

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

2014-12

DATE:

From: 4 July 2014 to: 23 July 2014

VESSEL:

Sir Wilfrid Laurier

PROJECT(S):

Canada's Three Oceans C30
w/ Distributed Biological Observatory

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

WaterProperties.ca

Captain: Stu Aldrich
 Second Officer: _____
 Fishing Master: _____
 First Officer: _____
 Third Officer: _____

Mission Participants / Agencies:

[illegible][illegible]

Data logging computer: WGBCIOS101655 (same PC as prior years)
 Data acquisition program: Sensare 7.23.12
 CTD deck unit make: SBE 11+ model: Seabird serial number: #800

Primary CTD

Make: SBEG+ model: serial number: # 9411

Primary temperature serial number: 03P 5048

Primary conductivity serial number: 04-3579

Secondary temperature serial number: 03P 5073

Secondary conductivity serial number: 04-3581

Transmissometer: WET Labs Model: CSTAR s/n: 1050

Fluorometer: Model SCF Seapoint Cable gain: s/n: 274 P, S or NC

Oxygen sensor: yes Model: SBEG3 s/n: 431117 P, S or NC

PAR sensor: Biosphere-L Model: ASP 2300 s/n: 70501

Other sensors: ~~SBEG~~ Surface PAR Biosphere-L ASR2200 s/n: 20279 P, S or NC

Other sensors: Altimeter PSA916 s/n: 40853 P, S or NC

Other sensors: s/n: P, S or NC

Other sensors: s/n: P, S or NC

Secondary CTD

Make: Scabird model: SBE25 serial number: _____

Primary temperature serial number: _____

Primary conductivity serial number: _____

Secondary temperature serial number: _____

Secondary conductivity serial number: _____

Transmissometer: _____ Model: _____ s/n: _____

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

Oxygen sensor: _____ Model: _____ s/n: _____ **P, S or NO** pump? _____

PAR sensor: _____ Model: _____ s/n: _____

Other sensors: _____ s/n: _____ **P, S or NO** pump? _____

Other sensors: _____ s/n: _____ **P, S or NO** pump? _____

Other sensors: _____ s/n: _____ **P, S or NO** pump? _____

Other sensors: _____ s/n: _____ **P, S or NO** pump? _____

CTD calibration bottle location (height above CTD in metres):

Rosette Setup:

Number of bottles: 24

Manufacturer: Ocean Test Equipment Inc. on a seabird pylon

Volume of bottles (litres): 10L

Winches:

1. Make: Hawboldt Model: _____ Serial #: 12024 Used for: .316 wire CTD
2. Make: _____ Model: _____ Serial #: _____ Used for: _____
3. Make: _____ Model: _____ Serial #: _____ Used for: _____

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

Salinometer:

Make: Post cruise Model: _____ Serial Number: _____
Comments on performance during cruise (comments should also be reflected in the post-cruise report):

Oxygen Kit(s):

Make: _____ Model: _____ Kit Number: _____
Make: _____ Model: _____ Kit Number: _____
Comments on performance during cruise (comments should also be reflected in the post-cruise report):

Thermosalinograph System (SBE21):

Program: SCA ~~SAVE~~ SAVE Version: _____
Sampling interval (seconds): 5 seconds
Fluorometer sensor serial number: 3275 SCF
Comments on performance during cruise (comments should also be reflected in the post-cruise report):
TSG serial # 2142376-3274

ADCP Setup:

Computer time zone: _____ User Exits: Name: _____ Exit points: _____
Sampling interval (sec): _____ Name: _____ Exit points: _____
Bin Length: (2^x): _____ Name: _____ Exit points: _____
Pulse Length: _____ Work File: _____
Buffer (bytes): _____
Gyro Offset: _____

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

CTD Test Cast Information

Test Cast along side? Yes ☐ No ☐

Comments

Test Cast in Saanich Inlet or other location? Yes ☐ No ☐

Comments

CTD pressure reading on deck (db), before cast: _____ after cast: _____

Pumps working? Yes ☐ (0011) No ☐ (0010)

Secondary Temp – Primary Temp:

(Average from the mixed region) _____

Secondary Salinity – Primary Salinity:

(Average from the mixed region) _____

Additional Comments:

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Month July				Year 2014			Ship SWL			Cruise ID 2014-12					
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
27	Test			ROS					7200	400					Test cast at Dock 7m! Data look fine.
5	UCT01	20:39		UCTD		1			7200	400					July 5-1. Asc
5	XCT01	21:05		XCTD		2			7200	1100					
6	UCT02	02:55		UCTD		3			7200	400					July 6-1. Asc
6	UCT03	15:02		UCTD		4			7200	400					July 6-2. Asc
6	UCT04	20:57		UCTD		5			7200	400					July 6-3. Asc
6	XCT02			XCTD		6			7200	1100					
7	UCT05	02:53		UCTD		7			7200	400					July 7-1. Asc
7	UCT06	08:55		UCTD		8			7200	400					July 7-2. Asc
7	UCT07	14:57		UCTD		9			7200	400					July 7-3. Asc
7	UCT08	20:57		UCTD		10			7200	400					July 7-4. Asc
7	XCT03			XCTD		11			7200	1100					
8	UCT09	02:56		UCTD		12			7200	400					July 8-1. Asc
8	UCT010	08:56		UCTD		13			7200	400					July 8-2. Asc
8	UCT011	15:00		UCTD		14			7200	400					July 8-3. Asc
8	UCT012	21:00		UCTD		15			7200	400					July 8-4. Asc
8	XCT04			XCTD		16			7200	1100					

Cast Type:

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 ROS = Rosette plus CTD
 SET = Fish Set

USW = Sea Water Loop

MOR = Mooring
 NET = Plankton Net Haul
 DRF = Drifter

Bottle Firing Method:

US = Up / Stop
 UN = Up / No stop
 DN = Down / No stop

Notes:

Time Code:

BE = Beginning Time of Cast
 BO = Bottom Time of Cast
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Transmissometer to be cleaned before each cast, do not use Ammonia products

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July 6?

Limit Switch on UC70 failed when trying to
wind Spool for the 02:00 (PDT) comb. (cancelled comb.)
Next day Coastguard personnel managed to open the Spooler
and they rigged a manual switch for Spooling.

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Month <u>JULY</u>				Year <u>2014</u>			Ship <u>SWC</u>			Cruise ID <u>2014-12</u>					
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
9	UCTD13	03:02		UCTD		17			7200	400					July 9-1. Asc
9	UCTD14	08:55		UCTD		18			7200	400					July 9-2. Asc
9	UCTD15	14:58		UCTD		19			7200	400					July 9-3. Asc
9	UCTD16	21:01		UCTD		20			7200	400					July 9-4. Asc
9	XCTD 5			XCTD		21			7200	1100					
10	UCTD17	02:59		UCTD		22			7200	400					July 10-1. Asc
10	UCTD18	09:01		UCTD		23			7200	400					July 10-2. Asc
10	UCTD19	14:59		UCTD		24			7200	400					July 10-3. Asc
10	UCTD20	21:00		UCTD		25			600	400					July 10-4. Asc
10	XCTD6			XCTD		26			600	600					
14	SLIP-1	14:41	BE	ROS	US	27	62 0.678	175 3.551	81	76	1-8	8	Cut 1	✓	Sea: 1500 T
14	SLIP-1		BO				62 0.685	175 3.575		75					T = 1.542 S = 0.709
14	SLIP-1	14:58	EN				62 0.715	175 3.650							P = 0.2
14	SLIP-2	17:46	BE	ROS	US	28	62 2.989	175 12.516	84	76	9-15	7	Cut 2	✓	P = 0.2 Sea 1960
14		17:50	BO				62 3.000	175 12.551							
14		18:00	EN				62 3.002	175 12.551							
14	SLIP-2	19:15		SVP		29	62 3.002	175 12.551							#133126
14	SLIP-2B	20:52	BO	CTD		30	62 13.144	174 52.640	77	71		0	Cut 3	✓	Sea: 1570
		20:53	BO				62 13.109	174 52.670							

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SLIP-1 and SLIP-2

Also Bottom camera, Bongo, Model #5 No event # for these
in Bongo at SLIP-1 & SLIP-2

Also Lake Alert ROS means
ROSLR + ADCP unless specified

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Cruise ID 2014-12

Month 3-5				Year 2014			Ship SMC								
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
14	SLIP-20	21:00	EN	CTD		30	62 13.145	174 52.686				0			
14	SLIP-3	22:43	BE	ROS	US	31	62 23.425	174 34.196	71	67	16-21	6	Cut 4	✓	Sea: 16800
14	SLIP-3	22:51	BO				62 23.424	174 34.228							
14	SLIP-3	22:58	EN				62 23.440	174 34.250							
14	SLIP-3	23:00		Bottom CTD		32									
14	SLIP-3			Bottom		33									
14	SLIP-3			MOR		34									
15	SLIP-3B	01:39	BE	CTD		35	62 28.078	174 4.883	69	63		0	Cut 5	✓	Sea: 11900
15	SLIP-3B	01:42	BO	CTD		35	62 28.076	174 4.900							
15	SLIP-3B	01:45		CTD		35	62 28.090	174 4.907							
15	SLIP-5	03:33	BE	ROS	US	36	62 33.602	173 32.956	65		22-27	6	Cut 6	✓	Sea: 9500
15	SLIP-5	03:37	BO			36	62 33.607	173 32.984		60					
15	SLIP-5	03:44	EN			36	62 33.619	173 33.016							
15	SLIP-5	03:50		Bottom CTD		37									
15	SLIP-5			Bottom		38									
15	SLIP-5			MOR		39									
15	SLIP-5B	6:16	BE	CTD		40	62 47.186	173 29.989	69	64		0	Cut 7	✓	Sea: 15700
	SLIP-5B	06:21	BO				62 47.192	173 30.006							
		06:23	EN												

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Notes:

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SLIP-3

B. 4. Camera used 10 minutes prior to B. 4. C. 4.

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Month July				Year 2014			Ship SWL		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information	Latitude							
15	SLIP-4	08:09	BE	ROS	US	41	63 1.808	173 27.571	71	66	28-45	18	Cut 8	✓	Scan #: 12200
	SLIP-4	08:14	BO				63 1.811	173 27.562							
	SLIP-4	08:27	EN				63 1.8	173 27.592							
	SLIP-4			Camera		42									
	SLIP-4			Bongo		43									
	SLIP-4			Mud 5		44									
15	SLIP-4B	15:05	BO	CTD	-	45	63 16.808	173 4.752	70	66	-	0	Cut 9	✓	Scan #: 14500
15	SLIP-4B	15:10	BO	CTD		45	63 16.819	173 4.764							
15	SLIP-4B	15:12	EN	CTD		45	63 16.819	173 4.759							
15	SLIP-4C	17:42	BE	CTD		46	63 36.251	172 35.382	55	50		0	Cut 10	✓	Scan #: 9200
15	SLIP-4C	17:46	BO	CTD		46	63 36.247	172 35.353							
15	SLIP-4C	17:50	EN	CTD		46	63 36.262	172 35.336							
15	BCL-6A	20:12	BE	ROS	US	47	63 55.166	172 5.908	54	50	46-50	5	Cut 11	✓	Scan #: 23000
15	BCL-6A	20:18	BO	ROS											
15	BCL-6A	20:24	EN				63 55.381	172 5.340							
15		21:07		SVP		48	64 00.762	171 56.6893			WOCB-SVP		DRIFTING	BOUY	10:133127
15	BCL-6B	22:56	BE	CTD	-	49	64 17.549	171 29.756	48	42			Cut 12	✓	Scan #: 20900
	BCL-6B	23:00	BO				64 17.629	171 29.624							
	BCL-6B	23:02	EN				64 17.702	171 29.538							

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=

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Notes:

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BCL-6A

Delayed due to BINGO

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Month <u>July</u>				Year <u>2014</u>			Ship <u>SWL</u>			Cruise ID <u>2014-12</u>					
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
16	BCL-6C	0203	BE	CTD	-	50	64 40.328	170 38.652	48		-	0	C-113	✓	P20.2 Scan #: 15800
16	BCL-6C	0207	BO	CTD			64 40.408	170 38.641		43					
16	BCL-6C	0209	EN	CTD			64 40.470	170 38.665							
16	UTBS-5	0433	BE	ROS	US	51	64 40.244	169 55.214	47	42	51-55	5	C-114	✓	P20.1 Scan #: 18800
16	UTBS-5	04:39	BO	ROS			64 40.298	169 55.258							
16	UTBS-5	04:45	EN	ROS			64 40.372	169 55.316							
16	UTBS-5			CAMERA		52									
16	UTBS-5			BONGO		53									
16	UTBS-5			MORS		54									
16	UTBS-2	08:14	BE	ROS	US	55	64 40.888	169 5.999	45	41	56-60	5	C-115	✓	P20.0 Scan #: 14900
16	UTBS-2	08:18	BO							41					
16	UTBS-2	08:22	EN				64 41.051	169 5.989							
16	UTBS-2			CAMERA		56									
16	UTBS-2			BONGO		57									
16	UTBS-2			MORS		58									
16	UTBS-2A	11:47	BE	CTD	-	59	64 40.236	168 13.793	39		-	0	C-116	✓	P20.1 Scan #: 11900
16	UTBS-2A	11:50	BO				64 40.276	168 13.696		35					
16	UTBS-2A	11:52	EN				64 40.200	168 13.657							

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Month <u>July</u>				Year <u>2014</u>			Ship <u>SWL</u>				Cruise ID <u>2014-12</u>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
16	UTBS-4	17:09	BE	ROS	US	60	64 57.619	169 53.452	49	44	61-65	5	Cat 17	✓	P ² O Scan # 9200
16	UTBS-4	17:13	Bo	ROS			64 57.618	169 53.464							
16	UTBS-4	17:19	EN	ROS			64 57.643	169 53.476							
16	UTBS-4			CAMERA		61									
16	UTBS-4			BONGA		62									
16	UTBS-4			Moox5		63									
16	UTBS-1	20:22	BE	ROS	US	64	64 59.436	169 8.447	48	44	66-80	15	Cat 18	✓	P ² O Scan # 10700
16	UTBS-1	20:27	Bo	ROS		64	64 59.447	169 8.470							
16	UTBS-1	20:39	EN	ROS		64	64 59.470	169 8.540							
16	UTBS-1			CAMERA		65									
16	UTBS-1			BONGA		66									
16	UTBS-1			Moox5		67									
17	BRS-3	01:54	BE	ROS		68	65 42.263	168 46.522	53	48	81-85	5	Cat 19	✓	P ² O Scan # 15300
17	BRS-3	01:58	Bo	ROS		68									
17	BRS-3	02:04	EN	ROS		68	65 42.222	168 46.517							
17	UTN-1	07:50	BE	ROS	US	69	66 42.688	168 23.917	35		86-89	4	Cat 20	✓	P ² O Scan # 12230
17	UTN-1	07:55	Bo	ROS						30					
17	UTN-1	07:59	EN				66 42.715	168 23.970							
17	UTN-1			CAMERA		70									

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6 notes

This page is for any notes or observations

BFS-3 Rose H Station witback ABCP

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Month <u>July</u>				Year <u>2014</u>			Ship <u>Swan</u>				Cruise ID <u>2014-12</u>					
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned		Comments
							Latitude	Longitude								
17	UTN-1			Bongo		71										
17	UTN-1			Bongo		72										
17	UTN-2	11:11	BE	ROS	US	73	67 30.05	168 43.746	47	42	90-94	5	Cat 21	✓		P20.0 Scan # 11300
17	UTN-2	11:15	BO			73										
17	UTN-2	11:21	EN			72	67 30.04	168 43.600								
17	UTN-2			Camera		74										
17	UTN-2			Bongo		75										
17	UTN-2			Bongo		76										
17	UTN-3	14:08	BE	ROS	US	77	67 19.781	168 54.559	50	45	95-99	5	Cat 22	✓		P20.0 Scan # 7700
17	UTN-3	14:12	BO				67 19.782	168 54.532								
17	UTN-3	14:19	EN				67 19.817	168 54.480								
17	UTN-3			Camera		78										
17	UTN-3			Bongo		79										
17	UTN-3			Bongo		80										
17	UTN-4	1645	BE	ROS	US	81	67 30.082	168 54.253	50	46	100-114	15	Cat 23	✓		P20.1 Scan # 14200
17	UTN-4	1650	BO			81										
17	UTN-4	1700	EN			81	67 30.112	168 53.914								
17	UTN-4			Camera		82										Cancelled due to too much swell
17	UTN-4			Bongo		83										

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Month July				Year 2014			Ship SWL				Cruise ID 2014-12				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
17	UTN-4			M.O.S		84									
17	UTN-6	20:32	BE	ROS	US	85	67 44.478	168 26.381	50	45	115-119	5	C-124	✓	P.O. 1 Sec # 7000
17	UTN-6	20:35	BO	ROS		85									
17	UTN-6	20:41	EN	ROS		85	67 44.532	168 26.342							
17	UTN-6			Bongo		86									
17	UTN-6			M.O.S		87									
18	SEC-8	14:31	BE	ROS	US	88	68 18.000	166 56.141	35	30	120-124	5	C-125	✓	P.O. 1 Sec # 11400
18	SEC-8	14:35	BO												
18	SEC-8	14:40	EN			88	68 18.021	166 56.087							
18	SEC-8			Cenere		89									
18	SEC-8			Bongo		90									
18	SEC-8			M.O.S		91									
18	SEC-7	16:08	BE	ROS	US	92	68 14.526	167 7.260	43	38	125-129	5	C-126	✓	P.O. 1 Sec # 11800
18	SEC-7	16:12	BO			92									
18	SEC-7	16:19	EN			92	68 14.527	167 7.271							
18	SEC-7	16:27	BO	ROS	US	92	68 14.524	167 7.310	43	38	125-129	5	C-126	✓	P.O. 1 Sec # 7000
18	SEC-7	16:29	BO												
18	SEC-7	16:35	EN			92	68 14.530	167 7.303							
18	SEC-7			M.O.S		93									

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Bottle Firing Method:

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Time Code:

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

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Notes:

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SEC-7

Strigots on 2 So Hls. Cured cork
Red cork 26. Overwith clock.

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Month <u>July</u>				Year <u>2014</u>			Ship <u>SWL</u>			Cruise ID <u>2014-12</u>					
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
18	SEC-7			Bongo		94									
18	SEC-6	18:02	BO	ROS	US	95	68 11.113	167 18.434	48	43	130-134	5	C-127	✓	20.1 Scin # 9100
18	SEC-6	18:03	BO	ROS		95									
18	SEC-6	18:10	EN	ROS		95	68 11.117	167 18.440							
18	SEC-6			Bongo		96									
18	SEC-6			MOR		97									
18	SEC-5	19:29	BE	ROS	US	98	68 7.670	167 29.730	50	46	135-149	15	C-128	✓	20.1 Scin # 9080
18	SEC-5	1934	BO	ROS		98									
18	SEC-5	1948	EN	ROS		98	68 7.663	167 29.776							
18	SEC-5			Camera		99									
18	SEC-5			MOR		100									
18	SEC-5			Bongo		101									
18	SEC-4	22:03	BE	ROS	US	102	68 0.742	167 52.157	53	48	150-154	5	C-129	✓	20.1 Scin # 9200
18	SEC-4	22:05	BO	ROS		102	68 0.751	167 52.104							
18	SEC-4	22:10	EN	ROS		102	68 0.781	167 52.019							
18	SEC-4			Camera		103									
18	SEC-4			Bongo		104									
18	SEC-4			MOR		105									

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Bottle Firing Method:

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Notes:

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Month <u>July</u>				Year <u>2014</u>			Ship				Cruise ID				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
19	SEC-3	00:46	BE	ROS	US	106	67 53.876	168 14.071	59	54	155-159	5	G/30	✓	P=0.1 Sec # 9700
19	SEC-3	00:50	BO	ROS		106									
19	SEC-3	00:58	EN	ROS		106	67 53.870	168 14.066							
19	SEC-3			Camera		107									
19	SEC-3			Boyo		108									
19	SEC-3			M+S		109									
19	SEC-2	03:26	BE	ROS	US	110	67 46.966	168 36.054	50	45	160-164	5	G/31	✓	P=0.0 Sec # 13800
19	SEC-2	03:30	BO	ROS		110	67								
19	SEC-2	03:36	EN	ROS		110	67 46.972	168 36.059							
19	SEC-2			Camera		111									
19	SEC-2			Boyo		112									
19	SEC-2			M+S		113									
19	SEC-1	06:10	BE	ROS	US	114	67 40.228	168 54.521	50	45	165-171	7	G/32	✓	P=0.1 Sec # 11000
19	SEC-1	06:12	BO	ROS		114	67 40.228	168 54.526							
19	SEC-1	06:19	EN	ROS		114	67 40.217	168 54.564							
				Camera		115									
				Boyo		116									
				M+S		117									

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Notes:

Time Code:

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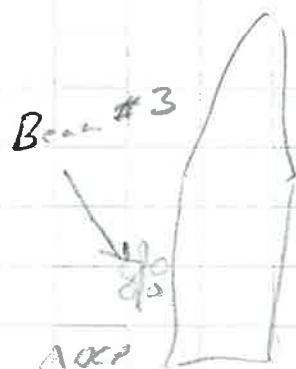
Transmissometer to be cleaned before each cast, do not use Ammonia products

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SEC-2



SEC-1

35 and 45 m/hr filters are green. 25 m filter red and green. All above, red.
 Bongo nets are both full of red algae.
 Red nets at all other stations and other SEC stations.

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Month				Year			Ship					Cruise ID				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments	
							Latitude	Longitude								
19	UTN-7	1206	BE	ROS	US	118	68 0.011	168 55.820	57	53	172-177	6	Cmd 33	✓	P.O. 1 Sea # 14200	
19	UTN-7	1210	BO			118										
19	UTN-7	1218	EN			118	67 59.965	168 55.849								
19	UTN-7			Camera		119										
19	UTN-7			Bongo		120										
19	UTN-7			Mud x5		121										
19	3cms/sec mooring					122	Two mooring out and two in - up 14									
19	SC4-14	1541		Mooring		122	68 01.9960	168 50.0391	54.2	8m	above sea floor					
19	SC4-14w	1622		Mooring		123	68 02.9840	168 50.0102	51.9	8m	above sea floor					
20	DBO-4.1	1646	BE	ROS	US	124	70 58.367	161 54.072	45	42	178-182	5	Cmd 34	✓	Sea # 9600	
20	DBO-4.1	1651	BO			124										
20	DBO-4.1	1657	EN			124	70 58.349	161 53.917								
20	DBO-4.1			Camera		125										
20	DBO-4.1			Bongo		126										
20	DBO-4.1			Mud x5		127										
20	DBO-4.1A	1834	BE	CTD		128	71 2.494	162 5.246	45	40	—	—	Cmd 35	✓	P.O. 1 Sea # 9870	
20	DBO-4.1A	1837	BO			128										
20	DBO-4.1A	1840	EN			128										

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Bottle Firing Method:

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 DN = Down / No stop

Notes:

Time Code:

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

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11 notes

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DBO 4.1

Near the ice edge

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Month <u>July</u>			Year <u>2014</u>				Ship <u>Suez</u>				Cruise ID <u>2014-12</u>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
20	DBO-4.2	19:32	BE	ROS	US	129	71 6.217	162 15.839	47	47	183-187	5	G/36	✓	P.O.I. Scan # 14200
20	DBO-4.2	19:37	BO			129									
20	DBO-4.2	19:44	EN			129	71 6.181	162 15.764							
20	DBO-4.2			Boys		130									
20	DBO-4.2			M.J. 45		131									
20	DBO-4.2A	21:24	BE	CTD	-	132	71 8.671	162 27.642	46	41	—	0	G/37	✓	P.O.I. Scan # 9800
20	DBO-4.2A	21:27	BO			132									
20	DBO-4.2A	21:29	EN			132	71 8.662	162 27.616	41						
20	DBO-4.3	22:23	BE	ROS	US	133	71 13.958	162 38.098	46	42	188-202	15	G/38	✓	P.O.I. Scan # 9300
20	DBO-4.3	22:28	BO			133									
20	DBO-4.3	22:42	EN			133	71 13.964	162 38.084							
20	DBO-4.3			OPTIX		134									
20	DBO-4.3			Camera		135									
20	DBO-4.3			Boys		136									
20	DBO-4.3			M.J. 45		137									
21	DBO-4.3A	14:19	BE	CTD	-	138	71 17.729	162 48.516	46	41	—	0	G/39	✓	P.O.I. Scan # 10400
21	DBO-4.3A	14:22	BO	CTD		138									
21	DBO-4.3A	14:25	EN	CTD		138	71 17.712	162 48.434							

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

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12 notes

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DBO 4.3a

By swell from Seamount
to central Rose H.

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Month <u>July</u>				Year <u>2014</u>			Ship <u>SWL</u>				Cruise ID <u>2014-12</u>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
21	DBO-4.4	15:22	BE	ROS	US	139	71 21.706	163 0.491	46	41	203-207	5	Cat 40	✓	P2-0.1 Scan #10200
21	DBO-4.4	15:25	BO			139									
21	DBO-4.4	15:32	EN			139	71 21.699	163 0.472							
21	DBO-4.4			Bo-yo		140									
21	DBO-4.4			Mod x5		141									
21	DBO-4.4A	17:15	BE	CTD	—	142	71 25.715	163 12.059	43	38	—	0	Cat 41	✓	P2-0.1 Scan #12300
21	DBO-4.4A	17:18	BO	CTD		142									
21	DBO-4.4A	17:21	EN	CTD		142	71 25.674	163 11.939							
21	DBO-4.5	18:08	BE	ROS	US	143	71 29.387	163 23.294	43	38	208-212	5	Cat 42	✓	P2-0.0 Scan #10700
21	DBO-4.5	18:12	BO	ROS		143									
21	DBO-4.5	18:19	EN	ROS		143	71 29.347	163 23.251							
21	DBO-4.5			Bo-yo		144									
21	DBO-4.5			Mod x5		145									
21	DBO-4.5A	19:41	BE	CTD	—	146	71 33.286	163 34.898	43	38	—	0	Cat 43	✓	P2-0.1 Scan #15200
21	DBO-4.5A	19:45	BO	CTD		146									
21	DBO-4.5A	19:48	EN	CTD		146	71 33.232	163 34.812							
21	DBO-4.6	20:39	BE	ROS	US	147	71 37.090	163 46.265	42	37	213-217	5	Cat 44	✓	P2-0.1 Scan #10600
21	DBO-4.6	20:43	BO	ROS		147									
21	DBO-4.6	20:49	EN	ROS		147	71 37.108	163 46.208							

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DBO 4.4

Rough Seas Big swell from South.

DBO-4.5a

Largest flowered plant detected at 25 m.

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Month				Year			Ship <i>Swc</i>				Cruise ID <i>2014-12</i>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
21	DBO-46			Bongo		148									
21	DBO-46			Mosx5		149									
22		19:39		Transfer Mooring		150	71 19.7553	157 36.0127	102	61m					
22	BurC-3	21:20	BE	ROS	US	151	71 19.821	157 19.021	91	86	218-224	7	C-145	✓	BCH-14 P.O. Sen # 10900
22	BurC-3		BO	ROS		151									
22	BurC-3	21:38	EN	ROS		151	71 20.102	157 17.573							
22	BurC-3			Camera		152									
22	BurC-3			Bongo		153									
22	BurC-3			Modx2		154									
23	BurC-4	00:18	BE	ROS*	US	155	71 21.450	157 29.090	108	103	225-232	8	C-146	✓	P.O. Sen # 10800
23	BurC-4	00:24	BO	ROS*		155	71 21.496	157 28.532							
23	BurC-4	00:33	EN	ROS*		155	71 21.559	157 28.044							
23	BurC-4			Camera		156									
23	BurC-4			Bongo		157									
23	BurC-4			Modx2		158									
23	BurC-5	02:50	BE	ROS	US	159	71 23.954	157 27.875	126	121	233-248	16	C-147	✓	P.O. Sen # 8900
23	BurC-5	02:57	BO	ROS		159									
23	BurC-5	03:09	EN	ROS		159	71 24.032	157 26.793							
23		14:45				163	Recovered Bongo Burrow Canyon mooring. Shaded last year								

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* BAC-4. No ADOP. To much ice.
Worried about cutting cable
Station not exactly