DAILY SCIENCE LOG BOOK

CRUISE NUMBER 2017-65

DATE: From: Oct 3, 2017 To:

VESSEL: Vector

PROJECT(S):

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

WaterProperties.ca

Captain: NICOLA MANCHY First Officer: MARK MEESTER

Second Officer: PETER MITCHELL Third Officer: _____

Fishing Master: BOSUN JAMIE HENDERSON Chief Engineer: JOHN

Mission Participants / Agencies:

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

1st Leg Scientific Personnel: Chief Scientist: PETER CHANDLER

Name	Watch	Cabin	Name	Watch	Cabin
PETER CHANDLER	1	1	SCOTT ROSE	2	3
NINA NEMCEK	1	4	CINDY WRIGHT	2	4
MARK BOLTON	1	2	DAVE SPEAR	2	2

2nd Leg Scientific Personnel: Chief Scientist: _____

Name	Watch	Cabin	Name	Watch	Cabin

**** 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: Vector Laptop

Data acquisition program: Seasave

CTD deck unit make: SBE model: 11+ serial number: 550

Primary CTD

Make: SBE model: 9+ serial number: _____

Primary temperature serial number: 4054

Primary conductivity serial number: 1766

Secondary temperature serial number: 4484

Secondary conductivity serial number: 3531

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

Transmissometer: _____ Model: _____ s/n: _____

Fluorometer: Model Seapoint Cable gain: 3X s/n: 3685 P, S or NO pump?

Fluorometer: Model _____ Cable gain: _____ s/n: ~~3685~~ P, S or NO pump?

Oxygen sensor: SBE Model: 43 s/n: 1119 (P), S or NO pump?

PAR sensor: Biospherical Model: QSP200L4S s/n: 4565 Surface PAR? Y / N

Other sensors: Altimeter s/n: 62355 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: SBE model: 25+ serial number: 1123

Primary temperature serial number: 3396

Primary conductivity serial number: 4888

Secondary temperature serial number: _____

Secondary conductivity serial number: _____

Transmissometer: _____ Model: _____ s/n: _____

Transmissometer: _____ Model: _____ s/n: _____

Fluorometer: Model Wetlabs ECO Cable gain: _____ 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: 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?

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)

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month OCT **Year** 2017 **Vessel** VECTOR **Cruise ID** 2017-65

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Positional Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
1	S1	4	00:50	BE	ROS	US	48° 39.10	123° 30.61			1 - 9	9	all	☑ ☑	
			00:52	BO			° 39.11	° 30.61		100	-			☐ ☐	
			01:06	EN			° 39.11	° 30.60			-			☐ ☐	
			:				° .	° .			-			☐ ☐	Conf file changed
2	FORTUNE	4	19:18	EN	MOOR	—	49° 13.245	125° 45.898	94	94	-	—	DS	☐ ☐	with new DO
			:				° .	° .			-			☐ ☐	value in "E"
3	FORTUNE	4	19:28	BE	CTD		49° 13.24	125° 45.83	93		-		DC	☐ ☐	SBE 25
			19:30	BO			° 13.25	° 45.82			-			☐ ☐	
			19:31	EN			° 13.25	° 45.82			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
4	CYPRESS	4	20:20		MOR		49° 15.132	125° 52.046	66		-		DS	☐ ☐	mooring rel'd
			22:21	RE			° 15.155	° 51.955			-			☐ ☐	signal to release
			:				° .	° .			-			☐ ☐	but remained
5	CYPRESS	4	20:39	BE	CTD		49° 15.200	125° 52.138	64	60	-		DC	☐ ☐	moored
			20:40	BO			° 15.201	° 52.143			-			☐ ☐	
			20:41	EN			° 15.204	° 52.155			-			☐ ☐	
6	MILLAR	5	00:53	BO			49° 16.817	126° 02.004	21.0	21.0	-			☐ ☐	deployment
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	

Event Type:
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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
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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

Notes: _____

depart Jelby Pct Bay 17h05 3 Oct 2017 - fair + calm weather
- departure delayed by 1 h due to network problems
- 2 minute soak at 10 m depth
- no TSG as water pump unserviceable
- ship's engineer working on cooling system of #1 generator
- no Haro Strait stations - night steam to Clayoquot Sound

- Fortune mooring → deployment
- FORTUNE CTD - SBE 25 10 m dip - soak 2 min off hydro winch + stbd chains
- Cypress recovery - no release - rig off A-frame for dragging using work winch
- CYPRESS CTD - SBE 25 down 10 m + up - soak 2 minutes

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7	MILLAR	5	00:58	BE	CTD		49 °16.835	126 °02.047			-		PC	☐☐	
			00:59	BO			°16.835	°02.047			-			☐☐	
			01:00	EN			°16.835	°02.047			-			☐☐	
8	101	5	14:13	BE	ROS		48° 25.40	124° 45.17	233		-		SR	☑☐	2min soak @ 12m
			14:17	BO			°25.42	°45.16		229	-			☐☐	
			14:22	EN			°25.41	°45.17			-			☐☐	
9	102	5	15:02	BE	ROS	US	48° 30.00	124° 44.04	257		10-23	14	SR	☑☐	
			15:06	BO			°30.01	°44.02		252	-			☐☐	
			15:22	EN			°30.00	°44.02			-			☐☐	
10	103	5	15:53	BE	ROS		48° 33.01	124° 43.02	122		-		SR	☑☐	
			15:55	BO			°33.01	°43.01		117	-			☐☐	
			15:57	EN			°33.01	°43.01			-			☐☐	
11	76	5	17:09	BE	ROS		48° 31.40	124° 30.01	88		-		SR	☑☐	
			17:10	BO			°31.40	°30.01		85	-			☐☐	
			17:11	EN			°31.40	°30.01			-			☐☐	
12	75	5	17:41	BE	ROS	US	48° 28.20	124° 32.82	223		24-37	14	SR	☑☐	
			17:46	BO			°28.21	°32.81		219	-			☐☐	
			18:01	EN			°28.18	°32.81			-			☐☐	
			:				° .	° .			-			☐☐	

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Produced by the Water Properties Group, IOS

WaterProperties.ca
Version: 6 December 2016

This page is for any notes or observations

CYPI-A Mooring Recovery October 4, 2017

2020 - On Station
Send 18DC 124 122

2023 - Send 18DC + 1855 122 + 122 received and executed - does not surface

Ranges 118 117 115
Send 121 + 121 received & executed

2029 Send 18DC 1855 112 112 received & executed still not on surface

2122 Set up for drag - plot previous range rings and move to get one more

- Send 18DC 182 185
- Relocate again

2128 + 158 158 158 157 156
Relocat

2133 - 158 154 153 149

2155 Send 88 89 93 94 95
- Send 18DC + 1855 - 94 95 executes

2200 - Start drag 2220 - On Surface heavily biofouled

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13	75	5	17:44	BE	DRF		48° 28.206	124° 32.808	223		-		SR	☐☐	DRF #s →
14	74	5	18:32	BE	ROS		48° 25.11	124° 35.62	190		-		SR	☑☐	A new o-ring
			18:34	BO			° 25.11	° 35.60		186	-			☐☐	was installed in
			18:37	EN			° 25.10	° 35.61			-			☐☐	the top of bot 5
15	73	5	20:58	BE	ROS		48° 14.995	124° 6.67	162		-		R	☑☑	
			21:01	BO			° 14.995	° 6.67		158	-			☐☐	
			21:04	EN			° 14.996	° 6.671			-			☐☐	
16	72	5	21:38	BE	NET		48° 18.572	124° 03.998	188	183	-			☐☐	down @ ½ m s⁻¹
			21:45	BO			° .530	° .962			-			☐☐	up @ 1 m s⁻¹
			21:47	EN			° .510	° .896			-			☐☐	
17	72	5	21:57	BE	ROS	US	48° 18.488	124° 03.857	188		38 - 50	13		☑☑	
			22:03	BO			° 18.466	° 03.846		183	-			☐☐	
			22:15	EN			° .402	° .886			-			☐☐	
18	71	5	22:51	BE	ROS		48° 22.180	123° 59.394	109	105	-			☑☑	
			22:53	BO			° 22.175	° 59.381			-			☐☐	
			22:56	EN			° 22.181	° 59.384			-			☐☐	
19	70	6	00:01	BE	ROS		48° 19.189	123° 43.195	151		-			☑☑	
			00:03	BO			° 19.184	° 43.187		148	-			☐☐	
			00:06	EN			° 19.181	° 43.194			-			☐☐	

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Drifter #s for station 75 SCT - 762, 786, 775
Osker - 407, 412, 413
Osker D 512, 511, 509

- ship's saltwater pump U/S, used deck nets with garden hose connected to fire main drain

+8/-5

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20	69	6	00:42	BE	ROS	US	48° 15.566	123° 43.228	176		51 - 62	12	RE	☐☐	
			00:46	BO			° 15.563	° 43.234		172	-			☐☐	
			00:57	EN			° 15.574	° 43.288			-			☐☐	
21	69	6	00:59	DE	DRF		48° 15.574	123° 43.288	176		-		RC	☐☐	→
22	68	6	01:28	BE	ROS		48° 12.221	123° 43.003	138		-		RC	☑☑	
			01:31	BO			° 12.218	° 43.008		133	-			☐☐	
			01:33	EN			° 12.223	° 43.004			-			☐☐	
23	105	6	03:36	BE	ROS		48° 10.984	123° 19.050	85		-		RC	☑☑	
			03:38	BO			° 10.994	° 19.086		80	-			☐☐	
			03:39	EN			° 10.996	° 19.093			-			☐☐	
24	ADCP	6	04:12	BE	ROS	US	48° 13.998	123° 18.050	119		63 - 72	10	RC	☑☑	air temp 10°C
			04:15	BO			° 13.999	° 18.052		115	-			☐☐	
			04:23	EN			° 14.006	° 18.053			-			☐☐	
25	104	6	05:09	BE	ROS		48° 19.973	123° 18.044	85		-		RC	☑☑	
			05:11	BO			° 19.974	° 18.046		80	-			☐☐	
			05:12	EN			° 19.979	° 18.055			-			☐☐	
26	67	6	05:38	BE	ROS		48° 22.822	123° 18.044	105		-		RC	☑☑	
			05:41	BO			° 22.820	° 18.044		99	-			☐☐	
			05:42	EN			° 22.822	° 18.060			-			☐☐	

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Notes: _____

SCT drifters released at station 69 766, 790

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27	66	6	06:18	BE	ROS		48 °19.324	123 °14.120	100		-			☑☑	
			06:20	BO			°19.319	°14.113		96	-			☐☐	
			06:22	EN			°19.318	°14.119			-			☐☐	
28	66	6	06:23	DE	DRF		48 °19.318	123 °14.119			-			☐☐	nicely clustered
29	65	6	07:07	BE	ROS	US	48 ° 15.923	123 ° 9.834			-			☑☐	on release
			07:09	BO			° 15.935	° 9.860	127		-			☐☐	
			07:18	EN			° 15.922	° 9.936		122	-			☐☐	
30	64	6	08:32	BE	ROS		48° 12.802	123° 5.738	107		-		SR	☑☐	Seasave didn't
			08:34	BO			° 12.800	° 5.743		103	-			☐☐	archive data on
			08:36	EN			° 12.799	° 5.750			-			☐☐	the
31	63	6	09:17	BE	NET		48° 14.605	122° 58.479	153		-		CW/DS	☐☐	
			09:21	BO			° 14.603	° 58.488		145	-			☐☐	
			09:25	EN			° 14.598	° 58.485			-			☐☐	
32	63	6	09:31	BE	ROS		48° 14.600	122° 58.484	152		-		SR	☑☐	
			09:33	BO			° 14.600	° 58.493		147	-			☐☐	
			09:37	EN			° 14.600	° 58.493			-			☐☐	
33	62	6	10:53	BE	ROS	US	48° 22.813	123° 2.566	150		86 - 96	11	SR	☑☐	surface bottle
			10:56	BO			° 22.810	° 2.576		147	-			☐☐	wasn't tripped
			11:04	EN			° 22.807	° 2.593			-			☐☐	

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Notes: _____

SCT Drifters at STN 66 : 767, 768, 780
OSKER Drifters at STN 66 : 415, 490, 416

Decent rate for cast 30-33 may have been too fast SR

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34	61	6	12:12	BE	ROS		48° 29.206	123° 9.216			-		SR	☑ ☐	spikes at ≈250db
			12:17	BO			° 29.210	° 9.191			-			☐ ☐	
			12:22	EN			° 29.207	° 9.179			-			☐ ☐	
35	60	6	12:58	BE	ROS		48° 33.911	123° 12.794	292		-			☑ ☐	
			13:03	BO			° 33.912	° 12.809		287	-			☐ ☐	
			13:07	EN			° 33.916	° 12.803			-			☐ ☐	
36	59	6	13:48	BE	NET		48° 37.837	123° 14.579	233		-			☐ ☐	
			13:55	BO			° 37.817	° 14.561			-			☐ ☐	
			13:59	EN			° 37.772	° 14.574			-			☐ ☐	
37	59	6	14:07	BE	ROS	US	48° 37.808	123° 14.572	235		97-111	15	SR	☑ ☐	spikes @≈150db
			14:11	BO			° 37.813	° 14.580		230	-			☐ ☐	
			14:26	EN			° 37.790	° 14.604			-			☐ ☐	
38	59	6	14:18	BE	DRF		48° 37.814	123° 14.582			-			☐ ☐	DRF# 778, 761
39	58	6	15:11	BE	ROS		48° 43.038	123° 14.315	345		-		SR	☑ ☐	
			15:17	BO			° 43.026	° 14.298		342	-			☐ ☐	
			15:22	EN			° 43.018	° 14.304			-			☐ ☐	
40	57	6	15:56	BE	ROS		48° 43.974	123° 8.171	164		-		SR	☑ ☐	
			15:59	BO			° 43.990	° 8.203		160	-			☐ ☐	
			16:01	EN			° 43.998	° 8.228			-			☐ ☐	

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This page is for any notes or observations

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41	57	6	16:02	BE	DRF		48° 43.998	123° 8.228	164		-	1	DS	☐☐	DRF# Osmar 480,470
42	56	6	16:45	BE	ROS		48° 46.394	123° 1.642	213		112-125	14	SR	☑☐	SCT# 784,788
			16:49	BO			° 46.376	° 1.590		210	-			☐☐	
			17:05	EN			° 46.388	° 1.632			-			☐☐	
43	47	6	18:07	BE	ROS		48° 49.316	123° 6.179	186		-			☑☐	A new top o-ring
			18:10	BO			° 49.368	° 6.126		182	-			☐☐	was installed
			18:13	EN			° 49.396	° 6.049			-			☐☐	in bottle 1
44	48	6	18:37	BE	ROS		48° 51.734	123° 3.174	228		-			☑☐	bottle 2 was
			18:40	BO			° 51.726	° 3.173		223	-			☐☐	re-tensioned
			18:44	EN			° 51.726	° 3.193			-			☐☐	
45	49	6	19:14	BE	ROS		48° 54.992	122° 59.616	130		-		RC	☐☐	
			19:17	BO			° 54.991	° 59.626		125	-			☐☐	
			19:19	EN			° 54.990	° 59.618			-			☐☐	
46	50	6	19:49	BE	ROS		48° 57.704	122° 56.094	25		-		RC	☑☑	
			19:50	BO			° 57.703	° 56.100		20	-			☐☐	
			19:50	EN			° 57.702	° 56.104			-			☐☐	
47	44	6	20:41	BE	ROS		48° 56.809	123° 05.939	120		-		RC	☑☑	
			20:43	BO			° 56.822	° 05.944		115	-			☐☐	
			20:45	EN			° 56.812	° 05.962			-			☐☐	

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Notes: _____

check spikes - only in pressure signal - consider 911 scrap rather than reterminations in events 43 & 34

- drop stations 106 & 107 from survey - ✓

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month OCTOBER **Year** 2017 **Vessel** VECTOR **Cruise ID** 2017-65

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Positional Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
48	45	6	21:11	BE	ROS		48°53.912	123°08.365	125		-		PC	☑☑	
			21:14	BO			°53.922	°08.366		122	-			☐☐	
			21:16	EN			°53.923	°08.366			-			☐☐	
49	46	6	21:41	BE	NET		48°51.414	123°10.774	175		-		NN	☐☐	
			21:47	BO			°51.420	°10.774		166	-			☐☐	
			21:50	EN			°51.423	°10.795			-			☐☐	
50	46	6	22:00	BE	ROS	US	48°51.414	123°10.844	175		126-137	12	PC	☐☐	
			22:03	BO			°51.414	°10.837		172	-			☐☐	
			22:14	EN			°51.421	°10.829			-			☐☐	
51	43	6	23:55	BE	ROS		49°00.215	123°30.096	200		-		PC	☑☑	
			23:59	BO			°00.216	°30.101		196	-			☐☐	
			00:03	EN			°00.199	°30.089			-			☐☐	
52	42	7	00:33	BE	ROS	US	49°01.829	123°26.171	318		138-153	16	PC	☐☐	
			00:38	BO			°01.844	°26.182		314	-			☐☐	
			00:55	EN			°01.760	°26.234			-			☐☐	
53	41	7	01:33	BE	ROS		49°03.295	123°22.280	239		-		PC	☐☐	
			01:36	BO			°03.278	°22.280		237	-			☐☐	
			01:40	EN			°03.274	°22.287			-			☐☐	
			:				° .	° .			-			☐☐	

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Notes: _____

This page is for any notes or observations

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month OCTOBER **Year** 2017 **Vessel** VECTOR **Cruise ID** 2017-65

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
54	41	7	01:44	BE	NET		49 ° 03 . 277	123 ° 22 . 293	239		-		NN	☐☐	
			01:53	BO			° 03 . 244	° 22 . 348		229	-			☐☐	
			01:57	EN			° 03 . 233	° 22 . 355			-			☐☐	
55	108	7	02:23	BE	ROS		49 ° 04 . 388	123 ° 19 . 105	90		-		RE	☑☑	
			02:25	BO			° 04 . 390	° 19 . 100		86	-			☐☐	
			02:27	EN			° 04 . 388	° 19 . 098			-			☐☐	
56	37	7	03:38	BE	ROS		49 ° 13 . 586	123 ° 20 . 540	206		-		RE	☑☑	
			03:42	BO			° 13 . 590	° 20 . 557		202	-			☐☐	
			03:45	EN			° 13 . 594	° 20 . 564			-			☐☐	
57	38	7	04:19	BE	ROS		49 ° 11 . 975	123 ° 26 . 393	305		-		RE	☑☑	
			04:25	BO			° 11 . 982	° 26 . 410		302	-			☐☐	
			04:30	EN			° 11 . 986	° 26 . 417			-			☐☐	
58	38	7	04:34	BE	NET		49 ° 11 . 989	123 ° 26 . 421	305		-		NN	☐☐	
			04:45	BO			° 11 . 985	° 26 . 411		295	-			☐☐	
			04:51	EN			° 11 . 980	° 26 . 475			-			☐☐	
59	38	7	04:53	DE	DRF		49 ° 11 . 977	123 ° 26 . 477	305		-		RE	☐☐	760, 771 →
60	39	7	05:38	BE	ROS	US	49 ° 09 . 796	123 ° 32 . 020	373		154 - 170	17	RE	☐☐	
			05:44	BO			° 09 . 810	° 33 . 043		369	-			☐☐	
			06:02	EN			° 09 . 824	° 33 . 019			-			☐☐	

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Notes: _____

SCT drifters STN 38 760, 771
STN 39 764, 777

- weather becoming worse - deck crew not experienced with chains - wait for lull
- consider northern diversion if conditions get worse

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month OCTOBER | **Year** 2017 | **Vessel** VECTOR | **Cruise ID** 2017-65

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Positional Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
61	39	7	06:04	DE	DRF		49 ° 09 .832	123 °33 .029	372		-		RC	☐☐	764 , 777
62	40	7	06:36	BE	ROS		49 ° 8 .584	123 ° 36 .794	150		-		RC	☐☐	
			06:38	BO			° 8 .584	°36 .794		149	-			☐☐	
			06:41	EN			° 8 .587	°36 .787			-			☐☐	
63	40	7	06:57	BE	NET		49 ° 8 .595	123 °36 .788	150		-		DS/CW	☐☐	
			07:02	BO			° 8 .595	°36 .799		140	-			☐☐	
			07:04	EN			° 8 .593	°36 .804			-			☐☐	
64	GE01	7	08:08	BE	NET		49 ° 14.999	123° 44 .885	400		-		DS/CW	☐☐	
			08:22	BO			° 15 .005	° 44 .890		389	-			☐☐	
			08:28	EN			° 15 .006	° 44 .890			-			☐☐	
65	GE01	7	08:35	BE	ROS	US	49 ° 15 .003	123° 44 .896	401		171 - 173	3	SR	☑☐	spikes @ 150m~
			08:43	BO			° 15 .007	° 44 .884		396	-			☐☐	
			08:52	EN			° 15 .004	° 44 .897			-			☐☐	
66	26	7	09:24	BE	ROS		49 ° 14 .297	123° 50 .776	249		-		SR	☑☐	spikes @ ~150
			09:29	BO			°14 .300	° 50 .777		244	-			☐☐	
			09:33	EN			°14 .305	°50 .779			-			☐☐	
67	265	7	09:59	BE	ROS		49 °16 .782	123 ° 49 .451	410		-		SR	☑☐	
			10:06	BO			°16 .792	° 49 .457		406	-			☐☐	
			10:12	EN			°16 .808	° 49 .456			-			☐☐	

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Notes: _____

This page is for any notes or observations

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month | **Year** | **Vessel** | **Cruise ID**

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Positional Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
68	265	7	10:05	BE	DRF		49° 16.808	123° 49.456	410		-		DS	☐☐	Oskar 484
69	27	7	10:38	BE	ROS		49° 19.097	123° 47.982	345		174-190		SR	☑☐	SCT 763,772
			10:45	BO			° 19.109	° 47.986		341	-			☐☐	
			11:02	EN			° 19.115	° 48.007			-			☐☐	
70	27	7	10:47	BE	DRF		49° 19.111	123° 47.978	345		-			☐☐	
71	275	7	11:46	BE	ROS		49° 21.822	123° 46.555	107		-		SR	☑☐	
			11:48	BO			° 21.824	° 46.558		102	-			☐☐	
			11:49	EN			° 21.827	° 46.564			-			☐☐	
72	275	7	11:47	BE	DRF		49° 21.826	123° 46.561	107		-		DS	☐☐	Oskar 457,471,475
73	28	7	12:11	BE	ROS		49° 24.098	123° 45.300	136		-		SR	☑☐	SCT 791,765,769
			12:14	BO			° 24.101	° 45.302		132	-			☐☐	
			12:16	EN			° 24.097	° 45.301			-			☐☐	
74	28	7	12:20	BE	NET		49° 24.098	123° 45.293	132		-			☐☐	
			12:25	BO			° 24.094	° 45.286		122	-			☐☐	
			12:27	EN			° 24.091	° 45.285			-			☐☐	
75	24		14:03	BE	NET		49° 30.317	124° 5.984	422		-			☐☐	
			14:18	BO			° 30.311	° 6.006		412	-			☐☐	
			14:25	EN			° 30.302	° 6.007			-			☐☐	
			:				° .	° .			-			☐☐	

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Notes: _____

Produced by the Water Properties Group, IOS

WaterProperties.ca
Version: 6 December 2016

This page is for any notes or observations

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month October **Year** 2017 **Vessel** Vector **Cruise ID** 2017-65 Page 12 of _____

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Positional Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
76	24	7	14:33	BE	ROS	US	49° 30.306	124° 6.004	429		191 - 192	2	SR	☑☐	I stopped the
			14:42	BO			° 30.298	° 6.007		424	-			☐☐	winch @ ≈ 410m
			14:50	EN			° 30.293	° 6.017			-			☐☐	to adjust the wire
77	24	7	14:53	BE			49° 30.293	124° 6.017	429		193-193			☐☐	spooling SR→
			14:53	BO			° 11.	° 11.		2	-			☐☐	#77 was done
			14:53	EN			° 11.	° 11.			-			☐☐	just to get a
78	25	7	15:17	BE	ROS		49° 27.709	124° 7.510	292		-	/	SR	☑☐	missed bottle
			15:22	BO			° 27.704	° 7.506		288	-			☐☐	
			15:27	EN			° 27.700	° 7.501			-			☐☐	
79	2	7	15:56	BE	ROS	US	49° 24.096	124° 9.292	278		194 - 208	15		☑☐	bottle 5 stripped
			16:02	BO			° 24.070	° 9.292		273	-			☐☐	without 30s wait
			16:18	EN			° 24.074	° 9.284			-			☐☐	
80	2	7	15:57	BE	DRF		49° 24.095	124° 9.292	278		-			☐☐	
81	CPF1	7	16:54	BE	NET		49° 22.003	124° 4.983	243		-			☐☐	#785, 784
			17:00	BO			° 22.008	° 4.984			-			☐☐	
			17:04	EN			° 22.005	° 4.984			-			☐☐	
82	CPF1	7	17:11	BE	ROS	US	49° 22.001	124° 4.984			-			☐☐	
			17:16	BO			° 21.998	° 4.981			-			☐☐	spigot o-rings
			17:21	EN			° 21.997	° 4.984			-			☐☐	changed on 15, 14,
															+12

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Notes: _____

#208 DA - STN 2 lost ~ 400 500ml of water

This solved the spiking problem ER

The keyboard got bumped upon arrival @ 150m, so no 30s waittime. ER

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month October **Year** 2017 **Vessel** Vector **Cruise ID** 2017-65

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Positional Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
83	1	7	18:02	BE	ROS		49° 20.314	124° 12.103	248		-		SR	☑ ☐	
			18:07	BO			° 20.323	° 12.109		244	-			☐ ☐	
			18:11	EN			° 20.335	° 12.104			-			☐ ☐	
84	4	7	19:10	BE	ROS		49° 24.492	124° 22.096	342		-		PC	☑ ☑	
			19:16	BO			° 24.496	° 22.108		336	-			☐ ☐	
			19:22	EN			° 24.499	° 22.111			-			☐ ☐	
85	3	7	19:43	BE	ROS	US	49° 26.592	124° 20.189	320		-		PC	☑ ☑	air temp 13°C
			19:49	BO			° 26.592	° 20.197		315	212 -227	16		☐ ☐	
			20:07	EN			° 26.599	° 20.197			-			☐ ☐	
86	BS17	7	22:01	BE	NET		49° 28.997	124° 46.003	60		-		NN	☐ ☐	
			22:04	BO			° 28.995	° 45.999		50	-			☐ ☐	
			22:05	EN			° 28.995	° 45.999			-			☐ ☐	
87	BS17	7	22:14	BE	ROS	US	49° 28.994	124° 46.013	58		228 -235	8	PC	☑ ☑	
			22:15	BO			° 28.994	° 46.014		54	-			☐ ☐	
			22:23	EN			° 28.987	° 46.021			-			☐ ☐	
88	5	7	23:42	BE	ROS		49° 27.992	124° 29.980	325		-		PC	☐ ☐	depth sounder
			23:47	BO			° 27.990	° 29.978		322	-			☐ ☐	bouncing from
			23:52	EN			° 27.994	° 29.962			-			☐ ☐	323 to 349
			:				° .	° .			-			☐ ☐	

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WaterProperties.ca
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DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month OCTOBER **Year** 2017 **Vessel** VECTOR **Cruise ID** 2017-65

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89	CPF2	7	23:55	BE	NET		49 °28.000	124 °29.965	325		-		NN	☑ ☐	
		8	00:06	BO			°28.007	°29.966		315	-			☐ ☐	
			00:11	EN			°28.015	°29.963			-			☐ ☐	
90	6	8	00:41	BE	ROS	US	49 °30.596	124 °27.793	192		236-248	13	PC	☑ ☐	
			00:44	BO			°30.601	°27.792		188	-			☐ ☐	
			00:56	EN			°30.590	°27.782			-			☐ ☐	
91	7	8	01:29	BE	ROS		49 °34.398	124 °24.185	352		-		PC	☑ ☐	
			01:34	BO			°34.403	°24.178		348	-			☐ ☐	
			01:39	EN			°34.399	°24.184			-			☐ ☐	
92	8	8	02:31	BE	ROS		49 °39.302	124 °32.987	341		-		PC	☑ ☐	
			02:36	BO			°39.301	°32.995		334	-			☐ ☐	
			02:41	EN			°39.299	°32.994			-			☐ ☐	
93	9	8	03:29	BE	ROS	US	49 °35.513	124 °38.262	168		249-260		PC	☑ ☐	
			03:26	BO			°35.513	°38.258		165	-			☐ ☐	
			03:37	EN			°35.494	°38.286			-			☐ ☐	
94	10	8	04:32	BE	ROS		49 °40.715	124 °47.272	97		-		PC	☑ ☐	
			04:34	BO			°40.718	°47.276		94	-			☐ ☐	
			04:35	EN			°40.720	°47.274			-			☐ ☐	
			:				° .	° .			-			☐ ☐	

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Std 11 SCT DRIFTERS 787,770

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month OCTOBER | **Year** 2017 | **Vessel** VECTOR | **Cruise ID** 2017-65

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Positional Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
95	11	8	04:59	BE	ROS		49 °42.398	124 °43.391	298		-		PC	☑ ☐	
			05:04	BO			°42.402	°43.376		295	-			☐ ☐	
			05:08	EN			°42.400	°43.384			-			☐ ☐	
96	11	8	05:12	BE	NET		49 °42.401	124 °43.391	298		-		NN	☐ ☐	
			05:22	BO			°42.398	°43.412		288	-			☐ ☐	
			05:27	EN			°42.399	°43.403			-			☐ ☐	
97	11	8	05:30	DE	DRF		49 °42.399	124 °43.410			-		PC	☐ ☐	787.770 SOT
98	12	8	05:53	BE	ROS	US	49 °43.607	124 °40.811	352		261-276	16	PC	☑ ☐	
			05:59	BO			°43.607	°40.830		347	-			☐ ☐	
			06:16	EN			°43.612	°40.796			-			☐ ☐	
99	13	8	07:54	BE	ROS		49 °55.292	124 °55.201	231		-		SR	☑ ☐	
			07:58	BO			°55.292	°55.193		227	-			☐ ☐	
			08:02	EN			°55.294	°55.184			-			☐ ☐	
100	14	8	08:31	BE	NET		49 °52.990	124 °59.575	311		-		CW/DS	☐ ☐	
			08:41	BO			°52.996	°59.598		301	-			☐ ☐	
			08:46	EN			°.997	°59.596			-			☐ ☐	
101	14	8	08:51	BE	ROS	US	49 °52.998	124 °59.597	312		277-293		SR	☑ ☐	
			08:58	BO			°53.003	°59.589		308	-			☐ ☐	
			09:13	EN			°53.011	°59.574			-			☐ ☐	

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US = Up / Stop (default)
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Notes: _____

Produced by the Water Properties Group, IOS

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Version: 6 December 2016

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month October **Year** 2017 **Vessel** Vector **Cruise ID** 2017-65

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Positional Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
102	14	8	08:57	BE	DRF		49° 53.001	124° 59.590	312		-		DS	☐☐	DRF #5 →
103	15	8	09:41	BE	ROS		49° 51.602	° 1.590	127		-		SR	☑☐	
			09:43	BO			° 51.600	° 1.591		122	-			☐☐	
			09:45	EN			° 51.601	° 1.595			-			☐☐	
104	16	8	11:08	BE	ROS	US	49° 57.689	125° 8.801	156		294-304	11	SR	☑☐	Long stay aft
			11:11	BO			° 57.692	° 8.780		151	-			☐☐	during deployment
			11:24	EN			° 57.703	° 8.779			-			☐☐	30°+
105	17	8	11:55	BE	ROS		49° 58.790	125° 4.300	264		-		SR	☑☐	
			11:59	BO			° 58.794	° 4.291		260	-			☐☐	
			12:03	EN			° 58.792	° 4.285			-			☐☐	
106	18	8	12:31	BE	ROS		49° 59.194	124° 58.901	146		-		SR	☑☐	
			12:34	BO			° 59.198	° 58.897		141	-			☐☐	
			12:36	EN			° 59.204	° 58.891			-			☐☐	
107	19	8	13:10	BE	ROS		50° 1.194	124° 52.894	270		-		SR	☑☐	
			13:15	BO			° 1.188	° 52.906		265	-			☐☐	
			13:19	EN			° 1.188	° 52.916			-			☐☐	
108	QU39	8	14:28	BE	ROS		50° 1.836	125° 5.940	276		-		SR	☑☐	
			14:32	BO			° 1.841	° 5.936		271	-			☐☐	
			14:36	EN			° 1.842	° 5.941			-			☐☐	

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Notes: _____

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San #14 DRF #s Oskar 432, 434, 495 SCT 779, 781, 782

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month October **Year** 2017 **Vessel** Vector **Cruise ID** 2017-65

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
109	QU29	8	14:52	BE	ROS		50° 3.064	125° 6.408	257		-		SR	☑ ☐	
			14:57	BO			° 3.064	° 6.413		252	-			☐ ☐	
			15:01	EN			° 3.067	° 6.415			-			☐ ☐	
110	QU20	8	15:17	BE	ROS		50° 4.807	125° 6.024	240		-			☑ ☐	
			15:21	BO			° 4.807	° 6.026		235	-		SR	☐ ☐	
			15:25	EN			° 4.804	° 6.025			-			☐ ☐	
111	QU34	8	15:45	BE	ROS		50° 7.200	125° 5.974	109		-		SR	☑ ☐	
			15:47	BO			° 7.200	° 5.974		105	-			☐ ☐	
			15:49	EN			° 7.201	° 5.971			-			☐ ☐	
112	QU36	8	16:33	BE	ROS		50° 11.396	124° 59.764	550		-		SR	☑ ☐	
			16:42	BO			° 11.419	° 59.747		545	-			☐ ☐	
			16:51	EN			° 11.423	° 59.708			-			☐ ☐	
113	14	8	19:07	BE	ROS		49° 52.999	124° 59.596	315		-		R	☑ ☐	ctd for rosette
			19:12	BO			° 53.000	° 59.597		310	-			☐ ☐	
			19:17	EN			° 53.004	° 59.596			-			☐ ☐	
114	14	8	19:20	BE	NET		49° 53.006	124° 59.597	315		-		NN	☐ ☐	ship's
			19:32	BO			° 53.009	° 59.599		305	-			☐ ☐	waste water
			19:37	EN			° 53.064	° 59.064			-			☐ ☐	discharge during
			:				° .	° .			-			☐ ☐	cast →

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Notes: _____

discharge stopped when net @ 30 m from surface - get ship to put discharge from auto to manual (stop) during casts

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month OCTOBER | **Year** 2017 | **Vessel** VECTOR | **Cruise ID** 2017-65

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Positional Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
115	21	8	21:06	BE	ROS		50° 1.998	125° 13.610	75		-		RE	☑ ☐	air temp 15°C
			21:07	BO			° 1.997	° 13.612		70	-			☐ ☐	
			21:09	EN			° 1.998	° 13.617			-			☐ ☐	
116	20	9	00:29	BE	ROS		49° 47.173	124° 32.273	314		-		RE	☑ ☐	
			00:33	BO			° 47.173	° 32.273		310	-			☐ ☐	
			00:38	EN			° 47.172	° 32.267			-			☐ ☐	
117	22	9	02:01	BE	ROS	US	49° 40.206	124° 16.294	352		305 - 307	3	RE	☑ ☐	
			02:07	BO			° 40.202	° 16.277		348	-			☐ ☐	
			02:15	EN			° 40.200	° 16.279			-			☐ ☐	
118	22	9	02:19	BE	NET		49° 40.202	124° 16.282	352		-		NN	☐ ☐	
			02:31	BO			° 40.202	° 16.289		342	-			☐ ☐	
			02:37	EN			° 40.200	° 16.289			-			☐ ☐	
119	22	9	02:42	BE	NET		49° 40.202	124° 16.293	352		-		NN	☐ ☐	
			02:54	BO			° 40.200	° 16.296		342	-			☐ ☐	
			03:00	EN			° 40.198	° 16.289			-			☐ ☐	
120	22	9	03:05	DE	DRF		49° 40.198	124° 16.289			-		RE	☐ ☐	773, 774
121	28	9	05:55	BE	ROS		49° 24.091	123° 45.311	134		-		RE	☑ ☐	
			05:57	BO			° 24.096	° 45.308		129	-			☐ ☐	
			05:59	EN			° 24.098	° 45.310			-			☐ ☐	

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Notes: _____

Sponge bob SCT drifters 773 & 774

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month OCTOBER | **Year** 2017 | **Vessel** VECTOR | **Cruise ID** 2017-65

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Positional Information Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
122	275	9	06:20	BE	ROS		49° 21.810	123° 46.552	103		-		RE	☑ ☐	
			06:22	BO			° 21.810	° 46.552		101	-			☐ ☐	
			06:24	EN			° 21.815	° 46.556			-			☐ ☐	
123	27	9	06:53	BE	ROS		49° 19.102	123° 47.981	344		-		SR	☑ ☐	
			06:59	BO			° 19.108	° 47.978		340	-			☐ ☐	
			07:04	EN			° 19.106	° 47.978			-			☐ ☐	
124	265	9	07:32	BE	ROS		49° 16.796	123° 49.441	410		-		SR	☑ ☐	
			07:38	BO			° 16.796	° 49.457		406	-			☐ ☐	
			07:45	EN			° 16.789	° 49.457			-			☐ ☐	
125	26	9	08:17	BE	ROS		49° 14.309	123° 50.784	255		-		SR	☑ ☐	
			08:22	BO			° 14.309	° 50.782		251	-			☐ ☐	
			08:25	EN			° 14.315	° 50.790			-			☐ ☐	
126	GE01	9	08:56	BE	NET		49° 14.996	123° 44.886			-			☐ ☐	
			09:09	BO			° 14.979	° 44.890			-			☐ ☐	
			09:16	EN			° 14.969	° 44.897			-			☐ ☐	
127	SOGS3B	9	15:11	BO	BOXCORE		49° 12.460	123° 17.999	85	85	/	/	CW/DS	☐ ☐	0811 Local time
128	G101	9	19:58	BE			48° 45.858	123° 20.534	66		-		MB	☐ ☐	SDE 25
			19:59	BO			° 45.844	° 20.533		61	-			☐ ☐	
			20:00	EN			° 45.842	° 20.530			-			☐ ☐	

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Notes: _____

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This page is for any notes or observations

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month OCTOBER **Year** 2017 **Vessel** VECTOR **Cruise ID** 2017-65

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Longitude	Bottom Depth	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
129	GI-01	9	20:04	BE	NET		48°45.863	123°20.525	66		-		NN	☐ ☐	
			20:06	BO			°45.840	°20.501		56	-			☐ ☐	
			20:07	EN			°45.842	°20.498			-			☐ ☐	
130	SC-04	9	20:43	BE	CTD		48°43.503	123°24.979	94		-			☐ ☑	
			20:45	BO			°43.502	°24.971		89	-			☐ ☐	
			20:46	EN			°43.500	°24.973			-			☐ ☐	
131	SC-04	9	20:48	BE	NET		48°43.502	123°24.983	94		-			☐ ☐	
			20:51	BO			°43.506	°24.981		84	-			☐ ☐	
			20:53	EN			°43.516	°24.972			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	

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Notes: ______________________________