

Rosette Log for IOS Cruise ID 2009-20

Ship: *CCGS Louis S St-Laurent*

2 = 90.2
alt = 12.2

Cast # 1

UTC Date (ddmmmyyy) 20 SEP 2009

Ice Coverage 10

Water Depth(below hull) m

Station AG-M

UTC Time 00:06

In Air pressure (before/after) 10.11

Sound Speed 1478

CTD File 200920-001

Lat (N) 71 1.896 Lon (W) 127 45.620

CTD Operator SZ / GP / VUC

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC/ALK	DIC (KB)	1.38 DIC (KB)	* CDOM	Chl a (Total)	Chl a (PAM)	Chl a (Prod)	Bacteria	FW Alk	NUT	O18	Ba	NH4	SAL	Comments
1	hwy 10	90	✓1	✓✓	✓	1331 -0.3			1								✓		3			✓✓	✓	2NH4
2		75	✓2	✓✓		1413 -0.7			2								✓		1	✓✓		✓✓	✓	
3		61	✓3	✓✓		1430 -0.7			3				✓				✓				✓✓	✓✓	✓	4NH4
4			✓4	✓✓		1223 -0.6			4								✓			✓✓			✓	
5			✓5	✓✓	W	1434 -0.5	1495 -0.4	1297 -0.5	5								✓						✓	
6			✓6	✓✓		1432 -0.7			6								✓						✓	
7			✓7	✓✓		1418 -0.5			7								✓						✓	
8			✓8	✓✓		1499 -0.5			8								✓						✓	
9			✓9	✓✓		1482 -0.5			9								✓						✓	
10			✓10	✓✓		1382 -0.5			10								✓						✓	
11			✓11	✓✓		1468 -0.4			11								✓						✓	
12			✓12	✓✓		1244 -0.3			12								✓						✓	leaking from bottom cap after open
13			✓13	✓✓		1427 -0.5			13								✓			✓✓	✓✓	✓✓	✓	2NH4
14			✓14	✓✓		1452 -0.3			14								✓				✓✓	✓✓	✓	
15			✓15	✓✓		1287 -0.4			15								✓				✓✓	✓✓	✓	
16			✓16	✓✓		1224 -0.3			16								✓				✓✓	✓✓	✓	
17			✓17	✓✓	✓	1445 -0.2	1471 -0.2		17								✓				✓✓	✓✓	✓	add two NH4 here
18	75	✓	✓18	✓✓		1381 -0.3			18								✓						✓	for filter seawater
19	50	✓	✓19	✓✓		1426 -0.1			19								✓						✓	
20	30	✓	✓20	✓✓		1440 -0.4			20								✓						✓	
21	20	✓	✓21	✓✓		1110 -1.7			21								✓						✓	
22	10	✓	✓22	✓✓		1422 4.3			22								✓						✓	no chla duplicate taken
23	5	✓	✓23	✓✓	✓	1448 4.7	1293 4.9		23	✓			✓	✓			✓		✓	✓	✓		✓	no water for salt or nats or Ba, O18
24		✓	24						24								✓		3			W	✓	no bottle @ surface

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

* no filtering done for CDOM

too rough

1

Rosette Log for IOS Cruise ID 2009-20

Ship: *CCGS Louis S St-Laurent*

Cast # 2

UTC Date (ddmmmyyyy) 20 / 09 / 2009

Ice Coverage /10

Water Depth(below hull) 1131 m

Station CABOS

UTC Time 17:40:26

In Air pressure (before/after) 1-0.33

Sound Speed 1478

CTD File 200920-002

Lat (N) 71 49.136

Lon (W) 131 47.754

CTD Operator EF

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC (ALK)	DIC (KB)	TSS DIC (KB)	CSOM	Chl a (Total)	Chl a (PAM)	Chl a (Prod)	Bacteria	FWALK	NUT	Salt	O18	Ba	NH4	Comments
24		1000	1✓	✓✓	✓	586 0.3			1										3	✓				
25		300	2✓	✓✓		575 -0.1			2															
26		275	3✓	✓✓		1457 -0.2			3															
27		250	4✓	✓✓	✓	1328 -0.5	547 -0.5		4															
28		230	5✓	✓✓		462 -0.8			5															
29		210	6✓	✓✓		1192 -1.1			6															
30		190	7✓	✓✓		1002 -1.2			7															
31		180	8✓	✓✓		439 -1.3			8															
32		170	9✓	✓✓		1336 -1.3			9															
33		160	10✓	✓✓		329 -1.4			10															
34		150	11✓	✓✓		1225 -1.4			11															
35		140	12✓	✓✓		1417 -1.3			12															
36		120	13✓	✓✓		425 -1.2			13															
37		110	14✓	✓✓		456 -1.2			14															
38		100	15✓	✓✓	✓	1295 -1.2	1130 -1.2	1270 -1.2	15						✓	✓								
39		90	16✓	✓✓		1352 -1.0			16															
40	chl/Mn	78	17✓	✓✓		1284 -1.1			17						✓	✓								
41	9	78	18✓	✓✓		1231 -1.1			18						9✓	✓								
42	15	51	19✓	✓✓		1136 -1.0			19						4✓	✓								
43	4	36	20✓	✓✓		1446 -0.9			20						4✓	✓								
44	1	20	21✓	✓✓		1343 -0.6			21						4✓	✓								
45	2	12	22✓	✓✓		1216 0.0			22						4✓	✓								
46	2	0	23✓	✓✓	✓	1286 -0.3			23						2✓	✓				3	1			
			24						24															

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

High Alt Resolution w/ ISUS cast — Max Depth = 1000 m

Rosette Log for IOS Cruise ID 2009-20

Ship: *CCGS Louis S St-Laurent*

Cast # 3

UTC Date (ddmmmyyyy) 20 / 04 / 2009

Ice Coverage /10

Water Depth(below hull) 1100 m

Station CABOS

UTC Time 19:08

In Air pressure (before/after) -0.50, -0.33

Sound Speed _____

CTD File 200920-003

Lat (N) 71 49.853 Lon (W) 131 46.739

CTD Operator ET

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC/ALK	BIC (KB)	13C-BIC (KB)	CDOM	Chl a (Total)	Chl a (PAM)	Chl a (Prod)	Bacteria	FW Alk	NUT	Salt	O18	Ba	NH4	Comments
47	Bot-10	1108	✓ 1	✓✓	✓	1299, -0.8			1								✓		3	✓				
48	1000	1000	✓ 2	✓✓	✓✓	1188, -0.5	1493, -0.6	1347, -0.5	2										1	✓				
49	900	900	✓ 3	✓✓		1346, -0.6			3															
50	800	800	✓ 4	✓✓		1429, -0.5			4															
51	700	700	✓ 5	✓✓		1363, -0.3			5															
52	600	600	✓ 6	✓✓		1362, -0.3			6														✓✓	4NH4
53	500	500	✓ 7	✓✓		1428, -0.2			7															
54	450	450	✓ 8	✓✓	✓	1433, -0.2	1456, 0.0		8															
55	6max	433	✓ 9	✓✓		1356, 0.0			9										✓					
56	34.75	340	✓ 10	✓✓		1204, -0.1			10															
57	34.7	318	✓ 11	✓X		1375, -0.2			11															Bottom end cap leaking (drips)
58	34.6	286	✓ 12	✓X		1358, -0.1			12									✓			✓	✓		Bottom end cap leaking (drips)
59	34.4	245	✓ 13	✓✓		1340, -0.5			13															
60	34	206	✓ 14	✓✓		1212, -1.1			14															
61	33.7	187	✓ 15	✓✓		1454, -1.3			15														✓✓	
62	33.4	172	✓ 16	✓✓		1341, -1.4			16														✓✓	
63	33.1	156	✓ 17	✓✓	✓	1366, -1.4	1354, -1.4		17				✓						✓				✓✓	
64	32.9	143	✓ 18	✓✓		1351, -1.4			18														✓✓	Oxy redraw
65	32.6	124	✓ 19	✓✓		1447, -1.4			19														✓✓	
66	32.3	103	✓ 20	✓X		1309, -1.4			20					✓✓									✓✓	Bottom end cap leaking
67	01max	78	✓ 21	✓✓		1150, -1.1			21					✓✓									✓✓	
68		40	✓ 22	✓✓		1360, -1.1			22														✓✓	
69		20	✓ 23	✓✓		1361, -0.3			23					✓✓					1	1		1	✓✓	
70		5	✓ 24	✓✓	✓	1451, -0.4			24	✓			✓				✓	✓	3	✓	✓	✓	✓✓	

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

Rosette Log for IOS Cruise ID 2009-20

Ship: CCGS Louis S St-Laurent

Cast # 41 UTC Date (ddmmmyyy) 21 09 2009 Ice Coverage /10 Water Depth(below hull) 1990 m
 Station CB-316 UTC Time 0133 In Air pressure (before/after) -0.56 / -0.42 Sound Speed 1500 m/s
 CTD File 200920-004 Lat (N) 72° 8.927 Lon (W) 134° 10.410 CTD Operator SZ/MC

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC/ALK	DTG (KB)	TSC-BIC (KB)	CDOM	Chl a (Total)	Chl a (PAM)	Chl a (Fpod)	Bacteria	FW Alk	NUT	Salt	O18	Ba	NH4	Comments
71	bot-10	1934	1	✓	✓	✓	1422, +0.5		1								✓		3	✓				
72	1934	2000	2	✓	✓	✓	1448, -0.3		2								✓		1	✓				
73		1500	3	✓	✓	✓	1293, -0.4		3															
74		1200	4	✓	✓	✓	1283, -0.3		4															
75		1000	5	✓	✓	✓	1434, -0.3	1495, -0.3	5															
76		800	6	✓	✓	✓	1471, -0.3		6															
77		600	7	✓	✓	✓	1381, 0.0		7															
78		500	8	✓	✓	✓	1426, 0.0		8															
79		450	9	✓	✓	✓	1440, +0.1		9															
80	403	403	10	✓	✓	✓	1110, +0.2	1468, +0.3	10															
81	34.8	363	11	✓	✓	✓	1344, +0.2		11															
82	34.7	305	12	✓	✓	✓	1427, 0.0		12															
83	34.6	276	13	✓	✓	✓	1452, 0.0		13												✓	✓	✓	✓
84	34.4	239	14	✓	✓	✓	1023, -0.2		14															
85	34	199	15	✓	✓	✓	1224, -0.9		15												✓			
86	33.5	176	16	✓	✓	✓	1297, -1.2		16															
87	33.1	160	17	✓	✓	✓	1432, -1.2		17				✓								✓			
88	32.9	147	18	✓	✓	✓	1418, -1.2		18												✓			
89	32.6	134	19	✓	✓	✓	1499, -1.2		19												✓			
90	32.3	112	20	✓	✓	✓	1482, -1.2		20												✓			
91	OMAX	62	21	✓	✓	✓	1302, -0.9		21					✓							✓			
92		50	22	✓	✓	✓			22					✓							✓			
93		20	23	✓	✓	✓	1413, -0.7	1430, -0.6	23					✓						✓	✓			
94		5	24	✓	✓	✓	1194, -1.0		24	✓			✓				✓	✓	3	✓	✓	✓	✓	

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

OK
 carbonyl NO LABELS
 carbonyl salt water filled for STANDARD CHECK
 OK
 NO LABELS
 bottom spigot leaking
 → no 180 duplicate taken
 Top cap hung up → bottle didn't close

Rosette Log for IOS Cruise ID 2009-20

Ship: CCGS Louis S St-Laurent

Z ~2140m

Cast # 005

UTC Date (ddmmmyyyy) 22 Sept 2009

Ice Coverage 8/10

Water Depth(below hull) 2789 m

Station CB-23a

UTC Time 17:13

In Air pressure (before/after) -0.56 / -0.35

Sound Speed 1500 m/s

CTD File 200920-005

Lat (N) 72 52.060

Lon (W) 136 0.378

CTD Operator EF/MC

Samp #	Target Property	Depth(m)	Niskin #	Bottle integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC/ALK	DIC (KB)	13C-DIC (KB)	CDOM	Chl a (Total)	Chl a (PAM) + Chl a (Redd)	Bacteria	FW Alk	NUT	Salt	O18	Ba	NH4	Comments
95	Bot-10	2718	✓1	✓✓	✓	586 -0.1			1							✓		3	✓				
96		2500	✓2	✓✓	✓✓	1457 -0.3	545 -0.3	1484 +0.0	2										✓				
97		2000	✓3	✓✓		1328 -0.3			3														
98		1500	✓4	✓✓		547 -0.3			4														
99		1000	✓5	✓✓		462 +0.1			5														
100		750	✓6	✓✓		1192 +0.1			6														
101		500	✓7	✓✓		1202 +0.4			7													✓✓	(+12 no labels)
102	tmax	400	✓8	✓✓		439 +0.4			8														
103	34.75	339	✓9	✓✓		1336 +0.4			9														
104	34.7	321	✓10	✓✓		329 +0.3			10									✓					
105	34.6	293	✓11	✓✓	✓	1417 -0.1	1225 0.0		11													✓✓	
106	34.4	254	✓12	✓✓		425 -0.5			12										✓		✓✓	✓✓	
107	34	211	✓13	✓✓		456 -1.0			13											✓	✓✓	✓✓	
108	33.5	190	✓14	✓✓		1295 -1.2			14											✓	✓✓	✓✓	
109	33.1	176	✓15	✓✓		1130 -1.3			15				✓							✓	✓✓	✓✓	
110	32.9	165	✓16	✓✓		1270 -1.4			16											✓	✓✓	✓✓	Redraw oxy #1
111	32.6	147	✓17	✓✓		1352 -1.3			17											✓	✓✓	✓✓	
112	32.3	126	✓18	✓✓	✓	1231 -1.2	1284 -1.3		18											✓	✓✓	✓✓	Redraw oxy #1
113	chl max	78	✓19	✓✓		1136 -1.2			19														
114		51	✓20	✓✓	✗				20					✓✓	✓		✓				✓	✓✓	
115		36	✓21	✓✓	1	1446 -1.2			21					✓✓	✓								bottom spigot dripping?
116		20	✓22	✓✓		1343 -1.4			22					✓	✓		✓			✓	✓✓	✓✓	
117		12	✓23	✓✓		1216 -1.4			23					✓	✓		✓			✓	✓✓	✓✓	only one nutrient sample → 23 empty No salinity
118		0	✓24	✓✓	✓	1286 -1.0			24	✓			✓	✓	✓		✓	3	✓				bottom spigot might be leaking?

Bottle integrity: First test bottom petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

* Misun chooses 20-24

↑ ask Misun re labels

NH4 start STDS 18:04

No NH4

5

Rosette Log for IOS Cruise ID 2009-20

Ship: *CCGS Louis S St-Laurent*

Z ~ 3127m

Cast # 006

UTC Date (ddmmmyyyy) 23 09 2009

Ice Coverage 9/10

Water Depth(below hull) 3142 (CTD) m

~ 3180

Station CB-22

UTC Time 01:19

In Air pressure (before/after) -0.44/-0.43

Sound Speed 1500 m/s

CTD File 200920-006

Lat (N) 73 29.050

Lon (W) 137 57.131

CTD Operator MC

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC/ALK	DIC (KB)	13C-DIC (KB)	CDOM	Chl a (Total)	Chl a (PAM)	Chl a (Prod)	Bacteria	FW Alk	NUT	Salt	O18	Ba	NH4	Comments
119	BOT-10	3132	✓1	✓✓	✓	1422 -0.1			1								✓		3	✓				
120		2900	✓2	✓✓	✓✓	1364 -0.7	1194 -0.8	1430 -0.8	2										✓	✓				
121		2500	✓3	✓✓		1413 -0.9			3															
122		2000	✓4	✓✓		1382 -0.9			4															
123		1500	✓5	✓✓		1331 -0.7			5															
124		1000	✓6	✓✓		1471 -0.6			6															
125		800	✓7	✓✓	✓	1381 -0.5	1426 -0.4		7															
126		700	✓8	✓✓		1440 -0.3			8															
127		600	✓9	✓✓		1110 -0.2			9															
128		500	✓10	✓✓		1468 0.0			10															
129	EMAX	425	✓11	✓✓		1344 0.0			11										✓	✓				
130	34.8	381	✓12	✓✓		1427 0.0			12															
131	34.7	322	✓13	✓✓		1452 -0.1			13															
132	34.6	294	✓14	✓✓		1023 0.3			14												✓	✓		
133	34	216	✓15	✓✓		1224 -1.2			15												✓	✓		
134	33.5	199	✓16	✓✓		1297 -1.2			16												✓	✓		
135	33.1	186	✓17	✓✓		1432 -1.4			17				✓								✓	✓		
136	32.9	172	✓18	✓✓		1418 -1.3			18															
137	32.6	150	✓19	✓✓		1499 -1.3			19												✓	✓		
138	32.3	128	✓20	✓✓		1482 -1.3			20										✓		✓	✓		
139	chlmax	60	✓21	✓✓		1445 -1.0			21					✓✓							✓	✓		
140	EMAX	43	✓22	✓✓		1495 -0.9			22					✓✓				✓			✓	✓		
141		20	✓23	✓✓	✓	1434 -0.9	1223 -1.2		23									✓	✓	✓	✓	✓		
142		5	✓24	✓✓	✓	1293 -1.3			24	✓			✓	✓✓			✓	✓	3	✓	✓	✓		

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

↑
10m/1

Rosette Log for IOS Cruise ID 2009-20

Ship: *CCGS Louis S St-Laurent*

Z ~ 3221m

Cast # 007

UTC Date (ddmmmyyy) 23 09 2009

Ice Coverage 8/10

Water Depth(below hull) 3268 m

Station CB-27

UTC Time 10:12

In Air pressure (before/after) -0.56 -0.52

Sound Speed 1500

CTD File 200920-007

Lat (N) 73 0.146

Lon (W) 134 54.42

CTD Operator EF/MD/KY

Samp #	Target Property	Depth(m)	Niskin #	Bottle integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC/ALK	DIC (KB)	TSS-DIC (KB)	CDOM	Chl a (Total)	Chl a (PAM)	Chl a (Prod)	Bacteria	FW Alk	NUT	Salt	O18	Ba	NH4	Comments
143	Bot-10	3207	1	✓	✓	586 -0.2			1								✓		3	✓				
144		3000	2	✓	✓	575 -0.5	1457 -0.5	1484 -0.5	2								✓		✓	✓				
145		2500	3	✓	✓	1528 -0.3			3									✓						redraw.
146		2000	4	✓	✓	462 -0.8			4															
147		1500	5	✓	✓				5															
148		1000	6	✓	✓	547 -0.5	1192 -0.5		6															
149		800	7	✓	✓	1202 -0.5			7															
150		600	8	✓	✓	439 -0.3			8															
151		500	9	✓	✓	1336 -0.1			9														12	
152	chl max	413	10	✓	✓	329 -0.1			10															
153	34.75	352	11	✓	✓	1417 -0.1			11															
154	34.7	336	12	✓	✓	1225 -0.1			12									✓	✓		✓	✓		
155	34.6	306	13	✓	✓	425 -0.3			13									✓	✓					
156	34.4	266	14	✓	✓	456 -0.4			14															
157	34	227	15	✓	✓	1295 -0.8			15															
158	33.5	205	16	✓	✓	1270 -1.1			16															
159	33.1	191	17	✓	✓	1130 -1.1	1284 -1.1		17				✓						✓					
160	32.9	181	18	✓	✓	1352 -1.1			18										✓					
161	32.6	158	19	✓	✓	1136 -1.2			19															
162	32.3	134	20	✓	✓	1231 -1.1			20															
163	chl max	72	21	✓	✓	1286 -0.7			21					✓										
164		45	22	✓	✓	1343 -0.8			22					✓										
165		20	23	✓	✓	1216 -0.7			23					✓										redraw.
166		5	24	✓	✓	1446 -1.0			24	✓			✓				✓	✓	3	✓	✓	✓		

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

1284

really!
3 sets
+3 dup

3268 3255

Rosette Log for IOS Cruise ID 2009-20

Ship: CCGS Louis S St-Laurent

MK-7 ~ 3000 m

Cast # 008

UTC Date (ddmmmyyyy) 09/23/2009

Ice Coverage 9/10

Water Depth(below hull) 3033 m

Station MK-7

UTC Time 17:01

In Air pressure (before/after) 0.69/1-0.37

Sound Speed 1500

CTD File 200920-20

Lat (N) 72 29.45

Lon (W) 139 57.135

CTD Operator EF/Md/KY

ISUS cast
+ calibration
for SAZ, OXY

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC/ALK	DIC (KB)	13C-DIC (KB)	CDOM	Chl a (Total)	Chl a (PAM)	Chl a (Prod)	Bacteria	FW ALK	NUT	Salt	O18	Ba	NH4	*'C' (calibration) bottles use Firm method: ship 30 sec, up1, dn2, up1, Comments 30 sec + chase
167		1000	C1	✓	✓	✓	1451 -0.1	1358 -0.5	1								✓		3	✓				up1 dn2 up1
168		900	C2	✓	✓	✓	1443 -0.5	1361 -0.6	2								✓		✓					up1 dn2 up1
169		500	3	✓	✓				3															
170		300	4	✓	✓				4												✓	✓		
171		750	5	✓	✓				5												✓	✓		
172		225	6	✓	✓				6															
173		200	7	✓	✓				7												✓	✓		
174		190	8	✓	✓				8															
175		180	9	✓	✓				9				✓											
176		170	C10	✓	✓	✓	1448 -1.2	1309 -1.4	10										✓	✓				up1 dn2 up1
177		160	11	✓	✓				11												✓	✓		→ spigot dripping
178		150	12	✓	✓				12															
179		140	13	✓	✓				13															
180		130	14	✓	✓				14												✓	✓		
181		120	C15	✓	✓	✓	1447 -1.1	1351 -1.2	15										✓	✓				up1 dn2 up1
182		110	✓16	✓	✓				16															
183		100	17	✓	✓				17												✓	✓		
184		90	18	✓	✓				18															
185	chl max	66	C19	✓	✓	✓	1354 -1.0		19					✓	✓		✓	✓	✓	✓	✓	✓		up1 dn2 up1
186		43	C20	✓	✓	✓	1366 -1.1		20					✓	✓				✓	✓	✓	✓		" " "
187		30	C21	✓	✓	✓	1341 -1.1		21					✓	✓						✓	✓		" " "
188		17	C22	✓	✓	✓	1212 -1.2		22					✓	✓						✓	✓		" " "
189		10	C23	✓	✓	✓	1454 -1.3		23	✓				✓	✓		✓	✓	✓	✓	✓	✓		" " "
190		0	C24	✓	✓				24	✓				✓	✓		✓	✓	✓	✓	✓	✓		dn1 up1 *No bottle in rosette *ISUS *bucket sample taken at surface for MiSun.

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

No niskin but we took bucket for MiSun's chl-prod sample.
↑ 20-24 From MiSun

OX: 170-180 4
175 min 35 max
250 50 max

Salt

5, 15
120, 140
800, 900

Ask MiSun what she needs in labels

MiSun
NH4
7
8

Rosette Log for IOS Cruise ID 2009-20

Ship: CCGS Louis S St-Laurent

Z=3419

Cast # 009UTC Date (ddmmmyyyy) 24 09 2009Ice Coverage 9/10Water Depth(below hull) 3504 mStation Sta-AUTC Time 08:42In Air pressure (before/after) -0.55 / -0.52Sound Speed 1500CTD File 200920-Lat (N) 72 39.49Lon (W) 144 44.694CTD Operator EF/MD/KY

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC/ALK	DIC (KB)	13C-DIC (KB)	CDOM	Chl a (Total)	Chl a (PAM)	Chl a (Prod)	Bacteria	FW Alk	NUT	Salt	O18	Ba	NH4	Comments
191	Bot-10	3440	✓1	✓✓	✓	1360 -0.5			1	✓✓							✓		3	✓				I take a while for sensor to react.
192		3100	✓2	✓✓		586 -0.3	575 -0.3	1457 -0.5 1484 -0.6	2															
193		2500	✓3	✓✓		1328 -0.7			3															
194		2000	✓4	✓✓		462 -0.7			4															
195		1500	✓5	✓✓		547 -0.4			5											✓				
196		1000	✓6	✓✓		1192 -0.4			6															
197		800	✓7	✓✓	✓	1202 -0.3	439		7															
198		600	✓8	✓✓		1336 0.			8															
199		500	✓9	✓✓		329 0.2			9															NH4 test
200	timox	446	✓10	✓✓		1417 0.3			10											✓				
201	* 34.75	400	✓11	✓✓		1225 0.3			11															
202	34.7	338	✓12	✓✓		425 0.2			12									✓			✓	✓		
203	34.6	306	✓13	✓✓	✓	456 0.0	1295 0.0		13									✓						
204	34	236	✓14	✓✓		1270 -0.6			14															
205	33.5	211	✓15	✓✓		1130 -0.8			15															
206	33.1	192	✓16	✓✓		1284 -0.8			16	✓			✓											
207	32.9	178	✓17	✓✓		1352 -1.0			17															
208	32.6	151	✓18	✓✓		1136 -0.7			18												✓			
209	32.3	128	✓19	✓✓	✓	1231 -1.0	1286 -0.9	1343 -0.9	19													✓		
210		100	✓20	✓✓		1216 -0.9			20					✓✓										
211	chlmax	70	✓21	✓✓		1446 -0.4			21					✓✓						✓				
212		45	✓22	✓✓		1422 -0.4			22					✓✓										
213		20	✓23	✓✓		1223 0.0			23										✓					
214		5	✓24	✓✓	✓	1233 -0.8			24	✓			✓				✓	✓	3	✓	✓	✓		O18 sample lid cracked when tightened → replaced

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

* please log
34.75
and 34.8
Use whichever
is closer to the
middle btw.
34.7 & timox.

34.75 352
34.80 400

↑
dup @
bottom
and 5=33

↑
Linda,
please pull
dups from
second 'fresh'
set

Rosette Log for IOS Cruise ID 2009-20

Ship: *CCGS Louis S St-Laurent*

Cast # 010

UTC Date (ddmmmyyy) 24 09 2009

Ice Coverage /10

Water Depth(below hull) 2697 m

Station CB-29

UTC Time 22:50

In Air pressure (before/after) -0.43 / -0.52

Sound Speed 1500 m/s (Knudsen reads 2747m depth)

CTD File 200920-010

Lat (N) 71 59.129

Lon (W) 140 1.086

CTD Operator MC

Z ~ 2670 m

* False start → acquisition stopped
* 010 file overwritten

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC/ALK	DIC (KB)	13C-DIC (KB)	CDOM	Chl a (Total)	Chl a (RAM)	Chl a (Prod)	Bacteria	FW Alk	NUT	Salt	O18	Ba	NH4	Comments
215	bot-10	2687	✓1	✓✓	✓	1422 -0.3			1								✓		3	✓				
216		2500	✓2	✓✓		1440 -0.5			2															
217		2000	✓3	✓✓		1216 -0.5			3									✓			✓	✓		
218		1500	✓4	✓✓		1343 -0.5			4															
219		1000	✓5	✓✓		1286 -0.3			5									✓			✓	✓		REDRAW ex O ₂
220		800	✓6	✓✓		1231 0.0			6											✓				
221		600	✓7	✓✓	✓	1136 0.2	1352 0.3		7															
222		500	✓8	✓✓		1284 0.3			8															24 No Labels
223		450	✓9	✓✓		1130 0.3			9											✓				
224	twax	428	✓10	✓✓		1270 0.3			10															
225	34.8	384	✓11	✓✓		1295 0.3			11															
226	34.7	322	✓12	✓✓		136 0.3			12															
227	34.6	296	✓13	✓✓	✓	425 0.1	1225 0.1		13									✓			✓	✓		
228	34.4	258	✓14	✓✓		1417 -0.2			14															
229	34	218	✓15	✓✓		329 -0.7			15															
230	33.5	197	✓16	✓✓		1336 -1.1			16															
231	33.1	185	✓17	✓✓	✓✓	439 -1.1	1202 -1.1	1192 -1.0	17				✓											
232	32.9	171	✓18	✓✓		462 -1.2			18															
233	32.6	149	✓19	✓✓		547 -1.2			19															
234	32.3	126	✓20	✓✓		1328 -1.2			20											✓				
235	chilmax	78	✓21	✓✓		586 -0.8			21					✓✓										
236		45	✓22	✓✓		1484 -0.9			22					✓✓										
237		20	✓23	✓✓		1233 -0.7			23					✓✓										
238		5	✓24	✓✓	✓	1223 -0.1			24	✓			✓					✓	3	✓	✓	✓	✓	

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

018#214 bottle 24
Sta A →
replaced cap sample note

↑
3 sets
(Linda will get dups from 2nd set)

Altimeter reading
= 10.06 m above bottom

Rosette Log for IOS Cruise ID 2009-20

Ship: CCGS Louis S St-Laurent
OPEN WATER

Z ~ 60m

Cast # 011 UTC Date (ddmmmyyyy) 27 09 2009 Ice Coverage 0 / 10 Water Depth(below hull) 57 m
Station CB-28aa UTC Time 03:00 In Air pressure (before/after) -0.48 -0.47 Sound Speed 1466 m/s
CTD File 200920-011 Lat (N) 69 59.923 Lon (W) 139 58.918 CTD Operator MC

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC/ALK	BIC (KB)	13C-BIC (KB)	CDOM	Chl a (Total)	Chl a (PAM)	Chl a (Prod)	Bacteria	FW Alk	NUT	Salt	O18	Ba	NH4	Comments
239	bot-10	47	✓1	✓	✓	1429, 0.0			1								✓	✓	3	✓	✓	✓	✓	*Sensave crashed before launch - had to reboot computer
240	40	40	✓2	✓	✓	1422, -0.5			2					✓			✓	✓	1	✓	✓	✓	✓	
241	20	20	✓3	✓	✓	1233, -0.7	1484, -0.7		3					✓			✓	✓	1	✓	✓	✓	✓	
242	5	5	✓4	✓	✓	586, -0.7			4	✓			✓	✓			✓	✓	3	✓	✓	✓	✓	
			5						5															
			6						6															
			7						7															
			8						8															
			9						9															
			10						10															
			11						11															
			12						12															
			13						13															
			14						14															
			15						15															
			16						16															
			17						17															
			18						18															
			19						19															
			20						20															
			21						21															
			22						22															
			23						23															
			24						24															

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

↑
water may be silty??

2100m

Rosette Log for IOS Cruise ID 2009-20

Ship: *CCGS Louis S St-Laurent*
OPEN WATER

Z ~ 250 m

Cast # 012

UTC Date (ddmmmyyy) 27 09 2009

Ice Coverage 0/10

Water Depth(below hull) 238 m

Station MK-1

UTC Time 04:37

In Air pressure (before/after) -0.277 -0.44

Sound Speed 1466

CTD File 200920-012

Lat (N) 70 13 969

Lon (W) 140 11 21

CTD Operator MC

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC/ALK	DIC (KB)	13C-DIC (KB)	CDOM	Chl-a (Total)	Chl-a (PAM)	Chl-a (Prod)	Bacteria	FW Alk	NUT	Salt	O18	Ba	NH4	Comments
243	bot-10	222	✓1	✓✓	✓	547 +1.7			1								✓	✓	3	✓	✓	✓	✓	
244	34	140	✓2	✓✓	✓	462 0.0			2															
245	33.5	120	✓3	✓✓	✓	1202 -0.6			3															
246	✓33.1	110	✓4	✓✓	✓✓	1192 -0.8	439 -0.9	1336 -1.0	4				✓							✓				
247	32.9	107	✓5	✓✓	✓	329 -0.7			5															Re-draw O ₂
248	32.6	95	✓6	✓✓	✓	1417 -0.9			6															Top valve possibly open → Redraw O ₂
249	32.3	82	✓7	✓✓	✓	1225 -0.7			7															
250	chl-a-x	53	✓8	✓✓	✓	425 -0.6			8															
251	45	45	✓9	✓✓	✓	456 -0.5			9															
252	20	20	✓10	✓✓	✓	1295 +0.2			10												✓			
253	5	5	✓11	✓x	✓✓	1270 2.3	1130 2.4		11	✓			✓				✓	✓	3	✓	✓	✓	✓	
			12						12															
			13						13															
			14						14															
			15						15															
			16						16															
			17						17															
			18						18															
			19						19															
			20						20															
			21						21															
			22						22															
			23						23															
			24						24															

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

Rosette Log for IOS Cruise ID 2009-20

Ship: CCGS Louis S St-Laurent

Z ~ 1000
ISUS is
onCast # 013UTC Date (ddmmmyyyy) 27 09 2009Ice Coverage 0 / 10Water Depth(below hull) 808 mStation MK-3UTC Time 07:17:34In Air pressure (before/after) -0.5 / -0.35Sound Speed 1466CTD File 200920-013Lat (N) 70 34.337Lon (W) 139 58.855CTD Operator ZF/MD/KY

Samp #	Target Property	Depth(m)	Niskin #	Bottle integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC/ALK	DIC (KB)	13C-DIC (KB)	CDOM	Chl a (Total)	Chl a (PAM)	Chl a (Prod)	Bacteria	FW Alk	NUT	Salt	O18	Ba	NH4	Comments
254	MAX1000 Bot-10/1000	792	✓1	✓✓	✓	1284 0.8			1								✓		3	✓				
255		750	✓2	✓✓	✓	1136 0.6	1231 0.5		2															
256		500	✓3	✓✓		1286 0.5			3															
257		450	✓4	✓✓		1343 0.5			4															
258	tmax	366	✓5	✓✓	✓✓	1216 0.5	1446 0.5	1454 0.5	5															
259	34.75	289	✓6	✓✓		1351 0.3	1384		6															
260	34.7	265	✓7	✓✓		1354 0.2			7											✓				
261	34.6	240	✓8	✓✓		1366 0.0			8									✓			✓	✓	✓	
262	34.4	212	✓9	✓✓		1341 -0.2			9														✓	
263	34	169	✓10	✓✓		1212 -0.9			10														✓	
264	33.5	148	✓11	✓✓		1453 -1.2			11														✓	
265	33.1	133	✓12	✓✓		1347 -1.2			12				✓										✓	Spigot drips
266	32.9	122	✓13	✓✓	✓	1428 -1.2	1299 -1.2		13												✓		✓	
267	32.6	105	✓14	✓✓		1204 -1.0			14														✓	
268	32.3	90	✓15	✓✓		1356 -1.0			15														✓	
269	chl/min	53	✓16	✓✓		1433 -0.7			16														✓	
270		45	✓17	✓✓		1456 -0.5			17														✓	
271		20	✓18	✓✓		1362 0.1			18														✓	
272		5	✓19	✓✓	✓	1363 0.3			19	✓			✓				✓	✓	3	✓	✓	✓	✓	
			20						20															
			21						21															
			22						22															
			23						23															
			24						24															

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

Rosette Log for IOS Cruise ID 2009-20

Ship: CCGS Louis S St-Laurent

Z ~ 2000

Cast # 014 UTC Date (ddmmmyyyy) 27 09 2009

Ice Coverage 0/10

Water Depth(below hull) 2089 m

Station CB-286 (MK-5) UTC Time 10:51:22

In Air pressure (before/after) 01 - 0.46

Sound Speed 1466

ISUS OFF

CTD File 200920-014 Lat (N) 70 59.974 Lon (W) 139 59.753

CTD Operator EF/MD/KY

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC/ALK	DIC (KB)	130-DIC (KB)	CDOM	Chl a (Total)	Chl a (PAM) +	-Chl a (Preb)	Bacteria	FW/ALK	NUT	Salt	O18	Ba	NH4	Comments
273	bot-10	2069	✓ 1	✓✓	✓	1360 7.6			1								✓		3	✓				
274		1500	✓ 2	✓✓		1223 -0.2			2															re-draw
275		1000	✓ 3	✓✓	✓✓	1457 0.1	1188 0.0	1445 0.0	3															redraw to 1.
276		750	✓ 4	✓✓		1352 0.2			4															
277		500	✓ 5	✓✓		1493 0.4			5													✓✓		(+ STDs NH4)
278		450	✓ 6	✓✓		1297 0.5			6															
279	chlmax	436	✓ 7	✓✓		1344 0.5			7															
280	34.75	351	✓ 8	✓✓		1331 0.5			8															redraw
281	34.7	325	✓ 9	✓✓		1150 0.5			9															
282	34.6	298	✓ 10	✓✓		1434 0.3			10									✓			✓	✓✓		
283	34.4	260	✓ 11	✓✓		1418 -0.3			11														✓✓	redraw
284	34	228	✓ 12	✓✓	✓	1110 -0.5	1471 -0.5		12														✓✓	end cap problem
285	33.5	206	✓ 13	✓✓		1364 -0.8			13														✓✓	
286	33.1	187	✓ 14	✓✓		1452 -1.0			14				✓										✓✓	
287	32.9	170	✓ 15	✓✓		1432 -0.9			15														✓✓	
288	32.6	140	✓ 16	✓✓		1427 -0.1			16														✓✓	
289	32.3	106	✓ 17	✓✓	✓	1440 -0.7	1430 -0.6		17														✓	
290	chlmax	49	✓ 18	✓✓		1375 -0.2			18					✓✓				✓	3	✓	✓	✓	✓✓	
291	chlmax	49	✓ 19	✓✓	✓	1499 -0.2	1340 0.1		19					✓	✓			✓	✓	✓	✓	✓	✓	
292		33	✓ 20	✓✓		1426 -0.1			20					✓	✓			✓	3	✓	✓	✓	✓	
293		23	✓ 21	✓✓		1194 0.3			21					✓	✓			✓	✓	✓	✓	✓	✓	
294		13	✓ 22	✓✓		1495 -0.8			22					✓	✓			✓	✓	✓	✓	✓	✓	
295		8	✓ 23	✓✓		1482 1.2			23					✓	✓			✓	✓	✓	✓	✓	✓	
296		0	✓ 24	✓✓	✓	1023 1.0			24	✓			✓	✓	✓		✓	✓	3	✓	✓	✓	✓	

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

misu
chooses

Rosette Log for IOS Cruise ID 2009-20

Ship: CCGS Louis S St-Laurent

Cast # 015

UTC Date (ddmmmyyyy) 28/09/2009

Ice Coverage 10% small floating pieces of ice

Water Depth(below hull) 2023 m (Knudson)

Station BL-6

UTC Time 04:55

In Air pressure (before/after) -0.46/-0.25

Sound Speed 1466

CTD File 200920-015

Lat (N) 71 39.458 Lon (W) 151 13.882

CTD Operator MC

Z ~ 2000 m
21 nm

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC (KB)	13C-DIC (KB)	CDOM	Chl a (Total)	Chl a (PAMAPROD)	Bacteria	Niskin #	FW Alk	NUT	O18	Ba	NH4	SALT	Comments
297	bot-10	2008	✓1	✓✓	✓	1284 +0.0			1	✓✓	✓✓				✓	1	✓	3	✓	✓		✓	FALSE START WITH CTD → STOP, WAIT, RE-START
298		1800	✓2	✓✓		1186 +0.3			2							2						✓	Re-draw
299		1500	✓3	✓✓	✓	1231 0.0	1286 0.0	1343 0.0	3							3							
300		1200	✓4	✓✓		1363 -0.1			4	✓	✓✓					4	✓		✓	✓			
301		1000	✓5	✓✓		1216 0.0			5							5							
302		800	✓6	✓✓		1454 +0.1			6							6							
303		600	✓7	✓✓		1351 +0.3			7	✓	✓✓					7	✓		✓	✓			
304		500	✓8	✓✓		1354 +0.4			8							8					✓✓	✓	
305		450	✓9	✓✓		1366 +0.5			9	✓	✓✓					9	✓		✓	✓			
306	✓ timex	400	✓10	✓✓		1341 +0.5			10							10							
307	34.75	316	✓11	✓✓		1212 +0.4			11							11							
308	34.7	295	✓12	✓✓		1453 +0.3			12							12							
309	34.6	266	✓13	✓✓		1347 +0.2			13							13	✓		✓	✓	✓✓	✓	
310	34.4	239	✓14	✓✓		1428 -0.2			14							14	✓		✓	✓	✓✓	✓	
311	34	212	✓15	✓✓		1299 -0.7			15	✓	✓✓					15	✓		✓		✓✓	✓	
312	33.5	185	✓16	✓✓		1204 -1.1			16	✓	✓✓					16	✓		✓		✓✓	✓	
313	33.1	168	✓17	✓✓		1356 -1.1			17	✓✓	✓✓	✓				17	✓		✓		✓✓	✓	bottom spigot leaking
314	32.9	155	✓18	✓✓	✓	1433 -1.2	1456 -1.1		18	✓	✓✓					18	✓		✓		✓✓	✓	
315	32.6	131	✓19	✓✓		1362 -1.2			19	✓	✓✓					19	✓		✓		✓✓	✓	
316	32.3	111	✓20	✓✓		1446 -1.1			20							20	✓		✓		✓✓	✓	
317	✓ timex	80	✓21	✓✓		1360 +0.3			21							21	✓		✓		✓✓	✓	
318		45	✓22	✓✓		1223 -0.5			22							22	✓		✓		✓✓	✓	
319		20	✓23	✓✓		1457 0.0			23							23	✓		✓		✓✓	✓	
320		5	✓24	✓✓	✓	1188 0.1			24	✓		✓			✓	24	✓	3	✓	✓	✓✓	✓	

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

27

15

Rosette Log for IOS Cruise ID 2009-20

Ship: *CCGS Louis S St-Laurent*

2 ~ 155m
9nm

Cast # D16

UTC Date (ddmmmyyyy) 28/09/2009

Ice Coverage 0/10

Water Depth(below hull) 152 m

Station BL-2

UTC Time 08:21

In Air pressure (before/after) -0.56 / -0.5V

Sound Speed 1466

CTD File 200920-D16

Lat (N) 71 23.761 Lon (W) 152 02.75

CTD Operator EF/JC

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC/ALK	DIC (KB)	13C-DIC (KB)	CDOM	Chl a (Total)	Chl a (PAM/Prod)	Bacteria	Niskin #	FW Alk	NUT	O18	Ba	NH4	SALT	Comments
321	bot-10	138	✓ 1	✓✓	✓	575 0.4			1		✓✓	✓✓				✓	1	✓	3	✓	✓	✓✓	✓	
322	32.9	100	✓ 2	✓✓	✓	1194 -0.6	1430 -0.8		2		✓	✓	✓			✓	2	✓	✓	✓	✓	✓	✓	
323	32.6	89	✓ 3	✓✓		1364 -1.0			3		✓	✓				✓	3	✓	✓	✓	✓	✓		
324	32.3	71	✓ 4	✓✓		1350 -1.0			4		✓✓	✓✓				✓	4	✓	✓	✓	✓	✓	✓	
325	chl my	45	✓ 5	✓✓		1023 1.4			5		✓	✓				✓	5	✓	✓	✓	✓	✓	✓	
326	chl my	30	✓ 6	✓✓		1293 1.3			6		✓	✓				✓	6	✓	✓	✓	✓	✓	✓	
327		20	✓ 7	✓✓		1495 0.7			7		✓	✓				✓	7	✓	✓	✓	✓	✓	✓	
328		5	✓ 8		✓	1375 0.5			8	✓	✓	✓✓	✓			✓	8	✓	3	✓	✓	✓✓	✓	
			9						9								9							
			10						10								10							
			11						11								11							
			12						12								12							
			13						13								13							
			14						14								14							
			15						15								15							
			16						16								16							
			17						17								17							
			18						18								18							
			19						19								19							
			20						20								20							
			21						21								21							
			22						22								22							
			23						23								23							
			24						24								24							

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

9

Rosette Log for IOS Cruise ID 2009-20

Ship: *CCGS Louis S St-Laurent*

Cast # 017

UTC Date (ddmmmyyyy) 28 / 09 / 2009

Ice Coverage 3 / 10

Water Depth(below hull) 831 m

Station BL-4

UTC Time 10:53

In Air pressure (before/after) -0.61

Sound Speed 1466

CTD File 200920-017

Lat (N) 71 29.557 Lon (W) 151 38.323

CTD Operator EF

2 ~ 1010 m
~ 3 hr sampling
40 min

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC/ALK	DIC (KB)	13C-DIC (KB)	CDOM	Chl a (Total)	Chl a (PAM/Prod)	Bacteria	Niskin #	FW Alk	NUT	O18	Ba	NH4	SALT	Comments
329	bot 10	817	✓ 1	✓✓	✓	1224 0.8			1		✓	✓✓				✓	1	✓	3	✓	✓		✓	
330		800	✓ 2	✓✓		1434 0.5			2			✓✓					2			✓			✓	
331		600	✓ 3	✓✓	✓✓	1493 0.5	1452 0.5	1482 0.5	3								3						✓	
332		500	✓ 4	✓✓		1499 0.5			4		✓						4					✓✓		
333		450	✓ 5	✓✓		1422 0.5			5								5							
334	6m x	317	✓ 6	✓✓	✓	1418 0.5	1297 0.5		6								6							
335	34.25	290	✓ 7	✓✓		1468 0.5			7								7						✓	
336	34.7	265	✓ 8	✓✓		1381 0.5			8								8							
337	34.6	231	✓ 9	✓✓		1340 0.4			9								9							
338	34.4	208	✓ 10	✓✓		1427 0.0			10								10				✓✓			
339	34	179	✓ 11	✓✓		1110 -0.5			11								11			✓	✓			
340	33.5	154	✓ 12	✓✓	✓	1344 -0.9	1382 -0.9		12								12							
341	33.1	140	✓ 13	✓✓		1413 -1.0			13		✓		✓				13							
342	32.9	133	✓ 14	✓✓		1426 -0.9			14								14							
343	32.6	116	✓ 15	✓✓		1440 -0.9			15								15							
344	32.3	109	✓ 16	✓✓		1471 -0.7			16								16							
345	churn	50	✓ 17	✓✓		1331 -0.2			17					✓✓			17							
346		45	✓ 18	✓✓		586 -0.1			18					✓✓			18							
347		20	✓ 19	✓✓		1233 0.0			19					✓✓			19							
348		5	✓ 20	✓✓	✓	1422 0.6			20	✓	✓	✓✓	✓			✓	20	✓	3	✓	✓	✓✓	✓	
			21						21								21							
			22						22								22							
			23						23								23							
			24						24								24							

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

24

820

#192

17

Rosette Log for IOS Cruise ID 2009-20

Ship: CCGS Louis S St-Laurent

2 ~ 3000

Cast # 018

UTC Date (ddmmmyyyy) 28 | 09 | 2009

Ice Coverage 3/10

Water Depth(below hull) 2978 m

Station BL-8

UTC Time 15:35

In Air pressure (before/after) 0.54 / 0.57

Sound Speed 1466

CTD File 200920-18

Lat (N) 71 57-186 Lon (W) 150 10-198

CTD Operator ZZ

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC/ALK	DIC (KB)	13C-DIC (KB)	CDOM	Chl a (Total)	Chl a (PAM/Prod)	Bacteria	Niskin #	FW Alk	NUT	O18	Ba	NH4	SALT	Comments
349	bot-10	2980	✓1	✓✓	✓	1447 40.5			1		✓✓	✓✓				✓	1	✓	3	✓	✓		✓	
350		2500	✓2	✓✓		1429 -0.2			2							✓	2							
351		2000	✓3	✓✓		1424 -0.4			3								3							
352		1500	✓4	✓✓	✓	1328 -0.4	547 -0.3		4								4							
353		1008	✓5	✓✓		463 -0.1			5								5							find at 1008
354		800	✓6	✓✓		1202 0.2			6								6							
355		600	✓7	✓✓		1192 0.4			7								7							
356		500	✓8	✓✓		439 0.5			8								8					✓✓		
357		450	✓9	✓✓		329 0.5			9								9							
358	6mm	394	✓10	✓✓		1336 0.7			10	✓							10							
359	34.75	333	✓11	✓✓	✓	1417 0.6	1225 0.7	456 0.7	11								11							drippy, maybe tip not close tight enough
360	34.7	308	✓12	✓✓		425 0.5			12								12			✓	✓		✓	
361	34.6	277	✓13	✓✓		1295 0.3			13								13					✓✓		
362	34.4	238	✓14	✓✓		1270 -0.2			14								14					✓✓		
363	34	210	✓15	✓✓		1130 -0.5			15								15					✓✓		
364	33.5	193	✓16	✓✓		1309 -0.7			16								16					✓✓		
365	33.1	175	✓17	✓✓	✓	1451 -0.8	1358 -0.7		17	✓		✓					17					✓✓		redraw #1
366	32.9	161	✓18	✓✓		1443 -1.0			18								18					✓✓		redraw
367	32.6	138	✓19	✓✓		1361 -0.9			19								19					✓✓		
368	32.3	108	✓20	✓✓		1448 0.1			20								20					✓✓		
369	1/2 WA	57	✓21	✓✓		1433 0.6			21					✓✓			21					✓✓		
370	OH/1mm	31	✓22	✓✓		1362 2.9			22					✓✓			22					✓✓		
371		20	✓23	✓✓		1456 1.1			23					✓✓			23					✓✓		
372		5	✓24	✓✓	✓	1231 0.5			24	✓	✓	✓	✓			✓	24	✓	3	✓	✓		✓	

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

28

Turn 1600

7
could
be
Chl a +
PAM/PROD

2970

151
95

18

Rosette Log for IOS Cruise ID 2009-20

Ship: *CCGS Louis S St-Laurent*

Cast # 019

UTC Date (ddmmmyyyy) 28 09 2009

Ice Coverage /10

Water Depth(below hull) 3691 m

Station CB-2a

UTC Time 21:22

In Air pressure (before/after) -0.481 - 0.36

Sound Speed 1466 m/s

CTD File 200920-019

Lat (N) 72 29.605 Lon (W) 150 2.770

CTD Operator MC

w/ISUS

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - TriPLICATE	Niskin #	DIC/ALK	DIC (KB)	13C-DIC (KB)	CDOM	Chl a (Total)	Chl a (PAM/Prod)	Bacteria	Niskin #	FW Alk	NUT	Sal	O18	Ba	NH4	Comments
373		300	✓1	✓✓					1								1	3						Downcast speed 60m/min 4hr cast.
374		250	✓2	✓✓					2								2							
375		200	✓3	✓✓					3								3							
376		180	✓4	✓✓					4								4							
377		160	✓5	✓✓					5								5							
378		140	✓6	✓✓					6								6							
379		120	✓7	✓✓					7								7							
380		100	✓8	✓✓					8								8							
381		80	✓9	✓✓					9								9							
382		68	✓10	✓✓					10								10							
383		68	✓11	✓✓					11					✓			11	X						
384		68	✓12	✓✓					12					✓			12	X						
385		44	✓13	✓✓					13					✓			13	✓		✓	✓			
386		31	✓14	✓✓					14					✓			14							
387		18	✓15	✓✓					15					✓			15	✓		✓	✓			
388		10	✓16	✓✓					16					✓			16							
389		0	✓17	✓✓					17	✓				✓			17	✓	3		✓	✓		
			18						18								18							
			19						19								19							
			20						20								20							
			21						21								21							
			22						22								22							
			23						23								23							
			24						24								24							ISUS ON

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

20-29

3710

Z~ 3680

Rosette Log for IOS Cruise ID 2009-20

Ship: CCGS Louis S St-Laurent

(CTD+10m)

Cast # 020

UTC Date (ddmmmyyyy) 29 / 09 / 2009

Ice Coverage 1/10

Water Depth (below hull) 3749m

Station CB-2

UTC Time 1:25

in Air pressure (before/after) -0.44 / -0.45

Sound Speed 1466 m/s

CTD File 200920-020

Lat (N) 73 0.342

Lon (W) 149 59.675

CTD Operator MC

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tmp	Oxy Flask #, and draw tmp - Duplicate	Oxy Flask #, and draw tmp - Triplicate	Niskin #	DIC/ALK	DIC (KB)	TSS-DIC (KB)	CDOM	Chl a (Total)	Chl a (PAM/Prod)	Bacteria	Niskin #	FW Alk	NUT	Sal	O18	Ra	NH4	Comments
390	Bot 10	3739	✓1	✓✓	✓	575 +0.5			1							✓	1	3	✓					WHOI - mooring release check @ bottom x 3 (26 min @ bottom) 3739m
391		3100	✓2	✓✓	✓✓	1194 +0.1	1430 0.0	1364 -0.2	2								2		✓					Bottle 1194 → small bubble from MnCl2 removed.
392		2500	✓3	✓✓		1150 -0.3			3								3							
393		2000	✓4	✓✓		1023 -0.3			4								4							
394		1500	✓5	✓✓		1293 -0.3			5								5							
395		1000	✓6	✓✓		1495 0.0			6								6							
396		750	✓7	✓✓		1352 +0.3			7								7							
397		500	✓8	✓✓		1188 +0.5			8								8						✓✓	
398		450	✓9	✓✓		1354 +0.5			9								9				✓	✓		
399	4 min	390	✓10	✓✓		1366 +0.5			10								10							
400	34.75	372	✓11	✓✓		1341 +0.5			11								11							
401	34.7	342	✓12	✓✓		1212 +0.3			12								12							
402	34.6	300	✓13	✓✓		1453 -0.3			13								13	✓			✓	✓	2	
403	34.4	264	✓14	✓✓		1347 -0.7			14								14							
404	34	244	✓15	✓✓	✓	1428 -1.1	1299 -1.0		15								15							
405	33.5	219	✓16	✓✓		1204 -1.4			16								16				✓	✓		
406	33.1	204	✓17	✓✓		1356 -1.3			17				✓				17							
407	32.9	170	✓18	✓✓		1445 -1.3			18								18							
408	32.6	140	✓19	✓✓		1284 -1.2			19								19							
409	32.3	93	✓20	✓✓		1136 -0.5			20								20			✓				
410	1 min	60	✓21	✓✓		1446 -0.7			21					✓✓			21							
411	CH 100	30	✓22	✓✓		1360 -0.5			22					✓✓			22							
412		20	✓23	✓✓	✓	1223 -0.1	1457 0.0		23								23						2	
413		5	✓24	✓✓	✓	1361 -0.0			24	✓			✓	✓✓		✓	24	✓	3	✓✓	✓	✓		

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

Note: T_{max} bottle removed + all salinity targets shifted up one bottle.

Kristina to confirm

Knudson Reels { 3793 @ 1466 m/s
FY2 { 3822 @ 1478 m/s

SS changed @ bottom of cast

3780

Z ~ 3810

Rosette Log for IOS Cruise ID 2009-20

Ship: CCGS Louis S St-Laurent

Reel (CFD+ALT): 3812+10.

Cast # 0.21

UTC Date (ddmmmyyyy) 29/09/2009

Ice Coverage 5/10

Water Depth (below hull) 3793 m

Station CB-3

UTC Time 10:00

In Air pressure (before/after) -0.5 / -0.38

Sound Speed

CTD File 200920-021

Lat (N) 73 59.884

Lon (W) 156 0.558

Software crashed.

CTD Operator EI

Stratification Test

At 3 bottles (50m, 200m, 1000m)

Take 4 salts @ first samples

Take 4 salts from the

drops of the bottle.

Comments

So 8 bottles / test Niskin

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw trip	Oxy Flask #, and draw trip - Duplicate	Oxy Flask #, and draw trip - Triplicate	Niskin #	DIC/ALK	DIC (KB)	130-DIC (KB)	CDOM	Chl a (Total)	Chl a (Prod)	Bacteria	Niskin #	FW Alk	NUT	Sal	OT8	Ba	NH4	Comments
414	Bot-10	3812	1	✓	✓	1224 0.8			1							✓	1		3	✓				
415		3100	2	✓	✓	1434 0.4	1493 0.0		2								2							
416		2500	3	✓	✓	1452 -0.2			3								3							
417		2000	4	✓	✓	1482 -0.3			4								4							
418		1500	5	✓	✓	1499 -0.2			5								5							
419		1000	6	✓	✓	1418 0.2	1297 0.3	1468 0.4	6								6		8	✓	✓			8 at 1000 → 4+4
420		750	7	✓	✓	1381 0.5			7								7							
421		500	8	✓	✓	1340 0.6			8								8							
422		450	9	✓	✓	1427 0.6			9								9							
423	34.75	382	10	✓	✓	1110 0.5			10								10							
424	34.7	353	11	✓	✓	1344 0.3			11								11							
425	34.6	324	12	✓	✓	1382 0			12								12							
426	34.4	287	13	✓	✓	1413 -0.6			13								13	✓		✓	✓	2		
427	34	252	14	✓	✓	1440 -1.0			14								14							
428	33.5	226	15	✓	✓	1471 -1.1			15								15		8					→ 8 salts : 4+4
429	33.1	204	16	✓	✓	1331 -1.0			16								16							
430	32.9	183	17	✓	✓	586 -0.8			17								17							
431	32.6	156	18	✓	✓	1233 -0.2			18								18							
432	32.3	133	19	✓	✓	1286 -0.1	1351 -0.1		19								19							
433		95	20	✓	✓				20								20							
434	chl max	75	21	✓	✓				21					✓			21		8					→ 8 salts : 4+4
435		60	22	✓	✓				22					✓			22							
436		25	23	✓	✓	1454 0.0			23					✓			23			✓	✓	2		
437		5	24	✓	✓	1363 -0.5			24	✓			✓			✓	24	✓	3	✓	✓	✓		

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments:

chl max 75
Time 21

↑
confirm
w/ Kristine

Rosette Log for IOS Cruise ID 2009-20

Ship: CCGS Louis S St-Laurent

Cast # 022 UTC Date (ddmmmyyyy) 29/09/2009 Ice Coverage 0/10 Water Depth(below hull) 3825 m
Station 184 UTC Time 16:32 In Air pressure (before/after) -0.6 / -0.4 Sound Speed 1478
CTD File 200920-022 Lat (N) 74 58-736 Lon (W) 150 0287 CTD Operator EF

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw trip	Oxy Flask #, and draw trip - Duplicate	Oxy Flask #, and draw trip - TriPLICATE	Niskin #	DIC/ALK	DIC (KB)	13C-DIC (KB)	CDOM	Chl a (Total)	Chl a (PAM/Prod)	Bacteria	Niskin #	FW Alk	NUT	Sal	O18	Ba	NH4	Comments
438	Chl max	69	1						1						X		1							
439		69	2						2						X		2							
440		44	3						3						X		3							
441		31	4						4						X		4							
442		18	5						5						X		5							
443		10	6						6						X		6							
444		0	7						7						X		7							
			8						8								8							
			9						9								9							
			10						10								10							
			11						11								11							
			12						12								12							
			13						13								13							
			14						14								14							
			15						15								15							
			16						16								16							
			17						17								17							
			18						18								18							
			19						19								19							
			20						20								20							
			21						21								21							
			22						22								22							
			23						23								23							
			24						24								24							

Bottle integrity: First test lower petcock then test top valve. 0 means pass, 1 means fail. If niskin fails, explain this in the comments column.

Comments: