

Rosette Log for IOS Cruise ID 2009-20

Ship: CCGS Louis S St-Laurent

Cast # 045

UTC Date (ddmmmyyy) 09 | 10 | 2009

Ice Coverage 10/10

Water Depth(below hull) 3632 m

Station CB-18

UTC Time 07:32

In Air pressure (before/after) -0.2 / -0.2

Sound Speed 1478

CTD File 200920-045

Lat (N) 75 0-25

Lon (W) 140 3-613

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)	13C-DIC (KB)	CDOM	Chl a (Total)	Chl a (PAM/Prod)	Bacteria	Niskin #	FW Alk	NUT	Sal	O18	Ba	NH4	Comments
941	bot-10	3621	1	✓	✓	1023 0.8			1							✓	1		3	✓				
942		3100	2	✓	✓	1223 0.1	1136 0.0	1433 -0.2	2								2							
943		2500	3	✓	✓	1445 -0.4			3								3							
944		2000	4	✓	✓	1204 -0.5			4								4							
945		1500	5	✓	✓	1457 -0.3			5								5							
946		1000	6	✓	✓	1299 -0.3			6								6							
947		750	7	✓	✓	1448 -0.1			7								7							
948		500	8	✓	✓	1110 0.3			8								8							
949	tmr	453	9	✓	✓	1443 0.2			9								9							
950	34.8	405	10	✓	✓	1452 0.3			10								10							
951	34.7	342	11	✓	✓	1499 0			11								11							
952	34.6	314	12	✓	✓	1363 -0.3	1482 0.0		12								12				✓	✓		
953	34.4	276	13	✓	✓	1188 -0.3			13								13							
954	34	233	14	✓	✓	1468 -1.0			14								14				✓	✓		missed bottle 14 m Ba.
955	33.5	218	15	✓	✓	1347 -1			15								15							
956	33.1	205	16	✓	✓	1212 -1.1			16				✓				16				✓	✓		
957	32.9	198	17	✓	✓	1453 -1.0			17								17				✓	✓		
958	32.6	178	18	✓	✓	1366 -1.0			18								18				✓	✓		
959	32.3	133	19	✓	✓	1354 -1.2			19								19				✓	✓		
960	1/2	103	20	✓	✓	1358 -1.0			20					✓			20							
961	chl	74	21	✓	✓	1293 -0.6	1495 -0.5	1422 -0.5	21					✓			21	✓			✓	✓		redraw 1422, pH 12.93
962	tmr	21	22	✓	✓	1341 -0.2			22					✓			22	✓						
963		15	23	✓	✓	1360 -0.3			23					✓			23							
964		5	24	✓	✓	1352 -0.6			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:

O₂ and tmr: 3:36 AM

07:25 - 10:35

Rosette Log for IOS Cruise ID 2009-20

Ship: CCGS Louis S St-Laurent

Depth From Bridge

Z = 3520

Full depth
w/ Near Surface
Max StudyCast # 046 UTC Date (ddmmmyyy) 09 | 10 | 2009Ice Coverage 9.0/10Water Depth(below hull) 3527 mStation CB-21 UTC Time 20:07In Air pressure (before/after) -0.24/-0.22Sound Speed 1478 m/sCTD File 200920-046 Lat (N) 74 0.199 Lon (W) 140 5.156CTD Operator MC ?

Samp #	Target Property +11m	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
965	bot-10	3510	✓ 1	✓	✓	1493 +1.4	1446 +0.9		1	✓						✓	1	3	✓					Re-draw O ₂
966		3100	✓ 2	✓		1375 +0.4			2								2							
967		2500	✓ 3	✓		1361 +0.2			3								3							
968		2000	✓ 4	✓	✓	1364 +0.1	1286 +0.1	1343 +0.2	4								4	✓		✓	✓			
969		1500	✓ 5	✓		1484 +0.2			5								5							
970		1000	✓ 6	✓		1328 +0.4			6								6	✓		✓	✓			
971		750	✓ 7	✓		462 +0.6			7								7							
972		500	✓ 8	✓		439 +0.9			8								8							
973	tmax	422	✓ 9	✓		329 +0.9			9								9							
974	34.8	398	✓ 10	✓		1336 +0.9			10								10							
975	34.6	309	✓ 11	✓		1202 +0.6			11								11	✓		✓	✓			
976	34.4	269	✓ 12	✓		1417 0.0			12	✓							12	✓						drippy end cap
977	34	234	✓ 13	✓		1225 -0.5			13								13	✓						
978	33.5	216	✓ 14	✓		456 -0.7			14								14	✓						
979	33.1	198	✓ 15	✓		425 -0.7			15				✓				15	✓						
980	32.9	180	✓ 16	✓	✓	1295 -0.7	1270 -0.7		16								16	✓						
981	32.6	152	✓ 17	✓		1432 -0.7			17								17	✓		✓				
982	32.3	128	✓ 18	✓		1309 -0.6			18								18	✓						
983	tmax	91	✓ 19	✓		1451 -0.2			19								19	✓						
984	tmin	76	✓ 20	✓		1284 0.0			20	✓							20	✓						
985	tmax	51	✓ 21	✓		1216 +0.5			21					✓			21	✓						
986	tmin	43	✓ 22	✓		1130 +0.7			22					✓			22	✓						
987	tmax	25	✓ 23	✓	✓	1456 +0.5	1362 +0.6		23								23	✓						
988		5	✓ 24	✓	✓	1297 -0.3			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:

Rosette Log for IOS Cruise ID 2009-20

Ship: CCGS Louis S St-Laurent

3288+ 7.6

Cast # 047

UTC Date (ddmmmyyyy) 10 | 10 | 2009

Ice Coverage 10/10

Water Depth(below hull) 3263 m

Station CB-40

UTC Time 11:21

In Air pressure (before/after) -0.47 -0.36

Sound Speed 1478

CTD File 200920-47

Lat (N) 74 30.488 Lon (W) 135 27.610

CTD Operator CF

Last sample of bottle flush test. Thanks Edward!
cancelled (Chm-stop)

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
989	bot-10	3288	✓ 1	✓✓	✓	1023 0.8			1							✓	1		3	✓				
990		3100	✓ 2	✓✓	✓✓	1223 0.2	1136 0.1	1433 0.0	2								2			✓				
991		2500	✓ 3	✓✓		1445 -0.3			3								3							
992		2000	✓ 4	✓✓		1204 -0.1			4								4							
993		1500	✓ 5	✓✓		1457 0.0			5								5							
994		1000	✓ 6	✓✓	X				6								6							← salt 4 at start, 4 at end
995		750	✓ 7	✓✓		1209 0.4			7								7							
996		500	✓ 8	✓✓		1448 0.7			8								8							
997	tmax	408	✓ 9	✓✓		1110 1.0			9								9							
998	34.8	367	✓ 10	✓✓		1443 0.9			10								10							
999	34.7	306	✓ 11	✓✓		1452 0.7			11								11							
1000	34.6	280	✓ 12	✓✓	✓	1409 0.6	1363 0.7	1422 0.7	12								12				✓	✓		redraw - 1422
1001	34.4	243	✓ 13	✓✓		1482 0.3			13								13							
1002	34.0	199	✓ 14	✓✓		1188 -0.5			14								14				✓	✓		
1003	33.5	180	✓ 15	✓✓	X				15								15							← SALT 4 at start, 4 at end
1004	33.1	168	✓ 16	✓✓		1468 -0.6			16			✓					16			✓	✓	✓		
1005	32.9	158	✓ 17	✓✓		1347 -0.5			17								17							
1006	32.6	141	✓ 18	✓✓		1212 -0.4			18								18							
1007	32.3	120	✓ 19	✓✓		1453 -0.6			19								19				✓	✓		
1008	1/2	92	✓ 20	✓✓	✓	1366 -0.5	1354 -0.5		20								20				✓	✓		
1009	chl	63	✓ 21	✓✓		1358 -0.5			21					✓✓			21	✓		✓	✓	✓		
1010	t 57	57	✓ 22	✓✓	X				22					✓✓			22	✓		3				← looking for high grad over 45 start
1011	t	29	✓ 23	✓✓		1293 -0.2			23								23	✓						4 at end
1012		5	✓ 24	✓✓	✓	1495 -0.8			24	✓			✓	✓✓		✓	24	✓	3	✓	✓	✓		cancel bottle flush test, 4 & 4

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:

O₂ end time: 7:00 AM

cancel bottle flush test, 4 & 4

Rosette Log for IOS Cruise ID 2009-20

Ship: CCGS Louis S St-Laurent

1000m ISUS

High Res Nutrient

Cast # 048

UTC Date (ddmmmyyyy) 10/10/2009

Ice Coverage 9/110

Water Depth(below hull) 3267 m

Station CB-406

UTC Time 16:34

In Air pressure (before/after) -0.5 / -0.2

Sound Speed 1478

CTD File 200920-48

Lat (N) 74 33.134

Lon (W) 134 48.580

CTD Operator EF

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tnp	Oxy Flask #, and draw tnp - Duplicate	Oxy Flask #, and draw tnp - Triplicate	Niskin #	DIC/ALK	DIC (KB)	135-DIC (KB)	CDOM	Chl a (Total)	Chl a (PAM/Prod)	Bacteria	Niskin #	FVA/ALK	NUT	Sal	O48	Ba	NH4	Comments
1013		1000	1	W	✓	1194 1.4			1							✓	1		3	✓				O2 drawn first then 8 sal
1014		500	2	W	✓	1429 1.1			2							✓	2							*9 for salt flush test (NS)
1015		300	3	W	✓	1231 0.6	1426 0.6	1427 0.0	3							✓	3							4 at start, 4 at end
1016		235	4	W	✓	1430 -0.1			4							✓	4							
1017		220	5	W	✓	1428 -0.3			5							✓	5							
1018		205	6	W	✓	1418 -0.3			6							✓	6							
1019		190	7	W	✓	1434 -0.5			7							✓	7							
1020		175	8	W	✓	1454 -0.7			8				✓			✓	8							*8 for salt flush test (NS)
1021		160	9	W	✓	586 -0.7			9							✓	9							4 at start, 4 at end
1022		145	10	W	✓	1233 -0.7	1413 -0.7		10							✓	10							
1023		130	11	W	✓	1471 -0.7			11							✓	11							
1024		115	12	W	✓	547 -0.7			12							✓	12							
1025		105	13	W	✓	1440 -0.7			13							✓	13							
1026		95	14	W	✓	1331 -0.5			14							✓	14							*8 for salt flush test (NS)
1027		75	15	W	✓	1382 -0.5			15							✓	15							12 4 at start, 4 at end
1028	chlx	70	16	W	✓	1356 -0.5	1344 -0.5		16					✓		✓	16							*8 for salt flush test (NS)
1029	chlx	70	17	W	✗				17					✓	✗	✗	17		✗	✗				← ONLY MISUN
1030	chlx	58	18	W	✓	1340 -0.7			18					✓		✓	18							MISUN +1
1031		46	19	W	✓	1351 -0.1			19					✓		✓	19							
1032		32	20	W	✓	1447 -0.3			20					✓		✓	20							
1033		18	21	W	✓	575 -0.3			21					✓		✓	21							
1034		11	22	W	✓	1341 -0.4			22	✓			✓	✓		✓	22							
1035		0	23	W	✓	1360 -0.7			23					✓	✓	✓	23		3	✓				after bottle is tagged, down to take de-ion
1505			24		✓				24	✓						✓	24		3					ISUS

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:

O2 at time 11:05

58

46

Rosette Log for IOS Cruise ID 2009-20

Ship: *CCGS Louis S St-Laurent*

3497 #9-6.

Focus on
deep
w/2 For M. Sun

Cast # 049

UTC Date (ddmmmyyyy) 11/10/2009

Ice Coverage 8/10

Water Depth(below hull) 3512 m

Station CB-21

UTC Time 12:03

In Air pressure (before/after) 0.51/0.37

Sound Speed 1478

CTD File 200920-49

Lat (N) 74 0-250

Lon (W) 139 52-2

CTD Operator EZ

Samp #	Target Property	Depth(m)	Niskin #	Bottle Integrity (0=good, 1=bad)	Oxygen	Oxy Flask #, and draw tnp	Oxy Flask #, and draw tnp - Duplicate	Oxy Flask #, and draw tnp - Triplicate	Niskin #	DISALK	DIC (KB)	13C-DIC (KB)	CDOM	Chl a (Total)	Chl a (PAM/Prod)	Bacteria	Niskin #	FWALK	NUT	Sal	O18	Ba	NH4	Comments
1036	bot-10	3497	1	VV	✓	1381 1.8			1							✓	1		3	2	✓	✓		
1037	3450		2	VV		1297 0.7			2								2							
1038	3400		3	VV	VV	1150 0.4	1361 0.4	1364 0.3	3								3			(VV)				
1039	3350		4	VV		1286 0.2			4								4							
1040	3300		5	VV		1343 0.0			5								5							
1041	3250		6	VV		1484 0.0			6								6							
1042	3200		7	VV		1328 0.0			7								7							
1043	3150		8	VV		462 0.0			8								8							
1044	3100		9	VV		439 0.0	1456 1.2	1362 1.0	9								9							3 calbonds 1136 0.9
1045	3000		10	VV		329 0.0			10								10							
1046	2950		11	W		1336 0.0			11								11							
1047	2900		12	VV		1202 0.0			12								12							
1048	2850		13	VV	✓	1417 0.0	1225 0.1		13								13							
1049	2800		14	VV		456 0.0			14								14							
1050	2750		15	VV		425 0.0			15								15							
1051	2700		16	VV		1295 0.0			16								16							
1052	2650		17	VV		1270 0.3			17								17							
1053	2600		18	VV		1432 0.2			18								18							
1054	2550		19	VV		1309 0.3			19								19							
1055	2500		20	VV		1451 0.3			20								20							
1056	2250		21	VV		1284 0.4			21								21							
1057	2000		22	VV	✓	1216 0.5			22							✓	22		3	2	✓	✓		
1058	chlmon	65	23						23						✓		23							
1059	chlmon	62	24						24						✓		24							2nd bot trip 1 @ 62 and 65

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
fill
1 set /
cage

O₂ end time N8:10

Rosette Log for IOS Cruise ID 2009-20

Ship: *CCGS Louis S St-Laurent*

3697+ 8.0

Rosette

Cast # 050

UTC Date (ddmmmyyyy) 12 / 10 / 2009

Ice Coverage 10 / 10

Water Depth(below hull) 3706 (K) m

Station CB-6e

UTC Time 06:30

In Air pressure (before/after) -0.44 / -0.41

Sound Speed 1478

O₂ end time: 2:30 AM

CTD File 200920-050

Lat (N) 74 21.448

Lon (W) 143 24.734

CTD Operator (W) → 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)	13C-DIC (KB)	CDOM	Chl a (Total)	Chl a (PAM/Prod)	Bacteria	Niskin #	FW Alk	NUT	Sal	O18	Ba	NH4	Comments
1060	bot-10	3697	✓1	✓✓	✓	1192 1.2			1							✓	1		3	✓				
1061		3100	✓2	✓✓	✓✓	1352 0.7	1023 0.5	1223 0.5	2								2							
1062		2500	✓3	✓✓		1495 0.3			3								3							
1063		2000	✓4	✓✓		1293 0.3			4								4							
1064		1500	✓5	✓✓		1358 0.4			5								5							
1065		1000	✓6	✓✓		1354 0.6			6								6							
1066		750	✓7	✓✓		1366 0.7			7								7							
1067		500	✓8	✓✓		1453 1.0			8								8							
1068	tmax	456	✓9	✓✓		1212 1.1			9								9							
1069	34.8	412	✓10	✓✓		1347 1.1			10								10							
1070	34.7	351	✓11	✓✓		1468 1.0			11								11							
1071	34.6	323	✓12	✓✓		1188 0.3			12								12				✓✓			
1072	34.4	280	✓13	✓✓		1422 0.3			13								13							
1073	34	242	✓14	✓✓		1482 -0.3			14								14							
1074	33.5	218	✓15	✓✓		1363 -0.4			15								15							
1075	33.1	200	✓16	✓✓		1499 -0.6			16				✓				16				✓✓			
1076	32.9	185	✓17	✓✓		1452 -0.5			17								17							
1077	32.6	156	✓18	✓✓		1443 -0.5			18								18	✓						
1078	32.3	130	✓19	✓✓		1110 -0.4			19								19	✓						
1079	1/2	101	✓20	✓✓	✓	1448 -0.1	1299 0.1		20					✓✓			20	✓						
1080	chl	72	✓21	✓✓		1457 0.4			21					✓✓			21	✓						
1081	tmax	52	✓22	✓✓		1204 0.6			22								22	✓						
1082		15	✓23	✓✓	✓	1445 0.0	1433 0.0		23								23	✓						
1083		5	✓24	✓✓	✓	1186 -0.3			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: 6 bottle cast on foredeck during this cast (on wire))
→ CANCELLED

~ 3696m

Rosette Log for IOS Cruise ID 2009-20

Ship: *CCGS Louis S St-Laurent*

Cast # 051

UTC Date (ddmmmyyyy) 12 10 2009

Ice Coverage 8/10

Water Depth(below hull) 3527 m (from previous CB-21 cast)

Station CR21

UTC Time 21:58

In Air pressure (before/after) -0.44 -0.26

Sound Speed N/A (Knudsen disconnected for mooring)

CTD File 200920-051

Lat (N) 73 59.759

Lon (W) 139 59.626

CTD Operator W

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/Prod)	Bacteria	Niskin #	FW Alk	NUT	Sal	O18	Ba	NA4	Jen's 5 Mar Min Max Min Max										
																								Comments										
1084		100 ✓	1	✓✓	✓	1231 +1.6			1							✓	1		3	✓					M.Sm 1 2 3 4 5 Chl Chl									
1085		90 ✓	2	✓✓	✓	1194 +1.2			2							✓	2			1	✓	✓												
1086		80 ✓	3	✓✓					3								3		X															
1087	chlmax	67 ✓	4	✓✓	X				4					✓	✓	✓	4								- FAILED - did not close All M.Sm's									
1088	chlmax	67 ✓	5	✓✓					5					✓	✓	✓	5																	
1089		55 ✓	6	✓✓	✓	1434 +1.1			6					✓✓	✓	✓	6				✓	✓												
1090		47 ✓	7	✓✓	✓	1454 +1.0			7							✓	7	✓			✓	✓												
1091		43 ✓	8	✓✓					8						✓		8																	
1092		39 ✓	9	✓✓	✓	586 +0.8			9						✓		9	✓			✓	✓												
1093		30 ✓	10	✓✓					10						✓		10																	
1094		28 ✓	11	✓✓	✓	1233 +0.7			11					✓✓	✓	✓	11				✓	✓												
1095		20 ✓	12	✓✓	✓	1413 +0.4			12								12	✓			✓	✓												
1096		17 ✓	13	✓✓					13						✓		13																	
1097		10 ✓	14	✓✓					14						✓		14																	
1098		5 ✓	15	✓✓	✓	1471 0.0			15	✓				✓	✓	✓	15	✓			✓	✓												
1099		0 ✓	16	✓✓					16						✓	✓	16		3	✓														
			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:

~100m
Misun

Jen's 5 Max Min Max Min Max
Misun 1 2 3 4 5 chl chl

FAILED - did not close
All Misun's

Rosette Log for IOS Cruise ID 2009-20

Ship: *CCGS Louis S St-Laurent*

Cast # UTC Date (ddmmmyyyy) 13/10/2009

Ice Coverage 10/10

Water Depth(below hull) 3188 (K) m

Station CB-22 UTC Time

In Air pressure (before/after)

Sound Speed 1478 m/s

CTD File 200920- Lat (N) Lon (W)

CTD Operator (M)

*Foredeck
Niskins - on-wire
"7000" series*

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 #	DIS/ALK	DIS (KB)	13C-DIC (KB)	GDOM	Chl a (Total)	Chl a (PAM/Prod)	Bacteria	Niskin #	FW Alk	NUT	Sal	O18	Ba	NH4	Comments
7001		75	1	KK					1								1	✓	3	✓	✓	✓		
7002		60	2	✓					2								2							
7003		50	3	✓					3								3							
7004		35	4						4								4							
7005		20	5	✓					5								5							
7006		5	6	✓					6								6	✓	3	✓	✓	✓		
			7						7								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:

49 → 52 (3 min)

★ Repeat station
from start of
cruise

Rosette Log for IOS Cruise ID 2009-20

Ship: CCGS Louis S St-Laurent

Cast # 052

UTC Date (ddmmmyyyy) 13 | 10 | 2009

Ice Coverage 10 / 10

Water Depth (below hull) 3188 (K) m

Station CB-22

UTC Time 02:49

In Air pressure (before/after) -0.61 -0.46

Sound Speed 1478 m/s

CTD File 200920-052

Lat (N) 73 31.408

Lon (W) 137 54.829

CTD Operator M

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
1100	Bot-10	3168	✓1	✓✓	✓	1381 +1.2			1							✓	1		3	✓				Also 6 Niskins-on-wire with SBE19 done from foredeck during this cast.
1101		3000	✓2	✓✓	✓✓	1297 +0.7	1150 +0.4	1361 +0.3	2								2			✓				
1102		2900	✓3	✓✓		1264 +0.2			3								3							
1103		2500	✓4	✓✓		1286 +0.1			4								4							
1104		2000	✓5	✓✓		1343 +0.1			5								5			✓				
1105		1500	✓6	✓✓		1484 +0.2			6								6							
1106		1000	✓7	✓✓		462 +0.5			7								7							
1107		700	✓8	✓✓	✓	439 +0.7	1362 +0.8		8								8							
1108		500	✓9	✓✓		329 +1.0			9								9							
1109	FW	427	✓10	✓✓		1336 +1.2			10								10			✓				
1110	34.8	384	✓11	✓✓		1202 +1.1			11								11							
1111	34.6	300	✓12	✓✓		1417 +0.9			12								12				✓	✓		
1112	34.4	260	✓13	✓✓		1225 +0.4			13								13							
1113	34	218	✓14	✓✓		456 -0.5			14								14							
1114	33.5	200	✓15	✓✓		425 -0.5			15								15							
1115	33.1	185	✓16	✓✓		1295 -0.7			16				✓				16				✓	✓		
1116	32.9	176	✓17	✓✓	✓	1270 -0.5	1432 -0.5		17								17							
1117	32.6	156	✓18	✓✓		1309 -0.5			18								18							
1118	32.3	130	✓19	✓✓		1451 -0.5			19								19							
1119	1/2	95	✓20	✓✓		1216 -0.8			20								20							
1120	chiller	65	✓21	✓✓		1284 -0.1			21					✓✓			21	✓						
1121	chiller	35	✓22	✓✓		1430 -0.3			22					✓✓			22	✓						
1122		20	✓23	✓✓		1429 +0.8			23					✓✓			23	✓			✓	✓		
1123		5	✓24	✓✓	✓	1328 -0.3			24	✓			✓			✓	24	✓	3	✓	✓	✓		← dup Ba, O18

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:

207 35 → 10 35

Rosette Log for IOS Cruise ID 2009-20

Ship: *CCGS Louis S St-Laurent*

Cast # 053 UTC Date (ddmmmyyyy) 14 / 10 / 2009

Ice Coverage 0/10

Water Depth(below hull) 1123 (K) m

Station CABOS UTC Time 2:08

In Air pressure (before/after) -0.461 - 0.15

Sound Speed 1457 m/s

CTD File 200920-053 Lat (N) 71 49.667 Lon (W) 131 46.936

CTD Operator M

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
1124		1100 ✓	1	✓✓					1							✓	1		2	✓				
1125		1000 ✓	2	✓✓					2								2							
1126		800 ✓	3	✓✓					3								3			✓				
1127		700 ✓	4	✓✓					4								4							
1128		600 ✓	5	✓✓					5								5			✓				
1129		500 ✓	6	✓✓					6								6							
1130	tmax	420 ✓	7	✓✓					7								7							
1131	34.8	381 ✓	8	✓✓					8								8							
1132	34.7	303 ✓	9	✓✓					9								9							
1133	34.6	270 ✓	10	✓✓					10								10	✓			✓	✓		
1134	34.4	232 ✓	11	✓✓					11								11							
1135	34	191 ✓	12	✓✓					12								12	✓			✓	✓		Small drops after first sample drawn
1136	33.5	170 ✓	13	✓✓					13								13							
1137	33.1	154 ✓	14	✓✓					14				✓				14	✓			✓	✓		
1138	32.9	144 ✓	15	✓✓					15								15							
1139	32.6	125 ✓	16	✓✓					16								16							
1140	32.3	106 ✓	17	✓✓					17								17	✓			✓	✓		
1141	1/2	78 ✓	18	✓✓					18								18	✓			✓✓	✓✓		
1142	1/2	48 ✓	19	✓✓					19								19	✓			✓	✓		
1143	1/2	41 ✓	20	✓✓					20								20	✓			✓	✓		
1144	1/2	30 ✓	21	✓✓					21								21	✓			✓	✓		
1145		15 ✓	22	✓✓					22								22	✓			✓	✓		
1146		5 ✓	23	✓✓					23	✓			✓			✓	23	✓	2	✓✓	✓✓	✓✓		
			24						24								24							ISUS ON

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

↑
All Frozen