Captain: Ben First Officer: Mark

Second Officer: Kirstin Third Officer: _____

Fishing Master: / Chief Engineer: Andrew.

Mission Participants / Agencies:

Tamara Fraser, Kenny Scozzafava, Jasmine Wietzke, Stephen Page, Scott Rose, Di Wan

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

1st Leg Scientific Personnel: Chief Scientist: Tamara Fraser

Name	Watch	~~Watch~~ Cabin	Name	Watch	~~Watch~~ Cabin
Tamara Fraser		D	Scott Rose		N
Kenny Scozzafava		D	Stephen Page		N
Di Wan		D	Jasmine Wietzke		N

2nd Leg Scientific Personnel: Chief Scientist: _____

Name	Watch	Cabin	Name	Watch	Cabin

.psa/file header seems to be 2016-10

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month October **Year** 2016 **Vessel** Vector **Cruise ID** 2016-71

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Positional Information Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
1	SI	31	00:49	BE	ROS	US	48° 39.109	123° 30.599	187		-		TF, DW, KS	☑ ☐	started archiving @ 10m of 10m down
			00:51	BO			48° 39.104	123° 30.596		102	1 - 10	10		☐ ☐	
			01:05	EN			48° 39.109	123° 30.607			-			☐ ☐	
2	58	31	02:48	BE	CTD	—	48° 42.997	123° 14.287	338		-		TF, DW	☐ ☐	trans. not cleaned
			02:55	BO			48° 42.990	123° 14.303		333.2	-	∅		☐ ☐	
			03:02	EN			48° 42.958	123° 14.435			-			☐ ☐	
3	59	31	03:52	BE	NET	US	48° 37.7985	123° 14.8447	212		-	—		☐ ☐	
			03:57	BO			48° 37.7157	123° 14.8231		depth set 150	-			☐ ☐	
			03:59	EN			48° 37.6659	123° 14.8116			-			☐ ☐	
4	59	31	04:19	BE	ROS	US	48° 37.746	123° 14.788	214		-			☑ ☐	
			04:24	BO			48° 37.682	123° 14.770		208	11 - 25	15	TF, KS, DW	☑ ☐	pH cap not removed
			04:40	EN			48° 37.411	123° 14.683			-			☐ ☐	
5	60	31	05:42	BE	CTD	—	48° 33.965	123° 13.639	265		-	∅	TF	☑ ☐	archive started
			05:48	BO			48° 33.815	123° 13.579		266	-			☐ ☐	on up part of 10 down and back
			05:53	EN			48° 33.809	123° 13.583			-			☐ ☐	
6	61	31	06:32	BE	CTD	✓	48° 29.566	123° 11.828	216		-	∅	TF	☑ ☐	
			06:37	BO			48° 29.538	123° 11.792		215	-			☐ ☐	
			06:41	EN			48° 29.524	123° 11.772			-			☐ ☐	
			:				° .	° .			-			☐ ☐	

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Notes: _____

Produced by the Water Properties Group, IOS

WaterProperties.ca
Version: 14 February 2013

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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7	102	31	15:21	BE	NET		48° 30.038	124° 44.035	251		-		SP	☐☐	
			15:29	BO			° 30.157	° 44.105		242	-			☐☐	
			15:34	EN			° 30.216	° 44.131			-			☐☐	
			:				° .	° .			-			☐☐	
8	102	31	15:52	BE	ROS	US	48° 29.99	124° 43.99	259		26 - 40	15	SR	☑☐	bottles 14+15 wee
			15:59	BO			° 30.02	° 44.01		255	-			☐☐	closed in air due
			16:17	EN			° 30.04	° 44.00			-			☐☐	to a swell
			:				° .	° .			-			☐☐	
9	102		16:19	BE	ROS	US	48° 30.04	124° 44.00	259		-	2		☐☐	Cast 9 was just
			16:19	BO			° 30.04	° 44.00		255	-			☐☐	to trip 2 more
			16:19	EN			° 30.04	° 44.00			-			☐☐	bottles as 14+15
			:				° .	° .			-			☐☐	were tripped in air
10	103		16:57	BE	ROS		48° 32.98	124° 42.99	125		-		SR	☑☐	
			17:00	BO			° 32.98	° 42.99		120	-			☐☐	
			17:02	EN			° 32.97	° 42.99			-			☐☐	
			:				° .	° .			-			☐☐	
11	76		18:08	BE	ROS		48° 31.43	124° 29.99	89		-		SR	☑☐	
			18:09	BO			° 31.43	° 29.99		85	-			☐☐	
			18:11	EN			° 31.43	° 29.99			-			☐☐	

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Ocean Sciences Division, Institute of Ocean Sciences

Month October/November **Year** 2016 **Vessel** Vector **Cruise ID** 2016-71

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
12	75	31	18:42	BE	ROS	US	48° 28.19	124° 32.78	225		41-55	15	SR/TF	☑ ☐	was pH cap on?
			18:48	BO			48° 28.18	124° 32.83			-			☐ ☐	
			19:04	EN			48° 28.248	124° 33.112			-			☐ ☐	forgot to fire #15; no particle sample
13	72	31	21:26	BE	NET	US	48° 18.933	124° 03.695	194		-	—	TF, DW, KS	☐ ☐	
			21:30	BO			48° 18.928	124° 03.898		174	-			☐ ☐	
			21:33	EN			48° 18.926	124° 04.000			-			☐ ☐	
14	72	31	21:46	BE	ROS	US	48° 18.875	124° 03.822	188		-	14	TF, DW, KS	☑ ☐	
			21:50	BO			48° 18.881	124° 03.810		185	-			☐ ☐	
			22:04	EN			48° 18.882	124° 03.821			-			☐ ☐	
15	71	31	22:	BE	CTD	—	48° 22.	123° 59.	108		-	Ø	TF, DW, KS	☑ ☐	forgot to record location + time
			22:48	BO			48° 22.202	123° 59.422		108	-			☐ ☐	
			22:51	EN			48° 22.205	123° 59.430			-			☐ ☐	
16	70	01	00:03	BE	CTD	—	48° 19.168	123° 43.198	156		-	Ø	TF, DW	☑ ☐	
			00:06	BO			48° 19.168	123° 43.237		150.2	-			☐ ☐	
			00:09	EN			48° 19.156	123° 43.284			-			☐ ☐	
17	69	01	00:40	BE	ROS	US	48° 15.599	123° 43.198	180		69-81		TF, KS, DW	☑ ☐	
			00:45	BO			48° 15.608	123° 43.193			-			☐ ☐	
			00:57	EN			48° 15.612	123° 43.242			-			☐ ☐	
			:				° .	° .			-			☐ ☐	

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18	66	01	03:24	BE	ROS	US	48° 19.308	123° 14.114	102		82 - 91	10	TF, KS, DW	☑ ☐	
			03:26	BO			48° 19.312	123° 14.130		99.8	-			☐ ☐	
			03:34	EN			48° 19.274	123° 14.369			-			☐ ☐	
19	104	01	04:03	BE	CTD	—	48° 19.997	123° 18.058		85	-	—	TF, KS	☑ ☐	
			04:06	BO			48° 19.990	123° 18.140			-			☐ ☐	fired bottle -
			04:08	EN			48° 19.987	123° 18.163			-			☐ ☐	by mistake
20	67	01	04:25	BE	DRF	—	48° 22.657	123° 18.400		—	-	5 drifters for Sarah Patton		☐ ☐	released drifters:
			:				° .	° .			-			☐ ☐	571, 579, 390,
			:				° .	° .			-			☐ ☐	580, 567
21	67	01	04:33	BE	CTD	-	48° 22.798	123° 18.118	107		-	—	TF, KS	☑ ☐	
			04:35	BO			48° 22.799	123° 18.125		102.5	-			☐ ☐	
			04:37	EN			48° 22.798	123° 18.142			-			☐ ☐	
22	56	01	07:25	BE	DRF	—	48° 37.780	123° 14.670			-			☐ ☐	5 drifters 388, 392
			:				° .	° .			-			☐ ☐	568, 567, 570
23	57	01	08:30	BE	ROS		48° 43.99	123° 8.11	161		-		SR	☑ ☐	
			08:32	BO			° 43.99	° 8.11		156	-			☐ ☐	
			08:36	EN			° 43.99	° 8.10			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	

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24	56	01	09:41	BE	ROS	US	48° 46.43	123° 1.62	209		92-106		SR	☑ ☐	
			09:46	BO			° 46.43	° 1.62		205	-			☐ ☐	
			10:02	EN			° 46.41	° 1.59			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
25	47	01	10:58	BE	ROS	/	48° 49.31	123° 6.25	185		-	/	SR	☑ ☐	
			11:01	BO			° 49.31	° 6.24			-			☐ ☐	
			11:05	EN			° 49.31	° 6.22			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
26	48	01	11:30	BE	ROS	/	48° 51.43	123° 3.67	225		-	/	SR	☑ ☐	
			11:34	BO			° 51.42	° 3.64		221	-			☐ ☐	
			11:39	EN			° 51.42	° 3.62			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
27	45	01	12:25	BE	ROS	/	48° 53.91	123° 8.38	129		-		SR	☑ ☐	
			12:28	BO			° 53.91	° 8.37		125	-			☐ ☐	
			12:31	EN			° 53.91	° 8.34			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
28	46	01	13:33	BE	NET	/	48° 51.409	123° 10.796	179		-		SR	☐ ☐	
			13:39	BO			° 51.388	° 10.814		168	-			☐ ☐	
			13:42	EN			° 51.368	° 10.832			-			☐ ☐	

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29	46	01	13:56	BE	ROS	US	48° 51.42	123° 10.78	179		107-119	13	SR	☑ ☐	
			14:00	BO			°51.40	°10.79		175	-			☐ ☐	
			14:13	EN			°51.38	°10.80			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
30	46	01	14:18	BE	DRF		48°51.38	123° 10.80			-		SP	☐ ☐	
			:				° .	° .			-			☐ ☐	
31	107	01	15:16	BE	ROS		48° 58.40	123° 17.96	184		-		SR	☑ ☐	
			15:19	BO			°58.39	°17.96			-			☐ ☐	
			15:22	EN			°58.38	°17.96			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
32	106	01	15:59	BE	ROS		49° 1.00	123° 13.19	79		-		SR	☑ ☐	
			16:04	BO			° 1.00	° 13.19		75	-			☐ ☐	
			16:05	EN			° 1.00	° 13.19			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
33	108	01	16:44	BE	ROS		49°4.40	123° 19.11	94		-		SR	☑ ☐	
			16:46	BO			° 4.40	° 19.11		89	-			☐ ☐	
			16:47	EN			° 4.40	° 19.11			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	

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34	41	01	17:10	BE	NET		49° 3.310	123° 22.287	240		-		SP	☐☐	
			17:17	BO			° 3.270	° 22.205		230	-			☐☐	
			17:22	EN			° 3.222	° 22.126			-			☐☐	
			:				° .	° .			-			☐☐	
35	41	01	17:31	BE	ROS		49° 3.32	123° 22.33	245		-		SR	☑☐	
			17:36	BO			° 3.29	° 22.31		241	-			☐☐	
			17:40	EN			° 3.27	° 22.30			-			☐☐	
			:				° .	° .			-			☐☐	
36	42	01	18:07	BE	ROS	US	49° 1.79	123° 26.20	322		120 -136		SR	☑☐	
			18:13	BO			° 1.80	° 26.23			-			☐☐	
			18:34	EN			° 1.82	° 26.24			-			☐☐	
37	43	01	19:12	BE	ROS	—	49° 00.192	123° 30.108	197		-	—	TF,KS	☑☐	
			19:17	BO			49° 00.187	123° 30.100		192	-			☐☐	
			19:21	EN			49° 00.182	123° 30.091			-			☐☐	
38	40	01	20:26	BE	NET		49° 08.677	123° 36.771	153		-			☐☐	
			20:31	BO			49° 08.546	123° 36.746		143	-			☐☐	
			20:33	EN			49° 08.557	123° 36.7162			-			☐☐	
			:				° .	° .			-			☐☐	
			:				° .	° .			-			☐☐	

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39	40	01	20:45	BE	ROS		49° 08.588	123° 36.786	159		-	0	TF	☒ ☐	bottom came up?
			20:49	BO			49° 08.586	123° 36.780		152	-			☐ ☐	may have touched bottom
			20:52	EN			49° 08.587	123° 36.773			-			☐ ☐	altimeter did not read bottom
40	39	01	21:38	BE	ROS	US	49° 09.850	123° 32.992	377		137 - 158	22	TF, DW, KS	☑ ☐	
			21:46	BO			49° 09.842	123° 33.013		372.9	-			☐ ☐	
			22:10	EN			49° 09.832	123° 33.005			-			☐ ☐	
41	38	01	22:51	BE	NET		49° 11.985	123° 26.361	308		-		TF, DW, KS	☐ ☐	
			23:00	BO			49° 11.967	123° 26.339		298	-			☐ ☐	
			23:05	EN			49° 11.958	123° 26.322			-			☐ ☐	
42	38	01	23:18	BE	ROS	US	49° 11.993	123° 26.369	310		/	/	TF, DW	☑ ☐	ctd only
			23:24	BO			49° 11.983	123° 26.344		305	-			☐ ☐	altimeter did
			23:30	EN			49° 11.978	123° 26.354			-			☐ ☐	not kick in until leaving bottom
43	37	02	00:38	BE	ROS		49° 13.604	123° 20.701	219		/	/	TF, DW.	☑ ☐	CTD only
			00:42	BO			49° 13.600	123° 20.705		216	-			☐ ☐	
			00:46	EN			49° 13.596	123° 20.704			-			☐ ☐	
44	GEO1		02:28	BE	NET		49° 14.981	123° 44.779	406		-			☐ ☐	
			02:37	BO			49° 15.017	123° 44.434		300	-			☐ ☐	
			02:46	EN			49° 14.919	123° 44.429			-			☐ ☐	
			:				° .	° .			-			☐ ☐	

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DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month November **Year** 2016 **Vessel** Vector **Cruise ID** 2016-17

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Positional Information Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
14	2b	02	03:	BE	ROS	7	49° 14.	123° 59.	267		-	7	TF, DW	☑ ☐	SAR
			03:	BO			49° 14.	123° 56.			-			☐ ☐	
			03:	EN			49° 14.	123° 50.			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
45	IA1	02	18:09	BE	ROS	—	49° 27.70	122° 52.88	57		-		SR	☑ ☐	
			18:10	BO			° 27.70	° 52.88		54	-			☐ ☐	
			18:11	EN			° 27.70	° 52.88			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
46	IA2	02	18:51	BE	ROS	US	49° 23.78	122° 52.69	219		159 - 173		SR	☑ ☐	174 not used at all (DW/TF)
			18:56	BO			49° 23.789	122° 52.693		215.4	-			☐ ☐	
			19:11	EN			49° 23.797	122° 52.692			-			☐ ☐	
47	IA3	02	19:51	BE	ROS	US	49° 19.634	122° 55.717			175 - 175		TF, DW	☑ ☐	
			19:53	BO			49° 19.633	122° 55.730			-			☐ ☐	
			19:55	EN			49° 19.631	122° 55.735			-			☐ ☐	
48	IA4	02	20:18	BE	ROS	—	49° 18.944	122° 56.249	45		—	—	TF, DW, IS	☑ ☐	
			20:19	BO			49° 18.946	122° 56.248		40.7	-			☐ ☐	
			20:20	EN			49° 18.946	122° 56.246			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
			:				° .	° .			-			☐ ☐	

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DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month November **Year** 2016 **Vessel** Vector **Cruise ID** 2016-71

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Positional Information Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
49	IA5	02	20:47	BE	ROS	—	49° 17.728	122° 58.116	19		—	—	TF, KS	☑ ☐	
			20:47	BO			49° 17.728	122° 58.117		15	-			☐ ☐	
			20:48	EN			49° 17.728	122° 58.116			-			☐ ☐	
50	IA6	02	21:51	BE	ROS	US	49° 17.989	123° 05.425	56		176 - 181	6	TF, KS, DW	☑ ☐	
			21:54	BO			49° 17.987	123° 05.443			-			☐ ☐	approx time + location
			21:57	EN			49° 17.982	123° 05.447			-			☐ ☐	
51	BI1	02	22:40	BE	ROS	—	49° 19.078	123° 13.056	50		—	—	TF, KS	☑ ☐	
			22:41	BO			49° 19.078	123° 13.055		45.9	-			☐ ☐	
			22:42	EN			49° 19.079	123° 13.052			-		TF, KS, DW	☑ ☐	
52	BI2	02	23:20	BE	ROS	US	49° 17.706	123° 20.582	149		182 - 193			☐ ☐	
			23:24	BO			49° 17.708	123° 20.588		145	-			☐ ☐	
			23:34	EN			49° 17.711	123° 20.584			-			☐ ☐	
53	NET28	03	01:30	BE	NET		49° 24.177	123° 45.195	135		-		KS, TF	☐ ☐	
			01:33	BO			49° 24.136	123° 45.162		125	-			☐ ☐	
			01:35	EN			49° 24.101	123° 45.136			-			☐ ☐	
54	28	03	01:46	BE	ROS	—	49° 24.085	123° 45.198	138		—	—	TF, KS	☑ ☐	
			01:49	BO			49° 24.068	123° 45.186			-			☐ ☐	
			01:51	EN			49° 24.050	123° 45.167			-			☐ ☐	
			:				° .	° .			-			☐ ☐	

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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 Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
55	22	03	05:10	BE	ROS	—	49 °40.188	124 °16.314	356		—	—	TF DW	☑ ☐	bottle for nutrient reference @ b-5 no sample
			05:16	BO			49 °40.186	124 °16.307		350.1	-			☐ ☐	
			05:23	EN			49 °40.171	124 °16.282			-			☐ ☐	
56	20	03	06:48	BE	ROS	—	49 °47.200	124 °32.300	313		—	—	TF DW	☑ ☐	
			06:54	BO			49 °47.202	124 °32.275		307	-			☐ ☐	
			07:00	EN			49 °47.210	124 °32.243			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
57	12	03	08:25	BE	ROS	US	49 ° 43.61	124 ° 40.84	355		194-210	17	SR	☑ ☐	
			08:33	BO			° 43.53	° 40.76		350	-			☐ ☐	
			08:52	EN			° 43.36	° 40.56			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
58	11	03	09:40	BE	ROS	—	49 °42.37	124 °43.44	299		-		SR	☑ ☐	
			09:46	BO			°42.35	°43.38		295	-			☐ ☐	
			09:51	EN			°42.32	°43.27			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
59	10	03	10:23	BE	ROS	—	49 °40.72	124 ° 47.22	100		—		SR	☑ ☐	
			10:25	BO			°40.72	° 47.18		95	-			☐ ☐	
			10:27	EN			°40.72	° 47.15			-			☐ ☐	
			:				° .	° .			-			☐ ☐	

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WaterProperties.ca
Version: 14 February 2013

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month November **Year** 2016 **Vessel** Vector **Cruise ID** 2016-71

Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information Latitude	Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
60	19	03	22:02	BE	ROS	—	50 °01.190	124 °52.951	279		—	—	TF DW	☑☐	chains on.
			22:08	BO			50 °01.166	124 °52.894		271	-			☐☐	
			22:13	EN			50 °01.105	124 °52.801			-			☐☐	
61	18	03	23:06	BE	ROS	—	49°59.294	124°58.760	144		—	—	TF DW	☑☐	wind mixed layer almost 75 m deep!
			23:08	BO			49°59.296	124°58.750		134	-			☐☐	
			23:11	EN			49°59.299	124°58.748			-			☐☐	wind upto ~40 knots
62	QU39	04	01:01	BE	ROS	—	50 °01.853	125 °05.521	273		—	—	TF DW KS	☑☐	
			01:06	BO			50°01.825	125°05.450		263	-			☐☐	windy 40knts.
			01:11	EN			50 °01.781	125 °05.383			-			☐☐	
63	16	04	03:19	BE	ROS	US	49°57.726	125 °08.675	156		-		TF DW	☑☐	no bottle O_2
			03:23	BO			49°57.671	125 °08.544			211-202	12		☐☐	samples
			03:34	EN			49°57.622	125 °08.209			-			☐☐	
64	21	04	04:22	BE	ROS	—	50 °02.010	125 °13.549	85		—	—	TF, KS	☑☐	chains off
			04:24	BO			50 °02.068	125 °13.537		86.3	-			☐☐	pump not on until after up 10 x here
			04:26	EN			50 °02.120	125 °13.556			-			☐☐	
65	14	04	06:15	BE	NET		49°53.035	124 °59.582	315		-			☐☐	
			06:27	BO			49°52.899	124°59.236		300	-			☐☐	
			06:34	EN			49°52.927	124°59.857			-			☐☐	
			:				° .	° .			-			☐☐	

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66	14	04	06:55	BE	ROS	US	49 °53.00	124 °59.52	315		223 - 238	16	SR	☑ ☐	
			07:02	BO			49 °52.98	124 °59.51		310	-			☐ ☐	
			07:20	EN			49 °52.86	124 °59.43			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
67	9	04	09:51	BE	ROS	US	49 °35.50	124 °38.32	167		239 - 251	13	SR	☑ ☐	
			09:54	BO			°35.47	°38.30		163	-			☐ ☐	
			10:07	EN			°35.414	°38.18			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
68	6	04	11:08	BE	ROS	US	49 °30.61	124 °27.82	193		252 - 265	14	SR	☑ ☐	
			11:11	BO			°30.60	°27.77			-			☐ ☐	
			11:26	EN			°30.58	°27.59			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
69	CPF2	04	12:06	BE	NET	/	49 °28.023	124 °30.029	325		/	/	SP	☐ ☐	
			12:18	BO			°27.973	°29.763		315	-			☐ ☐	
			12:23	EN			°27.934	°29.564			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
70	CPF2	04	12:38	BE	ROS	/	49 °28.02	124 °29.98	327		/	/	SR	☑ ☐	pH cap was left on.
			12:44	BO			°28.01	°29.93		322	-			☐ ☐	
			12:50	EN			°28.02	°29.89			-			☐ ☐	

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Month November **Year** 2016 **Vessel** Vector **Cruise ID** 2016-71

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71	3	04	13:47	BE	ROS		49°26.60	124°20.25	328		266 - 282		SR	☑ ☐	
			13:54	BO			°26.60	°20.23		323	-			☐ ☐	
			14:13	EN			°26.60	°20.11			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
72	4	04	14:40	BE	ROS	/	49°24.51	124°22.12	344		-	/	SR	☑ ☐	
			14:47	BO			°24.51	°22.06			-			☐ ☐	
			14:54	EN			°24.51	°22.01			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
73	1	04	15:54	BE	ROS	/	49°20.31	124°12.13	248		-		SR	☑ ☐	
			15:59	BO			°20.31	°12.10		245	-			☐ ☐	
			16:04	EN			°20.31	°12.06			-			☐ ☐	
			:				° .	° .			-			☐ ☐	
74	2	04	16:34	BE	ROS	US	49°24.16	124° 9.32	281		283 -298		SR	☑ ☐	.hex file has
			16:40	BO			°24.09	° 9.30		276	-			☐ ☐	stn name = 2?
			16:58	EN			°24.07	° 9.20			-			☐ ☐	pH cap on?
			:				° .	° .			-			☐ ☐	
75	CPF1	04	18:02	BE	NET		49°22.036	124° 5.236	251		-			☐ ☐	
			18:10	BO			°22.017	° 5.140		24(	-			☐ ☐	
			18:13	EN			°22.016	° 5.076			-			☐ ☐	

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76	275	04	19:43	BE	ROS	—	49°21.794	123°46.582	112		—	—	TF DW	☑☐	
			19:45	BO			49°21.793	123°46.585		107.3	-			☐☐	
			19:47	EN			49°21.796	123°46.584			-			☐☐	
77	27	04	20:11	BE	ROS	US	49°19.108	123°47.994	350		299-315	17	TF DW KS	☑☐	
			20:18	BO			49°19.084	123°47.989		346.2	-			☐☐	
			20:35	EN			49°19.094	123°47.994			-			☐☐	
78	265	04	21:17	BE	ROS	-	49°16.687	123°49.478	413		—	—	TF KS	☑☐	
			21:25	BO			49°16.682	123°49.481		408	-			☐☐	
			21:33	EN			49°16.690	123°49.462			-			☐☐	
79	26	04	21:55	BE	ROS	—	49°14.328	123°50.842	259		—	—	TF	☑☐	hit mud :(
			22:00	BO			49°14.244	123°50.837		252.4	-			☐☐	
			22:04	EN			49°14.281	123°50.838			-			☐☐	
80	26	04	22:08	BE	DRF		49°14.2400	123°50.834			-			☐☐	sponge bobbers (red) 576, 573, 572, 575, 574
81	GI-01	05	02:12	BE	NET		48°46.846	123°20.538	74		-			☐☐	
			02:15	BO			48°46.849	123°20.526			-			☐☐	
			02:16	EN			48°46.851	123°21.523			-			☐☐	
82	SC-04	05	02:59	BE	NET		48°43.500	123°24.981	92		-			☐☐	
			03:02	BO			48°43.503	123°24.996		82	-			☐☐	
			03:03	EN			48°43.504	123°24.997			-			☐☐	

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