WHOI-76-61

DATA FILE

SEDIMENTS OF THE EAST ATLANTIC CONTINENTAL MARGIN

NORTHWEST AFRICA

Sample Collection and Analysis

Compiled and Edited By

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WOODS HOLE OCEANOGRAPHIC INSTITUTION
Woods Hole, Massachusetts 02543

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TECHNICAL REPORT

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Approved for Distribution John I. Ewing

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Department of Geology & Geophysics

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ABSTRACT

The petrology, provenance, and history of sediments from the continental shelf and upper continental slope of western Africa have been studied in some detail by scientists from the Woods Hole Oceanographic Institution as part of a long-term investigation of the marine geology of the Eastern Atlantic Continental Margin (funded by the National Science Foundation through the Office of the International Decade of Ocean Exploration in a grant to Dr. K.O. Emery- GX-28193). In this data file we present the analytical data and other information relating to all of the readily available samples (1178) of sediment from northwestern Africa (off the coasts of Morocco and what was recently called Spanish Sahara). These data have been described and interpreted in a recent article in the scientific literature (Summerhayes and others, 1976). The data file contains sample locations, shipboard descriptions, size data, sand fraction composition, clay mineral composition, carbonate assemblage, and carbonate, nitrogen, and carbon contents. The object of the data file is to make these data readily available to other research groups interested in African margin sediments.

INTRODUCTION

The purpose of this data file, which is modelled on that produced by Hathaway (1971) for the continental margin of the Atlantic coast of the United States, is to make available in printed form the basic data relating to samples collected as part of the Woods Hole Oceanographic Institution's program of study of the continental margin of West Africa. This program was funded by the National Science Foundation's Office of the International Decade of Ocean Exploration through a grant to Dr. K.O. Emery. One of the objectives of this work was to investigate the petrology, provenance, and history of surficial sediments on the west African margin. During the course of this sedimentological investigation, through cruises on research vessels of the Institution, and through cruises by other American and foreign scientists, the majority of samples obtained were from the continental shelves of Morocco and Spanish Sahara, in northwest Africa. A comprehensive study of sedimentation on the northwest African margin resulted (Summerhayes, Milliman, Briggs, Bee, and Hogan, 1976), and this data file makes available the sample information used for that study.

The background to this study has been described by Milliman (1972), and Summerhayes and others (1976). Milliman (1972) and Milliman and Summerhayes (1975) give descriptions of the analytical methods used to treat the samples. A substantial number of the analyses (mainly of phosphate and carbonate) come from the unpublished theses of students from Imperial College, London (Nutter,1969; Summerhayes, 1970; Bee, 1974) who were involved in studying the origin and distribution of phosphate in sediments from the continental margin of northwest Africa. This study was carried out through the Applied Geochemistry Research Group of Imperial College, under the direction of Dr. J.S. Tooms. It involved three extensive cruises to the area, two on R.R.S. JOHN MURRAY, and one on M.V. SURVEYOR, sponsored by the Natural Environmental Research Council of Great Britain. Other unpublished analyses of sediment size and carbonate content were provided by Dr. R.L. McMaster, of the University of Rhode Island, following a major cruise to the area by the R.V. TRIDENT. This data file presents all of the available data from these and other sources prior to June 1974.

ACKNOWLEDGEMENTS

We present the results of 1014 samples collected by Imperial College, 92 collected by University of Rhode Island, 43 collected by Woods Hole Oceanographic Institution, and 29 samples collected by the Institute of Oceanographic Sciences. Of the Imperial College samples 320 were analyzed in Woods Hole, together with all of the U.R.I. and W.H.O.I. samples. Visual descriptions of the I.O.S. samples were provided by R.H. Belderson, and some analytical data for these samples came from the thesis of Summerhayes (1970). For the provision of unpublished information relating to sample collection and analyses, we are indebted to Drs. J.S. Tooms, D.S. Cronan, and A.G. Bee, of Imperial College, Dr. R.L. McMaster of U.R.I., and R.H. Belderson of I.O.S.

For collection of samples during the Institution's program of study on the west African continental margin, we are indebted to Dr. Elazar Uchupi. Samples from other cruises by W.H.O.I. ships were provided by G. Rowe, R. Haedrich, and J. Ryther.

Those analyses carried out at Woods Hole, were performed by Lois Toner, Caroline Rodgers, Colleen Hogan, Jeffrey Ellis, Frances Forrestal, Gilpin Robinson and Catherine Offinger. Jack Hathaway of the United States Geological Survey kindly gave his advice on the interpretation of clay mineral diffractograms. The file was typed by Donna Allison, and Dorothy Meinert prepared the diagrams.

SECTION I

CRUISE INFORMATION

SECTION I

HEADING CODES

INSTITUTION CODE

IOS = Institute of Oceanographic Sciences, Surrey, England
IC = Imperial College, London, England
URI = University of Rhode Island, Kingston, R.I., U.S.A.
WHOI= Woods Hole Oceanographic Institution, Woods Hole, Mass., U.S.A.

AREA CODE

MCSS = Moroccan Continental Shelf and Slope
SSCSS= Spanish Saharan Continental Shelf and Slope
MACSS= Mauritanian Continental Shelf and Slope

BASIC PURPOSE CODE

G = Geological and Biological Sampling
S = Seismic Profiling

NOTE: Chief Scientist Listed is that of Pertinent Cruise Leg(s).

SECTION I

CRUISE	SHIP	INSTITUTION	AREA	DATES DA MO YR - DA MO YR	BASIC PURPOSE	CHIEF SCIENTIST
TR15	R.V. TRIDENT	URI	MCSS SSCSS	13 4 64 - 2 6 64	G,S	R. McMaster
DIS 21	R.R.S. DISCOVERY	IOS	SSCSS	14 1 68 - 10 2 68	G,S	P. David
IC 68	R.R.S. JOHN MURRAY	IC	SSCSS	1 2 68 - 13 2 68	G,S	J. Tooms
IC 69	R.R.S. JOHN MURRAY	IC	MCSS	6 1 69 - 6 2 69	G,S	J. Tooms
IC 70	M.V. SURVEYOR	IC	MCSS	26 10 70 - 16 11 70	G,S	C. Summerhayes
AII 59	R.V. ATLANTIS II	WHOI	SSCSS MCSS	9 6 70 - 17 12 70	G	J. Ryther
AII 75	R.V. ATLANTIS II	WHOI	MACSS SSCSS	20 1 73 - 9 7 73	G,S	E. Uchupi
AII 82	R.V. ATLANTIS II	WHOI	SSCSS	19 2 74 - 4 6 74	G,S	R. Haedrich

SECTION II

SAMPLE LIST; SHIP-LOGGED DATA

SECTION II SAMPLE LIST; SHIP-LOGGED DATA

The following sample list includes all ship-logged information for those sampling stations at which sediment was successfully recovered, and for which some descriptive or analytical data has ultimately become available. This section, as well as each of the following sections (III-VI), is divided into two parts;

A. All Moroccan samples, chronologically listed
By cruise

B. All Spanish Saharan samples, chronologically listed
By cruise

Note on Sample Numbers

A capital letter immediately following a station number indicates a subsample of the given station sample

Sampler Type Code

G = Shipek Grab
PD= Pipe Dredge
GC= Gravity Core
BD= Chain-bag dredge
BD/PD= Both together, pipe towed behind bag dredge
VC= Vibrocorer
WB= Water Bottle
VV= .04 m^2 Van Veen
VV1= .1 m^2 Van Veen
BC= Box Core
EUS= Ellis Underway Sampler

Note on Sampler Type

All TR15 samples were taken with either a Smith-McIntyre or a Peterson sampler.

NOTE ON SAMPLE DEPTH

CM or M = depth in corrected meters
UCF = depth, uncorrected fathoms
CF = depth, corrected fathoms

NOTE ON SAMPLE LOCATION MAPS

See Figure section, page 173.

A. MOROCCAN SHELF SAMPLES

TR 15

Sample No.	Latitude	Longitude	Corrected Depth Meters	Sample Description
68	27°55'N	13°03'W	26	Coarse sand and shell
69	27°56'N	13°07'W	50	Silt and fine sand
70	27°57'N	13°09.5'W	65	Medium to coarse sand
71	27°59'N	13°16.5'W	157	Shell fragments and sand
72	27°58'N	13°15'W	97	Shell fragments and sand
73	27°57.5'N	13°13'W	83	Shell fragments and sand
74	27°57'N	13°18'W	94	Shell fragments and sand
75	28°41'N	11°08.5'W	50	Medium to fine sand
76	28°44.5'N	11°11'W	66	Medium to fine sand
77	28°46'N	11°12'W	74	Medium to fine sand
78	29°06'N	11°26.5'W	160	Medium sand and shells
79	29°01'N	11°23.5'W	100	Shell fragments and sand
81	28°53'N	11°17'W	92	Shell fragments and sand
82	30°03'N	9°47'W	20	Fine brown sand
83	30°03.5'N	9°49.5'W	50	Silt and fine sand(brown)
84	30°03.5'N	9°51'W	75	Brown silt and clay
85	30°04'N	9°52.5'W	88	Brown silt and clay
86	30°04'N	9°58'W	99	Brown silt and clay
87	30°14'N	9°45.5'W	121	Brown mud
88	30°29'N	9°46'W	67	Brown mud
89	30°27'N	9°52.5'W	100	Brown sand

TR 15

Sample No.	Latitude	Longitude	Corrected Depth Meters	Sample Description
90	30°26'N	9°59.5'W	167	Brown sand
91	30°57.5'N	9°50'W	35	Medium-fine brown sand
92	30°57.5'N	9°52'W	50	Medium-fine brown sand
93	30°58'N	9°57'W	75	Brown mud
94	30°57.5'N	10°00.5'W	100	Brown mud
95	30°57'N	10°08.5'W	160	Brown-black medium sand
96	30°57'N	10°07'W	125	Mud
98	32°03'N	9°55'W	130	Brown mud
99	32°00'N	9°55'W	96	Green-brown medium sand
102	32°00'N	9°50.5'W	55	Rock
104	33°17'N	8°58'W	157	Fine brown sand
105	33°08'N	8°42'W	50	Sand and shell fragments
106	33°09'N	8°43'W	63	Fine brown sand
108	33°12'N	8°48.5'W	105	Brown mud
109	33°16'N	8°56'W	120	Tan medium to coarse sand
111	34°09.5'N	7°25'W	157	Brown mud
112	34°04.5'N	7°23'W	125	Brown mud
113	33°55'N	7°18'W	95	Brown mud
114	33°53'N	7°17.5'W	75	Brown mud and shell fragments
115	33°51'N	7°16.5'W	29	Algal rock
116	34°10'N	6°57'W	125	Brown mud

TR 15

Sample No.	Latitude	Longitude	Corrected Depth Meters	Sample Description
117	34°15'N	7°00'W	150	Gray sand
118	34°07'N	6°54'W	97	Brown mud
119	34°05'N	6°52'W	50	Brown mud
121	35°01.5'N	6°35'W	199	Brown mud
122	35°00.5'N	6°33'W	150	Brown-gray mud, shell fragments
123	34°59'N	6°30'W	124	Olive-gray mud
124	34°56'N	6°24'W	100	Olive-gray mud
125	34°54'N	6°21'W	43	Olive-tan sand
126	34°53'N	6°20'W	20	Medium-fine sand
127	35°18'N	6°18.5'W	100	Olive-gray mud
128	35°22'N	6°26'W	150	Olive-gray sand & mud
129	35°23'N	6°28'W	193	Olive-gray sand & mud
130	35°41'N	6°21.5'W	200	Tan sand and shell fragments
131	35°40.5'N	6°20'W	135	Tan sand and shell fragments
132	35°40'N	6°17'W	121	Tan sand and shell fragments
133	35°38.5'N	6°13'W	100	Tan sand and shell fragments
134	35°37.5'N	6°08'W	73	Tan sand and shell fragments
135	35°36'N	6°03'W	43	Tan sand and shell fragments

AII 59

Sample #	Latitude	Longitude	Depth (meters)	Sample Description
1747	28°05'N	13°13'W	183	None
1748	28°19'N	13°36'W	1300	None
1749	28°49'N	12°29'W	175	None
1750	29°20'N	11°04'W	165	None

AII 75

Sample No.	Sampler	Latitude	Longitude	Depth (m)	Sample Description
34	EUS	28°51'N	11°49'W	110	Fine to medium grained sand, light brown
35	EUS	29°43.2'N	10°16.5'W	128	Muddy sand, light olive gray

IC 68

Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
111	G	1/23/68	0001	0100	34°08.0'	07°35.5'	194	200	366	Mud
112	BD/PD	1/23/68	0130	0220	34°05.0' 34°04.5'	07°33.0' 07°33.6'	96 78	98 81	181 148	Large mud sample
113	G	1/23/68	0300	0328	34°00.7'	07°32'	70	72	132	Mud
114	G	1/23/68	0400	0433	33°57'	07°30.5'	63	65	119	Mud
115	G	1/23/68	0505	0530	33°52.3'	07°29.8'	60	62	113	Mud
116	G	1/23/68	0550	0620	33°50.2'	07°28'	48	50	92	Mud
117	G	1/23/68	0650	0718	33°46.2'	07°25.7'	34	35	64	Silty mud
118	G	1/23/68	0750	0805	33°43.4'	07°23'	18	19	31	Fine sand and coral
119	BD/PD	1/23/68	1618	1748	34°27' 34°26.8'	07°43' 07°42.9'	733 680	753 698	1370 1270	Mud in PD
120	BD/PD	1/23/68	1827	2026	34°16.5' 34°16.2'	07°42.5' 07°42.4'	745 668	765 686	1392 1249	Mud (sticky) in PD Cal. mudst. in BD
121	BD/PD	1/23/68	2148	2300	34°13' 34°12.5'	07°31.5' 07°31.3'	290 230	298 237	545 434	Mud in PD Coral in BD

IC 68

Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
125	BD/PD	1/24/68	2000	2132	33°20' 33°20'	09°32' 09°31.5'	730 664	750 682	1365 1241	Mud in both BD and PD
126	BD/PD	1/25/68	2319	0050	33°21.2' 33°21.0'	09°26.4' 09°25.8'	485 402	499 414	908 753	Mud in BD Coral in PD
127	BD/PD	1/25/68	0148	0252	33°17.5' 33°17.4'	09°17.2' 09°16.8'	382 380	393 391	255 712	Sticky mud
128	BC	1/25/68	0329	0437	33°16.5' 33°15.9'	09°09' 09°07'	187 152	193 157	353 287	2 out of 4 corers recovered
129	G	1/25/68	0445	0535	33°16.5'	09°09.5'	201	207	379	Brown fine sand
133	GC/G	1/25/68	0700	0848	33°15'	09°01.5'	88	91	167	Fine sand and shell in grab. 1/2 ft. core
134	G	1/25/68	0943	0955	33°15'	08°59.9'	73	76	139	Sand
135	G	1/25/68	1031	1040	33°13.5'	08°53'	60	62	113	Cobble and shells
137	G	1/25/68	1200	1205	33°12.4'	08°49.5'	61	63	115	Muddy sand
138	G	1/25/68	1220	1230	33°11.1'	08°46.3'	58	60	110	Mud and fine sand
139	BD/PD	1/25/68	1240	1317	33°10.5' 33°10'	08°44' 08°43.5'	40 41	41 42	75 77	Shells and phosphate pebbles

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Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
140	G	1/25/68	1400	1407	33°08.8'	08°39.3'	26	27	49	Muddy fine sand
141	G	1/25/68	1435	1440	33°08.3'	08°36.5'	10	10	18	Fine sand
143	GC/G	1/26/68	1205	1323	31°18'	10°48.6'	510	525	956	7' core. Grab empty
144	BD/PD	1/26/68	1435	1537	31°18.3' 31°18.3'	10°40.7' 10°40'	385 373	397 395	723 719	Mud in pipe. Rock dredge empty
149	G	1/27/68	0800	0910	31°22.8'	09°48.8'	7	7	13	Coral and sand
150	G	1/27/68	1000	1006	31°22.5'	09°57.5'	45	46	84	Mud
151	BD/PD	1/27/68	1050	1120	31°22.7' 31°22.9'	10°02.3' 10°01.8'	66 68	67 70	123 128	Limestone and black sand
153	G	1/27/68	1225	1245	31°21.3'	10°08.5'	70	72	132	Sand, mud and shells
154	BD/PD	1/27/68	1335	1415	31°20.8' 31°20.8'	10°17' 10°16.5'	218 180	225 186	412 340	Conglomeratic phosphorite and glauconitic sandy mud
155	BD/PD	1/27/68	1435	1528	31°19.5' 31°19.8'	10°19.7' 10°18.9'	254 230	261 237	478 434	Glauconitic mud and limestone

IC 68

Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
266	G	10/2/68	2228	2232	27°57.7'	12°56.5'	10	11	20	Fine sand
267	G	10/2/68	2248	2250	27°58.5'	12°57'	20	21	38	Sand and coral
268	G	10/2/68	2308	2311	27°59.5'	12°57.5'	22	23	42	Sand and coral
269	G	10/2/68	2324	2327	28°00.2'	12°57.7'	23	24	44	Sand and shell fragments
270	G	10/2/68	2342	2346	28°01.2'	12°58.3'	25	26	48	Sand and shell fragments
271	G	10/2/68	2358	2404	28°02'	12°59'	21	22	40	Sand and shell fragments
272	BD/PD	11/2/68	0028	0115	28°05'	13°00'	27	28	51	Sand in pipe
					28°05.5'	13°00.5'	31	32	59	
273	BD/PD	11/2/68	0140	0217	28°08.7'	13°02.5'	42	43	79	Sand in pipe
					28°09'	13°03'	42	43	79	Shelly limestone
274	G	11/2/68	0241	0246	28°11.5'	13°04.7'	48	49	90	Fine shell sand
275	G	11/2/68	0305	0313	28°14'	13°06.5'	54	56	103	Shell sand
276	G	11/2/68	0332	0339	28°16.5'	13°08'	56	58	106	Shell sand
277	BD/PD	11/2/68	0349	0450	28°17.5'	13°08.7'	180	185	339	Glob. sand, shells and
					28°17.1'	13°09.2'	150	155	284	limestone
278	GC	11/2/68	0525	0548	28°21.5'	13°11.5'	357	367	668	4 1/2 ft. gritty clay

IC 68

Station No.	Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
279	GC	11/2/68	0617	0635	28°24.5'	13°14'	456	469	854	4 1/2 ft. clay
280	BD/PD	11/2/68	0707	0850	28°27'	13°15.7'	535	550	1001	Soft mud
					28°26.5'	13°14.8'	486	500	910	
281	GC	11/2/68	0935	0947	28°29'	13°17.2'	563	579	1054	4 1/2 ft. core mud
282	GC	11/2/68	1040	1054	28°30.5'	13°17.5'	578	594	1081	5 ft. mud
283	BD/PD	11/2/68	1103	1225	28°31.5'	13°18'	583	600	1092	Sand in pipe
					28°31.1'	13°17.2'	570	586	1067	
284	BD/PD	11/2/68	1258	1428	28°34.5'	13°20.5'	656	674	1227	Mud in pipe
					28°35.2'	13°21.2'	518	533	970	
285	BD/PD	11/2/68	1450	1505	28°38'	13°23.7'	692	711	1294	Mud in pipe
					28°37'	13°24.2'	560	576	1048	

IC 69

Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	Depth Range CF	Depth Range CM	Comments
TRAVERSE 1										
802	GC	1/17/69	0308	0328	30°33.8'N	10°15.1'W	530		997	2'9" core. Greenish gray silt
803	GC	1/17/69	0500	0525	30°30.5'N	10°07.2'W	284		535	4'7 1/2" core. Brown mud at top, gray at bottom.
804	BD/PD	1/17/69	0585	0645	30°29'N	10°04.2'W	136 124		256 234	Fine muddy green sand in pipe
805	G	1/17/69	0720	0736	30°28'N	9°57'W	64		121	Glauconitic medium sand
806	G	1/17/68	0818	0848	30°28.4'N	9°52.0'W	48		90	Mud
TRAVERSE 2										
809	GC	1/18/69	0817	0827	31°03.7'N	10°27.8'W	312		586	5'4" core, brown mud
810	BD/PD	1/18/69	0925	1005	31°04.8'N	10°24'W	249		469	Brown mud
811	GC	1/18/69	1050	1105	31°04.0'N	10°19'W	212		399	3' gritty glauconitic mud
812	G	1/18/69	1136	1153	31°03.8'N	10°14'W	138		260	Coarse shelly glauconitic sand
813	BD/PD	1/18/69	1223	1256	31°06.0'N	10°13.9'W	124 116		234 219	Glauconitic sand, phosphorite?, coal and clinker
814	G	1/18/69	1348	1355	31°04'N	10°10'W	98		185	Medium sand
815	GC	1/18/69	1409	1419	31°04'N	10°07.7'W	76		143	2" brown glauconitic sand and shelly limestone bedrock
817	BD/PD	1/18/69	1449	1515	31°04'N	10°06.4'W	68		128	Glauconitic muddy sand and phosphorite?

Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	Depth Range CF	Depth Range CM	Comments
818	BD/PD	1/18/69	1530	1554	31°04.3'	10°05.2'	61		115	Green glauconitic mud, siltstone, sandstone, phosphorite?
819	G	1/18/69	1612	1652	31°04.2'	10°03.2'	46		87	Coarse shell sand and limestone
820	G	1/18/69	1658	1700	31°03.9'	10°02.2'	45		85	Brown muddy shell sand
821	BD/PD	1/18/69	1719	1807	31°03.6'	10°01'	52		98	Pebbly brown mud and limestone
822	G	1/18/69	1818	1836	31°04.2'	9°59.7'	52		98	Greenish brown sandy mud
823	BD/PD	1/18/69	1848	1946	31°04.2'	9°58.4'	48 44		90 83	Brown shelly mud and pebbles
824	BD/PD	1/18/69	1942	2019	31°04'	9°57.2'	48 40		90 75	Brown shelly mud
825	G	1/18/69	2040	2051	31°04.4'	9°55'	37		70	Sand
826	BD/PD	1/18/69	2106	2142	31°05!	9°53.2'	29		55	Brown muddy sand with large shells and siltstone pebbles
827	BD/PD	1/18/69	2215	2244	31°07.6'	9°56.3'	44		83	Brown sandy mud
TRAVERSE 3										
829	BD/PD	1/19/69	0918	0956	31°11.7'	9°57.3'	45		85	Muddy pebbly sand with limestone
830	BD/PD	1/19/69	1007	1036	31°11.75'	9°59.7'	52		98	Brown muddy shell sand with pebbles
831	BD/PD	1/19/75	1048	1124	31°11.5'	10°01.15'	57 55		107 104	Brown glauconitic muddy sand with siltstone

IC 69

Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
832	G	1/19/69	1132	1200	31°11.4'	10°02.7'	63		119	Glauconitic muddy sand
833	BD/PD	1/19/69	1230	1311	31°11.3'	10°04'	66		124	Green muddy sand and phosphorite?
834	BD/PD	1/19/69	1324	1359	31°11.2'	10°05.8'	66		124	Muddy glauconitic sand with flint mudstone
835	G	1/19/69	1410	1420	31°11.6'	10°06.9'	65		122	Glauconitic sand
836	BD/PD	1/19/69	1436	1505	31°11.5'	10°08.9'	70		132	Glauconitic black sand and siltstone
837	BD/PD	1/19/69	1525	1600	31°11.8'	10°10.4'	93		175	Shelly glauconitic sand and sandstone
838	G	1/19/69	1619	1645	31°11.5'	10°13.4'	140		264	Black glauconitic sand
839	GC	1/19/69	1658	1723	31°11.2'	10°15'	156		294	5 1/2 ft. glauconitic black and brown sand
840	G	1/19/69	1756	1826	31°11.3'	10°16.6'	162		305	Black sand
841	BD/PD	1/19/69	1848	1930	31°11.4'	10°18.7'	170		320	Muddy glauconitic sand
842	G	1/19/69	2000	2035	31°10.4'	10°23.1'	238		448	Muddy glauconitic sand
843	GC/WB	1/19/69	2108	2204	31°09.8'	10°27.8'	272		512	2'9" brown mud top and green sand bottom
TRAVERSE 4										
844	GC/WB	1/19/69	2241	2327	31°14.4'	10°29.8'	296		558	4'4" brown mud top and green sand bottom

Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	Range CM	Comments
846	G	1/20/69	1242	1306	31°15'	10°26.5'	253		447	Black sand
847	BD/PD	1/20/69	1322	1418	31°15.4'	10°24.6'	162		305	Phosphatic? conglomerate and coarse shell sand
848	BD/PD	1/20/69	1427	1510	31°15.7'	10°23.1'	150 136		283 256	Phosphatic? conglomerate and coarse shell sand
849	GC/WB	1/20/69	1533	1600	31°15.8'	10°19'	207		390	1'5" glauconitic sand
850	G	1/20/69	1639	1703	31°16.1'	10°16.5'	176		332	Black glauconitic sand
851	G	1/20/69	1735	1753	31°16.2'	10°14.3'	144		271	Black glauconitic sand
852	G	1/20/69	1804	1821	31°16.7'	10°12.2'	112		211	Black glauconitic sand
853	G	1/20/69	1832	1846	31°16.4'	10°09.7'	70		132	Coarse muddy sand
854	BD/PD	1/20/69	1858	1944	31°16.2'	10°06.8'	68		128	Pebbly black sand
855	BD/PD	1/20/69	2000	2020	31°16.6'	10°05.0'	64		121	Coarse muddy sand and limestone
856	BD/PD	1/20/69	2103	2144	31°16.6'	9°59.8'	59		111	Brown mud
857	BD/PD	1/20/69	2158	2219	31°16.8'	9°57.7'	52		98	Brown mud
TRAVERSE 5										
859	BD/PD	1/20/69	2345	0010	31°27'	9°59'	46		87	Brown mud and glauconite coated pebbles
860	G	1/21/69	0026	0032	31°26.9'	10°00.6'	51		96	Brown mud

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
861	G	1/21/69	0047	0105	31°26.7'	10°02.6'	63		119	Brown mud
862	BD/PD	1/21/69	0117	0132	31°26.5'	10°04.3'	70		132	Brown muddy sand
863	G	1/21/69	0144	0159	31°26.55'	10°05.8'	70		132	Black sand
864	G	1/21/69	0214	0224	31°26.4'	10°07.9'	73		138	Muddy glauconitic sand and pebbles
865	BD/PD	1/21/69	0326	0303	31°26.1'	10°09.7'	74		139	Medium sand, sandstone and phosphorite?
866	BD/PD	1/21/69	0312	0357	31°26.0'	10°11.5'	131 166		247 313	Medium shell sand
867	G	1/21/69	0400	0411	31°25.8'	10°15'	316		595	Glauconitic sand
868	GC/WB	1/21/69	0433	0540	31°25.6'	10°18.6'	103		1025	5'2 1/2" brown and green sandy mud
TRAVERSE 6										
869	G	1/21/69	1148	1200	31°32.8'	9°54.4'	39		73	Brown mud
870	G	1/21/69	1226	1231	31°32.7'	9°56.7'	44		83	Brown mud
871	BD/PD	1/21/69	1640	1714	31°32.3'	9°58.8'	40		75	Delayed due winch troubles. Coarse, shell sand and fine-grained limestone
872	BD/PD	1/21/69	1755	1820	31°32.1'	10°02.1'	62		117	Brown mud
873	BD/PD	1/21/69	1835	1850	31°32'	10°05'	70		132	Muddy black glauconitic sand

Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
874	G	1/21/69	1857	1915	31°31.5'	10°06.6'	70		132	Muddy black glauconitic sand
875	BD/PD	1/21/69	1929	1952	31°31.6'	10°09.2'	72		136	Muddy shelly sand with flint, sandstone and phosphorite?
876	BD/PD	1/21/69	2036	2120	31°31.5'	10°11'	72		136	Shell sand with mudstone
877	BD/PD	1/21/69	2126	2152	31°31'	10°12.3'	80 73		151 138	Shell sand with phosphorite?
878	G	1/21/69	2211	2225	31°30.4'	10°14.2'	302		569	Muddy glauconitic sand
879	GC	1/21/69	2251	2312	31°30.3'	10°18.6'	482		906	4'8" core. Brown mud top, green sand centre, gray mud bottom
TRAVERSE 5										
880	BD/PD	1/22/69	0013	0057	31°26'	10°25.1'	490		921	Siltstone and glauconitic sand
882	BD/PD	1/22/69	0220	0244	31°24.9'	10°24.0'	400		753	Mudstone and glauconitic sandy mud
883	BD/PD	1/22/69	0256	0334	31°25.3'	10°22'	472		888	Limestone, phosphorite? and glauconitic sandy mud
TRAVERSE 7										
885	G	1/22/69	1240	1253	31°52.2'	9°33!	10		19	Fine sand
886	G	1/22/69	1322	1327	31°51.8'	9°36.2'	17		32	Pebbles with muddy fine sand
887	G	1/22/69	1353	1402	31°51.6'	9°39.7'	20		38	Pebbly shell sand
888	G	1/22/69	1429	1437	31°51.5'	9°43.4'	20		38	Coarse shell sand

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
889	G	1/22/69	1502	1508	31°51.3'	9°46.9'	22		41	Coarse shell sand
890	BD/PD	1/22/69	1600	1615	31°51.0'	9°51.5'	39		73	Brown mud
891	BD/PD	1/22/69	1648	1704	31°51.3'	9°55.2'	52		98	Muddy glauconitic sand
892	BD/PD	1/22/69	1745	1808	31°51.6'	9°56.8'	56		105	Calcareous rocks and shells
893	BD/PD	1/22/69	1828	1850	31°52.2'	9°59.7'	74		139	Phosphorite? and glauconitic muddy sand
894	BD/PD	1/22/69	1908	1928	31°52'	10°01.6'	71		134	Sandstone and muddy shell sand
895	BD/PD	1/22/69	1938	1948	31°51.8'	10°02.7'	69		130	Muddy sand and rock
896	BD/PD	1/22/69	2018	2057	31°51'	10°07.5'	72		136	Siltstone and phosphorite? with muddy shell sand
897	G	1/22/69	2115	2123	31°51.5'	10°08.6'	160		301	Shelly sand
898	BD/PD	1/22/69	2145	2218	31°51.7'	10°10.2'	76		143	Conglomerate (phosphatic?) and shell sand
899	BD/PD	1/22/69	2310	2335	31°51.3'	10°15.2'	168		316	Conglomerate (phosphatic?) and silt
TRAVERSE 8										
901	G	1/23/69	1020	1130	32°18.8'	9°15.8'	12		23	Shell sand
902	G	1/23/69	1200	1208	32°18.1'	9°19.9'	21		40	Shell sand
903	BD/PD	1/23/69	1219	1240	32°17.9'	9°22.2'	22		41	Shelly limestone and siltstone with shell sand

Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
904	BD/PD	1/23/69	1256	1316	32°17.2'	9°24.6'	22		41	Shelly limestone and siltstone with shell sand
905	G	1/23/69	1331	1338	32°17'	9°26.9'	24		45	Shell sand
906	BD/PD	1/23/69	1359	1415	32°16.8'	9°28.3'	26		49	Sandstone, limestone, flint and shell sand
907	BD/PD	1/23/69	1435	1500	32°16'	9°31.9'	32		60	Siltstone and shell sand
908	BD/PD	1/23/69	1516	1536	32°15.7'	9°33.4'	28		53	Mudstone and shell sand
909	BD/PD	1/23/69	1545	1607	32°15.3'	9°35.1'	28		53	Shelly sandstone and shell sand
910	BD/PD	1/23/69	1620	1638	32°15'	9°37.8'	24		45	Algal crust and sandstone
911	BD/PD	1/23/69	1643	1703	32°14.6'	9°38.6'	31		58	Sandstone and shell sand
912	G	1/23/69	1745	1752	32°14.4'	9°42.5'	48		90	Fine brown sand
913	G	1/23/69	1810	1818	32°13.9'	9°44.8'	60		113	Muddy fine sand
914	BD/PD	1/23/69	1852	1913	32°13.7'	9°46.7'	66		124	Mudstones, sandstone and shell sand
915	BD/PD	1/23/69	1928	1948	32°13.2'	9°50.2'	130		245	Siltstone, phosphorite? and mud
916	BD/PD	1/23/69	2015	2046	32°12.3'	9°49.6'	70		132	Mudstone and limestone
918	GC/WB	1/23/69	2229	2400	32°11.8'	9°56.2'	840		1579	9" core - brown mud

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Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	Depth Range CF	Depth Range CM	Comments
TRAVERSE 9										
921	G	1/24/69	1030	1050	32°30.2'	9°44.6'	448		843	2'10" core, brown silty mud (core catcher reversed)
922	BD/PD	1/24/69	1110	1141	32°30.5'	9°41.4'	80 87		151 164	Sandstone and glauconitic muddy sand
923	BD/PD	1/24/69	1209	1235	32°31.4'	9°40.7'	32		151	Phosphatic? conglomerate and shelly sand
924	BD/PD	1/24/69	1255	1323	32°30.8'	9°37.8'	64		121	Siltstone, limestone and shell sand
925	G	1/24/69	1335	1339	32°30.7'	9°36!	46		87	Shelly sand
926	G	1/24/69	1355	1405	32°30.7'	9°34.1'	52		98	Shelly muddy sand
927	G	1/24/69	1420	1424	32°30.7'	9°32.6'	50		94	Brown glauconitic sand
928	BD/PD	1/24/69	1443	1513	32°30.7'	9°31.2'	46		87	Medium sand
929	G	1/24/69	1527	1530	32°30.7'	9°28.9'	34		64	Coarse shell sand
930	BD/PD	1/24/69	1541	1600	32°30.6'	9°28.4'	38		72	Sandstone, algal crusts and shelly sand
931	BD/PD	1/24/68	1628	1640	32°30.7'	9°27'	34 38		64 72	Sandy limestone and mudstone and shell sand
932	BD/PD	1/24/69	1716	1745	32°30.6'	9°25.2'	26		49	Limestone, algal crusts and shell sand
933	BD/PD	1/24/69	1757	1810	32°30.8'	9°24.1'	34		64	Fractured argil. limestone, mudstone and shell sand

Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
934	BD/PD	1/24/69	1830	1848	32°30.9'	9°22.6'	33		62	Shell sand
935	G	1/24/69	1906	1920	32°30.5'	9°21'	29		55	Shell sand
936	G	1/24/69	1931	1936	32°30.6'	9°19.2'	25		47	Silty sand
937	G	1/24/69	1947	1954	32°30.6'	9°17.3'	18		34	Shell sand
TRAVERSE 10										
939	GC	1/25/69	0446	0515	32°53'	9°35'	804		1511	5'10" core brown mud top, gray mud bottom
940	BD/PD	1/25/69	0538	0635	32°52.4'	9°32.1'	642		1207	Brown mud
941	GC	1/25/69	0648	0704	32°51.8'	9°30.4'	218		411	6'4" sandy mud top, greenish mud bottom
942	BD/PD	1/25/69	0721	0743	32°51.3'	9°28.5'	77		145	Siltstone and shell sand
943	G	1/25/69	0755	0802	32°51'	9°21.8'	72		136	Muddy shell sand
944	G	1/25/69	0826	0834	32°50.8'	9°25.4'	62		113	Shell sand
945	G	1/25/69	0852	0857	32°50.5'	9°23.6'	57		107	Shell sand
947	G	1/25/69	0955	1005	32°49.6'	9°20.4'	50		94	Shell sand and coral
948	BD/PD	1/25/69	1026	1045	32°49'	9°18.3'	55		104	Calc. mudstone and shell sand
949	BD/PD	1/25/69	1102	1124	32°48.3'	9°15.9'	54		102	Limestone and shell sand
950	BD/PD	1/25/69	1138	1153	32°47.2'	9°15'	51		96	Shell sand and phosphorite?

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tation No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
951	G	1/25/69	1248	1255	32°47.6'	9°13'	51		96	Fine brown muddy sand
952	BD/PD	1/25/69	1320	1333	32°46.5'	9°10.8'	48		90	Argil. limestone and silty mud
953	G	1/25/69	1353	1402	32°46'	9°08.7'	44		83	Shell sand
954	BD/PD	1/25/69	1420	1444	32°45.4'	9°06.4'	34		64	Shell sand and conglomerate
956	BD/PD	1/26/69	0257	0324	33°07.9'	9°19.3'	208		392	Fine sandy mud
TRAVERSE 11										
957	GC	1/26/69	0341	0352	33°07.3'	9°16.7'	122		230	2' muddy sand - brown top then green
958	BD/PD	1/26/69	0418	0440	33°06.4'	9°13.8'	76		143	Impure limestone and shell sand
959	BD/PD	1/26/69	0505	0520	33°05.8'	9°09.8'	67		126	Limestone and phosphorite? with shell sand
960	BD/PD	1/26/69	0559	0625	33°05'	9°06.7'	56		105	Algal encrusted mudstone - shell sand
961	BD/PD	1/26/69	0645	0720	33°04.5'	9°04.3'	59		111	Algal encrusted limestone and phosphorite? with shell sand
962	G	1/26/69	0734	0747	33°04.2'	9°02.9'	58		109	Pebbly shell sand
963	BD/PD	1/26/69	0800	0816	33°03.7'	9°01.4'	61		115	Limestone and phosphorite? and shell sand
964	BD/PD	1/26/69	0920	0940	33°03.7'	9°01'	61		115	(Power failure on gallows) Limestone and phosphorite? with shell sand

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
965	BD/PD	1/26/69	1313	1327	33°03.2'	8°58.5'	52		98	Sandy siltsone and muddy sand
966	BD/PD	1/26/69	1351	1408	33°02.6'	8°56.8'	48		90	Calc. mudstone and phosphorite? pebble with shell sand
967	G	1/26/69	1418	1426	33°02.2'	8°55.2'	54		102	Shell sand
968	BD/PD	1/26/69	1440	1453	33°02.1'	8°54.7'	52		98	Brown silty mud
969	G	1/26/69	1506	1514	33°01.7'	8°52.6'	42		79	Brown sticky mud
970	BD/PD	1/26/69	1524	1539	33°01.5'	8°52'	34		64	Muddy shell sand
971	G	1/26/69	1549	1555	33°01.2'	8°50.7'	26		49	Shell sand
972	BD/PD	1/26/69	1605	1614	33°01.1'	8°50'	21		40	Shell sand and algal crusts
973	G	1/26/69	1628	1635	33°00.4'	8°47.7'	16		30	Phosphorite? and limestone pebbles with shell sand
TRAVERSE 12										
974	BD/PD	1/26/69	1730	1745	33°04'	8°47.9'	25		47	Algal encrusted shelly limestone and shell sand
975	G	1/26/69	1758	1809	33°04.5'	8°49.2'	30		57	Shell sand
976	BD/PD	1/26/69	1822	1840	33°04.7'	8°50.8'	45		85	Mud and shell sand and mudstone and sandstone
977	BD/PD	1/26/69	1858	1914	33°04.6'	8°52.7'	50		94	Sandy mud
978	BD/PD	1/26/69	1938	1948	33°05.4'	8°54.5'	47		89	Mudstone and argil. limestone with shell debris

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Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	Depth Range CF	Depth Range CM	Comments
979	BD/PD	1/26/69	2005	2021	33°05.6'	8°56.7'	51		94	Argillite and sand
980	BD/PD	1/26/69	2033	2055	33°06'	8°57.6'	60		113	Argillite, shelly argillite, brown muddy shelly sand
981	BD/PD	1/26/69	2119	2137	33°06.3'	8°59'	62		117	Sandy brown mud
982	BD/PD	1/26/69	2153	2214	33°06.4'	9°00.1'	58		109	Sandy brown mud with phosphorite? and limestone
TRAVERSE 13										
984	G	1/27/69	0430	0434	33°06.2'	8°42.4'	14		26	Algal crusts only
985	BD/PD	1/27/69	0454	0509	33°06.3'	8°43.6'	20		38	Fractured sandstone and shell sand
986	G	1/27/69	0528	0644	33°06.8'	8°46'	36		68	Coarse shell sand
987	BD/PD	1/27/69	0723	0731	33°07'	8°47.9'	37		70	Mudstone and sandstone and coarse shell sand
988	BD/PD	1/27/69	0742	0802	33°07.2'	8°48.7'	48		90	Mudstone, limestone, phosphorite? shelly sandy mud
989	BD/PD	1/27/69	0836	0850	33°07.6'	8°49.5'	50		94	Limestone slab and mud
991	G	1/27/69	1000	1010	33°07.9'	8°53'	60		113	Brown sandy mud
992	G	1/27/69	1020	1026	33°08.4'	8°54.3'	61		115	Shell sand
993	G	1/27/69	1041	1045	33°08.5'	8°56'	62		117	Shell sand
995	BD	1/27/69	1153	1210	33°09.5'	8°59.6'	63		119	Algal encrustations

Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
996	BD	1/27/69	1231	1248	33°09.3'	9°02'	60		113	Mudstone (fresh fractured) and algal crust
997	BD	1/27/69	1300	1326	33°10'	9°03'	64		121	Phosphorite? pebble
998	G	1/27/69	1339	1345	33°10.3'	9°05'	68		128	Fine brown silty sand
999	BD/PD	1/27/69	1358	1416	33°10.9'	9°07.2'	68		128	Shell sand
TRAVERSE 12										
1000	G	1/27/69	1441	1500	33°08.2'	9°10.3'	68		128	Fine silty sand
1001	BD/PD	1/27/69	1518	1542	33°07.8'	9°08.5'	68		128	Sandstone pebbles; lost pipe
1002	G	1/27/69	1554	1600	33°07.7'	9°07.5'	68		128	Coarse shelly sand
1003	BD/PD/G	1/27/69	1621	1648	33°07.3'	9°06.2'	63		119	Coarse shelly sand
1004	BD/PD	1/27/69	1708	1726	33°07.1'	9°04.4'	63		119	(Rock dredge broken) Conglomeratic phosphorite? limestone, mudstone
1005	G	1/27/69	1752	1759	33°07'	9°03.4'	61		115	Shelly sand
1006	G	1/27/69	1808	1815	33°06.8'	9°01.8'	61		115	Fine shelly sand and phosphorite? pebbles
1007	G	1/27/69	1833	1843	33°03.2'	9°00.5'	60		113	Shelly sand
TRAVERSE 14										
1013	G	2/1/69	1552	1616	33°11.2'	8°39.7'	21		40	Fine sand
1014	BD/PD	2/1/69	1643	1658	33°11.7'	8°42.1'	39		73	Limestone

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
1015	BD/PD	2/1/69	1730	1743	33°11.6'	8°41.7'	42		79	Calcareous mudstone
1016	BD/PD	2/1/69	1812	1824	33°12.1'	8°44.3'	46		87	Phosphorite? limestone and mud
1017	BD/PD	2/1/69	1846	1901	33°12.7'	8°45.7'	48		90	Argillaceous limestone
1018	G	2/1/69	1910	1928	33°12.8'	8°47.0'	54		102	Sandy mud
1019	G	2/1/69	1942	1949	33°13.2'	8°48.2'	56		105	Silty mud
1020	BD/PD	2/1/69	2018	2037	33°13.5'	8°49.7'	58		109	Sandy mud
1021	G	2/1/69	2050	2100	33°13.8'	8°50.6'	58		109	Mud and algal crusts
1022	BD/PD	2/1/69	2112	2132	33°14.1'	8°52'	58		110	Siltstone and mud
1023	G/WB	2/1/69	2140	2207	33°14.3'	8°52.9'	60		113	Fine sand
1024	BD/PD	2/1/69	2221	2259	33°14.6'	8°54.6'	62		117	Algal crust only
1025	BD/PD	2/1/69	2308	2325	33°15'	8°55.2'	62		117	Algal crust only
1026	G	2/1/69	2339	2355	33°15'	8°56.5'	62		117	Shelly sand
1027	G	2/2/69	0005	0036	33°15.5'	8°57.4'	62		117	Shelly sand
1028	BD/PD	2/2/69	0052	0112	33°15.6'	8°59.8'	70		132	Sandstone and coarse sand
TRAVERSE 15										
1029	GC	2/2/69	0156	0226	33°19.1'	8°56.5'	80		151	1'1" core black and brown sand
1030	G	2/2/69	0245	0300	33°19.6'	8°54.6'	77		145	Sand

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Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	Depth Range CF	Depth Range CM	Comments
1031	BD/PD	2/2/69	0314	0336	33°19'	8°52.8'	69		130	Sand and sandstone pebble
1032	G	2/2/69	0350	0405	33°19'	8°52.1'	66		124	Shelly sand
1033	BD/PD	2/2/69	0423	0442	33°18.7'	8°50.3'	62		117	Shell sand and limestone
1034	G	2/2/69	0454	0501	33°18.2'	8°49.2'	64		121	Muddy shell sand
1035	BD/PD	2/2/69	0510	0525	33°18.1'	8°48'	60		113	Muddy shell sand with phosphorite? and limestone
1036	BD/PD	2/2/69	0543	0558	33°17.6'	8°46.7'	52		98	Shell sand
1037	BD/PD	2/2/69	0624	0640	33°17.3'	8°45.4'	58		109	Shell sand and phosphorite?
1038	BD/Pd	2/2/69	0703	0720	33°16.8'	8°43.5'	54		102	Shell sand and limestone
1039	G	2/2/69	0730	0736	33°16.6'	8°42.3'	50		94	Mud
1040	BD/PD	2/2/69	0752	0802	33°15.9'	8°40.5'	44		83	Brown mud and shelly limestone
1041	BD/PD	2/2/69	0820	0905	33°15.7'	8°39.5'	35		66	Shelly mud
1042	G	2/2/69	0925	0931	33°15.1'	8°36.3'	20		38	Shell
TRAVERSE 17										
1044	BD/PD	2/2/69	1240	1259	33°27.1'	8°17.1'	16		30	Algal crust only
1045	G	2/2/69	1314	1322	33°27.9'	8°17.6'	19		36	Shell
1046	BD/PD/G	2/2/69	1336	1359	33°28.9'	8°18.4'	25		47	Silty mud

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
1047	BD/PD	2/2/69	1411	1428	33°29.4'	8°19.4'	26		49	Silt
1048	G	2/2/69	1453	1558	33°31.2'	8°20.5'	30		57	Silt
1049	GC/WB	2/2/69	1512	1540	33°32.2'	8°21.6'	36		68	3'4" core silt
1050	G	2/2/69	1600	1607	33°33.6'	8°22.6'	46		87	Silt
1051	G	2/2/69	1619	1628	33°34.4'	8°23.5'	52		98	Mud
1052	G	2/2/69	1643	1653	33°35.8'	8°24.3'	58		109	7'2" brown mud top, silt bottom
1053	G	2/2/69	1706	1711	33°36.8'	8°25.4'	64		121	Mud
1054	G	2/2/69	1734	1747	33°38'	8°26.5'	70		132	Mud
1055	GC	2/2/69	1758	1808	33°39.1'	8°27.4'	63		138	Sandy limestone blocked barrel
1056	BD/PD	2/2/69	1826	1846	33°40.8'	8°28.4'	81		153	Phosphatic? limestone and shell sand
1057	G	2/2/69	1900	1917	33°41.7'	8°29.2'	86		162	Shell sand
1058	BD/PD	2/2/69	1930	1957	33°42.7'	8°30'	100		188	Shell sand
1059	G	2/2/69	2027	2036	33°44.9'	8°31.1'	140		264	Shell sand
1061	GC	2/2/69	2144	2158	33°47.4'	8°33.9'	278		525	2'9" brown mud
1062	GC/WB	2/2/69	2219	2325	33°48.9'	8°35.1'	346		652	4'0" brown mud

Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	Range CM	Comments
TRAVERSE 18										
1063	G	2/3/69	0423	0430	33°40'	7°42.7'	26		49	Fine sand
1064	BD/PD	2/3/69	0458	0517	33°41.2'	7°44.2'	34		64	Sticky mud and shelly sand
1065	G	2/3/69	0530	0538	33°42.8'	7°45.8'	42		79	Mud
1066	G	2/3/69	0557	0604	33°44.8'	7°47.1'	51		96	Mud
1067	G	2/3/69	0614	0622	33°46.1'	7°47.8'	55		104	Mud
1068	G	2/3/69	0640	0645	33°47.9'	7°49.4'	61		115	Mud
1069	G	2/3/69	0712	0718	33°50.9'	7°51.8'	65		122	Mud
1070	BD/PD	2/3/69	0640	0800	33°53.2'	7°53.8'	70		132	Mud and limestone
1071	G	2/3/69	0836	0847	33°54.8'	7°54.8'	73		138	Muddy sand
1072	BD/PD	2/3/69	0907	0924	33°56.7'	7°55.8'	80		151	Muddy sand
1073	BD/PD	2/3/69	0935	0958	33°58'	7°56.6'	84		158	Muddy sand
1075	GC	2/3/69	1103	1116	33°59.2'	7°59.3'	134		247	6" core sandy mud
1077	GC	2/3/69	1223	1245	34°02.7'	8°02.5'	250		471	11" core sandy mud
1078	BD/PD	2/3/69	1310	1336	34°04.8'	8°03.6'	303		571	Brown mud
TRAVERSE 19										
1079	G	2/3/69	1955	1958	33°53.3'	7°06.1'	20		38	Fine sand
1080	BD/PD	2/3/69	2030	2046	33°55.1'	7°05.5'	28		53	Fine sand

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Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	Range CM	Comments
1081	G	2/3/69	2053	2108	33°56.5'	7°05'	40		75	Mud
1082	GC	2/3/69	2120	2138	33°57.7'	7°06.5'	45		85	Mud (6'11" core)
1083	G	2/3/69	2149	2157	33°59.5'	7°07.6'	55		104	Mud
1084	BD/PD	2/3/69	2215	2245	34°01.2'	7°07.5'	58		109	Mud
1085	G	2/3/69	2307	2313	34°03.2'	7°09.5'	64		121	Mud
1086	G	2/3/69	2332	2336	34°06.0'	7°10.3'	70		132	Mud
1087	G	2/3/69	2351	2357	34°06.8'	7°11'	68		128	Mud
1088	G	2/4/69	0010	0025	34°08.6'	7°11'	76		143	Mud
1089	GC	2/4/69	0038	0051	34°10'	7°11.7'	76		143	Mud (1'8" core)
1090	BD/PD/G	2/4/69	0114	0145	34°12.8'	7°12.3'	126		237	Fine sand

Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	Range CM	Comments
TRAVERSE 1										
1201	G	10/30/70	0910	0926	33°30.9'	07°54.6'	6 1/2	9	17	(1) Coral, rock, shell (2) Fine brown sand
1202	G	10/30/70	0932	0942	33°31.4'	07°55.0'	12 1/2	15	28	Shell-sand conglomerate
1203	G	10/30/70	0945	0952	33°32.2'	07°55.5'	17	20	36	Fine brown sand
1204	G	10/30/70	0954	0957	33°32.6'	07°56.1'	17	20	36	Fine brown sand
1205	G	10/30/70	1003	1012	33°33.4'	07°56.65'	18	21	38	Fine brown sand
1206	G	10/30/70	1018	1023	33°34.1'	07°57.3'	21	24	43	Fine brown sand
1207	G	10/30/70	1030	1045	33°35.0'	07°57.8'	24	27	51	Sand and rock fragments
1208	G	10/30/70	1055	1100	33°36'	07°58.8'	33 1/2	37	70	Shelly gravel
1209	G	10/30/70	1107	1113	33°36.9'	07°59.6'	36	39	72	Shelly gravel
1210	G	10/30/70	1123	1145	33°37.9'	08°0.45'	44	47	87	Top 6" = light sandy silt lower = dark sandy silt
TRAVERSE 2										
1211	GC	10/30/70	1214	1256	33°37.8'	08°07.0'	41	44	81	4' brown mud
1212	G	10/30/70	1310	1316	33°36'	08°04.8'	41	44	81	Dark brown mud
1213	G	10/30/70	1325	1337	33°35.35'	08°04.0'	36	39	72	Shell gravel overlying muddy gravel
1214	G	10/30/70	1345	1349	33°34.4'	08°03.2'	31	34	62	Mud and shell
1215	G	10/30/70	1355	1406	33°33.6'	08°02.8'	29	32	58	Mud and shell

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Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
1216	G	10/30/70	1415	1422	33°32.6'	08°01.8'	20	23	41	Algal mat
1217	G	10/30/70	1424	1432	33°31.95'	08°01.0'	19	22	40	Mud over shell
1218	G	10/30/70	1437	1443	33°31.55'	08°00.8'	17	20	36	Brown sand
1219	G	10/30/70	1447	1450	33°30.9'	08°00.6'	16	19	34	Brown sand
1220	G	10/30/70	1458	1501	33°30.0'	07°59.9'	12	14	26	Brown sand
TRAVERSE 3										
1221	G	10/30/70	1530	1535	33°28.25'	08°04.3'	9 1/2	11	23	Algal crust
1222	G	10/30/70	1541	1547	33°28.85'	08°04.6'	12	14	26	Algal crust
1223	G	10/30/70	1551	1605	33°29.4'	08°05.1'	13	15	28	Algal crust
1224	BD/PD	10/30/70	1608	1610	33°29.6'	08°05.5'	13	15	28	Algal crust and pebbles in PD
1227	G	10/30/70	1649	1652	33°31.45'	08°07.4'	26	29	53	Muddy sand
1229	G	10/30/70	1720	1723	33°33.2'	08°08.8'	32	35	64	Muddy sand
1230	G	10/30/70	1733	1738	33°34.1'	08°09.75'	38	41	75	Muddy sand
TRAVERSE 4										
1231	GC	10/30/70	1800	1815	33°34.1'	08°14.8'	40	43	79	4' silt core
1232	G	10/30/70	1825	1834	33°33.4'	08°14.0'	34	37	68	Brown silt
1233	G	10/30/70	1843	1848	33°32.6'	08°13.4'	30	33	60	Brown silt

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Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	Range CM	Comments
1234	G	10/30/70	1858	1903	33°32.0'	08°12.6'	28	31	57	Brown silt
1235	G	10/30/70	1914	1918	33°31.2'	08°12.2'	26	29	53	Rock (limestone)
1236	G	10/30/70	1928	1941	33°30.3'	08°11.65'	23	26	47	Rock (limestone)
1237	G	10/30/70	1951	2002	33°29.6'	08°11.1'	17	20	36	Few rock grains and algal crust
1238	G	10/30/70	2010	2020	33°28.8'	08°10.45'	14	16	30	Algal crust
1239	G	10/30/70	2026	2033	33°28.3'	08°10.0'				Algal crust
1241	G	10/30/70	2055		33°27.2'	08°09.3'	9	11	21	No sample
	PD	10/30/70		2118			9	11	21	Algal crust
1242	G	10/30/70	2129	2133	33°26.8'	08°08.75'	8	10	19	Algal crust
TRAVERSE 5										
1243	G	10/30/70	2157	2200	33°25.5'	08°13.6'	11	13	24	Algal crust
1244	G	10/30/70	2206	2213	33°25.95'	08°14.1'	12	14	26	Algal crust
1247	G	10/30/70	2248	2251	33°27.9'	08°15.45'	21	24	43	Brown mud
1248	G	10/30/70	2258	2302	33°28.7'	08°16.0'	24	27	49	Brown mud
1249	G	10/30/70	2310	2314	33°29.5'	08°16.75'	26	29	53	Brown mud
1250	G	10/30/70	2321	2324	33°30.2'	08°17.4'	27	30	55	Brown mud
1251	G	10/30/70	2332	2335	33°31.2'	08°18.2'	29	32	58	Brown mud
1252	G	10/30/70	2343	2347	33°32.0'	08°18.8'	31	34	62	Brown mud

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
TRAVERSE 6										
1253	G	10/30/70	2359	0003	33°31.6'	08°21.6'	33	36	66	Brown mud
1254	G	10/31/70	0010	0016	33°30.9'	08°20.8'	31	34	62	Brown mud
1255	G	10/31/70	0024	0029	33°29.9'	08°20.0'	29	32	58	Brown mud
1256	G	10/31/70	0037	0040	33.28.8'	08°14.4'	27	30	55	Brown mud
1257	G	10/31/70	0049	0053	33°28.2'	08°18.3'	26	29	53	Brown mud
1258	G	10/31/70	0101	0110	33°27.2'	08°17.2'	19	22	40	Muddy shelly sand.
1259	G	10/31/70	0116	0119	33°26.5'	08°17.0'	13	15	28	Algal crust
1261	G	10/31/70	0137	0139	33°25'	08°15.9'	11	13	24	Algal crust
1263	G	10/31/70	0152	0157	33'24.1'	08°15.25'	8	10	19	Algal crust
TRAVERSE 7										
1268	G	10/31/70	0252	0254	33°25.8'	08°19.9'	14	16	30	Algal crust
1270	G	10/31/70	0318	0321	33°27.45'	08°21.4'	23	26	47	Muddy sand
1271	G	10/31/70	0330	0332	33°28.5'	08°22'	26	29	53	Muddy sand
1272	G	10/31/70	0345	0348	33°29.1'	08°23'	28	31	57	Muddy silt
1273	G	10/31/70	0357	0400	33°29.9'	08°23.6'	31	34	62	Muddy silt

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Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
TRAVERSE 8										
1274	G	10/31/70	0414	0418	33°30.4'	08°27'	39	42	77	Muddy silt
1275	G	10/31/70	0428	0431	33°29.6'	08°26.1'	32	35	64	Muddy silt
1276	G	10/31/70	0440	0444	33°28.8'	08°25.6'	27	30	55	Sandy silt
1277	G	10/31/70	0452	0455	33°27.85'	08°24.8'	25	28	51	Fine sand
1278	G	10/31/70	0504	0507	33°27.0'	08°24.1'	23	26	47	Fine sand
1279	G	10/31/70	0515	0521	33°26.3'	08°23.3'	21	24	43	Algal crust
1280	G	10/31/70	0530	0535	33°25.4'	08°22.6'	15	18	32	Algal crust
1281	G	10/31/70	0543	0546	33°24.6'	08°21.9'	11	13	24	Algal crust
1282	G	10/31/70	0555	0600	33°24.2'	08°21.3'	9	11	21	Algal crust
TRAVERSE 9										
1283	G	10/31/70	0623	0625	33°20.45'	08°21.25'	8	10	19	Sandy silt
1284	G	10/31/70	0631	0633	33°20.9'	08°21.6'	8 1/2	11	21	Silt
1285	G	10/31/70	0639	0648	33°21.25'	08°22.1'	9 1/2	12	26	Algal crust
1286	G	10/31/70	0654	0656	33°21.95'	08°22.6'	7	9	17	Algal crust
1287	G	10/31/70	0703	0705	33°22.5'	08°23.25'	9	11	21	Algal crust
1288	G	10/31/70	0714	0716	33°23.4'	08°23.8'	9 1/2	12	26	Algal crust
1289	G	10/31/70	0723	0730	33°24.2'	08°24.5'	15 1/2	20	34	Algal crust

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
1290	G	10/31/70	0737	0742	33°25.0'	08°25.2'	22	25	45	Fine brown sand
1291	G	10/31/70	0750	0753	33°25.95'	08°25.8'	23	26	47	Fine brown sand
1292	G	10/31/70	0800	0803	33°26.7'	08°26.6'	24	27	49	Fine brown silt
1293	G	10/31/70	0811	0814	33°27.5'	08°27.3'	19	22	40	Fine brown sand
1294	G	10/31/70	0824	0826	33°28.4'	08°28.0'	25	28	51	Fine brown sand
TRAVERSE 10										
1295	G	10/31/70	0840	0842	33°27.4'	08°29.5'	26	29	53	Fine brown sand
1296	G	10/31/70	0848	0851	33°26.5'	08°29'	24	27	49	Fine brown sand
1297	G	10/31/70	0901	0905	33°25.5'	08°28.4'	23	26	47	Fine brown sand
1298	G	10/31/70	0913	0915	33°25.0'	08°27.4'	22	25	45	Fine brown sand
1299	G	10/31/70	0924	0927	33°23.8'	08°26.8'	20	23	41	Brown mud
1300	G	10/31/70	0936	0946	33°23.0'	08°26'	15	18	32	Algal crust
1303	G	10/31/70	1017	1019	33°20.7'	08°23.8'	9	11	21	Brown sand
1304	G	10/31/70	1023	1034	33°19.9'	08°23.15'	7	9	17	Brown sand
1305	G	10/31/70	1040	1043	33°19.15'	08°22.8'	7	9	17	Brown sand

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
TRAVERSE 11										
1306	G	10/31/70	1054	1056	33°18.3'	08°23.8'	7	9	17	Brown sand
1307	G	10/31/70	1101	1103	33°18.65'	08°24.4'	6	8	15	Brown sand
1308	G	10/31/70	1107	1109	33°19'	08°25.1'	7	9	17	Brown sand
1311	G	10/31/70	1248	1251	33°20.4'	08°27.3'	10 1/2	13	24	Algal crust
1312	G	10/31/70	1259	1305	33°21.15'	08°27.8'	14	16	30	Algal crust
1314	BD/PD	10/31/70		1333	33°22.6'	08°28.8'	21	24	43	PD shelly gravel
1315	G	10/31/70	1340	1344	33°23.3'	08°29.4'	25	28	51	Fine sand
1316	G	10/31/70	1352	1355	33°24.2'	08°29.8'	28	31	57	Fine silty sand
1317	G	10/31/70	1402	1406	33°25'	08°30.7'	30	33	60	Muddy silt
1318	G	10/31/70	1415	1435	33°25.7'	08°31.5'	37	40	73	4' mud core
TRAVERSE 12										
1319	G	10/31/70	1448	1452	33°25'	08°33.8'	37	40	73	Red/brown mud
1320A	G	10/31/70	1500	1505	33°24.25'	08°33.45'	37	40	73	Top red mud
1320B	G	10/31/70	1500	1505	33°24.25'	08°33.45'	37	40	73	Bottom black mud
1321A (0-2")	G	10/31/70	1513	1517	33°23.6'	08°32.5'	34	37	68	Top red mud
1321B (2-4")	G	10/31/70	1513	1517	33°23.6'	08°32.5'	34	37	68	Bottom blackish mud

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
1322A	G	10/31/70	1525	1529	33°22.75'	08°31.9'	31	34	62	Top red mud
1322B	G	10/31/70	1525	1529	33°22.75'	08°31.9'	31	34	62	Bottom blackish mud
1323	G	10/31/70	1537	1543	33°22'	08°31.2'	27	30	55	Reddish mud
1324	G	10/31/70	1550	1556	33°21'	08°30.3'	19	21	40	Mud and algal fragments
1326	BD/PD	10/31/70	1612	1618	33°19.9'	08°29.45'	15	18	32	(1) Mud (2) Coralgal fragments
1327	G	10/31/70	1627	1630	33°19'	08°28.8'	11	13	24	Algal crust
1328	G	10/31/70	1637	1640	33°18.7'	08°28.25'	11	13	24	Fine red mud/silt
1329	G	10/31/70	1645	1647	33°18.2'	08°27.8'	11	13	24	Red brown sandy silt
1330	G	10/31/70	1653	1655	33°17.65'	08°27.5'	11	13	24	Black mud (0-1/2" red mud)
1331	G	10/31/70	1701	1704	33°17.2'	08°27.1'	9	11	21	Fine sand pebbles
1332	G	10/31/70	1711	1715	33°16.6'	08°26.7'	7	9	17	Bedrock, algal crust
TRAVERSE 13										
1334	G	10/31/70	2114	2117	33°16.35'	08°32.4'	8 1/2	11	21	Algal crust
1335	G	10/31/70	2122		33°16.9'	08°32.65'	11 1/2	14	26	Algal crust
1336	PD	10/31/70	2136	2138	33°17.6'	08°33.2'	15	18	32	(1) Algal crust (2) Gray mud
1337	G	10/31/70	2159	2201	33°18.0'	08°34.1'	18	21	38	Light brown mud
1338	G	10/31/70	2210	2213	33°18.8'	08°34.55'	35	38	70	Light brown mud

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
1340	G	10/31/70	2233	2235	33°20.3'	08°36.0'	38	41	75	Light brown mud
1341	G	10/31/70	2243	2247	33°21.0'	08°36.55'	40	43	79	Light brown mud
1342	G	10/31/70	2259	2303	33°21.7'	08°37.15'	45	48	89	Light brown mud
1343	G	10/31/70	2313	2318	33°22.7'	08°37.9'	49	53	96	Light brown mud
1344	G	10/31/70	2325	2331	33°23.5'	08°38.6'	55	59	107	Light brown mud
1345	G	10/31/70	2343	2347	33°24.3'	08°39.4'	55	59	107	Shelly brown mud
1346	G	11/1/70	0003	0007	33°26.1'	08°40.6'	62	66	121	Shelly brown mud
1347	G	11/1/70	0022	0028	33°27.5'	08°41.9'	69	73	130	Shelly brown mud
1348	G	11/1/70	0044	0100	33°28.9'	08°44.1'	73	77	141	Shelly brown mud
1349	G	11/1/70	0117	0130	33°30.9'	08°45.5'	33	87	160	Shelly brown mud but with (phosphate?) pebbles
1350	G	11/1/70	0143	0153	33°32.5'	08°46.8'	106	111	203	Shell and sand
TRAVERSE 14										
1351	G	11/1/70	0302	0308	33°21.9'	08°41.0'	63	67	122	Brown shelly mud
1352 A	C	11/1/70	0317	0352	33°20.8'	08°42.0'	60	64	117	A little algal gravel
1352 B	G	11/1/70	0317	0352	33°20.8'	08°42.0'	60	64	117	Coarse shell and mud
1353	G	11/1/70	0403	0408	33°19.8'	08°41.6'	55	59	107	Light brown mud

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Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	Depth Range CF	Depth Range CM	Comments
1354	G	11/1/70	0419	0424	33°18.25'	08°41.8'	55	59	107	Light brown mud
1355	G	11/1/70	0434	0438	33°17.1'	08°41.25'	52	56	102	Light brown mud
1356	G	11/1/70	0449	0453	33°16.3'	08°40.7'	49	53	96	Light brown mud
1357	G	11/1/70	0503	0507	33°15.5'	08°39.3'	44	47	87	Light brown mud
1358	G	11/1/70	0517	0527	33°15.0'	08°37.9'	36	39	72	(1) Algal crust (2) Brown mud
1359	G	11/1/70	0537	0540	33°15.0'	08°37.0'	22	25	45	Muddy shell sand
1360	G	11/1/70	0546	0548	33°14.3'	08°36.3'	18	21	38	Algal crust
1361	G	11/1/70	0555	0559	33°13.9'	08°36.0'	15	18	32	Algal crust
1362	G	11/1/70	0604	0606	33°13.5'	08°35.8'	9	11	21	Algal crust
TRAVERSE 15										
1363	G	11/1/70	0619	0624	33°12.1'	08°37.0'	8	11	19	Algal crust
1364	G	11/1/70	0629	0634	33°12.5'	08°38.0'	12	14	26	Algal crust
1365	G	11/1/70	0642	0644	33°12.8'	08°38.5'	16	19	34	Algal crust
1366	G	11/1/70	0650	0656	33°12.7'	08°39.0'	16	19	34	Algal crust
1367	G	11/1/70	0704	0712	33°12.9'	08°40.5'	33	36	66	Light brown mud
1368	G	11/1/70	0720	0727	33°13.0'	08°41.2'	40	43	79	Lumps coral, shells, brown mud

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
1369	G	11/1/70	0736	0740	33°13.4'	08°42.5'	46	49	90	Brown mud
1370	G	11/1/70	0749	0753	33°13.5'	08°43.5'	52	56	102	Brown mud
1371	G	11/1/70	0802	0808	33°13.9'	08°44.6'	54	58	105	Brown mud and shells
1372	G	11/1/70	0816	0831	33°14.0'	08°46.0'	54 1/2	58	107	Brown mud and shells
1373	G	11/1/70	0838	0845	33°14.2'	08°47.8'	51	55	100	Shell and coral
TRAVERSE 16										
1374	G	11/1/70	0924	0941	33°09.9'	08°52.0'	57 1/2	61	113	Coarse shell and sand and pebbles
1375	G	11/1/70	0948	0955	33°10.0'	08°50.2'	58 1/2	62	115	Sandy shell gravel
1376	G	11/1/70	1003	1008	33°10.0'	08°48.7'	56	60	109	Sandy shell and rocklets
1377	G	11/1/70	1022	1034	33°09.5'	08°48.1'	52 1/2	56	104	Red silt and shell
1378	G	11/1/70	1042	1052	33°08.9'	08°46.6'	42	45	83	Shell gravel
1379	G	11/1/70	1100	1112	33°08.7'	08°45.5'	39	42	77	Piece bedrock
1381	G	11/1/70	1146	1154	33°08.4'	08°43.1'	25	28	51	Mud and algal debris
1382	G	11/1/70	1200	1205	33°08.1'	08°41.8'	13	15	28	Mud and fine sand
1383	G	11/1/70	1211	1215	33°07.7'	08°40.8'	20	23	41	Fine sand
1384	G	11/1/70	1220	1225	33°07.6'	08°40.0'	16	19	34	Fine sand
1385	G	11/1/70	1230	1233	33°08.0'	08°38.5'	12 1/2	14	28	Dark sand

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
TRAVERSE 17										
1387	G	11/1/70	1333	1336	33°04.5'	08°41.6'	12 1/2	14	28	Algal crust
1388	G	11/1/70	1341	1344	33°05.0'	08°42.5'	12	14	26	Algal crust
1389	G	11/1/70	1348	1351	33°05.3'	08°43.5'	15	18	32	Algal crust
1390	G	11/1/70	1359	1408	33°05.0'	08°44.2'	11 1/2	13	26	Mudstone pebbles
1391	G	11/1/70	1422	1426	33°05.8'	08°46.2'	35	38	70	5 cm top light mud, 10-15 cm black mud,bottom gravel
1392	G	11/1/70	1435	1440	33°06.3'	08°47.5'	40	43	79	Mud
1394	G	11/1/70	1508	1514	33°06.5'	08°50.0'	50	54	98	Dark brown mud
1395A	G	11/1/70	1525	1530	33°06.9'	08°51.0'	47	50	92	Shell gravel
1395B	G	11/1/70	1525	1530	33°06.9'	08°51.0'	47	50	92	Mudstone boulder
1396	G	11/1/70	1539	1548	33°07.5'	08°51.9'	46	49	90	Shelly muddy gravel
TRAVERSE 18										
1397	G	11/1/70	1643	1709	33°05.1'	09°01.0'	60	64	117	Shelly sand
1398	G	11/1/70	1716	1745	33°05.2'	09°00.0'	60	64	117	(?)Phosphorite pebble
1399	G	11/1/70	1753	1805	33°04.8'	08'58.6'	60	64	117	Muddy shell gravel
1400	G	11/1/70	1814	1825	33°04.5'	08°57.2'	55	59	107	Muddy shell gravel

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
1401	G	11/1/70	1832	1841	33°04.1'	08°56.0'	49	53	96	Muddy shell gravel
1402	G	11/1/70	1849	1900	33°03.3'	08°54.9'	52	56	102	Muddy shell sand
1403	G	11/1/70	1907	1922	33°03.0'	08°54.2'	55	59	107	Muddy shell sand
1404	G	11/1/70	1931	1942	33°02.4'	08°53.1'	53	57	104	Muddy shell sand
1405	G	11/1/70	1950	2000	33°02.0'	08°51.9'	48	51	94	Muddy shell sand
1406	G	11/1/70	2009	2023	33°01.9'	08°50.4'	36	39	72	Algal crust
1408	G	11/1/70	2052	2059	33°02.0'	08°48.6'	19	22	40	Algal crust
1409	G	11/1/70	2106	2113	33°02.0	08°47.0'	22	25	45	Coarse shell sand
1410	G	11/1/70	2120	2129	33°01.7'	08°46.3'	16	19	34	Algal crust
1411	G	11/1/70	2135	2142	33°01.6'	08°45.9'	12	14	26	Algal crust
1412	G	11/1/70	2148	2153	33°01.4'	08°45.0'	9	11	21	Algal crust
TRAVERSE 19										
1413	G	11/1/70	2222	2230	32°58.5'	08°48.1'	14	16	30	Algal crust
1414	G	11/1/70	2235	2240	32°58.8'	08°50.0'	15	18	32	Algal crust
1415	G	11/1/70	2247	2258	32°58.5'	08°50.1'	21	24	43	Algal crust
1416	G	11/1/70	2303	2311	32°58.6'	08°51.0'	25	28	51	Mud and shell
1417	G	11/1/70	2318	2327	32°59.0'	08°52.5'	33	36	66	Mud

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
1418	G	11/1/70	2335	2344	32°59.5'	08°53.5'	43	46	85	Muddy sand
1419	G	11/1/70	2353	0001	32°59.8'	08°55.0'	50	54	98	Mud
1420	G	11/2/70	0009	0018	33°00.0'	08°55.9'	53	57	104	Mud
1421	G	11/2/70	0025	0035	33°00.5'	08°56.8'	55	59	107	Mud
1422	G	11/2/70	0041	0051	33°00.5'	08°58.0'	56	60	109	Mud over gravel
1423	G	11/2/70	0059	0110	33°01.0'	08°59.0'	52	56	102	Mud over shell sand
1424	G	11/2/70	0118	0126	33°01.1'	09°00.1'	57	61	111	Muddy sand
1425	G	11/2/70	0133	0142	33°01.5'	09°01.5'	60	64	117	Muddy sand
1426	G	11/2/70	0149	0200	33°01.3'	09°02.9'	60	64	117	Muddy sand
1427	G	11/2/70	0208	0217	33°02.0'	09°03.9'	60	64	117	Fine sand
TRAVERSE 20										
1428	G	11/2/70	0246	0300	33°00.0'	09°05.8'	56	60	109	Fine sand.
1429	G	11/2/70	0309	0435	32°59.5'	09°04.1'	54	58	105	Shelly sand
1430	G	11/2/70	0501	0512	32°57.6'	09°02.3'	55	59	107	Shelly sand
1431	G	11/2/70	0521	0527	32°57.3'	09°01.1'	56	60	109	Shelly sand
1432	G	11/2/70	0536	0542	32°56.9'	09°00.1'	55	59	107	Muddy shell sand
1433	G	11/2/70	0549	0615	32°56.8'	08°59.0'	53	57	104	Silt

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
TRAVERSE 20										
1433	GC	11/2/70	0549	0615	32°56.8'	08°59.0'	53	57	104	Corer used without valve cap or trip weight. 5'6" mud
1434	G	11/2/70	0625	0630	32°56.5'	08°57.2'	49	53	96	Mud
1435	G	11/2/70	0640	0644	32°56.4'	08°56.4'	46	49	90	Mud
1436	G	11/2/70	0651	0656	32°55.9'	08°55.4'	43	46	85	Mud
1437	G	11/2/70	0704	0716	32°55.6'	08°54.1'	34	37	68	Algal crust
1438	G	11/2/70	0723	0726	32°55.5'	08°53.1'	26	29	53	Limestone rock
1439	G	11/2/70	0732	0740	32°55.4'	08°52.4'	22	25	45	Algal crust
1440	G	11/2/70	0746	0749	32°55.4'	08°52.1'	15	18	32	Algal crust
1441	G	11/2/70	0755	0758	32°55.0'	08°51.2'	13	15	28	Algal crust
TRAVERSE 21										
1442	G	11/2/70	0817	0821	32°52.5'	08°54.5'	17	20	36	Algal crust
1443	G	11/2/70	0826	0832	32°53.0'	08°55.0'	20	23	41	Algal crust
1444	G	11/2/70	0835	0841	32°53.0'	08°55.5'	23	26	47	Algal crust
1445	G	11/2/70	0846	0855	32°53.1'	08°56.1'	30	33	60	Shell sand
1446	G	11/2/70	0902	0906	32°53.4'	08°57.5'	37	40	73	Sandy mud
1447	G	11/2/70	0912	0917	32°53.8'	08°58.4'	38	41	75	Mud

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
1448	G	11/2/70	0926	0930	32°54.0'	09°00.0'	48	51	94	Mud
1449	G	11/2/70	0935	0941	32°54.3'	09°01.3'	48	51	94	Muddy sand
1450	G	11/2/70	0949	0954	32°54.5'	09°02.5'	50	54	98	Muddy sand
1451	G	11/2/70	1002	1006	32°54.8'	09°03.8'	52	56	102	Sand and rock
1452	G	11/2/70	1015	1020	32°55.0'	09°05.0'	53	57	104	Sand
TRAVERSE 20										
1456	G	11/2/70	2118	2128	32°57.5'	09°05.6'	57	61	911	Fine sand
1457	BD/PD	11/2/70	2145	2215	32°57.6'	09°06.1'	58	62	113	Shelly gravel and rock
1458	G	11/2/70	2220	2225	32°59.0'	09°08.6'	53	57	104	Shell sand
1459	G	11/2/70	2245	2250	32°59.5'	09°11.0'	58	62	113	Shell sand
1460	G	11/3/70	2303	0015	33°00.2'	09°13.6'	62	66	121	Shell sand
1461	BD/PD	11/3/70	0024	0055	33°00.2'	09°13.6'	57	61	111	Shell sand and rock
1462	G	11/3/70	0105	0113	33°00.7'	09°14.1'	60	64	117	Shell sand
1463	PD	11/3/70	0210	0237	33°01.1'	09°17.0'	69	73	134	Shell sand and rock
1464	G	11/3/70	0248	0310	33°01.5'	09°18.9'	75	89	145	Shell sand

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Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	Range CM	Comments
TRAVERSE 22										
1465	PD	11/3/70	0405	0420	32°55.9'	09°24.0'	70	74	136	Coarse shell sand
1466	G	11/3/70	0447	0455	32°54.4'	09°21.5'	59	63	115	Coarse shell sand
1467	G	11/3/70	0511	0519	32°55.0'	09°19.1'	56	60	109	Rock only (chert)
1468	PD	11/3/70	0547	0605	32°53.8'	09°06.5'	50	54	98	Shell sand and rock
1469	G	11/3/70	0620	0625	32°53.5'	09°14.2'	55	59	107	Muddy sand
1470	PD	11/3/70	0646	0705	32°53.1'	09°12.0'	54	58	105	Shell sand and mud
1471	PD	11/3/70	0733	0748	32°52.5'	09°09.5'	50	54	98	Muddy shell sand
1472	G	11/3/70	0806	0813	32°52.2'	09°07.0'	48	51	92	Shell gravel
1473	G	11/3/70	0848	0855	32°51.5'	09°05.3'	47	50	92	Coarse shell sand and mud
1474	G	11/3/70	0908	0914	32°51.6'	09°04.0'	46	49	90	Muddy shell sand
1475	G	11/3/70	0921	0927	32°51.2'	09°02.5'	47	50	92	Shelly mud
1476	G	11/3/70	0935	0940	32°51.0'	09°01.2'	42	45	83	Brown mud
1477	G	11/3/70	0950	0954	32'50.9'	09°00.8'	34	37	68	Pure shell sand
1478	G	11/3/70	1001	1010	32°50.6'	09°00.0'	30	33	60	Pure shell sand
1479	G	11/3/70	1019	1026	32°50.5'	08°59.0'	21	24	43	Algal crust

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
1480	G	11/3/70	1035	1040	32°50.2'	08°58.0'	22	25	45	Shell sand
1481	G	11/3/70	1047	1050	32°50.0'	08°57.1'	20	23	41	Shell sand
1482	G	11/3/70	1057	1103	32°49.9'	08°56.4'	10	12	23	Algal crust
1483	G	11/3/70	1105	1112	32°49.9'	08°56.7'	12	14	26	Algal crust
1484	G	11/3/70	1118	1123	32°50.0'	08°57.1'	20	23	41	Rocks and pebbles
1485	G	11/3/70	1130	1135	32°50.2'	08°58.0'	22	25	45	Rock
1486	G	11/3/70	1157	1207	32°50.0'	08°58.0'	22	25	45	Shell gravel
TRAVERSE 23										
1488	G	11/3/70	1335	1337	32°47.2'	09°01.0'	14	16	30	Algal crust
1489	G	11/3/70	1342	1346	32°47.5'	09°01.5'	18	21	38	Algal crust
1490	G	11/3/70	1350	1356	32°47.6'	09°02.0'	18	21	38	Algal crust
1491	G	11/3/70	1403	1410	32°47.9'	09°03.1'	30	33	60	Sand
1492	G	11/3/70	1419		32°48.1'	09°04.5'	37	40	73	Muddy sand
1493	GC	11/3/70	1430	1436	32°48.1'	09°04.5'	37	40	73	Small amount of coarse sand
1494	G	11/3/70	1442	1446	32°48.3'	09°05.5'	37	40	73	Sandy mud
1495	G	11/3/70	1459	1505	32°48.8'	09°06.5'	46	49	90	Fine sand

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
1496	G	11/3/70	1514	1518	32°48.9'	09°07.5'	46	49	90	Sandy mud
1497	G	11/3/70	1527	1531	32°49.2'	09°08.5'	49	53	96	Shell sand
1498	G	11/3/70	1540	1544	32°49.5'	09°10.2'	51	55	100	Shell sand
1499	G	11/3/70	1555	1558	32°49.9'	09°11.5'	45	48	89	Fine shell sand
TRAVERSE 24										
1500	G	11/3/70	1656	1659	32°44.0'	09°19.0'	53	57	104	Sandy mud
1501	G	11/3/70	1706	1712	32°44.0'	09°18.0'	53	57	104	Muddy sand
1502	G	11/3/70	1716	1720	32°43.8'	09°17.0'	51	55	100	Sandy mud
1503	G	11/3/70	1729	1733	32°43.4'	09°15.6'	48	51	94	Sandy mud
1504	G	11/3/70	1747	1750	32°42.4'	09°15.7'	47	50	92	Shell sand
1505	G	11/3/70	1802	1805	32°42.8'	09°15.0'	45	48	89	Brown mud
1506	G	11/3/70	1814		32°42.5'	09°13.5'	45	48	89	Brown mud
	GC	11/3/70		1837	32°42.5'	09°13.5'	45	48	89	2'6" long
1507	G	11/3/70	1842	1850	32°42.3	09°12.5'	41	44	81	Brown mud
1508	G	11/3/70	1857	1902	32°42.2'	09°11.1'	39	42	77	Shell sand
1509	G	11/3/70	1910	1913	32°42.0'	09°10.2'	36	39	72	Shell sand
1510	G	11/3/70	1919	1922	32°42.0'	09°09.8'	32	35	64	Shell sand

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
1511	G	11/3/70	1928	1932	32°41.9'	09°09.0'	30	33	60	Shell sand
1512	G	11/3/70	1937	1941	32°41.8'	09°08.5'	26	29	53	Shell sand
1513	G	11/3/70	1947	1949	32°41.8'	09°08.0'	22	25	45	Shell sand
1514	G	11/3/70	1956	1959	32°41.6'	09°06.9'	20	23	41	Fine shell sand
TRAVERSE 25										
1516	BD/PD	11/4/70	0115		32°42.6'	09°35.0'	57	61	111	Shells and rocks
1517	G	11/4/70	0128	0136	32°42.2'	09°34.5'	52	56	102	Sand
1518	BD/PD	11/4/70	0143	0218	32°42.0'	09°33.0'	48	51	94	Algal crust and sand
1519	BD/PD	11/4/70	0233	0301	32°41.8'	09°31.4'	56	60	109	Rocks, algal crust and sand
1520	G	11/4/70	0314	0319	32°41.5'	09°30.2'	56	60	109	Sandy mud
1521	G	11/4/70	0330	0335	32°41.3'	09°28.1'	55	59	107	Sandy mud
1522	G	11/4/70	0348	0353	32°41.0'	09°27.0'	52	56	102	Brown mud
1523	G	11/4/70	0402	0405	32°40.5'	09°25.7'	50	54	98	Brown mud
1524	BD/PD	11/4/70	0423	0446	32°40.4'	09°24.4'	44	47	87	Rocks and shell sand
1525	G	11/4/70	0500	0504	32°39.8'	09°22.6'	44	47	87	Muddy silt
1526	G	11/4/70	0512	0517	32°39.6'	09°21.6'	42	45	83	Muddy silt
1527	G	11/4/70	0526	0530	32°39.1'	09°20.2'	37	40	73	Muddy silt

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
1528	G	11/4/70	0539	0542	32°38.9'	09°18.7'	34	37	68	Muddy silt
1529	G	11/4/70	0550	0553	32°38.7'	09°17.2'	34	37	68	Muddy silt
1530	G	11/4/70	0601	0604	32°38.4'	09°16.1'	30	33	60	Shell sand
1531	G	11/4/70	0610	0613	32°38.1'	09°14.6'	24	27	49	Shell sand
1532	G	11/4/70	0619	0622	32°37.8'	09°13.2'	22	25	45	Shell sand
TRAVERSE 26										
1533	G	11/4/70	0650	0656	32°34.2'	09°16.9'	23	26	47	Algal crust
1534	G	11/4/70	0702	0706	32°34.2'	09°17.1'	25	28	51	Shell sand
1535	G	11/4/70	0711	0715	32°34.5'	09°18.0'	27	30	55	Fine sand
1536	G	11/4/70	0720	0724	32°34.6'	09°18.9'	29	32	58	Shell sand
1537	G	11/4/70	0730	0734	32°34.6'	09°19.2'	34	37	68	Shell sand
1538	G	11/4/70	0742	0745	32°34.7'	09°20.0'	37	40	73	Fine shell sand
1539	G	11/4/70	0754	0757	32°34.9'	09°21.0'	41	44	81	Fine shell sand
1540	G	11/4/70	0804	0808	32°35.0'	09°22.1'	43	47	87	Muddy shell sand
1541	G	11/4/70	0815	0819	32°35.0'	09°23.2'	43	47	87	Muddy shell sand
1542	G	11/4/70	0828	0833	32°35.4'	09°24.9'	26	50	92	Muddy shell sand
1543	G	11/4/70	0842	0846	32°35.6'	09°26.1'	41	44	81	Shell sand

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
1544	G	11/4/70	0853	0857	32°36.0'	09°27.4'	42	45	83	Muddy shell sand
1545	G	11/4/70	0907	0913	32°36.3'	09°28.5'	51	55	100	Coarse shell sand
TRAVERSE 27										
1546	G	11/4/70	0922	0927	32°35.5'	09°28.1'	52	56	102	Coarse shell sand
1547	G	11/4/70	0936	0942	32°35.0'	09°27.1'	40	43	79	Coarse shell sand
1548	G	11/4/70	0948	0952	32°34.5'	09°26.5'	45	48	89	Muddy sand
1549	G	11/4/70	1001	1005	32°33.8'	09°25.5'	35	38	70	Algal crust
1550	G	11/4/70	1014	1017	32°33.3'	09°24.5'	29	32	58	Sand
1551	G	11/4/70	1025	1029	32°32.5'	09°24.6'	36	39	72	Shelly mud
1552	G	11/4/70	1040	1049	32°31.5'	09°23.0'	33	36	66	Muddy sand
1553	G	11/4/70	1051	1055	32°30.8'	09°22.0'	33	36	66	Shell sand
1554	G	11/4/70	1158	1201	32°30.0'	09°21.3'	28	31	57	Shell sand
1555	G	11/4/70	1210	1213	32°29.4'	09°20.2'	26	29	53	Sand
1556	G	11/4/70	1221	1225	32°28.5'	09°19.1'	23	26	47	Fine sand
1557	G	11/4/70	1232	1243	32°28.2'	09°18.5'	22	25	45	Fine sand
1558	G	11/4/70	1245	1248	32°28.0'	09°17.9'	22	25	45	Muddy sand
1559	G	11/4/70	1255	1257	32°27.8'	09°16.4'	21	24	43	Muddy sand

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Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
1560	G	11/4/70	1302	1305	32°27.5'	09°16.0'	20	23	41	Muddy sand
1561	G	11/4/70	1308	1315	32°27.2'	09°15.5'	13	21	38	Muddy shell sand
1562	G	11/4/70	1319	1322	32°26.9'	09°15.0'	16	19	34	Muddy shell sand
1563	VC	11/4/70	1335	1452	32°27.5'	09°16.0'	20	23	41	5'3" core
TRAVERSE 28										
1564	G	11/4/70	1706	1716	32°26.7'	09°16.0'	18	21	38	Muddy gravel
1565	G	11/4/70	1720	1726	32°26.7'	09°16.2'	21	24	43	Muddy silt
1566	G	11/4/70	1730	1735	32°26.6'	09°16.4'	20	23	41	Fine sand
1567	G	11/4/70	1741	1745	32'26.7'	09°16.9'	22	25	45	Fine sand
1568	G	11/4/70	1751	1755	32°26.7'	09°17.8'	23	26	47	Muddy silt
1569	G	11/4/70	1803	1807	32°26.7'	09°19.3'	25	28	51	Coarse shell sand
1570	G	11/4/70	1816	1820	32°26.6'	09°20.5'	28	31	57	Fine sand
1571	G	11/4/70	1829	1835	32°26.8'	09°21.9'	30	33	60	Fine sand
1572	G	11/4/70	1844	1851	32°26.5'	09°22.5'	27	30	55	Fine shell sand
1573	G	11/4/70	1900	1905	32°26.5'	09°24.0'	31	34	62	Medium shell sand
1574	G	11/4/70	1913	1917	32°26.7'	09°25.3'	25	28	51	Algal crust
1575	G	11/4/70	1924	1927	32°26.8'	09°26.2'	27	30	55	Algal crust
1576	G	11/4/70	1933	1937	32°26.8'	09°27.4'	30	33	60	Algal crust

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
TRAVERSE 29										
1577	G	11/4/70	1950	1952	32°26.1'	09°26.4'	26	29	53	Algal crust
1579	G	11/4/70	2017	2020	32°25.5'	09°24.5'	32	35	64	Shell sand
1580	G	11/4/70	2030	2034	32°25.1'	09°23.5'	28	31	57	Shell sand
1581	G	11/4/70	2045	2050	32°25.0'	09°22.5'	23	26	47	Shell sand
1582	G	11/4/70	2100	2102	32°24.0'	09°21.3'	26	29	53	Shell sand
1583	G	11/4/70	2111	2115	32°23.8'	09°20.2'	25	28	51	Shell sand
1584	G	11/4/70	2122	2125	32°23.4'	09°19.5'	25	28	51	Shell sand
1585	G	11/4/70	2130	2132	32°23.0'	09°18.7'	24	27	49	Shell sand
1586	G	11/4/70	2136	2139	32°22.8'	09°18.0'	23	26	47	Shell sand
TRAVERSE 30										
1587	G	11/4/70	2220	2225	32°17.8'	09°15.1'	15	18	32	Fine sand
1588	G	11/4/70	2230	2233	32°18.0'	09°16.1'	14	16	30	Fine sand
1589	G	11/4/70	2240		32°18.2'	09°16.6'	15	18	32	Shell sand
1590	G	11/4/70	2246		32°18.5'	09°17.2'	15	18	32	Shell sand
1591	G	11/4/70	2259		32°19.0'	09°18.0'	17	20	36	Shell sand
1592	G	11/4/70	2309		32°19.5'	09°19.5'	18	21	38	Rock fragment

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
1593	G	11/4/70	2320		32°19.8'	09°20.5'	23	26	47	Shell sand
1594	G	11/4/70	2333		32°20.1'	09°21.4'	24	27	49	Shell sand
1595	G	11/4/70	2345		32°20.8'	09°22.3'	27	30	55	Shell sand
1596	G	11/4/70	2359		32°21.2'	09°23.8'	28	31	57	Algal crust
1597	G	11/5/70	0012		32°21.9'	09°24.6'	29	32	58	Algal crust
1598	G	11/5/70	0024		32°22.3'	09°25.7'	28	31	57	Algal crust
TRAVERSE 31										
1599	G	11/5/70	0100		32°17.5'	09°27.4'	28	31	57	Algal crust
1600	G	11/5/70	0116		32°17.3'	09°26.2'	27	30	55	Shell sand
1601	G	11/5/70	0128		32°17.0'	09°25.6'	26	29	53	Shell sand
1602	G	11/5/70	0140		32°16.7'	09°25.4'	25	28	51	Shell sand
1603	G	11/5/70	0149		32°16.0'	09°24.1'	24	27	49	Shell sand
1604	G	11/5/70	0200		32°15.5'	09°23.0'	24	27	49	Shell sand
1605	G	11/5/70	0213		32°15.1'	09°22.0'	21	24	43	Shell sand
1606	G	11/5/70	0227		32°15.0'	09°21.0'	19	22	40	Rock and shell sand
1607	G	11/5/70	0240		32°15.8'	09°19.6'	19	22	40	Muddy fine sand
1608	G	11/5/70	0250		32°14.3'	09°18.5'	19	22	40	Muddy silt

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
1609	G	11/5/70	0258		32°14.0'	09°17.5'	18	21	38	Muddy sand
1610	G	11/5/70	0310		32°13.3'	09°16.5'	17	20	36	Muddy silt
1611	G	11/5/70	0318		32°13.1'	09°15.5'	16	19	34	Mud overlying silt
TRAVERSE 32										
1612	G	11/5/70	0347		32°10.0'	09°18.0'	14	16	30	Sandy mud over mud
1613	G	11/5/70	0353		32°10.0'	09°19.0'	17	20	36	Sandy mud
1614	G	11/5/70	0403		32°10.5'	09°20.0'	17	20	36	Muddy sand
1615	G	11/5/70	0413		32°11.0'	09°20.5'	18	21	38	Muddy sand
1616	G	11/5/70	0428		32°11.4'	09°21.0'	20	23	41	Shelly sand
1617	G	11/5/70	0437		32°11.9'	09°22.2'	22	25	45	Mud
1618	G	11/5/70	0449		32°12.1'	09°23.0'	21	24	43	Shelly sand
1619	G	11/5/70	0503		32°12.5'	09°24.1'	24	27	49	Shelly sand
1620	G	11/5/70	0516		32°13.1'	09°25.2'	22	25	45	Shelly sand
1621	G	11/5/70	0529	0532	32°13.5'	09°26.6'	23	26	47	Shelly sand
1622	G	11/5/70	0540	0543	32°13.9'	09°27.1'	23	26	47	Shelly sand
1623	G	11/5/70	0555		32°14.1'	09°28.5'	25	28	51	Shelly sand
1624	G	11/5/70	0607		32°14.6'	09°29.0'	24	27	49	Shelly sand

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Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	Range CM	Comments
TRAVERSE 33										
1625	G	11/5/70	0631	0635	32°12.9'	09°30.9'	23	27	49	Shelly sand
1626	G	11/5/70	0648		32°12.4'	09°30.0'	23	27	49	Rock, shelly sand
1627	G	11/5/70	0721		32°12.0'	09°28.6'	24	27	49	Shelly sand
1628	G	11/5/70	0733		32°11.8'	09°27.5'	21	24	43	Shelly sand
1629	G	11/5/70	0746		32°11.3'	09°26.9'	25	28	51	Fine sand
1630	G	11/5/70	0756		32°10.5'	09°25.6'	23	26	41	Shell sand
1631	G	11/5/70	0806		32°10.0'	09°25.2'	24	27	49	Shell sand/gravel
1632	G	11/5/70	0816		32°09.8'	09°24.0'	23	26	47	Rock and shell
1633	G	11/5/70	0830		32°09.3'	09°22.8'	22	25	45	Shell and gravel
1634	G	11/5/70	0840		32°08.9'	09°22.1'	22	25	45	Muddy fine sand
1635	G	11/5/70	0853		32°08.5'	09°21.3'	21	24	43	Fine sand
1636	G	11/5/70	0900		32°08.0'	09°20.3'	19	22	40	Muddy silt
1637	G	11/5/70	0909		32°07.9'	09°20.0'	13	15	28	Shell sand
1638	G	11/5/70	0915		32°07.3'	09°19.3'	12	14	26	3" shell sand over silt
TRAVERSE 34										
1639	G	11/5/70	0932		32°06.2'	09°20.6'	11	13	24	Muddy silt
1640	G	11/5/70	0939		32°06.4'	09°21.1'	17	20	36	Muddy silt

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
1641	G	11/5/70	0948		32°06.6'	09°22.0'	18	21	38	Muddy silt
1642 A	G	11/5/70	0954		32°06.9'	09°22.6'	19	22	40	Muddy silt
1642 B	GC	11/5/70		1005	32°06.9'	09°22.6'	19	22	40	Only a few grams of sand
1643	G	11/5/70	1012	1015	32°07.2'	09°22.9'	20	23	41	Muddy silt
1644	G	11/5/70	1024	1027	32°07.6'	09°24.0'	22	25	45	Brown mud
1645	G	11/5/70	1034	1037	32°08.4'	09°25.6'	21	24	43	Muddy gravel
1646	G	11/5/70	1046	1049	32°08.5'	09°26.2'	21	24	43	Shell sand
1647	G	11/5/70	1057	1100	32°08.8'	09°27.1'	22	25	45	Coarse shell sand
1648	G	11/5/70	1109	1112	32°09.1'	09°28.4'	25	28	51	Coarse shell sand
1649	G	11/5/70	1120	1126	32°09.8'	09°30.0'	26	29	53	Rock fragments
1650	G	11/5/70	1136	1140	32°10.7'	09°30.9'	28	31	57	Coarse shell sand
TRAVERSE 35										
1651	G	11/5/70	1153	1156	32°09.3'	09°32.1'	27	30	55	Medium shell sand
1652	G	11/5/70	1204	1208	32°09.0'	09°31.1'	25	28	51	Medium shell sand
1653	G	11/5/70	1216	1220	32°08.5'	09°30.4'	25	28	51	Shell sand
1654	G	11/5/70	1227	1230	32°07.8'	09°29.5'	23	26	47	Shell sand
1655	G	11/5/70	1237	1240	32°07.4'	09°28.1'	19	22	40	Shell sand

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
1656	G	11/5/70	1247	1251	32°06.9'	09°27.5'	19	22	40	Shell sand
1657	G	11/5/70	1259	1302	32°06.5'	09°26.1'	20	23	41	Shell sand
1658	G	11/5/70	1310	1313	32°06.0'	09°25.4'	18	21	38	Muddy sand
1659	G	11/5/70	1321	1323	32°05.5'	09°24.0'	17	20	36	Muddy sand
1660	G	11/5/70	1333	1335	32°05.0'	09°23.0'	15	18	32	Muddy sand
1661	G	11/5/70	1341	1345	32°04.8'	09°12.8'	14	16	30	Muddy sand
1662	G	11/5/70	1351	1353	32°04.6'	09°21.9'	12	14	26	Muddy sand
1663	G	11/5/70	1358	1400	32°04.3'	09°21.0'	10	12	23	Muddy sand
1664	G	11/5/70	1404	1408	32°03.9'	09°20.1'	9	11	21	Muddy sand
END OF TRAVERSE										
1665	VC	11/5/70	1425	1525	32°04.6'	09°21.9'	12 1/2	14	26	2'0" muddy sand
1666	VC	11/5/70	1550	1630	32°06.0'	09°25.4'	19	22	40	Good core 10'4"sand and mud
1667	VC	11/5/70	1650	1740	32°07.2'	09°22.9'	16 1/2	19	34	3'2" mud and gravel
TRAVERSE 36										
1668	G	11/5/70	1900	1902	32°02.0'	09°21.5'	8	11	21	Muddy silt
1669	G	11/5/70	1912	1914	32°01.8'	09°22.4'	10	12	23	Muddy silt
1670	G	11/5/70	1919	1921	32°02.0'	09°23.1'	11	13	24	Muddy silt

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
1671	G	11/5/70	1926	1929	32°02.4'	09°23.3'	12	14	26	Muddy silt
1672	G	11/5/70	1933	1936	32°03.0'	09°23.4'	13	15	28	Fine silt
1673	G	11/5/70	1944	1947	32°03.4'	09°24.7'	17	20	36	Muddy silt
1674	G	11/5/70	1955	1958	32°03.8'	09°26.0'	20	23	41	Muddy silt
1675	G	11/5/70	2006	2010	32°05.0'	09°26.9'	22	25	45	Brown mud
1676	G	11/5/70	2019	2023	32°05.0'	09°27.5'	22	25	45	Shell sand
1677	G	11/5/70	2031	2034	32°05.5'	09°28.8'	23	26	47	Shell sand
1678	G	11/5/70	2043	2052	32°06.0'	09°30.0'	24	27	49	Shell sand
1679	G	11/5/70	2102	2106	32°06.3'	09°30.9'	23	26	47	Shell sand
1680	G	11/5/70	2113	2116	32°06.9'	09°32.1'	25	28	51	Shell sand
TRAVERSE 37										
1681	G	11/5/70	2133	2136	32°05.9'	09°34.8'	26	29	53	Coarse shell sand
1682	G	11/5/70	2145	2148	32°05.5'	09°33.5'	23	26	47	Coarse shell sand
1683	G	11/5/70	2155	2158	32°05.0'	09°33.1'	23	26	47	Coarse shell sand
1684	G	11/5/70	2207	2210	32°04.8'	09°32.0'	22	25	45	Coarse shell sand
1685	G	11/5/70	2218	2225	32°04.0'	09°31.2'	20	23	41	Rocky bottom
1686	G	11/5/70	2233	2241	32°03.8'	09°30.0'	21	24	43	Coarse shell sand

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
1687	G	11/5/70	2252	2255	32°03.3'	09°28.8'	17	20	36	Sand
1688	G	11/5/70	2307	2312	32°02.8'	09°27.5'	18	21	38	Muddy sand
1689	G	11/5/70	2319	2322	32°02.2'	09°26.4'	15	18	32	Muddy sand
1690	G	11/5/70	2333		32°02.0'	09°25.5'	12	14	26	Muddy sand
1691	G	11/5/70	2342		32°01.6'	09°25.2'	11	13	24	Muddy sand
1692	G	11/5/70	2352		32°01.4'	09°24.5'	10	12	23	Muddy sand
1693	G	11/6/70	0002		32°01.0'	09°24.0'	9	11	21	Muddy sand
TRAVERSE 38										
1694	G	11/6/70	0023		31°59.5'	09°25.5'	8	10	19	Muddy sand
1695	G	11/6/70	0033		32°00.0'	09°26.0'	10	12	23	Muddy sand
1696	G	11/6/70	0040		32°00.5'	09°26.9'	11	13	24	Muddy sand
1697	G	11/6/70	0047		32°00.7'	09°27.5'	12	14	26	Muddy sand
1698	G	11/6/70	0059		32°01.0'	09°28.3'	16	19	34	Muddy sand
1699	G	11/6/70	0113		32°01.5'	09°30.0'	18	21	38	Muddy sand
1700	G	11/6/70	0123		32°01.6'	09°31.0'	16	19	34	Muddy sand
1701	G	11/6/70	0135		32°02.0'	09°32.0'	17	20	36	Muddy sand
1702	G	11/6/70	0147		32°02.6'	09°32.8'	17	20	36	Muddy sand

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
1703	G	11/6/70	0200		32°03.0'	09°33.8'	18	21	38	Shelly sand
1704	G	11/6/70	0211		32°03.5'	09°34.8'	21	24	43	Sand
1705	G	11/6/70	0225		32°03.9'	09°35.8'	22	25	45	Shelly sand
TRAVERSE 39										
1706	G	11/6/70	0243		32°02.1'	09°37.0'	27	30	55	Shell sand
1707	G	11/6/70	0253		32°02.0'	09°36.0'	25	28	51	Sand on top of mud
1709	G	11/6/70	0317		32°01.0'	09°34.0'	20	23	41	Shelly sand
1710	G	11/6/70	0331		32°00.5'	09°33.1'	21	24	43	Coarse shell sand
1711	G	11/6/70	0341	0347	32°00.1'	09°32.2'	20	23	41	Muddy sand
1712	G	11/6/70	0354	0357	31°59.7'	09°31.0'	18	21	38	Shell sand
1713	G	11/6/70	0407	0410	31°59.7'	09°30.0'	16	19	34	Muddy sand
1714	G	11/6/70	0418	0423	31°58.8'	09°28.4'	14	16	30	Muddy sand
1715	G	11/6/70	0428	0431	31°58.2'	09°28.0'	13	15	28	Muddy sand
1716	G	11/6/70	0436	0438	31°58.0'	09°27.0'	12	14	26	Muddy sand
1717	G	11/6/70	0441	0445	31°57.8'	09°26.8'	10	12	23	Muddy sand
1718	G	11/6/70	0450	0452	31°57.6'	09°26.2'	8	10	19	Muddy sand

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Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	Depth Range CF	Depth Range CM	Comments
TRAVERSE 40										
1719	G	11/6/70	0505	0508	31°56.0'	09°28.1'	8	10	19	Muddy sand
1720	G	11/6/70	0513		31°56.1'	09°28.8'	10	12	23	Muddy sand
1721	G	11/6/70	0521	0523	31°56.3'	09°29.5'	13	15	28	Muddy sand
1722	G	11/6/70	0528	0531	31°56.5'	09°30.0'	14	16	30	Muddy sand
1723	G	11/6/70	0535	0538	31°56.9'	09°30.6'	15	18	32	Muddy sand
1724	G	11/6/70	0546	0549	31°57.5'	09°31.5'	17	20	36	Muddy sand
1725	G	11/6/70	0558	0606	31°58.0'	09°32.8'	20	23	41	Mud
1727	G	11/6/70	0623	0626	31°58.9'	09°34.5'	23	27	49	Shell sand
1728	G	11/6/70	0633	0641	31°59.4'	09°35.8'	25	28	51	Shell sand
1729	G	11/6/70	0650	0653	31°59.8'	09°37.0'	21	24	43	Shell sand
1730	G	11/6/70	0700	0706	32°00.5'	09°37.9'	23	26	49	Shell sand
1731	G	11/6/70	0714	0717	32°00.8'	09°39.0'	22	25	40	Shell sand
TRAVERSE 41										
1732	G	11/6/70	0738	0742	31°58.0'	09°42.0'	20	23	41	Shell sand
1733	G	11/6/70	0750	0753	31°57.8'	09°41.3'	17	20	36	Shell sand
1734	G	11/6/70	0800	0806	31°57.2'	09°40.4'	20	23	41	Shell sand

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Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	Depth Range CF	Depth Range CM	Comments
1735	G	11/6/70	0815	0823	31°57.0'	09°39.3'	20	23	41	Shell sand
1736	G	11/6/70	0832	0836	31°57.6'	09°39.5'	20	23	41	Shell sand
1737	G	11/6/70	0845	0853	31°56.6'	09°37.5'	20	23	41	Shell sand
1738	G	11/6/70	0900	0903	31°55.8'	09°36.5'	19	22	40	Shell sand
1739	G	11/6/70	0913	0917	31°55.3'	09°35.0'	19	22	40	Mudstone fragments
1740	G	11/6/70	0927	0931	31°55.0'	09°34.5'	18	21	38	Muddy sand
1741	G	11/6/70	0939	0942	31°54.3'	09°33.2'	16	19	34	Fine silt
1742	G	11/6/70	0947	0949	31°54.1'	09°32.8'	15	18	32	Fine silt
1743	G	11/6/70	0954	0957	31°53.8'	09°32.1'	13	15	28	Fine silt
1744	G	11/6/70	1004	1010	31°53.2'	09°31.9'	10	12	23	Sand
END OF TRAVERSE										
1745	VC	11/6/70	1050	1140	31°54.1'	09°32.8'	17	20	36	Only a small shell sand sample
1746	VC	11/6/70	1220	1245	31°56.3'	09°29.5'	13	15	28	1' core - fell out
1747	VC	11/6/70	1310	1445	32°00.7'	09°27.5'	13	15	28	5'3" - fine sand
1749	VC	11/6/70	1623	1650	32°02.0'	09°23.1'	10	12	23	6' core - collected in bags

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
TRAVERSE 42										
1751	G	11/7/70	0035	0047	32°21.6'	09°44.5'	76	80	147	Shell sand
1752	G	11/7/70	0106	0120	32°31.7'	09°42.3'	68	72	132	Rock fragments
1753	BD/PD	11/7/70	0133	0200	32°22.0'	09°40.8'	65	69	126	Fragments and sand
1754	BD/PD	11/7/70	0235	0245	32°22.1'	09°39.5'	50	54	98	Rocks and shell sand
1755	G	11/7/70	0312	0317	32°22.2'	09°38.5'	49	53	96	Muddy silt
1756	G	11/7/70	0337	0350	32°22.4'	09°35.6'	37	40	73	Shell sand
1757	G	11/7/70	0410	0417	32°22.6'	09°32.3'	33	36	66	Algal crust
1758	G	11/7/70	0429	0432	32°22.7'	09°30.4'	28	31	57	Algal crust
1759	BD/PD	11/7/70	0445	0500	32°23.1'	09°26.9'	30	33	60	Rocks and mud
TRAVERSE 43										
1761	G	11/7/70	1201	1206	32°03.7'	09°52.0'	74	78	143	Rock fragments and shell sand
1762	BD/PD	11/7/70	1225	1300	32°03.9'	09°49.5'	61	65	119	Shell sand
1763	PD	11/7/70	1330	1350	32°04.0'	09°47.6'				Muddy sand
1764	G	11/7/70	1358	1407	32°04.2'	09°45.7'	33	36	66	Sand
1765	PD	11/7/70	1421	1439	32°04.4'	09°43.8'	22	25	45	Algal crust
1766	G	11/7/70	1452	1457	32°04.6'	09°42.5'	24	27	49	Algal crust
1767	G	11/7/70	1514	1522	32°04.7'	09°41.4'	27	30	55	Shell sand

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
1768	G	11/7/70	1540	1544	32°04.8'	09°40.3'	25	28	51	Shell sand
1769	G	11/7/70	1600	1605	32°04.9'	09°38.4'	26	29	53	Shell sand
1770	PD	11/7/70	1627	1642	32°05.1'	09°36.4'	19	22	40	Rock fragments and shell sand
TRAVERSE 44										
1771	G	11/7/70	1835	1840	31°55.0'	09°44.1'	24	27	49	Shell sand
1772	G	11/7/70	1848		31°54.1'	09°43.0'	22	25	45	Shell sand
1773	G	11/7/70	1900	1903	31°53.7'	09°42.0'	22	25	45	Shell sand
1774	G	11/7/70	1911	1928	31°53.4'	09°41.1'	21	24	43	Shell sand
1775	G	11/7/70	1938	1948	31°53.0'	09°40.0'	20	23	41	Shell sand
1776	G	11/7/70	1959	2002	31°52.5'	09°39.0'	20	23	41	Shell sand
1777	G	11/7/70	2010	2013	31°52.0'	09°38.2'	20	23	41	Shell sand
1778	G	11/7/70	2023	2026	31°51.3'	09°36.8'	19	22	40	Brown mud
1779	G	11/7/70	2035	2038	31°50.9'	09°35.7'	16	19	34	Shell sand
1780	G	11/7/70	2042	2045	31°50.5'	09°35.0'	14	16	30	Shell sand
1781	G	11/7/70	2049	2052	31°50.4'	09°34.2'	11	13	24	Shell sand
1782	G	11/7/70	2050	2103	31°50.0'	09°33.4'	8	10	19	Muddy silt

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Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	Depth Range CF	Depth Range CM	Comments
TRAVERSE 45										
1783	G	11/7/70	2128	2131	31°47.0'	09°37.2'	10	12	23	Fine sand
1784	G	11/7/70	2139	2142	31°47.6'	09°37.7'	14	16	30	Shell sand
1785	G	11/7/70	2145	2148	31°48.0'	09°38.8'	15	18	32	Shell sand
1786	G	11/7/70	2156	2159	31°48.1'	09°39.2'	17	20	36	Shell sand
1787	G	11/7/70	2207	2210	31°48.3'	09°39.9'	18	21	38	Rocky bottom
1788	G	11/7/70	2237	2239	31°49.0'	09°41.0'	20	23	41	Mud
1789	G	11/7/70	2246	2255	31°49.2'	09°42.0'	20	23	41	Sand
1790	G	11/7/70	2303	2306	31°50.0'	09°43.0'	20	23	41	Sand
1791	G	11/7/70	2312	2320	31°50.4'	09°44.3'	21	24	43	Shell sand
1792	G	11/7/70	2330	2335	31°50.8'	09°45.5'	20	23	41	Shell sand
1793	G	11/7/70	2343	2346	31°51.5'	09°46.2'	22	25	45	Shell sand
1794	G	11/7/70	2355	0000	31°51.6'	09°47.2'	23	26	47	Shell sand
TRAVERSE 46										
1795	G	11/8/70	0026	0028	31°48.4'	09°50.0'	30	33	60	Mud
1796	G	11/8/70	0035	0040	31°47.8'	09°49.0'	27	30	55	Sandy mud
1797	G	11/8/70	0048	0051	31°47.4'	09°47.9'	25	28	51	Sandy mud

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Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
1798	G	11/8/70	0059	0102	31°46.9'	09°46.9'	22	25	45	Sandy mud
1799	G	11/8/70	0110	0115	31°45.6'	09°46.5'	18	21	38	Shell sand
1800	G	11/8/70	0123	0125	31°46.0'	09°45.0'	19	22	40	Shell sand
1801	G	11/8/70	0135	0142	31°45.8'	09°43.8'	17	20	36	Shell sand
1803	G	11/8/70	0202	0205	31°44.9'	09°41.9'	15	18	32	Shell sand
1804	G	11/8/70	0210	0212	31°44.7'	09°41.5'	14	16	30	Shell sand
1805	G	11/8/70	0220	0233	31°44.4'	09°41.0'	10	12	23	Muddy sand
1806	G	11/8/70	0229	0230	31°44.2'	09°40.3'	9	11	21	Shelly fine sand
TRAVERSE 47										
1808	G	11/8/70	0649	0654	31°40.4'	10°08.7'	100	105	192	Muddy sand
1809	G	11/8/70	0708	0718	31°40.5'	10°05.9'	78	82	151	Muddy sand
1810	PD	11/8/70	0731	0756	31°40.7'	10°02.0'	70	74	136	Glauconitic sand
1811	G	11/8/70	0812	0819	31°40.7'	10°01.0'	65 1/2	69	126	Glauconitic sand
1812	G	11/8/70	0835	0841	31°41.0'	09°58.3'	55 1/2	59	107	Brown mud
1813	G	11/8/70	0857	0901	31°41.1'	09°56.4'	44 1/2	47	87	Brown mud

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Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
1814	G	11/8/70	0921	0925	31°41.2'	09°54.2'	33	36	66	Brown mud
1815	G	11/8/70	0940	0943	31°41.3'	09°52.3'	20	23	41	Muddy sand
1816	G	11/8/70	0952	0954	31°41.4'	09°50.1'	19	22	40	Fine brown sand
1817	PD	11/8/70	1008	1035	31°41.6'	09°45.2'	16	19	34	Fine brown sand
TRAVERSE 49										
1820	G	11/8/70	1850	1900	31°32.0'	09°46.0'	20	23	41	Muddy sand
1821	G	11/8/70	1905	1914	31°32.1'	09°47.3'	23	26	47	Sandy mud
1822	G	11/8/70	1921	1927	31°32.0'	09°48.0'	25	28	51	Brown mud
1823	G	11/8/70	1933	1937	31°31.9'	09°48.6'	27	30	55	Brown mud
1824	G	11/8/70	1943	1947	31°31.8'	09°49.2'	23	31	57	Brown mud
1825	G	11/8/70	2003	2006	31°32.0'	09°51.0'	35	39	70	Brown mud
1826	G	11/8/70	2013	2021	31°32.0'	09°53.0'	37	40	73	Brown mud
1827	G	11/8/70	2040	2100	31°32.1'	09°55.8'	43	46	85	Mud and limestone
1828	PD	11/8/70	2115	2138	31°31.3'	09°57.8'	44	47	87	Rock and mud
TRAVERSE 50										
1830	PD	11/9/70	0131	0215	31°23.9'	09°53.8'	15	18	32	Rock fragments and mud
1831	G	11/9/70	0229	0234	31°23.9'	09°56.2'	28	31	57	Mud

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
1832	G	11/9/70	0247	0253	31°23.9'	09°57.6'	40	43	79	Mud
1833	G	11/9/70	0302	0308	31°23.9'	10°00.0'	48	51	94	Mud
1834	G	11/9/70	0323	0328	31°23.9'	10°01.6'	58	62	113	Mud
1835	G	11/9/70	0339	0345	31°23.9'	10°03.7'	63	67	122	Mud
TRAVERSE 51										
1836	G	11/9/70	0927	0932	31°16.9'	09°52.2'	61	65	119	Mud
1837	G	11/9/70	0950	0955	31°16.9'	09°57.5'	55	59	107	Mud
1838	G	11/9/70	1008	1013	31°16.8'	09°56.0'	48	51	94	Hard bottom
1839	G	11/9/70	1023	1029	31°16.8'	09°54.6'	37	40	73	Mud
1840	G	11/9/70	1040	1043	31°16.9'	09°53.0'	40	43	79	Mud
1841	G	11/9/70	1056	1059	31°16.9'	09°52.0'	36	39	72	Hard bottom
1842	G	11/9/70	1109	1113	31°16.9'	09°51.3'	30	33	60	Fine sand
1843	G	11/9/70	1121	1125	31°16.8'	09°50.0'	19	22	40	Fine sand
TRAVERSE 52										
1844	G	11/9/70	1204	1208	31°11.5'	09°51.6'	25	28	51	Shell sand
1845	G	11/9/70	1219	1224	31°11.5'	09°53.0'	38	41	75	Mud

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Station No.	Sampler Type	Date	Time, GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
1846	G	11/9/70	1234	1241	31°11.5'	09°54.0'	38	41	75	Mud
1847	G	11/9/70	1247	1253	31°11.3'	09°55.0'	40	43	79	Mud
1848	G	11/9/70	1301	1305	31°11.3'	09°56.3'	40	43	79	Mud
1850	G	11/9/70	1330	1338	31°11.2'	09°57.6'	46	49	90	Muddy sand and pebbles
TRAVERSE 53										
1851	G	11/9/70	1434	1440	31°04.4'	09°52.9'	25	29	53	Hard bottom
1852	G	11/9/70	1447	1449	31°04.4'	09°51.0'	23	26	47	Rock fragments
TRAVERSE 54										
1854	G	11/9/70	1810	1822	30°50.5'	09°04.0'	64	68	124	Mud with sand
1855	G	11/9/70	1832	1838	30°50.5'	09°02.1'	46	49	90	Mud with sand
1856	PD	11/9/70	1850	1910	30°50.5'	09°59.6'	42	45	83	Rock fragments and sand
1857	G	11/9/70	1924	1929	30°50.3'	09°57.2'	40	43	79	Shell sand
1858	G	11/9/70	1944	1948	32°50.2'	09°55.0'	40	43	79	Mud and sand
1859	G	11/9/70	2002	2006	30°50.5'	09°52.7'	38	41	75	Brown mud
1860	G	11/9/70	2020	2040	30°50.5'	09°51.0'	30	33	60	Brown mud

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Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
TRAVERSE 55										
1861	G	11/12/70	1115	1125	30°21.7'	09°37.5'	6	8	15	Mud over hard sand
1862	G	11/12/70	1135	1138	30°21.7'	09°38.10'	10	12	23	Hard mud, fine sand
1863	G/GC	11/12/70	1150	1204	30°21.7'	09°39.2'	13	15	28	Hard fine sand
TRAVERSE 56										
1865	G	11/12/70	2337		29°31.2'	10°36.8'	83	88	160	Sand
1866	G	11/12/70	2356		29°29.8'	10°33.8'	57	61	111	Shell sand
1867	G	11/13/70	0018		29°28.5'	10°32.3'	57	61	111	Fine sand
1868	G	11/13/70	0035		29°26.8'	10°31.0'	53	57	104	Sand
1869	G	11/13/70	0056		29°25.9'	10°29.0'	35	38	70	Muddy sand
1870	G	11/13/70	0110	0130	29°24.4'	10°28.1'	27	30	55	Sand
1871	G	11/13/70	0152	0155	29°23.8'	10°26.3'	22	25	45	Algal crust
1872	G	11/13/70	0215	0220	29°21.5'	10°25.0'	26	29	53	Small sand sample and coral
1873	G	11/13/70	0236		29°20.1'	10°22.8'	23	26	47	Coarse shell sand
1874	G	11/13/70	0253		29°18.9'	10°20.5'	21	24	43	Shell sand
1875	G	11/13/70	0311		29°17.3'	10°19.0'	18	21	38	Shell sand

IC 70

Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
TRAVERSE 57										
1877	GC	11/13/70	1340		29°11.5'	11°28.8'	190	198	362	Little sample, sand
1878	G	11/13/70	1413	1422	29°09.9'	11°27.0'	141	147	269	Fine sand
1879	G	11/13/70	1437	1444	29°07.9'	11°26.0'	133	139	254	Fine sand
1880	G	11/13/70	1500	1507	29°06.0'	11°25.1'	61	65	119	Sand
1881	G	11/13/70	1522	1530	29°04.4'	11°24.0'	57	61	111	Small sample fine sand and pebbles
1882	G	11/13/70	1549	1554	29°03.0'	11°22.5'	54	58	105	Fine shelly sand, small sample
1883	G	11/13/70	1607	1617	29°01.2'	11°21.0'	53	57	104	Coarse shell sand
1884	G	11/13/70	1621	1627	28°59.5'	11°19.5'	53	57	104	Small amount of fine shell sand
1885	G	11/13/70	1636	1642	28°58.0'	11°18.0'	53	57	104	Muddy fine shell sand and pebbles
1886	PD	11/13/70	1648	1712	28°56.7'	11°17.0'	54	58	105	Sand, lump of limestone and crust
1887	G	11/13/70	1724	1736	28°55.0'	11°15.2'	48	51	94	Coarse pebbly shell sand
1888	G	11/13/70	1747	1758	28°52.9'	11°14.2'	36	39	72	Rock, angular limestone
1889	G	11/13/70	1810	1815	23°51.8'	11°12.8'	44	47	87	Shell sand
1890	G	11/13/70	1830	1835	28°50.5'	11°11.0'	40	43	79	Sand and pebbles
1891	G	11/13/70	1848	1854	28°49.1'	11°09.7'	39	42	77	Sand
1892	G	11/13/70	1900	1905	28°48.0'	11°09.0'	38	41	75	Sand

IC 70

Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
1893	G	11/13/70	1914	1919	23°47.0'	11°07.8'	35	38	70	Muddy sand
1894	G	11/13/70	1926	1930	28°45.5'	11°06.9'	30	33	60	Muddy sand
TRAVERSE 58										
1898	G	11/15/70	2215	2225	28°15.0'	11°55.2'	18	21	38	Mud
1899	G	11/15/70	2247		28°17.0'	11°57.5'	22	25	45	Fine sand
1900	G	11/15/70	2314		28°19.5'	11°59.5'	23	26	47	Coarse shell sand
1901	G	11/15/70	2340		28°22.0'	12°01.0'	26	29	53	Mud and shell sand
1902	G	11/16/70	0007		28°24.5'	12°03.2'	27	30	55	Some sand
1903	G	11/16/70	0034	0042	28°26.8'	12°05.2'	28	31	57	Shell sand
1904	G	11/16/70	0108	0112	28°29.0'	12°07.5'	31	34	62	Shell sand
1905	G	11/16/70	0142		28°31.2'	12°09.5'	48	51	94	Sand
1906	G	11/16/70	0206		28°34.9'	12°11.2'	50	54	98	Sand

B. SAHARAN SHELF SAMPLES

TR 15

Sample No.	Latitude	Longitude	Depth	Sample Description
22	20°44'N	17°15'W	40	Tan shell fragments and sand
23	20°44'N	17°21'W	52	Light gray sand, shell fragments
24	20°44'N	17°19'W	46	Coral rock
25	20°43'N	17°39.5'W	148	Light gray sand and shell fragments
26	20°43'N	17°38'W	94	Light gray sand and shell fragments
27	20°44.5'N	17°31.5'W	72	Light gray sand and shell fragments
28	21°59'N	16°55'W	30	Gray-dark green mud
30	22°04'N	17°06'W	50	Shell fragments
31	22°09'N	17°15'W	76	Light gray sand and shell fragments
32	22°11'N	17°19'W	96	Light gray sand and shell fragments
33	22°13'N	17°22'W	110	Light gray sand and shell fragments
34	22°44'N	17°09'W	99	Light gray sand and shell fragments
35	23°14'N	16°22'W	20	Shell fragments
36	23°20'N	16°32'W	30	Tan shell sand
37	23°24'N	16°40.5'W	40	Tan shell sand
38	23°26'N	16°43.5'W	59	Gravel sand
39	23°28'N	16°47'W	75	Tan shell sand

TR 15

Sample No.	Latitude	Longitude	Depth	Sample Description
40	23°33'N	16°55'W	145	Tan shelly sand
42	24°21'N	15°49'W	29	Shell fragments and gravel
43	24°25'N	15°57'W	40	Tan shell sand
44	24°31'N	16°09.5'W	60	Tan shell sand
45	24°36'N	16°18'W	73	Tan shell sand
46	24°39'N	16°24.5'W	182	Tan shell sand
47	24°38'N	16°23.5'W	90	Tan shell sand
48	25°27.5'N	14°48.5'W	35	Rock
50	25°31'N	14°55'W	70	Shell sand
51	25°32.5'N	14°57.5'W	82	Tan shell sand
52	25°41'N	15°10'W	150	Tan shell sand
53	25°38.5'N	15°06.5'W	91	Tan shell sand
57	26°50.5'N	13°53'W	75	Tan shell sand
58	26°51'N	13°54'W	100	Tan shell sand
59	26°51.5'N	13°55'W	170	Tan shell sand

DIS 21

Station No.	Sampler Type	Location Latitude	Longitude	Depth (m)	Description
6561	G	27°28'N	13°30'W	75	Coarse grey-green shelly sand
6562	G	26°43.1'N	13°52.6'W	64	Small sample fine grey-green sand
6563	G	26°16.4'N	14°42.5'W	147	Small sample fine brown sand
6564	G	25°31.8'N	14°59'W	75	Ill-sorted brown shelly sand
6565	G	25°07'N	15°10'W	45	Very small sample shelly sand
6566	G	24°45.2'N	15°37'W	32	Coarse browny-pink ill-sorted shelly sand
6567	G	24°49.5'N	15°45.5'W	45	Light brown ill-sorted coarse shelly sand
6568	G	24°55.0'N	15°54.7'W	64	Light brown ill-sorted coarse shelly sand.
6569	G	25°00.5'N	16°03.4'W	75	Light brown ill-sorted coarse shelly sand
6570	G	25°06'N	16°12.4'W	211	Gray-green well-sorted medium sand
6573	G	25°16.6'N	16°30.8'W	1402	Gray-green well-sorted fine sand (small sample)
6574	G	25°11.5'N	16°21.7'W	830	Gray-green well-sorted fine sand (small sample)
6585	G	24°10.9'N	16°17'W	55	Gray brown well-sorted medium sand
6587	G	23°44'N	16°35'W	49	Light gray coarse shell sand (small sample)

DIS 21

Station No.	Sampler Type	Latitude	Longitude	Depth (m)	Description
6588	G	23°00'N	16°56'W	60	Brown coarse shell sand
6589	G	22°10.3'N	16°55'W	40	Gray-green well-sorted fine sand (small sample)
6590	G	22°10.5'N	17°06.3'W	55	Gray-green medium sand
6591	G	22°10.5'N	17°16.5'W	75	Gray-green medium-coarse sand
6592	G	22°11'N	17°22'W	92	Gray-green coarse sand
6593	G	22°11'N	17°27'W	752	Gray-green fine sand (small sample)
6594	G	22°11.6'N	17°37.9'W	1259	Brown fine sand (small sample)
6621	G	21°38.8'N	17°18.7'W	68	Gray-green coarse sand
6622	G	21°10.3'N	17°15.8'W	45	Gray-green medium sand (small sample)
6623	G	20°47'N	17°10.4'W	34	Gray-green medium sand
6624	G	20°46'N	17°21'W	57	Gray-green fine sand
6625	G	20°46'N	17°31.3'W	79	Gray-green fine sand
6626	G	20°46'N	17°36.8'W	96	Gray-green medium sand
6627	G	20°47'N	17°42'W	578	Gray-green medium sand (small sample)
6628	G	20°47.1'N	17°49'W	921	Gray-green medium sand (small sample)

AII 59

Station No.	Latitude	Longitude	Depth (M)	Sample Description
1741	23°45'N	17°02'W	256	
1742	23°52.3'N	17°00.5'W	1050	
1744	26°20'N	14°37'W	240	
1745	26°32'N	14°51'W	1000	
1746	26°53'N	15°16'W	2840	

AII 75

Sample No.	Sampler	Latitude	Longitude	Depth (m)	Sample Description
29	EUS	24°42'N	15°41°W	46	Medium to coarse grained bioclastic sand, light brown
30	EUS	24°28.5'N	15°50'W	100	Medium to fine-grained bioclastic sand, light brown
31	EUS	24°15.5'N	15°59.5'W	80	Medium to coarse grained bioclastic sand, light brown
32	EUS	24°02'N	16°08'W	8	Medium grained bioclastic sand, light brown
33	EUS	22°54'N	16°56.1'W		Sandy shell fragments

AII 82

Station No.	Sampler Type	Date	Latitude	Longitude	Depth CM
1	VV	4/29/74	21°19'N	17°05'W	25
2	VV	5/2/74			13
3	VV	5/2/74	20°58'N		28
4	VV	5/3/74	20°58'N		30
5	VV	5/3/74	20°58'N		28
6	VV	5/6/74	20°58'N		26
7	BC	5/17/74	21°40'N	17°01.4'W	30
8	BC	5/17/74	21°18.9'N	17°05.5'W	39
9	1VV	5/18/74	21°37.9'N	17°19.9'W	90
10	1VV	5/18/74	21°59.1'N	17°12.5'W	57
11	1VV	5/19/74	22°00.7'N	17°00.2'W	35
12	1VV	5/19/74	22°00.4'N	17°26.2'W	240
13	1VV	5/20/74	21°40'N	17°27.5'W	225
14	1VV	5/21/74	21°39'N	17°27'W	100
15	BC	5/21/74	20°58.4'N	17°06.3'W	30
16	1VV	5/21/74	21°00.3'N	17°34.9'W	140
17	BC	5/21/74	20°59.8'N	17°41'W	480
18	1VV	5/22/74	21°00.5'N	17°21.6'W	65
19	1VV	5/22/74	21°20'N	17°26.7'W	100
20	1VV	5/22/74	21°20'N	17°29.2'W	230
21	BC	5/23/74	21°22.2'N	17°38.2'W	500
22	1VV	5/23/74	21°39'N	17°28.8'W	366
23	BC	5/23/74	21°39.7'N	17°41.2'W	832
24	1VV	5/25/74	21°42.2'N	18°09.2'W	1820
25	BC	5/25/74	21°42.2'N	18°09.2'W	1820
26	1VV	5/26/74	22°00.5'N	17°27.1'W	540
27	BC	5/27/74	21°25.4'N	17°03.5'W	27

IC 68

tation No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	CM	Comments
222	GC	5/2/68	2130	2217	20°53.6'	17°44'	470	483	879	5 ft. green globigerina sand
223	BD/PD	5/2/68	2250	2253	20°53.5'	17°41.8'	310	322	586	Muddy sand
					20°53.5'	17°40.8'	303	312	568	
224	BD/PD	6/2/68	0020	0114	20°53.1'	17°37.6'	120	124	227	Shell sand in pipe. Shells
					20°53.5'	17°37.3'	70	72	132	and rocks in dredge
225	G	6/2/68	0203	0213	20°53'	17°31'	44	45	82	Medium sand
226	G	6/2/68	0257	0308	20°52.2'	17°24.6'	31	32	59	Sand and shell fragments
227	BD/PD	6/2/68	0357	0424	20°51.5'	17°19.4'	28	29	53	Sand and shells in pipe
					20°51.4'	17°18.8'	22	23	42	Calcareous sandstones in BD
228	G	6/2/68	0500	0507	20°50.6'	17°13.2'	21	22	40	Sand and shells
229	G	6/2/68	0545	0552	20°50.4'	17°08.1'	12	12	22	Shell fragments
230	G	6/2/68	0601	0609	20°51.1'	17°08.5'	16	16	29	Fine sand
233	GC	7/2/68	1507	1529	23°34.2'	17°11.2'	392	404	735	5 ft. green mud
234	BD/PD	7/2/68	1635	1728	23°33.6'	17°00.7'	264	272	498	Limestone
					23°33.3'	17°00.3'	222	229	419	
235	BD/PD	7/2/68	1752	1830	23°33'	16°57.5'	120	124	227	Shells in pipe. Shelly
					23°32.7'	16°57'	72	74	135	limestones in BD

IC 68

Station No.	Sampler Type	Date	Time GMT From	Time GMT To	Lat. N to Lat. N	Long. W to Long. W	Depth UCF	Range CF	Range CM	Comments
237	G	7/2/68	2005	2017	23°32.1'	16°57.4'	58	60	110	Shells
238	BD/PD	7/2/68	2035	2057	23°32'	16°54.8'	55	57	104	Shells
					23°31.7'	16°54.2'	55	57	104	
239	BD/PD	7/2/68	2129	2205	23°31.4'	16°50'	45	46	84	Shells and shelly limestone
					23°31.7'	16°49.5'	42	43	79	
240	G	7/2/68	2230	2239	23°31.1'	16°45.9'	32	33	60	Shelly sand
241	BD/PD	7/2/68	2257	2312	23°30.7'	16°43.2'	32	33	60	Shelly sand in pipe
					23°30.4'	16°42.6'	32	33	60	
242	G	7/2/68	2356	2405	23°30.3'	16°36'	19	20	37	Shells
243	GC	8/2/68	0053	0107	23°30'	16°28.9'	17	18	33	3" shell fragments
244	G	8/2/68	0155	0200	23°29.5'	16°22'	16	17	31	Shell fragments
245	G	8/2/68	0247	0253	23°29'	16°15.5'	12	13	24	Shell fragments
246	G	8/2/68	0335	0340	23°28.2'	16°08.8'	13	14	26	Shell fragments
247	G	8/2/68	0353	0355	23°28.2'	16°06.5'	10	11	20	Shell fragments
249	BD/PD	9/2/68	0741	0845	26°29.5'	15°01.5'	776	798	1452	Glob. mud
					26°29'	15°01'	696	715	1301	
250	BD/PD	9/2/68	0910	1035	26°27.5'	14°59'	558	574	1045	Glob. mud and some coral
					26°26.8'	14°58'	528	543	988	

IC 68

Station No.	Sampler Type	Date	Time GMT From	To	Lat. N to Lat. N	Long. W to Long. W	Depth Range UCF	CF	CM	Comments
251	GC	9/2/68	1100	1140	26°24.4'	14°54.7'	532	547	996	4 1/2 ft. mud
252	BD/PD	9/2/68	1237	1404	26°21.5'	14°51.3'	363	373	679	Coral and sand
					26°21'	14°50.3'	312	321	584	
255	G	9/2/68	1644	1648	26°17.1'	14°45'	113	116	212	Shell sand
256	G	9/2/68	1707	1717	26°14.6'	14°43'	75	77	141	Shell sand
257	G	9/2/68	1732	1740	26°13.2'	14°41'	57	59	108	Shell sand
258	BD/PD	9/2/68	1758	1819	26°11.5'	14°38'	46	47	86	Shell sand
					26°11.3'	14°39'	44	45	82	
259	BD/PD	9/2/68	1832	1847	26°11.1'	14°39'	45	46	84	Shelly limestone
					26°11.2'	14°38.5'	45	46	84	
260	BD/PD	9/2/68	1920	1940	26°11.1'	14°37.7'	41	42	77	Shell fragments
					26°10.7'	14°38'	39	40	73	
261	BD/PD	9/2/68	1955	2035	26°10.6'	14°36.5'	32	33	60	Shell limestone
					26°10.5'	14°37'	32	33	60	
262	BD/PD	9/2/68	2112	2140	26°09.8'	14°36.7'	32	33	60	Coral and shell sand
					26°09.5'	14°36.5'	25	26	48	
263	BD/PD	9/2/68	2200	2219	26°09.1'	14°34.5'	19	20	37	Shell limestone and shell
					26°09.1'	14°34'	17	18	33	sand
264	BD/PD	9/2/68	2248	2309	26°08.6'	14°32.3'	15	16	29	Limestone and shell
					26°08.8'	14°33'	15	16	29	sand

SECTION III

SAMPLE TEXTURE

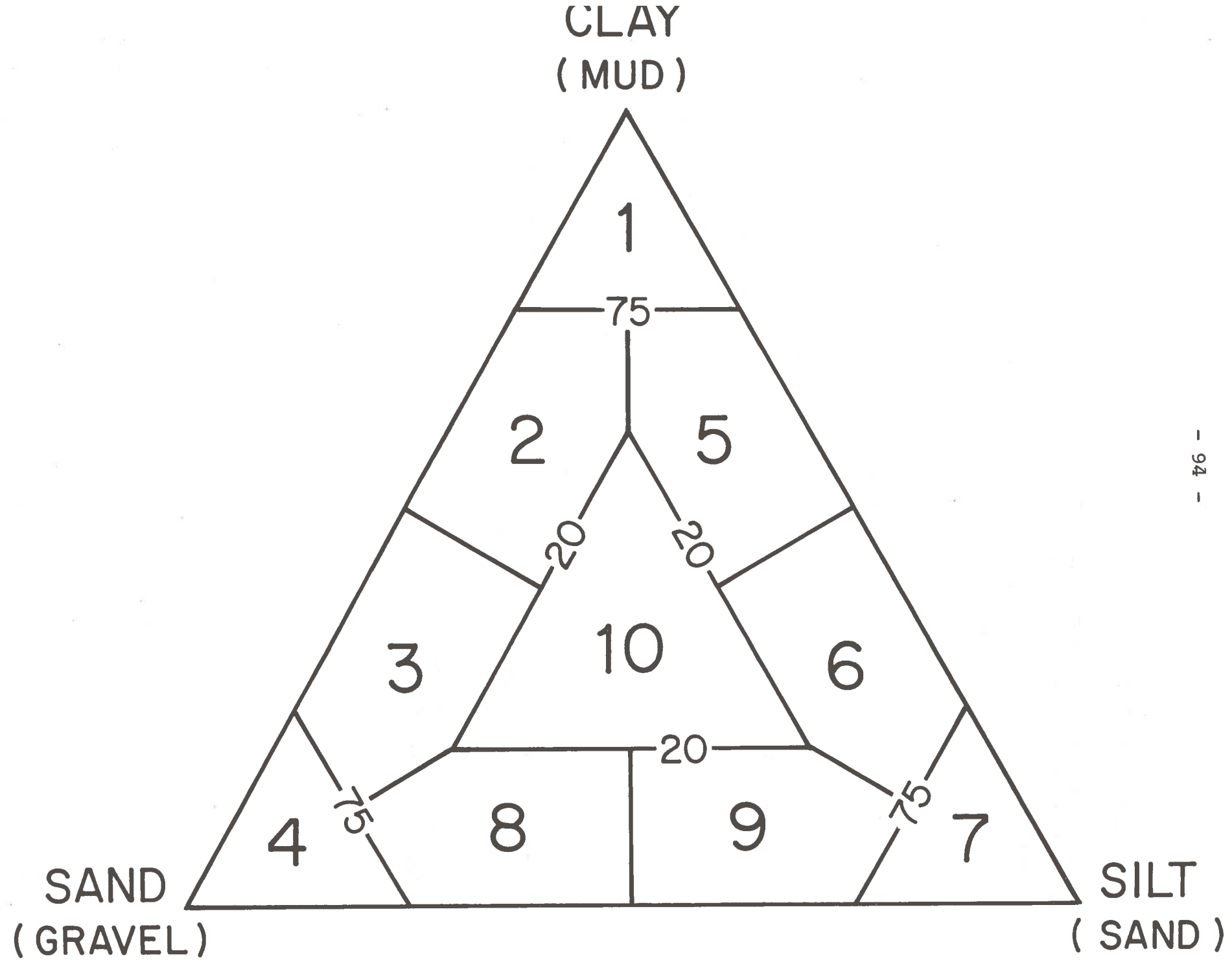
III SAMPLE TEXTURE

The following data section provides all available sample texture information. The size divisions used are as follows:

		Particle diameters
All U.R.I. (TR 15) samples	% gravel	> 2 mm (phi < -1)
	% sand	0.0625 - 2 mm (phi = -1 to phi = 4)
	% mud	< 0.0625 mm (phi > 4)
All other samples	% sand	> 0.0625 mm (phi < 4)
	% silt	0.00195 mm - 0.0625 mm (phi = 4 to phi = 9)
	% clay	< 0.00195 mm (phi > 9)

The sand and gravel components were determined by wet sieving; the clay fraction by centrifuging techniques.

The texture classification numbers for the gravel-sand-mud or sand-silt-clay analyses are based on the following diagram (after Shepard, 1954);


CLAY
(MUD)
1
75
2
5
20
20
3
10
6
20
75
75
4
8
9
7
SAND
(GRAVEL)
SILT
(SAND)

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Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
68	7	92			1			7
69	5	81			14			7
70	6	70			24			6
71	8	91			1			7
72	6	90			4			7
73	8	87			5			7
74	4	93			3			7
75	3	84			13			7
76	2	63			35			6
77	4	75			21			6,7
78	2	96			2			7
79	0	99			1			7
81	10	90			0			7
82	0	80			20			7
83	0	12			88			1
84	0	16			84			1
85	3	47			50			5
86	0	70			30			6
87	2	75			23			6,7
88	0	1			99			1
89	8	55			37			6
90	0	85			15			7
91	0	98			2			7
92	1	72			27			6
93	3	50			47			6
93A	3	41			56			5
94	1	66			33			6
95	0	93			7			7
96	0	69			31			6
98	7	72			21			6
99	0	85			15			7
104	0	84			16			7

TR 15

Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
105	3	96			1			7
106	1	90			8			7
108	0	65			35			6
109	15	85			0			7
111	6	72			22			6
112	100	0			0			4
113	0	0			100			1
114	12	71			17			6
115	50	50			0			8,9
116	1	52			47			6
117	2	88			10			7
118	0	0			100			1
119	0	54			46			6
121	0	19			81			1
122	0	63			37			6
123	0	28			72			5
124	0	0			100			1
125	0	89			11			7
126	0	93			7			7
127	0	0			100			1
128	1	59			40			6
129	4	64			32			6
130	6	79			15			7
131	5	73			22			6
132	11	71			18			6
133	13	77			10			7
134	11	71			18			6
135	15	85			0			7

Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
266		97	tr	3	3	.99	4	
267		97	2	1	3	.33	4	
268		99	tr	1	1	.99	4	
269		98	1	1	2	.50	4	
270		99	tr	1	1	.99	4	
271		98	1	1	2	.50	4	
272		93	4	3	7	.43	4	
273		77	6	17	23	.74	4	
274		88	7	5	12	.42	4	
275		12	8	80	88	.91	1	
276		91	4	5	9	.56	4	

IC 69

Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
829		93	5	2	7	.29	4	
830		61	24	15	39	.38	8	
831		77	19	4	23	.17	4	
832		76	14	10	24	.42	4	
833		76	15	9	24	.38	4	
834		85	8	6	14	.43	4	
835		84	8	8	16	.50	4	
836		86	8	6	14	.43	4	
837		90	6	4	10	.40	4	
838		95	2	3	5	.60	4	
839		82	9	9	18	.50	4	
840		87	7	6	13	.46	4	
841		75	15	10	25	.40	3,4	
847		89	6	5	11	.45	4	
848		88	6	6	12	.50	4	
851		90	5	5	10	.50	4	
852		86	8	6	14	.43	4	
853		70	8	22	30	.73	8	
854		83	17	tr	17	.01	4	
855		81	12	7	19	.37	4	
856		4	65	31	96	.32	6	
860		77	11	12	23	.52	4	
862		68	19	13	32	.41	3	
867		87	7	6	13	.46	4	
869		1	71	28	99	.28	6	
870		50	37	13	50	.26	8	
873		76	14	10	24	.42	4	
874		75	12	13	25	.52	3,4	
875		81	9	10	19	.53	4	
876		51	35	14	49	.29	8	
877		86	8	6	14	.43	4	

Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
879		6	59	35	94	.37	6	
882		83	10	7	17	.41	4	
885		78	17	5	22	.23	4	
887		96	1	3	4	.75	4	
890		56	42	2	44	.05	8	
891		73	18	9	27	.33	8	
893		64	16	20	36	.56	3	
894		82	10	8	18	.44	4	
896		86	8	6	14	.43	4	
898		95	2	3	5	.60	4	
899		45	25	30	55	.55	10	
901		96	4	tr	4	.01	4	
902		98	1	1	2	.50	4	
903		98	1	1	2	.50	4	
904		99	tr	1	1	.99	4	
905		98	1	1	2	.50	4	
907		99	tr	1	1	.99	4	
908		95	3	2	5	.40	4	
911		99	tr	1	1	.99	4	
912		96	2	2	4	.50	4	
913		84	10	6	16	.38	4	
921		9	57	34	91	.37	6	
922		80	10	10	20	.50	4	
923		88	6	6	12	.50	4	
924		89	6	5	11	.45	4	
925		89	4	7	11	.64	4	
926		73	13	14	27	.52	3	
927		88	6	6	12	.50	4	
928		88	6	6	12	.50	4	
929		98	1	1	2	.50	4	
930		97	1	2	3	.67	4	
931		90	5	5	10	.50	4	

IC 69

Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
932		97	1	2	3	.67	4	
933		97	1	2	3	.67	4	
934		92	4	4	8	.50	4	
935		93	3	4	7	.57	4	
936		48	36	16	52	.31	8	
937		98	1	1	2	.50	4	
939		4	55	41	96	.43	6	
940		7	44	49	93	.53	5	
941		23	50	27	77	.35	10	
942		79	10	11	21	.52	4	
944		97	1	2	3	.67	4	
945		86	7	7	14	.50	4	
949		98	2	tr	2	tr/2	4	
950		97	1	2	3	.67	4	
951		67	23	10	33	.30	3	
952		42	38	20	58	.34	8,10	
954		99	tr	tr	1	tr/1	4	
956		56	26	18	44	.41	3	
958		93	3	4	7	.57	4	
960		98	1	1	2	.50	4	
961		95	2	3	5	.60	4	
963		92	4	4	8	.50	4	
964		77	12	11	23	.48	4	
965		77	13	10	23	.43	4	
966		70	17	13	30	.43	8	
968		29	45	26	71	.37	10	
969		32	39	29	68	.43	10	
970		77	13	10	23	.43	4	
973		98	1	1	2	.50	4	
974		98	1	1	2	.50	4	
975		15	9	76	85	.89	1	

IC 69

Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
976		26	43	31	74	.42	10	
977		54	28	18	46	.39	8	
979		66	19	15	34	.44	3	
980		72	16	12	28	.43	3	
981		80	11	9	20	.45	4	
985		98	1	1	2	.50	4	
986		99	tr	tr	1	tr/1	4	
987		76	13	11	24	.46	4	
988		65	22	13	35	.37	8	
989		62	21	17	38	.45	8	
991		47	17	36	53	.68	3	
992		81	10	10	20	.50	4	
993		68	17	15	32	.47	8	
998		79	10	11	21	.52	4	
999		92	2	6	8	.75	4	
1002		89	5	6	11	.55	4	
1003		85	7	8	15	.53	4	
1005		96	1	3	4	.75	4	
1006		85	6	9	15	.60	4	
1007		92	3	5	8	.63	4	
1016		31	42	27	69	.39	10	
1018		40	37	23	60	.38	10	
1019		64	22	14	36	.39	8	
1020		71	18	11	29	.38	8	
1021		90	5	5	10	.50	4	
1022		91	5	4	9	.44	4	
1023		88	5	7	12	.58	4	
1027		97	tr	3	3	.99	4	
1028		94	2	4	6	.67	4	
1029		80	12	8	20	.40	4	
1030		90	6	4	10	.40	4	

IC 69

Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
1031		93	2	5	7	.71	4	
1032		91	3	6	9	.67	4	
1033		93	2	5	7	.71	4	
1034		75	14	11	25	.44	4,8	
1035		74	14	12	26	.46	8	
1037		77	12	11	23	.48	4	
1038		54	40	6	46	.13	8	
1039		2	63	35	98	.36	6	
1040		16	33	51	84	.61	5	
1046		37	46	17	63	.27	9	
1047		58	30	12	42	.29	12	
1048		54	39	7	46	.15	8	
1050		5	71	24	95	.25	6	
1051		2	73	25	98	.26	6	
1052		3	65	32	97	.33	6	
1053		10	71	19	90	.21	6	
1054		29	41	30	71	.42	10	
1056		87	7	6	13	.46	4	
1062		48	29	23	52	.44	10	
1063		82	11	7	18	.39	4	
1064		72	17	11	28	.39	8	
1065		29	51	20	71	.28	9,10	
1066		1	67	32	99	.32	6	
1067		1	65	34	99	.34	6	
1068		1	62	37	99	.37	6	
1069		26	46	28	74	.38	10	
1070		43	34	23	57	.40	10	
1072		65	21	14	35	.40	8	
1073		70	18	12	30	.40	8	
1078		18	11	71	82	.21	2	
1079		90	5	5	10	.50	4	
1080		74	14	12	26	.46	8	

Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
1081		12	49	39	88	.44	6	
1082		12	50	38	88	.43	6	
1083		2	66	32	98	.33	6	
1084		27	41	32	73	.44	10	
1085		14	30	56	86	.65	5	
1086		37	36	27	63	.43	10	
1088		74	14	12	26	.46	8	

IC 70

Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
1201		78	18	4	22	.18	4	
1203		90	7	3	10	.30	4	
1205		94	4	2	6	.33	4	
1209		92	5	3	8	.38	4	
1227		79	15	6	21	.29	4	
1229		62	31	7	38	.18	8	
1283		60	34	6	40	.15	8	
1284		71	24	5	29	.17	8	
1291		89	8	3	11	.27	4	
1293		84	9	7	16	.44	4	
1319		6	55	39	94	.41	6	
1321		16	66	18	84	.21	6	
1329		80	14	6	20	.30	4	
1331		89	7	4	11	.36	4	
1338		1	72	27	99	.27	6	
1340		1	69	30	99	.30	6	
1343		1	74	25	99	.25	6	
1347		63	24	13	37	.35	8	
1350		85	9	6	15	.40	4	
1383		88	11	1	12	.08	4	
1385		98	1	1	2	.50	4	
1430		76	22	2	24	.08	4	
1432		57	30	13	43	.30	8	
1434		15	64	21	85	.25	6	
1436		23	61	16	77	.21	9	
1440		91	4	5	9	.56	4	
1516		92	3	5	8	.63	4	
1518		90	5	5	10	.50	4	
1520		78	15	7	22	.32	4	
1522		74	7	19	26	.73	3	
1524		61	29	10	39	.26	8	
1526		44	44	12	56	.33	8,9	

Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
1528		60	32	8	40	.20	8	
1530		98	1	1	2	.50	4	
1532		98	1	1	2	.50	4	
1565		65	29	6	35	.17	8	
1567		74	20	6	26	.23	8	
1569		92	6	2	8	.25	4	
1571		81	11	8	19	.42	4	
1573		96	2	2	4	.50	4	
1575		91	4	5	9	.56	4	
1599		96	1	3	4	.75	4	
1601		99	tr	1	1	.99	4	
1603		98	1	1	2	.50	4	
1605		96	1	3	4	.75	4	
1607		89	8	3	11	.27	4	
1609		78	18	4	22	.18	4	
1611		41	54	5	59	.08	9	
1615		80	19	1	20	.05	4	
1651		97	tr	3	3	.99	4	
1653		98	1	1	2	.50	4	
1655		99	tr	1	1	.99	4	
1657		97	1	2	3	.67	4	
1659		63	24	13	37	.35	8	
1661		72	24	4	28	.14	8	
1663		85	12	3	15	.20	4	
1681		98	1	1	2	.50	4	
1683		98	1	1	2	.50	4	
1689		89	7	4	11	.36	4	
1691		94	4	2	6	.33	4	
1693		91	6	3	9	.33	4	
1698		91	7	2	9	.22	4	
1701		94	4	2	6	.33	4	
1718		86	12	2	14	.17	4	

IC 70

Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
1719		89	9	2	11	.18	4	
1721		87	10	3	13	.23	4	
1723		91	6	3	9	.33	4	
1725		57	34	9	43	.21	8	
1727		93	4	3	7	.43	4	
1729		91	4	5	9	.56	4	
1731		97	1	2	3	.67	4	
1740		74	22	4	26	.15	8	
1744		89	10	1	11	.09	4	
1771		98	tr	2	2	.99	4	
1773		94	2	4	6	.67	4	
1775		90	5	5	10	.50	4	
1777		88	9	3	12	.25	4	
1779		93	5	2	7	.29	4	
1781		97	3	tr	3	tr/3	4	
1782		96	3	1	4	.25	4	
1783		96	3	1	4	.25	4	
1795		46	44	10	54	.19	8	
1796		71	22	7	29	.24	8	
1797		67	26	7	33	.21	8	
1799		79	12	9	21	.75	4	
1801		84	11	5	16	.31	4	
1805		93	2	5	7	.71	4	
1806		97	2	1	3	.33	4	
1820		72	22	6	28	.21	8	
1822		12	74	14	88	.16	6	
1824		26	59	15	74	.20	9	
1826		3	81	16	97	.16	7	
1828		29	57	14	71	.20	9	
1836		2	72	26	98	.27	6	
1840		2	78	20	98	.20	7	
1841		8	73	19	92	.21	6	

IC 70

Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
1843		92	5	3	8	.38	4	
1845		39	45	16	61	.26	9	
1847		56	33	11	44	.25	8	
1861B		89	7	4	11	.36	4	
1863		88	8	4	12	.33	4	
1865		87	7	6	13	.46	4	
1866		86	6	8	14	.57	4	
1867		88	6	6	12	.50	4	
1868		87	11	2	13	.15	4	
1870		95	2	3	5	.60	4	
1873		98	1	1	2	.50	4	
1874		98	tr	2	2	.99	4	
1875		99	tr	1	1	.99	4	
1879		84	10	6	16	.38	4	
1880		91	4	5	9	.56	4	
1883		92	3	5	8	.63	4	
1885		90	6	4	10	.40	4	
1886		87	8	5	13	.38	4	
1887		96	2	2	4	.50	4	
1889		97	1	2	3	.67	4	
1891		83	10	7	17	.41	4	
1892		76	16	8	24	.33	4	
1893		72	17	11	28	.39	8	
1894		77	16	7	28	.30	4	
1898		85	10	5	15	.33	4	
1899		96	2	2	4	.50	4	
1900		96	1	3	4	.75	4	
1901		95	2	3	5	.60	4	
1905		79	16	5	21	.24	4	

AII 59

Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
1747A		82			18			
1747B		93			7			
1748		15			85			
1749		85			15			
1750		67			33			

AII 75

Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
34		82	8	10	56	18	4	
35		92	4	4	50	8	4	

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Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
22	7	92			1			7
23	0	99			1			7
24	100	0			tr			4
25	5	94			1			7
26	3	95			2			7
27	1	87			12			7
28	0	3			97			1
30	0	100			tr			7
31	2	97			1			7
32	3	95			2			7
33	2	98			tr			7
34	0	97			3			7
35	16	84			tr			7
36	20	80			tr			7
37	12	88			tr			7
38	22	77			1			7
39	3	97			tr			7
40	3	97			tr			7
41	2	97			1			7
42	22	78			tr			7
43	10	90			tr			7
44	20	80			tr			7
45	28	71			1			9
46	5	94			1			7
47	9	90			1			7
48	100	0			tr			4
50	4	95			1			7
51	16	83			1			7
52	7	91			2			7
53	5	94			1			7
57	10	89			1			7
58	16	83			1			7
59	10	88			2			7

Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
221		63	29	8	37	.22	8	
223		84	11	5	16	.31	4	
224		88	8	4	12	.33	4	
225		85	11	4	15	.27	4	
226		9	6	85	91	.93	1	
227		95	3	2	5	.40	4	
228		95	3	2	5	.40	4	
230		53	42	5	47	.11	8	
234		15	10	75	85	.88	1,2	
235		99	tr	1	1	.99	4	
237		94	3	3	6	.50	4	
238		94	4	2	6	.33	4	
239		96	3	1	4	.25	4	
240		97	2	1	3	.33	4	
241		96	2	2	4	.50	4	
242		98	1	1	2	.50	4	
244		98	1	1	2	.50	4	
245		98	1	1	2	.50	4	
246		89	8	3	11	.27	4	
247		99	tr	1	1	.99	4	
249		49	31	20	51	.39	8,10	
250		35	43	22	65	.34	10	
252		73	17	10	27	.37	8	
257		92	5	3	8	.38	4	
258		96	3	1	4	.25	4	
259		97	2	1	3	.33	4	
260		97	1	2	3	.67	4	
262		98	1	1	2	.50	4	
263		99	tr	1	1	.99	4	
264		98	1	1	2	.50	4	

AII 59

Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
1742		13			87			
1744		91			9			
1745		81			19			
1746		14			86			

AII 75

Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
29		98	1	1	2	.50	4	
30		98	1	1	2	.50	4	
31		97	2	1	3	.33	4	
32		97	tr	3	3	.99	4	

AII 82

Sample No.	% Gravel	% Sand	% Silt	% Clay	% Mud (Silt + Clay)	Clay/ Mud	Sand-Silt-Clay Classification	Gravel-Sand-Mud Classification
1		77	14	9	23	.39	4	
2		92	6	2	8	.25	4	
3		27	63	10	73	.14	9	
4		27	27	46	73	.63	10	
5		28	57	15	72	.21	9	
6		66	27	7	34	.21	8	
7		41	41	18	59	.31	8,9	
8		85	8	7	15	.47	4	
9		88	6	6	12	.50	4	
10		96	4	tr	4	tr/4	4	
11		90	7	3	10	.30	4	
12		95	3	2	5	.40	4	
13		96	1	4	5	.80	4	
14		95	2	3	5	.60	4	
15		74	22	4	26	.15	8	
16		95	3	2	5	.40	4	
17		85	6	9	15	.60	4	
19		88	6	6	12	.50	4	
19		93	3	4	7	.57	4	
20		89	6	5	11	.45	4	
21		66	21	13	34	.38	8	
22		94	3	3	6	.50	4	
23		47	39	14	53	.26	8	
24A		8	62	30	92	.33	6	
24B		46	39	15	54	.28	8	
26		91	5	4	9	.44	4	
27		70	24	6	30	.20	8	

SECTION IV

FINE SAND FRACTION; COMPOSITION

SECTION IV: FINE SAND FRACTION: COMPOSITION

As before, samples are grouped by cruise, and listed by sample number, with Moroccan samples preceding Saharan samples. Analyses were made on the fine sand fraction (125 to 250 micrometers in size) because this fraction occurs in most of the world's shelf sediments, thus allowing a means of intercomparison between different continental margins. Analyses were made by counting 300 grains under a binocular microscope; feldspars were stained for identification (see Milliman, 1972, for further details). All minerals are reported in percentages of the fine sand fraction.

Mineral Names

Qtz = quartz

K.Feld= potash feldspar

Plag = plagioclase

Glauc = glauconite

Mica = mica plates

Heavies = magnetite, rutile, amphiboles, et cetera

Rock Frag = rock fragments

Abbreviations: F/F+Q = ratio of feldspar to quartz plus feldspar
K/Na = ratio of potash feldspar to plagioclase

Mineralogical Classification

A = arkosic (F/F+Q = more than 25 percent)
SA = subarkosic (F/F+Q = 10-25 percent)
SO = suborthoquartzitic (F/F+Q = 5-10 percent)
O = orthoquartzitic (F/F+Q = less than 5 percent)

A. MOROCCAN SHELF SAMPLES

TR 15

Sample No.	% Qtz	%K Feld	% Plag	F/ F+Q	K/Na	% Glauc	% Mica	% Heavies	% Rock Frag
70	27	6	4	A	1.5	60			tr
75	57	12	14	A	.86	16			tr
76	17	5	2	A	2.5	75			tr
77	36	9	6	A	1.5	47			tr
83	55	14	20	A	.7	10			tr
84	52	9	15	A	.6	24			tr
85	40	6	7	SA	.86	47	tr		tr
90	35	2	8	SA	.25	54			tr
91	56	16	20	A	.8	7	1		tr
99	53	9	17	A	.53	20			tr
106	59	4	10	A	.4	25			1
117				A		>95			
118	71	6	12	SA	.5	8			2
122	52	3	6	SA	.5	39			
125	55	4	10	SA	.4	20			tr

IC 68

Sample No.	% Qtz	%K Feld	% Plag	F/ F+Q	K/Na	% Glauc	% Mica	% Heavies	% Rock Frag
266	49	22	20	A	1.1	6			
267	9	tr	2		tr/2	88			
268						15			
269	27	5	2	SA	2.5	64			
270	62	4	9	SA	.44	24			
271						10			
272						10			
273						40			
274	tr	tr	tr		tr/tr	>95			
275						20			
276	14	2	2	SA	1	81			

IC 69

Sample No.	% Qtz	%K Feld	% Plag	F/ F+Q	K/Na	% Glauc	% Mica	% Heavies	%Rock Frag
829						100			
830						100			
831						98			
832						95			
833						98			
834						98			
835						99			
836						98			
837						98			
838						99			
839						98			
840						98			
841						100			
847						90			
848						>85			
851	tr	tr	tr		tr/tr	>95			
852						99			
853						98			
854						98			
855						98			
860						> 95			
862						100			
867						98			
870						>50			
873						99			
874						100			
875						100			
876						80			
877						70			
879						100			
882						>95			
885	55	14	20	A	.7	10			
891	34	1	1	SO	1	62			
893						99			
894						>95			
896						95			
898	22	1	4	SA	.25	67			
903						tr			50
905						tr			45
908						5			20
912						<5			50
913						<5			50
922						>95			

IC 69

Sample No.	% Qtz	%K Feld	% Plag	F/ F+Q	K/Na	% Glauc	% Mica	% Heavies	% Rock Frag
923	15	1	1	SA	1	79			
926	53	9	13	A	.69	23			
927						<5			40
928	61	13	21	A	.62	2			
929						<5			
930						10			
931						<5			50
932						<5			
933						<5			
934						25			
935						15			
936						15			30
937						45			25
940						25			
942						95			
944						95			
949						50			
950						>60			
951						99			
952						94			
958						65			
959						90			
961						>70			
963						>90			
964						>90			
965						>95			
966						60			
968						90			
969						85			
970						tr			
976						60			
977						99			
979						>95			
980						99			
981						99			
987						50			
988						>80			
989						99			
991						90			
992						98			
993						98			
999						75			

IC 69

Sample No.	% Qtz	%K Feld	% Plag	F/ F+Q	K/Na	% Glauc	% Mica	% Heavies	% Rock Frag
1003						>85			
1005						50			
1006						50			
1007						60			
1016						60			10
1018						>90			
1020						95			
1021						50			
1022						70			
1023						>85			
1030						70			
1031						>95			
1032						>90			
1033						75			
1034						>90			
1037						60			
1038						>90			
1046						20			35
1047						<5			35
1063						5			40
1064						<10			25
1065						10			35
1069						95			
1070						100			
1072						99			
1078						>90			
1079						<10			
1080						15			30
1081						15			25
1084						60			
1086						98			
1088						98			

IC 70

Sample No.	% Qtz	%K Feld	% Plag	F/ F+Q	K/Na	% Glauc	% Mica	% Heavies	% Rock Frag
1203	80	9	6	SA	1.48	3			2
1227	71	13	6	SA	2.2	8			1
1284	73	8	9	SA	.85	3			7.5
1319	66	9	11	SA	.78	13.5			1
1329	66	14	7	SA	2.12	3			8
1340	75	7	9	SA	.75	3			3
1350						>75			
1432						100			
1434	59	18	25	A	.69	23			6
1522	69	15	8	SA	1.84	7			.51
1528	78	9	6	SA	1.45	6			1
1565	61	21	9	A	2.25	7			1
1571	62	15	17	A	.90	4			1
1599	57	13	11	A	1.19	18			2
1605	52	17	18	A	.95	9			4
1651	69	17	5	SA	3.53	5			4
1657	58	12	9	A	1.33	15			6
1663	52	16	22	A	.72	7			3
1689	71	11	6	SA	1.71	8			3
1719	71	17	3	SA	5.3	7			2
1725	55	18	20	A	.94	6			.6
1731	68	16	8	A	2.0	4			4
1775	48	17	19	A	.89	12			4
1781	58	12	12	A	1	13			4
1797	38	26	29	A	.90	4			.5
1805	64	16	11	A	1.37	6			2
1824	66	18	9	A	1.96	7			.3
1828						100			
1843	78	13	3	SA	4.7	3			6
1861	33	25	25	A	1.02	11			6
1866	67	6	13	SA	.44	10			4
1870	68	14	11	A	1.3	5			1
1875	67	15	10	A	1.5	6			2
1887	54	12	3	SA	3.7	9			3
1892	34	2	1	SO	1.75	60			.3
1898	71	17	4	SA	4.17	6			.1
1901	27	45	25	A	1.79	2			.6

AII 59

Sample No.	% Qtz	%K Feld	% Plag	F/ F+Q	K/Na	% Glauc	% Mica	% Heavies	% Rock Frag
1747A						75			
1747B						90			
1749						15	tr		
1750						25			

AII 75

Sample No.	% Qtz	%K Feld	% Plag	F/ F+Q	K/Na	% Glauc	% Mica	% Heavies	% Rock Frag
34	tr					> 95			

B. SAHARAN SHELF SAMPLES

TR 15

Sample No.	% Qtz	%K Feld	% Plag	F/ F+Q	K/Na	% Glauc	% Mica	% Heavies	% Rock Frag
22	54	2	4	A	.5	35		tr	
25	54	5	8	SA	.63	33		tr	
33	95	tr	2	O	tr/2	2		tr	
50	67	9	4	SA	2.25	18		1	

IC 68

Sample No.	% Qtz	%K Feld	% Plag	F/ F+Q	K/Na	% Glauc	% Mica	% Heavies	% Rock Frag
226	89	3	1	O	3	4			
228	87	5	2	SO	2.5	5			
235						0			
247	91	3	1	O	3	4			
252	18	3	5	A	.6	73			
257	73	5	11	SA	.45				
258						60			
259						30			
260	22				tr/3	75			
262						5			
264	61	7			.5	1			

AII 59

Sample No.	% Qtz	%K Feld	% Plag	F/ F+Q	K/Na	% Glauc	% Mica	% Heavies	% Rock Frag
1742						10	5		
1744						55			
1745						85			
1746						tr	5		

AII 75

Sample No.	% Qtz	%K Feld	% Plag	F/ F+Q	K/Na	% Glauc	% Mica	% Heavies	% Rock Frag
31						<5			

AII 82

Sample No.	% Qtz	%K Feld	% Plag	F/ F+Q	K/Na	% Glauc	% Mica	% Heavies	% Rock Frag
1							tr		
2						tr			
3							tr	tr	
9	30					50			
10	80					20			
11	100								
12	70					30			
13						tr			
16						tr			
17						30			
20	40					60			
21	70					30			
22	40					60			
23						15			
26						30			

SECTION V

CLAY MINERALS

SECTION V CLAY MINERALS

Samples are grouped into cruises, and listed by sample number. Moroccan samples are followed by Saharan samples. Clay mineral contents were determined by calculating their peak area percentages from X-ray diffractograms, following the method of Biscaye (1965). The determinations were made on material finer than 2 micrometers in size, which was separated from the rest of the sediment by centrifuge, and vacuum pumped through silver filters.

We determined four major clay minerals: - montmorillonite, illite, kaolinite, and chlorite, which are presented in terms of their percentage of the less than 2 micrometer (clay) size fraction. Although the results of our calculations are recorded to the first decimal place, the method used is probably only precise to within ±5 percent of any given value. Values given in parentheses represent the means of duplicate analyses.

A MOROCCAN SHELF SAMPLES

Sample No.	% Mont.	% Illite	% Kaolinite	% Chlorite	Illite / Kaolinite
266	2.7	82.4	10.3	4.6	8.00
272	9.0	75.9	10.8	4.3	7.03
274	7.0	78.8	8.7	5.5	9.06
275	5.7	79.4	9.5	5.4	8.36
276	7.1	76.9	11.2	4.8	6.87

Sample No.	% Mont.	% Illite	% Kaolinite	% Chlorite	Illite / Kaolinite
829	(13.9)	(74.2)	(5.6)	(6.4)	(13.39)
831	7.8	76.9	7.9	7.4	9.73
833	25.7	55.6	10.5	8.2	5.30
835	11.6	76.5	6.0	5.9	12.75
837	7.1	81.9	5.5	5.5	14.89
838	9.2	82.2	4.3	4.3	19.12
839	8.8	73.6	9.3	8.3	7.91
841	7.7	81.0	4.6	6.7	17.61
847	13.2	70.4	8.2	8.2	8.59
851	7.7	80.7	5.8	5.8	13.91
853	9.2	77.4	6.7	6.7	11.55
855	8.1	78.1	6.9	6.9	11.32
860	9.2	74.8	8.0	8.0	9.35
861	8.9	78.5	5.8	6.8	13.53
862	10.8	78.9	4.4	5.9	17.93
870	7.1	79.2	6.9	6.8	11.48
873	9.5	77.8	6.5	6.2	11.97
875	10.3	78.3	4.1	7.3	19.10
877	7.8	78.8	6.7	6.7	11.76
882	8.5	79.9	5.8	5.8	13.78
887	7.0	84.6	4.2	4.2	20.14
890	7.7	79.5	4.2	8.6	18.92
894	11.4	74.8	6.9	6.9	10.84
896	12.1	72.1	7.9	7.9	9.13
899	6.7	78.4	7.0	7.9	11.20
901	6.1	83.7	3.7	6.5	22.62
903	4.3	83.1	6.3	6.3	13.19
906	8.9	80.0	3.7	7.4	21.62
912	5.0	84.8	5.3	4.9	16.00
920	5.8	81.7	6.0	6.5	13.62
921	6.2	73.6	10.1	10.1	7.29
922	10.8	79.2	5.0	5.0	15.84
924	8.8	77.2	7.0	7.0	11.03
926	7.6	77.2	7.6	7.6	10.16
928	8.1	76.9	7.5	7.5	10.25
931	5.0	81.9	6.4	6.9	12.77
933	5.9	80.9	6.6	6.6	12.26
935	(31.1)	(59.9)	(4.5)	(4.5)	(13.31)
936	9.5	75.3	7.6	7.6	9.91
939	9.2	72.2	9.3	9.3	7.76
941	15.5	67.7	8.4	8.4	8.06
942	9.2	75.9	6.3	8.6	12.05
944	8.0	79.0	6.5	6.5	12.15

Sample No.	% Mont.	% Illite	% Kaolinite	% Chlorite	Illite / Kaolinite
950	8.2	79.0	5.4	5.4	14.63
951	9.2	78.0	4.5	8.1	17.38
952	13.9	62.9	11.6	11.6	5.42
956	(16.8)	(69.3)	(9.5)	(9.5)	(7.98)
958	6.9	79.1	7.0	7.0	11.30
961	(10.4)	(74.6)	(6.8)	(8.3)	(11.82)
964	20.1	56.5	11.7	11.7	4.83
966	10.9	74.1	8.1	6.9	9.15
969	8.8	71.2	10.0	10.0	7.12
970	8.5	76.5	7.5	7.5	10.20
976	13.1	69.5	8.7	8.7	7.99
979	8.7	73.5	8.9	8.9	8.26
981	10.1	71.5	9.0	9.4	7.94
987	11.1	74.5	7.2	7.2	10.35
989	7.9	75.7	8.2	8.2	9.23
992	8.1	77.2	6.3	8.4	12.25
998	12.3	77.3	5.2	5.2	14.87
999	7.8	73.0	9.6	9.6	7.60
1020	7.2	78.8	9.7	4.3	8.12
1029	8.9	75.1	6.1	9.9	12.31
1035	9.1	76.9	7.0	7.0	10.99
1039	8.1	74.1	8.9	8.9	8.33
1048	13.5	76.2	4.1	6.2	18.59
1053	5.5	76.3	9.1	9.1	8.38
1065	11.0	75.8	6.1	7.1	12.43
1072	9.7	72.3	6.3	11.7	11.48
1078	17.1	71.0	5.6	6.3	12.68
1083	7.9	76.6	6.6	8.9	11.61
1088	10.2	75.3	4.9	9.6	15.37

Sample No.	% Mont.	% Illite	% Kaolinite	% Chlorite	Illite / Kaolinite
1201	10.8	79.2	5.0	5.0	15.84
1203	9.3	77.2	6.3	7.2	12.25
1205	5.9	80.1	5.8	8.2	13.81
1207	9.7	77.0	4.9	8.4	15.71
1209	5.4	80.2	5.0	9.4	16.04
1229	9.6	78.0	5.1	7.3	15.29
1283	13.8	76.8	4.7	4.7	16.34
1284	18.1	74.5	3.7	3.7	20.14
1293	10.2	77.8	4.8	7.2	16.21
1317	9.4	63.2	13.7	13.7	4.61
1319	7.1	77.9	6.2	8.8	12.56
1321	6.9	82.2	4.0	6.9	20.55
1329	8.0	77.7	5.7	8.6	13.63
1331	7.1	80.6	6.1	6.2	13.21
1338	4.3	79.9	7.9	7.9	10.11
1340	6.1	71.6	9.8	12.5	7.31
1343	4.8	77.6	8.8	8.8	8.82
1350	4.7	79.7	7.8	7.8	10.22
1430	6.7	77.3	8.0	8.0	9.66
1432	6.9	82.9	5.1	5.1	16.25
1434	4.2	84.0	5.9	5.9	14.24
1436	(5.1)	(78.9)	(7.3)	(8.8)	(10.99)
1440	3.8	84.2	6.0	6.0	14.03
1516	5.3	78.6	7.5	8.6	10.48
1518	5.0	81.2	6.9	6.9	11.77
1520	6.4	78.5	5.0	10.1	15.70
1522	5.1	81.4	5.8	7.7	14.03
1524	6.9	83.1	5.3	4.7	15.68
1526	6.8	82.7	4.5	6.0	18.38
1528	(6.2)	(81.3)	(6.0)	(6.6)	(13.85)
1530	4.8	83.4	5.9	5.9	14.14
1532	5.9	80.5	6.8	6.8	11.84
1565	5.5	80.0	6.4	8.1	12.50
1567	3.9	83.6	5.6	6.9	14.93
1569	6.3	85.1	4.3	4.3	19.79
1571	3.7	80.5	7.1	8.7	11.34
1573	5.1	81.7	6.3	6.9	12.97
1609	4.3	87.1	4.3	4.3	12.97
1661	3.8	89.8	3.2	3.2	28.06
1663	3.7	88.3	4.0	4.0	22.08
1681	4.6	82.4	5.6	7.4	14.71
1689	7.9	77.0	5.7	9.4	13.51
1691	0.0	88.6	5.7	5.7	15.54

IC 70

Sample No.	% Mont.	% Illite	% Kaolinite	% Chlorite	Illite / Kaolinite
1693	5.3	86.3	7.7	0.7	11.21
1719	0.0	89.6	5.2	5.2	17.23
1721	6.9	84.7	4.2	4.2	20.17
1723	5.3	83.3	5.7	5.7	14.61
1725	6.1	81.7	4.8	7.4	17.02
1729	4.8	85.0	4.4	5.8	19.32
1731	4.7	82.2	4.7	8.4	17.49
1771	4.6	84.3	6.1	5.0	13.82
1773	4.7	83.5	5.9	5.9	14.15
1775	4.9	83.3	5.9	5.9	14.12
1777	4.3	81.2	3.9	10.6	20.82
1779	4.1	83.1	6.4	6.4	12.98
1795	5.5	84.5	5.0	5.0	16.90
1796	6.0	82.6	4.8	6.6	17.21
1797	5.7	83.6	5.0	5.7	16.72
1799	4.4	82.6	6.5	6.5	12.71
1801	5.7	84.9	4.0	5.4	21.23
1820	4.0	89.5	2.4	4.1	37.29
1822	6.6	83.4	5.0	5.0	16.68
1824	4.0	85.0	5.5	5.5	15.45
1828	4.8	83.0	6.1	6.1	13.61
1836	2.8	87.4	4.9	4.9	17.84
1840	3.8	86.6	4.8	4.8	18.04
1841	6.5	85.2	3.2	5.1	26.63
1843	4.0	87.4	4.3	4.3	20.33
1845	4.9	85.7	4.7	4.7	18.23
1847	5.3	84.8	3.8	6.1	22.32
1861	13.0	73.4	6.8	6.8	10.79
1863	9.8	77.8	6.2	6.2	12.55
1865	5.4	76.6	9.0	9.0	8.51
1866	16.6	71.2	6.1	6.1	11.67
1867	11.1	74.7	7.1	7.1	10.52
1868	6.6	80.6	6.4	6.4	12.59
1870	3.9	87.3	4.4	4.4	19.84
1873	4.2	80.8	7.5	7.5	10.77
1883	2.9	83.5	8.6	5.0	9.71
1885	4.2	80.4	9.7	5.7	8.29
1886	4.1	82.3	6.8	6.8	12.10
1887	2.2	82.6	7.6	7.6	10.87
1889	3.9	80.5	7.8	7.8	10.32
1891	3.4	80.2	8.2	8.2	9.78
1892	2.5	79.0	12.4	6.1	6.37
1893	4.5	81.2	9.2	5.1	8.83

IC 70

Sample No.	% Mont.	% Illite	% Kaolinite	% Chlorite	Illite / Kaolinite
1894	4.8	82.4	6.4	6.4	12.88
1898	4.5	81.1	10.9	3.5	7.44
1899	2.4	83.3	10.7	3.6	7.79
1900	3.6	81.7	8.1	6.6	10.09
1905	3.6	78.6	8.9	8.9	8.83

B SAHARAN SHELF SAMPLES

IC 68

Sample No.	% Mont.	% Illite	% Kaolinite	% Chlorite	Illite / Kaolinite
221	33.8	34.7	23.9	7.6	1.45
223	36.0	49.6	9.1	5.3	5.45
224	9.9	70.9	12.7	6.5	5.58
225	20.0	64.0	11.8	4.2	5.42
227	16.1	67.7	11.1	5.1	6.10
230	7.1	72.6	14.8	5.5	4.90
234	14.9	68.5	7.3	9.3	9.38
237	11.0	71.2	13.7	4.1	5.20
238	23.3	60.2	13.1	3.4	4.60
239	5.7	78.9	7.7	7.7	10.25
240	3.7	80.5	7.9	7.9	10.19
241	10.0	72.7	13.2	4.1	5.51
242	6.9	76.5	12.0	4.6	6.38
246	6.7	75.1	13.4	4.7	5.60
249	16.5	65.9	10.2	7.4	6.46
250	15.4	58.9	19.0	6.7	3.10
252	(9.8)	(73.0)	(11.2)	(6.1)	(6.68)
257	8.3	76.2	10.3	5.2	7.40
258	10.0	74.9	9.1	6.0	8.23
259	8.1	78.1	9.1	4.7	8.58
263	4.5	80.5	7.5	7.5	10.73

SECTION VI

CHEMICAL ANALYSES AND CARBONATE ASSEMBLAGE

SECTION VI CHEMICAL ANALYSES AND CARBONATE ASSEMBLAGE

$\%CaCO_3$

U.R.I. (TR15) samples: Aliquots of each sample were treated with 10% HCL.

IC 68, IC 69, IC 70, DIS21 samples: $\%CaCO_3$ was determined by titration with sodium hydroxide after dissolution in HCL, and the values corrected for soluble apatite content.

WHOI (AII 59, AII 75, AII 82) samples: $\%CaCO_3$ was determined by the acid-leaching technique of Twenhofel and Tyler (1941).

Organic Carbon

The organic carbon content, in percent, was measured by a gasometric technique similar to that described by Kolpack and Bell (1968), after removal of $CaCO_3$ by acid treatment.

$\%N_2$

The percent nitrogen was determined by volumetric determination of aminoid nitrogen by the micro Kjeldahl method of Kabat and Mayer (1948).

C/N

This is %organic carbon/% nitrogen

$CaCO_3$ Assemblages

The calcium carbonate components listed are those found within the total sand and gravel fraction (> 0.062 mm), using either the binocular or the petrographic microscope. The carbonate assemblage code is as follows:

AC	= Algal Crust
AF	= Algal Fragments
AL	= Algal Limestone
BA	= Barnacle
BFM	= Benthonic Foraminifers
BP	= Brachiopoda
BR	= Bryozoa
BS	= Broken Shell
C	= Coral
CA	= Coralline Algae
E	= Echinodermata
FM	= Foraminifera
FRGS	= Fragments
G	= Grapestone
L	= Limestone
LI	= Limpet
M	= Mollusca
MI	= Miniacina miniacea (attached foraminifera)
O	= Outcrop
P	= Pelecypoda (Mollusca)
PFM	= Planktonic Foraminifers
PHOS.L	= Phosphatic Limestone
PT	= Pteropoda (Mollusca)
S	= Scaphopoda (Mollusca)
SE	= Serpulidae (Annelida) worm tubes
T	= Textularid (BFM)

P_2O_5

The phosphate content was determined colorimetrically, as P_2O_5, using a vanadomolybdate method, modified after Ward et al. (1963).

A MOROCCAN SHELF SAMPLES

SECTION VI

TR 15

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
68	95				M	
69	75				M	
70	78				M	
71	99				M	
72	97				BR, M	
73	87				M, FM	
74	98				FM, M	
75	26				FM, M	
76	48				FM, M	
77	58				FM	
78	97				BR	
79	99				BR	
81	97				BR	
82	17				M, FM	
83	12				FM, E	
84	25				FM, E	
85	60				PFM	
86	43				PFM	
87	38				PFM	
88	14					
89	67					
90	44				PFM	
91	47				BR, FM	
92	47				M	
93	51				BR, FM	
93A	73				BR, FM	
94	60				PFM	
95	13				PFM	
96	52				M	
98	35				O	
99	26				M, FM	
102					O	
104	94				BFM	
105	95				M	
106	75				M, BR	
108	80				M, FM	
109	98				BR	
111	64				PFM	
113	27.9					
114	78				M	
115					CA	
116	49.3					
117	57				PFM	
118	34				M,E	
119	32.3					

SECTION VI
TR 15

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
121	46				PFM, BFM	
122	46				PFM, BFM, M	
123	37				M, E, FM	
124	27.7					
125	46				M, FM	
126	41				M, FM	
127	25.5					
128	41					
129	47				FM, E	
130	79				BR, FM	
131	84				BR, M	
132	82				BR, FM	
133	69				M, FM	
134	78				M, BR	
135	87				M, BR, FM	

SECTION VI

IC 68

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
111	75.6					0.43
112	81.4					0.27
113	77.5					0.23
114	62.0					0.24
115	33.0					0.15
116	31.0					0.14
117	35.9					0.15
118	47.9					0.17
119	74.7					0.12
120	74.7					0.13
121	72.7					0.23
125	65.0					0.11
126	75.6					0.14
127	66.9					0.18
128						0.17
129	82.4					1.58
133	84.4					3.04
134	87.2					2.49
135	91.1					0.23
137	74.7					0.30
138	48.9					
139	86.3					0.20
140	84.4					0.79
141	73.8					0.60
143	53.9					0.11
144	61.9					0.11
149	58.8					0.17
150	32.8					0.18
151	28.8					0.32
153	57.5					0.60
154	57.6					0.34
155	43.9					0.72
266	35	0.17	0.02	9.44		0.11
267	92				BR, M, BA	0.25
268	93				G, S, M, BR	0.20
269	94				M, BA, BR	0.24
270	94					0.32
271	94				CA	0.27
272	91				M, BR, CA	0.15
273	88					0.18
274	76				FM, M FRGS	0.21
275	89	0.23	0.04	5.23		0.21

SECTION VI

IC 68

Sample #	$\%CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	$\%P_2O_5$
276	94				M, BR, BFM	0.27
277	82					5.20
278	63					0.14
279	59.3					0.15
280	58					0.11
281	51.8					0.13
282						0.11
283	60					0.13
284	67.7					0.12
285	65.8					0.11

SECTION VI

IC69

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
802	50.3					0.20
803	39.0					0.16
804	41.4					0.27
805	26.5					0.58
806	23.2					0.19
809						0.14
810	45.2					0.16
811	46.5					0.24
812	47.5					0.45
813	47.5					0.41
814	36.9					0.25
815	41.4					0.56
817	45.8					0.36
818	43.2					0.30
819	90.7					0.16
820	82.3					0.38
821	70.3					0.20
822	68.4					0.15
823	80.1					0.10
824	73.9					0.09
825	54.3					0.16
826	66.7					0.22
827	50.6					0.15
829	63.3	0.21	0.04	5.68	L	0.17
830	76.8					0.15
831	56.2				L, CA, M	0.21
832	30.5				M, FM	0.60
833	42.6				FM, M	0.35
834	53.4				F, FM	0.56
835	29.4				PFM, BFM	1.24
836	69.5				M, FM, CA	0.31
837	66.0				E, M	0.90
838	19.0				PFM, BFM	0.36
839	30.3				E, M	0.29
840	28.0				BFM	0.37
841	26.6	0.45	0.06	7.5	FM, M	0.56
842	15.4					0.35
843						0.13
844						0.18
846	36.9					1.13
847	77.6				M, BR,BFM	1.69
848	83.1				M, BR,BFM	0.56
850	14.4					0.41

IC69

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
851	22.9	0.22	0.03	6.47	PFM, BFM	0.36
852	56.3				FM, M	0.31
853	78.3				M, E, FM, BP	0.26
854	71.7				FM, M	0.25
855	73.4				M	0.34
856	28.2				FM	0.16
857	28.2					0.16
859	46.7					0.22
860	42.0				FM, M	0.31
861	28.2					0.18
862	26.6	0.74	0.04	17.21	FM	0.56
863	30.9					0.31
864	60.0					0.34
865	28.1					0.18
866	80.6					0.32
867	66.6				M, CA, BR, FM	0.29
868						0.14
869	30.4					0.18
870	41.4				M	0.20
871	69.6					0.23
872	32.6					0.15
873	24.6				FM	0.90
874	26.5				FM, M	0.68
875	46.0	0.32	0.05	6.53		0.86
876	71.8				FM, M	0.24
877	88.4				M, BR, E, BA	0.38
878	33.1					0.86
879	53.8				FM	0.17
880						0.45
882	42.4				M, BR, E, CA, FM	1.13
883						0.26
885	25.3				E, M	0.25
886	83.6					0.13
887	96.8					0.90
888	89.0					0.11
889	92.6					0.10
890	36.1	0.52	0.09	5.78		0.14
891	36.0				M	0.18
892	85.3					0.11
893	55.6				FM, M	0.23
894	82.1				M	0.56
895	67.7					0.68

IC69

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
896	76.9				BR, E, M	0.93
897	40.3					0.74
898	88.1				M, BR,MI, CA, L	1.46
899	69.2					0.51
901	93.3					0.40
902	96.4					0.11
903	90.8					0.22
904	86.5					0.11
905	90.0				M, BA	
906	91.4	0.09	0.02	3.75		0.11
907	96.4				M, CA, BR	0.10
908	90.2				BR, M, MI	0.10
909	98.3				CA, L, BR, M	0.22
910					AC	
911	92.1				CA, BR, LI	0.13
912	16.2				M	0.19
913	23.0				M, FM, E	0.11
914	88.3					0.22
915	54.1					0.22
918	29.2					0.14
921	38.2				FM, M	0.14
922	77.1				BR, M	0.86
923	81.2				BR,MI, M, T	1.40
924	95.2				CA, BR, MI	0.23
925	80.9	0.16	0.04	4	MI,CA	0.14
926	45.4				MI	0.14
927	10.6				M, E	0.13
928	37.9				M, E, BR, FM	0.14
929	97.7		0.04		BR, MI, CA, M, BA	0.11
930	95.8				CA, MI, SE, BR	0.09
931	82.7					0.14
932	98.9				BR, CA, MI, M, BA	0.10
933	94.5				M, BR	0.14
934	92.1				M, BR	0.17
935	90.8	0.12	0.03	3.87	E,M, BR, BA	0.23
936	38.6				FM, M FRGS	0.16
937	100.0				M, BA, L	0.25
939	39.8				FM	0.17
940	42.3				PFM	0.16
941	48.5					0.63
942	81.7	0.35	0.06	6.36	BR, P	2.03
943	58.5					2.03
944	92.1				M, MI, BP, BR, CA	0.22
945	90.8				MI, BR, PFM	0.16

IC69

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$Assemblage	%P_2O_5
946						0.17
947	71.1					0.15
949	95.8				BR, M, MI	0.27
950	96.4				M, BR	0.31
951	61.0	0.31	0.05	5.96	BR, BFM, M	0.20
952	41.1				FM	0.18
953	74.7					0.29
954	98.3				M SAND	0.36
956	63.4	0.36	0.05	7.35	FM	0.52
958	82.7				BR, M, BP, CA, C	3.33
959	85.8				FM, M, BR, BP	0.38
960	95.8				CA, M, BR,MI	0.16
961	94.5	0.17	0.04	4.47	PHOS. L, BR, M, CA	0.20
962	92.1		0.04			0.25
963	85.2				L, M, BP	0.74
964	79.6				M, BP, FM	0.56
965	77.1				BR, M	0.22
966	72.2				BR, M, FM,MI	0.17
967	38.4					0.26
968	48.5				M, CA	0.20
969	47.3				M, FM, BR	0.19
970	80.2		0.07		BR, M,MI, BP	0.18
971	67.8					0.15
972	97.0					0.17
973	99.4				PHOS.L, AF, M, BA	0.18
974	92.1				AL, L, BR	0.34
975	79.2		0.05			0.28
976	45.4				M, E, FM	0.22
977	59.7					0.32
978	74.6					0.22
979	77.7				M, BR, FM	0.19
980	72.6				M, BFM, E	0.52
981	77.0				M,FM FRGS	0.77
982	91.8				L, M, E, BR	0.25
984					AC	
985	100.0					0.20
986	96.9				M FRGS	0.34
987	94.4				BR, BP	0.17
988	76.5				M, E, BR, FM	0.90
989	65.2				BFM, M	0.90
991	59.9				PFM, E, M, BFM	0.22
992	80.3				M SAND	3.06
993	77.9				M	1.80
995					AC	

IC 69

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
996					AC	
997					AC	
998	88.6		0.05			0.97
999	92.5				BR, MI	1.58
1000	68.4					0.74
1002	92.4				E, BR, MI	0.68
1003	93.0				M, BFM, PFM	0.56
1005	94.3				BR, M,MI, BP	0.41
1006	88.6				BR, MI, FM, BP	0.32
1007	94.3				BR, M	0.26
1013	64.2					0.38
1016	48.0				M, E, BR	0.15
1017	41.5					0.14
1018	57.8				FM, M	0.31
1019	68.6				FM	0.31
1020	69.1		0.06		M, FM, BR, MI	0.31
1021	82.4				L	0.15
1022	90.6				MI, M, BR, BP	0.24
1023	93.5				BFM, PFM, M, BR, BP	0.74
1024					AC	
1025					AC	
1026	81.4					0.34
1027					CA, L, M, BR	0.20
1028	94.4				M, FM, CA, L	1.53
1029	84.3		0.03			3.83
1030	72.6				BR, MI, M, BP, E	7.88
1031	92.5				BR, MI, BP, M	1.91
1032	92.5				BP, MI, BR, M	0.77
1033	94.4				MI BR, M	0.38
1034	86.2				L	0.37
1035	83.3		0.06			1.24
1036	94.4					0.31
1037	82.7				M, MI, BR, BP	0.18
1038	67.7				M, BP, BR	0.19
1039	35.1		0.13			0.17
1040	45.8					0.18
1042						0.22
1044					AC	
1045					AC	
1046	26.8				M	0.14
1047	27.3				M, E	0.15
1048	28.7		0.03			0.15
1050	29.7				FM	0.15

IC 69

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
1051	31.4				FM, E	0.15
1052	31.6				FM, M, E	0.13
1053	41.3		0.11		PFM	0.14
1054	49.3				FM, M	0.27
1056	86.0				FM, BR,	0.52
1057	63.7					2.61
1058	72.0					1.55
1059	62.6					1.35
1062	70.1				PFM, BFM	0.18
1063	37.0				E	
1064	32.3				M, BR	0.15
1065	27.8		0.06		FM	0.13
1066	30.6				FM, E	0.13
1067	31.1				FM, E	0.14
1068	32.3				PFM	0.14
1069	55.7				PFM	0.16
1070	61.5				PFM	0.17
1071	64.2					0.29
1072	71.2		0.05		BFM, PFM, M, BR	0.31
1073	78.5				M, FM	0.35
1078	86.6		0.03		PFM, BFM	0.32
1079	70.0				M, BR, E	1.08
1080	48.8				M, SE, S	0.36
1081	27.5				FM, E, M	0.17
1082	28.5				FM, E	0.15
1083	26.0		0.04			0.14
1084	44.0					0.18
1085	36.5				FM, E	0.14
1086	47.2				FM, M	0.29
1087	61.1					0.36
1088	69.0		0.05		M	0.53
1090	57.5					0.68

Sample #	%$CaCO_3$	%OrgC	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
1201	29.9					0.24
1203	41.1				E,M	0.36
1204	38.3					0.47
1205	36.5		0.01		E,M	0.71
1206	29.9					0.43
1208	81.7					0.18
1209	86.9				M,BR	0.39
1210	27.7					0.14
1211	34.8					0.23
1212	27.1					0.17
1213	87.8					0.18
1216	91.0					0.28
1217	28.1					0.32
1218	28.6					0.28
1219	29.2					0.24
1220	27.5					0.24
1224	85.6					0.20
1227	29.6	0.01	0.02	0.6	M,E	0.24
1229	25.9				M,E,FM	0.14
1230	25.4					0.19
1231	30.1					0.17
1232	24.2					0.31
1233	24.5					0.20
1234	24.5					0.17
1238	87.1					0.27
1239	90.9					0.16
1247	28.4					0.19
1248	28.4					0.20
1249	30.0					0.23
1250	27.0					0.22
1251	25.9					0.16
1255	24.8					0.26
1256	27.1					0.20
1257	29.6					0.23
1258	68.5					0.13
1270	31.3					0.22
1271	30.4					0.20
1272	29.7					0.20
1273	27.5					0.22
1274	26.3					0.19
1275	28.8					0.20
1276	26.6					0.22
1277	25.7					0.25
1278	29.2					0.22
1281	78.0					0.16

Sample #	%$CaCO_3$	%OrgC	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
1282	89.5					0.17
1283	29.3		0.006		M,E	0.20
1284	27.6				M	0.19
1286	92.9					0.21
1287	87.1					0.11
1288	86.9					0.19
1290	26.9					0.28
1291	24.3	0.01	0.02	0.6	E,M	0.27
1292	21.4					0.21
1293	23.6				E,M	0.23
1294	24.0					0.25
1295	26.2					0.22
1296	23.5					0.22
1297	25.5					0.34
1298	27.6					0.19
1299	24.3					0.28
1303	25.6					0.29
1304	24.8					0.28
1305	27.8					0.29
1306	29.8					0.32
1307	23.7					0.38
1308	25.4					0.39
1311	83.4					0.25
1314	86.9					0.19
1315	27.5					0.43
1316	29.2					0.22
1317	27.0					0.23
1319	27.1		0.07		M,FM	0.19
1320	27.6					0.17
1321	28.8				M,FM,E	0.19
1322	30.1					0.19
1323	26.1					0.29
1328	34.3					0.25
1329	34.1				M	0.32
1330	30.1					0.20
1331	31.7		0.03		M	0.29
1332	77.2					0.29
1337	40.8					0.24
1338	29.7				FM	0.19
1340	28.4	0.8	0.12	6.5	FM	0.20
1341	22.4					0.20
1342	29.4					0.32
1243	30.1				FM,E	0.19
1344	27.9					0.22
1345	28.0					0.20

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
1346	76.8					0.30
1347	74.5		0.02		PFM,M,BFM	1.17
1349	76.6					1.95
1350	52.2					6.55
1351	77.3					0.45
1352	78.7					0.17
1354	45.6					0.20
1355	31.0					0.17
1356	30.4					0.19
1357	35.6					0.21
1365	92.5					0.17
1367	47.7					0.24
1368	47.8					0.17
1369	42.3					0.16
1371	64.9					0.22
1372	72.7					0.17
1373	90.3					0.13
1374	76.2					0.16
1375	73.2					0.38
1376	75.6					0.40
1377	46.6					0.16
1378	84.3					0.20
1382	55.9					1.02
1383	69.0					1.5
1384	74.7					1.24
1385	90.4					1.33
1387	92.1					0.21
1390	92.0					0.40
1391	56.1					0.32
1392	45.6					0.20
1394	56.7					0.25
1399	82.3					0.34
1401	84.8					0.15
1402	74.3					0.25
1403	46.4					0.16
1404	41.2					0.22
1405	82.0					0.30
1408	94.7					0.14
1409	97.3					0.12
1410	97.4					0.12
1412	98.2					0.14
1413	97.7					0.16
1416	56.8					0.18
1417	49.0					0.21
1418	58.0					0.21
1419	61.4					0.25

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Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
1420	67.5					0.17
1421	34.0					0.18
1422	39.2					0.20
1423	62.7					0.21
1424	71.8					0.42
1425	73.8					0.3
1426	75.2					0.22
1427	77.3					0.21
1428	83.1					0.15
1429	81.6					0.24
1430	79.1		0.03		M,BP,MI	0.23
1431	74.4					0.42
1432	71.0				M,PFM	0.27
1433	34.9					0.18
1434	33.6		0.09		FM,M	0.17
1435	33.2					0.15
1436	42.3				FM,M,E	0.31
1440	85.4	0.47	0.12	4.0	AC	0.28
1441	95.2					0.13
1442	87.7					0.23
1445	80.3					0.22
1446	52.3					0.45
1447	34.4					0.17
1448	32.0					0.15
1449	75.3					1.15
1450	61.8					0.27
1451	75.0					0.31
1452	69.9					0.29
1456	65.9					0.40
1458	78.8					0.12
1459	81.5					0.30
1460	70.6					0.17
1461	86.4					0.25
1462	86.1					0.15
1463	80.9					1.4
1464	74.2					1.5
1465	83.7					1.1
1466	77.7					0.28
1468	84.5					0.11
1469	74.8					0.25
1470	68.3					0.25
1471	79.4					0.28
1472	51.9					0.30
1473	39.3					0.13
1474	43.5					0.39
1475	40.3					0.22

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
1476	62.2					0.65
1477	92.4					0.42
1478	93.8					0.35
1480	94.0					0.25
1481	94.8					0.34
1483	98.5					0.21
1486	93.8					0.31
1488	95.5					0.17
1491	85.2					1.76
1492	74.4					0.59
1495	48.8					0.25
1496	51.8					0.32
1497	95.1					0.17
1498	95.9					0.25
1499	92.6					0.16
1500	43.1					0.14
1501	45.3					0.14
1502	44.0					0.16
1503	43.0					0.17
1504	84.8					0.15
1505	35.0					0.14
1506	33.5					0.14
1507	30.9					0.15
1508	30.9					0.15
1509	89.9					0.30
1510	90.5					0.23
1511	93.0					0.21
1512	95.5					0.26
1513	91.9					0.54
1514	94.8					0.21
1516	97.0				MI,M,BR,CA	0.18
1517	98.6					0.21
1518	95.4		0.03		BR,MI, T,M,CA	0.12
1519	85.5					0.30
1520	49.3				FM,M,E	0.16
1521	42.3					0.14
1522	38.0	0.22	0.04	4.9	FM	0.16
1523	42.8					0.16
1524	67.5				M,BR,FM	0.19
1525	50.4					0.19
1526	41.9		0.07		M,FM	0.15
1527	44.5					0.16
1528	38.0				FM,M,E	0.14
1529	35.4					0.14
1530	89.5	0.06	0.01	4.3	M SAND	0.24
1531	91.4					0.36

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Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
1532	90.8				M SAND, M FRGS	0.17
1533	89.4					0.26
1534	87.3					0.26
1535	87.9					0.59
1536	83.9					0.66
1537	90.6					0.16
1538	91.0					0.18
1539	70.1					0.18
1540	93.1					0.17
1541	69.2					0.18
1542	86.6					0.17
1543	56.3					0.14
1545	54.4					0.17
1546	90.5					0.17
1547	89.4					0.11
1548	50.6					0.16
1549	93.3					0.11
1550	88.0					0.12
1551	83.8					0.11
1552	89.2					0.18
1553	89.3					0.16
1555	83.4					0.29
1556	76.5					0.22
1557	21.9					0.14
1558	28.4					0.14
1559	39.6					0.17
1560	27.5					0.16
1561	60.5					0.19
1565	28.8		0.04		M,E	0.16
1566	33.6					0.14
1567	31.0				E,M	0.14
1568	40.1					0.17
1569	83.1	0.08	0.02	4.1	CA	0.19
1570	71.4					0.17
1571					BR,MI,BFM,L	
1573	91.5		0.02		M,BR	0.13
1575					AC	
1576	93.8					0.10
1579	94.0					0.17
1580	42.7					0.18
1581	94.5					0.14
1582	95.8					0.16
1583	93.2					0.13
1584	93.6					0.19
1585	93.6					0.20

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
1586	92.7					0.20
1587	45.7					0.18
1588	38.8					0.18
1589	87.6					0.14
1590	29.7					0.16
1591	88.0					0.14
1593	90.2					0.14
1594	91.1					0.12
1595	88.1					0.10
1597	78.9					0.14
1598	93.1					0.20
1599	84.2	0.115	0.03	3.85	BR, MI	0.10
1600	87.6					0.13
1601	73.2				M, BS	0.13
1602	86.3					0.14
1603	81.9		0.01		M, BS	0.16
1604	80.2					0.12
1605	47.6				M, BS	0.14
1606	68.0					0.14
1607	36.1	0.06	0.02	3.0	M, E, BR	0.20
1608	52.2					0.17
1609	32.2				FM, E, M	0.18
1610	24.8					0.16
1611	23.4					0.21
1612	15.7					0.17
1613	18.4					0.15
1614	17.1					0.16
1615	22.8					0.15
1616	72.3					0.16
1617	14.7					0.22
1618	80.6					0.13
1619	84.5					0.13
1620	93.8					0.11
1625	91.0					0.17
1626	90.2					0.12
1627	92.4					0.14
1628	91.6					0.16
1629	47.1					0.16
1630	92.9					0.11
1631	93.2					0.12
1633	93.7					0.15
1634	27.5					0.16
1635	50.9					0.18
1636	20.6					0.15
1637	44.0					0.17

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
1638	51.9					0.15
1639	21.5					0.23
1640	17.9					0.19
1641	15.2					0.25
1642	51.0					0.15
1643	16.6					0.17
1644	15.7					0.21
1645	95.8					0.12
1646	97.6					0.14
1647	54.0					0.19
1648	83.1					0.17
1649	61.5					0.14
1650	96.3					0.12
1651	30.9		0.01		M,BR,E	0.17
1652	72.2					0.17
1653	87.6				S,BS	0.16
1654	44.5					0.14
1655	62.3	0.3	0.01	31	E,BR,BA,BS	0.18
1656	34.8					0.17
1657	82.8				BA,BR,S,BS	0.14
1658	14.6					0.12
1659			0.03		E,M	0.14
1660	10.5					0.17
1661	12.7				E,M	0.17
1662	14.3					0.26
1663	13.9		0.02		M,FM,E	0.22
1664	14.8					0.17
1666	4.1					0.15
1668	13.2					0.15
1669	12.8					0.14
1670	14.5					0.12
1671	10.9					0.17
1672	8.7					0.17
1673	10.9					0.17
1674	18.0					0.14
1675	14.8					0.20
1676	20.0					0.17
1677	67.7					0.11
1678	85.6					0.12
1679	32.2					0.15
1680	77.8					0.18
1681	87.8				M,BA,BR,CA,BS	0.16
1682	80.5					0.13
1683	83.5		0.01		M,BA,BR,MI,BS	0.12
1684	88.7					0.08

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
1686	87.3					0.13
1688	27.9					0.12
1689	17.1				E,M,FM	0.17
1690	14.1					0.17
1691	13.3	0.07	0.02	4.1	M,E	0.21
1692	14.5					0.21
1693	14.5				M,E,FM	0.19
1694	18.9					0.15
1695	16.3					0.17
1696	14.6					0.15
1697	14.6					0.13
1698	21.2					0.10
1699	39.0					0.13
1700	82.9					0.11
1701	70.9					0.16
1702	65.1					0.12
1705	55.3					0.13
1706	93.4					0.03
1707	37.2					0.17
1709	80.5					0.14
1710	89.6					0.11
1711	66.4					0.13
1712	90.8					0.11
1713	19.8					0.16
1714	21.5					0.16
1715	24.1					0.15
1716	26.2					0.15
1717	21.1					0.16
1718	26.0					0.21
1719	29.0		0.02		M,E	0.21
1720	91.2					0.16
1721	24.5				M,E	0.14
1722	25.7					0.17
1723	22.7	0.09	0.01	8.0	M,E	0.17
1724	24.5					0.14
1725	17.6				M,E,FM	0.17
1727	26.2		0.03		BS,BR,BA	0.14
1728	83.2					0.10
1729	87.9				BR,M,BA,MI	0.10
1730	95.9					0.12
1731	90.9	0.12	0.03	4.9	M,BR,FM,BA	0.11
1733	91.3					0.09
1734	93.4					0.09
1735	91.3					0.10
1736	88.2					0.14

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Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
1737	90.0					0.11
1740	39.5					0.15
1741	22.5					0.12
1742	53.6					0.16
1743	25.7					0.18
1744	45.5					0.31
1746	35.9					0.18
1751	84.4					0.31
1754	82.5					0.21
1755	33.0					0.15
1758	95.0					0.16
1759	86.1					0.14
1761	63.6					0.66
1762	89.2					0.28
1763	37.6					0.20
1767	94.7					0.09
1768	92.1					0.11
1769	74.1					0.13
1770	74.5					0.14
1771	93.8				M,BR	0.10
1772	95.1					0.10
1773	91.8		0.03		M,BR,BA	0.07
1774	91.3					0.11
1775					BR,M,FM,L	
1777	87.3	0.2	0.05	3.9	BS,BR,FM,BA,L	0.16
1778	23.5					0.18
1779	82.2				BS,M,BA	0.14
1780	86.4					0.13
1781	90.3		0.02		BS	0.12
1782	35.2					0.33
1783	39.3					0.25
1784	88.6					0.13
1785	93.8					0.12
1786	88.7					0.12
1788	33.5					0.16
1790	88.7					0.12
1791	92.1					0.10
1793	93.4					0.10
1794	92.6					0.10
1795	28.3				M,FM,E	0.15
1796	29.6	0.26	0.04	6.4	M,E	0.15
1797	26.2				E,FM	0.13
1798	29.5					0.17
1799	86.5		0.10		M,BR,BA,E,FM	0.13
1800	79.6					0.16

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
1801					M,BA,L FRGS	
1803	45.8					0.17
1804	92.9					0.14
1805	35.4	0.06	0.02	2.8	M	0.26
1806	54.0					0.31
1808	73.9					2.4
1809	62.6					0.35
1810	65.8					0.40
1811	46.4					0.27
1812	27.1					0.15
1813	26.1					0.17
1814	21.9					0.13
1815	37.2					0.19
1816	34.8					0.15
1817	33.8					0.21
1820	44.0				M,E,FM	0.23
1821	45.7					0.23
1822	42.4		0.08		M,E	0.20
1823	42.7					0.25
1824	40.1				M,E	0.23
1825	29.5					0.18
1826	31.2	0.54	0.12	4.5		0.17
1827	30.1					0.16
1828	66.7					0.26
1830	32.5					0.17
1831	43.6					0.20
1832	47.9					0.17
1833	30.0					0.18
1834	30.0					0.17
1835	25.3					0.20
1836	30.4		0.18		FM,E,M	0.18
1837	32.9					0.17
1840	31.7				FM,E,M	0.17
1841	34.3	0.74	0.13	5.6	FM,M	0.15
1843	45.2				E,M	0.46
1844	47.7					0.30
1845	46.2		0.11		M,BA	0.19
1846	42.4					0.20
1847					M	
1848	68.0					0.20
1850	68.0					0.18
1854	47.8					0.24
1855	42.6					1.45
1856	88.6					0.33
1857	91.8					0.25

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
1858	39.8					0.17
1859	35.9					0.17
1860	47.0					0.17
1861	15.1		0.01		M,E	0.15
1862	13.4					0.14
1863	15.8				M,E,FM	0.17
1865	75.2		0.04		CA, MI	0.61
1866	91.3				MI,BR,M,FM,E	0.09
1867	86.1		0.05		M,E,MI,FRGS,FM	0.15
1868	79.1				MI	0.18
1869	49.1					0.23
1870	91.3		0.04		CA,M, MI	0.12
1873	90.7				BS	0.09
1874	83.2		0.02		M,BA	0.12
1875	80.6				BS	0.11
1878	94.8					0.23
1879	92.2		0.05		PFM,BFM,M	0.27
1880	92.4				M,FM,E,MI,BR	0.17
1883	89.6		0.03		M, MI	0.17
1885	81.0				PHOS L,M	0.68
1886	90.9		0.04			0.28
1887	86.6				L	0.29
1889	91.3		0.02		M	0.27
1891	78.4				M FRGS	0.31
1892	64.5		0.06		M,E	0.24
1893	35.9				M,FM	0.17
1894	32.9		0.06		M	0.17
1898	41.6				M,E,FM	0.14
1899	93.9		0.03		BS	0.12
1900	93.8				M	0.13
1901	92.5		0.03		M	0.35
1902	93.9					0.30
1903	92.2					0.26
1905					M,FM	0.32

SECTION VI

AII 59

Sample #	$\%CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	$\%P_2O_5$
1747A	83				BFM	
1747B	93				M, BP	
1748	60				PT	
1749	88				PFM, M	
1750	88				PFM, BFM	

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Sample #	$\%CaCO_3$	% Org C	%N	C/N	$CaCO_3$ Assemblage	$\%P_2O_5$
34	94				M, E	
35	67				FM, M	

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SECTION VI

TR 15

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
22	41				BR, M, FM	0.17
23	31				M, BR	
25	98				M	
26	97				M, PFM	0.10
27	92				M, FM	0.12
28	66				M, E	0.34
30	89				BR, M, SE	0.23
31	98				M	0.07
32	97				M, FM	0.09
33	61				M	
34	98				M, FM	0.09
35	95				M	0.07
36	99				M	0.05
37	99				M	0.05
38	95				M, BA	0.05
39	99				M	0.06
40	99				M	0.07
41	96				M, BR	0.15
42	95				M	0.05
43	97				M	0.08
44	99				BR	0.05
45	95				M	0.05
46	99				M	0.09
47	99				M	0.06
50	86				M, BFM	0.30
51	99				M, BR	0.07
52	99				M, FM	0.13
53	99				M, FM	0.25
57	91				BFM, E	0.16
58	93				M, BR	0.13
59	94				BR	0.18

SECTION VI

DIS 21

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
6561	91.9					0.13
6564	94.0					0.07
6566	94.0					0.07
6567	94.0					0.06
6568	94.0					0.05
6569	94.0					0.05
6570	92.5					0.45
6585	93.9					0.17
6588	94.0					0.09
6590	79.7					0.31
6591	92.9					0.10
6592	94.0					0.10
6621	94.0					0.14
6624	58.9					0.12
6626	94.0					0.13

SECTION VI

IC68

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
219	35.0					0.21
221	55.2				FM	0.13
222	48.3					0.14
223	60.0	0.69	0.09	7.93		0.15
224	92.0				M	0.12
225	94.0				M, E, FM	0.14
226	89.0		0.05			0.16
227	63.7				M, BR	0.21
228	43.2				M, FM, BA, BR	0.11
229	71.9					0.31
230	69.5				FM	0.30
232	47.7					0.16
233	58.8					0.17
234	89.0	0.51	0.08	6.3		0.17
235	94.0					0.06
237	92.0				M	0.11
238	93.0				M	0.11
239	93.0	0.13	0.03	4.19		0.11
240	92.0		0.03	3.46		0.10
241	94.0				M	0.12
242	94.0				M, BS	0.06
243	93.4					0.07
244	94.0				M	0.07
245	93.0				M	0.08
246	69.7					0.08
247	61.9	0.06	0.02	2.86		0.06
249	84.3	0.21	0.04	5.12		0.13
250	76.4				PFM	0.16
251	63.4					0.22
252	90.8	0.17	0.03	5.0	PFM, BFM, M	0.28
255	74.1					5.40
256	78.0					8.30
257	89.9				MI, BR, M, CA, BA	0.32
258	86.0				M, BR, MI, BA, CA	4.20
259	89.9				M, BA, E, MI	0.31
260	89.8	0.12	0.03	4.62	CA, M, FM	0.33
262	92.9				CA, M, BR, BA, MI	0.15
263	92.0	0.14	0.04	3.68	CA, M, BR	0.11
264	89.1				M, BR, CA, BFM	0.13

SECTION VI

AII 59

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
1742	51				PFM	
1744	90				M, BFM	
1745	69				PFM	
1746	49				PFM	

AII 75

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
29	98					
30	98					
31	94				M FRGS	
32	95				M FRGS	

SECTION VI

AII 82

Sample #	%$CaCO_3$	%Org C	%N	C/N	$CaCO_3$ Assemblage	%P_2O_5
1	47	0.43	0.11	3.9	BFM, E	
2	51	0.13	0.03	4.3	M, BA	
3	52	0.23	0.04	5.8	M, FM	
4		0.88	0.15	5.9	M, FM, E	
5	52	0.99	0.16	6.2	M, FM, E	
6		0.66	0.12	5.5	M, FM, E	
7	56	0.48	0.11	4.4	M, FM, E	
8	59	0.71	0.10	7.1	M, FM, E	
9	85	0.75	0.10	7.5	M, FM, E	
10	84	1.02	0.18	5.7	M	
11	72	0.38	0.06	6.3	M, BA	
12	94	0.36	0.05	7.2	M	
13	95	0.14	0.03	4.7	M	
14	88	0.29	0.04	7.3	M	
15	57	0.53	0.11	4.8	M, FM, E	
16	95	0.26	0.05	5.2	M	
17	57	0.73	0.10	7.3	PFM, M	
18	77	0.42	0.05	8.4	M	
19	97	0.20	0.04	5.0	M	
20	86	0.48	0.06	8.0	M	
21	45	1.45	0.15	9.7	PFM	
22	93	0.43	0.06	7.2	M	
23	46	1.09	0.32	3.4	PFM	
24	45	1.36	0.23	5.9	PFM	
25	45	1.52	0.30	5.0		
26	87	0.59	0.08	7.4	M, FM	
27	58	0.44	0.13	3.4	FM, M, E	

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FIGURE CAPTIONS

Fig. 1. Distribution of all sample sites from which we have used sediment data. Closed circles represent samples included in this data file. Open circles represent samples taken by the Instituto Espanol de Oceanografia prior to 1953 for which only a visual textural and compositional appraisal was available (for Spanish sample descriptions see references in Summerhayes and other, 1976). The upper map shows most of the Moroccan coast, the lower map shows South Morocco and Spanish Sahara; the two maps overlap by one degree of latitude. The bathymetry is from British Admiralty charts (for North Morocco), from Imperial College data (for central Morocco - Summerhayes, 1970; Bee, 1973), from the Instituto Espanol de Oceanografia (for South Morocco and all of Spanish Sahara- same sources as sample data), and from the 1971 atlas by Uchupi (for continental slope at 2000 m).

Fig. 2. Distribution of all samples (subset of closed circles in Figure 1) for which some or all of the analyses were performed at Woods Hole Oceanographic Institution. Base map is same as for Figure 1.

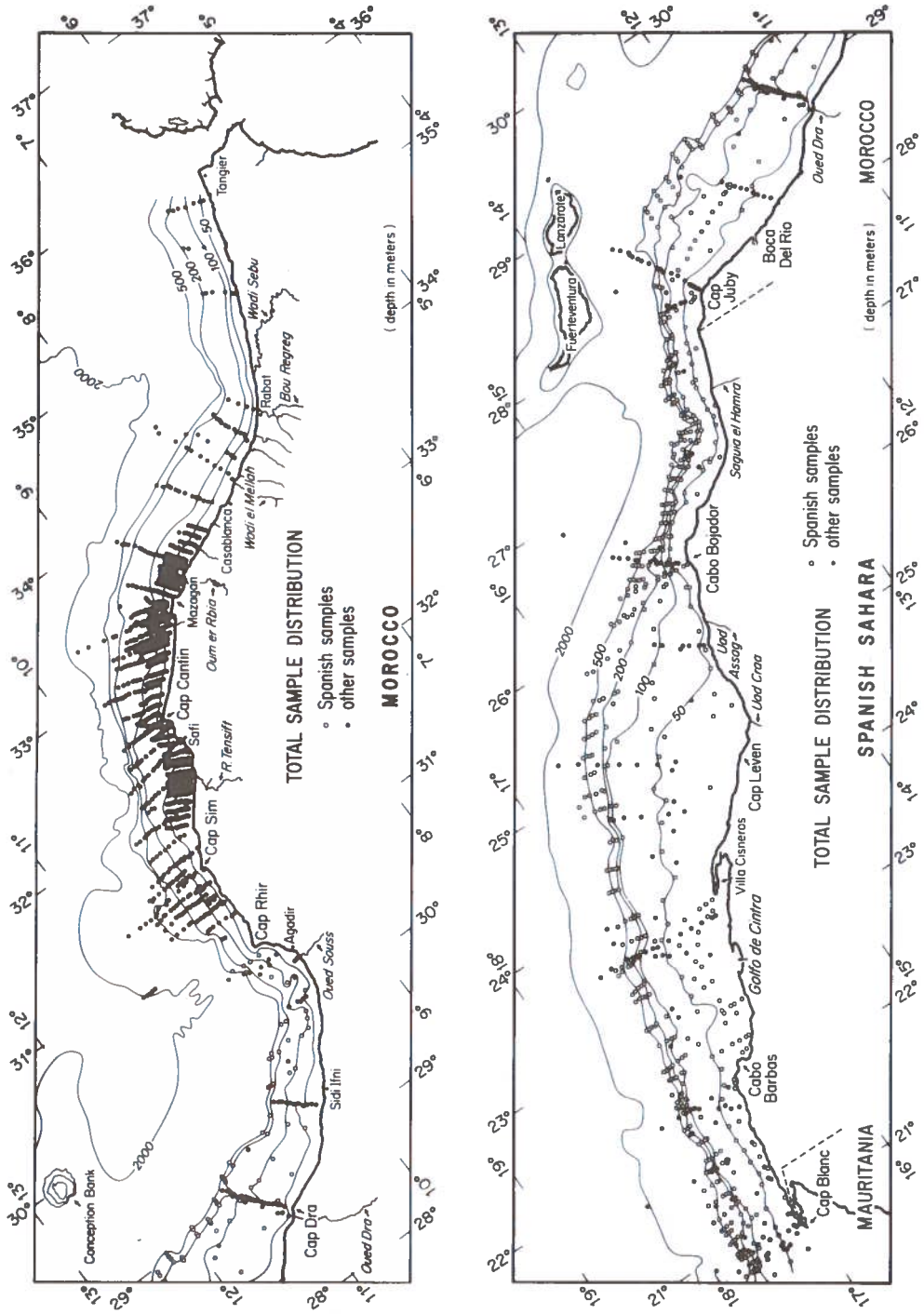
TOTAL SAMPLE DISTRIBUTION
Spanish samples
other samples
MOROCCO
(depth in meters)
Tangier
Wadi Sebu
Bou Regreg
Rabat
Casablanca
Wadi el Mellah
Oum er Rbia
Mazagan
Cap Cantin
Safi
R. Tensift
Cap Sim
Cap Rhir
Agadir
Oued Souss
Sidi Ifni
Cap Dra
Oued Dra
Conception Bank
TOTAL SAMPLE DISTRIBUTION
Spanish samples
other samples
SPANISH SAHARA
MOROCCO
(depth in meters)
Fuerteventura
Lanzarote
Cap Juby
Boca Del Rio
Oued Dra
Cabo Bojador
Saguia el Hamra
Uad Assag
Uad Craa
Cap Leyen
Villa Cisneros
Golfo de Cintra
Cabo Barbas
Cap Blanc
MAURITANIA

Fig. 1

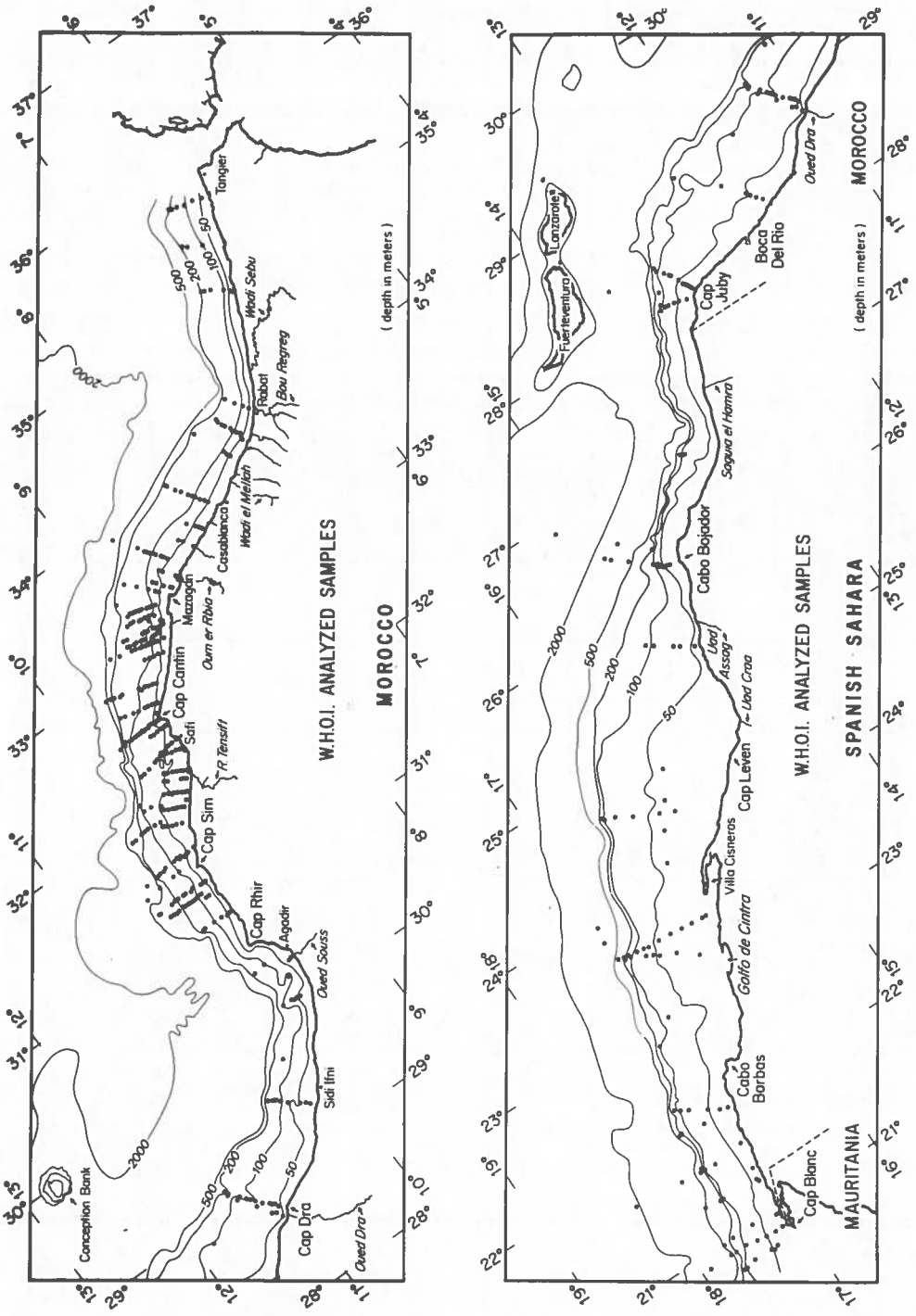
W.H.O.I. ANALYZED SAMPLES
MOROCCO
SPANISH SAHARA
MAURITANIA
(depth in meters)
Tangier
Rabat
Casablanca
Mazagan
Cap Cantin
Safi
Cap Sim
Cap Rhir
Agadir
Cap Dra
Oued Dra
Conception Bank
Fuerteventura
Lanzarote
Cap Juby
Boca Del Rio
Cabo Bojador
Cap Leven
Villa Cisneros
Cabo Barbas
Cap Blanc
2000
500
200
100
50

Fig. 2

Woods Hole Oceanographic Institution
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DATA FILE, SEDIMENTS OF THE EAST ATLANTIC CONTINENTAL MARGIN, NORTHWEST AFRICA by Scott R. Briggs, Colin P. Summerhayes, and John D. Milliman. 175 pages. June 1976. NSF Grant No. GX-28193.

The petrology, provenance, and history of sediments from the continental shelf and upper continental slope of western Africa have been studied in some detail by scientists from the Woods Hole Oceanographic Institution as part of a long-term investigation of the marine geology of the Eastern Atlantic Continental Margin. In this data file we present the analytical data and other information relating to all of the readily available samples (1178) of sediment from northwestern Africa (off the coasts of Morocco and what was recently called Spanish Sahara). The data file contains sample locations, shipboard descriptions, size data, sand fraction composition, clay mineral composition, carbonate assemblage, and carbonate, nitrogen, and carbon contents.

1. Data File
2. Continental Margin
3. Northwest Africa
4. Sample Collection Data

I. Briggs, Scott R.
II. Summerhayes, Colin P.
III. Milliman, John D.
IV. NSF Grant No. GX-28193

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7. Author(s)

Scott R. Briggs, Colin P. Summerhayes, and John D. Milliman

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National Science Foundation

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Technical

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15. Supplementary Notes

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16. Abstracts

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17. Key Words and Document Analysis. 17a. Descriptors

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2. Continental Margin
3. Northwest Africa
4. Sample Collection Data

17b. Identifiers/Open-Ended Terms

17c. COSATI Field/Group

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