

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

IOS 2016-32

SOG 2016-07

DATE:

From: 10 MAY 2016

To: 16 JUN 2016

VESSEL:

F/V Nordic Queen

PROJECT(S):

Neville - Discovery Islands Purse Seine
(Book 1 of 2)

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

WaterProperties.ca

Harold Sewid

Jim Sewid

Norman Sewid

ANTHONY LEWIS

DFO / NYIC

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

Chief Scientist:

Watch Cabin

Name

Julia Bradshaw

Dylan Canover

Watch Cabin

Watch Cabin

Chief Scientist:

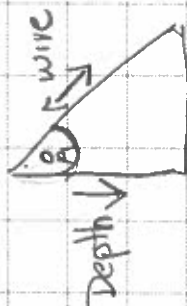
Survey Dates

10-11 May 2016
17-18 May 2016
24-25 May 2016
31 May - 01 Jun 2016
7-8 Jun 2016
14-15 Jun 2016
21-22 Jun 2016
28-29 Jun 2016
6-7 Jul 2016
12-13 Jul 2016

Depth Calculation for various wire angles to 50m Depth

NOT TOWING
APR 1968

<u>° LA</u>	<u>WIRE</u>
10	51m
20	53m
30	58m
40	65m
45	71m
50	



DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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Month MAY			Year 2016			Vessel F/V Nordic Queen Cruise ID 2016-32 (506-2016-07)									
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	Wt of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
001	Set 1	11	06:42	BE	SET		50° 27.428	126° 09.905	14 FA		-			☐	DEPTH = FATHOM
002	SET 2		07:40	BE	SET		50° 27.728	126° 04.515	152		-			☐	
003			08:14	BE	CTD		50° 27.792	126° 04.659	156	50m	-		YJ	☐	FLUORIMETER
004	↓		08:20	BE	NET		50° 27.830	126° 04.567	154	50	-	20°	YJ	☐	71365-71890
005	SET 3		11:56	BE	SET		50° 23.249	125° 36.996	27		-			☐	
006			12:25	BE	CTD		50° 23.276	125° 36.959	27	40m	-		YJ	☐	
007	↓		12:30	BE	NET		50° 23.308	125° 36.962	26	40	-	5°	YJ	☐	71890-72180
008	SET 4		14:35	BE	SET		50° 23.836	125° 20.281	127		-			☐	
009	SET 5		16:37	BE	SET		50° 18.293	125° 19.951	39		-			☐	
010			17:05	BE	CTD		50° 18.300	125° 19.937	39	50m	-		YJ	☐	
011	↓		17:11	BE	NET		50° 18.266	125° 19.932	40	50	-	0	YJ	☐	72180-72520
012	SET 6	✓	18:46	BE	SET		50° 11.346	125° 20.365	37		-			☐	
013	SET 7	17	08:16		SET		50° 10.877	125° 20.218	27		-			☐	
014	SET 8		10:01		SET		50° 18.288	125° 19.962	39		-			☐	
015			10:40		CTD		50° 18.304	125° 19.925	39	50	-		YJ	☐	
016	↓		10:44		NET		50° 18.307	125° 19.905	40	50	-	0	YJ	☐	72520-72830
017	Set 9		12:55		SET		50° 23.267	125° 36.943	29		-			☐	CTD HIT BOTTOM
018			13:48		CTD		50° 23.280	125° 36.942	29	50	-		YJ	☐	
019	↓		13:51		NET		50° 23.282	125° 36.949	28	40	-	0	YJ	☐	72830-73110

Event-Type:
 BOT = Bottle cast (no CTD)
 CTD = Standalone CTD
 ROS = CTD in Rosette
 SET = Fish Set

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

LOOP = Sea Water Loop
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 NET = Plankton Net Haul
 DRF = Drifter

Notes:

Produced by the Water Properties Group, IOS
 WaterProperties.ca
 Version: 20 April 2016

10-11 May CTD Serial # 0334
CTD Operator: Yeongha Jung
TSK # 7104 Coef (0.1422)

CTD/NET EN = OMITTED BOTH LESS THAN 2 MIN.

TOW EN = N/A

BOTTOM DEPTH = FATHOM

TARGET DEPTH = METER

71365 - 71890

$1 \text{ fa} = 1,828.8 \text{ m}$

Set 9: CTD hit bottom

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Month			MAY		Local		Year		2016		Vessel		NQ		Cruise ID					2016-32 (SOG-2016-07)		Page		2 of 19	
Event Number	Station Name	Day	Time (UTC)	Time (LST)	Event Type	Firing Method	Latitude	Positional Information	Longitude	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments									
020	SET10	17	16:27	BE	SET		50° 28.426	126° 04.269	120	FA		-													
021			17:28		CTD		50° 27.254	126° 05.790	114			-		YJ											
022			17:32		NET		50° 27.286	126° 05.785	112		50	-	10	YJ		73110 - 73520									
023	SET11		18:49		SET		50° 27.474	126° 09.848	20			-													
024	SET12	18	05:29		SET		50° 27.269	126° 05.539	120			-													
025			06:17		CTD		50° 27.259	126° 05.505	114		50	-		YJ											
026			06:22		NET		50° 27.265	126° 05.514	120		50	-	10	YJ		73520 - 74070									
027	SET13		09:34		SET		50° 21.862	125° 39.771	26.4			-													
028			10:15		CTD		50° 21.895	125° 39.853	33		50	-		YJ											
029			10:18		NET		50° 21.908	125° 39.879	34		50	-	5	YJ		74070 - 74380									
030	SET14		12:14		SET		50° 23.819	125° 20.218	131			-													
031	SET15		14:13		SET		50° 18.284	125° 19.956	39.8			-													
032			14:53		CTD		50° 18.314	125° 19.954	39		50	-		YJ											
3			14:57		NET		50° 18.309	125° 19.972	39		50	-	5	YJ		74380 - 74780									
034	SET16	24	08:16		SET		50° 11.395	125° 20.406	36			-													
			08:54		CTD		50° 11.352	125° 20.398	35		50	-		YJ											
036			08:57		NET		50° 11.322	125° 20.402	35		50	-	0	YJ		74780 - 75110									
	SET17		10:14		SET		50° 18.305	125° 19.944				-													
038			11:33		CTD		50° 18.304	125° 19.925	38		50	-		YJ											

Event Type: LOOP = Sea Water Loop

Bottle Firing Method: Time Codes

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This page is for any notes or observations

DEAD SEA LION ON BEACH 50 20 78 IN 125 23 708 W

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Month			MAY		Local		Year		2016		Vessel		NA		Cruise ID		2016-32		(SOG-2016-07)	
Event Number	Station Name	Day	Time (UTC)	Time (LST)	Event Type	Firing Method	Positional Latitude	Positional Longitude	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments					
039	SET17	24	11:36	BE	NET		50° 18.299	125° 19.966	38 FA	50m	-	0	YJ	□□	75110-75372					
040	SET18		12:46		SET		50° 21.833	125° 22.971	636 FA		-			□□						
041	↓		13:14		CTD		50° 21.777	125° 23.127	72.7 FA	50m	-		CF	□□						
042	↓		13:19		NET		50° 21.792	125° 23.083	69.3 FA	50m	-	0	CF	□□	75372-75690					
043	SET19		14:56		SET		50° 23.278	125° 36.948	128.4		-			□□						
044	↓		15:32		CTD		50° 23.510	125° 36.852	23	40	-		YJ	□□						
045	↓	↓	15:36		NET		50° 23.523	125° 36.821	25	40	-	0	YJ	□□	75690-75950					
046	SET20	25	05:16		SET		50° 27.162	126° 04.496	72.7		-			□□						
047	SET21		06:00		SET		50° 27.733	126° 04.644	154		-			□□						
048	↓		06:26		CTD		50° 27.722	126° 04.634	153	50	-		YJ	□□						
049	↓		06:32		NET		50° 27.734	126° 04.585	153	50	WIRE BOT (51)	10	YJ	□□	75950-76312					
050	SET22		07:06		SET		50° 28.571	126° 00.700	21.5		-			□□						
051	↓		07:42		CTD		50° 28.578	126° 00.688	22	40	-		YJ	□□						
-	↓		07:45		NET		50° 28.600	126° 00.664	22	35	-	0	YJ	□□	76312-76550					
053	SET23		14:06		SET		50° 23.933	125° 20.800	60		-			□□						
054	↓		14:35		CTD		50° 23.943	125° 20.797	59	50	-		CF	□□						
055	↓		14:39		NET		50° 23.953	125° 20.763	61	50	-	0	CF	□□	76550-76888					
056	SET24		16:12		SET		50° 18.299	125° 19.924	39.5		-			□□						
057	↓	↓	16:52	↓	CTD		50° 18.304	125° 19.925	38	50	-		YJ	□□						

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Notes:

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Set 18: End Box 1 plankton jars

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Month MAY			Year 2016		Vessel NORDIC QUEEN		Cruise ID 2016-32 (506-2016-07)				Page 4 of 19		
Event Number	Station Name	Day	Time (UTC)	Event Type	Firing Method	Positional Information	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Tms/FI Cleaned	Comments
058	SET 24	25	16:55	NET		50° 18.317 125° 19.926	39.7	50 m	-	0	YJ	☐	76888 - 77882
059	SET 25	↓	18:10	SET		50° 11.358 125° 20.392	36		-			☐	
062	SET 27	26	09:35	CTD		50° 19.206 125° 02.398	64.7	50 m	-	0	JB	☐	
063	↓	↓	09:38	NET		50° 19.206 125° 02.390	64.7	50 m	-	0	JB	☐	77882 - 78205
061	↓	↓	08:13	SET		50° 19.234 125° 00.608	47.0		-			☐	
060	SET 26	↓	06:46	BE		50° 18.77 124° 57.963	23.7		-			☐	
064	SET 28	↓	10:31	SET		50° 10.761 125° 0.608	47		-			☐	
065	↓	↓	10:52	CTD		50° 10.584 125° 00.713	62	50 m	-	6	JB	☐	
066	↓	↓	10:58	NET		50° 10.523 125° 00.746	62	50 m	-	10	JB	☐	78205 - 78538
067	SET 29	↓	11:56	SET		50° 07.661 125° 07.561	45		-			☐	
068	↓	↓	12:21	CTD		50° 07.429 125° 07.669	121	50	-	0		☐	
069	↓	↓	12:26	NET		50° 07.265 125° 07.727	121	50 m	-	5	JB	☐	78538 - 78920
07	SET 30	↓	13:42	SET		50° 4.189 125° 05.266	94.6		-			☐	
071	SET 31	↓	14:50	SET		50° 2.926 125° 09.741	53		-			☐	
072	SET 32	↓	15:47	SET		50° 00.253 125° 07.735	54.7		-			☐	
073	↓	↓	16:41	CTD		50° 00.242 125° 07.736	64.2	50 m	-	0	CF	☐	
074	↓	↓	16:44	NET		50° 00.236 125° 07.684	52.3	50 m	-	10	CF	☐	78920 - 79295
075	SET 33	31	08:50	SET		50° 11.35 125° 20.408	35.8		-			☐	
076	SET 34	↓	09:22	SET		50° 10.967 125° 20.507	30.7		-			☐	

Event Type:

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Set 24

More FM Reading than usual.

* ~~Set 27 / Set 26~~
Event #15
out of order

Plankton sample in 2 jars.

~~Set 28~~

Spill

Some of the sample too full; plankton sample in 2 jars.

~~Set 29~~

both sets,

we were emptying jellies

from the net into the path or area of bongo net.

SET 29: added more formalin, switched to 1 L container @ PBS

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Month			MAY-JUNE		Year		2016		Vessel			NQ		Cruise ID			2016-32		(SOG 2016-07)	
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments					
							Latitude	Longitude												
077	SET34	31	09:57	BE	CTD		50° 10.394	125° 20.407	30 FA	50 m	-	0	YJ	☐						
078	↓		10:00		NET		50° 10.884	125° 20.400	30	40 m	-	0	YJ	☐	79530* - 79760					
079	SET35		11:29		SET		50° 18.304	125° 19.925	39.5		-			☐						
080	↓		12:06		CTD		50° 18.292	125° 19.950	40	50	-	0	YJ	☐						
081	↓		12:28		NET		50° 18.310	125° 19.937	39.2	50	-	0	YJ	☐	79760 - 80092					
082	SET36		14:26		SET		50° 21.818	125° 39.470	36,		-			☐						
083	↓		15:04		CTD		50° 21.821	125° 39.463	31	50	-	0	YJ	☐						
084	↓		15:07		NET		50° 21.822	125° 39.562	24	40	-	0	YJ	☐	80092 - 80370					
085	SET37		18:16		SET		50° 27.274	126° 05.791	110 FA		-			☐						
086	↓		18:45		CTD		50° 27.281	126° 05.779	113	50	-	0	YJ	☐						
087	↓		18:49		NET		50° 27.270	126° 05.760	115	50	-	10	YJ	☐	80370 - 80750					
088	SET38		19:12		SET		50° 28.447	126° 04.345	120		-			☐						
089	↓		19:40		CTD		50° 28.444	126° 04.350	121	50	-	0	YJ	☐						
090	↓		19:44		NET		50° 28.415	126° 04.347	122	50	-	10	YJ	☐	80750 - 81112					
091	SET39	JUN 1	05:10		SET		50° 27.312	126° 05.770	85.7		-			☐						
092	SET40		05:50		SET		50° 27.729	126° 04.674	153		-			☐						
093	↓		06:25		CTD		50° 27.722	126° 04.634	152	50	-	0	YJ	☐						
094	↓		06:28		NET		50° 27.722	126° 04.634	152	50	-	0	YJ	☐	81112 - 81450					
095	SET41		06:45	↓	SET		50° 28.433	126° 04.331	121		-			☐						

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Sat 34
FLOWMETER NUMBER JUMPED (FROM PREVIOUS READING)

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Month			JUNE		Year		2016		Vessel			NQ		Cruise ID				2016-32 (SOG-2016-07)	
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/Fl Cleaned	Comments				
096	SET 41	1	07:19	BE	CTD		50° 28.447	126° 04.335	120FA	50M	-	0	YJ	□□					
097	↓		07:22		NET		50° 28.423	126° 04.373	124		-	0	YJ	□□	81450 - 81780				
098	SET 42		08:55		SET		50° 22.911	125° 52.255	23		-			□□					
099	↓		09:46		CTD		50° 23.023	125° 51.491	88	50	-	0	YJ	□□					
100	↓		09:50		NET		50° 23.042	125° 51.409	83	50	-	0	YJ	□□	81780 - 82095				
101	SET 43		11:10		SET		50° 23.236	125° 36.948	29		-			□□					
102	↓		11:47		CTD		50° 23.255	125° 36.932	29	40	-	0	YJ	□□					
103	↓		11:50		NET		50° 23.263	125° 36.940	30	40	-	0	YJ	□□	82095 - 82340				
104	SET 44		13:03		SET		50° 20.822	125° 24.086	79		-			□□					
105	SET 45		14:24		SET		50° 18.300	125° 19.963	39.1		-			□□					
106	↓		14:52		CTD		50° 18.304	125° 19.925	40	50	-	0	YJ	□□					
107	↓	↓	14:55		NET		50° 18.285	125° 19.988	40	50	-	0	YJ	□□	82340 - 82670				
108	SET 46	2	06:00		SET		50° 18.789	124° 57.889	58.3		-			□□					
109	↓		06:42		CTD		50° 18.782	124° 57.872	62	50	-	0	YJ	□□					
110	↓		06:44		NET		50° 18.830	124° 57.880	62	50	-	5	YJ	□□	83265 - 83620				
111	SET 47		07:16		SET		50° 18.693	125° 0.946	30		-			□□					
112	↓		07:48		CTD		50° 18.709	125° 00.924	32	50	-	0	YJ	□□					
113	↓		07:55		NET		50° 18.706	125° 00.874	32	50	-		YJ	□□	83 0 - 83945				
114	SET 48	↓	08:38	↓	SET		50° 19.209	125° 2.316	83.8		-			□□					

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115	SET48	2	08:56	BE	CTD		50°19.235	125°02.356	64.8FA	50m	-	0	YJ	☐								
116	↓		09:00		NET		50°19.246	125°02.353	66.3	50	-	5	YJ	☐	83945-84228							
117	SET49		10:24		SET		50°10.616	125°00.480	129		-			☐								
118	↓		11:11		CTD		50°10.617	125°00.479	132	50	-	0	YJ	☐								
119	SET50		12:24		SET		50°05.771	125°10.514	34.2		-			☐								
120	↓		13:07		CTD		50°05.772	125°10.514	28.7	50	-	0	YJ	☐								
121	SET51		13:49		SET		50°05.307	125°04.223	40		-			☐								
122	↓		14:53		CTD		50°05.413	125°04.226	42.5	50	-	0	YJ	☐								
123	↓	↓	14:58		NET		50°05.474	125°04.280	49.5	50	-	15	YJ	☐	84228-84600							
124	SET52	6	22:57		SET		50°18.285	125°19.995	37.7		-			☐								
125	↓	↓	23:33		CTD		50°18.304	125°19.925	39.4	50	-	0	YJ	☐								
126	↓	↓	23:37		NET		50°18.291	125°19.948	39.0	50	-	0	YJ	☐	84600-84992							
127	SET53	7	08:01		CTD		50°18.270	125°19.985	36.9	50	-	0	YJ	☐								
128	↓		08:05		NET		50°18.253	125°19.047	37.5	50	-	0	YJ	☐	84992-85220							
129	↓		08:28		SET		50°18.275	125°19.971	39.2		-			☐								
130	SET53B		11:16		CTD		50°23.276	125°36.973	24.9	40	-	0	YJ	☐	KNOX NET/SET X DUE TO STRONG CURR							
131	SET54		13:09		SET		50°22.918	125°51.859	32.7		-			☐								
132	↓		13:45		CTD		50°22.925	125°51.895	39.4	50	-	0	YJ	☐								
133	↓	↓	13:49	↓	NET		50°22.918	125°51.785	45.0	50	-	10	YJ	☐	85220-85540							

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

Notes:

Produced by the Water Properties Group, IOS

WaterProperties.ca
 Version: 20 April 2016

This page is for any notes or observations

Set 53B: Net & Set cancelled due to strong current (Knox Bay)

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month			JUNE		Year		2016		Vessel		NQ		Cruise ID 201632 (SOG-2016-07)				
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		
134	SET55	7	15:44	BE	SET		50° 28.557	126° 00.715	24.8 ^{FA}		-			☐			
135	↓		16:10		CTD		50° 28.578	126° 00.688	23.0	40	-	0	YJ	☐			
136	↓		16:14		NET		50° 28.565	126° 00.628	32.7	40	-	20	YJ	☐	85540-85870		
137	SET56		17:19		SET		50° 27.440	126° 09.836	20.0		-			☐			
138	↓		17:49		CTD		50° 27.439	126° 09.809	21.1	30	-	0	YJ	☐			
139	↓		17:52		NET		50° 27.439	126° 09.836	20.7	30	-	10	YJ	☐	85870-86078		
140	SET57		18:28		SET		50° 28.347	126° 09.546	183.0		-			☐			
141	↓	↓	18:56		CTD		50° 28.347	126° 09.546	183.0	50	-	20	YJ	☐	STRONG WIND BANGED X		
142	SET58	8	05:14		SET		50° 27.168	126° 05.975	18.6		-			☐			
143	↓		05:50		CTD		50° 27.163	126° 05.946	14.8	20	-	0	YJ	☐			
144	↓		05:53		NET		50° 27.164	126° 05.975	14.4	20	-	5	YJ	☐	86078-86220		
145	SET59		06:07		SET		50° 27.752	126° 04.687	155		-			☐			
146	SET60		06:43		SET		50° 28.453	126° 04.335	122		-			☐			
147	↓		07:08		CTD		50° 28.434	126° 04.301	121	50	-	0	YJ	☐			
148	↓		07:11		NET		50° 28.437	126° 04.086	117	50	-	20	YJ	☐	86220-86560		
149	SET61		10:53		SET		50° 23.431	125° 36.968	23.0		-			☐			
150	↓		11:41		CTD		50° 23.349	125° 37.000	22.8	40	-	0	YJ	☐			
151	↓		11:41		NET		50° 23.430	125° 37.962	22.0	40	-	0	YJ	☐	86560-86700		
152	SET62	↓	13:45	↓	SET		50° 23.282	125° 36.937	28.2		-			☐			

Event Type:
 BOT = Bottle cast (no CTD)
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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
 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
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 RE = Recover Mooring Time

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 WaterProperties.ca
 Version: 20 April 2016

This page is for any notes or observations

Set 57: Strong wind, bongo cancelled.

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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Month			JUNE		Year 2016			Vessel		NQ		Cruise ID					2016-32	
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/Fl Cleaned	Comments			
153	SET 62	8	14:12	BE	CTD		50° 23. 277	125° 36. 955	26.8	50 ^m	-	0	YJ	☐				
154	↓		14:15		NET		50° 23. 333	125° 36. 937	28.5	40 ^m	-	0	YJ	☐	86700-86975			
155	SET 63		16:10		SET		50° 18. 286	125° 20. 002	38.7		-			☐				
156	↓		16:38		CTD		50° 18. 304	125° 19. 925	39.2	50	-	0	YJ	☐				
157	↓		16:42		NET		50° 18. 291	125° 19. 948	39.1	50	-	5	YJ	☐	86975 - 87280			
158	SET 64	↓	18:10		SET		50° 10. 789	125° 20. 396	23.4		-			☐				
159	SET 65	9	05:29		SET		50° 18. 804	124° 57. 894	58.1		-			☐				
160	↓		05:57		CTD		50° 18. 782	124° 57. 872	59.7	50	-	0	YJ	☐				
161	↓		06:00		NET		50° 18. 790	124° 57. 831	65.4	50	-	0	YJ	☐	87280 - 87590			
162	SET 66		06:34		SET		50° 19. 141	125° 02. 526	61.0		-			☐				
163	↓		07:17		CTD		50° 19. 143	125° 02. 546	46.1	50	-	0	YJ	☐				
164	↓		07:21		NET		50° 19. 145	125° 02. 540	48.5	50	-	0	YJ	☐	87590-87882			
165	SET 67		08:49		SET		50° 10. 700	125° 00. 609	43.0		-			☐				
166	SET 68		09:26		SET		50° 10. 612	125° 00. 482	1350		-			☐				
167	↓		10:08		CTD		50° 10. 617	125° 00. 479	130	50	-	0	YJ	☐				
168	↓		10:13		NET		50° 10. 596	125° 00. 398	138	50	-	0	YJ	☐	87882 - 88172			
169	SET 69		11:02		SET		50° 07. 693	125° 07. 552	32.6		-			☐				
170	↓		11:46		CTD		50° 07. 676	125° 07. 559	36.0	50	-	0	YJ	☐				
171	↓	↓	11:50	↓	NET		50° 07. 696	125° 07. 008	29.2	50	-	0	YJ	☐	88172-88452			

Event Type:
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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:
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 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
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 RE = Recover Mooring Time

Notes:

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DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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Month			JUNE		Year		2016		Vessel			NQ		Cruise ID			2016-32		SOG2016-07	
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	Tms/FI Cleaned	Comments					
172	SET 70	9	12:2	BE	SET		50° 05.413	125° 04.226	44.8	m	-	-		☐						
173			13:28		CTD		50° 05.400	125° 04.264	39.8	50	-	0	YJ	☐						
174	↓		13:32		NET		50° 05.446	125° 04.210	41	50	-	10	YJ	☐	88452-88790					
175	SET 71		14:33		SET		49° 59.815	125° 06.882	86.8		-	-		☐						
176	↓		15:17		CTD		49° 59.793	125° 06.908	85.7	50	-	20	YJ	☐						
177	↓		15:21		NET		49° 59.846	125° 06.971	86.8	50 (51)	-	40	YJ	☐	Stranded D#5 88790-89300					
178	SET 72		15:52		SET		49° 57.935	125° 09.189	63.3		-	-		☐						
179	↓		16:18		CTD		49° 57.823	125° 09.568	58.8	50	-	0	YJ	☐						
180	↓	↓	16:22		NET		49° 57.830	125° 09.562	60.0	50	-	10	YJ	☐	89300-89680					
181	SET 73	14	08:20		SET		50° 11.264	125° 20.359	37.1		-	-		☐						
182	↓		08:46		CTD		50° 11.257	125° 20.335	37.4	50	-	0	YJ	☐						
183	↓		08:50		NET		50° 11.235	125° 20.359	36.8	50	-	0	YJ	☐	89680-89945					
184	SET 74		10:08		SET		50° 18.293	125° 19.953	39.4		-	-		☐						
185	↓		10:40		CTD		50° 18.317	125° 19.928	38.7	50	-	0	YJ	☐						
186	↓		10:47		NET		50° 18.301	125° 19.902	39.8	50	-	0	YJ	☐	89945-90208					
187	SET 75		12:08		SET		50° 20.817	125° 24.110	80.4		-	-		☐						
188	↓		12:44		CTD		50° 20.817	125° 24.099	79.6	50	-	0	YJ	☐						
189	↓		12:47		NET		50° 20.814	125° 24.107	78.5	50	-	0	YJ	☐	90208-90483					
190	SET 76	↓	13:1	↓	SET		50° 19.804	125° 28.577	16.0		-	-		☐						

Event Type: BOT = Bottle cast (no CTD)
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MOR = Mooring
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DRF = Drifter

Bottle Firing Method: US = Up / Stop (default)
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Time Code: BE = Beginning Time of Cast
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CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products
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RE = Recover Mooring Time

Notes:

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Set 71: Strong current; bongo net dragged at surface

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month			JUNE		Year		2016		Vessel		NQ		Cruise ID					2016-32		(5052016-07)	
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						
191	SET 76	14	13:40	BE	CTD		50° 19.835	125° 28.643	36.7 FA	50 M	-	0	YJ	☐							
192	↓		13:43		NET		50° 19.842	125° 28.637	41.2	50	-	0	YJ	☐	90188-90788						
193	SET 77		14:50		SET		50° 23.247	125° 36.927	30.0		-			☐							
194	↓		15:14		CTD		50° 23.250	125° 36.920	31.5	50	-	0	YJ	☐							
195	↓		15:17		NET		50° 23.265	125° 36.939	28.7	50	-	0	YJ	☐	90788-91065						
196	SET 78	↓	18:36		SET		50° 27.058	126° 05.497	15.4		-			☐							
197	SET 79	15	05:10		SET		50° 27.126	126° 05.621	35.9		-			☐							
198	↓		05:51		CTD		50° 27.111	126° 05.510	40.7	50	-	0	YJ	☐							
199	↓		05:55		NET		50° 27.113	126° 05.525	39.8	50	-	0	YJ	☐	91065-91372						
200	SET 80		06:12		SET		50° 27.828	126° 04.816	158 F		-			☐							
201	SET 81		07:20		SET		50° 28.632	126° 00.590	24.2		-			☐							
202	↓		07:46		CTD		° 28.646	126° 00.566	25.4	40	-	0	YJ	☐							
203	↓		07:49		NET		5° 28.643	126° 00.571	22.7	30	-	0	YJ	☐	91372-91532						
204	SET 82		08:56		SET		° 23.301	125° 53.789	95.5		-			☐							
205	↓		10:00		CTD		50° 23.317	125° 53.814	90.2	50	-	0	YJ	☐							
206	↓		10:03		NET		50° 23.310	125° 53.807	92.9	50	-	0	YJ	☐	91532-91888						
207	SET 83		11:34		SET		50° 23.247	125° 36.927	30.0		-			☐							
208	↓		12:01		CTD		50° 23.251	125° 36.927	30.7	50	-	0	YJ	☐							
209	↓	↓	12:04	↓	NET		50° 23.263	125° 36.933	29.7	50	-	0	YJ	☐	91888-92185						

Event Type:
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Bottle Firing Method:
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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
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Notes:

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DAILY SCIENCE LOG

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Month JUNE			Year 2016		Vessel NORDIC QUEEN		Cruise ID 2016-32 (SOG-2016-07)							
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
210	SET84	15	13:5	BE	SET		50° 18.289	125° 19.959	39.4	m	-			
211	↓		14:26		CTD		50° 18.288	125° 19.934	40.7	50	-	YJ		
212	↓		14:28		NET		50° 18.279	125° 19.921	40.1	50	-	YJ		912185-92500
213	SET85	↓	15:54		T		50° 11.343	125° 20.379	35.6		-			
214	SET86	16	05:10		SET		50° 18.806	124° 57.908	49.1		-			
215	↓		06:00				50° 18.776	124° 57.870	58.0	50	-	YJ		
216	↓		06:03		NET		50° 18.774	124° 57.866	60.0	50	-	YJ		92500 - 92815
217	SET87		06:31				° 19.234	125° 02.390	53.5		-			
218	SET88		07:00		SET		50° 18.969	125° 02.587	119.0		-			
19	↓		07:45		CT		° 19.050	125° 02.415	131.0	50	-			
220	↓		07:48		NET		50° 19.021	125° 02.456	128.0	50	-	YJ		92815 - 93150
221	SET89		08:59		SET		50° 10.641	125° 00.465	120.0		-			
222	SET90		09:52		SET		50° 09.462	125° 03.174	82.0		-			
223	↓		10:36		CTD		50° 09.482	125° 03.147	86.8	50	-	YJ		
224	↓		10:40		NET		50° 09.491	125° 03.135	87.6	50	-	YJ		93150 - 93472
225	SET91		10:08		SET		50° 07.687	125° 07.516	36.1		-			
226	↓		11:52		CTD		50° 07.667	125° 07.543	44.7	50	-	YJ		
227	↓		11:55		NET		50° 07.666	125° 07.549	47.1	50	-	YJ		93472 - 93770
228	SET92	↓	12:22	↓	SET		50° 05.398	125° 04.284	39.8		-			

Event Type:
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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 Codes:
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CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products
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Notes:

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DAILY SCIENCE LOG BOOK

MISSION
NUMBER

IOS 2016-32

SOG 2016-07

DATE:

From: 16 JUN 2016

To: 13 JUL 2016

VESSEL:

F/V NORDIC QUEEN

PROJECT(S):

Neville - Discovery Purse Seine
(Book 2 of 2)

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

WaterProperties.ca

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month JUNE			Year 2016		Vessel Nordic Queen			Cruise ID 2016-32 (SOG2016-07)							
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
							Latitude	Longitude							
229	SET92	16	12:56	BE	CTD		50°05.358	125°04.271	36.4	50 ^m	-	0	YJ	☐	
230	↓		12:59		NET		50°05.363	125°04.268	36.7	50	-	5	YJ	☐	93770-94065
231	SET93		14:06		SET		50°00.398	125°07.990	28.1		-			☐	
232	↓		14:50		CTD		50°00.431	125°07.979	33.4	50	-	10	YJ	☐	STRONG CURR
233	↓	↓	14:54		NET		50°00.473	125°07.988	50.8	50	-	20	YJ	☐	94065-94432
234	SET94	21	07:29		SET		50°10.756	125°20.402	22.7		-			☐	
235	↓		08:06		CTD		50°10.757	125°20.387	23.7	40	-	0	YJ	☐	
236	↓		08:09		NET		50°10.749	125°20.391	23.2	40	-	0	YJ	☐	94432-94705
237	SET95		09:29		SET		50°18.294	125°19.941	38.4		-			☐	
238	↓		09:56		CTD		50°18.311	125°19.922	38.0	50	-	0	YJ	☐	
239	↓		10:00		NET		50°18.299	125°19.949	38.0	50	-	0	YJ	☐	94705-95028
240	SET96		12:21		SET		50°22.123	125°38.793	139.0		-			☐	
241	↓		13:00		CTD		50°22.116	125°38.744	140.0	50	-	0	YJ	☐	
242	↓		13:03		NET		50°22.105	125°38.766	139.0	50	-	0	YJ	☐	95028-95332
243	SET97		13:22		SET		50°23.255	125°36.932	28.0		-			☐	
244	↓		13:51		CTD		50°23.261	125°36.934	29.0	50	-	0	YJ	☐	
245	↓		13:54		NET		50°23.266	125°36.953	27.0	50	-	0	YJ	☐	95332-95632
246	SET98		16:49		SET		50°28.455	125°50.232	106.0		-			☐	
247	↓	↓	17:26	↓	CTD		50°28.458	125°50.237	105.0	50	-	0	YJ	☐	

Event Type:
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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
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RE = Recover Mooring Time

Set 93: Strong current

(score)
SET94 PL.NET STAYED AT 30M FOR 15SEC DUE TO MECHANICAL PROBLEM DURING UPCAST.
(WHILE PULLING)

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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Month			JUNE		PST		Year 2016		Vessel		Cruise ID		2016-32 (SOG2016-07)			
Event Number	Station Name	Day	Time	Time	Time	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
248	SET98	21	17:29	BE	NET	NET		50°28.452	125°50.231	98.5	50 ^m	-	0		☐	95632 - 95950
249	SET99		18:52		SET	SET		50°27.088	126°05.600	17.0		-			☐	
250			19:17		CTD	CTD		50°27.108	126°05.525	39.2	50	-	0	YJ	☐	
251		✓	19:20		NET	NET		50°27.112	126°05.559	37.7	50	-	0	YJ	☐	95950-96270
252	SET100	22	04:40		SET	SET		50°27.258	126°05.805	105.0		-			☐	
253	SET101		05:12		SET	SET		50°27.828	126°04.801	158.0		-			☐	
254			05:41		CTD	CTD		50°27.820	126°04.817	158.0	50	-	5	YJ	☐	
255		✓	05:44		NET	NET		50°27.832	126°04.872	158.0	50	-	10	YJ	☐	96270-96580
256	SET102		06:54		SET	SET		50°28.426	126°04.241	123.0		-			☐	
257			06:36		CTD	CTD		50°28.411	126°04.276	121.0	50	-	0	YJ	☐	
258		✓	06:41		NET	NET		50°28.430	126°04.330	123.0	50	-	10	YJ	☐	96580-96814
259	SET103		10:46		SET	SET		50°23.413	125°36.569	34.0		-			☐	
260			11:20		CTD	CTD		50°23.410	125°36.517	33.8	50	-	0	YJ	☐	
261		✓	11:23		NET	NET		50°23.402	125°36.481	32.5	50	-	0	YJ	☐	96814-97112
262	SET104		13:56		SET	SET		50°20.640	125°23.888	15.0		-			☐	
263			14:39		CTD	CTD		50°20.682	125°23.913	32.0	50	-	0	YJ	☐	
264		✓	14:42		NET	NET		50°20.680	125°23.919	32.8	50	-	0	YJ	☐	97112-97422
265	SET105		15:35		SET	SET		50°18.397	125°19.888	35.5		-			☐	
266		✓	16:15	✓	CTD	CTD		50°18.376	125°19.824	37.5	50	-	0	YJ	☐	MECH. PROB. 29m FOR 20922

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

Notes:

Produced by the Water Properties Group, IOS

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 Version: 20 April 2016

Set 105: Mechanical problems CTD held at 29 m on upcast for 20 sec.

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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Month			JUNE		Year		2016		Vessel		NO		Cruise ID				2016-32		(SOG2016-07)	
Event Number	Station Name	Day	Time	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments					
267	SET105	22	16:21	BE	NET		50°18.386	125°19.818	37.7	50 ^m	-	0	YJ	☐	97422-97728					
268	SET106		17:34		SET		50°11.233	125°20.183	27.2		-			☐						
269			18:13		CTD		50°11.193	125°20.196	30.4	50	-	0	YJ	☐						
270		↓	18:16		NET		50°11.202	125°20.197	30.5	50	-	0	YJ	☐	97728-98036					
271	SET107	29	07:17		SET		50°11.337	125°20.372	34.0		-			☐						
272	SET108		09:09		CTD		50°18.323	125°19.919	38.4	50	-	0	YJ	☐						
273			09:12		NET		50°18.340	125°19.922	37.8	50	-	0	YJ	☐	98036-98270					
274		↓	09:21		SET		50°18.307	125°19.935	37.0		-			☐						
275	SET109		10:07		SET		50°17.944	125°20.365	37.3		-			☐						
276	SET110		12:24		SET		50°23.255	125°36.532	29.7		-			☐						
277			13:10		CTD		50°23.259	125°36.952	29.4	50	-	0	YJ	☐						
278		↓	13:13		NET		50°23.268	125°36.927	29.5	50	-	0	YJ	☐	98270-98580					
279	SET111		13:36		SET		50°21.897	125°39.857	26.0		-			☐	,					
280	SET112		15:59		SET		50°28.467	125°50.238	107.0		-			☐						
281			16:32		CTD		50°28.462	125°50.226	14.0	50	-	10	YJ	☐	STRONG CURRENT/WIND					
282		↓	16:35		NET		50°28.486	125°50.208	112.0	50 (51)	-	30	YJ	☐	98580-99000					
283	SET113		18:29		SET		50°27.440	126°09.818	20.0		-			☐						
284			19:02		CTD		50°27.443	126°09.834	22.5	30	-	0	YJ	☐						
285		↓	19:05	↓	NET		50°27.450	126°09.791	22.7	30	-	10	YJ	☐	99000-99170					

Event Type:
 BOT = Bottle cast (no CTD)
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 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
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 RE = Recover Mooring Time

Notes:

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This page is for any notes or observations

Set 112: Strong current and wind.

DAILY SCIENCE LOG

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Month			JUNE / July		Year		2016		Vessel		NQ		Cruise ID			2016-32 (SOG2016-07)	
Event Number	Station Name	Day	Time	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		
286	SET114	30	04:47	BE	SET		50°27.254	126°05.790	106.0		-	LOW ANG		☐			
287	SET115		05:28		SET		50°27.832	126°04.804	157.0		-			☐			
288	SET116		06:45		SET		50°27.200	126°00.198	76.2		-			☐			
289			07:15		CTD		50°27.811	126°00.192	76.6	50	-	5	YJ	☐			
290			07:19		NET		50°27.784	126°00.166	78.1	50	-	20	YJ	☐	99170-99530		
291	SET117		08:17		SET		50°22.924	125°51.587	36.0		-			☐			
292			08:44		CTD		50°22.909	125°51.877	25.4	50	-	0	YJ	☐			
293			08:47		NET		50°22.905	125°51.816	22.5	40	-	10	YJ	☐	99530-99810		
294	SET118		10:09		SET		50°23.250	125°36.928	30.0		-			☐			
295			10:34		CTD		50°23.275	125°36.921	30.1	50	-	0	YJ	☐			
296			10:37		NET		50°23.257	125°36.931	29.7	50	-	0	YJ	☐	99810-100140		
297	SET119		11:48		SET		50°21.057	125°23.448	32.2		-			☐			
298			12:25		CTD		50°21.063	125°23.440	40.5	50	-	0	YJ	☐			
299			12:29		NET		50°21.062	125°23.439	46.2	50	-	0	YJ	☐	00140-00480		
300	SET120		13:26		SET		50°18.285	125°19.452	39.7		-			☐			
301	SET121		14:34		SET		50°10.818	125°20.637	12.2		-			☐			
302			15:25		CTD		50°10.874	125°20.539	23.8	40	-	0	YJ	☐			
303			15:28		NET		50°10.876	125°20.535	24.0	40	-	0	YJ	☐	480-715		
304	SET122	6	17:36		SET		50°10.709	125°20.368	21.4		-			☐			

Event Type:
 BOT = Bottle cast (no CTD)
 CTD = Standalone CTD
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 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
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CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products
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 RE = Recover Mooring Time

Notes:

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DAILY SCIENCE LOG

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Month			Year			Vessel			Cruise ID						
July			2016			NQ			2016-32 (506-2016-057)						
Event Number	Station Name	Day	Time	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trms/Fl Cleaned	Comments
305	SET 123	6	09:45		CTD		50° 18.288	125° 19.947	38.5	50m	-	10m A-3	CF/JB	☐	
306	↓		09:51		NET		50° 18.298	125° 19.945	38.1	50	-		CF/JB	☐	715-C62
307	↓		09:56		SET		50° 18.280	125° 19.955	38.2		-			☐	
308	SET 124		11:35		CTD		50° 21.388	125° 22.459	108	50	-		CF/JB	☐	
309	↓		11:36		NET		50° 21.387	125° 22.451	111	50	-		CF/JB	☐	Bongo Lost
310	↓		11:45		SET		50° 21.389	125° 22.462	123		-			☐	
311	SET 125		13:33		SET		50° 23.255	125° 36.932	28.8		-			☐	
312	↓		14:10		CTD		50° 23.269	125° 36.944	30.2	50	-		CF/JB	☐	
313	SET 126		18:04		SET		50° 27.119	126° 05.569	35.0		-			☐	
314	↓		18:28		CTD		50° 27.117	126° 05.560	41.2	50	-		CF/JB	☐	
315	SET 127		18:57		SET		50° 27.437	126° 09.830	19.4		-			☐	
316	↓	↓	19:24		CTD		50° 27.432	126° 09.906	18.2	30m	-		CF/JB	☐	
317	SET 128	7	04:58		SET		50° 27.258	126° 05.800	84.5		-			☐	
318	SET 129		05:31		SET		50° 27.842	126° 04.797	158.0		-			☐	
319	SET 130		05:59		SET		50° 28.393	126° 04.285	124.0		-			☐	
320	↓		06:29		CTD		50° 28.417	126° 04.278	171.0	50m	-		CF/JB	☐	
321	SET 131		07:44		CTD		50° 27.981	125° 53.409	92.5	50m	-		CF/JB	☐	
322	↓		07:50		SET		50° 27.971	125° 53.416	90.2		-			☐	
323	SET 132	↓	15:25		CTD		50° 18.308	125° 19.926	39.1	50m	-		CF	☐	

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

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Version: 20 April 2016

Set 124: Scorenet lost due to hardware failure.

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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Month	Year	PST	Station Name	Day	Time (UTC)	Event Type	Firing Method	Positional Information	Bottom Pressure	Max Cast Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/Fl Cleaned	Comments
July	2016	PST	SET 132	7	17:27	SET		50° 18.304 125° 19.925	23.5		-				
			ET					0° 00.000 125° 20.415	24.0		-				
			↓					0° 00.000 125° 20.379	32.4		-				
3			SET 134	13	04:15	ET		0° 00.000 126° 05.567	20.0		-				
328			SET 135		05:23	SET		50° 22.061 176° 05.501	152.0		-				
32			CT 136		05:55	SET		50° 23.741 126° 04.544	24.2		-				
330			SET 137		06:52	SET		50° 28.641 126° 00.546	25.2		-				
331			↓		07:39	CTD		50° 28.633 126° 00.576	33.0	40m	-				New Bathy
332			↓		07:42	NET		50° 28.624 126° 00.540	33.0	40m	-				44074 - 41319
333			SET 138		10:34	CTD		50° 23.256 125° 36.932	29.8	50m	-				51074 - 51319
334			↓		11:07	CTD		50° 23.242 125° 36.927	30.5	50m	-				*CTD LEFT ON*
335			↓		11:10	NET		0° 23.255 125° 36.932	104		-				51319 - 51618
336			SET 139		12:25	SET		50° 21.387 125° 36.927	114	50m	-				
337			↓		13:04	CT		50° 21.387 125° 36.927	126	50m	-				
338			↓		13:12	NET		50° 21.393 125° 36.927	39.0		-				51618 - 518
339			SET 140		14:22	SET		50° 18.298 125° 19.946	37.2	50m	-				
340			↓		14:50	CT		50° 18.294 125° 19.940	37.4	50m	-				
341			↓		14:53	NET		50° 18.289 125° 19.930	4		-				8 - 52253
342			SET 141		16:14	SET		50° 1.475 125° 20.606			-				

Event Type:
 BOT = Bottle cast (no CTD)
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 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
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CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products
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 RE = Recover Mooring Time

Notes:

Produced by the Water Properties Group, IOS

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 Version: 20 April 2016

Sgt 137
TSK # 7277 (new SCOR net)

Sgt 138 - CTD left on

[illegible]

Event Type:		Bottle Firing Method:		Time Code:		CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products	
BOT = Bottle cast (no CTD)	LOOP = Sea Water Loop	US = Up / Stop (default)	BE = Beginning Time of Cast	DE = Deployment Time			
CTD = Standalone CTD	MOR = Mooring	UN = Up / No stop	BO = Bottom Time of Cast	MR = Messenger Release Time			
ROS = CTD in Rosette	NET = Plankton Net Haul	DN = Down / No stop	EN = End Time of Cast	RE = Recover Mooring Time			
SET = Fish Set	DRF = Drifter						
	=	Notes:		<i>Produced by the Water Properties Group, IOS</i>			
				WaterProperties.ca Version: 20 April 2016			