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CRUISE REPORT

HUDSON 82-031

HUDSON cruise 82-031 is the first of three sister cruises to Baffin Island under the Sedimentology of Arctic Fjords Experiment (SAFE). The project was initiated by the Geological Survey of Canada at the Atlantic Geoscience Centre (BIO, Dartmouth) under project SYVITSKI 810042. The program to date includes participation by three federal government departments and seven universities (see below). SAFE is a comprehensive study on the climatology, hydrography, physical oceanography, sediment dynamics, sedimentological history, and animal-sediment relationships of Arctic Fjords. The major questions to be answered are:

1. What is the hydrographic character of the glacier-fed rivers draining into the fjords in terms of discharge and sediment load?
2. What are the time-dependent influences of rivers, tides, wave activity, wind, and deep-water renewal, on the current regime of these Arctic fjords?
3. How do the above energy inputs affect the sedimentation in these Arctic fjords? I.e., what are the dynamics of pelagic sedimentation, resuspension events, turbidity, current episodes, ice-rafting, eolian transport, and other events?
4. What is the Quaternary sedimentological history of these northern inlets? How do these Arctic fjords differ from east-coast and west-coast inlets found in lower latitudes?
5. What climatological record can be resolved from foram investigations? ... How do these records relate to other lower latitude environments?

6. What are the limiting factors for faunal diversity and numbers?
7. What is the relationship between bayhead deltaic environments to their respective prodelta environments?
8. What are the geotechnical and geochemical properties of high latitude fjord sediments?
9. What are the casual relationships between planktonic production and nutrients, bacterial level and SPM?
10. Does groundwater flow into these permanent permafrost Arctic fjordic systems? If so, how?

The final product of this survey will be a workable model that can be used to predict the fate of natural sediment with inference to waste disposal - a problem of increasing significance with northern development. The cross-discipline coordination and site study by all scientists at the same time is the aim and advantage of SAFE.

HUDSON 82-031 was set out as the pilot and survey cruise with detailed sampling and experimentation to follow. The cruise was set up to survey the breadth of fjord environments as could be ascertained from LANDSAT images, areal photography, topographic and bathymetric maps and charts, and previous scattered information.

On September 9, 1982, 1600 hrs, the HUDSON departed Frobisher Bay with a scientific staff of 26. These included:

1. Dr. C.T. Schafer, EMG/AGC/GSC/DEMR - Chief Scientist
2. Dr. J.P.M. Syvitski, EMG/AGC/GSC/DEMR - Senior Scientist (Project Coordinator)
3. Dr. A. Hay, DP/MU - Physical Oceanography, Launch Scientist
4. Dr. R. Trites, MEL/DFO - Physical Oceanography

5. Mr. L. Petrie, MEL/DFO - Physical Oceanography
6. Mr. B. DeYong, DP/MU - Physical Oceanography
7. Dr. R. Gilbert, DG/QU - Geophysics
8. Mr. B. Maclean, RR/AGC/GSC/DEMR - Geophysics
9. Mr. J. Nielsen, PS/AGC/GSC/DEMR - Geophysics
10. Mr. A. Boyce, PS/AGC/GSC/DEMR - Technical Equipment
11. Mr. G. Bika, Hunttec - Hunttec Operations
12. Dr. F. Hein, DG/UA - Geotechnical Work
13. Mr. R. Fitzgerald, EMR/AGC/GSC/DEMR - Electrochemistry (cores)
14. Ms. K. Ellis, AOL/DFO - Isotopic Chemistry
15. Mr. G. Winters, EMG/AGC/GSC/DEMR - Attenuance/SPM
16. Dr. U. Weyer, NHRI/WSC/DEC - Hydrogeology
17. Mr. J. Banner, NHRI/WSC/DEC - Hydrogeology
18. Mr. D. Stroh, DB/SFU - Bacteriology
19. Mr. J. Stravers, INSTAAR/UBC - Quaternary Geology
20. Mr. G. Hodge, DGS/UBC - Photography, Delta Work
21. Mr. G. Rodgers, HSC/DFO - Hydrography
22. Mr. K. Robertson, EMG/AGC/GSC/DEMR - Watch Leader
23. Mr. K. Asprey, EMG/AGC/GSC/DEMR - Watch Leader
24. Mr. B. Murphy, PS/AGC/GSC/DEMR - Water Leader, Senior Technician
25. Mr. L. Johnson, PS/AGC/GSC/DEMR - Data Manager
26. Ms. C. Powell-Blakeney, EMG/AGC/GSC/DEMR - Data Manager

HUDSON 82-031 was to initially sample 10 inlets: Pagnirtung, Cornation, Maktak, Nedlukseak, Tingin, Iterbilung, McBeth, Inugsuin, Clark and Cambridge Inlets. Pagnirtung, a macrotidal inlet, was not surveyed due

to heavy ice conditions in Cumberland Sound. Sunneshine Fjord was substituted since it also had a reasonable tidal range (4 m). Launch and land parties were not deployed there due to heavy ice near the delta head. Liam Petric seriously injured his leg and had to be put ashore at Broughton; also at this time missing scientific supplies were recovered. Time rescheduling forced us to sample a nearby fjord, North Pangnirtung, and this was compensated by dropping Nedlukseak. All other fjords were sampled and the total number of inlets studied remained at ten.

The HUDSON did geophysical profiling up inlet (BIO sidescan, Huntec (R), 40 inch air gun, echo sounder, acoustic profiler) which helped position our sampling. The HUDSON's station work consisted of (part or all of): vertical haul (200 m) plankton tow (200 μ m); UMEL (R) camera drifting; Leheigh coring (3 m); piston coring (\approx 12 m); grab sampling; SCTD profiling; water sampling (10 per cast); and Larsen attenuation profiling. Details of shipboard analysis are given below. The scientific launch (GREBE) was used to study the prodelta environment via sidescan, RTT 1000, Ross acoustic profiler and SCTD profiling. Water samples were occasionally collected. The launch GULL was used principally as a hydrography vessel doing cross-inlet profiles. The Boston-Whaler was used to collect marine and river water samples as well as survey bayhead deltas via sediment sampling, trenching and photography. A jet ranger helicopter was used in Cambridge Fjord to position mountain-side cameras, aid in the delta survey as well as collecting water from nearby lakes (isotope chemistry/SPM work).

The scientific crew of HUDSON 82-031 were off loaded at 1600 hours, September 24, 1982, at Pond Inlet, N.W.T. Sea/wind/ice conditions were mostly favorable throughout the cruise. Ice conditions were encountered in

attempt to navigate Cumberland Sound, head of Sunneshine Fjord, entrance to Cambridge Fjord and route to Pond Inlet. Strong winds were encountered in most fjords blowing seaward (westerlies) and once in excess of 70 kts caused 1.5 hour delay and stoppage of sampling (McBeth). Winds were weak on the Baffin Shelf except crossing inlets. Swells were mostly less than 3 m except once we navigated 6.5 m waves (towards Tingin). Fjord wave height was fully developed in many fjords at 2 to 2.5 m. Mid-day temperatures drop from 5°C to -5°C northward as cruise progressed. Snow conditions were mild (Inugsuin, Clark and towards Pond Inlet)

SHIP-SIDE INSTRUMENTATION

Physical Oceanography

Datasonics Acoustic Profiler (HUDSON)
Ross Acoustic Profiler (GREBE)
Guildline Digital SCTD (HUDSON)
Guildline Portable SCTD (GREBE)
General Oceanics Rosette (HUDSON)
GO Niskin 5-L Water Samplers
GO Niskin 12-L Water Sampler
Larsen Attenuance Meter
HP 2100 MX Mini Computer
Oregon Red Attenuance Meter

Geophysics

Huntec DTS, Hewlett-Packard 3960A Tape Recorder
RTT 1000 Profiler (GREBE)

AGC Sidescan Sonar, Racal Store 4DS Recorded, FM

Klein 421T Sidescan Sonar, Racal Store 4DS Recorded, FM

Klein 421T Sidescan Sonar, TEAC R70A Recorder

40 In³ Air Gun, NSRF Streamer, Tapered, Racal Store 4D Recorded, FM

Varion Magnetometer

Interocean 711EA Winch

TECHNICAL REPORT - By W.A. Boyce

Prepared systems such as Hunttec DTS, AGC and Klein sidescan sonar and seismic reflection systems had little or no down time. Unprepared systems, such as RTT 1000 launch seismics and attenuance/rosette package did not perform well. Hunttec records including ARM graphic function were up to usual good calibre. The AGC sidescan sonar was used in water depth too deep for bottom coverage at the chosen 6-7 knot survey speeds. However good records of high ranges of 1000-1500 m each side of ship's track resolved good signals from sidewalls as well as bottom areas where shallowing occurred (prodeltas, sills). The Klein 421T system in the GREBE produced good prodelta records. Seismic reflection records were better than average for surficial purposes, using NSRF tapered noise cancelling short streamer and 40 in³ air gun.

The AGC small sidescan winch (Interocean 711EA) broke drive gearing teeth after new ones were installed last year suggesting that this winch may be too old or over powered for its present application. The rosette/attenuance/CTD sampling package, after failing during previous cruises, was not overhauled or set up for cold climate operation. Although found to be in working order at BIO, no major inspection attempt or preparations were

made. Many problems were discovered, evaluated and mostly repaired with full description available on request from Project Coordinator.

The Guildline SCTD on HUDSON and GREBE as well as both acoustic packages performed well. Launch GREBE radar system broke down a number of times as did the HUDSON's: more care and better instrumentation are needed.

SCIENTIFIC LAUNCH RECOMMENDATIONS - By A. Hay

1. Range-Finding Radar and Spares

The radar on the launch did not have a digital read-out variable-range ring, which is necessary for accurate position-fixing by radar. The radar unit failed early in the cruise and was inoperative for the remainder due to the absence of spare parts.

2. Precision Microwave Positioning System

A system like Mini-Ranger or Trisponder is necessary near the deltas. The deltas themselves present very poor radar targets because of their low relief and variability, both tidal and long term. The best solution would be a precision system, with surveying equipment for locating the shore transponders.

3. Winch for Water and Bottom Sampling

Could be gasoline powered and is needed in addition to the CTD winch. Should have a capstan for the sidescan tow cable.

4. Portable Shallow Seismic System

The RTT-1000 did not produce good records. Part of the problem may have been the ADTEK-8000 Graphic Recorder, but this was never properly ascertained.

5. Anchoring

Three Danforth-type anchors of weight suitable for the launch and sufficient chain are required to effect triple-point mooring of the launch in up to 80 m of water.

6. A second shelf on the port side in the forecastle.

SUMMARY

	<u>Grabs</u>	<u>Leheigh</u>	<u>Piston</u>	CTD (Trites)	CTD (Ellis) Radio- Chemical	<u>Cam.</u>	<u>Plank.</u>	<u>Neph.</u>	<u>JAWS</u>
Sunneshine	5	3	1	6	1	4	3	-	-
Coronation	5	2	2	5	1	2	2	-	-
Maktak	7	4	2	6	11	3	3	-	-
North Pang.	4	2	-	-	-	1	1	-	-
Pingin	4	1	2	7	-	2	2	1	-
Itebilung	4	2	1	4	1	2	2	-	-
McBeth	9	2	2	8	1	2	2	-	-
Inugsuin	7	2	2	9	1	1	1	3	-
Clark	8	2	2	8	-	2	2	1	-
Cambridge	<u>9</u>	<u>2</u>	<u>2</u>	<u>9</u>	<u>1</u>	<u>3</u>	<u>2</u>	<u>1</u>	<u>1</u>
	62	22	16	59	17	22	20	6	1

ACKNOWLEDGEMENTS

The Senior and Chief Scientists of this cruise extend great appreciation to the scientific staff whose enthusiasm and energy made this cruise the success it has shown to be. Their appreciation is also extended to Captain Mauger of the CSS HUDSON and his officers and crew who extended help beyond the call of duty. Many others, back at BIO and at various universities and government laboratories, who although did not attend, worked hard to assure success: to these, much appreciation.

WATER MONITORING STATIONS

DURING THE CRUISE 82-031 ON C.S.S. HURSON, CTD PROFILES AND WATER SAMPLES WERE COLLECTED AT MOST STATIONS WITH A GUIDELINE CTD PACKAGE, EQUIPPED WITH A GENERAL OCEANICS ROSETTE SAMPLER COMPLETE WITH 10 (5 LITRE) NISKEN BOTTLES. CTD PROFILES WERE LOGGED ON THE UP AND DOWN CASTS ON MAGNETIC TAPE VIA A HF-2100MX MINI COMPUTER. WATER SAMPLES WERE COLLECTED ON THE UP CAST AND SUBSAMPLED FOR SALINITY, OXYGEN, NUTRIENTS AND SUSPENDED PARTICULATE MATTER (SPM). AT SELECTED STATIONS ADDITIONAL CASTS WERE DONE TO OBTAIN WATER SAMPLES FOR CESIUM-137 AND STRONTIUM-90 ANALYSIS.

STATION	FLOID	TIME (ADT)	LATITUDE	LONGITUDE	DEPTH (M)	FLANKTON TOW DEPTH	SAMPLE DEPTH	STICKER #	SAMPLE DEPTH	STICKER #	STATION NOTES
CA1	CAMBRIDGE	2660533	711250	750000	196	170	185	8203734	30	8203739	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							150	8203735	20	8203740	
							100	8203736	10	8203741	
							75	8203737	5	8203742	
						50	8203738	1	8203743		
CA1E1L5	CAMBRIDGE	2660625	711250	750000	196	0	190	8204469	0	0	SAMPLES TAKEN FOR KATHY ELLIS, CESIUM-137 AND STRONTIUM-90.
							100	8204487	0	0	
							50	8204488	0	0	
							1	8204489	0	0	
						0		0	0		
CA2	CAMBRIDGE	2660926	711620	745200	314	0	309	8203744	30	8203749	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED
							200	8203745	20	8203750	
							150	8203746	10	8203751	
							100	8203747	5	8203752	
							50	8203748	1	8203753	
CA3	CAMBRIDGE	2661620	712360	744000	366	0	362	8203754	30	8203759	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED
							300	8203755	20	8203760	
							200	8203756	10	8203761	
							100	8203757	5	8203762	
							50	8203758	1	8203763	
CA4	CAMBRIDGE	2661737	712650	744370	476	0	460	8203764	30	8203769	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED
							400	8203765	20	8203770	
							200	8203766	10	8203771	
							100	8203767	5	8203772	
							50	8203768	1	8203773	
CA5	CAMBRIDGE	2661912	713300	744570	575	0	560	8203774	30	8203779	SALINITY, OXYGEN AND NUTRIENTS SUBSAMPLED.
							400	8203775	20	8203780	
							200	8203776	10	8203781	
							100	8203777	5	8203782	
							50	8203778	1	8203783	

WATER MONITORING STATIONS

DURING THE CRUISE 82-031 ON C.S.S. HUDSON, CTD PROFILES AND WATER SAMPLES WERE COLLECTED AT MOST STATIONS WITH A GUIDELINE CTD PACKAGE, EQUIPPED WITH A GENERAL OCEANICS ROSETTE SAMPLER COMPLETE WITH 10 (5 LITRE) HISKEN BOTTLES. CTD PROFILES WERE LOGGED ON THE UP AND DOWN CASTS ON MAGNETIC TAPE VIA A HP-21000X MINI COMPUTER. WATER SAMPLES WERE COLLECTED ON THE UP CAST AND SUBSAMPLED FOR SALINITY, OXYGEN, NITRATES AND SUSPENDED PARTICULATE MATTER (SPM). AT SELECTED STATIONS ADDITIONAL CASTS WERE MADE TO OBTAIN WATER SAMPLES FOR CESIUM-137 AND STRONTIUM-90 ANALYSIS.

STATION #	FIORD	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	PLANKTON TOW DEPTH	SAMPLE DEPTH	STICKER #	SAMPLE DEPTH	STICKER #	STATION NOTES
CA607 W	CAMBRIDGE	266	0	0	0	0	0	8204706	0	0	10 FT OFF REACH, SUB-SAMPLED FOR SPM, MAJOR IONS, TRACE METALS AND ISOTOPES.
CA608 W	CAMBRIDGE	266	0	0	0	0	0	8204707	0	0	10 FT OFF REACH, SUB-SAMPLED FOR SPM, CS, MAJOR IONS, TRACE METALS AND ISOTOPES.
CA609 W	CAMBRIDGE	266	0	0	0	0	0	8204708	0	0	10 FT OFF REACH, SUB-SAMPLED FOR SPM, CS, TRACE METALS, MAJOR IONS AND ISOTOPES.
CA610 W	CAMBRIDGE	266	0	0	0	0	0	8204709	0	0	NEAR POLYNYA, SUBSAMPLED FOR SPM, OX, N, MAJOR IONS, TRACE METALS AND ISOTOPES.
CA611 W	CAMBRIDGE	266	0	0	0	0	0	8204710	0	0	NEAR POLYNYA, SUBSAMPLED FOR SPM, N, MAJOR IONS, TRACE METALS AND ISOTOPES.
CA612 W	CAMBRIDGE	266	0	0	0	0	0	8204711	0	0	NEAR POLYNYA, SUBSAMPLED FOR SPM, OX, N, MAJOR IONS AND ISOTOPES.

WATER MONITORING STATIONS

DURING THE CRUISE 02-031 ON C.S.S. HOBSON, CTD PROFILES AND WATER SAMPLES WERE COLLECTED AT MOST STATIONS WITH A GUIDED LINE CTD PACKAGE, BUFFERED WITH A GENERAL OCEANICS ROSETTE SAMPLER COMPLETE WITH 10 (5 LITER) RISKEN BOTTLES. CTD PROFILES WERE LOGGED ON THE DECK AND BATHYCASTS ON MAGNETIC TAPE VIA A MP-2100MX MINI COMPUTER. WATER SAMPLES WERE COLLECTED ON THE DECK AND SUBSAMPLED FOR SALINITY, OXYGEN, NUTRIENTS AND SUSPENDED PARTICULATE MATTER (SPM), AT SELECTED STATIONS ADDITIONAL SAMPLES FOR CESJUM-137 AND STRONTIUM-90 ANALYSIS.

STATION	FLOOR	TIME (GMT)	LATITUDE	DEPTH (M)	FLANKION TOM DEPTH	SAMPLE DEPTH	STICKER #	SAMPLE DEPTH	STICKER #	STATION NOTES
CA613 W	CAMBRIDGE	266	0	0	0	0	8204712	0	0	NEAR POLYNYA, SUBSAMPLED FOR SPM, OX, H, MAJOR IONS TRACE METALS AND ISOTOPES
CA614 W	CAMBRIDGE	266	0	0	0	0	8204713	0	0	NEAR POLYNYA, SUBSAMPLED FOR SPM, OX, H, TRACE METALS MAJOR IONS AND ISOTOPES
CA615 W	CAMBRIDGE	266	0	0	0	0	8204714	0	0	LAKES SOUTH OF POLYNYA, SUBSAMPLED FOR SPM, OX, H, MAJOR IONS AND ISOTOPES. APPROX. 280 FT ABOVE SL.
CA616 W	CAMBRIDGE	266	0	0	0	0	8204715	0	0	LAKES SOUTH OF POLYNYA SUBSAMPLED FOR SPM, OX, MAJOR IONS, TRACE METALS AND ISOTOPES.
CA7	CAMBRIDGE	2651920	714130	398	0	380	8203714	30	8203719	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
						300	8203715	20	8203720	
						200	8203716	10	8203721	
						100	8203717	5	8203722	
						50	8203718	1	8203723	
CA8	CAMBRIDGE	2651645	714690	631	0	630	8203704	50	8203709	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
						400	8203705	30	8203710	
						200	8203706	20	8203711	
						150	8203707	10	8203712	
						100	8203708	1	8203713	

WATER MONITORING STATIONS

DURING THE CRUISE 92-031 ON C.S.S. HUDSON, CTD PROFILES AND WATER SAMPLES WERE COLLECTED AT MOST STATIONS WITH A GULLLINE CTD PACKAGE, EQUIPPED WITH A GENERAL OCEANICS ROSETTE SAMPLER COMPLETE WITH 10 (5 LITRE) NISKEN BOTTLES. CTD PROFILES WERE LOGGED ON THE UP AND DOWN CASTS ON MAGNETIC TAPE VIA A HP-2100HX MINI COMPUTER. WATER SAMPLES WERE COLLECTED ON THE UP CAST AND SUBSAMPLED FOR SALINITY, OXYGEN, NUTRIENTS AND SUSPENDED PARTICULATE MATTER (SPM). AT SELECTED STATIONS ADDITIONAL CASTS WERE DONE TO OBTAIN WATER SAMPLES FOR CESIUM-137 AND STRONTIUM-90 ANALYSIS.

STATION #	FLOID	TIME (ADT)	LATITUDE	LONGITUDE	DEPTH (M)	FLANKTON TOW DEPTH	SAMPLE DEPTH	STICKER #	SAMPLE DEPTH	STICKER #	STATION NOTES
CA9	CAMBRIDGE	2651440	714880	733100	610	0	600	8203694	30	8203699	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							400	8203695	20	8203700	
							200	8203696	10	8203701	
							100	8203697	5	8203702	
							50	8203698	0	8203703	

WATER MONITORING STATIONS

DURING THE CRUISE 92-031 ON C.S.S. HUDSON, CTD PROFILES AND WATER SAMPLES WERE COLLECTED AT MOST STATIONS WITH A GUIDED LINE CTD PACKAGE, EQUIPPED WITH A GENERAL OCEANICS ROSETTE SAMPLER COMPLETE WITH 10 (5 LITRE) WISKEN BOTTLES. CTD PROFILES WERE LOGGED ON THE UP AND DOWN CASTS OR MAGNETIC TAPE VIA A HP-21000X MINI COMPUTER. WATER SAMPLES WERE COLLECTED ON THE UP CAST AND SUBSAMPLED FOR SALINITY, OXYGEN, NUTRIENTS AND SUSPENDED PARTICULATE MATTER (SPM). AT SELECTED STATIONS ADDITIONAL CASTS WERE MADE TO OBTAIN WATER SAMPLES FOR CESIUM-137 AND STRONTIUM-90 ANALYSIS.

STATION	FLOOR	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	PLANKTON 10M DEPTH	SAMPLE DEPTH	STICKER #	SAMPLE DEPTH	STICKER #	STATION NOTES
CL1	CLARK	2641507	704960	723700	192	180	180	8203614	30	8203619	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							150	8203615	20	8203620	
							100	8203616	10	8203621	
							75	8203617	5	8203622	
							50	8203618	1	8203623	
CL2	CLARK	2641902	705000	722700	234	0	225	8203624	30	8203629	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED
							200	8203625	20	8203630	
							100	8203626	10	8203631	
							75	8203627	5	8203632	
							50	8203628	1	8203633	
CL3	CLARK	2641955	705280	721570	256	0	240	8203634	30	8203639	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							200	8203635	20	8203640	
							100	8203636	10	8203641	
							75	8203637	5	8203642	
							50	8203638	1	8203643	
CL4	CLARK	2642150	705850	720730	540	0	535	8203644	30	8203649	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							400	8203645	20	8203650	
							200	8203646	10	8203651	
							100	8203647	5	8203652	
							50	8203648	1	8203653	
CL5	CLARK	2652345	710550	715300	683	0	685	8203654	50	8203659	SALINITY, OXYGEN, NUTRIENTS
							600	8203655	30	8203660	
							400	8203656	20	8203661	
							200	8203657	10	8203662	
							100	8203658	5	8203663	
CL6	CLARK	2650405	710270	713100	655	0	655	8203664	50	8203669	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED EXCEPT FOR OXY SAMPLE # 8203667 VIAL WAS BROKEN NO TITRATION DONE.
							600	8203665	30	8203670	
							400	8203666	20	8203671	
							200	8203667	10	8203672	
							100	8203668	1	8203673	

WATER MONITORING STATIONS

DURING THE CRUISE 82-031 ON C.S.S. HUDSON, CTD PROFILES AND WATER SAMPLES WERE COLLECTED AT MOST STATIONS WITH A GUIDELINE CTD PACKAGE, EQUIPPED WITH A GENERAL OCEANICS ROSETTE SAMPLER COMPLETE WITH 10 (5 LITRE) RISKEN BOTTLES. CTD PROFILES WERE LOGGED ON THE UP AND DOWN CASIS ON MAGNETIC TAPE VIA A HF-2100X MINI COMPUTER. WATER SAMPLES WERE COLLECTED ON THE UP CAST AND SUBSAMPLED FOR SALINITY, OXYGEN, NUTRIENTS AND SUSPENDED PARTICULATE MATTER (SPM). AT SELECTED STATIONS ADDITIONAL CASIS WERE POKE TO OBTAIN WATER SAMPLES FOR CESIUM-137 AND STRONTIUM-90 ANALYSIS.

STATION	FLOOR	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	FLANKTON TOW DEPTH	SAMPLE DEPTH	STICKER #	SAMPLE DEPTH	STICKER #	STATION NOTES
CL7	CLARK	2650550	710260	711370	685	0	680	8203674	50	8203679	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							600	8203675	30	8203680	
							400	8203676	20	8203681	
							200	8203677	10	8203682	
							100	8203678	1	8203683	
CL8	CLARK	2650745	711090	704920	790	0	765	8203684	50	8203689	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							600	8203685	30	8203690	
							400	8203686	20	8203691	
							200	8203687	10	8203692	
							100	8203688	1	8203693	

WATER MONITORING STATIONS

WORKING THE CRUISE 02-031 ON C.S.S. HUDSON, CTD PROFILES AND WATER SAMPLES WERE COLLECTED AT MOST STATIONS WITH A COLLIERIE CTD PACKAGE, EQUIPPED WITH A GENERAL OCEANICS ROSETTE SAMPLER COMPLETE WITH 10 (5 LITER) RISER BOTTLES. CTD PROFILES WERE LOGGED ON THE UP AND FOUR CASIS OR BATHYMETRIC TAPE VIA A HP-2100RX MINI COMPUTER. WATER SAMPLES WERE COLLECTED ON THE UP CASI AND SUBSAMPLED FOR SALINITY, OXYGEN, NUTRIENTS AND SUSPENDED PARTICULATE MATTER (SPM), AT SELECTED STATIONS ADDITIONAL CASIS WERE USED TO OBTAIN WATER SAMPLES FOR CESIUM-137 AND STRONTIUM-90 ANALYSIS.

STATION	FLOOR	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	FLANKTON TOW DEPTH	SAMPLE DEPTH	STICKER #	SAMPLE DEPTH	STICKER #	STATION NOTES
C01	CORINATION	2561415	671250	644650	90	0	92	8203140	10	8203153	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED, SPM-NUCLEOFORE AND SILVER FILTERS.
							75	8203149	5	8203154	
							50	8203150	1	8203155	
							30	8203151	0	0	
							20	8203152	0	0	
C02	CORINATION	2561611	671410	643800	248	205	225	8203163	30	8203168	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED, SPM-NUCLEOFORE AND SILVER FILTERS.
							200	8203164	20	8203169	
							100	8203165	10	8203170	
							75	8203166	5	8203171	
							50	8203167	1	8203172	
C02-A	CORINATION	2561521	671410	643800	248	0	224	8203159	0	0	SAMPLE FOR KATHY ELLIS, RADIOCHEMISTRY, TESTED FOR CESIUM 137 AND STRONTIUM 90.
							100	8203160	0	0	
							50	8203161	0	0	
							1	8203162	0	0	
							0	0	0	0	
C03	CORINATION	2562035	671450	643000	269	0	250	8203173	50	8203178	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED, SPM-NUCLEOFORE AND SILVER FILTERS.
							200	8203174	30	8203179	
							150	8203175	20	8203180	
							100	8203176	10	8203181	
							75	8203177	1	8203182	
C04	CORINATION	2562310	671520	641020	355	200	352	8203183	30	8203188	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED, SPM-NUCLEOFORE AND SILVER FILTERS.
							300	8203184	20	8203189	
							200	8203105	10	8203190	
							100	8203186	5	8203191	
							50	8203187	1	8203192	
C05	CORINATION	2570228	671780	640900	497	0	497	8203193	30	8203198	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED, SPM-NUCLEOFORE AND SILVER FILTERS.
							400	8203194	20	8203199	
							200	8203195	10	8203200	
							100	8203196	5	8203201	
							50	8203197	1	8203202	

WATER MONITORING STATIONS

DURING THE CRUISE 82-031 ON C.S.S. HUDSON, CTD PROFILES AND WATER SAMPLES WERE COLLECTED AT MOST STATIONS WITH A GUIDOLINE CTD PACKAGE, EQUIPPED WITH A GENERAL OCEANICS ROSETTE SAMPLER COMPLETE WITH 10 (5 LITRE) NISKEN BOTTLES. CTD PROFILES WERE LOGGED ON THE UP AND DOWN CASIS ON MAGNETIC TAPE VIA A HP-2100MX MINI COMPUTER. WATER SAMPLES WERE COLLECTED ON THE UP CAST AND SURSAMPLED FOR SALINITY, OXYGEN, NUTRIENTS AND SUSPENDED PARTICULATE MATTER (SPM). AT SELECTED STATIONS ADDITIONAL CASIS WERE DONE TO OBTAIN WATER SAMPLES FOR CESIUM-137 AND STRONTIUM-90 ANALYSIS.

STATION #	FLOID	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	FLANKTON TOW DEPTH	SAMPLE DEPTH	STICKER #	SAMPLE DEPTH	STICKER #	STATION NOTES
IN1	IRUGSUIN	2630822	694080	694350	160	150	155	8203572	30	8203577	SALINITY, OXYGEN, NUTRIENTS SURSAMPLED.
							125	8203573	20	8203578	
							100	8203574	10	8203579	
							75	8203575	5	8203580	
							50	8203576	1	8203581	
IN1-A	IRUGSUIN	2630902	694080	694350	160	0	148	8204429	0	0	SALINITIES TAKEN. SAMPLES FOR KATHY ELLIS. TESTS DONE FOR CESIUM-137 AND STRONTIUM-90.
							100	8204430	0	0	
							50	8204431	0	0	
							1	8204432	0	0	
							0	0	0	0	
IN2	IRUGSUIN	2631318	694290	695400	280	0	270	8203582	30	8203587	SALINITY, OXYGEN, NUTRIENTS SURSAMPLED.
							200	8203583	20	8203588	
							100	8203584	10	8203589	
							75	8203585	5	8203590	
							50	8203586	1	8203591	
IN3	IRUGSUIN	2631519	694880	693300	557	0	550	8203592	30	8203597	SALINITY, OXYGEN, NUTRIENTS SURSAMPLED.
							400	8203593	20	8203598	
							200	8203594	10	8203599	
							100	8203595	5	8203600	
							50	8203596	1	8203601	
IN4	IRUGSUIN	2632000	695300	691725	585	0	560	8203602	30	8203607	SALINITY, OXYGEN, NUTRIENTS SURSAMPLED.
							400	8203603	20	8203608	
							200	8203604	10	8203609	
							100	8203605	5	8203610	
							50	8203606	1	8203611	
IN5	IRUGSUIN	2632121	695850	690200	503	0	100	8203612	0	0	SALINITY, OXYGEN, NUTRIENTS SURSAMPLED.
							1	8203613	0	0	
							0	0	0	0	
							0	0	0	0	
							0	0	0	0	

WATER MONITORING STATIONS

DURING THE CRUISE 02-031 ON C.S.S. HUDSON, CTD PROFILES AND WATER SAMPLES WERE COLLECTED AT MOST STATIONS WITH A GULLWING CTD PACKAGE, EQUIPPED WITH A GENERAL OCEANICS ROSETTE SAMPLER COMPLETE WITH 10 (5 LITER) NISKEN BOTTLES. CTD PROFILES WERE LOGGED ON THE DECK AND FOUR CASTS ON MAGNETIC TAPE VIA A HP-2100HX MINI COMPUTER. WATER SAMPLES WERE COLLECTED ON THE DECK AND SUBSAMPLED FOR SALINITY, OXYGEN, NITRATES AND SUSPENDED PARTICULATE MATTER (SPM). AT SELECTED STATIONS ADDITIONAL CASTS WERE DONE TO OBTAIN WATER SAMPLES FOR CESIUM-137 AND STRONTIUM-90 ANALYSIS.

STATION	TDR	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	FLANKTON TOW DEPTH	SAMPLE DEPTH	STICKER #	SAMPLE DEPTH	STICKER #	STATION NOTES
1N6	IN06S01H	263012H	700380	684140	267	0	260	8203562	30	8203567	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED. SPM; NUCLEOPORE AND SILVER FILTERS.
							200	8203563	20	8203568	
							100	8203564	10	8203569	
							75	8203565	5	8203570	
							50	8203566	1	8203571	
1N7	IN06S01H	262220H	701910	681920	391	0	378	8203552	30	8203557	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED. SPM; NUCLEOPORE AND SILVER FILTERS.
							300	8203553	20	8203558	
							200	8203554	10	8203559	
							100	8203555	5	8203560	
							50	8203556	1	8203561	
1N8	IN06S01H	262204H	702313	680364	338	0	325	8203542	30	8203547	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED. SPM; NUCLEOPORE AND SILVER FILTERS.
							300	8203543	20	8203548	
							200	8203544	10	8203549	
							100	8203545	5	8203550	
							50	8203546	1	8203551	

WATER MONITORING STATIONS

DURING THE CRUISE 82-03J ON C.S.S. HUDSON, CTD PROFILES AND WATER SAMPLES WERE COLLECTED AT MOST STATIONS WITH A GUIDELINE CTD PACKAGE, EQUIPPED WITH A GENERAL OCEANICS ROSETTE SAMPLER COMPLETE WITH 10 (5 LITRE) NISKEN BOTTLES. CTD PROFILES WERE LOGGED ON THE HP AND DOWN CASTS ON MAGNETIC TAPE VIA A HP-2100MX MINI COMPUTER. WATER SAMPLES WERE COLLECTED ON THE UP CAST AND SUBSAMPLED FOR SALINITY, OXYGEN, NUTRIENTS AND SUSPENDED PARTICULATE MATTER (SPM). AT SELECTED STATIONS ADDITIONAL CASTS WERE DONE TO OBTAIN WATER SAMPLES FOR CESIUM-137 AND STRONTIUM-90 ANALYSIS.

STATION	FIDRO	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	PLANKTON TOM DEPTH	SAMPLE DEPTH	STICKER #	SAMPLE DEPTH	STICKER #	STATION NOTES
111	ITERBILUNG	2601015	691850	691000	167	150	145	8203416	30	8203421	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							100	8203417	20	8203422	
							75	8203418	10	8203423	
							50	8203419	5	8203424	
							40	8203420	1	8203425	
112	ITERBILUNG	2601100	691850	691000	167	0	150	8204907	0	0	SAMPLES TAKEN FOR KATHY ELLIS FOR RADIOCHEMISTRY.
							100	8204908	0	0	
							50	8204909	0	0	
							1	8204910	0	0	
							0	0	0	0	
113	ITERBILUNG	2601510	692050	685300	320	0	305	8203426	30	8203431	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							200	8203427	20	8203432	
							100	8203428	10	8203433	
							75	8203429	5	8203434	
							50	8203430	1	8203435	
114	ITERBILUNG	2601645	691690	682200	417	230	405	8203436	30	8203441	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							300	8203437	20	8203442	
							200	8203438	10	8203443	
							100	8203439	5	8203444	
							50	8203440	1	8203445	
114	ITERBILUNG	2602045	691000	674500	303	0	290	8203446	30	8203451	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							200	8203447	20	8203452	
							100	8203448	10	8203453	
							75	8203449	5	8203454	
							50	8203450	1	8203455	

WATER MONITORING STATIONS

WORKING THE CRUISE 02-031 ON C.S.S. HURON, CTD PROFILES AND WATER SAMPLES WERE COLLECTED AT MOST STATIONS WITH A GUIDELINE CTD PACKAGE, EQUIPPED WITH A GENERAL OCEANICS ROSETTE SAMPLER COMPLETE WITH 10 (5 LITER) NISKIN BOTTLES. CTD PROFILES WERE LOGGED ON THE UP AND DOWN CABS ON MAGNETIC TAPE VIA A HP-2100MX MINI COMPUTER. WATER SAMPLES WERE COLLECTED ON THE UP CAST AND SUBSAMPLED FOR SALINITY, OXYGEN, NUTRIENTS AND SUSPENDED PARTICULATE MATTER (SPM). AT SELECTED STATIONS ADDITIONAL CABS WERE BORE TO OBTAIN WATER SAMPLES FOR CESIUM-137 AND STRONTIUM-90 ANALYSIS.

STATION	FLOID	TIME (ART)	LATITUDE	LONGITUDE	DEPTH (M)	FLANKTON TOW DEPTH	SAMPLE DEPTH	STICKER #	SAMPLE DEPTH	STICKER #	STATION NO/15
M01	HARTAK	2571042	672130	644650	90	0	75	8203213	5	8203218	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED. SPM-NUCLEOPORE AND SILVER FILTERS.
							50	8203214	1	8203219	
							30	8203215	0	0	
							20	8203216	0	0	
							10	8203217	0	0	
M02	HARTAK	2571300	671970	643360	257	230	254	8203220	30	8203225	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED. SPM-NUCLEOPORE FILTER
							200	8203221	20	8203226	
							100	8203222	10	8203227	
							75	8203223	5	8203228	
							50	8203224	1	8203229	
M02-0	HARTAK	2571215	671970	643360	252	0	250	8203230	0	0	SAMPLE FOR KATHY ELLIS. RADIOCHEMISTRY.
							100	8203231	0	0	
							50	8203232	0	0	
							1	8203233	0	0	
							0	0	0	0	
M04	HARTAK	2571635	671890	641700	333	300	320	8203234	30	8203239	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED. SPM-NUCLEOPORE FILTER.
							300	8203235	20	8203240	
							200	8203236	10	8203241	
							100	8203237	5	8203242	
							50	8203238	1	8203243	
M05	HARTAK	2570340	671750	640100	585	550	576	8203203	30	8203208	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED. SPM-NUCLEOPORE FILTER.
							400	8203204	20	8203209	
							200	8203205	10	8203210	
							100	8203206	5	8203211	
							50	8203207	1	8203212	
M060	HARTAK	2581107	672743	633540	658	0	640	8203244	50	8203249	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED. SPM-NUCLEOPORE FILTER.
							600	8203245	30	8203250	
							400	8203246	20	8203251	
							200	8203247	10	8203252	
							100	8203248	1	8203253	

WATER MONITORING STATIONS

DURING THE CRUISE 82-031 ON C.S.S. HUDSON, CTD PROFILES AND WATER SAMPLES WERE COLLECTED AT MOST STATIONS WITH A GUIDELINE CTD PACKAGE, EQUIPPED WITH A GENERAL OCEANICS ROSETTE SAMPLER COMPLETE WITH 10 (5 LITRE) NISKEN BOTTLES. CTD PROFILES WERE LOGGED ON THE UP AND DOWN CASIS ON MAGNETIC TAPE VIA A HP-2100HX MINI COMPUTER. WATER SAMPLES WERE COLLECTED ON THE UP CAST AND SURSAMPLED FOR SALINITY, OXYGEN, NUTRIENTS AND SUSPENDED PARTICULATE MATTER (SPM). AT SELECTED STATIONS ADDITIONAL CASTS WERE DONE TO OBTAIN WATER SAMPLES FOR CESIUM-137 AND STRONTIUM-90 ANALYSIS.

STATION	FLOP	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	PLANKTON YOW DEPTH	SAMPLE DEPTH	STICKER #	SAMPLE DEPTH	STICKER #	STATION NOTES
867	NAK TAK	2581240	673489	643460	585	0	575	8203254	30	8203259	SALINITY, OXYGEN, NUTRIENTS
							400	8203255	20	8203260	SUBSAMPLED.
							200	8203256	10	8203261	SPM-NUCLEOPORE FILTER.
							100	8203257	5	8203262	
							50	8203258	1	8203263	

WATER MONITORING STATIONS

DURING THE CRUISE R2-031 ON C.S.S. HUDSON, CTD PROFILES AND WATER SAMPLES WERE COLLECTED AT MOST STATIONS WITH A ROLLER THE CTD PACKAGE, EQUIPPED WITH A GENERAL OCEANICS ROSETTE SAMPLER COMPLETE WITH 10 (5 LITER) RISER BOTTLES. CTD PROFILES WERE LOGGED ON THE UF AND DOWN CASTS ON MAGNETIC TAPE VIA A HP-2100HX MINI COMPUTER. WATER SAMPLES WERE COLLECTED ON THE UP CAST AND SUBSAMPLED FOR SALINITY, OXYGEN, NUTRIENTS AND SUSPENDED PARTICULATE MATTER (SPM). AT SELECTED STATIONS ADDITIONAL CASTS WERE DONE TO OBTAIN WATER SAMPLES FOR CESIUM-137 AND STRONTIUM-90 ANALYSIS.

STATION #	FIDRO	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	FLANKTON TOW DEPTH	SAMPLE DEPTH	STICKER #	SAMPLE DEPTH	STICKER #	STATION NOTES
MC1	MCRETH	2611748	693290	694750	329	0	312	8203486	30	8203491	SUBSAMPLED FOR SALINITY, OXYGEN AND NUTRIENTS. CTD FOR INKIES. NO OXY AT 50 M DEPTH.
							200	8203487	20	8203492	
							100	8203488	10	8203493	
							75	8203489	5	8203500	
							50	8203490	1	8203501	
MC11	MCRETH	2610405	692950	663900	250	0	241	8203456	30	8203461	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED. SAMPLE FOR ELLIS.
							200	8203457	20	8203462	
							100	8203458	10	8203463	
							75	8203459	5	8203464	
							50	8203460	1	8203465	
MC11LS	MCRETH	2612030	693290	694750	329	300	313	8204412	0	0	CTD LOWERED FOR ELLIS CESIUM-137 & STRONTIUM-90 CABLE BEING TESTED AT SAME TIME. SEEMS TO WORK.
							100	8204413	0	0	
							50	8204414	0	0	
							1	8204415	0	0	
							0		0	0	
MC3	MCRETH	2620056	693140	691600	440	0	435	8203502	30	8203507	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							300	8203503	20	8203508	
							200	8203504	10	8203509	
							100	8203505	5	8203510	
							50	8203506	1	8203511	
MC3ELLS	MCRETH	2620020	693140	691600	440	0	420	8204416	0	0	SAMPLES TAKEN FOR KATHY ELLIS. TESTS DONE FOR CES-137 AND STRONTIUM-90.
							1	8204417	0	0	
							0	0	0	0	
							0	0	0	0	
							0	0	0	0	
MC4	MCRETH	2620240	693470	685700	530	0	520	8203512	30	8203517	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED. NO OXYGEN TITRATION AT 20 M DEPTH.
							400	8203513	20	8203518	
							200	8203514	10	8203519	
							100	8203515	5	8203520	
							50	8203516	1	8203521	

WATER MONITORING STATIONS

DURING THE CRUISE 82-031 ON C.S.S. HUDSON, CTD PROFILES AND WATER SAMPLES WERE COLLECTED AT MOST STATIONS WITH A GUIDELINE CTD PACKAGE - EQUIPPED WITH A GENERAL OCEANICS ROSETTE SAMPLER COMPLETE WITH 10 (5 LITRE) NISKEN BOTTLES. CTD PROFILES WERE LOGGED ON THE HF AND DOWN CASTS ON MAGNETIC TAPE VIA A HP-2100RX MINI COMPUTER. WATER SAMPLES WERE COLLECTED ON THE UP CAST AND SUBSAMPLED FOR SALINITY, OXYGEN, NUTRIENTS AND SUSPENDED PARTICULATE MATTER (SPM). AT SELECTED STATIONS ADDITIONAL CASTS WERE DONE TO OBTAIN WATER SAMPLES FOR CESIUM-137 AND STRONTIUM-90 ANALYSIS.

STATION #	FLOOR	TIME (ADT)	LATITUDE	LONGITUDE	DEPTH (M)	FLANKTON 10M DEPTH	SAMPLE DEPTH	STICKER #	SAMPLE DEPTH	STICKER #	STATION NOTES
MC6	MCBETH	2610040	693170	600940	415	0	380	8203476	30	8203481	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							300	8203477	20	8203482	
							200	8203478	10	8203483	
							100	8203479	5	8203484	
							50	8203480	1	8203485	
MC7	MCBETH	2620035	693750	681600	497	480	490	8203522	30	8203527	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED. SPM; NUCLEOPORE AND SILVER FILTERS.
							400	8203523	20	8203528	
							200	8203524	10	8203529	
							100	8203525	5	8203530	
							50	8203526	1	8203531	
MC8	MCBETH	2621350	694400	674400	290	0	287	8203532	30	8203537	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED, EXCEPT OX-30M. SPM; NUCLEOPORE AND SILVER FILTERS.
							200	8203533	20	8203538	
							100	8203534	10	8203539	
							75	8203535	5	8203540	
							50	8203536	1	8203541	
MC9	MCBETH	2610645	693000	685100	326	0	305	8203466	30	8203471	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED. SPM; NUCLEOPORE AND SILVER FILTERS.
							200	8203467	20	8203472	
							100	8203468	10	8203473	
							75	8203469	5	8203474	
							50	8203470	1	8203475	

SUNNESHINE

DURING THE CRUISE 02-931 ON C.S.S. HOUSON, CTD PROFILES AND WATER SAMPLES WERE COLLECTED AT MOST STATIONS WITH A GULLWING CTD PACKAGE, EQUIPPED WITH A GENERAL OCEANICS ROSETTE SAMPLER COMPLETE WITH 10 (5 LITER) NISKEN BOTTLES. CTD PROFILES WERE LOGGED ON THE UP AND DOWN CASTS ON MAGNETIC TAPE VIA A HP-2100HX MINI COMPUTER. WATER SAMPLES WERE COLLECTED ON THE UP CAST AND SUBSAMPLED FOR SALINITY, OXYGEN, NUTRIENTS AND SUSPENDED PARTICULATE MATTER (SPM). AT SELECTED STATIONS ADDITIONAL CASTS WERE DONE TO OBTAIN WATER SAMPLES FOR CESIUM-137 AND STRONTIUM-90 ANALYSIS.

STATION	CTD	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	FLANKTON TOW DEPTH	SAMPLE DEPTH	STICKER #	SAMPLE DEPTH	STICKER #	STATION NOTES
S01	SUNNESHINE	2541054	663695	615300	215	175	200	0203101	30	8203106	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED. NO OXYGEN SAMPLE FOR 8203104 (75N).
							150	0203102	20	8203107	
							100	0203103	10	8203108	
							75	8203104	5	203109	
							50	8203105	1	8203110	
S01-A	SUNNESHINE	2542105	663702	615423	215	0	100	8204817	0	0	SAMPLE FOR KATHY ELLIS, RADIOCHEMICAL.
							100	8204816	0	0	
							50	8204815	0	0	
							1	8204814	0	0	
							0	0	0	0	
S01LLS	SUNNESHINE	2542100	663702	615423	192	0	180	8204814	0	0	SAMPLES TAKEN FOR KATHY ELLIS, CESIUM-137 AND STRONTIUM-90.
							100	8204815	0	0	
							50	8204816	0	0	
							1	8204817	0	0	
							0	0	0	0	
S05	SUNNESHINE	2542342	663330	614260	155	125	150	8203112	20	8203117	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED, SPM-NUCLEOPORE AND SILVER FILTERS, SPM ON 8203117 POSSIBLY IN ERROR
							100	8203113	10	8203118	
							75	8203114	5	8203119	
							50	8203115	1	8203120	
							30	8203116	0	0	
S06	SUNNESHINE	2550722	663070	613920	100	0	150	8203122	20	8203127	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							100	8203123	10	8203128	
							75	8203124	5	8203129	
							50	8203125	1	8203130	
							30	8203126	0	0	
S07	SUNNESHINE	2550400	662930	613100	67	60	57	8203131	5	8203136	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							50	8203132	1	8203137	
							30	8203133	0	0	
							20	8203134	0	0	
							10	8203135	0	0	

SUNNESHINE

DURING THE CRUISE 82-031 ON C.S.S. HUDSON, CTD PROFILES AND WATER SAMPLES WERE COLLECTED AT MOST STATIONS WITH A GUIDEDLINE CTD PACKAGE, EQUIPPED WITH A GENERAL OCEANICS ROSETTE SAMPLER COMPLETE WITH 10 (5 LITRE) NISKEN BOTTLES. CTD PROFILES WERE LOGGED ON THE UP AND DOWN CASTS ON MAGNETIC TAPE VIA A HP-2100HX MINI COMPUTER. WATER SAMPLES WERE COLLECTED ON THE UP CAST AND SUBSAMPLED FOR SALINITY, OXYGEN, NUTRIENTS AND SUSPENDED PARTICULATE MATTER (SPM). AT SELECTED STATIONS ADDITIONAL CASTS WERE DONE TO OBTAIN WATER SAMPLES FOR CESIUM-137 AND STRONTIUM-90 ANALYSIS.

STATION #	FLOID	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	FLANKTON TOW DEPTH	SAMPLE DEPTH	STICKER #	SAMPLE DEPTH	STICKER #	STATION NOTES
SUB	SUNNESHINE	2551040	663010	611180	160	0	155	8203138	30	8203143	SALINITY, OXYGEN, NUTRIENTS
							150	8203139	20	8203144	SUBSAMPLED SPM--NUCLEOPORE
							100	8203140	10	8203145	AND SILVER FILTERS.
							75	8203141	5	8203146	
							50	8203142	1	8203147	

WATER MONITORING STATIONS

DURING THE CRUISE 82-031 ON C.S.B. HUDSON, CTD PROFILES AND WATER SAMPLES WERE COLLECTED AT MOST STATIONS WITH A COLLIERIE CTD PACKAGE, EQUIPPED WITH A GENERAL OCEANICS ROSETTE SAMPLER COMPLETE WITH 10 (5 LITER) RISKEN BOTTLES. CTD PROFILES WERE LOGGED ON THE DECK AND DOWN CASIS ON MAGNETIC TAPE VIA A HF-2100MX MINI COMPUTER. WATER SAMPLES WERE COLLECTED ON THE UP CAST AND SUBSAMPLED FOR SALINITY, OXYGEN, NUTRIENTS AND SUSPENDED PARTICULATE MATTER (SPM). AT SELECTED STATIONS ADDITIONAL CASIS WERE RUN TO OBTAIN WATER SAMPLES FOR CESIUM-137 AND STRONTIUM-90 ANALYSIS.

STATION	FIDRO	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	FLANKTON YOW DEPTH	SAMPLE DEPTH	STICKER #	SAMPLE DEPTH	STICKER #	STATION NOTES
111	YINGIN	2591650	685940	685760	90	0	05	8203278	10	8203283	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED. 8203278 & 204 BOTTLES BROKE, NO OXYGEN SUBSAMPLED.
							75	8203279	5	8203284	
							50	8203280	1	8203285	
							30	8203281	0	0	
							20	8203282	0	0	
111A	YINGIN	2591740	690540	685400	302	280	285	8203286	30	8203291	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							200	8203287	20	8203292	
							100	8203288	10	8203293	
							75	8203289	5	8203294	
							50	8203290	1	8203295	
112	YINGIN	2592215	690700	685050	347	0	330	8203296	30	8203401	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							300	8203297	20	8203402	
							200	8203298	10	8203403	
							100	8203299	5	8203404	
							50	8203300	1	8203405	
113	YINGIN	2592355	691150	682350	487	400	475	8203406	30	8203411	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							400	8203407	20	8203412	
							200	8203408	10	8203413	
							100	8203409	5	8203414	
							50	8203410	1	8203415	
114	YINGIN	2591155	690580	675450	298	0	280	8203276	0	0	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							1	8203277	0	0	
							0	0	0	0	
							0	0	0	0	
							0	0	0		
115	YINGIN	2591010	685425	671720	575	0	550	8203274	0	0	SALINITY, OXYGEN, NUTRIENTS SUBSAMPLED.
							1	8203275	0	0	
							0	0	0	0	
							0	0	0	0	
							0	0	0		

WATER MONITORING STATIONS

DURING THE CRUISE 07-031 ON C.S.S. HUDSON, CTD PROFILES AND WATER SAMPLES WERE COLLECTED AT MOST STATIONS WITH A GUIDOLINE CTD PACKAGE, EQUIPPED WITH A GENERAL OCEANICS ROSETTE SAMPLER COMPLETE WITH 10 (5 LITRE) NISKEN BOTTLES. CTD PROFILES WERE LOGGED ON THE UP AND DOWN CASTS ON MAGNETIC TAPE VIA A HF-2100HX MINI COMPUTER. WATER SAMPLES WERE COLLECTED ON THE UP CAST AND SUBSAMPLED FOR SALINITY, OXYGEN, NUTRIENTS AND SUSPENDED PARTICULATE MATTER (SPM). AT SELECTED STATIONS ADDITIONAL CASTS WERE DONE TO OBTAIN WATER SAMPLES FOR CESIUM-137 AND STRONTIUM-90 ANALYSIS.

STATION #	FLOID	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	FLANKTON TOW DEPTH	SAMPLE DEPTH	STICKER #	SAMPLE DEPTH	STICKER #	STATION NOTES
116	TINGIN	2590745	684890	660540	800	0	770	8203264	50	8203269	SALINITY, OXYGEN, NUTRIENTS
							600	8203265	30	8203270	SUBSAMPLED.
							400	8203266	20	8203271	SPM-NUCLEOPORE FILTER.
							200	8203267	10	8203272	
							100	8203268	1	8203273	

GRABS

USING THE CRUISE NO. 031 ON C.S.S. HUDSON, GRAB SAMPLES WERE TAKEN AT MOST STATIONS USING A VAN VEER OR SHIFER SAMPLER. 3 SUBSAMPLES WERE TAKEN FROM THE SURFACE LAYER AND 1 FROM THE SUBSURFACE LAYER IF THE SAMPLE WAS NOT HOMOGENEOUS. MACKOFAUNA SAMPLES WERE TAKEN FROM THE REMAINDER OF THE SAMPLE WAS STORED IN A PLASTIC BAG/HUCKET. ALL SAMPLES WERE LABELED WITH THE CRUISE AND STATION NUMBERS AND A YELLOW TAG NUMBER. THE FORAM AND MACKOFAUNA SAMPLES WERE TREATED WITH FORMALIN.

STATION	FLOOR	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	TYPE OF SAMPLER	SUBS (SURF)	SUBS (SUBSURF)	SUBS (MACKO)	STICKER #	NO #	STATION NOTES
C61	CARBIDE	2660550	711250	750020	195	VAN VEEN	3	1	1	0204466		1-FORAM(SCH) 2-SURF(SYU) 3-BACT(STROH) 4-SUBSURF(SYU) 5-MACKOFAUNA OLIVE GREEN MUD 2 ICH RED BROWN SURFACE MUD.
C61-B	CARBIDE	2661400	711250	750000	195	TRU SAMP	3	3	3			THE TRU (JAWS) SAMPLER WAS SET UP AND SUCCESSFULLY RUN BY BOB KUREWY. ON THE THIRD ATTEMPT THE GRAB WORKED WITH A 15H FREE FALL. THE GRAB WAS COMPLETELY FULL AND SUB-SAMPLED BY C.T. SCHOFFER.
C62	CARBIDE	2660905	711620	745200	316	VAN VEEN	3	1	0	0204494		1-FORAM(SCH) 2-SURF(SYU) 3-BACT(STROH) 4-SUBSURF(SYU) SANDY MUD BELOW
C63	CARBIDE	2661643	712360	744000	356	VAN VEEN	3	1	0	0204494		APPROX 1 CM THICK. OLIVE GREEN MUD. UPPER UNIT MEDIUM BROWN MUD, BOTH UNITS LADEN WITH ICE RAIFFED MATERIAL. TWO ATTEMPTS WERE MADE TO GET SAMPLE. CORRE IN 1ST.

GRABS

DURING THE CRUISE 82-031 ON C.S.S. HUDSON, GRAB SAMPLES WERE TAKEN AT MOST STATIONS USING A VAN VEEN OR SHUFER SAMPLER. 3 SUBSAMPLES WERE TAKEN FROM THE SURFACE LAYER AND 1 FROM THE SUBSURFACE LAYER IF THE SAMPLE WAS NOT HOMOGENEOUS. MACROFAUNA SAMPLES WERE TAKEN IF PRESENT. THE REMAINDER OF THE SAMPLE WAS STORED IN A PLASTIC BAG/BUCKET. ALL SAMPLES WERE LABELED WITH THE CRUISE AND STATION NUMBERS AND A YELLOW TAG NUMBER. THE FORAM AND MACROFAUNA SAMPLES WERE TREATED WITH FORMALIN.

STATION #	FLOOR	TIME (ADT)	LATITUDE	LONGITUDE	DEPTH (M)	TYPE OF SAMPLER	SURS (SURF)	SURS (SUBSURF)	SUBS (MACRO)	STICKER #	STATION NOTES
CA4	CAMBRIDGE	2661720	712650	744370	476	VAN VEEN	3	1	0	8204495	UPPER UNIT 1/2 CM THICK. LOWER UNIT OLIVE GREEN M MUD. UPPER UNIT OXIDIZED, CONTAINS PROFSTORES AND BRITTLE STARS.
CA5	CAMBRIDGE	2661945	713300	744570	575	VAN VEEN	3	1	0	8204497	UPPER UNIT SOOPY
CA6	CAMBRIDGE	2652302	713485	744000	640	VAN VEEN	3	1	0	8204461	LOWER UNIT OLIVE GREEN MUD AND SILT PLUS SOME ICE RAFTED DEBRIS. 1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) 3 MM BROWN SILTY CLAY OVERLYING HOMOGENEOUS LTY CLAY.
CA7	CAMBRIDGE	2651950	714130	742520	398	VAN VEEN	3	1	0	8204460	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) UPPER: THIN BROWN SURFACE LAYER (1 CM) LOWER: GREEN MUD (SILT) FREQUENT FERRULES TWO ATTEMPTS

GRABS

DURING THE CRUISE ON 031 ON C.S.S. HUDSON, GRAB SAMPLES WERE TAKEN AT MOST STATIONS USING A VAN VEEN OR SILVER SIEBER. 3 SUBSAMPLES WERE TAKEN FOR THE SURFACE LAYER AND 1 FROM THE SUBSURFACE LAYER IF THE SAMPLE WAS NOT HOMOGENEOUS. MACROFAUNA SAMPLES WERE TAKEN IF PRESENT. THE NUMBER OF THE SAMPLE WAS STORED IN A PLASTIC BAG/BUCKET. ALL SAMPLES WERE LABELED WITH THE CRUISE AND STATION NUMBERS AND A YELLOW TAG NUMBER. THE FORAM AND MACROFAUNA SAMPLES WERE TREATED WITH FORMALIN.

STATION	FLOOR	TIRE (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	TYPE OF SAMPLER	SUBS (SURF)	SUBS (SUBSURF)	SURS (MACRO)	STICKER	STATION NOTES
CAR	CAMBRIDGE	2651715	714690	741230	681	VAN VEEN	3	1	0	8204457	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) GREEN MUD OVERLAIN BY MEDIUM BROWN SURFACE MUD
CAP	CAMBRIDGE	2651815	714800	733100	610	VAN VEEN	3	1	1	8204456	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) 5-MACROFAUNA
CLJ	CLARK	2641522	704960	723700	192	VAN VEEN	3	1	1	8204438	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) 5-MACROFAUNA THIN VENEER OF SURFACE MATERIAL, LOWER UNIT FIRM - COLLECTIVELY A SILTY CLAY.
CLP	CLARK	2641920	705000	722700	234	VAN VEEN	3	1	0	8204443	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) GREY CLAY - NO SURFACE SEDIMENT.

GRABS

DURING THE CRUISE 82-031 ON C.S.S. HUDSON, GRAB SAMPLES WERE TAKEN AT MOST STATIONS USING A VAN VEEN OR SHIFLEN SAMPLER. 3 SUBSAMPLES WERE TAKEN FROM THE SURFACE LAYER AND 1 FROM THE SUBSURFACE LAYER IF THE SAMPLE WAS NOT HOMOGENEOUS. MACROFAUNA SAMPLES WERE TAKEN IF PRESENT. THE REMAINDER OF THE SAMPLE WAS STORED IN A PLASTIC BAG/BUCKET. ALL SAMPLES WERE LABELED WITH THE CRUISE AND STATION NUMBERS AND A YELLOW TAG NUMBER. THE FORAM AND MACROFAUNA SAMPLES WERE TREATED WITH FORMALIN.

STATION	FLOOR	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	TYPE OF SAMPLER	SURS (SURF)	SURS (SUBSURF)	SURS (MACRO)	STICKER	STATION NOTES
CL3	CLARK	2642054	705280	721570	256	VAN VEEN	3	1	0	8204444	1-FORAM(SCH) 2-SURF(SYV) -BACT(STROH) 4-SURSUF(SYV) SILT AND CLAY WITH ONE COBBLE IN IT.
CL4	CLARK	2642230	705850	720730	530	VAN VEEN	3	1	0	8204447	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) SAND WITH A THIN COVER OF SILTY CLAY.
CL5	CLARK	2650130	710550	715600	683	VAN VEEN	3	1	0	8204452	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) UPPER UNIT-LARGE SILTY CLAY, LOWER UNIT-FIRM GREY CLAY WITH SOME SILT AND SAND.
CL6	CLARK	2650410	710270	713100	552	VAN VEEN	3	1	1	8204453	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) 5-MACROFAUNA 1-2CM BROWN SEDIMENT UNDERLAIN BY GREEN CLAY. SOME SILT SAND + 1 COBBLE

GRABS

DURING THE CRUISE REPORT ON C. 9. 9. HUSSOH, GRAB SAMPLES WERE TAKEN AT MOST STATIONS USING A VAN VEEN OR SHIPER SAMPLES. 3 SUBSAMPLES WERE TAKEN FROM THE SURFACE LAYER AND 1 FROM THE SURFACE LAYER IF THE SAMPLE WAS NOT HOMOGENEOUS. MACROFAUNA SAMPLES WERE TAKEN IF PRESENT. THE NUMBER OF THE SAMPLE WAS STORED IN A PLASTIC BAG/BUCKET. ALL SAMPLES WERE LABELED WITH THE CRUISE AND STATION NUMBERS AND A YELLOW TAG NUMBER. THE FORAM AND MACROFAUNA SAMPLES WERE TREATED WITH FORMALIN.

STATION	FLOID	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	TYPE OF SORTER	SURS (SURT)	SURS (SUBSURT)	SURS (BACK)	STICKER	STATION NOTES
CL7	CLARK	2650615	710260	711370	685	VAN VEEN	3	1	0	8204454	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) MEDIUM BROWN CLAY AND COARSE SAND, UNDERLYING GREEN CLAY WITH OCCASIONAL FERRITES.
CL8	CLARK	2650836	711090	704920	755	VAN VEEN	3	1	0	8204455	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) BROWN SILTY CLAY OVER GREENISH CLAY.
CO1	CORRIGTON	2561400	631250	644650	90	SHIPER	3	1	1		1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) (SYV) GREY SOOPY HOMOGENEOUS SILTY CLAY. WORM TUBES PRESENT.
CO2	CORRIGTON	2561662	671410	643000	240	SHIPER	3	0	0	8204884	1-FORAM(SCH) 2-SURF(SYV) -BACT(STROH) GREENISH GREY MUD

GRABS

DURING THE CRUISE 02-031 ON C.S.S. HUDSON, GRAB SAMPLES WERE TAKEN AT MOST STATIONS USING A VAN VEEN OR SHIPEK SAMPLER. 3 SUBSAMPLES WERE TAKEN FROM THE SURFACE LAYER AND 1 FROM THE SUBSURFACE LAYER IF THE SAMPLE WAS NOT HOMOGENEOUS. MACROFAUNA SAMPLES WERE TAKEN IF PRESENT. THE REMAINDER OF THE SAMPLE WAS STORED IN A PLASTIC BAG/BUCKET. ALL SAMPLES WERE LABELED WITH THE CRUISE AND STATION NUMBERS AND A YELLOW TAG NUMBER. THE FORAM AND MACROFAUNA SAMPLES WERE TREATED WITH FORMALIN.

STATION	FLOD	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	TYPE OF SAMPLER	SUBS (SURF)	SUBS (SUBSURF)	SUBS (MACRO)	STICKER #	STATION NOTES
C03	CORONATION	2562021	671450	643000	269	SHIPEK	3	0	0	B204853	HOMOGENEOUS. SILT AND CLAY.
C04	CORONATION	2562235	671520	641020	356	SHIPEK	3	0	1	B204855	1-FORAM(SCH) 2-SURF(SYU) 3-BACT(STROH) 4-SUBSURF(SYU) 5-MACROFAUNA SILTY CLAY
C05	CORONATION	2560323	671780	640900	495	SHIPEK	3	1	1	B204860	1-FORAM(SCH) 2-SURF(SYU) 3-BACT(STROH) 4-SUBSURF(SYU) DISTINCT LAYERS. SOUPEY TOP, COMPACTED BOTTOM. CLAYEY SILT.
I01	IRUSUITI	2639003	694080	694350	160	VAN VEEN	3	0	0	B204423	1-FORAM(SCH) 2-SURF(SYU) 3-BACT(STROH) HOMOGENEOUS SILTY CLAY.

GRABS

1
 DURING THE CRUISE 02 031 ON C.S.S. HUDSON, GRAB SAMPLES WERE TAKEN AT MOST STATIONS USING A VAN VEEN OR SHLEIKER SAMPLER. 2 SUBSAMPLERS WERE TAKEN FROM THE SURFACE LAYER AND 1 FROM THE SURFACE LAYER IF THE SAMPLE WAS NOT HOMOGENEOUS. MACKROFAUNA SAMPLES WERE TAKEN IF PRESENT. THE REMAINDER OF THE SAMPLE WAS STORED IN A PLASTIC BAG/BUCKET. ALL SAMPLES WERE LABELED WITH THE CRUISE AND STATION NUMBERS AND A YELLOW TAG NUMBER. THE FORAM AND MACKROFAUNA SAMPLES WERE TREATED WITH FORMALIN.

STATION	FIDED	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	TYPE OF SAMPLER	SUBS (SURF)	SUBS (SUFSURF)	SUBS (MACKRO)	STICKER	STATION NOTES
1N2	TRUGSOUTH	2631337	694290	695400	103	VAN VEEN	3	1	1	8204434	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROB) 4-SUFSURF(SYV) 5-MACKROFAUNA. UPPER LAYER: THIN LAYER OF LIGHT BROWN MUD. LOWER LAYER: LIGHT GREY MEDIUM SAND.
1N3	TRUGSOUTH	2631500	694880	693300	557	VAN VEEN	3	1	0	8204432	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROB) 4-SUFSURF(SYV)
1N4	TRUGSOUTH	2632024	695300	691725	570	VAN VEEN	3	1	1	8204436	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROB) 4-SUFSURF(SYV) 5-MACKROFAUNA. SILTY MUD, UNDERLAIN BY A MUDDY SAND. SAND HIGH IN HEAVY MINERALS.
1N5	TRUGSOUTH	2632136	695050	690200	503	VAN VEEN	3	1	0	8204437	UPPER UNIT GREENISH COLOR LOWER UNIT BLACK BOTH UPPER AND LOWER UNITS ARE SILTY MUD. LOWER UNIT CONTAINS HIGH PERCENTAGE OF HEAVY MINERALS THUS BLACK COLOR

GRABS

DURING THE CRUISE 02-031 ON C.S.S. HUDSON, GRAB SAMPLES WERE TAKEN AT MOST STATIONS USING A VAN VEEN OR SHIFER SAMPLER. 3 SUBSAMPLES WERE TAKEN FROM THE SURFACE LAYER AND 1 FROM THE SUBSURFACE LAYER IF THE SAMPLE WAS NOT HOMOGENEOUS, MACROFAUNA SAMPLES WERE TAKEN IF PRESENT. THE REMAINDER OF THE SAMPLE WAS STORED IN A PLASTIC BAG/BUCKET. ALL SAMPLES WERE LABELED WITH THE CRUISE AND STATION NUMBERS AND A YELLOW TAG NUMBER. THE FORAM AND MACROFAUNA SAMPLES WERE TREATED WITH FORMALIN.

STATION	FLOID	TIME (ADT)	LATITUDE	LONGITUDE	DEPTH (M)	TYPE OF SAMPLER	SURS (SURF)	SURS (SUBSURF)	SURS (MACRO)	STICKER #	STATION NOTES
IN6	TRUGSOUTH	2630146	700380	684140	267	VAN VEEN	3	1	1	8204428	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF (SYV) 5-MACROFAUNA SURFACE: SILTY CLAY. SUBSURFACE: SILTY CLAY WITH ICE RAFTED SAND AND PEBBLES. MACROFAUNA PRESENT.
IN7	TRUGSOUTH	2622240	701910	681920	417	VAN VEEN	3	1	1	8204421	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF (SYV) 5-MACROFAUNA HOMOGENEOUS MUD.
IN8	TRUGSOUTH	2622122	702313	680364	338	VAN VEEN	3	1	0	8204312	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) UPPER: BROWN MUD (SILT AND CLAY). LOWER: COMPACTED GREENISH GREY FIRM COMPACTED MUD.
IT1	ITERBLUNG	2601250	691850	691000	167	VAN VEEN	3	1	1	8204904	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF (SYV) 5-MACROFAUNA TOP UNIT: SOUPEY BROWN CLAYEY SILT. LOWER UNIT: GREY CLAYEY SILT WITH ISOLATED POCKETS OF SAND

GRIDS

DURING THE CRUISE 02 031 ON C.S.S. HURSON, GRID SAMPLES WERE TAKEN AT MOST STATIONS USING A VAN VEEN OR SHIFER SAMPLER. 3 SUBSAMPLES WERE TAKEN FROM THE SURFACE LAYER AND 3 FROM THE SUBSURFACE LAYER IF THE SAMPLE WAS NOT HOMOGENEOUS. MACROFOUNDA SAMPLES WERE TAKEN IF PRESENT. THE CHARACTER OF THE SAMPLE WAS STORED IN A PLASTIC BAG/BUCKET. ALL SAMPLES WERE LABELLED WITH THE GRID AND STATION NUMBERS AND A YELLOW TAG NUMBER. THE FORAM AND MACROFOUNDA SAMPLES WERE TREATED WITH FORMOLIN.

STATION	FLOID	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	TYPE OF SAMPLER	SURS (SURS)	SURS (SORSUR)	SURS (MACRO)	STICKER	STATION NOTES
112-6	ITERBUUNG	2601550	692050	695300	320	VANVEEN	4	1	1	0204080	UPPER UNIT LESS COMPACTED LOWER UNIT MORE COMPACTED 1-FORAMS 2-SURFACE 3-SUB-SURFACE 3-BACTEKTA 4-MACROFOUNDA.
113	ITERBUUNG	2601722	691690	682200	417	VAN VEEN	3	1	1	0204881	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) CLAYEY SILT. TOP LAYER SOUPEY, BOTTOM FIRM, GREENISH GREY.
114	ITERBUUNG	2602024	691000	674500	303	VAN VEEN	3	1	1	0204404	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) 5-MACRO GREENISH HOMOGENEOUS MUD
101	HAKTAK	2571031	672130	644650	90	SHIFER	3	1	0	0204893	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SMITH HOMOGENEOUS GREY SILTY CLAY.

GRABS

DURING THE CRUISE 02-031 ON C.S.S. HUDSON, GRAB SAMPLES WERE TAKEN AT MOST STATIONS USING A VAN VEEN OR SHIPEK SAMPLER. 3 SUBSAMPLES WERE TAKEN FROM THE SURFACE LAYER AND 1 FROM THE SURFACE LAYER IF THE SAMPLE WAS NOT HOMOGENEOUS. MACROFAUNA SAMPLES WERE TAKEN IF PRESENT. THE REMAINDER OF THE SAMPLE WAS STORED IN A PLASTIC BAG/BUCKET. ALL SAMPLES WERE LABELED WITH THE CRUISE AND STATION NUMBERS AND A YELLOW TAG NUMBER. THE FORAM AND MACROFAUNA SAMPLES WERE TREATED WITH FORMALIN.

STATION #	FLOOR	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	TYPE OF SAMPLER	SUBS (SURF)	SUBS (SUBSURF)	SUBS (MACRO)	STICKER #	STATION NOTES
M02	HARTAK	2571154	671970	643360	252	VAN VEEN	3	1	0	8204892	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SUBSURF(SYV) 5-FORAM(SCH) CLAYEY SILT - 2 UNITS. SOUPEY TOP - COMPACTED BOTTOM.
M04	HARTAK	2571617	671890	641700	333	VAN VEEN	4	1	1	8204899	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SUBSURF(SYV) 5-MACROFAUNA UPPER-SOUPEY BROWN CLAYEY SILT. LOWER-FIRM GREY CLAYEY SILT. WORM TUBES.
M05	HARTAK	2570417	671750	640100	585	SHIPEK	3	1	1	8204862	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SUBSURF(SYV) 5-MACROFAUNA UPPER LAYER-SOUPEY BROWN CLAYEY SILT. LOWER-FIRM GREY CLAYEY SILT. SLIGHTLY INVERTED IN GRAB
M05A	HARTAK	2580705	671680	635500	575	SHIPEK	3	1	0	8204999	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SUBSURF(SYV) 5-ROCK SOUPEY BROWN CLAYEY SILT OVER FIRM GREY CLAYEY SILT.

GRAB5

DURING THE CRUISE 02 021 ON C.S.S. HUDSON, GRAB SAMPLES WERE TAKEN AT MOST STATIONS USING A VAN VEEN OR SHIPER SAMPLER. 3 SUBSAMPLES WERE TAKEN FROM THE SURFACE LAYER AND 1 FROM THE SURFACE LAYER IF THE SAMPLE WAS NOT HOMOGENEOUS. MACKROFAHA SAMPLES WERE TAKEN IF PRESENT. THE NUMBER OF THE SAMPLE WAS STORED IN A PLASTIC BAG/BUCKET. ALL SAMPLES WERE LABELED WITH THE CRUISE AND STATION NUMBERS AND A YELLOW TAG NUMBER. THE FORAM AND MACKROFAHA SAMPLES WERE TREATED WITH FORMALIN.

STATION	FLOOR	TIME (GMT)	LATITUDE (N)	LONGITUDE (E)	DEPTH (M)	TYPE OF SAMPLER	SURS (SURE)	SURS (SUSURF)	SURS (MACKR)	STICKER	STATION NOTES
M06A	MANTAK	250104Z	672743	633540	670	SHIPER	3	1	1	B204975	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROD) 4-SURSURE(SYV) 5-MACKROFAHA CLAYEY SILT, SOOPLY BROWN MUD OVER GREENISH GREY MUD.
M07	MANTAK	2501310	673480	643420	585	VAN VEEN	3	1	1	B205095	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROD) 4-SURSURE(SYV) 5-MACKROFAHA CLAYEY SILT, SOOPLY BROWN MUD OVER GREENISH GREY MUD.
M01	MCRETH	2611015	693290	694750	322	VAN VEEN	4	1	0	B204301	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROD) 4-SURSURE(SYV) 5-MACKROFAHA 1ST ATTEMPT GOT A ROUNDER (IN BAG) AND 2ND ATTEMPT GOT A SAMPLE.
M01J	MCRETH	2610443	692950	663900	250	VAN VEEN	3	1	1	B204405	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROD) 4-SURSURE(SYV) 5-MACKROFAHA UPPER BROWN SOOPLY MUD, LOWER DARK GREENISH GREY FIRM CLAY

GRABS

DURING THE CRUISE 82-031 ON C.S.S. HUDSON, GRAB SAMPLES WERE TAKEN AT MOST STATIONS USING A VAN VEEN OR SHIFER SAMPLER. 3 SUBSAMPLES WERE TAKEN FROM THE SURFACE LAYER AND 1 FROM THE SUBSURFACE LAYER IF THE SAMPLE WAS NOT HOMOGENEOUS. MACROFAUNA SAMPLES WERE TAKEN IF PRESENT. THE REMAINDER OF THE SAMPLE WAS STORED IN A PLASTIC BAG/BUCKET. ALL SAMPLES WERE LABELED WITH THE CRUISE AND STATION NUMBERS AND A YELLOW TAG NUMBER. THE FORAM AND MACROFAUNA SAMPLES WERE TREATED WITH FORMALIN.

STATION	FLOOR	TIME (ADT)	LATITUDE	LONGITUDE	DEPTH (M)	TYPE OF SAMPLER	SURF (SURF)	SURF (SUBSURF)	SUBS (MACRO)	STICKER #	STATION NOTES
MC3	MCBETH	2620122	693140	691600	432	VAN VEEN	3	1	0	8204419	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SUBSURF(SYV) GREEN GREY CLAY, VERY LOW SILT CONTENT, TOP UNIT LESS COMPACTED THAN LOWER
MC4	MCBETH	2620223	693470	685700	540	VAN VEEN	3	1	1	8204307	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SUBSURF(SYV) 5-MACROFAUNA CLAY WITH SOME SILT AND VERY FINE SAND, TOP LAYER SOUPEY. 1 DRIFSTONE BOULDER.
MC5	MCBETH	2620400	693680	683500	572	VAN VEEN	3	1	0	8204420	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SUBSURF(SYV) FINE GRAINED SILT AND CLAY, 2 UNITS, SOUPEY ON TOP, FIRM BELOW.
MC6	MCBETH	2610816	693170	680940	425	VAN VEEN	3	1	0	8204408	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SUBSURF(SYV) UPPER UNIT: BROWN SOUPEY MUD. LOWER UNIT: FIRMER GREENISH GREY MUD.

GRABS

DURING THE CRUISE 02 031 ON C.S.S. HUDSON, GRAB SAMPLES WERE TAKEN AT MOST STATIONS USING A VAN VEEN OR SUPEK SAMPLER. 3 SUBSAMPLERS WERE TAKEN FROM THE SURFACE LAYER AND 1 FROM THE SUBSURFACE LAYER IF THE SAMPLE WAS NOT HOMOGENEOUS. MACROFAUNA SAMPLES WERE TAKEN IF PRESENT. THE REMAINDER OF THE SAMPLE WAS STORED IN A PLASTIC BAG/BUCKET. ALL SAMPLES WERE LABELED WITH THE GEULST AND STATION NUMBERS AND A YELLOW TAG NUMBER. THE FORAM AND MACROFAUNA SAMPLES WERE TREATED WITH FORMALIN.

STATION	FLOOR	TIME (GMT)	LATITUDE (LAT)	DEPTH (M)	TYPE OF SAMPLER	SURS (SURF)	SURS (SUBSURF)	SURS (MACKD)	STICKER	STATION NOTES
MC7	MCRETH	2620914	693750	681600	497 VAN VEEN	3	0	0	8204306	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH)
										GREY HOMOGENEOUS MUD.
MC8	MCRETH	2621416	694400	674400	0 VAN VEEN	3	1	0	8204422	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSURF(SYV) BROWN SOUPEY MUD OVER GREY COMPACTED MUD.
MC9	MCRETH	2610645	693000	685100	326 VAN VEEN	3	1	0	8204406	UPPERMOST BROWN SOUPEY MUD LOWER FIRM LOWER UNIT FIRM GREEN GRAY MUD, WITH BLACK STREAKS.
MP1	NEARGHEIKUND	2500022	670350	644000	80 VAN VEEN	3	1	0	8204867	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSURF(SYV) SOUPEY BROWN MUD OVER COMPACTED GREY MUD.

GRABS

DURING THE CRUISE 92-031 ON C.S.S. HUDSON, GRAB SAMPLES WERE TAKEN AT MOST STATIONS USING A VAN VEEN OR SHIFER SAMPLER. 3 SUBSAMPLES WERE TAKEN FROM THE SURFACE LAYER AND 1 FROM THE SUBSURFACE LAYER IF THE SAMPLE WAS NOT HOMOGENEOUS. MACROFAUNA SAMPLES WERE TAKEN IF PRESENT. THE REMAINDER OF THE SAMPLE WAS STORED IN A PLASTIC BAG/BUCKET. ALL SAMPLES WERE LABELED WITH THE CRUISE AND STATION NUMBERS AND A YELLOW TAG NUMBER. THE FORAM AND MACROFAUNA SAMPLES WERE TREATED WITH FORMALIN.

STATION #	FJORD	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	TYPE OF SAMPLER	SURS (SURF)	SURS (SUBSURF)	SURS (MACRO)	STICKER #	STATION NOTES
NP2	NEANGHRIKUNG	2580127	670950	642500	347	VAN VEEN	3	1	1	8204871	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) 5-MACROFAUNA SOUFFEY BROWN MUD OVER FIRM MUD. BIG WORM TUBES.
NP3	NEANGHRIKUNG	2580345	671160	640500	333	VAN VEEN	3	1	1	8204976	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) SOUFFEY BROWN LAYER OVER A FIRM GREY LAYER. CLAYEY SILT.
SO1	SUNNESIINT	2541834	663702	615423	215	SHIFER	3	1	0	8204801	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) SILTY CLAY
SO5	SUNNESHIHE	2542337	663330	614260	155	SHIFER	3	1	0	8204833	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV)

GRABS

DURING THE CRUISE 02-031 ON C.S.S. HANSON, GRAB SAMPLES WERE TAKEN AT MOST STATIONS USING A VAN VEER OR SHIPER SAMPLER. 3 SUBSAMPLES WERE TAKEN FROM THE SURFACE LAYER AND 1 FROM THE SURFACE LAYER IF THE SAMPLE WAS NOT HOMOGENEOUS. MACKOFAUNA SAMPLES WERE TAKEN IF PRESENT. THE NUMBER OF THE SAMPLE WAS STORED IN A PLASTIC BAG/TICKET. ALL SAMPLES WERE LABELED WITH THE CRUISE AND STATION NUMBERS AND A YELLOW TAG NUMBER. THE FORAM AND MACKOFAUNA SAMPLES WERE TREATED WITH FORMALIN.

STATION	FLOOR	TIME (ART)	LATITUDE	LONGITUDE	DEPTH (M)	TYPE OF SAMPLER	SURF (SURF)	SURF (SUBSURF)	SURF (MACKO)	STATION NOTES
806	SURF SHORE	2550225	663070	613920	117	MACKINTYR	3	1	1	8204836 1-FORAM(SCD) 2-SURF(SYV) 3-BACT(STROD) 4-SUBSURF(SYV) 5-MACKOFAUNA GREENISH GREY SILTY MUD, MICA AND FERROHAG. WELL SORTED. HOMOGENEOUS.
807	SURF SHORE	2550420	662930	613100	67	SHIPER	3	0	1	8204824 1-FORAM(SCD) 2-SURF(SYV) 3-BACT(STROD) 5-MACKOFAUNA GREENISH GREY SANDY/SILTY (SOME FINES)(MUD). HIGH MICA CONTENT AND FERRO HAG. WELL SORTED.
808	SURF SHORE	2551040	663010	611180	160	SHIPER	3	0	6	8204843 1-FORAM(SCD) 2-SURF(SYV) 3-BACT(STROD) 4-MACKOFAUNA MEDIUM GRAINED SAND WITH SAND GRAVEL. MOST GRAVEL ON SURFACE.
1116	TINGIN	2591740	690540	685400	302	VAN VEEN	3	1	0	8205097 1-FORAM(SCD) 2-SURF(SYV) 3-BACT(STROD) 4-SUBSURF(SYV) SOUFFY BROWN SURFACE LAYER OVER A GREYISH GREY FINE SAND WITH SOME CLAY. SURFACE HAS SOME SAND. IRON OXIDE IN LOWER

GRABS

DURING THE CRUISE 02-031 ON C.S.S. HUDSON, GRAB SAMPLES WERE TAKEN AT MOST STATIONS USING A VAN VEEN OR SHIFER SAMPLER. 3 SUBSAMPLES WERE TAKEN FROM THE SURFACE LAYER AND 1 FROM THE SUBSURFACE LAYER IF THE SAMPLE WAS NOT HOMOGENEOUS. MACROFAUNA SAMPLES WERE TAKEN IF PRESENT. THE REMAINDER OF THE SAMPLE WAS STORED IN A PLASTIC BAG/BUCKET. ALL SAMPLES WERE LABELED WITH THE CRUISE AND STATION NUMBERS AND A YELLOW TAG NUMBER. THE FORAM AND MACROFAUNA SAMPLES WERE TREATED WITH FORMALIN.

STATION	FIORD	TIME (ADT)	LATITUDE	LONGITUDE	DEPTH (M)	TYPE OF SAMPLER	SURS (SURF)	SUBS (SUBSURF)	MACRO	SUBS	STICKER #	STATION NOTES
112	TINGIN	2592143	690700	685050	347	VAN VEEN	3	1	0	0	B204874	1-FORAM(SCH) 2-SURF(SYV) 3-BACT(STROH) 4-SURSUF(SYV) GREY SILTY CLAY, UPPER LAYER BROWN MUDDY SILTY CLAY, LOWER GREY SILTY CLAY.
113	TINGIN	2600030	691150	682350	487	VAN VEEN	3	1	0	0	B204876	1-FORAM(SCH) 2-SURF(SYV) 3-SURSUF(SYV) 4-BACTERIA(STROH)
116	TINGIN	2590803	684870	660540	800	VAN VEEN	3	1	0	0	B305096	1-FORAM(SCH) 2-SURF(SYV) 3-SURSUF(SYV) 4-BACTERIA(STROH)

CORES

FULL. IS A SUMMARY OF THE WORK DONE ON LEHEIGH CORES TAKEN ON 82-031 HUDSON. PISTON CORES WERE ALSO COLLECTED ON THIS CRUISE. GEOCHEMICAL SYNOPSIS: GEOCHEMICAL PROCEDURES INCLUDED SPLITTING, DESCRIBING, LOGGING, ARCHIVING, SUBSAMPLING AND EVALUATING. ELECTROMAGNETIC PARAMETERS INCLUDING PH, FE AND FS. LEHEIGH CORES EXAMINED ARE SUS, C04, MA2, NF2, I13, MC7, IN3 AND CA2 RESPECTIVELY. CONCLUSION: STATISTICAL EVALUATION, BASED ON 260 DISCRETE SUBSAMPLES AND 780 DATA POINTS INDICATES THE FOLL. OXIDATION/REDUCTION SEQUENCE. C04>MA2>I13>NF2>IN3>MC7>SUS RESPECTIVELY. ERD MEMBERS INCLUDE C04(OXIDIZED) WITH PH=7.42+/- 0.05. FE=4.77+/-0.30 AND FS=3.49+/-0.27 AS AFFUSED TO SUS (REDUCED) WITH PH=7.80+/-0.07, FE=3.25+/-0.73 AND FS=2.53+/-0.19 RESPECTIVELY. GEOCHEMICAL SYNOPSIS: LEHEIGH CORES WERE HALVED AND SPLIT ONBOARD. SUBSAMPLES BAGGED INCLUDE-- CORE CATCHER(CCC), DRIF STONES(DST), REDTECH(GT), LITHOLOGIC(L) AND WATER CONTENT(W). MINIATURE VANE SHEAR TESTS(MVS) AND PLICON VANE SHEAR CALIBRATORS(PVS) WERE DONE DOWN CORE. CORES WERE LABELLED; CRUISE, STATION, YELLOW TAG, INCREMENTS IN METERS. STYROFOAM PLUGS INSERTED WHERE SUBSAMPLES TAKEN.

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LEATH TWC SEC

STICKER

LAT

FIORD

STATION

DEPTH

EQUIP

(M)

TYPE

LEHEIGH

LEHEIGH

LEHEIGH

LEHEIGH

LEHEIGH

LEHEIGH

LEHEIGH

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CORE STORED IN UFRIGHT IN COOLER EXCEPT 5FT SECTION THE 12-4 WATCH LOST. THIS SECTION STORED IN BUCKET IN COOLER LABELLED PISTON CORE E-F MURPHY WATCH LEADER

1ST BARREL BROKE OFF, 2ND BARREL FRACTURED IN THE

0.02M --- 6177,77M
0.20M MVS 6178,78M
0.35M MVS 6179,79M
0.60M MVS 6180,80M
0.80M MVS 6181,81M
1.00M MVS 6182,82M
DRP STONES: TOP FEW CM, 0.3 M, 0.6M FERRELE CONCENTRATE
FVS .6, .8, .4, .2, .1M

CL-1: 0.00-1.25 M DEPTH
MASSIVE, STRUCTURELESS SANDY MUDD, LOTS OF REDUCED STREAKS, NO REDUCED BUKKOWS, DISPERSED CONGL. AND FERRELE CONCENTRATION ORG SHELLY ZONE 0.75M DEPTH TST SAMPLE;

STATION	FIORD	TIME (APT)	LAT	LONG	STICKER #	DEPTH (M)	EQUIP TYPE	LEATH	TWC	SEC
CA-6P	CAMBRIDGE	2662334	713485	744000	8204464	640	BENTHOS	0	Y	0
CL-5-0	CLARK	2650246	710550	715300	8204451	683	LEHEIGH	0	Y	0
CL-1-0	CLARK	2641611	704960	723700	8204440	192	LEHEIGH	127	N	2

FOIL. IS A SUMMARY OF THE WORK DONE ON LEHEIGH CORES TAKEN ON 82-031 HUDSON. PISTON CORES WERE ALSO COLLECTED ON THIS CRUISE. GEOCHEMICAL SYNOPOSIS: GEOCHEMICAL PROCEDURES INCLUDED SPLITTING, DESCRIBING, LOGGING, ARCHIVING, SUBSAMPLING AND EVALUATING ELECTROGRAHETIC PARAMETERS INCLUDING PH, PE AND PS. LEHEIGH CORES EXAMINED ARE SUS, CO4, MA2, NF2, T13, MC7, TH3 AND CA2 RESPECTIVELY. CONCLUSION: STATISTICAL EVALUATION, BASED ON 260 DISCRETE SUBSAMPLES AND 780 DATA POINTS INDICATES THE FOLI. OXIDATION REDUCTION SEQUENCE. CO4 MA2 T13 MC7 IN > MC7 > SUS RESPECTIVELY. PH PARAMETERS INCLUDE COA(OXIDIZED) WITH PH=7.424 / 0.05, PE=4.791 / 0.30 AND PS=3.491 / 0.27 AS OPPOSED TO SUS (REDUCED) WITH PH=7.801 / -0.07, PE=3.251 / -0.73 AND PS=2.531 / -0.19 RESPECTIVELY. GEOCHEMICAL SYNOPOSIS: LEHEIGH CORES WERE HALVED AND SPLIT ONBOARD. SUBSAMPLES BAGGED INCLUDE CORE CATCHER(CCC), DRUP STORE(SUS), GEOTECH(GT), LITHOLOGIC(L) AND WATER CONTENT(W). MINIATURE VANE SHEAR TESTS(MVS) AND FLICON VANE SHEAR CALIBRATIONS(CF99) WERE DONE. BORE CORES WERE LABELLED(CRUISE, STATION, YELLOW TAG, INCREMENTS IN METERS, STYROFOAM PLUGS INSERTED WHEN SUBSAMPLES TAKEN, BROWN CORE. CORES WERE LABELLED(CRUISE, STATION, YELLOW TAG, INCREMENTS IN METERS, STYROFOAM PLUGS INSERTED WHEN SUBSAMPLES TAKEN, BROWN CORE.

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STATION CLARK 2641537 704960 723700 8204439 192 BENTHOUS 420 Y 3

CL5-P CLARK 2650207 710550 715300 8204450 683 BENTHOUS 1016 N 7

NOTES: A LEHEIGH CORE WAS TAKEN AT THIS STATION BUT AFTER TWO ATTEMPTS AND TWO BROKEN LEHEIGH CORE BARRELS WE GAVE UP!

CO2-G CORNATION 2561850 671410 643800 8204887 248 LEHEIGH 248 N 2

CO2(T): 0.0-1.25 M DEPTH
 CO2(R): 1.25-2.48 M DEPTH
 GREYISH BLACK MUD, TOP
 0.1 M DISTURBED, WATER
 WASH TO 0.9 M FROM BASE
 UP, LOWER 0.4 M WELL-LAH-
 INATED SANDS AND SILT.
 DEPTH 1ST SAMPLES:
 0.10M MVS GT6,25W

NO TWC. CATCHER AND CUTTER SEPIRENTS SAVED IN.

0.60M MVS GT7,70W
 0.95M MVS GT8,14W
 1.5 M MVS GT9,20W
 1.9 M MVS GT10,37W
 2.3 M MVS GT11,66W
 CO2 CC COKE CATCHER
 DISBURD DURING SPLIT
 WATER WASHED UP THE SINES
 CORE CATCHER SUBSAMPLED 2

REDUCATED GREENISH SILTY CLAY.

FULL. IS A SUMMARY OF THE WORK DONE ON LEHIGH CORES TAKEN ON 82-031 HURSON. PISTON CORES WERE ALSO COLLECTED ON THIS CRUISE. GEOCHEMICAL SYNTHESIS!! GEOCHEMICAL PROCEDURES INCLUDED SPLITTING, DESCRIBING, LOGGING, ARCHIVING, SUBSAMPLING AND EVALUATING ELECTROCHEMICAL PARAMETERS INCLUDING PH, PE AND FS. LEHIGH CORES EXAMINED ARE S05, C04, MA2, NP2, TI3, MC7, IN3 AND CA2 RESPECTIVELY. CONCLUSION: STATISTICAL EVALUATION, BASED ON 260 DISCRETE SUBSAMPLES AND 780 DATA POINTS INDICATES THE FULL. OXIDATION-REDUCTION SEQUENCE. C04>MA2>TI3>NP2>IN3>MC7>S05 RESPECTIVELY. END MEMBERS INCLUDE C04(OXIDIZED) WITH PH=7.42 +/- 0.05, PE=4.79 +/- 0.30 AND FS=3.49 +/- 0.27 AS APPOSED TO S05 (REDUCED) WITH PH=7.80 +/- 0.07, PE=3.25 +/- 0.73 AND FS=2.53 +/- 0.19 RESPECTIVELY. GEOCHEMICAL SYNTHESIS!! LEHIGH CORES WERE HALVED AND SPLIT ONBOARD. SUBSAMPLES BAGGED INCLUDE - CORE CATCHER(CC), PROF STONES(PSI), GEOTECH(GT), LITHOLOGIC(L) AND WATER CONTENT(W). MINATURE VANE SHEAR TESTS(MVS) AND FLICON VANE SHEAR CALIBRATIONS(FVS) WERE DONE DOWN CORE. CORES WERE LABELLED BY CRUISE, STATION, YELLOW TAG. INCREMENTS IN METERS. STYROFOAM PLUGS INSERTED WHERE SUBSAMPLES TAKEN.

STATION	FLOOR	TIME (ADT)	LAT	LONG	STICKER #	DEPTH (M)	EQUIP (M)	TYPE	LENGTH (M)	TWC	SEC	NOTES
C02-F	CORNATION	2561710	671410	643800	8204889	248	BENTHOS	1067	Y	7		NO GEOCHEMICAL ANALYSIS DONE, ALL 7 SECTIONS A-H WERE STORED UPRIGHT IN COOLER.
C04-G	CORNATION	2570130	671520	641820	8204858	356	LEHIGH	246	N	2		NO GEOTECHNICAL ANALYSIS PH= 7.42 +/- .05 (N=34) PE= 4.79 +/- .30 (N=33) FS= 3.49 +/- .27 (N=34) CORE CUTTER RENT, FULL PEN. OF TWC, LOST 15 CM.
C04-F	CORNATION	2570044	671520	641820	8204859	356	BENTHOS	1090	Y	7		NO GEOCHEMICAL ANALYSIS TWC FULL PENETRATION, 40FT BARREL, 7 SECTIONS A-H

CORES

FOIL. IS A SUMMARY OF THE WORK DONE ON LEHEIGH CORES TAKEN ON 02-031 HUDSON. PISTON CORES WERE ALSO COLLECTED ON THIS CRUISE. GEOCHEMICAL SYNTHESIS: GEOCHEMICAL PROCEDURES INCLUDED SPLITTING, DESCRIBING, LOGGING, ARCHIVING, SUBSAMPLING AND EVALUATING. ELECTROMAGNETIC PARAMETERS INCLUDING FI, FE AND FS. LEHEIGH CORES EXAMINED ARE SUS, CO4, MA2, NP2, T13, MC7, IN3 AND C62 RESPECTIVELY. CONCLUSION: STATISTICAL EVALUATION, BASED ON 260 DISCRETE SUBSAMPLES AND 700 DATA POINTS INDICATES THE FOLLOWING OXIDATION/REDUCTION SEQUENCE. CO4>MA2>T13>NP2>IN3>MC7>SUS RESPECTIVELY. END MEMBERS INCLUDE CO4(OXIDIZED) WITH FI=7.431/- 0.05, FE=4.791/-0.30 AND FS=3.491/-0.27 AS OPPOSED TO SUS (REDUCED) WITH FI=7.804/-0.07, FE=3.251/-0.73 AND FS=2.531/-0.19 RESPECTIVELY. GEOCHEMICAL SYNTHESIS: LEHEIGH CORES WERE HALVED AND SPLIT ONBOARD. SUBSAMPLES BAGGED INCLUDE CORE CATCHER(CC), DRIFT STORES(DSD), GEOTECH(GT), LITHOLOGIC(L) AND WATER CONTENT(W). MINIATURE VANE SHEAR TESTS(HVS) AND PLYCON VANE SHEAR CALIBRATIONS(CVS) WERE DONE BOWH CORE. CORES WERE LABELLED BY CRUISE, STATION, YELLOW TAG, INCREMENTS IN METERS. STYROFOAM PLUGS INSERTED WHERE SUBSAMPLES TAKEN.

STATION	FIBER	TIME (GMT)	LAT	LONG	STICKER DEPTH EQUIP	LEHGH TWC SEC	NOTES
			(N)	(W)	(M)	(M)	
IN1-G	INUGS01H	2631130	694080	69435	8204425	160	LEHEIGH 245 N 2 IN1(T):0.00-1.23 H DEPTH 0.30 TO IN1(B):1.23-2.45 H DEPTH 0.70H HVS 6164-66,64-66M WELL-DEPT GREY/TAN TURBS 0.80H HVS 6167,67M UP TO GRAINLE SIZE MATR 1.0 TO VAL:MIDDLE MORE MASSIVE 1.50H HVS 6160-71,68-71M DEPTH 1ST SAMPLE: 1.75 TO 041.3M---- SURF:6159,60,50 2.40H HVS 6172-76,72-76M 0.05 TO 0.03H DSI,L ARCHIVE 0.23H HVS 6161-63,61-63M 1.32H ---- L

NO GEO CHEMICAL ANALYSIS
CORE STORED UPRIGHT IN COOLER.

NO GEOTECHNICAL ANALYSIS
SECTIONS A-B, B-C, C-D, D-E, E-F.

STATION	FIBER	TIME (GMT)	LAT	LONG	STICKER DEPTH EQUIP	LEHGH TWC SEC	NOTES
			(N)	(W)	(M)	(M)	
IN3-0	TRUGS01H	2631623	694880	691725	8204325	557	LEHEIGH 127 N 1 FI= 7.78 +/- 0.11 (N=25) FE= 3.74 +/- 0.88 (N=25) FS= 2.64 +/- 0.40 (N=25)

CORES

FOLL. IS A SUMMARY OF THE WORK DONE ON LEHEIGH CORES TAKEN ON 82-031 HUDSON. PISTON CORES WERE ALSO COLLECTED ON THIS CRUISE. GEOCHEMICAL SYNTHOSIS: GEOCHEMICAL PROCEDURES INCLUDED SPLITTING, DESCRIBING, ARCHIVING, SUBSAMPLING AND EVALUATING ELECTROMAGNETIC PARAMETERS INCLUDING PH, PE AND FS. LEHEIGH CORES EXAMINED ARE SUS, CO4, MA2, NF2, I13, MC7, IN3 AND CA2 RESPECTIVELY. CONCLUSION: STATISTICAL EVALUATION BASED ON 260 DISCRETE SUBSAMPLES AND 780 DATA POINTS INDICATES THE FOLL. OXIDATION REDUCTION SEQUENCE. CO4 > NO3 > I13 > MC7 > SUS RESPECTIVELY. CRD MEMBERS INCLUDE CO4 (OXIDIZED) WITH PH=7.427/-0.05, PE=4.791/-0.30 AND FS=3.491/-0.27 AS AFFOSED TO SUS (REDUCED) WITH PH=7.801/-0.07, PE=3.251/-0.73 AND FS=2.534/-0.19 RESPECTIVELY. GEOCHEMICAL SYNTHOSIS: LEHEIGH CORES WERE HALVED AND SPLIT ONBOARD. SUBSAMPLES RAGGED INCLUDE-- CORE CATCHER(CC), DRIF STONES(DSI), GEOTECH(GT), LITHOLOGIC(L) AND WATER CONTENT(W). MINIATURE VANE SHEAR TESTS(MVS) AND FLICON VANE SHEAR CALIBRATIONS(CVS) WERE DONE DOWN CORE. CORES WERE LABELLED; CRUISE, STATION, YELLOW TAG, INCREMENTS IN METERS. STYROFOAM PLUGS INSERTED WHERE SUBSAMPLES TAKEN.

NOTES

NOTES

LENTH TWC SEC

STICKER DEFTH EQUIP (M) TYPE

IN3-F INUGSUTN 2631547 694880 691725 8204326 557 BENTHOS 598 Y 4

I11-G I1ERB11UNG 2601336 691850 691000 8204905 167 LEHEIGH 0 N 0 2 ATTEMPTS WERE MADE. BROKE THE BARREL BOTH TIMES. NO SAMPLE TAKEN.

I11-F I1ERB11UNG 2601300 691850 691000 8204906 167 BENTHOS 634 Y 5 NO GEOCHEMICAL ANALYSIS

5 SECTIONS A-F. SOME PARTS OF THE CORE WERE LOST. THE

NO GEOTECHNICAL ANALYSIS

FOLL. IS A SUMMARY OF THE WORK DONE ON LEHIGH CORES TAKEN ON 02-031 HURSON. PISTON CORES WERE ALSO COLLECTED ON THIS CRUISE. GEOCHEMICAL SYNTHESIS: GEOCHEMICAL PROCEDURES INCLUDED SPLITTING, DESCRIBING, ARCHIVING, SUBSAMPLING AND EVALUATING ELECTROGRAFTIC PARAMETERS INCLUDING PH, FE AND FS. LEHIGH CORES EXAMINED ARE SU5, C04, M02, NE2, F13, MC7, IN3 AND C02 RESPECTIVELY. CONCLUSION: STATISTICAL EVALUATION, BASED ON 260 DISCRETE SUBSAMPLES AND 780 DATA POINTS INDICATES THE FOLLOWING DATA FOR REDUCTION SEQUENCE: C04-M02-F13-MC7-SU5 RESPECTIVELY. THE MEMBERS INCLUDE COCOXIDIZED) WITH PH=7.421/-0.05, FE=4.791/-0.30 AND FS=3.421/-0.27 AS AFFUSED TO SU5 (REMOVED) WITH PH=7.801/-0.07, FE=3.251/-0.19 RESPECTIVELY. GEOCHEMICAL SYNTHESIS: LEHIGH CORES WERE HALVED AND SPLIT ONBOARD. SUBSAMPLING BARRED INCLUDE CONE CATCHER(CC), DEEP STORE(SCSD), GEOTECH(CG), LITHOLOG(L) AND WATER CONTENT(W). MINIATURE VANE SHEAR TEST(SHVS) AND FLICON VANE SHEAR CALIBRATIONS(FVC) WERE DONE DOWN CORE. CORES WERE LABELLED: CRUISE, STATION, YELLOW TAG, INCREMENTS IN METERS, STYROFOAM PLUGS INSERTED WHERE SUBSAMPLING TAKEN.

STATION	FLOID	TIME (GMT)	LAT	LONG	STICKER	DEPTH (M)	EQUIP	LEIGH	TMC	SEC	NOTES	HOLLS
HA2-0	ITERFLUNG	2601915	691690	680220	8204401	417	LEHIGH	241	N	2	I13(C): 0.00-1.20 M DEPTH I13(B): 1.20-2.40 M DEPTH MASSIVE GREENISH MUD WITH VARIABLE BIOTURBATION. DEPTH ISI TEST: SURF ---- MICROFAUNA, L 0.02M ---- 6140, 60W 0.10M MVS 6141, 42W 0.19M ---- DST, L	0.20M MVS 6142, 01W 0.40M MVS 6143, 19W 0.60M MVS 6144, 54W 1.00M MVS 6145, 28W 1.40M MVS 6146, 18W 1.65M MVS 6147, 34W 1.75M MVS 6148, 23W 2.00M MVS 6149, 77W 2.30M MVS 6150, 62W

PH= 7.36 +/- .04 (N=35)
 FE= 4.29 +/- .48 (N=35)
 FS= 3.03 +/- .25 (N=35)

HA2-F	HAKTAK	2571335	671970	643360	8204898	252	RENTHO5	976	Y	7
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40 FOOT BARREL 1.7 SECTIONS
 AB/BC/CD/DE/EF/FG/GH.

CORES

FOLL. IS A SUMMARY OF THE WORK DONE ON LEHIGH CORES TAKEN ON 82-031 HUDSON. PISTON CORES WERE ALSO COLLECTED ON THIS CRUISE. GEOCHEMICAL SYNTHESIS: GEOCHEMICAL PROCEDURES INCLUDED SPLITTING, DESCRIBING, LOGGING, ARCHIVING, SUBSAMPLING AND EVALUATING. ELECTROMAGNETIC PARAMETERS INCLUDING PH, FE AND FS. LEHIGH CORES EXAMINED ARE SU5, C04, MA2, NE2, T13, MC7, IN3 AND CA2 RESPECTIVELY. CONCLUSION: STATISTICAL EVALUATION, BASED ON 260 DISCRETE SUBSAMPLES AND 780 DATA POINTS INDICATES THE FOLL. OXIDATION REDUCTION SEQUENCE. C04>MA2>T13>MC7>SU5 RESPECTIVELY. END MEMBERS INCLUDE C04(OXIDIZED) WITH PH=7.42+/- 0.05. FE=4.79+/- 0.30 AND FS=3.49+/- 0.27 AS AFFOSED TO SU5 (REDUCED) WITH PH=7.80+/- 0.07, FE=3.25+/- 0.73 AND FS=2.53+/- 0.19 RESPECTIVELY. GEOCHEMICAL SYNTHESIS: LEHIGH CORES WERE HALVED AND SPLIT ONBOARD. SUBSAMPLES BAGGED INCLUDE CORE CATCHER(CC), DEEP STONES(DST), GEOTECH(GT), LITHOLOGIC(L) AND WATER CONTENT(W). MINIATURE VANE SHEAR TESTS(MVS) AND FLICON VANE SHEAR CALIBRATIONS(FVS) WERE DONE DOWN CORE. CORES WERE LABELLED BY CRUISE, STATION, YELLOW TAG, INCREMENTS IN METERS. STYROFOAM PLUGS INSERTED WHERE SUBSAMPLES TAKEN.

STATION	FLOOR	TIME (ART)	LAT	LONG	STICKER	DEPTH EQUIP (M)	TYPE	LENTH TWC SEC	N	2	NO GEOCHEMICAL ANALYSIS	NOTES
MA4-G	HAKTAK	2571840	671890	641700	8204996	333	LEHIGH	295	N			0.02M ---- 6120,31W 0.55M MVS 6121,16W 1.0 M MVS 6122,73W 1.5 M MVS 6123,11W 2.0 M MVS 6124,07W 2.6 M MVS 6125,74W MA4(T):0.0 -1.48 M DEPTH MA4(R):1.48 - 2.98M DEPTH
MA4-P	HAKTAK	2571825	671890	641700	8205030	333	BENTHOS	1006	Y	7		DOMINANTLY TAN MUD WITH BIOTURBATION AND REDUCTION STREAKS TO VARYING DEGREES DOWNCORE. DEPTH TST SAMPLES: DEPTH TST SAMPLES:

STORED UPRIGHT IN THE COOLER

MA5-G	HAKTAK	2580615	671750	640100	8204865	585	LEHIGH	198	N	2		NO GEOCHEMICAL ANALYSIS! DOMINANTLY MASSIVE TAN/ GREY MUD, SOME BIOTURBATIO N, DARK REDUCED STREAKS AND SOME LAMINATION. DEPTH TST SAMPLES: 0.02M ----, 6112,61W 0.10M MVS, 6113,55W 0.30M MVS, 6114,35W
												0.39M MVS, 6115,79W 0.50M MVS, 6116,78W 0.70M MVS, 6117,72W 1.05M MVS, 6118,63W 1.50M MVS, 6119,50W 0.90M FVS ---- 0.20M FVS ---- 1.65M FVS ----

CORES

FOLL. IS A SUMMARY OF THE WORK DONE ON LEHEIGHTH CORES TAKEN ON 82-031 HUDSON. PISTON CORES WERE ALSO COLLECTED ON THIS CRUISE. GEOCHEMICAL SYNOPSIS: GEOCHEMICAL PROCEDURES INCLUDED SPLITTING, DESCRIBING, LOGGING, ARCHIVING, SURSAMPLING AND EVALUATING. ELECTROMAGNETIC PARAMETERS INCLUDING PH, PE AND PS. LEHEIGHTH CORES EXAMINED ARE S05, C04, MA2, NP2, I13, MC7, IN3 AND C02 RESPECTIVELY. CONCLUSION: STATISTICAL EVALUATION, BASED ON 260 DISCRETE SUBSAMPLES AND 780 DATA POINTS INDICATES THE FOLL. OXIDATION-REDUCTION SEQUENCE. C04>MA2>I13>NP2>IN3>MC7>S05 RESPECTIVELY. END MEMBERS INCLUDE C04(OXIDIZED) WITH PH=7.42 +/- 0.05. PE=4.79 +/- 0.30 AND PS=3.49 +/- 0.27 AS OPPOSED TO S05 (REDUCED) WITH PH=7.80 +/- 0.07, PE=3.25 +/- 0.73 AND PS=2.53 +/- 0.19 RESPECTIVELY.

GEOTECHNICAL SYNOPSIS: LEHEIGHTH CORES WERE HALVED AND SPLIT ONBOARD. SUBSAMPLES BAGGED INCLUDE CORE CATCHER(CC), DROP STONES(DST), GEOTECH(RT), LITHOLOGIC(L) AND WATER CONTENT(W). MINIATURE VANE SHEAR TESTS(NVS) AND FLICON VANE SHEAR CALIBRATIONS(FVS) WERE DONE DOWN CORE. CORES WERE LABELLED: CRUISE, STATION, YELLOW TAG. INCREMENTS IN METERS. STYROFOAM PLUGS INSERTED WHERE SUBSAMPLES TAKEN.

STATION	FJORD	TIME (GMT)	LAT	LONG	STICKER #	DEPTH (M)	EQUIP TYPE	LEIGHTH	LENTH	TWC	SEC	NOTES
MC7-GC	MCRETH	2621020	693750	681600	8204310	477	LEHEIGHTH	243	N	2		PH= 7.64 +/- 0.08 PE= 3.69 +/- 1.24 PS= 2.82 +/- 0.27
MC7-F	MCRETH	2620945	693750	681600	8204311	497	DENTHOS	1121	Y	8		NO GEOCHEMICAL ANALYSIS. STORED UPRIGHT IN COOLER. 8 SECTIONS A-H
NP2-G	NPANGHJRTUNG	2580247	670950	642500	8204870	347	LEHEIGHTH	284	N	2		PH= 7.51 +/- .05 (N=38) PE= 3.75 +/- .85 (N=38) PS= 2.09 +/- .31 (N=38)

CORE WAS FRAGMENTED WITH LOTS OF WATER IN IT.

CORES

FOLL. IS A SUMMARY OF THE WORK DONE ON LEHIGH CORES TAKEN ON 82-031 HUDSON. PISTON CORES WERE ALSO COLLECTED ON THIS CRUISE. GEOCHEMICAL SYNTHESIS: GEOCHEMICAL PROCEDURES INCLUDED SPLITTING, DESCRIBING, LOGGING, ARCHIVING, SUBSAMPLING AND EVALUATING ELECTROMAGNETIC PARAMETERS INCLUDING FI, FE AND FS. LEHIGH CORES EXAMINED ARE S05, C04, MA2, NF2, T13, MC7, T13 AND C02 RESPECTIVELY. CONCLUSION: STATISTICAL EVALUATION BASED ON 260 DISCRETE SUBSAMPLES AND 780 DATA POINTS INDICATES THE COLL. OXIDATION-REDUCTION SEQUENCE. C04 MA2 T13 NF2 T13 MC7 S05 RESPECTIVELY. END MEMBERS INCLUDE C04 (OXIDIZED) WITH FI=7.421/-0.05, FE=4.791/-0.50 AND FS=3.491/-0.27 AS OPPOSED TO S05 (REDUCED) WITH FI=7.004/-0.07, FE=3.251/-0.73 AND FS=2.531/-0.19 RESPECTIVELY. GEOCHEMICAL SYNTHESIS: LEHIGH CORES WERE HALVED AND SPLIT ONBOARD. SUBSAMPLES BAGGED INCLUDE CORE CATCHER(C02), PROOF STONES(S05), GEOTECH(C01), LITHOLOGIC(L) AND WATER CONTENT(W). MINATURE VANE SHEAR TESTS(HVS) AND FLICOR VANE SHEAR CALIBRATIONS(CPV3) WERE DONE DOWN CORE. CORES WERE LABELLED#CRUISE#STATION#YELLOW TAG. INCREMENTS IN METERS. STYROFOAM PLUGS INSERTED WHERE SUBSAMPLES TAKEN.

STATION	FLOID	TIME (ADT)	LAT	LONG	STICKER #	DEPTH EQUIP (M)	TYPE	LEHIGH	225 M	2	NOTES
HF3-6	NEARSHIRKING	2580415	671160	640500	8204972	333	LEHIGH	225	M	2	<p>NP3(T) 10.00-0.77 M DEPTH NP3(B) 0.77-2.20 M DEPTH UPPER 1.9 M GREY TAN MUD WITH VARYING DEGREES OF TURBURATION AND DARK REDUCED STREAKS. LOWER PART OF CORE DARK, GRADED SANDY TO SILTY MUD, LITTLE BIO-TURBATION. - 4 STACKED TURBULES</p> <p>DEPTH TST SAMPLES: 0.02M --- 6126.09M 0.10M HVS 6127.59M 0.46M HVS 6130.77M 1.00M HVS 6129.02M 1.50M HVS 6130.56M 2.25M HVS 6131.22M</p>
S01-6	SUNNESHINE	2542031	663702	615423	8204832	215	LEHIGH	240	N	2	<p>S01(T) 10.0-1.2 M DEPTH S01(B) 1.2-2.4 M DEPTH GREENISH BLACK MUD WITH OXIDIZED TAN ZONES NEAR BULKHVS; DISTURBED AND MOTTLED THROUGHOUT.</p> <p>DEPTH TST SAMPLES: 0.02M ---, MFI, L(SHELLS) L(SHELLS) IS A CORRUPTA 0.05M ---, 6117.71M 0.5 M HVS, 612.40M 1.0 M HVS, 613.43M 1.5 M HVS, 614.41M 2.0 M HVS, 615.13M S01 CC CORE CATCHER GRAVELLY CORE, UPPER 15 CM. DAMAGED.</p>
S05-6	SUNNESHINE	2550116	663330	614260	8204835	155	LEHIGH	232	N	2	<p>FI=7.904/- .07 (N=32) FE=3.251/- .73 (N=32) FS=2.531/- .19 (N=32) ON THE FIRST TRY LOST THE WHOLE CORE BARREL, SECOND ATTEMPT WAS SUCCESSFUL.</p> <p>NO GEOTECHNICAL ANALYSIS CORE CATCHER SUBSAMPLED, MICRO FAILED-- PIATON NONE ON THIS CORE</p>

FULL. IS A SUMMARY OF THE WORK DONE ON LEHIGH CORES TAKEN ON 82-031 HUDSON. PISTON CORES WERE ALSO COLLECTED ON THIS CRUISE. GEOCHEMICAL SYNTHESIS: GEOCHEMICAL PROCEDURES INCLUDED SPLITTING, DESCRIBING, LOGGING, ARCHIVING, SUBSAMPLING AND EVALUATING. ELECTROMAGNETIC PARAMETERS INCLUDING PH, FE AND PS. LEHIGH CORES EXAMINED ARE S05, C04, M02, N02, T13, MC7, IN3 AND C02 RESPECTIVELY. CONCLUSION: STATISTICAL EVALUATION, BASED ON 260 DISCRETE SUBSAMPLES AND 780 DATA POINTS INDICATES THE FOLL. OXIDATION REDUCTION SEQUENCE. C04 > M02 > T13 > N02 > IN3 > MC7 > S05 RESPECTIVELY. LHD MEMBERS INCLUDE C04 (OXIDIZED) WITH PH=7.424/- 0.05. FE=4.791/-0.30 AND PS=3.491/-0.27 AS APPOSED TO S05 (REDUCED) WITH PH=7.801/-0.07, FE=3.251/-0.73 AND PS=2.531/-0.19 RESPECTIVELY.

GEOTECHNICAL SYNTHESIS: LEHIGH CORES WERE HALVED AND SPLIT ONBOARD. SUBSAMPLES RAGGED INCLUDE - CORE CATCHER(CC), PROP STONES(DST), GEOTECH(GT), LITHOLOGIC(L) AND WATER CONTENT(W). MINIATURE VANE SHEAR TESTS(MVS) AND FLICON VANE SHEAR CALIBRATIONS(FVS) WERE DONE DOWN CORE. CORES WERE LABELLED: CRUISE, STATION, YELLOW TAG. INCREMENTS IN METERS. STYROFOAM PLUGS INSERTED WHERE SUBSAMPLES TAKEN.

STATION	FUID	TIME (GMT)	LAT	LONG	STICKER #	DEPTH EQUIP (M)	EQUIP TYPE	LENTH TWC SEC	NOTES
S05-F	SUNNESHINE	2550846	663330	614260	8204827	146	BENTHOS	770	Y 5 NO GEOCHEMICAL ANALYSIS CORE STORED UPRIGHT IN COOLER
S07-G	SUNNESHINE	2550532	662930	613100	8204840	67	LEHIGH	0	N 0 TWO ATTEMPTS WERE MADE BOTH UNSUCCESSFULL
T11A-F	TINGIN	2592007	690540	685400	8204873	302	BENTHOS	824	Y 6 NO GEOCHEMICAL ANALYSIS NO GEOTECHNICAL ANALYSIS 6 SECTIONS STORED UPRIGHT IN COOLER.

4 BARRELS (40 FT.)
NOTE: WATER DEPTH CHANGED

2 ATTEMPTS MADE WITHOUT
SUCCESS, OUTSIDE OF COKE

CORES

WORK DONE ON LEHIGH CORES TAKEN ON 02-031 HUDSON. PISON CORES WERE ALSO COLLECTED ON THIS CRUISE. FULL. IS A SUMMARY OF THE WORK DONE ON LEHIGH CORES TAKEN ON 02-031 HUDSON. PISON CORES WERE ALSO COLLECTED ON THIS CRUISE. GEOCHEMICAL PROCEDURES INCLUDED SPLITTING, DESCRIBING, LOGGING, ARCHIVING, SUBSAMPLING AND EVALUATING. GEOCHEMICAL PROCEDURES INCLUDED SPLITTING, DESCRIBING, LOGGING, ARCHIVING, SUBSAMPLING AND EVALUATING. FLECROGRAPHIC PARAMETERS INCLUDING PH, PE AND PS. LEHIGH CORES EXAMINED ARE SUS, C04, NA2, NF2, T13, MC7, LK3 AND L02 RESPECTIVELY. CONCLUSION: STATISTICAL EVALUATION BASED ON 260 DISCRETE SUBSAMPLES AND 780 DATA POINTS INDICATES THE FULL, OXIDATION REDUCTION SEQUENCE. C04, NA2, T13, NF2, LK3, MC7, LK3 AND L02 INDICATES THE FULL, OXIDATION REDUCTION SEQUENCE. C04 (OXIDIZED) WITH PH=7.421/-0.05, FI=4.7717-0.39 AND PS=3.491/-0.27 AS OPPOSED TO SUS (REDUCED) WITH PH=7.804/-0.07, PE=3.251/-0.73 AND PS=2.5317/-0.19 RESPECTIVELY. GEOCHEMICAL PROCEDURES: LEHIGH CORES WERE HALVED AND SPLIT ONBOARD. SUBSAMPLES BAGGED INCLUDE - CORE CATCHER(CC), DRUM STONKS(DSI), GEOTECH(BT), LITHO(DRCC) AND WATER CONTENT(W). HIRIATURE VANE SHEAR TEST(SCHVS) AND FLICON VANE SHEAR CALIBRATIONS(CVS) WERE DONE DOWN CORE. CORES WERE LABELLED: CRUISE, STATION, YELLOW TAG. INCREMENTS IN METERS. STYROFOAM PLUGS INSERTED WHERE SUBSAMPLES TAKEN.

NOTES

NOTES

STATION	FLOOR	TIME (GMT)	LAT	LONG	STICKER #	DEPTH EQUIP (M)	TYPE	LENTH TWC SEC	PH	PE	PS
T13-G	VIRGIN	2600145	691150	682350	8204879	487	LEHIGH	253	N	2	PH= 7.51 +/- .06 (N=36) PE= 3.79 +/- 1.05 (N=36) PS= 2.77 +/- .23 (N=36)

NO GEOTECHNICAL ANALYSIS

NO GEOCHEMICAL ANALYSIS
CORE STORED UPRIGHT IN COOLER.

8

Y

1141

487

8204875

691150

2600057

T13-F

CORE CATCHER AND BOTTOM SECTION STORED IN BUCKET

NO GEOTECHNICAL ANALYSIS

PHOTOGRAPHY

DURING THE CRUISE 82-031 ON C.S.S. HUDSON BOTTOM PHOTOGRAPHS WERE TAKEN AT MANY OF THE STATIONS USING 2 "UMEL" UNDERWATER CAMERAS MOUNTED VERTICALLY ON A TUBULAR STEEL FRAME EQUIPED WITH A FINGER AND A BOTTOM SENSING TRIP WEIGHT TO TRIGGER THE CAMERAS. USING 2 CAMERAS IN THIS MANNER ALLOWS THE PHOTOGRAPHS TO BE VIEWED IN STEREO. THE FILM USED WAS TRI-X 400 ASA B/W WITH 350 FRAMES/ROLL. 15 OR 20 PHOTOGRAPHS WERE TAKEN AT EACH CAMERA STATION. NO FILM PROCESSING WAS PERFORMED ON THE SHIP.

STATION	FLOOR	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH STICKER (M)	SHOTS	CAMERA SETTING	FILM	STATION NOTES
CA1	CAMBRIDGE	2660700	711250	750000	196 8204468	15	F8.0 AT 4 FT	2	LOST COMPASS-BROKEN LINE REPLACED
CA5	CAMBRIDGE	2661820	713300	744870	475 8204496	15	F8 AT 4 FEET	2	PROBLEMS WITH FINGER, NOT SHUTTING OFF ON BOTTOM
CA6	CAMBRIDGE	2652138	713485	744000	640 8204462	15	F8.0 AT 4 FT	2	START 2158 END 2225
CL1	CLARK	2641640	704960	723700	192 8204441	19	F8.0 AT 4 FT	2	START: 2641656 END: 2641705
CL3	CLARK	2642018	705280	721570	256 8204445	15	F8.0 AT 4 FT	2	START: 2642030 END: 2642042
CL5	CLARK	2650056	710550	715300	683 8204449	15	F8.0 AT 4 FT	2	CAMERA REQUIRED SOME REPAIRS ON THIS STATION.
CO2	CORRATON	2561754	671410	643800	248 8204886	15	F8. INFINITY	1	FOCUSED FOR INFINITY INSTEAD OF 4 FT. FOR ROLL 1. 400 ASA TRI-X B/W.
CO4	CORNATION	2562332	671520	641870	356 8204857	15	F8. INFINITY	1	FOCUSED FOR INFINITY INSTEAD OF 4 FT. FOR ROLL 1. 400 ASA TRI-X B/W.
TN1	INUGRUTH	2630940	694080	694350	160 8204426	15	F8.0 AT 4 FT	2	START TIME-2630940 END TIME -2631013

PHOTOGRAPHY

DURING THE CROSS OF 02 031 ON C.S.S. HUDSON BOTTOM PHOTOGRAPHS WERE TAKEN AT MANY OF THE STATIONS USING 2 "ORIEL" UNDERWATER CAMERAS MOUNTED VERTICALLY ON A TUBULAR STEEL FRAME EQUIPED WITH A FINGER AND A BOTTOM SENSING TRIP WEIGHT TO TRIGGER THE CAMERAS. USING 2 CAMERAS IN THIS MANNER ALLOWS THE PHOTOGRAPHS TO BE VIEWED IN STEREO. THE FILM USED WAS IKI X 400 ASA B/W WITH 250 LEAKS/ROLL. IN OR 20 PHOTOGRAPHS WERE TAKEN AT EACH CAMERA STATION. NO FILM PROCESSING WAS PERFORMED ON THE SELF.

STATION	FLOOR	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	DEPTH STICKER #	# OF SHOTS	CAMERA SETTING	FILM	STATION NOTES
111	TERRACING	2601155	691050	691000	167	8204901	15	FB.0 AT 4 FT	2	START TIME 1145. STOP TIME 1205
113	TERRACING	2601742	691690	680220	417	8204402	15	FB.0 AT 4 FT	2	START TIME 1815 STOP TIME 1829
102	HARTAK	2571525	671970	643360	250	8204896	15	FB. INFINITY	1	FOCUSED FOR INFINITY INSTEAD OF 4 FT. FOR ROLL 1. 400 ASA IKI X B/W.
104	HARTAK	2571732	671890	641700	333	8204997	15	FB. INFINITY	1	FOCUSED FOR INFINITY INSTEAD OF 4 FT. FOR ROLL 1. 400 ASA IKI X B/W.
105	HARTAK	2500513	671750	640100	580	8204863	15	FB. INFINITY	1	FOCUSED FOR INFINITY INSTEAD OF 4 FT. FOR ROLL 1. 400 ASA IKI X B/W.
101	HCBE III	2612200	694290	694750	332	8204304	15	FB.0 AT 4 FT	2	START TIME 2200 STOP TIME 2219
107	HCBE III	2621125	693750	601600	497	8204308	15	FB.0 AT 4 FT	2	START 1105, STOP 1201. REQUIRED 2 LOWERINGS TO REPAIR FINGER.
103	MCANGHELIUMS	2580330	671160	640500	333	8204973	15	FB. INFINITY	1	FOCUSED FOR INFINITY INSTEAD OF 4 FT. FOR ROLL 1. 400 ASA IKI X B/W.
101	SURF GUIDE	25542000	663702	615423	215	8204812	15	FB. INFINITY	1	FOCUSED FOR INFINITY INSTEAD OF 4 FT. FOR ROLL 1. 400 ASA IKI X B/W.

PHOTOGRAPHY

DURING THE CRUISE 02-031 ON C.S.S. HUDSON BOTTOM PHOTOGRAPHS WERE TAKEN AT MANY OF THE STATIONS USING 2 "UMEL" UNDERWATER CAMERAS MOUNTED VERTICALLY ON A TUBULAR STEEL FRAME EQUIPED WITH A FINGER AND A BOTTOM SENSING TRIP WEIGHT TO TRIGGER THE CAMERAS. USING 2 CAMERAS IN THIS MANNER ALLOWS THE PHOTOGRAPHS TO BE VIEWED IN STEREO. THE FILM USED WAS TRI-X 400 ASA B/W WITH 350 FRAMES/ROLL. 15 OR 20 PHOTOGRAPHS WERE TAKEN AT EACH CAMERA STATION. NO FILM PROCESSING WAS PERFORMED ON THE SHIP.

STATION #	FIORD	TIME (GMT)	LATITUDE	LONGITUDE	DEPTH (M)	STICKER #	# OF SHOTS	CAMERA SETTING	FILM #	STATION NOTES
S05	SUNNESHINE	2550010	663330	614260	155	8204834	15	FB. INFINITY	1	FOCUSED FOR INFINITY INSTEAD OF 4 FT. FOR ROLL 1. 400 ASA TRI-X B/W.
S06	SUNNESHINE	2550241	663070	613920	117	8204837	14	FB. INFINITY	1	FOCUSED FOR INFINITY INSTEAD OF 4 FT. FOR ROLL 1. 400 ASA TRI-X B/W.
S07	SUNNESHINE	2550509	662930	613100	67	8204841	15	FB. INFINITY	1	FOCUSED FOR INFINITY INSTEAD OF 4 FT. FOR ROLL 1. 400 ASA TRI-X B/W.
T110	TINGIN	2591850	690540	685400	302	8205098	15	FB. AT 4 FT	2	START TIME 1847. STOP TIME 1903
T13	TINGIN	2600251	691150	682350	487	8204877	15	FB.0 AT 4 FT	2	START TIME 0251 STOP TIME 0301

GEOPHYSICAL 0676

DURING HURSON CRUISE 02-031 GEOPHYSICAL LINES WERE RUN FROM THE MOUTH TO THE HEAD OF EACH Fjord. EQUIPMENT DEPLOYED ON THESE LINES INCLUDED 1: 40 CU IN BOLT AIR GUN COMPLETE WITH 100FT NSRF EEL. 2: BTO SIDE SCAN. 3: ABC HURTEC DIS REFLECTION SYSTEM. 4: HURSON GUN. 5: CONTINUOUS BATHYMETRY. NAVIGATION METHODS INCLUDED RADAR FIXING AND DEEP READING PLOTTED AT A SCALE OF 1:50,000.

LINE	Fjord	EQUIPMENT	START TIME	END TIME	START LAT	START LON	END LAT	END LON	NOTES
CA-001	CORONATION	AIR GUN	2560805	2561339	571505	533830	671251	644620	THIS LINE COVERS FIX POINTS 1-26 INCLUSIVE. FIXES ARE EVERY NAUTICAL MILE.
CA-001	CORONATION	AIR GUN	2661747	2670305	714860	733180	711275	750100	TAPE 415 FOOT 2070 1177 40 CU IN GUN AND NSRF EEL INFO TO FOLLOW ON HURSON'S RETURN TO BTO
CA-011	CORONATION	HURTEC DIS	2661747	2670505	714860	733180	711275	750100	TAPE NOT AVAILABLE YET
CA-SS1	CORONATION	SIDE SCAN	2661747	2670505	714860	733180	711275	750100	FIXES EVERY NAUTICAL MILE INFO WILL BE AVAILABLE ON HURSON'S RETURN TO BTO
CL-001	CLARK	AIR GUN	2640950	2641413	710560	715350	704960	724080	TAPE 4 FOOTAGE 0509-2065 40 CU IN GUN AND NSRF EEL FIXES EVERY NAUTICAL MILE FIX 1-28
CL-011	CLARK	HURTEC DIS	2640950	2641413	710560	715350	704960	724080	THIS LINE COVERS FIXES 1-27 INCLUSIVE FIXES EVERY NAUTICAL MI.

GEOPHYSICAL DATA

DURING HUDSON CRUISE 82-021 GEOPHYSICAL LINES WERE RUN FROM THE MOUTH TO THE HEAD OF EACH FIORD. EQUIPMENT DEPLOYED ON THESE LINES INCLUDED 40 CU IN BOLT AIR GUN COMPLETE WITH 100FT NSRF EEL, 2: B10 SIDE SCAN, 3: AGC HUNTEC DTS REFLECTION SYSTEM, 4: MUN'S ACQUATIC PROFILING SYSTEM, 5: CONTINUOUS BATHYMETRY. NAVIGATION METHODS INCLUDED RADAR FIXING AND DEAD RECKONING PLOTTED AT A SCALE OF 1:50,000.

LINE	FIORD	EQUIPMENT	START TIME	END TIME	START LAT	START LON	END LAT	END LOG	NOTES
CL-SS1	CLARK	SIDE SCAN	2641028	2641413	0	0 704960	724080		THIS LINE COVERS FIX POINTS 1-27 SS DEPLOYED AT FIX #4.
CO-AG1	CORONATION	AIRGUN	2560730	2561339	671505	633830	671251	644620	11,0600-2357 FT. 40 CU IN GUN.NSRF EEL FIXES 1-26. EVERY NAUTICAL MILE.
CO-H1	CORONATION	HUNTEC DEEP TOW	2560805	2561339	671505	633830	671251	644620	11,28373 ENDS AT 1999 FT. FIRST FIX IS (FIX A) FIX # 1 LAT 671630 LONG 634830 DTS HAVING PROBLEMS
CO-SS1	CORONATION	SIDE SCAN	2560929	2561339	0	0	671251	644620	NOT AVAILABLE YET. SS DEPLOYED AT FIX # 3. 1500M RANGE EACH SWATH. CH #2 (STR) SS TAPE RECORDER NOT WORKING.
IN-AG1	INUGSUTN	AIR GUN	2630026	2630723	700750	682890	694090	695720	TAPE 344 FOOT 2644-6840 FIXES EVERY 2 NAUTICAL MI 40 CU IN GUN AND NSRF EEL 0105 PROBLEMS WITH GUN 0201 AIR GUN WORKING
IN-H1	INUGSUTN	HUNTEC DTS	2630026	2630723	700750	682890	694090	695720	TAPE NOT AVAILABLE YET FIXES EVERY 2 NAUTICAL MI (FIX 25-26-27 1-20)

GEOPHYSICAL DATA

WORKING HUDSON CRUISE 82-031 GEOPHYSICAL LINES WERE RUN FROM THE MOUTH TO THE HEAD OF EACH FLOPP. EQUIPMENT DEPLOYED ON THESE LINES INCLUDED 1: 40 CU IN ROLL AIR GUN COMPLETE WITH LOGFENSEE EEL. 2: RIO SIDE SCAN. 3: ABC HUNTEC DIS REFLECTOR SYSTEM. 4: RUD'S 6000 SISTIC PROFILING SYSTEM. 5: CONTINUOUS BATHYMETRY. NAVIGATION METHODS INCLUDED KODAK FIXING AND DEEP RECORING FOOTED AT A SCALE OF 1:50,000.

LINE	FLOPP	EQUIPMENT	START TIME	END TIME	START LAT	START LON	END LAT	END LON	NOTES
IN-551	INUGBUN	SIDE SCAN	2630026	2630723	700750	682890	694090	695720	TAPE NOT AVAILABLE YET 0455 SIDE SCAN RECEIVED
IT-661	TIERTHURG	AIR GUN	2600330	2600916	691160	681800	691960	690600	TAPE 213 2366 0276 FIXES EVERY NAUTICAL MILE 40 CU IN GUN NSRF EEL FIXES 1-34
IT-661	TIERTHURG	HUNTEC DIS	2600338	2600916	691160	681800	691960	690600	TAPE NOT AVAILABLE YET BAD RECORDS DUE TO SPEED AND HARD BOTTOM SPEED RE- DUCE AT FIX 7
IT-551	TIERTHURG	SIDE SCAN	2600338	2600916	691160	681800	691960	690600	TAPE NOT AVAILABLE YET SIDE SCAN RECORDS IMPROVE AROUND 0500HR
HA-661	MAETAE	AIRGUN	2570657	2571000	671765	640320	672080	644302	TAPE NUMBER ONE TAPE FOOTAGE 2430-3411 LINE STARTED ON FIXES 7,8 79 FROM CO. FLOPP INCH FOOT. FIX 27-39
HA-111	HAKTON	HUNTEC DIS	2570657	2571005	671765	640320	672080	644320	2000 FT ON 13 TO 1000 14. SAME LINE AS AIR GUN FIX 8-39.

GEOPHYSICAL DATA

DURING HUDSON CRUISE 82-031 GEOPHYSICAL LINES WERE RUN FROM THE MOUTH TO THE HEAD OF EACH FIORD. EQUIPMENT DEPLOYED ON THESE LINES INCLUDED 1: 40 CU IN ROLT AIR GUN COMPLETE WITH 100FT NSRF EEL. 2: BFO SIDE SCAN. 3: AGC HUNTEC DTS REFLECTION SYSTEM. 4: HUN'S ACOU STIC PROFILING SYSTEM. 5: CONTINUOUS BATHYMETRY. NAVIGATION METHODS INCLUDED RADAR FIXING AND DEAD RECKONING PLOTTED AT A SCALE OF 1: 50,000.

LINE	FIORD	EQUIPMENT	START TIME	END TIME	START LAT	START LON	END LAT	END LON	NOTES
NA-591	NARTAK	SIDESCAN	2570657	2571000	671765	640320	672080	644320	TAPE FOOTAGE UNAVAILABLE
MC-AG1	MCRETH	AIR GUN	2610922	2611600	693240	681370	693172	695900	TAPE 3 FOOTAGE 0374-2306 40 CU IN GUN, NSRF EEL GALE FORCE WINDS FIXES 1-36
MC-HU	MCRETH	HUNTEC DTS	2610922	2611600	693240	681370	693172	695900	TAPE NOT AVAILABLE YET FIXES 1-36
MC-591	MCRETH	SIDESCAN	2610922	2611600	693240	681378	693172	695900	TAPE NOT AVAILABLE YET 1253 RETRIEVED DEEP SS 1330 DEPLOYED SHALLOW SS
NP-AG1	N.FANGHIRTUNG	AIR GUN	2572022	2580010	671555	635310	670425	644000	TAPE 2 FOOTAGE 0000-1122 FIXES EVERY NAUTICAL MILE FIXES 27-51 40 CU IN GUN & 100FT NSRF SHORT EEL
NP-HU	N.FANGHIRTUNG	HUNTEC DTS	2572022	2580010	671555	635310	670425	644000	NOT AVAILABLE SAME LINE AS AIR GUN

GEOPHYSICAL DATA

DURING HURSON CRUISE 82-031 GEOPHYSICAL LINES WERE RUN FROM THE MOUTH TO THE HEAD OF EACH FLOOR. EQUIPMENT DEPLOYED ON THESE LINES
 INCLUDED 1: 40 CU IN HOBY AIR GUN COMPLETE WITH 100FT NSEF EEL. 2: RIO SIDE SCAN. 3: AGC MONTEC DTS REFLECTOR SYSTEM. 4: RUN'S ACCO
 STIC PROFILING SCHEM. 5: CONTINUOUS BATHYMETRY. NAVIGATION METHODS INCLUDED KADAK FIXING AND DEAR KERING PLOTTED AT A SCALE OF 1:
 50,000.

LINE	FLOOR	EQUIPMENT	START TIME	END TIME	START LON	END LAT	NOT AVAILABLE YES	NOTES
RP-551	N. FANGHURUNG	SIDE SCAN	2572022	2580010	671555	670425	644000	NOT AVAILABLE YES SAME LINE AS AIR GUN
50-061	SORRESHIDE	AIR GUN	2541420	2541644	662890	663420	614370	1 TAPE #1 TURNED ON AT TIME 1450 AT 0000 FT AND ENDED AT 0545 FT. 40 CU IN. GUN, NSEF EEL.
50-011	SORRESHIDE	MONTEC DEEP TOW	2541443	2541645	662890	663420	614370	11: START:0000FT,END:2559. RECORDS SATISFACTORY NO SIDE SCAN RUN IN THIS FLOOR. FIXES 4-12 INCLUSIVE.
11-061	TINGIH	AIRGUN	2591227	2591624	690655	690025	685740	42 @ 1169FT TO 42 @ 2503 FEET. FIXES EVERY NAUTICAL MI. FIXES 1-29.40 CU IN AIRGUN. 100FT NSEF SHORT E EEL. HYDROPHONE CUT BY 55.
11-011	TINGIH	MONTEC DTS	2591227	2591624	690655	690025	685740	NOT AVAILABLE YET SOME INTERFERENCE FROM AIRGUN. RUN. TAPE RECORDER MALFUNCTIONING FROM 1440 TO 1539085.
11-551	TINGIH	SIDE SCAN	2591227	2591624	690655	690025	685740	NOT AVAILABLE YES STARTED GETTING RECORD AT 1539 ADT (FIX 25) CHANGED RANGE FROM 1500M TO 1000M KEN AZZERY IS A SWIMMER

BACTERIOLOGY

DURING HUDSON CRUISE B2-031 SAMPLES WERE COLLECTED TO MEASURE MICROBIAL ACTIVITY AND BIOMASS ACTIVITIES AND PRODUCTIVITIES OF COASTAL WATERS OF RAFFIN ISLAND. EMPHASIS WAS PLACED UPON THESE PARAMETERS AS INFLUENCED BY THE MIXING OF FRESH RIVER WATER AND SEA WATER SURFACE WATER SAMPLES WERE COLLECTED IN EVERY FLOOR.

STATION NUMBER	FLOOR NAME	YELLO STICKER NUMBER	HETEROTROPHIC PRODUCTIVITY	SUBSAMPLES BACTERIAL COUNT	CHLOROPHYLL "A" SAMPLE	LIGHT PRODUCTIVITY	TOTAL ORGANIC CARBON
CO-3	CORONATION	B204B46	YES	YES	YES	NO	NO
CL-1	CLARK	B204501	YES	YES	YES	NO	NO
CL-2	CLARK	B204502	YES	YES	YES	NO	NO
CL-3	CLARK	B204503	YES	YES	YES	NO	NO
CL-4	CLARK	B204504	YES	YES	YES	NO	NO
CL-5	CLARK	B204505	YES	YES	YES	NO	NO
CL-6	CLARK	B204506	YES	YES	YES	NO	NO
CL-7	CLARK	B204507	YES	YES	YES	NO	NO
CL-8	CLARK	B204508	YES	YES	YES	NO	NO
CO-01	CORONATION	B204B44	YES	YES	YES	YES	YES
CO-2	CORONATION	B204B45	YES	YES	YES	NO	NO
CO-4	CORONATION	B204B47	YES	YES	YES	NO	NO
CO-5	CORONATION	B204B48	YES	YES	YES	YES	YES
IR-1	TRUGSLIP	B204929	YES	YES	YES	YES	YES

BACTERIOLOGY

DURING HURSON CRUISE 02-031 SAMPLES WERE COLLECTED TO MEASURE MICROBIAL ACTIVITY AND BIOMASS ACTIVITIES AND PRODUCTIVITIES OF COASTAL WATERS OF RATTIN ISLAND. EMPHASIS WAS PLACED UPON THESE PARAMETERS AS INFLUENCED BY THE MIXING OF FRESH RIVER WATER AND SEA WATER SURFACE WATER SAMPLES WERE COLLECTED IN EVERY FLOOR.

STATION NUMBER	FLOOR NAME	YELLOW STICKER NUMBER	HETEROOTROPHIC PRODUCTIVITY	SUBSAMPLES BACTERIAL COUNT	CHLOROPHYLL "A" SAMPLE	LIGHT PRODUCTIVITY	TOTAL ORGANIC CARBON
IN-2	TRUGSOUTH	8204930	YES	YES	YES	NO	NO
IN-3	TRUGSOUTH	8204931	YES	YES	YES	NO	NO
IN-4	TRUGSOUTH	8204943	YES	YES	YES	YES	YES
IN-5	TRUGSOUTH	8204944	YES	YES	YES	NO	NO
IN-6	TRUGSOUTH	8204920	YES	YES	YES	NO	NO
IN-7	TRUGSOUTH	8204927	YES	YES	YES	YES	YES
IN-8	TRUGSOUTH	8204926	YES	YES	YES	YES	YES
IT-1	ITERRIDGING	8204937	YES	YES	YES	YES	YES
IT-2	ITERRIDGING	8204938	YES	YES	YES	YES	YES
IT-3	ITERRIDGING	8204939	YES	YES	YES	YES	YES
IT-4	ITERRIDGING	8204940	YES	YES	YES	YES	YES
HA-1	HAKTAK	8204849	YES	YES	YES	YES	YES
HA-2	HAKTAK	8204850	YES	YES	YES	NO	NO
HA-3	HAKTAK	8204851	YES	YES	YES	NO	NO

BACTERIOLOGY

DURING HUDSON CRUISE 82-031 SAMPLES WERE COLLECTED TO MEASURE MICROBIAL ACTIVITY AND BIOMASS ACTIVITIES AND PRODUCTIVITIES OF COASTAL WATERS OF ROFFIN ISLAND. EMPHASIS WAS PLACED UPON THESE PARAMETERS AS INFLUENCED BY THE MIXING OF FRESH RIVER WATER AND SEA WATER. SURFACE WATER SAMPLES WERE COLLECTED IN EVERY FIORD.

STATION NUMBER	FIORD NAME	YELLOW STICKER NUMBER	HETEROTROPHIC PRODUCTIVITY	SUBSAMPLES BACTERIAL COUNT	CHLOROPHYLL "A" SAMPLE	LIGHT PRODUCTIVITY	TOTAL ORGANIC CARBON
MA-5	MAKTAK	8204852	YES	YES	YES	YES	YES
MA-6A	MAKTAK	8204942	YES	YES	YES	YES	YES
MC-1	MCRETH	8204941	YES	YES	YES	YES	YES
MC-11	MCRETH	8204921	YES	YES	YES	YES	YES
MC-3	MCRETH	8204923	YES	YES	YES	YES	YES
MC-4	MCRETH	8204924	YES	YES	YES	YES	YES
MC-5	MCRETH	8204925	YES	YES	YES	YES	YES
MC-9	MCRETH	8204022	YES	YES	YES	YES	YES
SU-1	SUNNESHINE	8204831	YES	YES	YES	YES	YES
SU-5	SUNNESHINE	8204829	YES	YES	YES	NO	NO
SU-6	SUNNESHINE	8204838	YES	YES	YES	NO	NO
SU-8	SUNNESHINE	8204839	YES	YES	YES	NO	NO
TI-1	TINGTH	8204934	YES	YES	YES	YES	YES
TI-2	TINGTH	8204935	YES	YES	YES	YES	YES

BACTERIOLOGY

DURING HUDSON CRUISE 02-031 SAMPLES WERE COLLECTED TO MEASURE MICROBIAL ACTIVITY AND BIOMASS ACTIVITIES AND PRODUCTIVITIES OF COASTAL WATERS OF RAFFIN ISLAND. EMPHASIS WAS PLACED UPON THESE PARAMETERS AS INFLUENCED BY THE MIXING OF FRESH RIVER WATER AND SEA WATER SURFACE WATER SAMPLES WERE COLLECTED IN EVERY FLOOD.

STATION NUMBER	FLOOD NAME	YELLOW STICKER NUMBER	HETEROTROPHIC PRODUCTIVITY	SUBSAMPLES BACTERIAL COUNT	CHLOROPHYLL "A" SAMPLE	LIGHT PRODUCTIVITY	TOTAL ORGANIC CARBON
TI-3	TIDGIN	0204936	YES	YES	YES	YES	YES
TI-4	TIDGIN	0204933	YES	YES	YES	YES	YES
TI-5	TIDGIN	0204932	YES	YES	YES	YES	YES

DELTA WORK

STATION	FIORD	JUL	SAMPLE	STICKER
NOTE 1			NOTE 2	
NOTE 3				
CL10	CLARK	264	SEDIMENT	8204327
	MEDIUM GRAINED SAND WITH HIGH CONCENTRATION OF HEAVIES. (DELTA FRONT)			
CL2P	CLARK	264	SEDIMENT	8204328
	GRAVELLY SAND, (DELTA FRONT) SCRAPED FROM FROZEN SEDIMENT			
CL30-A	CLARK	264	SEDIMENT	8204329
	COLLECTED NEAR DELTA FRONT, SURFACE SAMPLE OF MEDIUM SAND.			
CL30-B	CLARK	264	SEDIMENT	8204329
	COLLECTED NEAR DELTA FRONT, UNDERLYING CL30-A, MEDIUM SAND WITH HEAVIES.			
CL40	CLARK	264	SEDIMENT	8204330
	GRAVELLY SAMPLE, MEDIUM LAG			
CL50	CLARK	264	SEDIMENT	8204331
	IRON STAINED MEDIUM TO FINE GRAINED SAND, COLLECTED FROM IRON PAN.			
CL60	CLARK	264	SEDIMENT	8204332
	GLACIER FLOUR AND SAND COLLECTED FROM GLACIER FRONT			
CL70	CLARK	264	WATER	8204333
	WATER TAKEN AT EDGE OF MORaine.			
CL80	CLARK	264	WATER	8204334
	WATER TAKEN CLOSER TO GLACIER			

DELTA WORK

STATION NOTE 1 NOTE 3	FLOID	JUL	SAMPLE NOTE 2	STICKER
C0100-A	CORRECTION	256	SEDIMENT	8204989
C0100-B	CORRECTION	256	WATER	8204990
C0110-A	CORRECTION	256	SEDIMENT	8204991
C0110-B	CORRECTION	256	WATER	8204992
C0120-A	CORRECTION	256	WATER	8204993
C0120-B	CORRECTION	256	ICE	8204994
C0130	CORRECTION	256	LICHEN	8204995
C0140-A	CORRECTION	256	SEDIMENT	8204977
C0140-B	CORRECTION	256	WATER	8204978
C020	CORRECTION	256	WATER	8204979

DELTA WORK

STATION NOTE 1 NOTE 3	FJORD	JUL	SAMPLE NOTE 2	STICKER
C03D	CORNATION	256	ICE	8204980
C04D-A	CORNATION	256	WATER	8204981
C04D-B	CORNATION	256	WATER	8204982
C04D-C	CORNATION	256	SEDIMENT	8204983
C05D	CORNATION	256	WATER	8204984
C06D	CORNATION	256	WATER	8204985
C07D	CORNATION	256	WATER	8204986
C08D	CORNATION	256	WATER	8204987
C09D	CORNATION	256	SEDIMENT	8204988
T11D	TIERTLOUIS FJORD TAKEN OF THE STATION	260	SEDIMENT SAND WAS FROZEN.	8204920

DELTA WORK

STATION NOTE 1 NOTE 3	FLOOD	DATE	SAMPLE NOTE 2	STICKER
1130	TERRACING	260	WATER	B203494
SAMPLED FROM THE MOUTH OF THE MAIN CHANNEL. SALINITY 25 0/00.				
1130	TERRACING	260	WATER	B203495
SAMPLED AT WHALER HOODING, NORTH SIDE OF DELTA. SALINITY 25 0/00.				
1140	TERRACING	260	SEDIMENT	B203496
WIND BLOWN SEDIMENT COLLECTED DIRECTLY FROM THE AIR 4 IN ABOVE THE GROUND.				
1150	TERRACING	260	SEDIMENT	B203497
WIND BLOWN SAND COLLECTED OVER BEDROCK.				
1160	TERRACING	260	SEDIMENT	B203498
SHEET SAND, RED TO COARSE GRAINED - POSSIBLE LAB.				
1170	TERRACING	260	SEDIMENT	B203499
TAKEN ALONG BANK OF TRIBUTARY.				
1180	TERRACING	260	SEDIMENT	B204000
PERGAMATIC ROCK GIVEN TO KAY BY ELLIS (LICHEN).				
HC20	HOBFTH	261	SEDIMENT	B204313
SANDY GRAVEL				
HC20-A	HOBFTH	261	SEDIMENT	B204314
HC20-B	HOBFTH	261	SEDIMENT	B204314

DELTA WORK

STATION NOTE 1 NOTE 3	FLOOD	JUL	SAMPLE NOTE 2	STICKER
MC30	MCRETH	261	SEDIMENT	8204315
MC40-A	MCRETH	261	SEDIMENT	8204316
MC40-R	MCRETH	261	SEDIMENT	8204316
MC50	MCRETH	261	SEDIMENT	8204317
MC60	MCRETH	261	SEDIMENT	8204318
MC70	MCRETH	261	SEDIMENT	8204320
TI-D-10	TINGIN	259	SEDIMENT	8204912
TI-D-10	TINGIN	259	SEDIMENT	8204913
TI-D-10 SUBSAMPLES TO DON STROH FOR	TINGIN	259	WATER	8204911
			BACTERIA.	SALINITY 4 0/00.
TI-D-10 SUBSAMPLES TO STROH-BACTERIA	TINGIN	259	WATER	8204914
				SALINITY 25 0/00.

DELTA WORK

STATION FLOID	00	SAMPLE	STICKER
NOTE 1		NOTE 2	
NOTE 3			
11-D-2	TIDGID	259	SEDIMENT 8204915
11-D-3	TIDGID	259	WATER 8204916
	ONLY INCLUDEFORK FLOWERING DO		NE.
11-D-4	TIDGID	259	SEDIMENT 8204917
11-D-5	TIDGID	259	WATER 8204918
	SUBSAMPLIES FOR SIKOH FACTORY		A. SALINITY 15.0/100.
11-D-6	TIDGID	259	DESCRIFY 8204919
	GENERALLY A GRAVELLY BEACH W		TID BEAILED TIDAL CHANNELS, R
	AKS ETC.		

LAUNCH WORK

SCIENTIFIC LAUNCH: SUMMARY OF OPERATIONS

DURING THE CRUISE 82-031 ON C.S.S. HUDSON, LAUNCH WORK WAS CARRIED OUT NEAR THE DELTA AREA OF SEVERAL FIORDS. LAUNCH INSTRUMENTS INCLUDED A RITEN 402 SIDE-SCAN, A ROSS LABORATORIES 192 KHZ ACOUSTIC SOUNDER, A GULLINE FORTABLE CTD AND AN RIT 1000 SHALLOW SEISMIC SYSTEM. THE RIT 1000 DID NOT PERFORM SATISFACTORILY. THE REMAINING SYSTEMS OPERATED NORMALLY. CTD AND SIDE-SCAN DATA WERE RECORDED ON MAG TAPE. WATER SAMPLES WERE TAKEN AT SEVERAL LOCATIONS. POSITIONS WERE DETERMINED WHEN POSSIBLE BY RADAR OR SEXTANT.

FIORD	DAY	RECORDER	TAPE	FOOTAGE	LINE	FIXES	CTD	CTD	TIME	DEPTH	LATITUDE	LONGITUDE	STATION NOTES	
		TYPE	#		#		STATION	#	(GMT)	(M)				
CLARK	264	TEAC	7	265-528	1-2	1-13	CL15	25	2641618	31	0	0	ACOUSTIC PROFILING AND SIDE-SCAN INFORMATION COLLECTED.	
		RACAL	3	0-517	1-2	1-13	CL25	26	2641626	50	0	0		
		TEAC	8	000-180	3	14-26	CL35	27	2641639	76	0	0		
		RACAL	3	550-815	3	14-20	CL45	28	2641713	115	0	0		
			0					0	0	0	0			
			0					0	0	0	0			
			0					0	0	0	0			
			0					0	0	0	0			
CORNATION	256	TEAC	1		1	1-10	C015	1	2561340	60	0	0	ACOUSTIC PROFILING AND SIDE-SCAN INFORMATION COLLECTED.	
		RACAL	1		1	1-10	C025	2	2561353	72	0	0		
		TEAC	2		2	11-17	C035	3	2561412	94	0	0		
		RACAL	1		2	11-17	C045	4	2561600	30	0	0		
			1		3	18-21		0	0	0	0			
			0					0	0	0	0			
			0					0	0	0	0			
			0					0	0	0	0			
THUGSUTIN	263	TEAC	6	402-525	1	1-7	IN15	17	1127	32	0	0	ACOUSTIC PROFILING AND SIDE-SCAN INFORMATION COLLECTED.	
		RACAL	2	3225-3484	1	1-7	IN25	18	1137	57	0	0		
		TEAC	7	000-114	2	8-10	IN35	19	1148	101	0	0		
		TEAC	7	138-250	3	11-15	IN45A	20	1209	55	0	0		
			0				IN45B	21	1215	47	0	0	694550	
			0				IN55	22	1409	140	694630	694630	693300	
			0				IN65	23	1544	380	694630	694630	693300	
			0			IN75	24	1649	560	694880	693300			
			0				0	0	0	0	0			
VIERRILLUNG	260	TEAC	5	000-175	1	1-3	IT15	11	1211	30	0	0	ACOUSTIC PROFILING AND SIDE-SCAN INFORMATION COLLECTED.	
		RACAL	2	2190-2335	1	1-3	IT25	12	1223	55	0	0		
		TEAC	5	187-348	2	4-7	IT35	13	1240	106	0	0		
		RACAL	2	2370-2634	2	4-7		0	0	0	0	0	0	
		TEAC	5	368-494	3	8-11		0	0	0	0	0	0	
		RACAL	2	2940-3190	3	8-11		0	0	0	0	0	0	
			0				0	0	0	0	0			
			0				0	0	0	0	0			

SCIENTIFIC LAUNCH: SUMMARY OF OPERATIONS

DURING THE CRUISE BY 031 ON C.S.S. HURSON, LAUNCH WORK WAS CARRIED OUT NEAR THE ILLIA AREA OF SEVERAL TRACKS. LAUNCH INFORMATION INCLUDED A RIT 1000 SIDE-SCAN, A ROSS LABORATORIES 192 KHZ ACOUSTIC SOURCE, A GULLERIE PORTABLE CTD AND AN RIT 1000 SMOULOU SLISOC SYSTEM. THE RIT 1000 DID NOT PERFORM SATISFACTORILY. THE RECHARGING SYSTEMS OPERATED NORMALLY. CTD AND SIDE-SCAN DATA WERE RECORDED ON MAG TAPE. WATER SAMPLES WERE TAKEN AT SEVERAL LOCATIONS. POSITIONS WERE DETERMINED WHEN POSSIBLE BY LOGBOOK OR SIXTANT.

STATION HOURS

FLOOR DAY RECORDER TAPE FOOTAGE LINE FIXES CTD TIME DEPTH LATITUDE LONGITUDE

TYPE	DAY	RECORDER	TAPE	FOOTAGE	LINE	FIXES	CTD	STATION	TIME (ABT)	DEPTH (M)	LATITUDE (N)	LONGITUDE (W)	ACQUSTIC PROFILING AND SIDE-SCAN INFORMATION COLLECTED.
TEAC	257	3	0	0	1	1-10	5	MC15	1309	27	0	0	ACQUSTIC PROFILING AND SIDE-SCAN INFORMATION COLLECTED.
TEAC		3	0	0	2	11-20	6	MC25	1319	57	0	0	
TEAC		4	0	0	3	21-26	7	MC35	1334	91	0	0	
		0	0	0			0		0	0	0	0	
		0	0	0			0		0	0	0	0	
		0	0	0			0		0	0	0	0	
		0	0	0			0		0	0	0	0	
		0	0	0			0		0	0	0	0	

TEAC	261	6	000-128	1	1-10	MC15	14	MC15	1831	25	0	0	ACQUSTIC PROFILING AND SIDE-SCAN INFORMATION COLLECTED.
TEAC		6	143-384	2	11-20	MC25	15	MC25	1837	50	0	0	
		0	0				16	MC35	1853	105	0	0	
		0	0	0			0		0	0	0	0	
		0	0	0			0		0	0	0	0	
		0	0	0			0		0	0	0	0	
		0	0	0			0		0	0	0	0	
		0	0	0			0		0	0	0	0	

TEAC	259	4	376-442	1	1-3	1115	8	1115	1827	35	0	0	ACQUSTIC PROFILING AND SIDE-SCAN INFORMATION COLLECTED, SIDE-SCAN LINE WAS NOT TAPER.
RACAL		2	1465-1623	1	1-3	1125	9	1125	1840	52	0	0	
TEAC		4	452-558	2	4-11	1135	10	1135	1856	95	0	0	
RACAL		0	0				0		0	0	0	0	
TEAC		0	0				0		0	0	0	0	
RACAL		0	0				0		0	0	0	0	
TEAC		0	0				0		0	0	0	0	
RACAL		0	0				0		0	0	0	0	
TEAC		0	0				0		0	0	0	0	
RACAL		0	0				0		0	0	0	0	

