

Rosette Log for IOS Cruise ID 2007-20

Cast # 92 UTC Date (dmy) 23 08 2007 UTC Time 1125
Station CB-21 Lat (N) 73 58.89
CTD File 200720-092 Lon (W) 140 02.04

Cast Type: **Geochemistry**

In Air pressure 0.5/0.4 Water Depth 3507⁺⁹ (Knudsen, w/o +9 for ship hull)
Ice Coverage 4/10 Sound Speed 1471 (setting in Knudsen)
Start Scan 14.000 Watch SE/RN

Cs/I

1134

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	
1867	1000		1														✓							✓	✓		no confirmation of firing from Seacore - did not fire	
	1000		2																									
	1000		3																									
	1000		4																									
1867	800		✓ 81														✓							✓			fired from deck unit	
1868	800		✓ 82																									
1869	800		✓ 73																									
1870	800		✓ 84																									
1871	600		✓ 85														✓							✓				
1872	600		✓ 106																									
1873	600		✓ 147																									
1874	600		✓ 128																									
1875	400		✓ 129	✓✓													✓							✓				
1876	400		✓ 1410																									
1877	400		✓ 1511																									
1878	400		✓ 1612																									
1879	300		✓ 1713	✓✓													✓							✓				
1880	300		✓ 1814																									
1881	300		✓ 1815																									
1882	300		✓ 2016																									
1883	5		✓ 2117														✓							✓				
1884	5		✓ 2218																									
1885	5		✓ 2319																									
1886	5		✓ 2420																									

Comments: Secondary T very different (.5C) from primary surface → 350m, 1st & 2nd C fine. Very thick intrusive layers ~ 30m thick around Tmax @ 412m. salinity wrong - must be primary T - that is off. came back @ 350m on ↓

Winch change gears 601m ↓ 600↑

106

Rosette Log for IOS Cruise ID 2007-20

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

Cast # 93 UTC Date (dmy) 23 08 2007 UTC Time 1300
Station CB-21 Lat (N) 73 57.90
CTD File 200720- 093 Lon (W) 140 05.75

In-Air Pressure 0.15/0.4 Water Depth 3491 +9 (Knudsen, w/o +9 for ship hull)
Ice Coverage 5/10 Sound Speed 1479 (setting in Knudsen)
Start Scan 3000? Watch JE/MD/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	
1887	5		1														2	2	2	2	2	1	2	1			
1888	5		2																								
1889	5		3																								
1890	5		4																								
			5																								
			6																								
			7																								
			8																								
			9																								
			10																								
			11																								
			12																								
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			14																								
			15																								
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			18																								
			19																								
			20																								
			21																								
			22																								
			23																								
			24																								

Comments:

Rosette Log for IOS Cruise ID 2007-20

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

Cast # 94 UTC Date (dmy) 23 08 2007 UTC Time 1321
Station CB-21 Lat (N) 73 58.02
CTD File 200720-094 Lon (W) 140 05.28

In-Air Pressure 0.5/0.4 Water Depth 3493+9 (Knudsen, w/o +9 for ship hull)
Ice Coverage 6/10 Sound Speed 1479 (setting in Knudsen)
Start Scan 8700 Watch 5e/HD/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	
K 1891	1000	✓	1	✓														2	2			1	2	1			
K 1892	1000	✓	2																								
K 1893	428	✓	3	✓✓														2	2			1	2	1			
K 1894	428	✓	4	✓✓✓																							
I 1895	106	✓	5	✓✓	✓	✓	✓	✓	✓	✓✓			✓✓	✓✓	✓✓												
I 1896	106	✓	6	✓✓												✓											
K 1897	95	✓	7	✓✓														2	2	2		1	2	1			
K 1898	95	✓	8															2	2	2		1	2	1			
I 1899	74	✓	9		✓	✓	✓	✓	✓	✓✓	✓	✓	✓✓	✓✓	✓✓												
I 1900	74	✓	10													✓											
K 1901	70	✓	11	✓✓													2	2	2	2	2	1	2	1			
K 1902	70	✓	12	✓✓																							
K 1903	40	✓	13	✓✓														2	2	2		1	2	1			
K 1904	40	✓	14	✓✓																							
I 1905	36	✓	15		✓	✓	✓	✓	✓	✓✓	✓	✓	✓✓	✓✓	✓✓												
1906	36	✓	16													✓											
1907	16	✓	17	✓✓	✓	✓	✓	✓	✓	✓✓	✓	✓	✓✓	✓✓	✓✓												
1908	16	✓	18	✓✓												✓											
1909	8	✓	19	✓✓	✓✓	✓✓	✓✓	✓	✓	✓✓	✓	✓	✓✓	✓✓	✓✓												
1910	8	✓	20													✓											
I 1911	2	✓	21	✓✓	✓	✓	✓	✓	✓	✓✓			✓✓	✓✓	✓✓												
1912	2	✓	22	✓✓												✓											
			23																								
1505			24																								

Comments: *winch change gears* *Go2↓ ~500↑ (I missed it a bit)* *106*
** oil slick @ surface on upcast when ROS coming out*
1505 *1905* *1910* *1911* *1912* *1913* *1914* *1915* *1916* *1917* *1918* *1919* *1920* *1921* *1922* *1923* *1924* *1925* *1926* *1927* *1928* *1929* *1930* *1931* *1932* *1933* *1934* *1935* *1936* *1937* *1938* *1939* *1940* *1941* *1942* *1943* *1944* *1945* *1946* *1947* *1948* *1949* *1950* *1951* *1952* *1953* *1954* *1955* *1956* *1957* *1958* *1959* *1960* *1961* *1962* *1963* *1964* *1965* *1966* *1967* *1968* *1969* *1970* *1971* *1972* *1973* *1974* *1975* *1976* *1977* *1978* *1979* *1980* *1981* *1982* *1983* *1984* *1985* *1986* *1987* *1988* *1989* *1990* *1991* *1992* *1993* *1994* *1995* *1996* *1997* *1998* *1999* *2000* *2001* *2002* *2003* *2004* *2005* *2006* *2007* *2008* *2009* *2010* *2011* *2012* *2013* *2014* *2015* *2016* *2017* *2018* *2019* *2020* *2021* *2022* *2023* *2024* *2025* *2026* *2027* *2028* *2029* *2030* *2031* *2032* *2033* *2034* *2035* *2036* *2037* *2038* *2039* *2040* *2041* *2042* *2043* *2044* *2045* *2046* *2047* *2048* *2049* *2050* *2051* *2052* *2053* *2054* *2055* *2056* *2057* *2058* *2059* *2060* *2061* *2062* *2063* *2064* *2065* *2066* *2067* *2068* *2069* *2070* *2071* *2072* *2073* *2074* *2075* *2076* *2077* *2078* *2079* *2080* *2081* *2082* *2083* *2084* *2085* *2086* *2087* *2088* *2089* *2090* *2091* *2092* *2093* *2094* *2095* *2096* *2097* *2098* *2099* *2100* *2101* *2102* *2103* *2104* *2105* *2106* *2107* *2108* *2109* *2110* *2111* *2112* *2113* *2114* *2115* *2116* *2117* *2118* *2119* *2120* *2121* *2122* *2123* *2124* *2125* *2126* *2127* *2128* *2129* *2130* *2131* *2132* *2133* *2134* *2135* *2136* *2137* *2138* *2139* *2140* *2141* *2142* *2143* *2144* *2145* *2146* *2147* *2148* *2149* *2150* *2151* *2152* *2153* *2154* *2155* *2156* *2157* *2158* *2159* *2160* *2161* *2162* *2163* *2164* *2165* *2166* *2167* *2168* *2169* *2170* *2171* *2172* *2173* *2174* *2175* *2176* *2177* *2178* *2179* *2180* *2181* *2182* *2183* *2184* *2185* *2186* *2187* *2188* *2189* *2190* *2191* *2192* *2193* *2194* *2195* *2196* *2197* *2198* *2199* *2200* *2201* *2202* *2203* *2204* *2205* *2206* *2207* *2208* *2209* *2210* *2211* *2212* *2213* *2214* *2215* *2216* *2217* *2218* *2219* *2220* *2221* *2222* *2223* *2224* *2225* *2226* *2227* *2228* *2229* *2230* *2231* *2232* *2233* *2234* *2235* *2236* *2237* *2238* *2239* *2240* *2241* *2242* *2243* *2244* *2245* *2246* *2247* *2248* *2249* *2250* *2251* *2252* *2253* *2254* *2255* *2256* *2257* *2258* *2259* *2260* *2261* *2262* *2263* *2264* *2265* *2266* *2267* *2268* *2269* *2270* *2271* *2272* *2273* *2274* *2275* *2276* *2277* *2278* *2279* *2280* *2281* *2282* *2283* *2284* *2285* *2286* *2287* *2288* *2289* *2290* *2291* *2292* *2293* *2294* *2295* *2296* *2297* *2298* *2299* *2300* *2301* *2302* *2303* *2304* *2305* *2306* *2307* *2308* *2309* *2310* *2311* *2312* *2313* *2314* *2315* *2316* *2317* *2318* *2319* *2320* *2321* *2322* *2323* *2324* *2325* *2326* *2327* *2328* *2329* *2330* *2331* *2332* *2333* *2334* *2335* *2336* *2337* *2338* *2339* *2340* *2341* *2342* *2343* *2344* *2345* *2346* *2347* *2348* *2349* *2350* *2351* *2352* *2353* *2354* *2355* *2356* *2357* *2358* *2359* *2360* *2361* *2362* *2363* *2364* *2365* *2366* *2367* *2368* *2369* *2370* *2371* *2372* *2373* *2374* *2375* *2376* *2377* *2378* *2379* *2380* *2381* *2382* *2383* *2384* *2385* *2386* *2387* *2388* *2389* *2390* *2391* *2392* *2393* *2394* *2395* *2396* *2397* *2398* *2399* *2400* *2401* *2402* *2403* *2404* *2405* *2406* *2407* *2408* *2409* *2410* *2411* *2412* *2413* *2414* *2415* *2416* *2417* *2418* *2419* *2420* *2421* *2422* *2423* *2424* *2425* *2426* *2427* *2428* *2429* *2430* *2431* *2432* *2433* *2434* *2435* *2436* *2437* *2438* *2439* *2440* *2441* *2442* *2443* *2444* *2445* *2446* *2447* *2448* *2449* *2450* *2451* *2452* *2453* *2454* *2455* *2456* *2457* *2458* *2459* *2460* *2461* *2462* *2463* *2464* *2465* *2466* *2467* *2468* *2469* *2470* *2471* *2472* *2473* *2474* *2475* *2476* *2477* *2478* *2479* *2480* *2481* *2482* *2483* *2484* *2485* *2486* *2487* *2488* *2489* *2490* *2491* *2492* *2493* *2494* *2495* *2496* *2497* *2498* *2499* *2500* *2501* *2502* *2503* *2504* *2505* *2506* *2507* *2508* *2509* *2510* *2511* *2512* *2513* *2514* *2515* *2516* *2517* *2518* *2519* *2520* *2521* *2522* *2523* *2524* *2525* *2526* *2527* *2528* *2529* *2530* *2531* *2532* *2533* *2534* *2535* *2536* *2537* *2538* *2539* *2540* *2541* *2542* *2543* *2544* *2545* *2546* *2547* *2548* *2549* *2550* *2551* *2552* *2553* *2554* *2555* *2556* *2557* *2558* *2559* *2560* *2561* *2562* *2563* *2564* *2565* *2566* *2567* *2568* *2569* *2570* *2571* *2572* *2573* *2574* *2575* *2576* *2577* *2578* *2579* *2580* *2581* *2582* *2583* *2584* *2585* *2586* *2587* *2588* *2589* *2590* *2591* *2592* *2593* *2594* *2595* *2596* *2597* *2598* *2599* *2600* *2601* *2602* *2603* *2604* *2605* *2606* *2607* *2608* *2609* *2610* *2611* *2612* *2613* *2614* *2615* *2616* *2617* *2618* *2619* *2620* *2621* *2622* *2623* *2624* *2625* *2626* *2627* *2628* *2629* *2630* *2631* *2632* *2633* *2634* *2635* *2636* *2637* *2638* *2639* *2640* *2641* *2642* *2643* *2644* *2645* *2646* *2647* *2648* *2649* *2650* *2651* *2652* *2653* *2654* *2655* *2656* *2657* *2658* *2659* *2660* *2661* *2662* *2663* *2664* *2665* *2666* *2667* *2668* *2669* *2670* *2671* *2672* *2673* *2674* *2675* *2676* *2677* *2678* *2679* *2680* *2681* *2682* *2683* *2684* *2685* *2686* *2687* *2688* *2689* *2690* *2691* *2692* *2693* *2694* *2695* *2696* *2697* *2698* *2699* *2700* *2701* *2702* *2703* *2704</*

Rosette Log for IOS Cruise ID 2007-20

Cast # 95 UTC Date (dmy) 24 Aug 2007 UTC Time 5:37
Station STA-A Lat (N) 72° 41.236' N
CTD File 200720-95 Lon (W) 144° 42.359' W

Cast Type: Geochemistry

In Air pressure 0.4/0.5 Water Depth 3498+9m (Knudsen, w/o +9 for ship hull)
Ice Coverage 1/10 Sound Speed 1477 (setting in Knudsen)
Start Scan 9100 Watch Hugh, Jen, Motby

Pu / Am Cast

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
1913	3000		✓ 1														✓									✓	
1914	3000		✓ 2																							✓	
1915	3000		✓ 3																							✓	
1916	3000		✓ 4																							✓	
1917	3000		✓ 5																							✓	
1918	3000		✓ 6																							✓	
1919	3000		✓ 7																							✓	
1920	3000		✓ 8																							✓	
1921	2000		✓ 9														✓									✓	
1922	2000		✓ 10																							✓	
1923	2000		✓ 11																							✓	
1924	2000		✓ 12																							✓	
1925	2000		✓ 13																							✓	
1926	2000		✓ 14																							✓	
1927	2000		✓ 15																							✓	
1928	2000		✓ 16																							✓	
1929	1500		✓ 17														✓									✓	
1930	1500		✓ 18																							✓	
1931	1500		✓ 19																							✓	
1932	1500		✓ 20																							✓	
1933	1500		✓ 21																							✓	
1934	1500		✓ 22																							✓	
1935	1500		✓ 23																							✓	
1936	1500		✓ 24																							✓	fired, confirmed but did not trip.

Comments:

Winch change gears 603 ↓ 2500 ↑

PU/Am Cast 2

Rosette Log for IOS Cruise ID 2007-20

Cast # 96 UTC Date (dmy) 24 08 2007 UTC Time 0800
 Station STA-A Lat (N) 74 40.42
 CTD File 200720- Lon (W) 144 44.88

Cast Type: Geochemistry

In Air pressure 0.4/0.4 Water Depth 3498⁺⁹ (Knudsen, w/o +9 for ship hull)
 Ice Coverage 1/10 Sound Speed 1477 (setting in Knudsen)
 Start Scan 7400 Watch SE/MD/HO/RN

0804

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
1937	1000		✓ 1														✓										
1938	"		✓ 2																								
1939	"		✓ 3																								
1940	"		✓ 4																								
1941	"		✓ 5																								
1942	"		✓ 6																								
1943	"		✓ 7																								
1944	"		✓ 8																								
1945	800		✓ 9														✓										
1946	"		✓ 10																								
1947	"		✓ 11																								
1948	"		✓ 12																								
1949	"		✓ 13																								
1950	"		✓ 14																								
1951	"		✓ 15																								
1952	"		✓ 16																								
1953	600		✓ 17														✓										
1954	"		✓ 18																								
1955	"		✓ 19																								
1956	"		✓ 20																								
1957	"		✓ 21																								
1958	"		✓ 22																								
1959	"		✓ 23																								
1960	"		✓ 24																								

Comments: surface T 4.4C (06m), S 18.5

Winch change gears 612m↓

Rosette Log for IOS Cruise ID 2007-20

Cast # 97 UTC Date (dmy) 24 08 2007 UTC Time 0910
Station STA-A Lat (N) 72 40.17
CTD File 200720-097 Lon (W) 144 46.98

Cast Type: Geochemistry

In Air pressure 0.5/0.4 Water Depth 3457⁺⁹ (Knudsen, w/o +9 for ship hull)
Ice Coverage 1/10 Sound Speed 1477 (setting in Knudsen)
Start Scan 9000 Watch JE/MB/HD/RN
0914

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
1961	400		✓ 1														✓										
1962	"		2																								
1963	"		3																								
1964	"		4																								
1965	"		5																								
1966	"		6																								
1967	"		7																								
1968	"		8																								
1969	200		9														✓										
1970	"		10																								
1971	"		11																								
1972	"		12																								
1973	"		13																								
1974	"		14																								
1975	"		15																								
1976	"		16																								
1977	5		17														✓										
1978	"		18																								
1979	"		19																								
1980	"		20																								
1981	"		21																								
1982	"		22																								
1983	"		23																								
1984	"		✓ 24																								

Comments:

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Cs / I

Rosette Log for IOS Cruise ID 2007-20

Cast # 98 UTC Date (dmy) 24 08 2007 UTC Time 1046
 Station STA-A Lat (N) 72 41.21
 CTD File 200720-098 Lon (W) 144 42.08

Cast Type: Geochemistry

In Air pressure 0.4/0.4 Water Depth 3464^{±9} (Knudsen, w/o +9 for ship hull)
 Ice Coverage 1/10 Sound Speed 1477 (setting in Knudsen)
 Start Scan 6400 Watch JE/MD/HD/RN

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 0.7ur	Chl-a 0.3um	Bacteria	FW-Alkalinity	Salinty	Nutrients	NH4	Barium	O-18	POC	TSS	I-129	CS-137	PU/AM	Comments
1985	1000		✓ 1														✓								✓		
1986	11		✓ 2																								
1987	11		✓ 3																								
1988	11		✓ 4																								
1989	800		✓ 5														✓										
1990	11		✓ 6																								
1991	11		✓ 7																								
1992	11		✓ 8																								
1993	600		✓ 9														✓										
1994	11		✓ 10																								
1995	11		✓ 11																								
1996	11		✓ 12																								
1997	400		✓ 13														✓							✓			
1998	11		✓ 14																								
1999	11		✓ 15																								
2000	11		✓ 16																								
2001	300	293	✓ 17														✓										
2002	11	293	✓ 18																								
2003	11	293	✓ 19																								
2004	11	293	✓ 20																								
2005	5		✓ 21														✓										
2006	11		✓ 22																								
2007	11		✓ 23																								
2008	11		✓ 24																						✓		

Comments: Surface S 17.4

Winch change gears 707 ↓ 600↑

Geochem

Rosette Log for IOS Cruise ID 2007-20

Cast # 99 UTC Date (dmy) 24 08 2007 UTC Time 1205
 Station STA-A Lat (N) 72 41.32
 CTD File 200720-099 Lon (W) 144 41.82

Cast Type: Geochemistry

In Air pressure 0.5/0.4 Water Depth 3463⁺⁹ (Knudsen, w/o +9 for ship hull)
 Ice Coverage 2/10 Sound Speed 1477 (setting in Knudsen)
 Start Scan 12100 Watch SE/MD/HD/RN

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
2009	700		✓ 1														✓✓	✓✓				✓✓	✓✓				note bottle out of sequence
2010	3000		✓ 2	✓✓	✓✓	3200	3202	3194	✓								✓✓	✓✓						✓			
2011	2500		✓ 3	✓✓	✓	3067											✓	✓						✓			
2012	2000		✓ 4	✓✓	✓	2032																		✓			
2013	1500		✓ 5	✓✓	✓	3043																		✓			
2014	1000		✓ 6	✓✓	✓	3137					✓	✓								✓	✓			✓			
2015	800		✓ 7	✓✓	✓	2049					✓	✓					✓	✓						✓			
2016	600		✓ 8	✓✓	✓✓	2015	3179										✓	✓						✓			
2017	500		✓ 9	✓✓	✓	2089					✓	✓					✓	✓						✓			
2018	tmax	452	✓ 10	✓✓	✓	2084					✓	✓												✓			
2019	34.75	393	✓ 11	✓✓		3203																					} might be a little off depth because I was trying to change winch do thing @ same time = too fast
2020	34.7	357	✓ 12	✓✓		2099																		✓			
2021	34.6	311	✓ 13	✓✓		3126																		✓			
2022	34.4	267	✓ 14	✓✓		3075					✓	✓								✓	✓			✓			
2023	34	227	✓ 15	✓✓		2085					✓	✓								✓	✓						
2024	33.5	201	✓ 16	✓✓		2068														✓	✓			✓			
2025	33.1	174	✓ 17	✓✓		2061					✓	✓								✓	✓						
2026	32.9	153	✓ 18	✓✓		3183					✓	✓								✓	✓						
2027	32.6	125	✓ 19	✓✓	✓	2044											✓	✓		✓	✓						
2028	32.3	100	✓ 20	✓✓	✓✓	2033	3135				✓	✓	✓				✓✓	✓✓		✓	✓			✓			Oxy dup sampled a little later
2029	Chl May	64	21	✓✓	✓	3094					✓	✓	✓			✓	✓	✓		✓	✓			✓			bottle 21 tripped early ~70m acc
2030	tmin	37	✓ 22	✓✓	✓	3094	2056										✓	✓		✓	✓						
2031	20		✓ 23	✓✓	✓	2091					✓	✓	✓				✓	✓		✓	✓						
2032	5		24	✓✓	✓	3098				✓	✓	✓	✓				✓	✓	✓	✓	✓			✓			

Comments:

winch change gears 602↓ 600↑

Rosette Log for IOS Cruise ID 2007-20

Cast # 100 UTC Date (dmy) 24 Aug 2007 UTC Time 1627
 Station STAN-E Lat (N) 72 38 17.64
 CTD File 200720-100 Lon (W) 143 41.70

Cast Type: Geochemistry

In Air pressure 0.4/0.4 Water Depth 3413¹⁹ (Knudsen, w/o +9 for ship hull)
 Ice Coverage 8/10 Sound Speed 1477 m/s (setting in Knudsen)
 Start Scan 9553 Watch 1E/MD/HD/RN/CR

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Oxygen Box3	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	Red Salinity	Nutrients Blue	NH4	Barium	O-18	POC	TSS	I-129	CS-137	PU/AM	Comments
2033	B0-50	3358	✓ 1	✓✓	✓✓✓	2027	3058	3034	✓								✓✓	✓✓✓									
2034	3000	3000	✓ 2	✓✓	✓	3051											✓	✓✓						✓			
2035	2500	2500	✓ 3	✓✓		3109																		✓			
2036	2000	2000	✓ 4	✓✓		3097																		✓			
2037	1500	1500	✓ 5	✓✓		3197																		✓			
2038	1000	1000	✓ 6	✓✓		3040					✓	✓												✓			
2039	800	800	✓ 7	✓✓	✓	3119					✓	✓					✓	✓✓		✓				✓			
2040	600	600	✓ 8	✓✓	✓✓	3069	3061										✓✓	✓✓✓						✓			
2041	500	500	✓ 9	✓✓	✓	3130					✓	✓					✓	✓✓						✓			
2042	tmax	442	✓ 10	✓✓		3164					✓	✓												✓			
2043	34.25	347	✓ 11	✓✓		2063																		✓			
2044	34.7	331	✓ 12	✓✓		3204																					
2045	34.6	298	✓ 13	✓✓		3107																		✓			
2046	34.4	264	✓ 14	✓✓		2064					✓	✓								✓				✓			
2047	34	229	✓ 15	✓✓		3084					✓	✓								✓							
2048	33.5	201	✓ 16	✓✓		3121														✓				✓			
2049	33.1	173	✓ 17	✓✓		3181					✓	✓								✓							
2050	32.9	153	✓ 18	✓✓		3123					✓	✓								✓							
2051	32.6	125	✓ 19	✓✓	✓	3108												✓✓		✓							
2052	32.3	104	✓ 20	✓✓	✓✓	3019	3038				✓	✓	✓				✓✓		✓	✓				✓			
2053	CHLMAX	95	✓ 21	✓✓	✓	3024					✓	✓	✓			✓	✓✓		✓	✓				✓			
2054	tmax	28	✓ 22	✓✓		3207										✓				✓							
2055	20	20	✓ 23	✓✓		2047					✓	✓	✓			✓	✓			✓							
2056	5	5	✓ 24	✓✓	✓	3016			✓	✓	✓	✓	✓			✓	✓✓	✓✓		✓	✓						

Comments:

13.5 * Oxy @ 6.2775 all cast (no oxy on CTD) — stuck in Seavac ↓ bill gear change display, data OK

Rosette Log for IOS Cruise ID 2007-20

Cast # 101
Station STA-195CH
CTD File 200720-101
UTC Date (dmy) 26 Aug 2007 UTC Time 15:48
Lat (N) 73 00.114
Lon (W) 145 21.164

Cast Type: **Geochemistry**
In Air pressure 0.5/0.6
Ice Coverage 6/10
Start Scan 11953
Water Depth 3561.9 (Knudsen, w/o +9 for ship hull)
Sound Speed 1480 m/s (setting in Knudsen)
Watch JE/HP/RN/HD/KS

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
2057	1000		✓ 1														✓								✓		CS/I cast
2058	1000		✓ 2																								
2059	1000		✓ 3																								
2060	1000		✓ 4																								
2061	800		✓ 5														✓										
2062	800		✓ 6																								
2063	800		✓ 7																								
2064	800		✓ 8																								
2065	600		✓ 9														✓										
2066	600		✓ 10																								
2067	600		✓ 11																								
2068	600		✓ 12																								
2069	400		✓ 13														✓										
2070	400		✓ 14																								
2071	400		✓ 15																								
2072	400		✓ 16																								
2073	300		✓ 17														✓										
2074	300		✓ 18																								
2075	300		✓ 19																								
2076	300		✓ 20																								
2077	5		✓ 21														✓										
2078	5		✓ 22																								
2079	5		✓ 23																								
2080	5		✓ 24																						✓		

Comments: out of anomalous water (no eddy) → bottom buzzer on deck unit went on @ ~100 m ↓ ≠ off @ ~100 m ↑ (?)

↓ 604 m Δ gears
↑ 600m Δ gears

Rosette Log for IOS Cruise ID 2007-20

Cast # 102 UTC Date (dmy) 26 Aug 2007 UTC Time 17:16
 Station STA-A95-CH Lat (N) 73° 0.656
 CTD File 200720-102.dat Lon (W) 145° 22.087

Cast Type: **Geochemistry**

In Air pressure 0.6/0.4 Water Depth 3568⁺⁹ (Knudsen, w/o +9 for ship hull)
 Ice Coverage 4/10 Sound Speed 1477 (setting in Knudsen)
 Start Scan 1100 Watch JE/HD/HD/RN/KB → day 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	GREEN Salinity	ORANGE Nutrients	NH4	Barium	O-18	POC	TSS	I-129	CS-137	PU/AM	Comments
2081	B0-50	3512	✓ 1	✓✓	✓✓	2027											✓✓	✓✓✓									
2082	3000	3000	✓ 2	✓✓	✓✓	3051	3194	3038									✓	✓✓						✓			
2083	2500	2500	✓ 3	✓✓		3109																	✓				
2084	2000	2000	✓ 4	✓✓		3097																	✓				
2085	1500	1500	✓ 5	✓✓		3177																	✓				
2086	1000	1000	✓ 6	✓✓		3040					✓	✓								✓	✓		✓				
2087	800	800	✓ 7	✓✓	✓	3119					✓	✓											✓				
2088	600	600	✓ 8	✓✓	✓✓	3069	3061																✓				
2089	500	500	✓ 9	✓✓	✓	3130					✓	✓					✓						✓				
2090	Tmax	406	✓ 10	✓✓		3164					✓	✓					✓✓						✓				
2091	34.75	350	✓ 11	✓✓		2063											✓	✓✓					✓				
2092	34.7	325	✓ 12	✓✓		3204												✓✓✓									
2093	34.6	294	✓ 13	✓✓		3107												✓✓					✓				
2094	34.4	257	✓ 14	✓✓		2064					✓	✓								✓	✓		✓				
2095	34	228	✓ 15	✓✓		3084					✓	✓								✓	✓						
2096	33.5	205	✓ 16	✓✓		3121														✓	✓		✓				
2097	33.1	178	✓ 17	✓✓		3181					✓	✓								✓	✓						
2098	32.9	158	✓ 18	✓✓		3123					✓	✓								✓	✓						
2099	32.6	128	✓ 19	✓✓		3108														✓	✓						
2100	32.3	102	✓ 20	✓✓	✓	3019					✓	✓						✓✓		✓	✓		✓				
2101	CHIMV	61	✓ 21	✓✓	✓✓	3024	3058				✓	✓	✓			✓		✓✓✓		✓	✓		✓				
2102	Tmin	14148	✓ 22	✓✓	✓	3207							✓			✓		✓✓		✓	✓						
2103	Tmax	16	✓ 23	✓✓	✓	2047					✓	✓	✓			✓	✓	✓		✓	✓						
2104	5		✓ 24	✓✓	✓	3016				✓	✓	✓	✓	✓		✓	✓✓	✓✓		✓	✓		✓				

Comments: not too sure about bottom depth thus slow down to 30 a bit sooner than normal (note for 1100s)

OXY Box # 3

NUTS - ORANGE CASE
RED NUMBERS

Agar @ 602 ↓

116

Rosette Log for IOS Cruise ID 2007-20

Cast # 103 UTC Date (dmy) 27 Aug 2007 UTC Time 2007
Station CR-27 Lat (N) 72° 59.989' N
CTD File 200720-103 Lon (W) 139° 59.615' W

Cast Type: **Geochemistry**

In Air pressure 0.5/0.5 Water Depth 3211+9m (Knudsen, w/o +9 for ship hull)
Ice Coverage /10 Sound Speed 1477 (setting in Knudsen)
Start Scan 0500 Watch Motop, Ten, Hugh, Tim

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Oxygen <i>Box #1</i>	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 <i>Green</i>	Nutrients <i>Blue Rock</i>	NH4	Barium	O-18	POC	TSS	I-129	CS-137	PU/AM	Comments
2105	Bottom	3203	✓ 1	✓✓	✓✓	3009	3057	2087									✓	✓✓									
2106	3000	3000	✓ 2	✓✓	✓	3209											✓✓										
2107	2500	2500	✓ 3	✓✓		2017											✓										
2108	2000	2000	✓ 4	✓✓		3048																					
2109	1500	1500	✓ 5	✓✓		2069																					
2110	1000	1000	✓ 6	✓✓		2086					✓	✓								✓	✓						
2111	800	800	✓ 7	✓✓		2098					✓	✓															
2112	600	600	✓ 8	✓✓		2025																					
2113	500	500	✓ 9	✓✓	✓	3104											✓										
2114	tmax	435	✓ 10	✓✓	✓✓	2092	2142				✓	✓					✓✓	✓✓									
2115	341.75	351	✓ 11	✓✓	✓	2074											✓										
2116	341.7	335	✓ 12	✓✓		3116																					
2117	341.6	298	✓ 13	✓✓		3190									✓												
2118	341.4	260	✓ 14	✓✓		2060					✓	✓			✓					✓	✓						
2119	34	220	✓ 15	✓✓		3187					✓	✓			✓					✓	✓						
2120	33.1	177	✓ 16	✓✓		3200					✓	✓			✓					✓	✓						
2121	32.9	159	✓ 17	✓✓		3178					✓	✓			✓					✓	✓						
2122	32.6	131	✓ 18	✓✓		3018									✓					✓	✓						
2123	32.3	107	✓ 19	✓✓		3055					✓	✓	✓	✓	✓					✓	✓						
2124	Chl-max	72	✓ 20	✓✓		2051							✓	✓	✓					✓	✓						
2125	T-max	62	✓ 21	✓✓		3118					✓	✓		✓	✓	✓				✓	✓						
2126	tmin	40	✓ 22	✓✓		2014					✓	✓	✓	✓	✓	✓				✓	✓						
2127	20	20	✓ 23	✓✓	✓	2007					✓	✓		✓	✓	✓				✓	✓						
2128	5	5	✓ 24	✓✓	✓✓	3186	3100			✓	✓	✓	✓	✓	✓	✓	✓✓	✓✓		✓	✓						

Comments:

↑
↑
one glass
one plastic
both to freezer

Rosette Log for IOS Cruise ID 2007-20

Cast # 104
Station CB23a
CTD File 200720-104

UTC Date (dmy) 27 08 2007
Lat (N) 72°54.313
Lon (W) 136°00.086

UTC Time 11:42

Cast Type: **Geochemistry**

In Air pressure 0.6/0.6 Water Depth 2764⁺9 (Knudsen, w/o +9 for ship hull)
Ice Coverage 8/10 Sound Speed 1477 (setting in Knudsen)
Start Scan 9600 Watch JE/MD/RW/HTD

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Oxygen 10/4	Oxy Flask #	Oxy Dup Flask #	Oxy Trip Flask #	DIC	C-13	DOC	CDOM	Total Chl-a 0.7µm	Chl-a 0.3µm	Bacteria	FW-Alkalinity	Salinity red on white	Nutrients yellow	NH4	Barium	O-18	POC	TSS	I-129	CS-137	PU/AM	Comments	
2129	1200		✓ 1	✓✓	✓✓	3182	2073	3189									✓✓	✓✓										
2130	1000		✓ 2	✓✓	✓	3160					✓	✓					✓	✓✓										
2131	800		✓ 3	✓✓	✓	3151					✓	✓					✓	✓		✓	✓							
2132	600		✓ 4	✓✓	✓	3174											✓	✓										
2133	500		✓ 5	✓✓	✓	3196					✓	✓	✓				✓	✓										
2134	Tmax	415	✓ 6	✓✓	✓	3206					✓	✓	✓				✓	✓										
2135	34.75	326	✓ 7	✓✓	✓	3012											✓	✓										
2136	34.7	318	✓ 8	✓✓	✓	3161											✓	✓✓										
2137	34.6	287	✓ 9	✓✓	✓	3096											✓✓	✓✓										
2138	34.4	250	✓ 10	✓✓	✓	3028					✓	✓					✓	✓✓		✓	✓							
2139	34	210	✓ 11	✓✓	✓	3047					✓	✓					✓	✓		✓	✓							
2140	33.7	194	✓ 12	✓✓	✓✓	3052	3124																					
2141	33.4	183	✓ 13	✓✓	✓	3193														✓	✓							
2142	33.1	170	✓ 14	✓✓	✓	3063					✓	✓								✓	✓							
2143	32.9	158	✓ 15	✓✓	✓	3033					✓	✓								✓	✓							
2144	32.6	132	✓ 16	✓✓	✓	3191														✓	✓							
2145	32.3	110	✓ 17	✓✓	✓	3166					✓	✓								✓	✓							
2146	ChlMax	64	✓ 18	✓✓	✓	2059										✓	✓	✓✓		✓	✓							
2147	Tmax	62	✓ 19	✓✓	✓	3003					✓	✓				✓	✓	✓✓		✓	✓							
2148	Tmin	36	✓ 20	✓✓	✓	3157											✓	✓✓										
2149	20		✓ 21	✓✓	✓	3188					✓	✓				✓	✓✓	✓		✓	✓							
2150	5		✓ 22	✓✓	✓✓	3180	3034			✓	✓	✓				✓	✓	✓✓		✓	✓							
			23																									
			24																									

Comments: user input for bottle fire so had to return to 1200 to confirm btl. 1 from ~1180m

gear 40 607m ↓ 598m ↑

Rosette Log for IOS Cruise ID 2007-20

Cast # 105 UTC Date (dmy) 27 08 2007 UTC Time 1811
Station CB-316 Lat (N) 72 16.28
CTD File 200720-105 Lon (W) 134 17.91

Cast Type: Geochemistry

In Air pressure 0.6/0.6 Water Depth 2077 (Knudsen, w/o +9 for ship hull)
Ice Coverage 9/10 Sound Speed 1477 (setting in Knudsen)
Start Scan 9700 Watch mixed

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	PUJAM	Comments
2151	1200	1200	✓ 1	✓✓	✓✓	3007	3171										✓✓	✓✓									
2152	1000	1000	✓ 2	✓✓	✓	3200					✓	✓					✓	✓✓✓									
2153	800	800	✓ 3	✓✓		3067					✓	✓						✓✓		✓	✓						
2154	600	600	✓ 4	✓✓		2032																					
2155	500	500	✓ 5	✓✓		3043					✓	✓															
2156	Tmax	420	✓ 6	✓✓		3137					✓	✓															
2157	34.75	335	✓ 7	✓✓		2049																					
2158	34.7	317	✓ 8	✓✓		2015											✓	✓✓									
2159	34.6	283	✓ 9	✓✓		2089											✓✓	✓✓✓									
2160	34.4	244	✓ 10	✓✓		2034					✓	✓			✓		✓	✓✓		✓	✓						
2161	34	206	✓ 11	✓✓		3203					✓	✓			✓					✓	✓						
2162	33.7	190	✓ 12	✓✓	✓	2099									✓					✓	✓						
2163	33.4	174	✓ 13	✓✓	✓✓	3126	3198								✓					✓	✓						
2164	33.1	157	✓ 14	✓✓	✓	3075					✓	✓			✓												
2165	32.9	144	✓ 15	✓✓		2085					✓	✓			✓					✓	✓						
2166	32.6	119	✓ 16	✓✓		2068									✓					✓	✓						
2167	32.3	98	✓ 17	✓✓		2061					✓	✓			✓					✓	✓						
2168	ChlMax	64	✓ 18	✓✓		3135							✓		✓	✓				✓	✓						
2169	Tmin	31	✓ 19	✓✓		2044					✓	✓	✓		✓	✓	✓✓	✓✓		✓	✓						
2170	20		✓ 20	✓✓	✓✓	2033	3202						✓		✓	✓	✓✓	✓✓✓		✓	✓						
2171	5		✓ 21	✓✓	✓	3094				✓	✓	✓	✓		✓	✓	✓	✓✓		✓	✓						
			22																								
			23																								
			24																								

Comments: Winch change gears 603↓

Rosette Log for IOS Cruise ID 2007-20

Cast # 107 UTC Date (dmy) 28 Aug 2007 UTC Time 3:47
Station CABOS Lat (N) 71° 50.059'N
CTD File 200720- 107 Lon (W) 131° 50.203'W

Cast Type: **Geochemistry**

In Air pressure 0.5/0.5 Water Depth 1153+9m (Knudsen, w/o +9 for ship hull)
Ice Coverage 5/10 Sound Speed 1473 (setting in Knudsen)
Start Scan 8600 Watch Tim, Jen, Hugh, Motoyo

Samp #	Target Property	Actual Depth(m)	Niskin #	Bottle Integrity	Oxygen	Oxy Flask #	Oxy Dup Flask #	Oxy Trip Flask #	Die	C-13	DOC	CDOM	Total Chl-a 0.7µm	Chl-a 0.3µm	Bacteria	FW-Alkalinity	Salinity	Nutrients	Pha	Barium	O-18	POC	TSS	I-129	CS-137	PU/AM	Comments
2172	Bottom	1141	✓ 1	✓✓	✓✓	3009	3142										✓✓	✓✓									
2173	1000	1000	✓ 2	✓✓	✓	3009					✓	✓				✓	✓	✓✓		✓	✓						
2174	800	800	✓ 3	✓✓	✓	2017					✓	✓															
2175	700	700	✓ 4	✓✓	✓	3098																					
2176	600	600	✓ 5	✓✓	✓	2069																					
2177	500	500	✓ 6	✓✓	✓	2086					✓	✓															
2178	450	450	✓ 7	✓✓	✓	2088																					
2179	420	420	✓ 8	✓✓	✓	2025					✓	✓					✓	✓✓									
2180	400	400	✓ 9	✓✓	✓✓	3104	3057										✓✓	✓✓									
2181	34.75	334	✓ 10	✓✓	✓	2092											✓	✓✓									
2182	34.7	301	✓ 11	✓✓	✓	2074																					
2183	34.6	267	✓ 12	✓✓	✓	3116																					
2184	34.4	231	✓ 13	✓✓	✓	3190					✓	✓			✓	✓				✓	✓						
2185	34	196	✓ 14	✓✓	✓	2060					✓	✓			✓	✓				✓	✓						
2186	33.5	167	✓ 15	✓✓	✓	3187									✓	✓				✓	✓						
2187	33.1	147	✓ 16	✓✓	✓	3201					✓	✓			✓	✓				✓	✓						
2188	32.9	133	✓ 17	✓✓	✓	3178					✓	✓			✓	✓				✓	✓						
2189	32.6	111	✓ 18	✓✓	✓	3018									✓	✓				✓	✓						
2190	32.3	90	✓ 19	✓✓	✓	3055					✓	✓			✓	✓	✓	✓		✓	✓						
2191	Chlmax	67	✓ 20	✓✓	✓	2051																					← For Karen + Ian
2192	6max	55	✓ 21	✓✓	✓	3118									✓	✓	✓	✓		✓	✓						
2193	6min	38	✓ 22	✓✓	✓	2014									✓	✓	✓	✓		✓	✓						
2194	20	20	✓ 23	✓✓	✓✓	2007	3100				✓	✓			✓	✓	✓✓	✓✓		✓	✓						
2195	5	5	✓ 24	✓✓	✓	3186				✓	✓	✓			✓	✓	✓	✓✓		✓	✓						

Comments:

more containers for carrying samples down
Drain ~ 3'x3' from aft outboard corner
speakers, glove/hat/coat hooks, safety brackets around heaters so plastic boxes don't melt,

376 0.55

~~388~~ 0.56

414 0.57

424 0.574