

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

2014 - 56

Book 1

DATE:

Mission: Aug 1st - Sept 11th 2014

This book: Aug 2nd - Aug 24th

From: Leg 1: Aug 1st - Aug 21st Leg 2: Aug 21st - Sept 11th

to:

VESSEL:

FROSTI

PROJECT(S):

Beaufort Sea Marine Fishes Project (BSMF)

Fisheries & Oceans Canada; Central & Arctic Region

Freshwater Institute
Winnipeg, MB

Institute of Ocean Sciences
Sidney, BC.

Fisheries and Oceans Canada

Project Lead: Jim Reist

Captain: John Roach First Officer: Ross Gordon
Second Officer: Kelly Muller Third Officer: _____
Fishing Master: _____

Mission Participants / Agencies: FWI

Scientific Personnel:

Name	Chief Scientist:	Watch	Cabin	Name	Watch	Cabin
Andrew Majewski	<u>Andy Majewski</u>					
Carolina Geraldo						
Desmond Rubin						
Laure de Montety				<u>Aug 1 → 21st 2014</u>		
Ashley Stecko						
Kelly Young						
Michael Dempsey						
Andrea Niemi						

Second leg of Mission:

Name	Chief Scientist:	Watch	Cabin	Name	Watch	Cabin
<u>Shannon MacPhee</u>						
<u>Sheila Atchison</u>				<u>Aug 21st → Sept 11th 2014</u>		
<u>Julia Henry</u>						
<u>Joseph Illasiak</u>						
<u>Laure de Montety</u>						
<u>Hugh Maclean</u>						
<u>Gillaume Meitertons</u>						
<u>Michelle Kamula</u>						

Data logging computer:

Franklin

Data acquisition program: SKSsave 7
CTD deck unit make: SBE model: 11 serial number: 425

Primary CTD

Make: SBE model: 9plus serial number: 1189
Primary temperature serial number: _____
Primary conductivity serial number: _____
Secondary temperature serial number: _____
Secondary conductivity serial number: _____
Transmissometer: Buck Labs Model: CSTAR s/n: 1666
Fluorometer: Model Seapoint Cable gain: 30x s/n: P, S or NO pump?
Oxygen sensor: SBE Model: 43 s/n: 202/359 P, S or NO pump?
PAR sensor: Biophysical Model: QSP2300 s/n: 70501
Other sensors: Seapoint Turbidity meter s/n: _____ P, S or NO pump?
Other sensors: Biophysical QSR2200 PAR s/n: 20277 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: 19plus2 serial number: 6009
Primary temperature serial number: _____
Primary conductivity serial number: _____
Secondary temperature serial number: _____
Secondary conductivity serial number: _____
Transmissometer: _____ Model: _____ s/n: _____
Fluorometer: Model Seapoint Cable gain: 30x s/n: 155 P, S or NO pump?
Oxygen sensor: SBE Model: 43 s/n: 1202 P, S or NO pump?
PAR sensor: _____ Model: _____ s/n: _____
Other sensors: Beathos PSA 716 Affinity s/n: _____ P, S or NO pump?
Other sensors: Seapoint turbidity meter 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): _____

DAILY SCIENCE LOG

Page 1

Month				Year				Ship			Cruise ID	
AUGUST				2014				FROSTI			2014-56 BREA	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments	
02	KUG01	ROS	1	BE	1311	70 0.748	133 46.669	22.4	20.7	md	5 Niskins. NO SPAR.	
				BO	1314	70 0.794	49.496					
				EN	1321	70 0.854	49.216					
02	KUG01	BON	2	BE	1331	70 06.766	133 48.886	21.0	15.0 21.0	ARM	Yo-yo, 15min @ 2 knots	
				EN	1346	70 02.47	133 48.76				↳ actual speed = 2.0-2.5 knots	
02	KUG01	BOX	3	BE	1424	70 00.53	133 50.65	20.5	20.5	ARM	Good mud	
				BO	1424	70 00.53	133 50.61				Rough landing on deck	
				EN	1426	70 00.53	133 50.51				DEP. ID: Box-130	
02	KUG01	BOX	4	BE	1438	70 00.51	133 49.71	21.0	21.0	ARM	DEP. ID: box-131	
				BO	1438	70 00.51	133 49.67					
				EN	1439	70 00.51	133 49.59					
02	KUG01	BBT	5	BE	1503	70 00.51	133 49.14	21.0	21.0	ARM	using mapout depth sensor	
				BO	1505	70 00.54	133 49.42	21.1			↳ worked well	
				EN	1511	70 00.58	133 49.80	20.9				
02	KUG01	BBT	6	BE	1522	70 00.38	133 50.17	20.1	20.1	ARM		
				BO	1525	70 00.45	133 50.28	20.6	20.6			
				EN	1535	70 00.72	133 50.69	21.1				
02	KUG01	W2A	7	BE	1636	70 00.11	133 49.91	20.1		ARM	Medium mud bomb	
				BO	1638	70 00.23	133 50.14	20.3			↳ Towed cable of stern to flush mud.	

Event Type:

BOT = Bottle cast, no CTD
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W2A = Western Trawl

BBT = Benthic Beam Trawl

BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

BE = Beginning Time
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Notes: _____

Transmissometer to be cleaned before each cast, do not use Ammonia products

02 Aug 2014

- low cloud cover
- rain
- 15 knots W-SW

DAILY SCIENCE LOG

Page _____

Month				Year				Ship			Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments	
02	KUG01	WZA	7	EN	1645	70 00.58	133 50.58	20.3				
02	AGK2	ROS	8	BE	1810	70° 2.38	133° 32.72	30.0		MD	NO SPAR. 5 Nishits.	
				BO	1811	70° 2.36	133° 32.67		25.9			
				EN	1814	70° 2.36	133° 32.60					
02	AGK02	BON	9	BE	1853	70 02.88	133 34.04	28.8	25.0	ARM	15min @ 2.0 knots, Yo-Yo	
				EN	1908	70 02.99	133 35.33	28.8				
02	AGK02	BOX	10	BE	1924	70 02.65	133 33.37	29.3		ARM	DEP.ID: box-132	
				BO	1925	70 02.64	133 33.31	29.4				
				EN	1927	70 02.63	133 33.24	28.4				
02	AGK02	Box	11	BE	1941	70 02.80	133 33.67	28.9		ARM	DEP.ID: box-133	
				BO	1942	70 02.79	133 33.62	29.5				
				EN	1943	70 02.78	133 33.55	28.8				
02	AGK02	BBT	12	BE	1958	70 02.77	133 33.54	29.5		ARM		
				BO	2006	70 02.90	133 34.25	29.0				
				EN	2012	70 02.98	133 34.71	29.9				
02	AGK02	BBT	13	BE	2028	70 03.12	133 35.57	29.3		ARM	Failed tow, no bottom contact	
				BO							tail wind too strong.	
				EN								

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Transmissometer to be cleaned before each cast, do not use Ammonia products

Notes: _____

Version: 22 May 2014

DAILY SCIENCE LOG

Page _____

Month				Year				Ship			Cruise ID
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments
02	AGK02	BBT	14	BE	2050	70 02.69	133 32.94	29.1			Failed tow, winch hydraulics stopped
				BO	2055	70 02.80	133 33.44	29.1			→ towed 20-30 min @ surface
				EN	2103	70 02.93	133 34.05	28.6			
02	AGK02	BBT	15	BE	2208	70 02.65	133 32.75	28.8			
				BO	2212	70 02.73	133 32.97	30.2			
				EN	2220	70 02.88	133 33.81	29.5			
02	AGK02	WZA	16	BE	2242	70 02.81	133 33.02	29.5			
				BO	2247	70 02.86	133 33.82	29.5			
				EN	2253	70 02.94	133 34.59	29.1			
03	AGK01	ROS	17	BE	1320	70 06.13	133 50.36	32.2			6 Niskins SPAR installed!
				BO	1322	70 6.10	133 50.20		28.2		—
				EN	1330	70 6.06	133 49.90				
03	AGK01	BON	18	BE	1340	70 06.05	133 49.74	32.5	25	ARM	yo-yo'd 4X
				EN	1357	70 06.43	133 51.08	31.8			
03	AGK01	BOX	19	BE	1419	70 06.18	133 50.39	30.8		ARM	DEP ID: box-134
				BO	1420	70 06.17	133 50.35	30.8			
				EN	1422	70 06.17	133 50.28	32.0		ARM	
03	AGK01	BOX	20	BE	1436	70 06.22	133 50.81	31.7		ARM	DEP ID: box-135
				BO	1437	70 06.23	133 50.78	31.4			

Event Type:

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Notes: _____

Transmissometer to be cleaned before each cast, do not use Ammonia products

03 Aug 2014

- low cloud
- light rain
- cold $\sim 0^{\circ}\text{C}$
- W. 10 Knots

originally 317 cal For SPAR changed to 20279

DAILY SCIENCE LOG

Page _____

Month				Year				Ship				Cruise ID
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments	
03	AGK01	BOX	20	EN	1439	70 06.23	133 50.72	31.2				
03	AGK01	BBT	21	BE	1455	70 06.08	133 48.58	31.5		ARM		
				BO	1459	70 06.14	133 48.93	31.5				
				EN	1506	70 06.24	133 49.43	31.3				
03	AGK01	BBT	22	BE	1517	70 06.17	133 50.22	31.4		ARM		
				BO	1521	70 06.25	133 50.49	31.0				
				EN	1528	70 06.38	133 50.98	31.9				
03	AGK01	WTA	23	BE	1555	70 06.14	133 48.57			ARM		
				BO	1556	70 06.15	133 48.69	31.4				
				EN	1602	70 06.25	133 49.68	32.2				
03	KUG02	ROS	24	BE	2154	70 50.96	134 40.27	77.2		MD		
				BO	2203	70 50.95	134 39.80		73.5			
				EN	2218	70 50.89	134 39.04					
03	KUG02	MPS	25	BE	2234	70 50.78	134 38.14	76.1	66	ARM	n1 B-50 n2 25-50 n3 25-0	
				BO	2237	70 50.76	134 37.96	76.1			First deployment for 2014	
				EN	2240	70 50.74	134 37.75	75.8				
03	KUG02	BON	26	BE	2250	70 50.76	134 37.58	76.2		ARM	Failed, tow. Mud in nets.	
				EN	2307	70 50.99	134 39.01				125m out	
03	KUG02	BON	27	BE	2313	70 51.09	134 39.56			ARM	100m out	

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Transmissometer to be cleaned before each cast, do not use Ammonia products

Notes: _____

DAILY SCIENCE LOG

Month				Year				Ship				Cruise ID		Page
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments			
3	KUGOL	BON	27	EN	2326	70 51.23	134 40.83							
3	KUGOL	BOX	28	BE	2342	70 51.11	134 40.92	78.5		ARM	DEP. ID: box-136			
				BO	2245	70 51.09	134 40.92	78.6						
				EN	2348	70 51.08	134 40.70	78.4						
4	KUGOL	BOX	29	BE	00:02	70 50.98	134 40.16	77.6		ARM	DEP. ID: box-137			
				BO	00 04	70 50.96	134 40.07	77.8						
				EN	00 07	70 50.95	134 39.97	77.6						
4	KUGOL	BBT	30	BE	0020	70 50.89	134 39.55	77.2		ARM				
				BO	0027	70 50.98	134 40.09	77.6						
				EN	0037	70 51.09	134 40.86	78.4						
4	KUGOL	WZA	31	BE	0102	70 50.91	134 42.24	72.9		ARM				
				BO	0108	70 50.95	134 40.94	78.2						
				EN	0128	70 51.05	134 38.00	77.1						
4	KUGOL	ROS	32	BE	1314	70 56.14	134 45.87	234	225	MD	Part 1 of KUGOL 4 Nishins.			
				BO	1321	70 56.10	134 45.65				CTD file first saved as 2014-56-0031, ignore -> take 2014-56-0032 (good file).			
				EN	1330	70 56.06	134 45.60							
	KUGOL	ROS	33	BE	1344	70 55.99	134 44.57	215	80	MD	Part 2 12 Nishins.			
				BO	1348	70 55.97	134 44.85							
				EN	1401	70 55.73	134 44.49							

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Notes:

Transmissometer to be cleaned before each cast, do not use Ammonia products

probably hit bottom and came up 4m from bottom

DAILY SCIENCE LOG

Page _____

Month				Year		Ship				Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments
04	KUG03	MPS	34	BE	1415	70 55.81	134 45.66	207		ARM	u1 B-100m, u2 100-50m, u3 50-25m, ^{u4 25-0m} 425
		EN		BO	1420	70 55.81	134 45.48	201			
				EN	1424	70 55.80	134 45.39	201			
04	KUG03	MPS BON	35	BE	1438	70 55.67	134 46.21	199		ARM	Failed tow. Mud in net. - 260m @ 50°
				EN	1456	70 56.03	134 44.64	216			L40
04	KUG03	MPS BON	36	BE	1512	70 56.17	134 42.75	197		ARM	Second deployment - 250m @ 50°
				EN	1533	70 55.85	134 44.86	197			clean
04	KUG03	BOX	37	BE	1553	70 55.82	134 45.35	201		ADS	DEP-ID: box-138
				BO	1558	70 55.83	134 45.20	200			
				EN	1604	70 55.85	134 45.08	202			
04	KUG03	BOX	38	BE	1616	70 55.89	134 44.77	201		ARM	
				BO	1619	70 55.90	134 44.69	201			
				EN	1625	70 55.92	134 44.55	201			
04	KUG03	BBT	39	BE	1642	70 56.51	134 41.71	211		ARM	
				BO	1656	70 56.26	134 42.94	208			
				EN	1706	70 56.11	134 43.63	204			
04	KUG03	W2A	40	BE	1746	70 55.76	134 45.79	202		ARM	
				BO	18:00	70 56.29	134 42.76	208			
				EN	18:20	70 56.69	134 40.15	204			

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Transmissometer to be cleaned before each cast, do not use Ammonia products

Notes: _____

Version: 22 May 2014

04 Aug 2014

- low cloud
- light rain
- 1°C

825 - water

DAILY SCIENCE LOG

Page _____

Month				Year				Ship			Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments	
04	KU604	ROS	41	BE	1943	70 58.93	134 47 83	345		MD.	6 Nishins. to the bottom	
				BO	1949	70 58.95	134 47.53		340			
				EN	2006	70 58.97	134 46.82					
04	KU604	ROS	42	BE	2024	70 58.74	134 47 78	336		MD.	12 Nishins to 80m.	
				BO	2029	70 58.72	134 47.52		80			
				EN	2040	70 58.70	134 47.30					
04	KUG04	MPS	43	BE	2058	70 58.79	134 47.62	336	323		N1 325-200 N2 200-100 N3 100-50.	
				BO	2107	70 58.77	134 47.30	333			04 50-25 N5 25-0	
				EN	2119	70 58.74	134 47.03	329				
04	KUG04	BON	44	BE	21:28	70 58.89	134 47.71	341	200			
				EN	21:49	70 59.67	134 45.82	351				
04	KUG04	BOX	45	BE	22:12	70 58.84	134 48.95	353			Box - 140	
				BO	22:17	70 58.80	134 48.82	351			Good	
				EN	22:24	70 58.76	134 48.50	345				
04	KUG04	BOX	46	BE	22:35	70 58.71	134 48.05	337			Box - 141	
				BO	22:39	70 58.69	134 47.87	335				
				EN	22:47	70 58.67	134 47.55	332				
04	KUG04	BOX	47	BE	22:50	70 58.64	134 47.22	327			Box - 142	
				BO	22:56	70 58.64	134 47.18	327				

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Transmissometer to be cleaned before each cast, do not use Ammonia products

Notes: _____

Oxygen sensor noisy
After cast, reviewed cast 32, 40 & 41. Noise starts near bottom on down cast
of 40. No noise in 32. Swapped out SBE43 1202 with 2559, for next cast.

DAILY SCIENCE LOG

Month				Year				Ship				Cruise ID		Page
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments			
04	KUG-04	BOX	47	EN	2302	70 58.62	134 49.90	322						
04	KUG-04	BBT	48	BE	2320	70 58.94	134 48.59	353		ARM				
				BO	2339	70 58.42	134 50.45	346						
				EN	23 49	70 58.24	134 51.12	347						
05	KUG-04	WZA	49	BE	00 24	70 57.35	134 53.86	343		ARM				
				BO	00 34	70 57.96	134 51.95	349						
				EN	00 54	70 58.53	134 49.63	345						
05	KUG-05	ROS	50	BE	1308	71 02.97	134 52.51	505	500	MD	6 Nishins			
				BO	1317	71 02.90	134 52.58							
				EN	1336	71 02.71	134 52.55	497						
05	KUG-05	ROS	51	BE	1400	71 02.74	134 52.26		80		12 Nishins			
				BO	1402	71 02.72	134 52.26							
				EN	1420	71 02.76	134 52.31							
05	KUG-05	BON	52	BE	1431	71 02.92	134 51.90	489	200	ARM	start point estimated from Captains chart			
				EN	1449	71 03.39	134 50.27	485			track.			
05	KUG-05	BOX	53	BE	1510	71 02.98	134 52.51	500		ARM	Box - 143			
				BO	1515	71 02.95	134 52.45	498						
				EN	1524	71 02.91	134 52.44	497						
05	KUG-05	BOX	54	BE	1536	71 02.94	134 52.41	496		ARM	Box - 144			

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Notes:

Transmissometer to be cleaned before each cast, do not use Ammonia products

05 Aug 2014

- Sunny, calm, cold ($\sim 1^{\circ}\text{C}$)
- up to 3/10 ice

- noisy ΔO — cable, pump plumbing?
- cleaned connector. better, not great.

DAILY SCIENCE LOG

Month				Year		Ship				Cruise ID		Page
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments	
05	KUG05	BOX		BO	1546	71 02.80	134 52.38	495				
				EN	1552	71 02.76	134 52.40	495				
05	KUG05	BBT	55	BE	1607	71 02.417	134 51.33	479		ARM		
				BO	1619	71 02.71	134 49.86	470				
				EN	1629	71 02.87	134 49.11	466				
05	KUG05	WZA	56	BE	1703	71 02.37	134 52.71	493		ARM		
				BO	1720	71 02.89	134 49.07	466				
				EN	1740	71 03.61	134 47.38	463				
05	KUG05	WZA	57	BE	19:00	71 02.66	134 52.09	488		ARM		
				BO	19:27	71 03.94	134 47.46	471				
				EN	19:47	71 04.51	134 45.06	470				
05	KUG05	MPS	58	BE	20:46	71 02.95	134 52.57	500	490	ARM	N1: B-200 N2: 200-100 N3: 100-50	
				BO	2053	71 02.93	134 52.46	498			N4: 50-25 N5: 25-0	
				EN	2103	71 02.90	134 52.25	495			operator - Mike Dempsey	
05	KUG05a	MWT	59	BE	2350	71 03.87	134 45.07	452	400	ARM	mwt-045	
06				BO	0003	71 03.15	134 43.84	428				
				EN	0019	71 02.40	134 42.71	404				
				OW	0029	71 02.28	134 42.41	398				

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CTD = CTD without Rosette
ROS = Rosette plus CTD
WZA = Western Trawl

BBT = Benthic Beam Trawl
BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

BE = Beginning Time
BO = Arrive on Bottom Tim
UP = Start up Time
EN = End Time

ow = out of water

Notes:

Transmissometer to be cleaned before each cast, do not use Ammonia products

DAILY SCIENCE LOG

Page _____

Month				Year				Ship			Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments	
06	KUG05a	MWT	60	BE	01:01	71 02.27	134 43.38	408.01	109	ARM	mwt-046	
				BO	01:04	71 02.53	134 43.29	411.57				
				EN	01:24	71 03.48	134 43.79	434.24				
				OW	01:32	71 03.61	134 44.19	442.78				
06	KUG05a	ROS	61	BE	1316	71 02.84	134 52.41	498	493	MD	12 Nishins Andrea's mixing experiment	
				BO	1325	71 2.76	134 52.35	49			EDIC	
				EN	1346	71 2.62	134 52.30					
06	KUG04a	CTD	62	BE	1504	70 58.65	134 48.16	338	320	ARM	Cable needs more weight	
				BO	1506	70 58.64	134 48.18				→ incomplete cast.	
				EN	1507	70 58.63	134 48.19					
06	KUG04a	CTD	63	BE	1511	70 58.60	134 48.22	336	320	ARM	Set in conjunction w hydroacoustics	
				BO	1516	70 58.56	134 48.23	336			net sampling.	
				EN	1522	70 58.53	134 48.28	336				
06	KUG04a	MPS	64	BE	1531	70 58.47	134 48.61	337	345		Set in conjunction w hydroacoustics	
				BO	1543	70 58.23	134 50.05	335			sampling. U1 300-200 U2 200-175 U3 175-125	
				EN	1609	70 57.76	134 52.81	350			N4 125-50 N5 50-0, but not recording.	
06	KUG04a	MPS	65	BE	1620	70 57.51	134 53.58	349	46		Test run to 40m. Trigger set @ 30m.	
				BO	1622	70 57.55	134 53.39				Did not trigger.	
				EN	1625	70 57.64	134 53.06	346				

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl
BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

BE = Beginning Time
BO = Arrive on Bottom Tim
UP = Start up Time
EN = End Time

Notes: _____

Transmissometer to be cleaned before each cast, do not use Ammonia products

new DO/ALT cable installed. No noise Hurrah!

DAILY SCIENCE LOG

Page _____

Month				Year				Ship				Page	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments		
06	KUG04a	MWT	66	BE	1648	70 58.29	134 50.43	343	300	ARM	Failed tow. Net did not deploy correctly. Not enough height, too much speed. Retrieved early & re-deployed. mwt_047		
				BO	1657	70 57.92	134 52.10	349					
				EN									
				OW	1715	70 57.55	134 53.59						
06	KUG04a	MWT	67	BE	1740	70 58.15	134 51.08	344	300	ARM	MWT-048		
				BO	1748	70 57.77	134 52.51						
				EN	1808	70 57.19	134 55.11						
				OW	1816	70 57.11	134 55.58						
06	KUG04a	MWT	68	BE	1840	70 56.81	134 57.07	354	150	ARM	MWT-049		
				BO	1845	70 57.02	134 56.22						
				EN	1905	70 57.63	134 53.72						
				OW	1909	70 57.70	134 53.61						
06	KUG04a	MPS	69	BE	1954	70 58.16	134 52.07	355	40	ARM	Test 2 to 40m. Trigger set at 30m. worked properly. Re-set of event 63.		
				BO	1956	70 58.12	134 52.33	356					
				EN	1958	70 58.08	134 52.55	356					
06	KUG04a	MPS	70	BE	2006	70 57.90	134 53.60	360	315	ARM	Success.		
				BO	2020	70 52.54	134 54.74	360					
				EN	2046	70 56.87	134 56.85	359					

Event Type:

BBT = Benthic Beam Trawl
BOT = Bottle cast, no CTD

Time Code:

Transducer:

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl
BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

BE = Beginning Time
BO = Arrive on Bottom Tim
UP = Start up Time
EN = End Time

Notes: _____

Transmissometer to be cleaned before each cast, do not use Ammonia products

DAILY SCIENCE LOG

Page _____

Month				Year				Ship			Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments	
06	KUG04a	ROS	71	BE	20:59	70 56.78	134 57.30	362	300	MD	12 Nishins - water for Andrew.	
				BO	2104	70 56.82	134 57.48					
				EN	2114	70 56.84	134 57.74					
06	KUG03a	CTD	72	BE	2223	70 55.77	134 45.29	191	180	ARM		
				BO	2227	70 55.77	134 45.27	191				
				EN	2231	70 55.78	134 45.29	192				
06	KUG03a	MWT	73	BE	2259	70 55.83	134 47.56	217	150	ARM	MWT-50	
				BO	2303	70 55.71	134 46.65	204				
				EN	2323	70 56.12	134 43.75	201				
				OW	2327	70 56.19	134 43.56	204				
06	KUG03a	MWT	74	BE	2345	70 56.49	134 41.69	202	50	ARM	MWT-51	
				BO	2347	70 56.34	134 42.23	199				
07?				EN	0007	70 55.85	134 44.77	190				
				OW	0008	70 55.84	134 44.80	190				
08	BNK01	ROS	75	BE	1302	72 07.78	127 02.31	56	50	MD	9 Nishins.	
				BO	1303	72 07.82	127 02.28					
				EN	1313	72 07.78	127 02.18					
08	BNK01	MPS	76	BE	1320	72 07.75	127 02.08	50	40	ARM	No flow. Do it again	
				BO	1322	72 07.74	127 02.04					

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl

BON = Bongo (note Hor/Obl/Ver)

MPS = Multi-net

MWT = Midwater trawl

BOX = Box Core

Time Code:

BE = Beginning Time

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UP = Start up Time

EN = End Time

Transmissometer to be cleaned before each cast, do not use Ammonia products

Notes: _____

$\Delta T \propto \Delta S$ large at times on upcast?

DAILY SCIENCE LOG

Page _____

Month				Year		Ship				Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments
				EN	1324	72 07.73	127 01.99	50			
08	BNK01	MPS	77	BE	1329	72 07.71	127 01.89	48		ARM	Repeat of event 76. Still no flow readings
				BO	1333	72 07.69	127 01.83	49			40-20, 20-10, 10-0 m
				EN	1334	72 07.68	127 01.80	48			
08	BNK01	BON	78	BE	1341	72 07.68	127 01.48	50	40	ARM	
				EN	1405	72 08.23	127 03.20	51			
08	BNK01	BOX	79	BE	1418	72 07.82	127 02.29	51		ARM	Box 145
				BO	1419	72 07.81	127 02.27	51			-hard bottom, no sample
				EN	1421	72 07.80	127 02.24	50			
08	BNK01	BOX	80	BE	1425	72 07.78	127 02.17	50		ARM	Box 146
				BO	1426	72 07.77	127 02.14	50			-hard bottom, no sample
				EN	1428	72 07.75	127 02.11	50			
08	BNK01	BOX	81	BE	1433	72 07.72	127 02.04	51		ARM	Box 147
				BO	1434	72 07.72	127 02.02	50			-same
				EN	1436	72 07.71	127 01.99	50			
08	BNK01	BOX	82	BE	1450	72 08.21	127 03.17	51		ARM	Box 148
				BO	1457	72 08.18	127 03.18	51			-moved to new location, new station
				EN	1453	72 08.18	127 03.18	51			to find softer ground
											-partial box

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl

BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

BE = Beginning Time
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UP = Start up Time
EN = End Time

Notes: _____

Transmissometer to be cleaned before each cast, do not use Ammonia products

08 Aug 2014

This page is for any notes or observations

Fog - visibility 50m at times
Calm seas
Light easterly winds

DAILY SCIENCE LOG

Page _____

Month				Year				Ship			Cruise ID
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments
08	BNK01	BBT	83	BE	1511	72 08.51	127 03.84	52		ARM	bbt-91
				BO	1520	72 08.05	127 02.80	51			
				EN	1530	72 07.78	127 02.21	52			
08	BNK01	WZA	84	BE	1555	72 08.35		52		ARM	wza-115
				BO	1559	72 08.08	127 02.96	52			
				EN	1619	72 07.26	127 01.05	51			
08	BNK02	ROS	85	BE	1844	72 5.92	127 28.75	359	346	MD	6 Nishins.
				BO	1850	72 5.84	127 28.65				
				EN	1905	72 5.76	127 28.63				
08	BNK02	ROS	86	BE	1927	72 5.52	127 28.63	350	80	MD	12 Nishins
				BO	1928	72 5.91	127 28.60				
				EN	1937	72 5.86	127 28.46				
08	BNK02	MPS	87	BE	1945	72 05.80	127 28.36	348	348	ARM	N1 340-200 N2 200-100 N3 100-50
				BO	1955	72 05.73	127 28.24	348			N4 50-25 N5 25-0
				EN	2003	72 05.66	127 28.16	351			
08	BNK02	BON	88	BE	2013	72 05.63	127 28.05	351	200	ARM	
				EN	2031	72 06.14	127 29.55	350			
08	BNK02	BOX	89	BE	2043	72 05.93	127 28.93	349		ARM	Box-149
				BO	2047	72 05.89	127 28.87	350			

Event Type:

BOT = Bottle cast, no CTD
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BON = Bongo (note Hor/Obl/Ver)
 MPS = Multi-net
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Time Code:

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 UP = Start up Time
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Transmissometer to be cleaned before each cast, do not use Ammonia products

Notes: _____

Fluorometer noisy with offset on upcast — clean connectors.

DAILY SCIENCE LOG

Page _____

Month				Year				Ship				Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...		Longitude (W) DDD MM.MM...		Bottom Depth	Max Depth	Logger's initials	Comments
				EN	2054	72	05.84	127	28.81	351			
8	BNK02	Box	90	BE	2103	72	05.75	127	28.78	352		ARM	Box -150
				BO	2108	72	05.71	127	28.76	352			
				EN	2113	72	05.67	127	28.75	352			
8	BNK02	BBT	91	BE	2132	72	06.64	127	31.40	350		ARM	bbt-92
				BO	2148	72	06.43	127	29.44	350			
				EN	2158	72	05.81	127	28.67	351			
8	BNK02	WZA	92	BE	2225	72	05.20	127	26.69	353		ARM	WZA-116
				BO	2235	72	05.79	127	28.60	351			
				EN	2255	72	06.45	127	30.90	352			
9	BNK03	ROS	93	BE	1426	72	5.59	129	58.30	367	362	MD	5 Nishins
				BO	1433	72	5.49	129	58.42				
				EN	1444	72	5.33	129	58.62				
9	BNK03	ROS	94	BE	1505	72	5.61	129	58.44	365	80	MD	12 Nishins.
				BO	1507	72	5.57	129	58.48				
				EN	1521	72	5.37	129	58.80				
9	BNK03	^{MPS} ROS	95	BE	1532	72	05.66	129	58.36	366	350		N31-200 N2 200-100 N3 100-50
				BO	1542	72	05.54	129	58.35	361 365			N4 50-25 N5 25-0
				EN	1550	72	05.45	129	58.45	366			

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
WZA = Western Trawl

BBT = Benthic Beam Trawl
BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

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BO = Arrive on Bottom Tim
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EN = End Time

Notes: _____

Transmissometer to be cleaned before each cast, do not use Ammonia products

Version: 22 May 2014

DAILY SCIENCE LOG

Page _____

Month				Year				Ship			Cruise ID
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments
9	BNK03	BOX	96	BE	1604	72 05.61	129 58.43	363	363	ARM	Box - 151
				BO	1608	72 05.54	129 58.45	364	364		
				EN	1614	72 05.47	129 58.52	365			
9	BNK03	Box	97	BE	1623	72 05.35	129 58.70	364		ARM	Box - 152
				BO	1627	72 05.30	129 58.78	365			
				EN	1633	72 05.28	129 58.87	366			
9	BNK03	BON	98	BE	1644	72 05.07	129 59.72	365		ARM	BE coord. recorded at 1646
				EN	1701	72 04.63	130 01.51	381			
9	BNK03	BBT	99	BE	1748	72 06.51	129 53.69	371		ARM	
				BO	1803	72 06.07	129 55.65	367			
				EN	1813	72 05.82	129 56.65	365			
9	BNK03	WZA	100	BE	1850	72 06.35	129 57.04	365		ARM	Hauled back early b/c we may have scooped mud.
				BO	1904	72 05.35	129 56.46	361			
				EN	1915	72 04.85	129 56.63	356			
9	BNK04	ROS	101	BE	2208	72 05.78	128 48.42	380		MD	5 Nishins aborted 6nd deploy
				BO							
				EN							
	BNK04	ROS	102	BE	2217	72 5.70	128 48.39	388	377	MD	good 6 Nishins
				BO	2225	72 5.61	128 48.43				CTD file = 2014-56-002 and 2014-56-003, disregard 2014-56-100

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
WZA = Western Trawl

BBT = Benthic Beam Trawl

BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

BE = Beginning Time
BO = Arrive on Bottom Tim
UP = Start up Time
EN = End Time

Notes: _____

Transmissometer to be cleaned before each cast, do not use Ammonia products

PAR cover on whole cast ops!

DAILY SCIENCE LOG

Month				Year				Ship				Cruise ID		Page _____
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...		Longitude (W) DDD MM.MM...		Bottom Depth	Max Depth	Logger's initials	Comments	
9	BNK04	ROS	102	EN	2236	72	5.48	128	48.42					
9	BNK04	MPS ROS	103	BE	2255	72	6.03	128	49.24	380	80	MD.	12 Niskins	
				BO	2257	72	6.00	128	49.26					
				EN	2307	72	5.87	128	49.38					
9	BNK04	MPS	104	BE	2316	72	05.79	128	48.65	379	370	ARM	N1 -200 N2 200-100 N3 100-50	
				BO	2325	72	05.73	128	48.59	379			N4 50-25 N5 25-0	
				EN	2335	72	05.60	128	48.67	380				
9	BNK04	BON	105	BE	2344	72	05.50	128	48.67	376	200	ARM		
				EN	00.04	72	06.21	128	48.87	376				
10	BNK04	BOX	106	BE	0013	72	05.95	128	49.06	378		ARM	Box 153	
				BO	0019	72	05.92	128	49.04	379				
				EN	0026	72	05.86	128	49.04	379				
10	BNK04	BOX	107	BE	0036	72	05.74	128	49.20	382		ARM	Box 154	
				BO	0040	72	05.68	128	49.27	380				
				EN	0046	72	05.62	128	49.28	380				
10	BNK04	BBT	108	BE	0104	72	04.87	128	47.23	386			bbt_94	
				BO	0120	72	05.53	128	48.22	380				
				EN	0130	72	5.80	128	48.69	379				

Event Type:

BOT = Bottle cast, no CTD
 CTD = CTD without Rosette
 ROS = Rosette plus CTD
 W2A = Western Trawl

BBT = Benthic Beam Trawl
 BON = Bongo (note Hor/Obl/Ver)
 MPS = Multi-net
 MWT = Midwater trawl
 BOX = Box Core

Time Code:

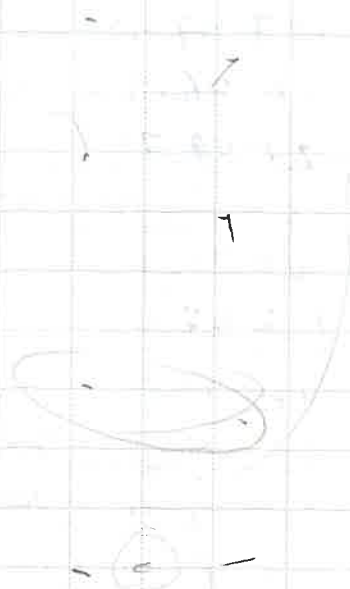
BE = Beginning Time
 BO = Arrive on Bottom Tim
 UP = Start up Time
 EN = End Time

Notes: _____

Transmissometer to be cleaned before each cast, do not use Ammonia products

10 Aug 2014

- Some fog in morning
- cloud 4/10
- wind N10-15, calm by evening



DAILY SCIENCE LOG

Page _____

Month				Year				Ship				Cruise ID		Page
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments			
10	BNK04	WZA	109	BE	0200	72 06.36	128 49.65	378		ARM	Lat/long recorded at 02:02			
				BO	0211	72 05.82	128 48.77	382						
				EN	0231	72 04.93	128 47.34	387						
10	BNK05	ROS	110	BE	1336	72 55.72	127 47.08	249	245	MD	5 Niskings			
				BO	1342	72 55.68	127 46.87							
				EN	1353	72 55.56	127 46.79							
10	BNK05	ROS	111	BE	1411	72 55.71	127 47.18	249	80	MD	12 Niskings.			
				BO	1413	72 55.69	127 47.12							
				EN	1426	72 55.56	127 47.03							
10	BNK05	MPS	112	BE	1437	72 55.88	127 47.53	251	240	ARM	N1 240-100 N2 100-50 N3 50-25			
				BO	1445	72 55.62	127 47.55	250			N4 25-0			
				EN	1450	72 55.56	127 47.52	249						
10	BNK05	BON	113	BE	1503	72 55.46	127 47.30	250	200	ARM				
				EN	1524	72 56.21	127 47.93							
10	BNK05	BOX	114	BE	1536	72 55.73	127 47.47	250		ARM	Box-155			
				BO	1540	72 55.69	127 47.43	252						
				EN	1545	72 55.65	127 47.38	252						
10	BNK05	BOX	115	BE	1553	72 55.57	127 47.37	249		ARM	Box-156			
				BO	1556	72 55.53	127 47.39	248						

Event Type:

BBT = Benthic Beam Trawl

Time Code:

Event Type:

BOT = Bottle cast, no CTD
 CTD = CTD without Rosette
 ROS = Rosette plus CTD
 WZA = Western Trawl

BBT = Benthic Beam Trawl
 BON = Bongo (note Hor/Obl/Ver)
 MPS = Multi-net
 MWT = Midwater trawl
 BOX = Box Core

Time Code:

BE = Beginning Time
 BO = Arrive on Bottom Tim
 UP = Start up Time
 EN = End Time

Notes: _____

Transmissometer to be cleaned before each cast, do not use Ammonia products

OAT OC.

DAILY SCIENCE LOG

Page _____

Month				Year				Ship			Cruise ID		Page _____
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments		
10	BNK05	BOX	115	EN	1601	72 55.49	127 47.41	250					
10	BNK05	BBT	116	BE	1618	72 54.63	127 47.87	252		ARM			
				BO	1627	72 55.06	127 47.63	250					
				EN	1637	72 55.38	127 47.30	245					
10	BNK05	W2A	117	BE	1705	72 54.49	127 48.04	254		ARM			
				BO	1712	72 55.08	127 47.64	251					
				EN	1732	72 56.02	127 47.56	249					
10	BNK06	ROS	118	BE	2049	72 55.83	126 23.57	61	56	MD	9 Nishins		
				BO	2051	72 55.84	126 23.56						
				EN	2100	72 55.84	126 23.61						
10	BNK06	MPS	119	BE	2109	72 55.82	126 23.67	58		ARM	N1 49-20 N2 20-20 N3 10-0		
				BO	2112	72 55.82	126 23.66	49					
				EN	2114	72 55.82	126 23.66	58					
10	BNK06	BON	120	BE	2123	72 55.85	126 23.46	58		ARM			
				EN	2144	72 56.57	126 21.83	53					
10	BNK06	BOX	121	BE	2204	72 55.71	126 23.74	55		ARM	BOX-157		
				BO	2206	72 55.71	126 23.74	55					
				EN	2207	72 55.71	126 23.72	55					
10	BNK06	BOX	122	BE	2215	72 55.72	126 23.57	52		ARM	BOX 158		

Event Type: BBT = Benthic Beam Trawl Time Code:

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl
BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

BE = Beginning Time
BO = Arrive on Bottom Tim
UP = Start up Time
EN = End Time

Notes:

Transmissometer to be cleaned before each cast, do not use Ammonia products

DAILY SCIENCE LOG

Page _____

Month				Year				Ship			Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments	
10	BNK06	BOX	122	BO	2216	72 55.72	126 23.56	52				
				EN	2218	72 55.72	126 23.54	51				
10	BNK06	Box	123	BE	2223	72 55.71	126 23.48	50		ARM	BOX_159	
				BO	2224	72 55.71	126 23.47	50				
				EN	2225	72 55.71	126 23.46	49				
10	BNK06	Box	124	BE	2228	72 55.70	126 23.41	48		ARM	BOX_160	
				BO	2229	72 55.70	126 23.40	48				
				EN	2230	72 55.70	126 23.38	48		ARM		
10	BNK06	Box	125	BE	2240	72 55.62	126 24.81	63		↓	BOX_161	
				BO	2241	72 55.62	126 24.80	63				
				EN	2243	72 55.62	126 24.79	63				
10	BNK06	BBT	126	BE	2257	72 55.31	126 24.43	43		ARM	bbt-96	
				BO	2308	72 55.77	126 23.33	51				
				EN	2318	72 56.01	126 22.64	49				
10	BNK06	WZA	127	BE	2338	72 56.85	126 21.25	50		ARM	WZA_126	
				BO	2342	72 56.64	126 21.61	50				
				EN	0002	72 55.76	126 23.37	51				
11	BNK07	ROS	128	BE	1303	72 5.89	127 8.46	209	203	MD	4 Nishins Big chlamax!	
				BO	1308	72 5.82	127 8.47					

Event Type:

BOT = Bottle cast, no CTD
 CTD = CTD without Rosette
 ROS = Rosette plus CTD
 WZA = Western Trawl

BBT = Benthic Beam Trawl
 BON = Bongo (note Hor/Obl/Ver)
 MPS = Multi-net
 MWT = Midwater trawl
 BOX = Box Core

Time Code:

BE = Beginning Time
 BO = Arrive on Bottom Time
 UP = Start up Time
 EN = End Time

Transmissometer to be cleaned before each cast, do not use Ammonia products

Notes: _____

11 Aug 2014

- Sunny (4/10)
- 4°C
- minor chop $< 0.5\text{m}$

DAILY SCIENCE LOG

Page _____

Month				Year				Ship				Cruise ID
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments	
11	BNK07	ROS	128	EN	1316	72 5.73	127 8.47					
	BNK07	ROS	129	BE	1337	72 5.91	127 8.54	207	80		12 Nishins	
				BO	1340	72 5.88	127 8.53					
				EN	1352	72 5.77	127 8.49					
11	BNK07	MPS	130	BE	1403	72 06.02	127 08.77	199	199	ARM	N1 10A-100m N2 100-50m N3 50-25m	
				BO	1414	72 05.92	127 08.82	207	199		N4 25-0m	
				EN	1419	72 05.88	127 08.77	207				
11	BNK07	BON	131	BE	1433	72 06.01	127 08.37	195	190	ARM	wire out = 280m	
				EN	1455	72 05.29	127 06.45	200				
11	BNK07	BOX	132	BE	1513	72 06.04	127 08.94	204		ARM	BOX - 162	
				BO	1516	72 06.02	127 08.96	205				
				EN	1520	72 06.00	127 08.96	206				
11	BNK07	BOX	133	BE	1529	72 06.06	127 08.56	193		ARM	BOX - 163	
				BO	1531	72 06.06	127 08.55	192				
				EN	1535	72 06.06	127 08.56	193				
11	BNK07	BBT	134	BE	1545	72 06.36	127 09.62	198		ARM	bbt - 97	
				BO	1557	72 05.97	127 08.52	199				
				EN	1607	72 05.71	127 07.82	201				

Event Type:

BOT = Bottle cast, no CTD
 CTD = CTD without Rosette
 ROS = Rosette plus CTD
 W2A = Western Trawl

BBT = Benthic Beam Trawl

BON = Bongo (note Hor/Obl/Ver)
 MPS = Multi-net
 MWT = Midwater trawl
 BOX = Box Core

Time Code:

BE = Beginning Time
 BO = Arrive on Bottom Tim
 UP = Start up Time
 EN = End Time

Transmissometer to be cleaned before each cast, do not use Ammonia products

Notes: _____

Version: 22 May 2014

DAILY SCIENCE LOG

Page _____

Month				Year				Ship				Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments		
11	BNK07	WLA	135	BE	1632	72 04.95	127 05.40	200		ARM	WZA-121		
				BO	1640	72 05.41	127 06.87	200					
				EN	1700	72 06.12	127 08.99	199					
11	BNK-HC1	CTD	136	BE	1955	72 06.00	126 48.98	30		ARM	Scabirrol 19		
				BO	1956	72 05.98	126 48.98	32					
				EN	1957	72 05.98	126 48.97	32					
11	BNK-HC1	BON	137	BE	20:02	72 06.04	126 48.89	31	25	ARM			
				EN	2020	72 06.73	126 49.85	32					
11	BNK-HC2	MWT	138	BE	2049	72 07.74	126 51.77	31	10	ARM	MWT-52		
				BO	2050	72 07.63	126 51.56	31					
				EN	2110	72 06.43	126 49.51	30					
				OW	2111	72 06.43	126 49.51	30					
11	BNK-HC2	CTD	139	BE	2307	72 05.92	127 09.91	225	215	ARM			
				BO	2311	72 05.89	127 09.83	225					
				EN	2314	72 05.86	127 09.75	225					
11	BNK-HC2	MPS	140	BE	2319	72 05.86	127 09.64	224	205	ARM	205m is trigger depth		
				BO	2329	72 06.13	127 10.26	221			N1 200-150 (Swim) N2 150-100 (Swim)		
				EN	2357	72 06.86	127 12.27	218			N3 100-50 (Swim) N4 50-25 (Swim)		
											N5 25-0 (Swim)		

Event Type:

BRT = Benthic Beam Trawl

Time Codes:

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl

BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

BE = Beginning Time
BO = Arrive on Bottom Tim
UP = Start up Time
EN = End Time

Notes: _____

Transmissometer to be cleaned before each cast, do not use Ammonia products

DAILY SCIENCE LOG

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Month				Year				Ship			Cruise ID
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments
11	BNK-HC2	MWT	141	BE	0023	72 06.74	127 11.97	218	197	ARM	MWT-53
				BO	0025	72 06.65	127 11.75				
				EN	0047	72 05.81	127 09.37				
				OW	0053	72 05.68	127 09.13				
12	BNK-HC3	ROS	142	BE	1503	72 5.76	127 50.03	377	373	MD	12 Niskins DIC & Not test
				BO	1510	72 5.86	127 50.21				
				EN	1527	72 5.61	127 50.77				
12	BNK-HC3	MPS	143	BE	1539	72 05.46	127 50.78	380	360	ARM	N1 350-300 N2 300-250 N3 250-200
				BO	1659						N4 200-60 N5 60-0
				EN	1639	72 05.80	127 43.44	374			
12	BNK-HC3	MWT	144	BE	1657	72 05.88	127 42.08			ARM	MWT-54
				BO	1713	72 05.88	127 45.43	373			
				EN	1733	72 05.91	127 48.65	377			
				OW	1744	72 05.83	127 49.50	378			
12	BNK-HC4	CTD	145	BE	2117	72 05.87	128 53.50	382		ARM	
				BO	2123	72 05.89	128 53.70	380			
				EN	2128	72 05.91	128 53.94	382			
12	BNK-HC4	MPS	146	BE	2133	72 05.93	128 53.92	380		ARM	N1 350-250 N2 250-200 N3 200-60
				BO	2147	72 06.45	128 54.40	380	360		N4 60-30 N5 30-0

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl
BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

BE = Beginning Time
BO = Arrive on Bottom Tim
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EN = End Time

Notes: _____

Transmissometer to be cleaned before each cast, do not use Ammonia products

DAILY SCIENCE LOG

Page _____

Month				Year				Ship			Cruise ID
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments
12	BNK-HC4	MPS	146	EN	2220	72 07.52	128 56.40	372			
12	BNK-HC4	MWT	147	BE	2235	72 07.81	128 56.91	371			MWT-55
				BO	2347	72 07.13	128 55.68	376	300		
				EN	2307	72 08.21	128 53.65	379			
				OW	2317	72 06.05	128 53.48				
12	BNK-HC4	MWT	148	BE	2349	72 05.90	128 50.54				MWT-56
				BO	2352	72 05.22	128 51.05	383	50		
				EN	0012	72 05.96	128 53.56	381			
				OW	0015	72 05.98	128 53.75				
13	NTC01	ROS	149	BE	1303	71 19.09	126 53.12	354	348		6 Nishins.
				BO	1311	71 18.98	126 53.03				in CTD file says station = NTC01
				EN	1323	71 18.81	126 52.88	353	80		
13	NTC01	ROS	150	BE	1343	71 19.07	126 53.46	353	80		12 Nishins
				BO	1345	71 19.03	126 53.42				in CTD file says station = NTC02
				EN	1356	71 18.85	126 53.25				
13	NTC01	MPS	151	BE	1415	71 19.04	126 53.31	353			N1 341-200 N2 200-100 N3 100-50
				BO	1423	71 18.90	126 53.18	351	341		N4 50-25 N5 25-0
				EN	1431	71 18.79	126 53.13	351			

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl
BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

BE = Beginning Time
BO = Arrive on Bottom Time
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Notes: _____

Transmissometer to be cleaned before each cast, do not use Ammonia products

DAILY SCIENCE LOG

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Month				Year				Ship				Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments		
13	NTC01	BON	152	BE	1442	71 18.53	126 52.83	351	200	ARM			
				EN	1503	71 19.22	126 54.08	351					
13	NTC01	BOX	153	BE	1517	71 19.16	126 53.25	352		ARM	Box - 164		
				BO	1522	71 19.08	126 53.19	351			No good.		
				EN	1528	71 18.99	126 53.14	351					
13	NTC01	BOX	154	BE	1538	71 18.81	126 52.99	351		ARM	Box - 165		
				BO	1543	71 18.73	126 52.95	352			Good		
				EN	1551	71 18.62	126 52.89	351					
13	NTC01	BOX	155	BE	1609	71 19.03	126 53.09	351		ARM	Box - 166		
				BO	1613	71 18.96	126 53.31	351					
				EN	1618	71 18.89	126 53.27	351					
13	NTC01	BBT	156	BE	1634	71 17.84	126 52.56	351		ARM	BBT - 98		
				BO	1653	71 18.66	126 53.11	350					
				EN	1703	71 18.97	126 53.48	350					
13	NTC02	W2A	157	BE	1735	71 19.66	126 54.97	350		ARM	W2A - 122		
				BO	1747	71 18.88	126 53.31	350					
				EN	1807	71 17.91	126 52.48	351					
				</									

Event Type:

BOT = Bottle cast, no CTD
 CTD = CTD without Rosette
 ROS = Rosette plus CTD
 W2A = Western Trawl

BBT = Benthic Beam Trawl
 BON = Bongo (note Hor/Obl/Ver)
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Time Code:

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Notes:

Transmissometer to be cleaned before each cast, do not use Ammonia products

DAILY SCIENCE LOG

Page _____

Month				Year				Ship				Cruise ID
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments	
14	ESC03	ROS	158	BE	1304	70 20.092	131 0.42	20	18.1		6 Nishins	
				BO	1306	70 20.07	131 0.54					
				EN	1313	70 20.00	131 0.82					
14	ESC03	BON	159	BE	1320	70 19.94	131 00.89	17		ARM		
				EN	1342	70 20.48	130 59.41	17				
14	ESC03	BOX	160	BE	1356	70 20.31	131 00.35	17		ARM	Box - 167	
				BO	1356	70 20.31	131 00.05	17			No good	
				EN	1357	70 20.30	131 00.89	17				
14	ESC03	BOX	161	BE	1401	70 20.26	131 00.27	17		ARM	Box - 168	
				BO	1402	70 20.26	131 00.31	17			Good.	
				EN	1403	70 20.24	131 00.36	17				
14	ESC03	BOX	162	BE	1415	70 20.09	131 00.12	16		ARM	Box - 169	
				BO	1415	70 20.09	131 00.13	17				
				EN	1416	70 20.08	131 00.15	17				
14	ESC03	BBT	163	BE	1429	70 20.04	131 00.35	17		ARM	BBT - 99	
				BO	1434	70 20.18	131 00.13	18				
				EN	1438	70 20.31	130 59.92	17				
14	ESC03	BBT	164	BE	1446	70 20.48	130 59.61	17		ARM	BBT - 100	
				BO	1449	70 20.55	130 59.47	16				

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl
BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

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EN = End Time

Transmissometer to be cleaned before each cast, do not use Ammonia products

Notes: _____

14 Aug 2014

overcast

5°C

158 ROS - bottles 5 & 6 did not drip

- no water sampler control.

tested on deck - no comms with pylon

inspected and cleaned pylon connections

- some gunk on pin 1 on pylon found.

TOK.

This page is for any notes or observations

DAILY SCIENCE LOG

Month				Year				Ship				Page _____	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N)	Longitude (W)	Bottom Depth	Max Depth	Logger's initials	Cruise ID	Comments	
						DD MM.MM...	DDD MM.MM...						
14	ESC-03	BBT	164	EN	1454	70 20.68	130 59.19	18					
14	ESC-03	W2A	165	BE	1510	70 20.66	130 58.70	17		ARM		W2A-123	
				BO	1513	70 20.51	130 59.18	17					
				EN	1518	70 20.34	130 59.79	18					
14	ESC04	ROS	166	BE	1841	70 5.24	132 7.76	20				6 Niskins	
				BO	1843	70 5.23	132 7.86						
				EN	1846	70 ↓	132 ↓						
14	ESC04	BON	167	BE	1903	70 05.17	132 08.63	19		ARM			
				EN	1922	70 05.70	132 07.42	20					
14	ESC04	BOX	168	BE	1937	70 05.29	132 07.88	20		ARM		BOX-170	
				BO	1937	70 05.29	132 07.91	20					
				EN	1938	70 05.29	132 07.94	20					
14	ESC04	BOX	169	BE	1948	70 05.27	132 08.31	20		ARM		BOX-171	
				BO	1949	70 05.26	132 08.33	19					
				EN	1950	70 05.25	132 08.41	20					
14	ESC04	BBT	170	BE	1959	70 05.14	132 08.57	19		ARM		bbt-101	
				BO	2002	70 05.16	132 08.26	19					
				EN	2007	70 05.22	132 07.88	19					
14	ESC04	BBT	171	BE	2013	70 05.28	132 07.41	20		ARM		bbt-102	

ent Type:
BOT = Bottle cast, no CTD

BBT = Benthic Beam Trawl
BON = Bongo (note Hor/Ohl/Ver)

Time Code:
BE = Beginning Time

Transmissometer to be cleaned before use

Event Type:

BOT = Bottle cast, no CTD
 CTD = CTD without Rosette
 ROS = Rosette plus CTD
 W2A = Western Trawl

BBT = Benthic Beam Trawl
 BON = Bongo (note Hor/Obl/Ver)
 MPS = Multi-net
 MWT = Midwater trawl
 BOX = Box Core

Time Code:

BE = Beginning Time
 BO = Arrive on Bottom Tim
 UP = Start up Time
 EN = End Time

Notes:

Transmissometer to be cleaned before each cast, do not use Ammonia products

This page is for any notes or observations

NO dropped out
-connectors cleaned

DAILY SCIENCE LOG

Month				Year		Ship					Cruise ID		Page
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments		
14	ESCO4	BBT	171	BO	2015	70 05.31	132 07.19	21					
				EN	2020	70 05.37	132 06.81	21					
14	ESCO4	W2A	172	BE	2037	70 05.44	132 06.14	19		ARM	W2A-124		
				BO	2041	70 05.35	132 06.67	19					
				EN	2046	70 05.22	132 07.41	18					
17	FRK01	ROS	173	BE	1314	70 4.94	126 11.87	36	31		7 Niskins.		
				BO	1315	70 4.96	126 11.97						
				EN	1322	70 4.94	126 12.17						
17	FRK01	MPS	174	BE	1338	70 04.90	125 11.59	35	27	ARM	N1 27-20 N2 20-10 N3 10-0		
				BO									
				EN	1340	70 04.89	125 11.65	35					
17	FRK01	BON	175	BE	1350	70 04.91	125 11.83	36	20	ARM			
				EN	1409	70 05.24	125 10.27						
17	FRK01	BOX	176	BE	1429	70 05.01	125 11.52	35		ARM	Box-172		
				BO	1430	70 05.00	125 11.53				Good!		
				EN	1431	70 04.98	125 11.56						
17	FRK01	BOX	177	BE	1440	70 04.85	125 11.887	32			Box-173		
				BO	1441	70 04.84	125 11.91						
				EN	1442	70 04.83	125 11.94						

Event Type:

BOT = Bottle cast, no CTD
 CTD = CTD without Rosette
 ROS = Rosette plus CTD
 W2A = Western Trawl

BBT = Benthic Beam Trawl
 BON = Bongo (note Hor/Obl/Ver)
 MPS = Multi-net
 MWT = Midwater trawl
 BOX = Box Core

Time Code:

BE = Beginning Time
 BO = Arrive on Bottom Tim
 UP = Start up Time
 EN = End Time

Notes:

Transmissometer to be cleaned before each cast, do not use Ammonia products

17 Aug 2014

Sunny, 7°C

Winds light in morning
→ increased to SE 25 Knots in afternoon

no DO drop out

DAILY SCIENCE LOG

Page _____

Month				Year				Ship			Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N)	Longitude (W)	Bottom Depth	Max Depth	Logger's initials	Comments	
						DD MM.MM...	DDD MM.MM...					
17	FRK01	BBT	178	BE	14:49	70 05.26	125 10.73	44		ARM	bbt-103	
				BO	15:05	70 05.02	125 11.40	35				
				EN	15:15	70 04.82	125 12.31	34				
17	FRK01	WZA	179	BE	1535	70 04.50	125 15.05	34		ARM	wza-125	
				BO	1538	70 04.58	125 14.63	34				
				EN	1559	70 04.94	125 11.75	50				
17	FRK02	ROS	180	BE	1737	70 4.94	125 25.19	79	74	MD	14 Niskins	
				BO	1740	70 4.90	125 25.31					
				EN	1751	70 4.84	125 25.71					
17	FRK02	MPS	181	BE	1802	70 05.05	125 25.11	70	61	ARM	M1 60-25 N2 25-0	
				BO	1805	70 05.04	125 25.17					
				EN	1807	70 05.03	125 25.23					
17	FRK02	BON	182	BE	1815	70 05.01	125 25.54	77	65	ARM		
				EN	1832	70 05 619	125 25 241					
17	FRK02	BOX	183	BE	18:47	70 04 966	125 25 163	72		CGL	Box - 174	
				BO	1848	70 04 946	125 25 193					
				EN	1850	70 04 925	125 25 254					
17	FRK02	BOX	184	BE	19:04	70 05 120	125 25 159	73		CGL	Box - 175	
				BO	19:05	70 05 115	125 25 188					

Event Type:BBT = Benthic Beam TrawlTime Code:

Event Type:

BOT = Bottle cast, no CTD
 CTD = CTD without Rosette
 ROS = Rosette plus CTD
 WZA = Western Trawl

BBT = Benthic Beam Trawl
 BON = Bongo (note Hor/Obl/Ver)
 MPS = Multi-net
 MWT = Midwater trawl
 BOX = Box Core

Time Code:

BE = Beginning Time
 BO = Arrive on Bottom Tim
 UP = Start up Time
 EN = End Time

Transmissometer to be cleaned before each cast, do not use Ammonia products

Notes: _____

DAILY SCIENCE LOG

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Page _____

Month				Year				Ship				Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N)	Longitude (W)	Bottom Depth	Max Depth	Logger's initials	Comments		
						DD MM.MM...	DDD MM.MM...						
17	FRK02	BOX	184	EN	19:07	70 05 107	125 25 242	73					
17	FRK02	BBT	185	BE	19:21	70 04 166	125 26 217	82		CGL	BBT_104		
				BO	19:25	70 04 285	125 25 942	77					
				EN	19:35	70 04 532	125 25 381						
17	FRK02	W2A	186	BE	20:04	70 04.51	125 25.46			ARM	W2A-126		
				BO	20:12	70 04.95	125 25.39	77					
				EN	20:32	70 05.84	125 25.33	73					
17	FRK03	ROS	187	BE	21:53	70 5.06	125 51.27	128	123		2 Nishins		
				BO	21:57	70 5.03	125 51.55						
				EN	22:01	70 5.01	125 51.79						
17	FRK03	ROS	188	BE	22:16	70 5.06	125 51.30	126	80		12 Nishins		
				BO	22:18	70 5.11	125 51.41						
				EN	22:30	70 5.09	125 51.13						
17	FRK03	MPS	189	BE	22:51	70 05.09	125 50.84	124	115	ARM	N1 115-100 N2 100-51 N3 51-25 N4 25-0		
				BO	22:56	70 05.05	125 51.12	124					
				EN	22:59	70 05.02	125 51.25	124					
17	FRK03	BON	190	BE	23:08	70 04.89	125 51.69	124	115	ARM/CGL			
				EN	23:36	70 05 71	125 51 328						
17	FRK03	BBT	191	BE	23:50	70 06.35	125 50.49	127		ARM	BBT_105		

Event Type: BBT - Benthic Beam Trawl Time Code:

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl
BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

BE = Beginning Time
BO = Arrive on Bottom Tim
UP = Start up Time
EN = End Time

Notes: _____

Transmissometer to be cleaned before each cast, do not use Ammonia products

DAILY SCIENCE LOG

Page _____

Month				Year				Ship			Cruise ID
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments
17	FRK03	BBT	191	BO	00:00	70 05.94	125 50.97	130			
				EN	00:16	70 05.64	125 51.21	128			
17	FRK03	WZA	192	BE	00:38	70 06.16	125 50.84	128		ARM	WZA - 127
				BO	00:48	70 05.54	125 51.08	128			
				EN	01:08	70 04.66	125 51.83	123			
17	FRK03	BOX	193	BE	01:34	70 05.16	125 51.29	126		ARM	BOX - 176
				BO	01:36	70 05.17	125 51.40	126			Did not work - no mud. Too windy. Putting it away.
				EN	01:39	70 05.17	125 51.56	126			
18	FRK03	BOX	194	BE	1306	70 04.92	125 51.03	123		ARM	BOX - 177
				BO	1308	70 04.92	125 51.10	124			Good!
				EN	1310	70 04.93	125 51.21	124			
18	FRK03	BOX	195	BE	1322	70 05.02	125 51.56	125		ARM	BOX - 178
				BO	1324	70 05.03	125 51.65	126			Good!
				EN	1326	70 05.05	125 51.74	125			
18	FRK04	ROS	196	BE	1417	70 4.99	126 2.11	202	197		3 Nishins
				BO	1421	70 5.03	126 2.33				
				EN	1432	70 5.11	126 2.74				
18	FRK04	ROS	197	BE	1458	70 5.03	126 1.86	198	80		12 Nishins
				BO	1501	70 5.06	126 1.96				

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
WZA = Western Trawl

BBT = Benthic Beam Trawl

BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

BE = Beginning Time
BO = Arrive on Bottom Time
UP = Start up Time
EN = End Time

Transmissometer to be cleaned before each cast, do not use Ammonia products

Notes: _____

Aug 18

Sunny 21°

Winds 20-25 knots

This page is for any notes or observations

DAILY SCIENCE LOG

Page _____

Month				Year				Ship			Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's Initials	Comments	
18	FRK04	ROS	197	EN	15:14	70 5.16	126 2.48	197	80	MD		
18	FRK04	MPS	198	BE	15:26	70 05.02	126 02.21	199	191	ARM	N1 191-100 N2 100-50 N3 50-25	
				BO	15:29	70 05.05	126 02.33	199			N4 25-0	
				EN	15:34	70 05.09	126 02.52	201				
18	FRK04	BON	199	BE	15:43	70 05.18	126 02.85	205	190	ARM		
				EN	16:08	70 04.80	126 01.65	193				
18	FRK04	BOX	200	BE	16:22	70 04.99	126 01.72	196		ARM	BOX-179	
				BO	16:26	70 05.03	126 01.84	196				
				EN	16:30	70 05 071	126 02 020	198				
18	FRK04	BOX	201	BE	16:44	70 05 202	126 02 524	202		CGL	BOX-180	
				BO	16:46	70 05 236	126 02 607					
				EN	16:51	70 05 278	126 02 787					
18	FRK04	BBT	202	BE	17:09	70 06 332	126 02 427	204		CGL	BBT-106	
				BO	17:16	70 05 956	126 02 452					
				EN	17:26	70 05 669	126 02 509					
18	FRK04	W2A	203	BE	17:59	70 66.52	126 02.20	203		ARM	W2A-128	
				BO	18:06	70 05.94	126 02.40					
				EN	18:26	70 04.96	126 02.21					

Event Type:

BOT = Bottle cast, no CTD
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 W2A = Western Trawl

BBT = Benthic Beam Trawl
 BON = Bongo (note Hor/Obl/Ver)
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 MWT = Midwater trawl
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 BO = Arrive on Bottom Time
 UP = Start up Time
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Transmissometer to be cleaned before each cast, do not use Ammonia products

Notes: _____

DAILY SCIENCE LOG

Page _____

Month				Year				Ship			Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments	
18	FRK05	ROS	204	BE	1948	70 5.03	126 25.81	228	222	MD	4 Nishins	
				BO	1953	70 5.09	126 26.03					
				EN	2005	70 5.18	126 26.46					
18	FRK05	MPS	205	BE	2017	70 04.99	126 25.95	225		ARM	N1: 217-100 N2: 100-50 N3: 50-25 N4: 25-0	
				BO	2023	70 05.04	126 26.14	217				
				EN	2028	70 05.07	126 26.33	225				
18	FRK05	ROS	206	BE	2049	70 05.02	126 25.74	228	80	MD	12 Nishins.	
				BO	2052	70 05.05	126 25.85					
				EN								
18	FRK05	Box	207	BE	2122	70 04.91	126 25.45	225		ARM	BOX - 181	
				BO	2125	70 04.93	126 25.57	225				
				EN	2131	70 04.94	126 25.77	225				
18	FRK05	Box	208	BE	2143	70 05.02	126 26.27	225		ARM	BOX - 182	
				BO	2147	70 05.04	126 26.40	225			Perfect core. Ashley decided to just do the	
				EN	2151	70 05.06	126 26.58	225			one.	
18	FRK05	BON	209	BE	2203	70 05.02	126 26.14	225		ARM		
				EN	2222	70 04.75	126 24.37	225				
18	FRK05	BBT	210	BE	2234	70 04.70	126 23.53	226		ARM	BBT - 107	
				BO	2246	70 04.97	126 25.26	226				

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl
BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

BE = Beginning Time
BO = Arrive on Bottom Time
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Notes:

Transmissometer to be cleaned before each cast, do not use Ammonia products

chla & xmiss failed - noisy then dead.

replaced floor/xmiss cable - TOK.

DAILY SCIENCE LOG

Page _____

Month				Year				Ship			Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments	
18	FRK05	BBT	210	EN	2256	70 05.10	126 26.16	225				
18	FRK05	W2A	211	BE	2322	70 05.49	126 28.99	225		ARM	W2A-129	
				BO	2332	70 05.22	126 27.07	225				
				EN	2352	70 04.78	126 24.56	225				
19	FRK06	ROS	212	BE	1302	70 05.23	126 46.39	125	119	MD	3 Nishias	
				BO	1305	70 05.34	126 46.63				originally saved as 2014-56-0230 and -0231 (disregard those CTD file) use -0212 and -0213	
				EN	1308	70 05.40	126 46.80					
19	FRK06	ROS	213	BE	1330	70 05.04	126 46.11	125	80			
				BO	1332	70 5.07	126 46.19				11 Nishias.	
				EN	1346	70 5.29	126 46.77					
19	FRK06	MPS	214	BE	1358	70 05.07	126 46.07	127	116	ARM	N1 113-50 N2 50-25 N3 25-0	
				BO	1403	70 05.15	126 46.77	125				
				EN	1406	70 05.23	126 46.46	123				
19	FRK06	Box	215	BE	1415	70 05.37	126 46.79	119		ARM		
				EN	1440	70 04.78	126 45.38	134				
19	FRK06	Box	216	BE	1451	70 04.99	126 45.87	129		ARM	Box-183	
				BO	1454	70 05.03	126 45.98	127			Good	
				EN	1457	70 05.07	126 46.11	126				
19	FRK06	Box	217	BE	1515	70 05.06	126 46.09	127		ARM	Box-184	

Event Type:

BOT = Bottle cast, no CTD
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 ROS = Rosette plus CTD
 W2A = Western Trawl

BBT = Benthic Beam Trawl
 BON = Bongo (note Hor/Obl/Ver)
 MPS = Multi-net
 MWT = Midwater trawl
 BOX = Box Core

Time Code:

BE = Beginning Time
 BO = Arrive on Bottom Tim
 UP = Start up Time
 EN = End Time

Notes:

Transmissometer to be cleaned before each cast, do not use Ammonia products

DAILY SCIENCE LOG

Month

Day (UTC)

Station Name

Event Type

Event Number

Year

Time Code

Time (UTC)

Latitude (N)
DD MM.MM...

Longitude (W)
DDD MM.MM...

Ship

Bottom Depth

Max Depth

Logger's initials

Cruise ID

Comments

19	FRK06	BOX	217	BO	1518	70 05.11	126 46.11	127				
				EN	1521	70 05.17	126 46.21	126				No mud.
A	FRK06	BOX	218	BE	1524	70 05.24	126 46.33	125		ARM	BOX-185	
				BO	1526	70 05.28	126 46.41	124				No mud
				EN	1529	70 05.32	126 46.51	123				
19	FRK06	BOX	219	BE	1540	70 04 975	126 46 051	126		CFL	BOX-186	
				BO	1542	70 05 015	126 46 079					Load!
				EN	1545	70 05 079	126 46 204					
19	FRK06	BBT	220	BE	1600	70 05.60	126 46.83	122		ARM	BBT-107	
				BO	1606	70 05.39	126 46.56	123				
				EN	1616	70 05.15	126 46.28	125				
19	FRK06	W2A	221	BE	1643	70 06.01	126 47.11	123		ARM	W2A-130	
				BO	1648	70 05.67	126 46.85	122				
				EN	1708	70 04.76	126 45.74	128				
19	FRK07	ROS	222	BE	1854	70 05.08	126 54.63	42	37	MD	7 Niskins.	
				BO	1857	70 05.14	126 54.84					
				EN	1903	70 05.29	126 54.14					CTD file originally saved as 2014-56-0226 -> DISCARD
19	FRK07	MPS	223	BE	19:20	70 05.00	126 54.58	40		ARM	use 2014-56-0222	
				BO	19:22	70 05.04	126 54.74	39	32			

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 ROS = Rosette plus CTD
 W2A = Western Trawl

BBT = Benthic Beam Trawl
 BON = Bongo (note Hor/Obl/Ver)
 MPS = Multi-net
 MWT = Midwater trawl
 BOX = Box Core

Time Code:

BE = Beginning Time
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 UP = Start up Time
 EN = End Time

Notes:

Transmissometer to be cleaned before each cast, do not use Ammonia products

This page is for any notes or observations

muddled - oops!

DAILY SCIENCE LOG

Month				Year				Ship				Cruise ID		Page
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments			
19	FRK07	MPS	223	EN	19:23	70 05.02	126 54.85	38		ARM	N1 31-20 N2 20-10 N3 10-0			
19	FRK07	BON	224	BE	19:33	70 05.38	126 55.12	39		ARM				
				EN	19:51	70 04 939	126 54 526	40						
19	FRK07	BOX	225	BE	20:01	70 04 968	126 54 553	40		CGL	Box- 187			
				BO	20:02	70 04 985	126 54 585	38						
				EN	20:04	70 05 028	126 54 654	40						
19	FRK07	BOX	226	BE	20:12	70 05 270	126 55 139	37		CGL	Box- 188			
				BO	20:13	70 05 295	126 55 190							
				EN	20:14	70 05 324	126 55 248							
19	FRK07	BBT	227	BE	20:31	70 06 180	126 55 485	40		CGL	BBT- 108			
				BO	20:37	70 06 025	126 55 365							
				EN	20:47	70 05 727	126 55 139							
19	FRK07	W2A	228	BE		missed		38		ARM	W2A - 131			
				BO	21:11	70 06.65	126 56.28	38						
				EN	21:31	70 05.80	126 55.10	40						
20	ISMO	ROS	229	BE	0020	67 51.67	126 44.67	43	39	MD	smoking hills productivity			
				BO	0021	51.67	44.67							
				EN		missed					CTD file originally named as 2014-56-0247-0Ds regard. use 2014-56-0229			

Event Type:

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 ROS = Rosette plus CTD
 W2A = Western Trawl

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 BON = Bongo (note Hor/Obl/Ver)
 MPS = Multi-net
 MWT = Midwater trawl
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Time Code:

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Notes: _____

Transmissometer to be cleaned before each cast, do not use Ammonia products

DAILY SCIENCE LOG

Page _____

Month				Year				Ship			Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments	
20	SMD	MPS	230	BE	0039	69 51.72	126 44.69	40		ARM	N1 32-20 N2 20-10 N3 10-0	
				BO	0040	69 51.74	126 44.73	40	32			
				EN	0042	69 51.76	126 44.76	40				
20	SMD	BOX	231	BE	0056	69 51.62	126 44.54	42		ARM	Box - 189	
				BO	0057	69 51.63	126 44.55	42			Good!	
				EN	0058	69 51.64	126 44.57	42				
20	SMD	BBT	232	BE	0114	69 50.86	126 44.40	41		ARM		
				BO	0117	69 51.12	126 44.42	41				
				EN	0127	69 51.46	126 44.56	40				
20	BOW	BON	233	BE	02:12	69 56.38	126 44.76	34		ARM	Bowhead feeding area. 10-15 whales	
				EN	02:30	69 57.37	126 45.38	30			at mouth of Horton River	
20	BOW2	ROS	234	BE	1244	69 58.27	126 46.41	43	38	MD	Bowhead Feeding re-visiting.	
				BO	1246	69 58.26	126 46.41				7 whisks.	
				EN	1255	69 58.22	126 46.45					
20	FRK-HCI	CTD	235	BE	1444	70 05.13	126 45.25	141	135	ARM		
				BO	1448	70 05.18	126 45.44	138				
				EN	1452	70 05.22	126 45.65	135				
20	FRK-HCI	MPS	236	BE	1456	70 05.32	126 46.05	129	120	ARM	N1 115-100 N2 100-20 N3 60-30	
				BO	1508	70 05.26	126 46.06	129			N4 30-10 N5 10-0	

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl
BON = Bongo (note Hor/Obl/Ver)
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Time Code:

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Notes: _____

Transmissometer to be cleaned before each cast, do not use Ammonia products

DAILY SCIENCE LOG

Page _____

Month				Year				Ship			Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments	
20	FRK-HC1	MPS	236	EN	1537	70 05.12	126 49.32	86				
20	FRK-HC1	MWT	237	BE	1557	70 05.18	126 51.60	64	50	ARM	MWT-57	
				BO	1602	70 05.19	126 51.85	69				
				EN	1622	70 05.21	126 48.9	91				
				OW	1626	70 05.28	126 48.83	93				
20	FRK-HC2	CTD	238	BE	1847	70 04.96	126 10.71	225	215	ARM		
				BO	1853	70 04.91	126 10.75	226				
				EN	1856	70 04.90	126 10.77	225				
20	FRK-HC2	MPS	239	BE	1902	70 04.91	126 10.96	225	215	ARM	N1-210-175 N2-175-80 N3-80-30 N4-30-15 N5-50	
				BO								
				EN	1948	70 04.97	126 17.21	227				
20	FRK-HC2	MWT	240	BE	2003	70 05.06	126 18.84	227	200	ARM	MWT-58	
				BO	2016	70 05.039	126 16.798	227				
				EN	2036	70 05.034	126 14.161	225				
				OW	2042	70 05.018	126 13.95	225				
20	FRK-HC2	MWT	241	BE	2102	70 04.99	126 12.83	225		ARM	MWT-59	
				BO	2107	70 04.99	126 13.71	225				
				EN	2117	70 04.99	126 15.37	226				
				OW	2121	70 04.94	126 16.47	226				

Event Type:

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W2A = Western Trawl

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Transmissometer to be cleaned before each cast, do not use Ammonia products

DAILY SCIENCE LOG

Month				Year			Ship				Cruise ID		Page
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments		
20	FRK-HC2	UCTD	242		16:56L			125 m			OUT OF WATER 17:03		
21	FRK-HC3	CTD	243	BE	00:32	70 05.06	125 24.32	59	50	ARM			
				BO	00:34	70 05.06	125 24.35	60					
				EN	00:36	70 05.06	125 24.37	61					
21	FRK-HC3	MPS	244	BE	00:52	70 05.08	125 24.31	61	65	ARM	N1-55-45m N2 45-30m N3 30-20 N4 20-10 N5 10-0m		
				EN	01:22	70 04.97	125 28.81	82					
21	FRK-HC3	MWT	245	BE	01:38	70 05.009	125 30.057	98	30		MWT-60		
				BO	01:40	70 05.016	125 29.709	98					
				EN	01:50	70 05.029	125 28.185	83					
				OW	01:51	70 05.024	125 28.061						
22	BPT-Cal	W2A	246	BE	13:35	69 39.587	123 16.028	72.9	77.9	SPA	End of leg 1 sampling		
				EN	13:48	69 38.904	123 16.404	66.9			W2A calibration trawl in Darnley Bay		
22	BPT-OS	ROS	248	BE	14:36	69 42.005	123 11.622	36.5		AM.			
				BO	14:37	69 42.010	123 11.597		35.4				
				GM	14:43	69 42.048	123 11.449						
22	BPT-OS	MPS	249	BE							EN time + coords taken from "Seasave" prog.		
				BO									
				EN	14:51	69 42.18	123 11.004						
22	BPT-OS	BON	250	BE	15:11	69 42.252	123 10.748	30	SPA		Let out 70m wire, 05° angle		

Event Type:

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Notes:

Transmissometer to be cleaned before each cast, do not use Ammonia products

Aug 22 3/10 overcast
Sunny
Wind 10-12^{South} K; 0.5m waves

DAILY SCIENCE LOG

Page _____

Page _____

Month				Year				Ship				Cruise ID
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N)	Longitude (W)	Bottom Depth	Max Depth	Logger's initials	Comments	
						DD MM.MM...	DDD MM.MM...					
22	BPT_05	BON	250	EN	15:32	69 41.690	123 12.611	36.3		SPA		
22	BPT_05	Box	251	BE	15:46	69 42.090	123 11.966	36.4			Box-190 good	
				BO	15:47	69 42.087	123 11.718	36.3		SPA		
				EN	15:48	69 42.084	123 11.724	36.4				
22	BPT_05	Box	252	BE	15:56	69 42.099	123 11.617	36.8			Box-191 good	
				BO	15:57	69 42.102	123 11.598	36.7		SPA	wind slowed, S ~7 knots	
				EN	15:58	69 42.110	123 11.566	36.3				
22	BPT_05	BBT	253	BE	16:17	69 43.068	123 11.392	43.2			BBT-111	
				BO	16:22	69 42.773	123 11.362	38.88		SPA	Start of tow	
				EN	16:32	69 42.405	123 11.371	35.28				
22	BPT_05	W2A	254	BE	16:54	69 42.274	123 11.400	38.01			W2A-132	
				BO	17:58	69 42.498	123 11.415	39.10		SPA		
				EN	17:18	69 42.425	123 11.030	38.57				
22	BPT_04	ROS	255	BE	18:40	69 41.891	123 14.520	72		H.M.		
				BO	18:42	69 41.881	123 14.503		70.5			
				EN	18:52	69 41.803	123 14.221					
22	BPT_04	MPS	256	BE	19:09	69 41.861	123 14.611	73.8		SPA		
				BO	19:12	69 41.838	123 14.621	73.8	60			
				EN	19:14	69 41.820	123 14.608	73.3				

Event Type: BBT = Benthic Beam Trawl Time Codes:

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl
BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

BE = Beginning Time
BO = Arrive on Bottom Tim
UP = Start up Time
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Notes:

Transmissometer to be cleaned before each cast, do not use Ammonia products

DAILY SCIENCE LOG

Page _____

Month				Year				Ship			Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments	
22	BPT-04	BON	257	BE	19:24	69 41.741	123 14.542	71.3		SPA	100m out, assume 50° angle	
				EN	19:43	69 42.347	123 15.290	78.94				
22	BPT-04	BOX	258	BE	19:56	69 41.840	123 14.398	69.9		SPA	BOX-192 Success	
				BO	19:58	69 41.825	123 14 340	68.1				
				EN	19:59	69 41.801	123 14.283	67.5				
22	BPT-04	BOX	259	BE	20:10	69 41.919	123 14.287	69.4		SPA	BOX-193 Success	
				BO	20:11	69 41.902	123 14.261	68.5				
				EN	20:13	69 41.879	123 14.230	67.7				
22	BPT-04	BBT	260	BE	20:29	69 41.852	123 14.096	65.1		SPA	BBT-112	
				BO	20:41	69 41.107	123 14.471	70.3				
				EN	20:51	69 41.413	123 14.663	73.3				
22	BPT-04	W2A	261	BE	21:13	69 42.167	123 14.567	68		SPA	W2A-133	
				BO	21:15	69 42.045	123 14.437	65				
				EN	21:35	69 40.960	123 14.732	71				
22 30	BPT-03	ROS	262	BE	2236	69 42.001	123 26.79	121		H.M.	33.1 @ 95m	
				BO	2241	69 41.984	123 26.854		117		1st cast	
				EN	2244	69 41.986	123 26.870					

Event Type:

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→ 21:00 Aug 22, 2/10 clouds, calm, < 5kt wind S, Sunny ☀

DAILY SCIENCE LOG

Page _____

Month <u>AUG</u>			Year <u>2014</u>			Ship <u>FROST</u>			Cruise ID <u>2014-56</u>		
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments
22 22	BPT 03	ROS	263	BE	2317	69 41.850	123 26.300	121		H.M	
				BO	2320	69 41.866	123 26.310		70		
				EN	2326	69 41.888	123 26.317				
23	BPT 03	BON	264	BE	07:14	69 41.930	123 27.79	121		8m	* multinet motor unit won't take to deck unit; suspected low battery or blown fuse.
				EN	30:49	69 41.959	123 25.560				170m wire, L=45°
23	BPT 03	CTD	265	BE	1311	69 41.915	123 26.539	121		H.M	CTD ONLY - NO SAMPLES
				BO	1313	69 41.911	123 26.544		119		
				EN	1316	69 41.902	123 26.560				
23	BPT 03	BOX	266	BE	13:27	69 41.874	123 26.609	122		SPA	Box-194 Success
				BO	13:29	69 41.867	123 26.622	122			
				EN	13:32	69 41.857	123 26.643	121			
23	BPT 03	BOX	267	BE	1341	69 41.841	123 26.722	121		SPA	Box-195 Success
				BO	1343	69 41.839	123 26.744	122			
				EN	1347	69 41.837	123 26.776	122			
23	BPT 03	BBT	268	BE	1402	69 41.916	123 28.302	121		SPA	BBT-113
				BO	1416	69 41.932	123 26.292	121			
				EN	14:26	69 41.964	123 25.340	124			
23	BPT 03	W2A	269	BE	14:55	69 42.184	123 24.315	128		SPA	W2A-134
				BO	14:58	69 42.147	123 24.457	124			

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Aug 23rd
Start of the day: BPT-03 CTD event 265. 9/10 overcast, calm no waves, light drizzle.

DAILY SCIENCE LOG

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Month <u>August</u>				Year <u>2014</u>				Ship <u>F/V Frush</u>			Cruise ID <u>2014-56</u>	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments	
23	BPT-03	W2A	269	EN	1518	69 41.827	123 27.479	119		SPA	W2A-134	
23	BPT-02	ROS	270	BE	1635	69 41.981	123 47.245	67		H.M.		
				BO	1639	69 42.662	123 47.237		66			
				EN	1649	69 42.064	123 47.111					
23	BPT-02	BON	271	BE	17:02	69 42.061	123 47.761	68.4	45?	SPM	Towed depth 45m, wire angle ~60; 70m wire V=2.5kn (1.4 in water)	
				EN	17:22	69 41.822	123 45.511					
23	BPT-02	BOX	272	BE	17:39	69 42.062	123 47.390	70		SPA	Box-196 success	
				BO	17:41	69 42.054	123 47.358	70				
				EN	17:43	69 42.053	123 47.310	70				
23	BPT-02	BOX	273	BE	17:54	69 42.082	123 47.104	71		SPA	Box-197	
				BO	17:56	69 42.088	123 47.076	71				
				EN	17:58	69 42.095	123 47.042	72				
23	BPT-02	BBT	274	BE	18:12	69 42.129	123 47.817	67		SPA	BBT-114 Started raining, still no wind 10/10 overcast	
				BO	18:21	69 41.993	123 46.697	70				
				EN	18:31	69 41.888	123 45.747	70				
23	BPT-02	W2A	275	BE	18:57	69 41.907	123 46.207	68		SPA	W2A-135 10 min tow	
				BO	18:58	69 41.918	123 46.241	68			Ship pulling starboard before beginning of tow; rain ended	
				EN	19:08	69 42.141	123 47.640	65				

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Transmissometer to be cleaned before each cast, do not use Ammonia products

Notes: _____

DAILY SCIENCE LOG

Page _____

Month <u>Aug</u>				Year <u>2014</u>				Ship <u>F/V Frost</u>			Cruise ID <u>2014-56</u>	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments	
23	BPT-01	ROS	276	BE	2015	69 42.223	123 49.183	41		H.M.		
				BO	2018	69 42.217	123 49.157		35		CHL MAX = 28m	
				EN	2026	69 42.204	123 49.063					
23	BPT-01	BON	277	BE	2043	69 42.109	123 48.068	103			can't find suitable btm, towing from 61m → 40m 10 min tow only, 140 @ 50m wire, 140 @ 35m wire	
				EN	2053	69 42.203	123 49.249		25?			
23	BPT-01	Box	278	BE	21:03	69 42.203	123 49.229		SPA	SPA	Box-198 Success	
				BO	21:05	69 42.213	123 49.204	40				
				EN	21:08	69 42.219	123 49.189	40				
23	BPT-01	Box	279	BE	21:15	69 42.153	123 49.162	30		SPA	Box-199 dumped	
				BO	21:16	69 42.141	123 49.167	31				
				EN	21:17	69 42.126	123 49.177	30				
23	BPT-01	Box	280	BE	21:25	69 42.318	123 49.253	41		SPA	Box-200	
				BO	21:26	69 42.316	123 49.240	41				
				EN	21:27	69 42.313	123 49.219					
23	BPT-01	BBT	281	BE	21:44	69 42.136	123 48.139			SPA	BBT-115 no W2A @ BPT-01	
				BO	21:52	69 42.225	123 48.227					
				EN	22:01	69 42.361	123 49.933					
23	BPT-01	MPS	282	BE	23:01	69 42.245	123 49.438	43		SAM		
				BO	23:04	69 42.216	123 49.469					

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DAILY SCIENCE LOG

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Month				Year				Ship			Cruise ID	
August				2014				F/V Frost			2014-56	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N)	Longitude (W)	Bottom Depth	Max Depth	Logger's initials	Comments	
						DD MM.MM...	DDD MM.MM...					
23	BPT-01	mps	282	EN	23:05	69 42.204	123 49.481	42.3	35	SAM	Hush changed motor unit fuse → motor has power!	
24	BPT-03	mps	283	BE	1:07	69 41.906	123 26.333	123				
				BO	1:11	69 41.878	123 26.412		110		✓ Net #3 motor turn very slow, depth strata likely offset; check CTD	
				EN	1:13	69 41.860	123 26.446					
24	BPT-02	mps	284	BE	13:04	69 42.071	123 47.292					
				BO	13:07	69 42.083	123 47.253	71				
				EN	13:09	69 42.094	123 47.231		60			
24	BPT-HC1	CTD	285	BE	14:28	69 42.174	123 35.224	93		H.M.	CTD 19 ONLY 2 min SURFACE @ START	
				BO	14:30	69 42.186	123 35.261		85			
				EN	14:32	69 42.185	123 35.282					
24	BPT-HC1	MPS	286	BE	14:53	69 42.164	123 35.347			SPA / SAM		
				BO	15:03	69 42.111	123 33.039	90				
				EN	15:30	69 41.932	123 30.534					
24	BPT-HC1	MWT	287	BE	15:53	69 41.865	123 28.512	122		SPA	MWT-061	
				BO	15:54	69 41.870	123 28.733					
				EN	16:14	69 41.985	123 31.661					
				OW	16:20	69 41.968	123 32.082	112				
24	BPT-HC1	MWT	288	BE	16:38	69 41.857	123 32.571	107		SPA	MWT-062	
				EN	16:40	69 41.870	123 31.990	118				

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Notes: _____

DAILY SCIENCE LOG

Page _____

Month <u>AUG</u>				Year <u>2014</u>				Ship <u>FRSTI</u>			Cruise ID <u>2014-56</u>	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments	
24	BPT-HC1	MWT	288	EN	17:00	69 41.975	123 29.130	123		SPA	Sunny, calm, 4/10 overcast	
				OW	17:07	69 42.016	123 28.693	122			resumed transect: 17:37 69 42.282 123 35.121	
24	BPT-HC2	CTD	289	BG	18:44	69 41.707	123 22.537	120		H.m.	CTD ONLY -	
				BO	18:48	69 41.680	123 22.508		115			
				EN	18:52	69 41.666	123 22.516					
24	BPT-HC2	Hmps	290	BG	19:02	69 41.678	123 22.520	128.2		Sam	unlock @ 110 105m	
				BO	19:15	69 41.802	123 24.126		105			
				EN	19:40	69 41.963	123 27.350		105			
24	BPT-HC2	MWT	291	BE	20:04	69 41.919	123 26.391	122		SPA	mwt-063	
				BO	20:06	69 41.908	123 26.131	123				
				EN	20:26	69 41.880	123 23.221	128				
				OW	20:33	69 41.896	123 22.262	118				
24	BPT-HC2	MWT	292	BE	20:53	69 42.076	123 22.723	126	<	SPA	mwt-064	
				BO	20:57	69 42.054	123 23.387	127				
				EN	21:17	69 41.949	123 26.379	121				
				OW	21:28	69 41.936	123 27.314	122				
24	BPT-05	DBC	293	BE	23:35	69 42.211	123 11.784	37.7		SAM/SPA	Benthic camera	
				BO		69 42.189	123 11.786					
				EN	23:50	69 42.102	123 11.824	38.4				

Event Type:

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ROS = Rosette plus CTD
W2A = Western Trawl
DBC = digital benthic camera

BBT = Benthic Beam Trawl

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