MGGB 90005042

117-01/07

MGG09005042

A SUMMARY OF SEDIMENT SIZE AND CHEMISTRY OF FIVE CORES FROM PENSACOLA, FLORIDA AND THREE CORES FROM JACKSONVILLE, FLORIDA N.A.S. NAVY DIVERS. NOVEMBER 1972 AND MAY 1973.

Prepared by: P. B. Loomis
J. C. Bowman
S. E. Johnson

Prepared for: Code 6110

September 1973

Geological Laboratory
Nearshore Surveys Division
Oceanographic Surveys Department

U. S. NAVAL OCEANOGRAPHIC OFFICE
WASHINGTON, D. C. 20373

M 09005042

The results of the sediment size and composition analyses are printed out in tabular form.

The following is an explanation of the terms encountered on the data printout sheet:

CRUISE	A number assigned to each cruise for identification purposes.
SAMPLE	A consecutive number applied to each core taken successively throughout the cruise.
LATITUDE	Expressed in degrees, minutes, and tenths of minutes.
LONGITUDE	Expressed in degrees, minutes and tenths of minutes.
TAKEN	Date in day, month, and year that core was taken.
CORER TYPE	Letters corresponding to sampling device code below.

Corers		Grabs	
HYP	Hydroplastic piston	SPK	Shipek Sediment Sampler
HYG	Hydroplastic gravity	HLP	Alpine Heavy Duty Grab
KUP	Kullenberg piston	SMS	Small Mud Snapper
KUG	Kullenberg gravity	VVS	Van Veen Grab
PHL	Phlegar gravity	BED	Birge-Ekman Dredge
MEG	Modified Ewing gravity	DLS	Dietz-LaFond Snapper
MEP	Modified Ewing piston	OPG	Orange Peel Grab
VIB	Vibrocorer	SBS	Scoopfish Bottom Sampler
BOM	Boomerang		
EWP	Ewing piston		
EWG	Ewing gravity		
DOC	DIVER OPERATED		

LENGTH	Length of core recorded in centimeters as observed in the laboratory.
PENETRATION	Penetration of coring device recorded in centimeters as observed in the field.
DEPTH	The uncorrected sonic sounding in meters.
ANALYZED	Date in day, month, and year that core was analyzed in the laboratory.
I.D. No.	Three or four digit laboratory project number followed by consecutive number assigned to each subsample analyzed.
INTERVAL	Interval of subsample as measured in centimeters from the top of the core.
MM	Particle diameter size intervals based on Wentworth size grades in millimeters.
PER	Percent of total sample weight within the given size interval.

MSG09005042

GRAVEL, SAND SILT, CLAY — Percent of the total sample weight within the four size classes.

Class ranges are:

1. Gravel - coarser than 2 mm
2. Sand - 2 to 0.0625 mm
3. Silt - 0.0625 to 0.0039 mm
4. Clay - finer than 0.0039

MEAN (MM) — The geometric mean of the distribution expressed in millimeters.

MEAN (PHI) — The logarithmic mean of the distribution expressed in phi units ($-\log_2$) of the diameter in millimeters.

STAN DEV — Standard deviation. A measure of the degree of spread or dispersion of the distribution about the mean expressed in phi units.

$$s = \sqrt{\frac{\sum f \quad (X_i - \bar{X})^2}{100}}$$

SKEWNESS — A measure of the asymmetry of the distribution. Positive values denote skewness of the distribution toward the fine particles; negative values denote skewness toward the coarse particles. A normal distribution has a skewness of 0.

$$\text{Skewness} = \frac{2 \sum f \quad (X_i - X)^3}{100 \quad s^3}$$

KURTOSIS — A measure of the peakedness of the distribution. Positive values denote a "leptokurtic" distribution more "peaked" than normal. Negative values denote a "platykurtic" distribution, or a distribution more "flat" than normal. When using the following formula, a normal curve has a kurtosis of 0.

$$\text{Kurtosis} = \left[\frac{\sum f \quad (X_i - \bar{X})^4}{100 \quad s^4} \right] - 3$$

$CACO_3$ — Percent of the total sample weight soluble in 2 N HCL.

ORG CARBON — Percent organic carbon of the total sample weight as determined using a Leco carbon analyzer.

COLOR — Wet sediment color, based on the Geological Society of America Rock-Color Chart, as determined in the laboratory.

NITROGEN — Percent nitrogen of the total sample weight as determined by the Kjeldahl method.

Project No: 451
Location: Pensacola, FA

MGG09005042
117-07

Logged By J. C. Bowman
Date Logged 18 JUL 73

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: Pensa-1 Lat: 30° 17' 56" N .93 Long: 87° 19' 54" W .90 Date: 13 NOV 72 Water depth:	451-1	Moderate olive gray 5Y4/2	Yes	Silty Sand	0-12" (0-30cm) Shell fragments Plant fragments Slight Ammonia odor Decaying Plant material odor.
Sample No: Pensa-1 Lat: 30° 17' 56" N Long: 87° 19' 54" W Date: 13 NOV 72 Water depth:	451-2	Light olive gray 5Y5/2	Yes	Sand	12-36" (30-91cm) Shell fragments
Sample No: Pensa-1 Lat: 30° 17' 56" N Long: 87° 19' 54" W Date: 13 NOV 72 Water depth:	451-3	Light olive gray 5Y5/2	Yes	Sand	36-60" (91-152cm) Shell fragments.
Sample No: Pensa-2 Lat: 30° 17' 51" N .85 Long: 87° 19' 54" W Date: 13 NOV 72 Water depth:	451-4	Greenish black 5GY2/1	Yes	Silty clay	0-12" (0-30cm) Shell fragments.
Sample No: Pensa-2 Lat: 30° 17' 51" N Long: 87° 19' 54" W Date: 13 NOV 72 Water depth:	451-5	Moderate olive gray 5Y4/2	Yes	Silty Sand	12-41" (30-104cm) Shell fragments
Sample No: Pensa-2 Lat: 30° 17' 51" N Long: 87° 19' 54" W Date: 13 NOV 72 Water depth:	451-6	Greenish black 5G2/1	Yes	Sandy Silt	41-70" (104-178cm) Shell fragments
Sample No: Pensa-3 Lat: 30° 20' 48" N .80 Long: 87° 15' 55" W Date: 14 NOV 72 .92 Water depth:	451-7	Greenish black 5GY2/1	Yes	Clayey Silt	0-12" (0-30cm) Shell fragments
Sample No: Pensa-3 Lat: 30° 20' 48" N Long: 87° 15' 55" W Date: 14 NOV 72 Water depth:	451-8	Dark greenish gray 5GY4/1	Yes	Silty Sand	12-41" (30-104cm)
Sample No: Pensa-3 Lat: 30° 20' 48" N Long: 87° 15' 55" W Date: 14 NOV 72 Water depth:	451-9	Light olive gray	Yes	Silty Sand	41-70" (104-178cm) Shell fragments

LOG FOR CORE SAMPLES

Project No: 451
Location: Pensacola, FA

MGG09005042
117-07

Logged By J.C. Bowman
Date Logged 18 JUL 73

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: Pensa-4 Lat: 30° 20' 38" N .63 Long: 87° 16' 00" W .00 Date: 14 Nov 72 Water depth:	451-10	Greenish black 5G2/1	Yes	Clayey Silt	0-12" (0-30cm) Shell fragments
Sample No: Pensa-4 Lat: 30° 20' 38" N Long: 87° 16' 00" W Date: 14 Nov 72 Water depth:	451-11	Greenish black 5G2/1	Yes	Clayey Silt	12-40" (30-102cm) Shell fragments
Sample No: Pensa-4 Lat: 30° 20' 38" N Long: 87° 16' 00" W Date: 14 Nov 72 Water depth:	451-12	Greenish black 5G2/1	Yes	Silty Clay	40-68" (102-173cm) Shell fragments
Sample No: Pensa-5 Lat: 30° 20' 32" N .53 Long: 87° 16' 07" W .12 Date: 14 Nov 72 Water depth:	451-13	Greenish black 5GY2/1	Yes	Sandy Silt	0-12" (0-30cm) Shell fragments.
Sample No: Pensa-5 Lat: 30° 20' 32" N Long: 87° 16' 07" W Date: 14 Nov 72 Water depth:	451-14	Greenish black 5GY2/1	Yes	Sandy Silt	12-28" (30-71cm)
Sample No: Pensa-5 Lat: 30° 20' 32" N Long: 87° 16' 07" W Date: 14 Nov 72 Water depth:	451-15	Greenish black 5GY2/1	Yes	Silty Sand	28-45" (71-114cm) Shell fragments.
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					

LOG FOR CORE SAMPLES

Project No: 451
Location: NAS-JAX

MGG09005042
117-01

Logged By J.C. Bowman
Date Logged 18 JUL 73

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: NAS-JAX-1 Lat: 30° 14.8'N .13 Long: 81° 40.0'W Date: Water depth:	451-16	Greenish black 5G2/1	Yes	Sandy Silt	0-12" (0-30cm) Shell fragments
Sample No: NAS-JAX-2 Lat: 30° 14.8'N Long: 81° 40.0'W Date: Water depth:	451-17	moderate olive gray 5Y4/2	Yes	Silty clay	12-42" (30-107cm) Shell fragments
Sample No: NAS-JAX-1 Lat: 30° 14.8'N Long: 81° 40.0'W Date: Water depth:	451-18	moderate olive gray 5Y4/2	Yes	Clayey Silt	42-72" (107-183cm) Shell fragments
Sample No: NAS-JAX-2 Lat: 30° 14.8 N Long: 81° 40.0'W Date: Water depth:	451-19	Greenish black 5G2/1	Yes	Silt	0-12" (0-30cm) Shell fragments
Sample No: NAS-JAX-2 Lat: 30° 14.8'N Long: 81° 40.0'W Date: Water depth:	451-20	Brownish black 5YR2/1	Yes	Silt	12-47" (30-119cm) Shell fragments
Sample No: NAS-JAX-2 Lat: 30° 14.8'N Long: 81° 40.0'W Date: Water depth:	451-21	Brownish gray 5YR4/1	Yes	Silty clay	47-82" (119-208cm) Shell fragments
Sample No: NAX-JAX-3 Lat: 30° 14.8'N Long: 81° 40.0'W Date: Water depth:	451-22	Greenish black 5GY2/1	Yes	Silt	0-12" (0-30cm) Shell fragments
Sample No: NAX-JAX-3 Lat: 30° 14.8'N Long: 81° 40.0'W Date: Water depth:	451-23	Greenish black 5GY2/1	Yes	Silt	12-49" (30-124cm) Shell fragments
Sample No: NAX-JAX-3 Lat: 30° 14.8'N Long: 81° 40.0'W Date: Water depth:	451-24	Brownish gray 5YR3/1	Yes	Silt	49-87" (124-221cm) Shell fragments

MGG09005042

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PENSA TAKEN NOV72 LATITUDE 30 17.9 N MARSDEN SQUARE 117-07 LENGTH 152.0 ANALYZED SEP73
SAMPLE PENSA1 DEPTH LONGITUDE 87 19.9 W CORER TYPE DOC PENETRATION

	SUBSAMPLE ID.	451 1	451 2	451 3
	DEPTH INTERVAL	.0- 30.5	30.5- 91.4	91.4-152.4
DIAM (PHI)	DIAM (MM)	PERCENT	PERCENT	PERCENT
<-4	>16.000	.000	.000	.000
-4 TO -3	16.000 TO 8.000	.000	.000	.000
-3 TO -2	8.000 TO 4.000	.231	.671	.844
-2 TO -1	4.000 TO 2.000	.134	.070	.157
-1 TO 0	2.000 TO 1.000	.197	.237	.408
0 TO 1	1.000 TO .500	3.429	7.864	11.852
1 TO 2	.500 TO .250	42.541	48.929	51.579
2 TO 3	.250 TO .125	38.423	37.901	25.917
3 TO 4	.125 TO .063	3.415	1.324	1.699
4 TO 5	.063 TO .031	1.145	.257	1.227
5 TO 6	.031 TO .016	.717	.165	.553
6 TO 7	.016 TO .008	.998	.132	.772
7 TO 8	.008 TO .004	.654	.079	.646
8 TO 9	.004 TO .002	.625	.132	.369
9 TO 10	.002 TO .001	.780	.212	.035
>10	<.001	6.662	2.025	3.943
	GRAVEL (>2.0 MM)	.415	.741	1.001
	SAND (2.0-.063 MM)	88.005	96.255	91.455
	SILT (.063-.004 MM)	3.513	.634	3.198
	CLAY (<.004 MM)	8.067	2.370	4.346
	MEAN (MM)	.1473	.2453	.2257
	MEAN (PHI)	2.757	2.027	2.148
	STANDARD DEVIATION	2.438	1.519	2.052
	SKEWNESS	1.177	1.848	1.413
	KURTOSIS	4.725	19.237	9.030
	CALCIUM CARBONATE	4.000	1.000	2.000
	ORGANIC CARBON	.573 (±.016)	.189 (±.013)	1.249 (±.027)
	NITROGEN (KJELDAHL)	.058 (±.000)	.013 (±.001)	.048 (±.008)
	COLOR (GSA)	5Y4/2	5Y5/2	5Y5/2

MGG09005042

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PENSA TAKEN NOV72 LATITUDE 30 17.9 N MARSDEN SQUARE 117-07 LENGTH 178.0 ANALYZED SEP73
SAMPLE PENSA2 DEPTH LONGITUDE 87 19.9 W CORER TYPE DOC PENETRATION

	SUBSAMPLE ID.	451 4	451 5	451 6
	DEPTH INTERVAL	.0- 30.5	30.5-104.1	104.1-177.8
DIAM (PHI)	DIAM (MM)	PERCENT	PERCENT	PERCENT
<-4	>16.000	.000	.000	.000
-4 TO -3	16.000 TO 8.000	.000	.000	.000
-3 TO -2	8.000 TO 4.000	.000	.000	.101
-2 TO -1	4.000 TO 2.000	.031	.248	.136
-1 TO 0	2.000 TO 1.000	.137	.225	.333
0 TO 1	1.000 TO .500	10.819	7.372	7.125
1 TO 2	.500 TO .250	58.042	59.150	25.556
2 TO 3	.250 TO .125	18.998	26.743	55.920
3 TO 4	.125 TO .063	.499	.851	5.472
4 TO 5	.063 TO .031	.648	.375	.869
5 TO 6	.031 TO .016	.785	.226	.413
6 TO 7	.016 TO .008	.999	.401	.291
7 TO 8	.008 TO .004	.826	.270	.326
8 TO 9	.004 TO .002	.927	.482	.227
9 TO 10	.002 TO .001	.797	.153	.239
>10	<.001	6.503	3.503	2.992
	GRAVEL (>2.0 MM)	.031	.248	.238
	SAND (2.0-.063 MM)	88.484	94.340	94.406
	SILT (.063-.004 MM)	3.258	1.273	1.899
	CLAY (<.004 MM)	8.227	4.138	3.458
	MEAN (MM)	.1827	.2306	.1813
	MEAN (PHI)	2.452	2.117	2.464
	STANDARD DEVIATION	2.526	1.862	1.728
	SKEWNESS	1.221	1.770	1.615
	KURTOSIS	4.756	12.895	12.670
	CALCIUM CARBONATE	3.000	2.000	2.000
	ORGANIC CARBON	.478(±.010)	.369(±.018)	.476(±.042)
	NITROGEN (KJELDAHL)	.056(±.003)	.025(±.001)	.023(±.001)
	COLOR (GSA)	5GY2/1	5Y4/2	5G2/1

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PENSA TAKEN NOV72 LATITUDE 30 17.9 N MARSDEN SQUARE 117-07 LENGTH 178.0 ANALYZED SEP73
SAMPLE PENSA3 DEPTH LONGITUDE 87 19.9 W CORER TYPE DOC PENETRATION

	SUBSAMPLE ID.	451 7	451 8	451 9
	DEPTH INTERVAL	.0- 30.5	30.5-104.1	104.1-177.8
DIAM (PHI)	DIAM (MM)	PERCENT	PERCENT	PERCENT
<-4	>16.000	.000	.000	.000
-4 TO -3	16.000 TO 8.000	.000	.000	1.279
-3 TO -2	8.000 TO 4.000	.128	.000	.192
-2 TO -1	4.000 TO 2.000	.223	.103	.120
-1 TO 0	2.000 TO 1.000	.331	.115	.461
0 TO 1	1.000 TO .500	5.812	7.988	10.812
1 TO 2	.500 TO .250	41.093	56.347	64.425
2 TO 3	.250 TO .125	21.778	24.423	20.966
3 TO 4	.125 TO .063	.939	.594	.335
4 TO 5	.063 TO .031	.087	.484	.062
5 TO 6	.031 TO .016	1.575	.561	.132
6 TO 7	.016 TO .008	3.119	.598	.026
7 TO 8	.008 TO .004	3.438	.716	.125
8 TO 9	.004 TO .002	2.321	.790	.020
9 TO 10	.002 TO .001	1.577	.517	.013
>10	<.001	17.578	6.763	1.032
	GRAVEL (>2.0 MM)	.351	.103	1.591
	SAND (2.0-.063 MM)	69.954	89.467	96.939
	SILT (.063-.004 MM)	8.219	2.360	.345
	CLAY (<.004 MM)	21.477	8.070	1.065
	MEAN (MM)	.0643	.1785	.3219
	MEAN (PHI)	3.959	2.486	1.635
	STANDARD DEVIATION	3.603	2.475	1.275
	SKEWNESS	.491	1.271	1.386
	KURTOSIS	-.727	5.275	26.026
	CALCIUM CARBONATE	7.000	3.000	1.000
	ORGANIC CARBON	1.152 (±.051)	.666 (±.032)	.068 (±.001)
	NITROGEN (KJELDAHL)	.095 (±.004)	.037 (±.002)	.006 (±.000)
	COLOR (GSA)	5GY2/1	5GY4/1	5Y6/1

MGG09005042

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PENSA TAKEN NOV72 LATITUDE 30 17.9 N MARSDEN SQUARE 117-07 LENGTH 173.0 ANALYZED SEP73
SAMPLE PENSA4 DEPTH LONGITUDE 87 19.9 W CORER TYPE DOC PENETRATION

	SUBSAMPLE ID.	451 10	451 11	451 12
	DEPTH INTERVAL	.0- 30.5	30.5-101.6	101.6-172.7
DIAM (PHI)	DIAM (MM)	PERCENT	PERCENT	PERCENT
<-4	>16.000	.000	.000	.000
-4 TO -3	16.000 TO 8.000	1.327	.000	.000
-3 TO -2	8.000 TO 4.000	1.002	.391	.237
-2 TO -1	4.000 TO 2.000	.733	.330	.167
-1 TO 0	2.000 TO 1.000	1.489	.578	.373
0 TO 1	1.000 TO .500	1.628	1.056	5.479
1 TO 2	.500 TO .250	7.407	5.560	21.999
2 TO 3	.250 TO .125	30.105	13.552	28.247
3 TO 4	.125 TO .063	11.844	5.212	5.362
4 TO 5	.063 TO .031	6.100	7.775	1.353
5 TO 6	.031 TO .016	3.327	3.301	2.639
6 TO 7	.016 TO .008	2.971	5.647	3.291
7 TO 8	.008 TO .004	2.278	3.953	3.174
8 TO 9	.004 TO .002	2.674	3.866	1.971
9 TO 10	.002 TO .001	2.595	5.039	1.236
>10	<.001	24.520	43.741	24.472
	GRAVEL (>2.0 MM)	3.062	.721	.404
	SAND (2.0-.063 MM)	52.474	25.958	61.460
	SILT (.063-.004 MM)	14.676	20.676	10.457
	CLAY (<.004 MM)	29.788	52.645	27.679
	MEAN (MM)	.0298	.0069	.0371
	MEAN (PHI)	5.066	7.187	4.753
	STANDARD DEVIATION	3.764	3.569	3.758
	SKEWNESS	.144	-.257	.308
	KURTOSIS	-1.039	-1.235	-1.290
	CALCIUM CARBONATE	18.000	21.000	11.000
	ORGANIC CARBON	1.398 (±.051)	2.121 (±.122)	1.146 (±.028)
	NITROGEN (KJELDAHL)	.169 (±.001)	.237 (±.006)	.111 (±.003)
	COLOR (GSA)	5G2/1	5G2/1	5G2/1

MGG09005042

11

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PENSA TAKEN NOV72 LATITUDE 30 17.9 N MARSDEN SQUARE 117-07 LENGTH 114.0 ANALYZED SEP73
SAMPLE PENSA5 DEPTH LONGITUDE 87 19.9 W CORER TYPE DOC PENETRATION

	SUBSAMPLE ID.	451 13	451 14	451 15
	DEPTH INTERVAL	.0- 30.5	30.5- 71.1	71.1-114.3
DIAM (PHI)	DIAM (MM)	PERCENT	PERCENT	PERCENT
<-4	>16.000	2.601	.000	.000
-4 TO -3	16.000 TO 8.000	.357	.000	.000
-3 TO -2	8.000 TO 4.000	.102	.801	.106
-2 TO -1	4.000 TO 2.000	1.135	.484	.372
-1 TO 0	2.000 TO 1.000	.637	.358	.424
0 TO 1	1.000 TO .500	4.882	4.652	1.566
1 TO 2	.500 TO .250	42.959	50.721	50.675
2 TO 3	.250 TO .125	35.260	33.890	41.219
3 TO 4	.125 TO .063	1.266	.985	.904
4 TO 5	.063 TO .031	.094	.354	.441
5 TO 6	.031 TO .016	.741	.568	.293
6 TO 7	.016 TO .008	1.137	.267	.299
7 TO 8	.008 TO .004	.862	.267	.221
8 TO 9	.004 TO .002	.621	.468	.143
9 TO 10	.002 TO .001	.259	.180	.096
>10	<.001	7.088	6.003	3.240
	GRAVEL (>2.0 MM)	4.194	1.285	.478
	SAND (2.0-.063 MM)	85.005	90.607	94.799
	SILT (.063-.004 MM)	2.834	1.457	1.254
	CLAY (<.004 MM)	7.967	6.651	3.479
	MEAN (MM)	.1833	.1883	.2098
	MEAN (PHI)	2.447	2.409	2.253
	STANDARD DEVIATION	2.767	2.297	1.721
	SKEWNESS	.713	1.329	1.856
	KURTOSIS	3.689	6.995	15.208
	CALCIUM CARBONATE	4.000	8.000	4.000
	ORGANIC CARBON	.302 (±.005)	.216 (±.003)	.133 (±.010)
	NITROGEN (KJELDAHL)	.031 (±.002)	.023 (±.001)	.013 (±.000)
	COLOR (GSA)	5GY2/1	5GY2/1	5GY2/1

MGG09005042

12

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE NAS-JX TAKEN NOV72 LATITUDE 30 14.8 N MARSDEN SQUARE 117-01 LENGTH 183.0 ANALYZED SEP73
SAMPLE JAX-1 DEPTH LONGITUDE 81 40.0 W CORER TYPE DOC PENETRATION

	SUBSAMPLE ID.	451 16	451 17	451 18
	DEPTH INTERVAL	.0- 30.5	30.5-106.7	106.7-182.9
DIAM (PHI)	DIAM (MM)	PERCENT	PERCENT	PERCENT
<-4	>16.000	.000	.000	.000
-4 TO -3	16.000 TO 8.000	.000	.000	.000
-3 TO -2	8.000 TO 4.000	.000	.000	.000
-2 TO -1	4.000 TO 2.000	.038	.000	.024
-1 TO 0	2.000 TO 1.000	.126	.274	.128
0 TO 1	1.000 TO .500	.379	.203	.096
1 TO 2	.500 TO .250	.581	.162	.132
2 TO 3	.250 TO .125	1.225	.912	11.031
3 TO 4	.125 TO .063	1.263	1.520	29.746
4 TO 5	.063 TO .031	.505	.309	3.011
5 TO 6	.031 TO .016	1.036	7.043	6.840
6 TO 7	.016 TO .008	17.810	13.883	7.033
7 TO 8	.008 TO .004	12.366	10.995	5.997
8 TO 9	.004 TO .002	9.019	7.651	3.950
9 TO 10	.002 TO .001	3.612	4.003	2.216
>10	<.001	52.040	53.048	29.794
	GRAVEL (>2.0 MM)	.038	.000	.024
	SAND (2.0-.063 MM)	3.575	3.070	41.134
	SILT (.063-.004 MM)	31.717	32.229	22.882
	CLAY (<.004 MM)	64.671	64.701	35.960
	MEAN (MM)	.0022	.0022	.0117
	MEAN (PHI)	8.823	8.807	6.412
	STANDARD DEVIATION	2.109	2.134	3.155
	SKEWNESS	-.627	-.551	.101
	KURTOSIS	1.609	.826	-1.591
	CALCIUM CARBONATE	15.000	11.000	4.000
	ORGANIC CARBON	14.048 (±.921)	7.456 (±.037)	2.249 (±.163)
	NITROGEN (KJELDAHL)	.688 (±.597)	.727 (±.019)	.232 (±.007)
	COLOR (GSA)	5G2/1	5Y4/2	5Y4/2

REMARKS SUBSAMPLE 451- 16 LARGE VARIANCE OF CARBON AND NITROGEN RELATED TO HIGH READING

MGG09005042

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE NAS-JX TAKEN NOV72 LATITUDE 30 14.8 N MARSDEN SQUARE 117-01 LENGTH ~208.0 ANALYZED SEP73
SAMPLE JAX-2 DEPTH LONGITUDE 81 40.0 W CORER TYPE DOC PENETRATION

	SUBSAMPLE ID.	451 19	451 20	451 21
	DEPTH INTERVAL	.0- 30.5	30.5-119.4	119.4-208.3
DIAM (PHI)	DIAM (MM)	PERCENT	PERCENT	PERCENT
<-4	>16.000	.000	.000	.000
-4 TO -3	16.000 TO 8.000	.000	.000	.000
-3 TO -2	8.000 TO 4.000	.000	.000	.000
-2 TO -1	4.000 TO 2.000	.000	.236	.000
-1 TO 0	2.000 TO 1.000	.000	.448	.025
0 TO 1	1.000 TO .500	.000	.518	.052
1 TO 2	.500 TO .250	.000	.363	.156
2 TO 3	.250 TO .125	.000	.584	57.499
3 TO 4	.125 TO .063	1.395	.679	21.294
4 TO 5	.063 TO .031	.567	.603	1.236
5 TO 6	.031 TO .016	7.064	6.504	1.752
6 TO 7	.016 TO .008	20.058	10.557	1.533
7 TO 8	.008 TO .004	16.424	9.897	1.330
8 TO 9	.004 TO .002	7.355	6.881	1.205
9 TO 10	.002 TO .001	3.387	4.807	1.197
>10	<.001	43.750	57.923	12.720
	GRAVEL (>2.0 MM)	.000	.236	.000
	SAND (2.0-.063 MM)	1.395	2.592	79.027
	SILT (.063-.004 MM)	44.113	27.562	5.852
	CLAY (<.004 MM)	54.491	69.611	15.122
	MEAN (MM)	.0027	.0020	.0588
	MEAN (PHI)	8.539	8.977	4.088
	STANDARD DEVIATION	1.956	2.197	2.764
	SKEWNESS	-.180	-.804	.824
	KURTOSIS	-1.175	2.943	1.043
	CALCIUM CARBONATE	11.000	14.000	2.000
	ORGANIC CARBON	11.794(±.250)	11.967(±.267)	.724(±.016)
	NITROGEN (KJELDAHL)	1.254(±.034)	1.026(±.078)	.082(±.001)
	COLOR (GSA)	5G2/1	5YR2/1	5YR4/1

REMARKS SUBSAMPLE 451- 19 LARGE VARIANCE OF CARBON AND NITROGEN RELATED TO HIGH READING
REMARKS SUBSAMPLE 451- 20 LARGE VARIANCE OF CARBON AND NITROGEN RELATED TO HIGH READING

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE NAS-JX TAKEN NOV72 LATITUDE 30 14.8 N MARSDEN SQUARE 117-01 LENGTH 221.0 ANALYZED SEP73
SAMPLE JAX-3 DEPTH LONGITUDE 81 40.0 W CORER TYPE DOC PENETRATION

	SUBSAMPLE ID.	451 22	451 23	451 24
	DEPTH INTERVAL	.0- 30.5	30.5-124.5	124.5-221.0
DIAM (PHI)	DIAM (MM)	PERCENT	PERCENT	PERCENT
<-4	>16.000	.000	.000	.000
-4 TO -3	16.000 TO 8.000	.000	.000	.000
-3 TO -2	8.000 TO 4.000	.000	.000	.000
-2 TO -1	4.000 TO 2.000	.242	.007	.000
-1 TO 0	2.000 TO 1.000	.727	.064	.027
0 TO 1	1.000 TO .500	.121	.085	.059
1 TO 2	.500 TO .250	.121	.142	.128
2 TO 3	.250 TO .125	.182	.142	15.121
3 TO 4	.125 TO .063	.260	.235	8.259
4 TO 5	.063 TO .031	1.399	.214	5.585
5 TO 6	.031 TO .016	4.677	4.959	6.476
6 TO 7	.016 TO .008	13.631	13.038	5.407
7 TO 8	.008 TO .004	9.935	10.758	5.793
8 TO 9	.004 TO .002	5.870	6.768	4.813
9 TO 10	.002 TO .001	4.677	4.595	4.010
>10	<.001	58.157	58.991	44.323
	GRAVEL (>2.0 MM)	.242	.007	.000
	SAND (2.0-.063 MM)	1.412	.670	23.593
	SILT (.063-.004 MM)	29.642	28.968	23.261
	CLAY (<.004 MM)	68.704	70.355	53.146
	MEAN (MM)	.0019	.0018	.0055
	MEAN (PHI)	9.010	9.157	7.507
	STANDARD DEVIATION	2.122	1.838	3.195
	SKEWNESS	-.793	-.553	-.226
	KURTOSIS	3.248	.550	-1.441
	CALCIUM CARBONATE	16.000	16.000	6.000
	ORGANIC CARBON	11.889 (±.743)	11.989 (±.669)	3.107 (±.146)
	NITROGEN (KJELDAHL)	1.244 (±.025)	1.208 (±.018)	.301 (±.011)
	COLOR (GSA)	5GY2/1	5GY2/1	5YR3/1

REMARKS SUBSAMPLE 451- 22 LARGE VARIANCE OF CARBON RELATED TO HIGH CARBON READINGS
REMARKS SUBSAMPLE 451- 23 LARGE VARIANCE OF CARBON RELATED TO HIGH CARBON READINGS

MGG09005042