	124° 55.66	74	65	-			☐ ☐	CTD
28	HFTA 0007	18	09:27	BE	TA		48° 33.01	124° 56.45			-			☐ ☐	Deploy Array
29	HFTA 0007	18	11:00	BE	TA		48° 32.93	125° 03.94			-			☐ ☐	Recover Array
30	HFTA 0007	18	11:09	BE	CTD		48° 33.01	125° 04.14	94	85	-			☐ ☐	CTD
31	HFTA 0008	18	11:23	BE	TA		48° 33.17	125° 04.69			-			☐ ☐	Deploy Array
32	HFTA 0008	18	13:00	BE	TA		48° 37.88	125° 05.70			-			☐ ☐	Retrieve Array
33	HFTA 0008	18	13:08	BE	CTD		48° 38.04	125° 05.94	90	80	-			☐ ☐	CTD
34	HFTA 0009	18	13:23	BE	TA		48° 38.45	125° 06.55			-			☐ ☐	Deploy Array
35	HFTA 0009	18	15:01	EN	TA		48° 40.90	125° 7.61			-			☐ ☐	Retrieve Array
36	HFTA 0009	18	15:02	BE	CTD		48° 40.92	125° 7.53	57	45	-			☐ ☐	CTD
37	HFTA 0010	18	15:24	BE	TA		48° 40.84	125° 6.92	58		-			☐ ☐	Deploy Array
38	HFTA 0010	18	17:03	EN	TA		48° 39.80	124° 59.86			-			☐ ☐	Retrieve Array

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Time Code:

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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				August		Year		2018		Vessel		VECTOR		Cruise ID		2018-90	
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments		
							Latitude	Longitude									
39	HPTA0010	18	17:03	BE	CTD		48° 39.76	124° 59.81	48	32	-			☐ ☐	CTD		
40	HPTA0011	18	17:23	BE	TA		48° 39.81	124° 59.07			-			☐ ☐	DEPLOYED TOWED ARRAY		
41	HPTA0011	18	21:00	BE	TA		48° 34.74	124° 45.35			-			☐ ☐	Recover Array		
42	HPTA0011	18	21:08	BE	CTD		48° 34.70	124° 45.24	67	55	-			☐ ☐	CTD		
43	HPTA0012	18	23:40	BE	TA		48° 33.77	124° 42.23			-			☐ ☐	Deploy Array		
44	HPTA0012	19	01:10	EN	TA		48° 35.78	124° 47.58			-			☐ ☐	Recover Array		
45	HPTA0012	19	01:15	BE	CTD		48° 35.78	124° 47.59	52		-			☐ ☐	CTD		
46	HPTA0013	19	01:24	BE	TA		48° 35.91	124° 47.83			-			☐ ☐	DEPLOY ARRAY		
47	HPTA0013	19	03:01	EN	TA		48° 38.46	124° 52.93			-			☐ ☐	Recover ARRAY		
48	HPTA0013	19	03:10	BE	CTD		48° 38.52	124° 53.08	49	32	-			☐ ☐	CTD		
49	HPTA0014	19	03:22	BE	TA		48° 38.68	124° 53.44			-			☐ ☐	DEPLOY ARRAY		
50	HPTA0014	19	05:02	BE	TA		48° 39.99	125° 00.23			-			☐ ☐	RECOVER ARRAY		
51	HPTA0014	19	05:13	BE	CTD		48° 40.02	125° 00.46	45	35	-			☐ ☐	CTD		
52	HPTA0015	19	05:19	BE	TA		48° 39.99	125° 00.53			-			☐ ☐	DEPLOY ARRAY		
53	HPTA0015	19	07:06	BE	TA		48° 41.47	125° 08.42			-			☐ ☐	RECOVER ARRAY		
54	HPTA0015	19	07:12	BE	CTD		48° 41.56	125° 08.62	56	45	-			☐ ☐	CTD		
55	HPTA0016	19	07:20	BE	TA		48° 41.74	125° 09.05			-			☐ ☐	Deploy Array		
56	HPTA0016	19	09:00	BE	TA		48° 44.70	125° 15.46			-			☐ ☐	RECOVER ARRAY		
57	HPTA0016	19	09:10	BE	CTD		48° 44.76	125° 15.58	55	45	-			☐ ☐	CTD		

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Notes:

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Month <u>AUG</u>				Year <u>2018</u>			Vessel <u>VECTOR</u>			Cruise ID <u>2018-90</u>					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
58	HFTA0017	19	09:20	BE	TA		48° 44.94	125° 15.97			-			☐ ☐	DEPLOY ARRAY
59	HFTA0017	19	11:02	BE	TA		48° 47.93	125° 22.57			-			☐ ☐	RECOVER ARRAY
60	HFTA0017	19	11:12	BE	CTD		48° 48.06	125° 22.83	95	85	-			☐ ☐	CTD
61	^{14702m} PORT RENAISSANCE	19	17:33	BE	MOR		48° 30.30	124° 31.00	169		-			☐ ☐	MOORING DEPLOYED
62	PORT RENAISSANCE	19	17:33	BE	CTD		48° 30.30	124° 31.00	169		-			☐ ☐	CTD
63	HFTA0018	19	20:01	BE	CTD		48° 33.67	125° 00.19	67	57	-			☐ ☐	CTD
64	HFTA0018	19	20:21	BE	TA		48° 33.84	125° 00.75			-			☐ ☐	DEPLOY ARRAY
65	HFTA0018	19	23:03	EN	TA		48° 39.18	125° 13.88			-			☐ ☐	RECOVER ARRAY
66	HFTA0019	19	23:12	BE	CTD		48° 39.22	125° 13.99	105	100	-			☐ ☐	CTD
67	HFTA0019	19	23:23	BE	TA		48° 39.48	125° 14.45			-			☐ ☐	DEPLOY ARRAY
68	HFTA0019	20	00:36	BE	TA		48° 44.53	125° 24.38			-			☐ ☐	RECOVER ARRAY
69	HFTA0020	20	01:47	BE	CTD		48° 44.57	125° 24.60	112	100	-			☐ ☐	CTD
70	HFTA0020	20	02:01	BE	TA		48° 44.53	125° 24.26			-			☐ ☐	DEPLOY ARRAY
71	HFTA20	20	03:00	BE	TA		48° 44.03	125° 21.37			-			☐ ☐	RECOVER ARRAY
72	HFTA21	20	03:10	BE	CTD		48° 43.96	125° 21.16	111	100	-			☐ ☐	CTD
73	HFTA21	20	03:19	BE	TA		48° 43.89	125° 20.85			-			☐ ☐	DEPLOY ARRAY
74	HFTA21	20	05:31	BE	TA		48° 42.02	125° 14.75			-			☐ ☐	RECOVER ARRAY
75	HFTA21B	20	05:44	BE	CTD		48° 41.87	125° 14.46	94	85	-			☐ ☐	CTD
			:				°	°			-			☐ ☐	

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Month <u>August</u>				Year <u>2019</u>			Vessel <u>VECTOR</u>				Cruise ID <u>2018-90</u>				
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
							Latitude	Longitude							
76	HARO STRAIT	20	19:19	BE	MOR		48° 29.77	123° 11.57	233		-			☐ ☐	DEPLOYED HARO STRAIT mooring
77	HARO STRAIT	20	19:22		CTD		48° 29.76	123° 11.57	233	220	-			☐ ☐	CTD
78	BOUNDARY PASS	20	21:35	EN	MOR		48° 43.99	123° 08.55			-			☐ ☐	RECOVERED BOUNDARY PASS mooring
79	BOUNDARY PASS mooring	20	22:35	BE	MOR		48° 44.01	123° 09.05			-			☐ ☐	DEPLOYED BP mooring
80	BOUNDARY	20	22:39	BE	CTD		48° 44.01	123° 09.04	183	170	-			☐ ☐	CTD
81	HARO 001	21	00:33	BE	CTD		48° 33.21	123° 13.18	250	240	-			☐ ☐	CTD
82	HARO 002	21	02:33	BE	CTD		48° 31.35	123° 12.56	201	190	-			☐ ☐	CTD
83	HARO 003	21	04:33	BE	CTD		48° 27.78	123° 11.60	117	105	-			☐ ☐	CTD
84	HARO 004	21	06:35	BE	CTD		48° 31.87	123° 11.87	233	220	-			☐ ☐	CTD
85	HARO 005	21	08:36	BE	CTD		48° 29.15	123° 11.13	221	210	-			☐ ☐	CTD
86	HARO 006	21	10:04	BE	CTD		48° 33.21	123° 11.79	256	245	-			☐ ☐	CTD
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	

Event Type:

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Bottle Firing Method:

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Notes: _____

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