

Shared Cast w/ Geochem + RNA/DNA

Rosette Log for IOS Cruise ID 2007-20

Cast # 23 UTC Date (dmy) 2 Aug 2007 UTC Time 5:35
 Station MK-1 Lat (N) 70 13.79
 CTD File 200720-023 Lon (W) 140 00.25

Cast Type: Geochemistry

In Air pressure 10.4 Water Depth 220 (Knudsen, w/o +9 for ship hull)
 Ice Coverage 1/10 Sound Speed 1464 (setting in Knudsen)
 Start Scan _____ Watch _____

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Oxygen	Oxy Flask #	Oxy Dup Flask #	Oxy Trip Flask #	DIC	C-13	DOC	CDOM	Total Chl a 0.7um	Chl-a 0.3um	Bacteria	FW-Alkalinity	Salinity	Nutrients	NH4	Barium	O-18	POC	TSS	LA29	CS137	PAM	Comments
424	bottom	220	✓1	✓✓	✓	3004						✓✓			✓	✓	✓	✓	✓	✓	✓						
425	200	200	✓2	✓✓		3005																					
426	200	200	✓3	✓✓																							
427	33.1	143	✓4	✓✓	✓	3097					✓✓	✓✓			✓	✓	✓	✓✓	✓✓	✓	✓						
428	32.9	125	✓5	✓✓	✓✓	3177	3198	3082			✓✓	✓✓			✓	✓	✓	✓	✓✓	✓	✓						
429	100	100	✓6	✓✓																							
430	100	100	✓7	✓✓																							
431	32.6	86	✓8	✓✓	✓	3069					✓✓	✓✓			✓	✓	✓	✓	✓✓	✓	✓						
432	Ch-max	65	✓9	✓✓																							
433	Ch-max	65	✓10	✓✓																							
434	Ch-max	65	✓11	✓✓																							
435	32.3	59	✓12	✓✓	✓	3204					✓✓	✓✓			✓	✓	✓	✓	✓✓	✓	✓						
436	50	50	✓13	✓✓																							
437	50	50	✓14	✓✓																							
438	50	50	✓15	✓✓	✓	3084					✓✓	✓✓				✓	✓	✓	✓✓	✓	✓						
439	35	35	✓16	✓✓																							
440	35	35	✓17	✓✓																							
441	20	20	✓18	✓✓	✓	3135					✓✓	✓✓			✓	✓	✓	✓✓	✓✓	✓	✓						
442	5	5	✓19	✓✓																							
443	5	5	✓20	✓✓																							
444	5	5	✓21	✓✓	✓	3024				✓	✓✓	✓✓				✓	✓	✓	✓✓	✓	✓						
445	Surf		22	✓✓																							
446	Surf		23	✓✓																							
			24																								±SUS

Comments:

geochem: bottom, ~~22~~, 33.1, 32.9, 32.6, 32.3, 50, chl max, 20, 5

RNA/DNA: 12 bottles

Prod: 2 bottles surface

} 23

Rosette Log for IOS Cruise ID 2007-20

Cast Type: Productivity, RNA/DNA, POC/TSS

Cast # 23 UTC Date (dmy) 02 08 2007 UTC Time _____
Station MK1 Lat (N) 70 13.79
CTD File 200720-023 Lon (W) 140 00.25

In-Air Pressure 0.5 Water Depth 220⁺9 (Knudsen, w/o +9 for ship hull)
Ice Coverage 1/10 Sound Speed 1464 (setting in Knudsen)
Start Scan _____ Watch MI +

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Productivity (Ian Wrohan/Diana Varela)													RNA/DNA (Karen Scarcella/C. Lovejoy)							J.Jackson		Comments
					Pro NC	Pro NH ₄	Pro U	PON POC	Bio Si	Chl a	PID _L	PID _F	Nut NH ₄	Nut Urea	Nut NPS	DIC	Fish E	DNA	Chl a	RNA	HP LC	Bac	Nut	Bio mas	POC	TSS	
424			1																								
425		200	2															2	2			1	1	1			
426		200	3																								
427			4																								
428			5																								
429		100	6															2	2			1	1	1			
430		100	7																								
431			8																								
432		65	9														2	2	2	2	2	1	1	1			
433		65	10																								
434			11																								
435			12																								
436		50	13															2	2	2		1	1	1			
437		50	14																								
438			15																								
439		35	16															2	2	2		1	1	1			
440		35	17																								
441			18																								
442		5	19														2	2	2	2	2	1	1	1			
443		5	20																								
444			21																								
445	surf	2	22		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓											
446	surf	2	23													✓											
			24																								

Comments:

shared with productivity

Rosette Log for IOS Cruise ID 2007-20

Cast # 24 UTC Date (dmy) 02 08 2007 UTC Time 0837
 Station CB28ad Lat (N) 70 00.19
 CTD File 200720-024 Lon (W) 140 00.59

Cast Type: **Geochemistry**
 In Air pressure 0.4/0.4 Water Depth 58 (Knudsen, w/o +9 for ship hull)
 Ice Coverage 0/10 Sound Speed 1464 (setting in Knudsen)
 Start Scan 1900 Watch JE/MD/HD/RN

43

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Oxygen	Oxy Flask #	Oxy Dup Flask #	Oxy Trip Flask #	DIC	C-13	DOC	CDOM	Total Chl-a 0.7um	Chl-a 0.3um	Bacteria	FW-Alkalinity	Salinity	Nutrients	NH4	Barium	O-18	POC	TSS	I-129	CS-137	PU/AM	Comments
447	Bo-5	53 ✓	1	✓✓	✓	3100					✓✓	✓✓			✓	✓	✓✓	✓	✓✓	✓	✓					✓✓	
448	ChlMax	20 ✓	2	✓✓	✓✓	3189	3194				✓✓	✓✓			✓	✓	✓	✓✓	✓✓	✓	✓						Fluorometer maxed out
449	5	✓	3	✓✓	✓	3058				✓	✓✓	✓✓			✓	✓	✓	✓	✓✓	✓	✓						
450	surf	✓	4																								} Productivity
451	surf	✓	5	✓✓																					✓✓		
			6																								
			7																								
			8																								
			9																								
			10																								
			11																								
			12																								
			13																								
			14																								
			15																								
			16																								
			17																								
			18																								
			19																								
			20																								
			21																								
			22																								
			23																								
			24																								

Comments:

Shared Cast w/ Geochem & POC/DNA

Rosette Log for IOS Cruise ID 2007-20

Cast Type: Productivity, RNA/DNA, POC/TSS

Cast # 24 UTC Date (dmy) 02 08 2007 UTC Time _____
Station CB28a2 Lat (N) _____
CTD File 200720-024 Lon (W) _____

In-Air Pressure _____ Water Depth _____ (Knudsen, w/o +9 for ship hull)
Ice Coverage /10_ Sound Speed _____ (setting in Knudsen)
Start Scan _____ Watch _____

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Productivity (Ian Wrohan/Diana Varela)												RNA/DNA (Karen Scarcella/C. Lovejoy)								J.Jackson		Comments	
					Pro NC	Pro NH ₄	Pro U	PON POC	Bio Si	Chl a	PID _L	PID _F	Nut NH ₄	Nut Urea	Nut NPS	DIC	Fish E	DNA	Chl a	RNA	HP LC	Bac	Nut	Bio mas	POC	TSS		
447			1																									
448			2																									
449			3																									
450	surf		4		✓✓	✓✓	✓✓	✓	✓	✓✓	✓	✓	✓✓	✓✓	✓✓													
451	surf		5												✓													
			6																									
			7																									
			8																									
			9																									
			10																									
			11																									
			12																									
			13																									
			14																									
			15																									
			16																									
			17																									
			18																									
			19																									
			20																									
			21																									
	surf		22																									
	surf		23																									
			24																									

Comments:

~ 75m

Geochem + Prod (2)

Rosette Log for IOS Cruise ID 2007-20

Cast # 25
Station BL-1
CTD File 200720-

UTC Date (dmy) 04 Aug 2007 UTC Time 3:37
Lat (N) 21°19.499'
Lon (W) 152°13.055'

Cast Type: **Geochemistry**
In Air pressure 0.4 / 0.5 Water Depth 51m (Knudsen, w/o +9 for ship hull)
Ice Coverage 0/10 Sound Speed _____ (setting in Knudsen)
Start Scan _____ Watch _____

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Oxygen	Oxy Flask #	Oxy Dup Flask #	Oxy Trip Flask #	DIC	C-13	DOC	CDOM	Total Chl-a 0.7um	Chl-a 0.3um	Bacteria	FW-Alkalinity	Salinity	Nutrients	NH4	Barium	O-18	POC	TSS	I-129	CS-137	PU/AM	Comments
456	Bottom	51	✓1		✓						✓✓			✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓						✓ Toss if redundant! w/50m
457	50	51	✓2	✓✓	✓✓	3004	3051	3171			✓✓	✓		✓	✓	✓✓	✓✓	✓✓	✓✓	✓	✓						
458	20	20	✓3	✓✓	✓	3097					✓✓	✓		✓	✓	✓	✓✓	✓✓	✓✓	✓	✓						
459	5	5	✓4	✓✓	✓	3177				✓	✓✓	✓		✓	✓	✓	✓✓	✓✓	✓✓	✓	✓						
460	PROD	5	✓5																								add for Ian
461	PROD	5	✓6																								
			7																								
			8																								
			9																								
			10																								
			11																								
			12																								
			13																								
			14																								
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			18																								
			19																								
			20																								
			21																								
			22																								
			23																								
			24																								

Comments:

↑
label oxy
oxy Box 3

↑
freeze one set w/labels
(no dups)

Rosette Log for IOS Cruise ID 2007-20

Cast Type: Productivity, RNA/DNA, POC/TSS

Cast #25

StationBL-1

CTD File200720-

UTC Date (dmy) _____

Lat (N) _____

Lon (W) _____

UTC Time _____

In-Air Pressure _____

Ice Coverage /10

Start Scan _____

Water Depth _____

Sound Speed _____

Watch _____

(Knudsen, w/o +9 for ship hull)

(setting in Knudsen)

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Productivity (Ian Wrohan/Diana Varela)												RNA/DNA (Karen Scarcella/C. Lovejoy)								J.Jackson		Comments
					Pro NC	Pro NH ₄	Pro U	PON POC	Bio Si	Chl a	PID _L	PID _F	Nut NH ₄	Nut Urea	Nut NPS	DIC	Fish E	DNA	Chl a	RNA	HP LC	Bac	Nut	Bio mas	POC	TSS	
			1																								
			2																								
			3																								
			4																								
460	P5		5		✓✓	✓✓	✓✓	✓	✓	✓✓	✓	✓	✓✓	✓✓	✓✓												
461	5		6													✓											
			7																								
			8																								
			9																								
			10																								
			11																								
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			23																								
			24																								

Comments:

RNA/DNA ~150m (12)

Rosette Log for IOS Cruise ID 2007-20

Cast # 26 UTC Date (dmy) 4 Aug 2007 UTC Time 4:50
 Station BL-2 Lat (N) 71° 23.986 N
 CTD File 200720- Lon (W) 152° 1.901 W

Cast Type: Productivity, RNA/DNA, POC/TSS

In-Air Pressure 0.6 Water Depth 145+9 (Knudsen, w/o +9 for ship hull)
 Ice Coverage 0/10 Sound Speed _____ (setting in Knudsen)
 Start Scan _____ Watch _____

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Productivity (Ian Wrohan/Diana Varela)												RNA/DNA (Karen Scarcella/C. Lovejoy)								J.Jackson		Comments
					Pro NC	Pro NH ₄	Pro U	PON POC	Bio Si	Chl a	PID _L	PID _F	Nut NH ₄	Nut Urea	Nut NPS	DIC	Fish E	DNA	Chl a	RNA	HP LC	Bac	Nut	Bio mas	POC	TSS	
462	145	149	✓ 1														2	2			1	1	1				
463	145	149	✓ 2																								
464	135	135	✓ 3														2	2			1	1	1				
465	135	135	✓ 4																								
466	102	103	✓ 5														2	2	2		1	1	1				
467	102	103	✓ 6																								
468	35	35	✓ 7														2	2	2	2	1	1	1				
469	35	35	✓ 8																								
470	20	20	✓ 9														2	2	2		1	1	1				
471	20	20	✓ 10																								
472	5	5	✓ 11														2	2	2	2	2	1	1	1			
473	5	5	✓ 12																								
			13																								
			14																								
			15																								
			16																								
			17																								
			18																								
			19																								
			20																								
			21																								
			22																								
			23																								
			24																								

Comments:

BL-2 ~150m

Shore w/ Prod (12) Geochem (9)

Rosette Log for IOS Cruise ID 2007-20

Cast # 27
 Station BL-2
 CTD File 200720-27

UTC Date (dmy) 4 Aug 2007 UTC Time 5:39
 Lat (N) 21° 24.098' N
 Lon (W) 152° 2.392' W

Cast Type: Geochemistry

In Air pressure 0.5/0.4 Water Depth 151+9m (Knudsen, w/o +9 for ship hull)
 Ice Coverage 0/10 Sound Speed 1464 (setting in Knudsen)
 Start Scan _____ Watch _____

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Oxygen	Oxy Flask #	Oxy Dup Flask #	Oxy Trip Flask #	DIC	C-13	DOC	CDOM	Total Chl-a 0.7um	Chl-a 0.3um	Bacteria	FW-Alkalinity	Salinity	Nutrients	NH4	Barium	O-18	POC	TSS	I-129	CS-137	PU/AM	Comments
474	Bottom	149	✓ 1	XV	✓	3119					✓✓	✓			✓	✓	✓	✓✓		✓	✓						slow drip.
475	32.6	139	✓ 2	✓✓	✓✓	3069	3130	2073			✓✓	✓			✓	✓	✓✓	✓✓✓		✓	✓						
476	32.3	75	✓ 3	✓✓	✓	2016					✓✓	✓			✓	✓	✓	✓✓		✓	✓						
477	50		4	✓✓	✓	3204					✓✓	✓			✓	✓	✓	✓✓		✓	✓						
478	49		5	✓✓																							
479	49		6	✓✓																							
480	Chl-mx	38	7	✓✓	✓	3107									✓	✓	✓	✓✓		✓	✓						
481	Ch-ma	38	8	✓✓																							
482	Ch-na	38	9	✓✓																							
483	20		10	✓✓	✓✓	2064	3084				✓✓	✓			✓	✓	✓	✓✓		✓	✓						
484	14		11	✓✓																							
485	14		12	✓✓																							
486	7		13	✓✓																							
487	7		14	✓✓																							
488	5		15	✓✓	✓	3121				✓	✓✓	✓			✓	✓	✓	✓✓		✓	✓						
489	5		16	✓✓																							
490	5		17	✓✓																							
491	2		18	✓✓																							
492	2		19	✓✓																							
			20																								
			21																								
			22																								
			23																								
			24																								

Comments:

↑ Geochem + Prod! Geochem: 5 ↑ 20, chl-mx, 50, 32.3, 32.6, 32.9, 33.1, B. Han
 label oxy
 dup for fixings, add label
 if not = 33.1
 33

PROD (shore w/ Geochem)

Rosette Log for IOS Cruise ID 2007-20

Cast Type: Productivity, RNA/DNA, POC/TSS

Cast # 27 UTC Date (dmy) 04 Aug 2007 UTC Time 0538
 Station B2-2 Lat (N) 71 24.10
 CTD File 200720-27 Lon (W) 152 02.89

In-Air Pressure 0.4 Water Depth 151⁺9 (Knudsen, w/o +9 for ship hull)
 Ice Coverage 0/10 Sound Speed _____ (setting in Knudsen)
 Start Scan _____ Watch _____

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Productivity (Ian Wrohan/Diana Varela)												RNA/DNA (Karen Scarcella/C. Lovejoy)								J. Jackson		Comments		
					Pro NC	Pro NH ₄	Pro U	PON POC	Bio Si	Chl a	PID _L	PID _F	Nut NH ₄	Nut Urea	Nut NPS	DIC	Fish E	DNA	Chl a	RNA	HP LC	Bac	Nut	Bio mas	POC	TSS			
474	Bottom	149	✓ 1																										2 before 4/5 W/ma
475	32.6	139	✓ 2																										
476	32.3	75	✓ 3																										
477	50		✓ 4																										4 between 4/5 W/ma
478	49		✓ 5		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓														
479	49		✓ 6													✓													
480	Ch-max	38	✓ 7																										
481	Ch-max	38	✓ 8		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓														
482	Ch-max	38	✓ 9													✓													
483	20		✓ 10																										
484	14		✓ 11		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓														
485	14		✓ 12													✓													
486	7		✓ 13		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓														
487	7		✓ 14													✓													
488	5		✓ 15																										
489	5		✓ 16		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓														
490	5		✓ 17													✓													
491	2		✓ 18		✓	✓	✓	✓	✓	✓			✓	✓	✓														
492	2		✓ 19													✓													
			20																										
			21																										
			22																										
			23																										
			24																										

Comments:

Shore w/ TSS/POC

Rosette Log for IOS Cruise ID 2007-20

Cast # 28 UTC Date (dmy) 04 08 2007 UTC Time 0728
 Station BL-3 Lat (N) 71 27.93
 CTD File 200720-628 Lon (W) 151 47.85

Cast Type: Geochemistry

In Air pressure 0.4/0.4 Water Depth 537 ⁺⁹ (Knudsen, w/o +9 for ship hull)
 Ice Coverage 0/10 Sound Speed 1464 (setting in Knudsen)
 Start Scan 9000 Watch 3E/MD/HD/RN

3300

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Oxygen	Oxy Flask #	Oxy Dup Flask #	Oxy Trip Flask #	DIC	C-13	DOC	CDOM	Total Chl-a 0.7um	Chl-a 0.3um	Bacteria	FW-Alkalinity	Salinity	Nutrients	NH4	Barium	O-18	POC	TSS	I-129	CS-137	PU/AM	Comments
493	B ₀ -5	567	✓ 1	✓✓	✓	3009					✓✓	✓					✓	✓✓									
494		440	✓ 2	✓✓	✓	3209											✓	✓✓				✓✓	✓✓				
495	T _{max}	370	✓ 3	✓✓	✓	2017											✓	✓✓				✓✓	✓✓				
496	T _{max}	338	✓ 4	✓✓	✓	3048					✓✓	✓					✓	✓✓	✓✓✓								ATL
497	34.75	255	✓ 5	✓✓	✓	3034											✓	✓✓									
498	34.6	227	✓ 6	✓✓	✓	2086									✓	✓	✓	✓✓	✓✓								
499	34.4	211	✓ 7	✓✓	✓	2088					✓✓	✓				✓	✓✓	✓✓		✓	✓	✓✓	✓✓				
500	34	194	✓ 8	✓✓	✓	2025	3199				✓✓	✓			✓	✓	✓	✓✓		✓	✓						
501		187	✓ 9	✓✓	✓	3104									✓	✓	✓	✓✓	✓✓	✓	✓						
502		177	✓ 10	✓✓	✓	2092									✓	✓	✓	✓✓	✓✓	✓	✓	✓✓	✓✓				
503	33.1	155	✓ 11	✓✓													✓	✓✓				✓✓	✓✓				
504	33.1	155	✓ 12	✓✓	✓	3116					✓✓	✓			✓	✓	✓	✓✓	✓✓	✓	✓						
505	32.9	131	✓ 13	✓✓																		✓✓	✓✓✓				
506	32.9	131	✓ 14	✓✓	✓✓	2060	3124	2069							✓	✓	✓	✓✓	✓✓	✓	✓						
507	32.6	90	✓ 15	✓✓																		✓✓	✓✓✓				
508	32.6	90	✓ 16	✓✓	✓	3201									✓	✓	✓	✓✓	✓✓	✓	✓						
509	32.3	75	✓ 17	✓✓	✓	3178					✓✓	✓			✓	✓	✓	✓✓	✓✓	✓	✓	✓✓	✓✓✓				slow leak spigot
510	32.3	50	✓ 18	✓✓	✓	3018					✓✓	✓			✓	✓	✓	✓✓	✓✓	✓	✓						
511	ChlMax	40	✓ 19																			✓✓	✓✓✓				
512	ChlMax	40	✓ 20	✓✓	✓	2051	3061				✓✓	✓			✓	✓	✓	✓✓	✓✓	✓	✓						Pacific
513	20		✓ 21	✓✓	✓	3118					✓✓	✓			✓	✓	✓	✓✓	✓✓	✓	✓	✓✓	✓✓				
514	5		✓ 22																			✓✓	✓✓✓				
515	5		✓ 23	✓✓	✓	2007				✓	✓✓	✓			✓	✓	✓✓	✓✓	✓✓	✓	✓						SIRF
516	1509		✓ 24																								

Comments:

see depth
list on next
sheet↑
dups
for freezing
(add label)

BL-4 1000m

Geochem + Prod (2)

Rosette Log for IOS Cruise ID 2007-20

Cast # 29 UTC Date (dmy) 04 08 2007 UTC Time 1020
 Station BL-4 Lat (N) 71 30.14
 CTD File 200720-029 Lon (W) 151 39.43

Cast Type: Geochemistry

In Air pressure 0.5/ Water Depth 993 +9 (Knudsen, w/o +9 for ship hull)
 Ice Coverage 1/10 Sound Speed 1464 (setting in Knudsen)
 Start Scan 7700 Watch 35/MD/HD/KN

2430

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Oxygen Box #2	Oxy Flask #	Oxy Dup Flask #	Oxy Trip Flask #	DIC	C-13	DOC	CDOM	Total Chl-a 0.7um	Chl-a 0.3um	Bacteria	FW-Alkalinity	Rel Salinity	Nutrients	NH4	Barium	O-18	POC	TSS	I-129	CS-137	PU/AM	Comments
516	Bottom	1000+1	✓ 1	✓x	✓✓	3007	3100				✓	✓					✓	✓✓									slight dribble out of bolt
517	800		✓ 2	✓✓	✓✓✓	3200	3189	3057			✓	✓				✓	✓✓	✓✓✓		✓	✓						
518	600		✓ 3	✓✓	✓	3067											✓	✓✓									
519	400		✓ 4	✓✓	✓	2032					✓	✓					✓	✓✓									
520	450		✓ 5	✓✓	✓	3043											✓	✓✓✓									
521	400		✓ 6	✓✓	✓	3137					✓	✓					✓	✓✓	✓✓✓								
522	Tmax	349	✓ 7	✓✓	✓	2049					✓✓	✓					✓	✓✓									
523	341.75	265	✓ 8	✓✓	✓	2015											✓	✓✓									
524	341.6	222	✓ 9	✓✓	✓	2089											✓	✓✓									
525	341.4	208	✓ 10	LL	✓	2084					✓✓	✓			✓	✓	✓	✓✓	✓✓	✓	✓						
526	341	191	✓ 11	LL	✓	3203					✓	✓			✓	✓	✓	✓✓	✓✓	✓	✓						
527	331.7	179	✓ 12	LL	✓	2099									✓	✓	✓	✓✓	✓✓	✓	✓						
528	331.4	165	✓ 13	x✓	✓	—									✓	✓	✓	✓✓	✓✓	✓	✓						Top valve not tight
529	331.1	144	✓ 14	LL	✓✓	3075	3202				✓	✓			✓	✓	✓✓	✓✓✓	✓✓	✓	✓						
530	32.9	126	✓ 15	LL	✓	2085									✓	✓	✓	✓✓	✓✓	✓	✓						
531	32.6	84	✓ 16	LL	✓	2068									✓	✓	✓	✓✓	✓✓	✓	✓						
532	32.3	58	✓ 17	x✓	✓	—					✓✓	✓				✓	✓✓	✓✓	✓✓	✓	✓						Fastspigot leak vent shut
533	Chl max	36	✓ 18	LL	✓	3183									✓	✓	✓	✓✓	✓✓	✓	✓						
534	50	32	19	LL	✓	2044					✓✓	✓			✓	✓	✓	✓✓	✓✓	✓	✓						
535	20		✓ 20	LL	✓	2033					✓✓	✓			✓	✓	✓	✓✓	✓✓	✓	✓						
536	5		21	LL	✓	3094				✓	✓✓	✓			✓	✓	✓✓	✓✓	✓✓	✓	✓						
537	PROD	5	22	✓✓																							
538	PROD	5	23	✓✓																							
			24																								

Comments:

add

↑
label +
freeze on set

switch winch gears ↓ 600m 510↑

36

BL-6 @ 2000m

Rosette Log for IOS Cruise ID 2007-20

Cast # 30 UTC Date (dmy) 04 08 2007 UTC Time 1312
 Station BL-6 Lat (N) 71 39.44
 CTD File 200720-030 Lon (W) 151 14.05

Cast Type: Geochemistry

In Air pressure 0.5/0.4 Water Depth 2009⁺⁹ (Knudsen, w/o +9 for ship hull)
 Ice Coverage 0/10 Sound Speed 1464 (setting in Knudsen)
 Start Scan 13700 Watch SE/MD/HD/RN

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Oxygen Box #	Oxy Flask #	Oxy Dup Flask #	Oxy Trip Flask #	DIC	C-13	DOC	CDOM	Total Chl-a 0.7um	Chl-a 0.3um	Bacteria	FW-Alkalinity	Gr Salinity	Gr Nutrients	NH4	Barium	O-18	POC	TSS	I-129	CS-137	PU/AM	Comments
539	Bottom	2000 ^{±11}	✓ 1	x ✓	✓✓	3182	2014	3142									✓	✓									medium spigot drip with air vent finally closed
540	1500		✓ 2	✓✓	✓	3160											✓✓	✓✓									
541	1200		✓ 3	✓✓	✓	3151											✓	✓									
542	1000		✓ 4	✓✓	✓✓	3174	3038				✓✓	✓				✓	✓	✓		✓	✓						
543	800		✓ 5	✓✓	✓	3196					✓✓	✓					✓	✓									
544	700		✓ 6	✓✓	✓	3206											✓	✓									
545	600		✓ 7	✓✓	✓	3012											✓	✓									
546	500		✓ 8	✓✓	✓	3161					✓✓	✓					✓	✓									
547	450		✓ 9	✓✓	✓	3096											✓	✓									
548	4m x	415	✓ 10	✓✓	✓	3028					✓✓	✓					✓	✓✓	✓✓								another odd Tmax @ 348m.
549	34.75	285	✓ 11	✓✓	✓	3047											✓	✓									
550	34.7	254	✓ 12	✓✓	✓	3052											✓	✓									
551	34.6	227	✓ 13	✓✓	✓	3193									✓	✓	✓	✓	✓✓	✓	✓						
552	34.4	197	✓ 14	✓✓	✓	3063					✓✓	✓			✓	✓	✓	✓	✓✓	✓✓	✓	✓					
553	34	170	✓ 15	✓✓	✓✓	3033	2027				✓✓	✓			✓	✓	✓	✓	✓✓	✓✓	✓	✓					
554	33.7	158	✓ 16	✓✓	✓	3197									✓		✓	✓									
555	33.4	143	✓ 17	✓✓	✓	3166									✓	✓	✓✓	✓	✓✓	✓✓	✓	✓					
556	33.1	122	✓ 18	✓✓	✓	2059					✓	✓			✓	✓	✓	✓	✓✓	✓✓	✓	✓					
557	32.9	106	✓ 19	✓✓	✓	3003					✓✓	✓			✓	✓	✓	✓	✓✓	✓✓	✓	✓					
558	32.6	83	✓ 20	✓✓	✓	3157									✓	✓	✓	✓✓	✓✓	✓	✓						
559	32.3	67	✓ 21	✓✓	✓	3188									✓	✓	✓✓	✓	✓✓	✓✓	✓	✓					
560	chl M ₀	51	✓ 22	✓✓	✓	3180					✓✓	✓	✓	✓	✓	✓	✓	✓	✓✓	✓✓	✓	✓					
561	20		✓ 23	✓✓	✓	3113					✓✓	✓	✓	✓	✓	✓	✓	✓	✓✓	✓✓	✓	✓					
562	5		✓ 24	✓✓	✓	3006					✓	✓	✓	✓	✓	✓	✓	✓	✓✓	✓✓	✓	✓					

Comments:

↑ HD
 1st set
 + freeze
 one set

winch change gears 613↓ 571↑

Rosette Log for IOS Cruise ID 2007-20

Cast # 31 UTC Date (dmy) 4 8 2007 UTC Time 1733
Station BL-8 Lat (N) 71 57.88
CTD File 200720-031 Lon (W) 150 13.70

Cast Type: **Productivity, RNA/DNA, POC/TSS**

In-Air Pressure 0.4/0.4 Water Depth 2986⁺⁹ (Knudsen, w/o +9 for ship hull)
Ice Coverage 0/10 Sound Speed 1464 (setting in Knudsen)
Start Scan 7800 Watch 2E^{start}

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Productivity (Ian Wrohan/Diana Varela)												RNA/DNA (Karen Scarcella/C. Lovejoy)								J. Jackson		Comments
					Pro NC	Pro NH ₄	Pro U	PON POC	Bio Si	Chl a	PID _L	PID _F	Nut NH ₄	Nut Urea	Nut NPS	DIC	Fish E	DNA	Chl a	RNA	HP LC	Bac	Nut	Bio mas	POC	TSS	
563	1000		✓ 1														2	2			1	1	1				
564	1000		✓ 2																								
565	395		✓ 3														2	2			1	1	1				
566	395		✓ 4																								
567	395		✓ 5																					✓✓	✓✓✓		
568	210	34.4	✓ 6																					✓✓	✓✓✓		
569	137		✓ 7																					✓✓	✓✓✓		
570	129	33.1	✓ 8																					✓✓	✓✓✓		
571	110	32.9	✓ 9																					✓✓	✓✓✓		
572	100		✓ 10														2	2	2		1	1	1				
573	100		✓ 11																								
574	80	32.6	✓ 12																					✓✓	✓✓✓		
575	70		✓ 13														2	2	2		1	1	1				
576	70		✓ 14																								
577	66	32.3	✓ 15																					✓✓	✓✓✓		
578	Ch-max	45	✓ 16														2	2	2	2	2	1	1	1			
579	Ch-max	45	✓ 17																								
580	Ch-max	45	✓ 18																					✓✓	✓✓✓		
581	Ch-max	45	✓ 19																					✓✓	✓✓✓		
582	20		✓ 20																					✓✓	✓✓✓		
583	5		✓ 21														2	2	2	2	2	1	1	1			
584	5		✓ 22																								
585	5		✓ 23																					✓✓	✓✓✓		
586	15US		24																								15US + PAIR

Comments: Wind 20 kts easterly

(C) B2-8 @ 3000m Grochem

Rosette Log for IOS Cruise ID 2007-20

Cast # 32
Station B2-8
CTD File 200720-32

UTC Date (dmy) 4 Aug 2007
Lat (N) 71° 59.96' N
Lon (W) 150° 18.490' W

UTC Time 19:51

Cast Type: Geochemistry

In Air pressure 0.4
Ice Coverage 0/10
Start Scan

Water Depth 3024m (Knudsen, w/o +9 for ship hull)
Sound Speed (setting in Knudsen)
Watch

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Oxygen	Oxy Flask #	Oxy Dup Flask #	Oxy Trip Flask #	DOC	C-13	DOC	CDOM	Total Chl-a 0.7µm	Chl-a 0.3µm	Bacteria	FW-Alkalinity	Salinity	Nutrients	NH4	Barium	O-18	POC	TSS	I-129	CS-137	PU/AM	Comments
586	Bottom	3020	V1	✓✓	✓✓	3004	3198										✓✓	✓✓									
587	2800	2800	V2	✓✓	✓	3051											✓	✓✓									
588	2500	2500	V3	✓✓	✓✓	3109	3135										✓	✓✓									
589	2100	2000	V4	✓✓	✓	3097											✓	✓✓									
590	1500		V5	✓✓	✓	3177											✓✓	✓✓									
591	1000		V6	✓✓	✓	3040					✓	✓				✓	✓✓			✓	✓						
592	800		V7	✓✓	✓	3119					✓	✓					✓	✓✓									
593	600		V8	✓✓	✓	3069											✓	✓✓									
594	500		V9	✓✓	✓	3130					✓	✓					✓	✓✓									2L for Kristina (ammonium)
595	Emox	360	V10	✓✓	✓	3164					✓	✓					✓	✓✓	✓✓								
596	34.75	299	V11	✓✓	✓	2063											✓	✓✓									
597	34.75	273	V12	✓✓	✓	3204											✓	✓✓									
598	34.6	246	V13	✓✓	✓	3107									✓	✓	✓	✓✓									
599	34.4	214	V14	✓✓	✓	2064					✓	✓			✓	✓	✓	✓✓	✓✓	✓	✓						
600	34	182	V15	✓✓	✓	3084					✓	✓			✓	✓	✓	✓✓	✓✓	✓	✓						
601	33.7	166	V16	✓✓	✓	3121									✓	✓	✓	✓✓	✓✓	✓	✓						
602	33.4	150	V17	✓✓	✓	3181									✓	✓	✓	✓✓	✓✓	✓	✓						
603	33.1	132	V18	✓✓	✓	3223					✓	✓			✓	✓	✓✓	✓✓	✓✓	✓	✓						
604	32.9	113	V19	✓✓	✓	3108					✓	✓			✓	✓	✓	✓✓	✓✓	✓	✓						
605	32.6	82	V20	✓✓	✓✓	2019									✓	✓	✓	✓✓	✓✓	✓	✓						
606	32.3	68	V21	✓✓	✓	3024							✓	✓	✓	✓	✓	✓✓	✓✓	✓	✓						
607	chl max	50	V22	✓✓	✓	3207					✓	✓	✓	✓	✓	✓	✓	✓✓	✓✓	✓	✓						
608	20		V23	✓✓	✓	2047					✓	✓	✓	✓	✓	✓	✓	✓✓	✓✓	✓	✓						
609	5		V24	✓✓	✓	3016				✓	✓	✓	✓	✓	✓	✓	✓	✓✓	✓✓	✓	✓						

Comments:

Nat blue clay
DO Box #3

Salinity-yellow.

↑
Labels freeze one set

(B)

BL-8 C 3000 m

PRO D (12)

OR @ CB-2a if not ready for B.H.

Rosette Log for IOS Cruise ID 2007-20

Cast # 33
Station CB-2a
CTD File 200720-UTC Date (dmy) 5 Aug 2007 UTC Time 00:57
Lat (N) 72°29.959N
Lon (W) 150°21.701W

Cast Type: Productivity, RNA/DNA, POC/TSS

In-Air Pressure 0.4
Ice Coverage 4/10
Start Scan Water Depth 3681 (Knudsen, w/o +9 for ship hull)
Sound Speed (setting in Knudsen)
Watch

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Productivity (Ian Wrohan/Diana Varela)													RNA/DNA (Karen Scarcella/C. Lovejoy)								J.Jackson		Comments
					Pro NC	Pro NH ₄	Pro U	PON POC	Bio Si	Chl a	PID _L	PID _F	Nut NH ₄	Nut Urea	Nut NPS	DIC	Fish E	DNA	Chl a	RNA	HP LC	Bac	Nut	Bio mas	POC	TSS		
610	65		✓1		✓	✓	✓	✓	✓	✓			✓	✓	✓													
611	65		✓2													✓												
612	30		✓3		✓	✓	✓	✓	✓	✓			✓	✓	✓													
613	30		✓4													✓												
614	10		✓5		✓	✓	✓	✓	✓	✓			✓	✓	✓													
615	10		✓6													✓												
616	8		✓7		✓	✓	✓	✓	✓	✓			✓	✓	✓													
617	8		✓8													✓												
618	5		✓9		✓	✓	✓	✓	✓	✓			✓	✓	✓													
619	5		✓10													✓												
620	2		✓11		✓	✓	✓	✓	✓	✓			✓	✓	✓													
621	2		✓12													✓												
			13																									
			14																									
			15																									
			16																									
			17																									
			18																									
			19																									
			20																									
			21																									
			22																									
			23																									
			24																									

Comments:

Water for
Sediment traps?

Rosette Log for IOS Cruise ID 2007-20

Cast # 34 UTC Date (dmy) 5 Aug 2007 UTC Time 2:14
Station CB-2a Lat (N) 72° 30.628'N
CTD File 200720-034 Lon (W) 150° 4' 38.8'W

Cast Type: **Geochemistry**

In Air pressure 0.4 Water Depth 3713+9m (Knudsen, w/o +9 for ship hull)
Ice Coverage 3/10 Sound Speed _____ (setting in Knudsen)
Start Scan _____ Watch _____

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Oxygen #	Oxy Flask #	Oxy Dup Flask #	Oxy Trip Flask #	DIC	C-13	DOC	CDOM	Total Chl-a 0.7um	Chl-a 0.3um	Bacteria	FW-Alkalinity	Salinity	Nutrients	NH4	Barium	O-18	POC	TSS	I-129	CS-137	PU/AM	Comments
622	Bottom	3713m	✓ 1	✓✓	✓✓	3009	3199	3061									✓	✓✓									
623	3000	3000m	✓ 2	✓✓	✓	3209											✓✓	✓✓									
624	2500	2500m	✓ 3	✓✓	✓	2017											✓	✓✓									
625	2000	1976m(2000dbw)	✓	✓✓	✓	3048												✓✓									
626	1500		✓ 5	✓✓	✓	3034												✓✓									
627	1000		✓ 6	✓✓	✓✓	2086	3124				✓	✓						✓✓		✓	✓						
628	800		✓ 7	✓✓	✓	2088												✓✓									
629	600		✓ 8	✓✓	✓	2025												✓✓									
630	500		✓ 9	✓✓	✓	3104					✓	✓						✓✓									
631	450		✓ 10	✓✓	✓	2092												✓✓									
632	Tmax	388	✓ 11	✓✓	✓	2074					✓	✓						✓✓	✓✓								
633	34.75	337	✓ 12	✓✓	✓	3116												✓✓									
634	34.7	316	✓ 13	✓✓	✓	3190									✓			✓✓									
635	34.6	290	✓ 14	✓✓	✓	2060									✓	✓	✓	✓✓	✓✓	✓	✓						
636	34.4	256	✓ 15	✓✓	✓	3087					✓	✓			✓	✓	✓	✓✓	✓✓	✓	✓						
637	34	224	✓ 16	✓✓	✓	3201					✓	✓			✓	✓	✓	✓✓	✓✓	✓	✓						
638	33.5	199	✓ 17	✓✓	✓	3178									✓	✓	✓	✓✓	✓✓	✓	✓						
639	33.1	168	✓ 18	✓✓	✓	3018					✓	✓			✓	✓	✓✓	✓✓	✓✓	✓	✓						
640	32.9	146	✓ 19	✓✓	✓	3055									✓	✓	✓	✓✓	✓✓	✓	✓						
641	32.6	119	✓ 20	✓✓	✓	2051									✓	✓	✓	✓✓	✓✓	✓	✓						
642	32.3	92	✓ 21	✓✓	✓✓	3118	3194				✓	✓			✓	✓	✓	✓	✓✓	✓	✓						
643	32.1	50	✓ 22	✓✓	✓	2014					✓	✓			✓	✓	✓	✓	✓✓	✓	✓						
644	Chl-trak	15	✓ 23	✓✓	✓	2007					✓	✓			✓	✓	✓	✓	✓✓	✓	✓						
645	5		24	✓✓	✓	3186				✓	✓	✓			✓	✓	✓✓	✓✓	✓✓	✓	✓						

Comments:

↑ 1st freezing sample + label
label
sample to pickle

Rosette Log for IOS Cruise ID 2007-20

Cast # 35 UTC Date (dmy) 5 8 2007 UTC Time 0744
Station CB-2 Lat (N) 72 59.93
CTD File 200720-035 Lon (W) 149 58.73

Cast Type: **Geochemistry**
In Air pressure 0.5/0.4 Water Depth 3745 (Knudsen, w/o +9 for ship hull)
Ice Coverage 8/10 Sound Speed / (setting in Knudsen)
Start Scan 13800 Watch SE/MP/HD/RN
5145

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Oxygen Box 2	Oxy Flask #	Oxy Dup Flask #	Oxy Trip Flask #	DIC	C-13	DOC	CDOM	Total Chl-a 0.7um	Chl-a 0.3um	Bacteria	FW-Alkalinity	Salinity	Nutrients	NH4	Barium	O-18	POC	TSS	I-129	CS-137	PU/AM	Comments
646	Bottom 100	3645	✓ 1	LL	✓	3007	3202	3189									✓	✓									
647	3000		✓ 2	✓	✓	3200											✓	✓									
648	2500		✓ 3	✓	✓	3067																					
649	2000		✓ 4	✓	✓	2032																					
650	1500		✓ 5	✓	✓	3043											✓	✓									
651	1000		✓ 6	✓	✓	3137	3100				✓	✓				✓	✓	✓		✓	✓						
652	800		✓ 7	✓	✓	2049					✓	✓					✓	✓									
653	600		✓ 8	✓	✓	2015																					
654	500		✓ 9	✓	✓	2049					✓	✓															
655	450		✓ 10	✓	✓	2084																					
656	424		✓ 11	✓	✓	3203					✓	✓							✓								
657	344.75	352	✓ 12	✓	✓	2099																					
658	341.7	329	✓ 13	✓	✓	312.7									✓	✓				✓	✓						
659	341.6	294	✓ 14	✓	✓	307.5									✓				✓								
660	341.4	262	✓ 15	✓	✓	208.5					✓	✓			✓	✓			✓	✓	✓						
661	341	230	✓ 16	✓	✓	206.8					✓	✓			✓	✓			✓	✓	✓						
662	331.5	202	✓ 17	✓	✓	206.1									✓	✓			✓	✓	✓						slow leak spiggot
663	331.1	170	✓ 18	✓	✓	318.3					✓	✓			✓	✓			✓	✓	✓						
664	32.9	148	✓ 19	✓	✓	204.4					✓	✓			✓	✓			✓	✓	✓						
665	32.6	113	✓ 20	✓	✓	203.3									✓	✓	✓	✓	✓	✓	✓						
666	32.3	89	✓ 21	✓	✓	304.4	305.8				✓	✓			✓	✓	✓	✓	✓	✓	✓						
667	321.111	53	✓ 22	✓	✓	205.6					✓	✓			✓	✓	✓	✓	✓	✓	✓						
668	20		✓ 23	✓	✓	209.0					✓	✓			✓	✓	✓	✓	✓	✓	✓						
669	5		✓ 24	✓	✓	309.8				✓	✓	✓			✓	✓	✓	✓	✓	✓	✓						

Comments: Please go to bottom but first bottle is bottom = 100m (to avoid funny sediment effect)
JANU! ↓
Emilie + Karen not available for pickling.
freeze + label one set
change gears 571 ↓ 486 ↑
42

Rosette Log for IOS Cruise ID 2007-20

Cast # 36 UTC Date (dmy) 5 8 2007 UTC Time 1656
Station CB3 Lat (N) 73 59.02
CTD File 200720-036 Lon (W) 149 58.69

Cast Type: **Geochemistry**
In Air pressure 0.5/03 Water Depth 3815⁺⁹ (Knudsen, w/o +9 for ship hull)
Ice Coverage 9/10 Sound Speed 1479 (setting in Knudsen)
Start Scan 14600 Watch JE/MD/HD/RN
↑ after one dip to 50m & back up because pumps off.

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Oxygen	Oxy Flask #	Oxy Dup Flask #	Oxy Trip Flask #	DIC	C-13	DOC	CDOM	Total Chl-a 0.7um	Chl-a 0.3um	Bacteria	FW-Alkalinity	Salinity	Nutrients	NH4	Barium	O-18	POC	TSS	I-129	CS-137	PU/AM	Comments
670	B ₀ -100	3815	✓1	✓✓	✓✓	3182	2027	3038									✓✓	✓✓									
671	3000	3000	✓2	✓✓	✓	3160																					
672	2500	2500	✓3	✓✓	✓	3151																					
673	2000	2000	✓4	✓✓	✓	3174																					
674	1500	1500	✓5	✓✓	✓	3196																					
675	1060	1000	✓6	✓✓	✓	3206					✓	✓								✓	✓						
676	800	800	✓7	✓✓	✓	3012					✓	✓							✓✓✓								
677	600	600	✓8	✓✓	✓	3161	3135										✓	✓									
678	500	497	✓9	✓✓	✓	3096					✓	✓															
679	450	450	✓10	✓✓	✓	3028																					
680	T _{max}	415	✓11	✓✓	✓	3047					✓	✓															
681	34.75	348	✓12	✓✓	✓✓	3052																					
682	34.7	324	✓13	✓✓	✓	3193									✓					✓	✓						
683	34.6	294	✓14	✓✓	✓	3063									✓												
684	34.4	261	✓15	✓✓	✓	3033					✓	✓			✓				✓✓	✓	✓						
685	34	231	✓16	✓✓	✓	3191					✓	✓			✓				✓✓	✓	✓						
686	33.5	206	✓17	✓✓	✓	3166									✓				✓✓	✓	✓						
687	33.1	179	✓18	✓✓	✓	2059					✓	✓			✓				✓✓	✓	✓						
688	32.9	160	✓19	✓✓	✓	3003									✓				✓✓	✓	✓						
689	32.6	134	✓20	✓✓	✓✓	3157	3171								✓				✓✓	✓	✓						
690	32.3	107	✓21	✓✓	✓	3188					✓	✓	✓		✓		✓	✓	✓✓	✓	✓						
691	CHL _{max}	67	✓22	✓✓	✓	3180					✓	✓	✓		✓	✓	✓	✓	✓✓	✓	✓						
692	20		✓23	✓✓	✓	3113					✓	✓	✓		✓	✓	✓	✓	✓✓	✓	✓						
693	5		✓24		✓					✓	✓	✓	✓		✓	✓	✓	✓	✓✓	✓	✓						

Comments: Oxygen box #4 ↑ use small bottles winch change gears 610↓
Nutrients = green box Salinity = white box

Rosette Log for IOS Cruise ID 2007-20

Cast # 37
Station CB-4
CTD File 200720-037

UTC Date (dmy) 06 08 2007 UTC Time 4:25
Lat (N) 74° 55.418
Lon (W) 150° 7.956

Cast Type: Geochemistry
In Air pressure 9.1 / 0.5 Water Depth 3818 + 9 (Knudsen, w/o +9 for ship hull)
Ice Coverage 8/10 Sound Speed 1479 (setting in Knudsen)
Start Scan Watch MT start 2E end

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Oxygen	Oxy Flask #	Oxy Dup Flask #	Oxy Trip Flask #	DIC	C-13	DOC	CDOM	Total Chl-a 0.7um	Chl-a 0.3um	Bacteria	FW-Alkalinity	Salinity	Nutrients	NH4	Barium	O-18	POC	TSS	I-126	CS-137	PU/AM	Comments
694	Bottom		✓ 1	✓✓	✓✓	3009	3142		✓								✓✓	✓✓									
695	3000		✓ 2																								2 for Karen
696	3000		✓ 3																								
697	3000		✓ 4	✓✓	✓✓	3048	2073	3057	✓								✓✓	✓✓									
698	2000		✓ 5	✓✓	✓	3034											✓	✓									
699	1500		✓ 6	✓✓	✓	2086											✓	✓									
700	1000		✓ 7	✓✓	✓	2088					✓	✓				✓	✓	✓		✓	✓						
701	800		✓ 8	✓✓	✓	2025					✓	✓					✓	✓									
702	600		✓ 9	✓✓	✓	3104											✓	✓									
703	500		✓ 10	✓✓	✓	2092					✓	✓					✓	✓									
704	460	460	✓ 11	✓✓	✓	2074					✓	✓					✓	✓									
705	341.75	360	✓ 12	✓✓	✓	3116											✓	✓									
706	34.7	318	✓ 13	✓✓	✓	3190									✓	✓	✓	✓		✓	✓						
707	34.6	280	✓ 14	✓✓	✓	2060									✓	✓	✓	✓									
708	34.4	250	✓ 15	✓✓	✓	3187					✓	✓			✓	✓	✓	✓		✓	✓						
709	34	217	✓ 16	✓✓	✓	3201					✓	✓			✓	✓	✓	✓		✓	✓						
710	33.5	193	✓ 17	✓✓	✓	3178			✓						✓	✓	✓	✓		✓	✓						medium pigot drip
711	33.1	171	✓ 18	✓✓	✓	3018			✓✓		✓	✓			✓	✓	✓	✓		✓	✓						
712	32.9	150	✓ 19	✓✓	✓✓	3055	2069		✓						✓	✓	✓	✓		✓	✓						
713	32.6	125	✓ 20	✓✓	✓	2051	?								✓	✓	✓	✓		✓	✓						
714	32.3	103	✓ 21	✓✓	✓	3118					✓	✓			✓	✓	✓	✓		✓	✓						
715	41	41	✓ 22	✓✓	✓	2014					✓	✓			✓	✓	✓	✓		✓	✓						
716	20		✓ 23	✓✓	✓	2007					✓	✓			✓	✓	✓	✓		✓	✓						
717	5	surf	✓ 24	✓✓	✓	3186			✓	✓	✓	✓			✓	✓	✓✓	✓		✓	✓						tripped late lanyard hangup

Comments:

slow drip
lower
O-ring
winch change gear 592 ↑

Rosette Log for IOS Cruise ID 2007-20

Cast Type: Productivity, RNA/DNA, POC/TSS

Cast # 37 UTC Date (dmy) 06 08 2007 UTC Time 4:25
Station CB-4 Lat (N) 74° 55.418
CTD File 200720- 37 Lon (W) 150° 7.956

In-Air Pressure 28.19 Water Depth 3818 +9 (Knudsen, w/o +9 for ship hull)
Ice Coverage 8/10 Sound Speed _____ (setting in Knudsen)
Start Scan _____ Watch _____

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Productivity (Ian Wrohan/Diana Varela)													RNA/DNA (Karen Scarcella/C. Lovejoy)								J.Jackson		Comments
					Pro NC	Pro NH ₄	Pro U	PON POC	Bio Si	Chl a	PID _L	PID _F	Nut NH ₄	Nut Urea	Nut NPS	DIC	Fish E	DNA	Chl a	RNA	HP LC	Bac	Nut	Bio mas	POC	TSS		
695			1																									
			2															✓✓	✓✓			✓	✓	✓				
696			3																									
			4																									
			5																									
			6																									
			7																									
			8																									
			9																									
			10																									
			11																									
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			21																									
			22																									
			23																									
			24																									

Comments:

Rosette Log for IOS Cruise ID 2007-20

Cast # 38 UTC Date (dmy) 6 8 2007 UTC Time 0905
Station CB 4 Lat (N) 74 55 22
CTD File 200720-038 Lon (W) 150 08.83

Cast Type: **Productivity, RNA/DNA, POC/TSS**
In-Air Pressure 0.6/0.4 Water Depth 3821 (Knudsen, w/o +9 for ship hull)
Ice Coverage 7/10 Sound Speed 1479 (setting in Knudsen)
Start Scan ? Watch JE/HD/RN

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Productivity (Ian Wrohan/Diana Varela)												RNA/DNA (Karen Scarcella/C. Lovejoy)								J.Jackson		Comments	
					Pro NC	Pro NH ₄	Pro U	PON POC	Bio Si	Chl a	PID _L	PID _F	Nut NH ₄	Nut Urea	Nut NPS	DIC	Fish E	DNA	Chl a	RNA	HP LC	Bac	Nut	Bio mas	POC	TSS		
718		70	✓ 1	✓✓	X	X	X	✓	✓	✓✓	✓	✓	✓✓	✓✓	✓✓													
719		70	✓ 2	✓✓												✓												
720		46	✓ 3	✓✓	✓	✓	✓	✓	✓	✓✓	✓	✓	✓✓	✓✓	✓✓													
721		46	✓ 4	✓✓												✓												
722		19	✓ 5	✓✓	✓	✓	✓	✓		✓✓			✓✓	✓✓	✓✓													
723		19	✓ 6	✓✓												✓												
724		9	✓ 7	✓✓	✓	✓	✓	✓		✓✓			✓✓	✓✓	✓✓													
725		9	✓ 8	✓✓												✓												
726		6	✓ 9	✓✓	✓✓	✓✓	✓✓	✓	✓	✓✓	✓	✓	✓✓	✓✓	✓✓													
727		6	✓ 10	✓✓												✓												
728		2	✓ 11	✓✓	✓	✓	✓	✓	✓	✓✓			✓✓	✓✓	✓✓													
729		2	12	✓✓												✓												
			13																									
			14																									
			15																									
			16																									
			17																									
			18																									
			19																									
			20																									
			21																									
			22																									
			23																									
			24																									

Comments:

Rosette Log for IOS Cruise ID 2007-20

Cast # 39 UTC Date (dmy) 6 8 2007 UTC Time 1010
Station CB4 Lat (N) 74 55.10
CTD File 200720-039 Lon (W) 150 09.51

Cast Type: Productivity, RNA/DNA, POC/TSS

In-Air Pressure 0.5/0.4 Water Depth 3819⁺⁹ (Knudsen, w/o +9 for ship hull)
Ice Coverage 7/10 Sound Speed 1479 (setting in Knudsen)
Start Scan ? Watch JE/MD/HD/RN
display stuck!

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Productivity (Ian Wrohan/Diana Varela)												RNA/DNA (Karen Scarcella/C. Lovejoy)								J.Jackson		Comments
					Pro NC	Pro NH ₄	Pro U	PON POC	Bio Si	Chl a	PID _L	PID _F	Nut NH ₄	Nut Urea	Nut NPS	DIC	Fish E	DNA	Chl a	RNA	HP LC	Bac	Nut	Bio mas	POC	TSS	
730	800	K	✓ 1	✓✓													✓✓	✓✓			✓	✓	✓				
731	800	K	✓ 2	✓✓																							
732	460	K	✓ 3	✓✓													✓✓	✓✓			✓	✓	✓				
733	460	K	✓ 4	✓✓																							
734	246	K	✓ 5	✓✓																				✓✓	✓✓✓		
735	166	K	✓ 6	✓✓																				✓✓	✓✓✓		
736	149	K	✓ 7	✓✓																				✓✓	✓✓✓		
737	124	K	✓ 8	✓✓																				✓✓	✓✓✓		
738	100	K	✓ 9	✓✓																				✓✓	✓✓✓		
739	63	K	✓ 10	✓✓													✓✓	✓✓	✓✓		✓	✓	✓				
740	63	K	✓ 11	✓✓																							
741	63	K	✓ 12	✓✓																	✓			✓✓	✓✓✓		
742	63	K	✓ 13	✓✓																	✓			✓✓	✓✓✓	✓✓	
743	48	K	✓ 14	✓✓													✓✓	✓✓	✓✓	✓✓	✓	✓	✓				
744	48	K	✓ 15	✓✓																							
745	48	K	✓ 16	✓✓																				✓✓	✓✓✓		
746	20	K	✓ 17	✓✓																				✓✓	✓✓✓		
747	5	K	18	✓✓													✓✓	✓✓	✓✓	✓✓	✓	✓	✓				
748	5	K	19	✓✓																							
749	5	K	20	✓✓																				✓✓	✓✓✓		
750	5	K	✓ 21	✓✓																				✓✓	✓✓✓		
751			22																								
752			23																								
753	505		24																								

Comments: Winch change gears 627↓ 543↑

RS-6 @ 3500

Rosette Log for IOS Cruise ID 2007-20

Cast # 40 UTC Date (dmy) 07 08 2007 UTC Time 0812
 Station RS-6 (1015) Lat (N) 75 30.82
 CTD File 200720-040 Lon (W) 155 16.04

Cast Type: Geochemistry

In Air pressure 0.6/0.4 Water Depth 3833 ⁺⁹ (Knudsen, w/o +9 for ship hull)
 Ice Coverage 7/10 Sound Speed 1479 (setting in Knudsen)
 Start Scan 6850 Watch JE/MD/HD/RN

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Oxygen Box #	Oxy Flask #	Oxy Dup Flask #	Oxy Trip Flask #	DOC	C-13	DOC	CDOM	Total Chl-a 0.7um	Chl-a 0.3um	Bacteria	FW-Alkalinity	Salinity Green	Nutrients Red	NH4	Barium	O-18	POC	TSS	I-129	CS-137	PU/AM	Comments	
751	Bottom	3830 ⁺¹⁰	✓ 1	✓✓	✓✓	3182	2027										✓	✓									} water for sediment traps	
752	3200		✓ 2	✓✓	✓	3160											✓✓	✓✓										
753	2500		✓ 3	✓✓	✓	3151											✓	✓										
754	2000		✓ 4	✓✓	✓✓✓	3174	3135	3171									✓	✓										
755	1500		✓ 5	✓✓	✓	3196											✓	✓										
756	1000		✓ 6	✓✓	✓	3206					✓	✓				✓	✓	✓✓		✓	✓							
757	800		✓ 7	✓✓	✓	3012					✓	✓					✓	✓✓										
758	600		✓ 8	✓✓	✓	3161											✓	✓										
759	500		✓ 9	✓✓	✓	3096					✓	✓					✓	✓										
760	tmax	413	✓ 10	✓✓	✓	3028					✓	✓					✓	✓	✓✓									
761	34.75	358	✓ 11	✓✓	✓	3047											✓	✓										
762	34.75	333	✓ 12	✓✓	✓	3052											✓✓	✓										
763	34.6	307	✓ 13	x ✓	✓										✓		✓	✓									Top air vent loose	
764	34.4	267	✓ 14	✓✓	✓	3063					✓	✓			✓	✓	✓	✓	✓✓	✓	✓							
765	34	235	✓ 15	✓✓	✓	3033					✓	✓			✓	✓	✓	✓	✓✓	✓	✓							
766	33.5	215	✓ 16	✓✓	✓	3191									✓	✓	✓	✓	✓✓	✓	✓							
767	33.1	195	✓ 17	✓✓	✓	3166					✓	✓			✓	✓	✓✓	✓✓	✓✓	✓	✓							
768	32.9	179	✓ 18	✓✓	✓	2059					✓	✓			✓	✓	✓	✓	✓✓	✓	✓							
769	32.6	159	✓ 19	✓✓	✓✓	3003	3082								✓	✓	✓	✓	✓✓	✓	✓							
770	32.3	116	✓ 20	✓✓	✓	3157									✓	✓	✓	✓	✓✓	✓	✓							
771	Tmax	56	✓ 21	✓✓	✓	3138					✓	✓	✓	✓	✓	✓	✓	✓	✓✓	✓	✓							
772	ChlMax	56	✓ 22	✓✓	✓	3180					✓	✓	✓	✓	✓	✓	✓	✓	✓✓	✓	✓							
773	20		✓ 23	✓✓	✓	3113					✓	✓	✓	✓	✓	✓	✓	✓	✓✓	✓	✓							
774	5		✓ 24	✓✓	✓	3006				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓✓	✓	✓							

Comments:

Chl Max
+
tmax

Small subsurface tmax @ 10m

secondary xmissometer reading -1.1% at 230 ↓ & beyond, came back by 900 and

Wait at beginning of cast for ice chunks to clear - rosette still in air.

Winch change gears 520 ↓ 560 ↑

Rosette Log for IOS Cruise ID 2007-20

Cast # 41
Station R5-4
CTD File 200720-041

UTC Date (dmy) 7 08 2607
Lat (N) 75 36.91
Lon (W) 156 03 43

UTC Time 1332

Cast Type: Geochemistry

In Air pressure 0.5/0.5
Ice Coverage 8/10
Start Scan 8400

Water Depth 2355⁺⁹ (Knudsen, w/o +9 for ship hull)
Sound Speed 1479 (setting in Knudsen)
Watch JE/MD/HV/RN

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Oxygen Box 2	Oxy Flask #	Oxy Dup Flask #	Oxy Trip Flask #	DIC	C-13	DOC	CDOM	Total Chl-a 0.7um	Chl-a 0.3um	Bacteria	FW-Alkalinity	Chl-a Salinity	Nutrients	NH4	Barium	O-18	POC	TSS	I-129	CS-137	PU/AM	Comments
775	Bo-10	2330 ⁺	✓ 1	✓✓	✓✓	3007	3202	3100										✓✓									
776	2000		✓ 2	✓✓													✓✓	✓✓									
777	1500		✓ 3	✓✓													✓✓	✓✓									
778	1000		✓ 4	✓✓	✓	2032					✓	✓					✓✓	✓✓									
779	1800		✓ 5	✓✓	✓	3043					✓	✓					✓	✓									
780	700		✓ 6	✓✓														✓✓									
781	600		✓ 7	✓✓													✓✓	✓✓✓	✓	✓							
782	500		✓ 8	✓✓	✓✓	2015	3058				✓	✓				✓	✓	✓✓		✓	✓						
783	Tmax	440	✓ 9	✓✓	✓	2089					✓	✓					✓✓	✓✓									tmax .92,
784	34.75	334	✓ 10	✓✓																							
785	34.7	316	✓ 11																								
786	34.6	291	✓ 12																								
787	34.4	254	✓ 13	✓✓	✓	3126					✓	✓			✓		✓	✓✓	✓✓								
788	34	219	✓ 14	✓✓	✓	3075					✓	✓			✓	✓	✓	✓✓	✓	✓							
789	33.7	206	✓ 15	✓✓											✓	✓	✓	✓✓	✓	✓							
790	33.4	193	✓ 16												✓	✓		✓✓		✓	✓						
791	33.1	173	✓ 17	✓✓	✓	2061					✓	✓			✓	✓	✓	✓✓	✓✓	✓	✓						
792	32.9	153	✓ 18	✓✓	✓✓	3183	3194				✓	✓			✓	✓	✓✓	✓✓	✓✓	✓	✓						
793	32.6	118	✓ 19												✓	✓		✓✓	✓✓	✓	✓						
794	32.3	93	✓ 20	✓✓	✓	2033					✓	✓			✓	✓	✓	✓✓	✓	✓							
795	Chl _{max}	62	✓ 21	✓✓	✓	3094					✓	✓			✓	✓	✓			✓	✓						
796	T _{max}	55	✓ 22										✓		✓	✓	✓		✓✓	✓	✓						
797	20		✓ 23	✓✓	✓	2091					✓	✓	✓		✓	✓	✓		✓✓	✓	✓						
798	5		✓ 24	✓✓	✓	3098				✓	✓	✓	✓		✓	✓	✓	✓✓	✓✓	✓	✓						

Comments: - secondary xmissometer reading - 1.1 @ Surface at deployment. only change gears 451 ↓ 586 ↑
came back w 290m on downcast
- wait at 5 m on upcast for ice before bringing aboard drifted shallower during cast.

Rosette Log for IOS Cruise ID 2007-20

Cast # 42 UTC Date (dmy) 7 08 2007 UTC Time 1726
Station RS-1 Lat (N) 75 44 81
CTD File 200720-042 Lon (W) 157 05.80

Cast Type: Productivity, RNA/DNA, POC/TSS

In-Air Pressure 0.6/0.5 Water Depth 982⁺⁹ (Knudsen, w/o +9 for ship hull)
Ice Coverage 9/10 Sound Speed 1479 (setting in Knudsen)
Start Scan 10200 Watch 32/MD/HD/RN

1733

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Productivity (Ian Wrohan/Diana Varela)													RNA/DNA (Karen Scarcella/C. Lovejoy)										J.Jackson		Comments
					Pro NC	Pro NH ₄	Pro U	PON POC	Bio Si	Chl a	PID _L	PID _F	Nut NH ₄	Nut Urea	Nut NPS	DIC	Fish E	DNA	Chl a	RNA	HP LC	Bac	Nut	Bio mas	POC	TSS				
799		253	✓ 1																						✓✓	✓✓✓				
800		173	✓ 2																						✓✓	✓✓✓				
801		156	✓ 3																						✓✓	✓✓✓				
802		122	✓ 4																						✓✓	✓✓✓				
803		96	✓ 5																						✓✓	✓✓✓				
804		92	✓ 6		✓	✓	✓	✓	✓	✓✓			✓✓	✓✓	✓✓															
805		92	✓ 7													✓														
806		60	✓ 8		✓	✓	✓	✓	✓	✓✓	✓	✓	✓✓	✓✓	✓✓															
807		60	✓ 9													✓														
808		54	✓ 10																					✓✓	✓✓✓					
809		42	✓ 11																					✓✓	✓✓✓					
810		27	✓ 12		✓	✓	✓	✓	✓	✓✓	✓	✓	✓✓	✓✓	✓✓															
811		27	✓ 13													✓														
812		20	✓ 14																					✓✓	✓✓✓					
813		15	✓ 15		✓	✓	✓	✓	✓	✓✓			✓✓	✓✓	✓✓															
814		15	✓ 16													✓														
815		15	✓ 17																					✓✓	✓✓✓					
816		15	✓ 18																					✓✓	✓✓✓					
817		9	✓ 19		✓✓	✓✓	✓✓	✓	✓	✓✓	✓	✓	✓✓	✓✓	✓✓															
818		9	✓ 20													✓														
819		5	✓ 21																					✓✓	✓✓✓					
820		2	✓ 22		✓	✓	✓	✓	✓	✓✓			✓✓	✓✓	✓✓															
821		2	✓ 23													✓														
—	ISUS	—	✓ 24																											

Comments: