MGG09005071

LABORATORY ITEM 517

M. S. Loughridge MAY 15 '78

Carla

A SUMMARY OF SEDIMENT SIZE AND CHEMISTRY OF 66 GRAB SAMPLES FROM MAYPORT, FLORIDA. TUGBOAT 16. SEPTEMBER 1977.

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Prepared for: NORDA Code 334

MAY 1978

Oceanographic Laboratories
Oceanographic Department

NAVAL OCEANOGRAPHIC OFFICE
WASHINGTON, D. C. 20373

MGG09005071

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	DOC	Diver Operated Corer
EWP	Ewing piston		
EWG	Ewing gravity		

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.

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.

LOG FOR GRAB SAMPLES

MGG09005071

Project No: 517
Location: Mayport

Logged By L.M. Reynolds
Date Logged 19 April, 78

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: 1-A-2 Lat: 30°21.16' N Long: 81° 18.00' W Date: Water depth:		5Y3/2 dark olive gray	NO	SILTY Sand	
Sample No: 1-B-2 Lat: Long: Date: Water depth:		5Y4/2 olive gray	NO	SILTY Sand	
Sample No: 1-C-2 Lat: Long: Date: Water depth:		5Y2.5/1 black	No	Silty Clay	
Sample No: 1-D-2 Lat: Long: Date: Water depth:		5Y5/2 Olive gray	Yes	Sand	Shell fragments
Sample No: 1-E-2 Lat: Long: Date: Water depth:		5Y3/2 dark olive gray	No	Silty Clay	
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					

LOG FOR GRAB SAMPLES

MGG09005071

Project No: 517
Location: Mayport

MGG09005071

Logged By L.M Reynolds
Date Logged 19 April, 78

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: 2-A-2 Lat: 30°21.46'N Long: 81°18.00'W Date: Water depth:		5Y2.5/2 black	NO	Silty Clay	
Sample No: 2-B-2 Lat: Long: Date: Water depth:		5Y3/2 dark olive gray	Yes	Clayey Silt	Shell fragments
Sample No: 2-C-2 Lat: Long: Date: Water depth:		5Y3/2 dark olive gray	Yes	Silty Sand	Shell Fragments
Sample No: 2-D-2 Lat: Long: Date: Water depth:		5Y4/2 olive gray	NO	Silty Clay	
Sample No: 2-E-2 Lat: Long: Date: Water depth:		5Y4/1 dark gray	Yes	Silty Sand	Shell Fragments
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					

LOG FOR GRAB SAMPLES

Project No: 517
Location: Mayport

MGG09005071

Logged By L.M. Reynolds
Date Logged 19 April 78

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: 3-A-2 Lat: 30°21.06'N Long: 81°17.62'W Date: Water depth:		5Y3/2 dark olive gray	NO	clayey silt	
Sample No: 3-B-2 Lat: Long: Date: Water depth:		5Y5/2 olive gray	Yes	silty sand	shell fragments
Sample No: 3-C-2 Lat: Long: Date: Water depth:		5Y5/2 olive gray	Yes	sand	shell fragments
Sample No: 3-D-2 Lat: Long: Date: Water depth:		5Y5/2 olive gray	Yes	sand	shell fragments
Sample No: 3-E-2 Lat: Long: Date: Water depth:		5Y4/2 olive gray	Yes	silty sand	shell fragments
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					

LOG FOR GRAB SAMPLES MGG09005071

Project No: 517
Location: Mayport

Logged By L.M. Reynolds
Date Logged 19 April, 78

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: 4-A-2 Lat: 30°21.16'N Long: 81°19.18'W Date: Water depth:		5Y5/2 olive gray	Yes	Sand	Shell fragments
Sample No: 4-B-2 Lat: Long: Date: Water depth:		5Y5/2 olive gray	Yes	Sand	Shell fragments
Sample No: 4-C-2 Lat: Long: Date: Water depth:		5Y5/2 olive gray	Yes	Sand	Shell fragments
Sample No: 4-D-2 Lat: Long: Date: Water depth:		5Y5/2 olive gray	Yes	Sand	Shell fragments
Sample No: 4-E-2 Lat: Long: Date: Water depth:		5Y5/2 olive gray	Yes	Sand	Shell fragments
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					

LOG FOR GRAB SAMPLES

MGG09005077

Project No: 517
Location: Mayport

Logged By L.M. Reynolds
Date Logged 19 April, 78

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: 5-A-2 Lat: 30° 17.04' N Long: 81° 18.03' N Date: Water depth:		5Y4/2 Olive gray	Yes	Silty Sand	Shell fragments
Sample No: 5-B-2 Lat: Long: Date: Water depth:		5Y4/2 Olive gray	Yes	Silty Sand	Shell fragments
Sample No: 5-C-2 Lat: Long: Date: Water depth:		5Y4/2 Olive gray	Yes	Silty Sand	Shell fragments
Sample No: 5-D-2 Lat: Long: Date: Water depth:		5Y4/2 Olive gray	Yes	Silty Sand	Shell fragments
Sample No: 5-E-2 Lat: Long: Date: Water depth:		5Y4/2 Olive gray	Yes	Silty Sand	Shell fragments
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					

LOG FOR GRAB SAMPLES

Project No: 517
Location: Mayport

Logged By L.M. Reynolds
Date Logged 19 April, 78

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: 6-A-2 Lat: 30°22.18'N Long: 81°18.00'W Date: Water depth:		5Y6/2 light olive gray	Yes	Sand	Shell fragments
Sample No: 6-B-2 Lat: Long: Date: Water depth:		5Y6/3 Pale olive	Yes	Sand	Shell fragments
Sample No: 6-C-2 Lat: Long: Date: Water depth:		5Y6/2 light olive gray	Yes	Sand	Shell fragments
Sample No: 6-D-2 Lat: Long: Date: Water depth:		5Y6/2 light olive gray	Yes	Sand	Shell fragments
Sample No: 6-E-2 Lat: Long: Date: Water depth:		5Y6/2 light olive gray	Yes	Sand	Shell fragments
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					

MGG09005071

LOG FOR CORE SAMPLES

Project No: 517
Location: Mayport

Logged By L. M. Reynolds
Date Logged 20 April, 7E

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: 1-B-1 Lat: 30°21.16'N Long: 81°18.00'W Date: Water depth:		2.5Y4/2 dark grayish brown	Yes	Clayey Sand	Shell fragments
Sample No: 1-B-2 Lat: Long: Date: Water depth:		2.5Y3/2 Very dark grayish brown	Yes	Sand	a few shell fragments
Sample No: 1-B-3 Lat: Long: Date: Water depth:		2.5Y 5/2 grayish brown	Yes	Sand	Shell fragments
Sample No: 1-C-1 Lat: Long: Date: Water depth:		2.5Y4/2 dark grayish brown	Yes	Clayey Sand	Shell fragments
Sample No: 1-C-2 Lat: Long: Date: Water depth:		5Y4/2 Olive gray	Yes	Silty Sand	Shell fragments
Sample No: 1-C-3 Lat: Long: Date: Water depth:		2.5Y 5/2 grayish brown	Yes	Sand	Shell fragments
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date:					

LOG FOR CORE SAMPLES

MGG09005071

MGG09005071

Project No: 517
Location: Mayport

Logged By L.M. Reynolds
Date Logged 20 April 78

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: 2-B-1 Lat: 30°21.46'N Long: 81°18.00'W Date: Water depth:		5Y3/2 dark olive gray	NO	Clayey Sand	
Sample No: 2-B-2 Lat: Long: Date: Water depth:		5Y4/2 olive gray	NO	Clayey Sand	
Sample No: 2-B-3 Lat: Long: Date: Water depth:		5Y4/2 Olive grey	NO	Silty Sand	
Sample No: 2-C-1 Lat: Long: Date: Water depth:		5Y3/2 dark olive gray	NO	Clayey Sand	
Sample No: 2-C-2 Lat: Long: Date: Water depth:		2.5Y3/2 Very dark grayish brown	NO	Clayey Sand	
Sample No: 2-C-3 Lat: Long: Date: Water depth:		2.5Y3/2 Very dark grayish brown	NO	Clayey Sand	
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: 517
Location: Mayport

MGG09005071

Logged By L. M. Reynolds
Date Logged 20 April, 73

	La No.	Color	Calc. Mat.	Sedimont Type	Remarks
Sample No: 3-B-1 Lat: 30°21.06'N Long: 81°17.62'W Date: Water depth:		5Y5/2 Olive gray	Yes	Sand	Shell fragments
Sample No: 3-B-2 Lat: Long: Date: Water depth:		5Y4/2 Olive gray	Yes	Silty Sand	Shell fragments
Sample No: 3-B-3 Lat: Long: Date: Water depth:		5Y6/2 light Olive gray	Yes	Sand	Shell Fragments
Sample No: 3-C-1 Lat: Long: Date: Water depth:		5Y5/2 olive gray	Yes	Sand	a few shell fragments
Sample No: 3-C-2 Lat: Long: Date: Water depth:		5Y5/2 Olive grey	Yes	Sand	Shell fragments
Sample No: 3-C-3 Lat: Long: Date: Water depth:		5Y4/2 Olive gray	Yes	Silty Sand	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: 517
Location: Mayport

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Logged By L.M. Reynolds
Date Logged 20 April, 78

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: 4-B-1 Lat: 30°21.16'N Long: 81°19.18'W Date: Water depth:		5Y6/2 light olive gray	Yes	Sand	Shell fragments
Sample No: 4-B-2 Lat: Long: Date: Water depth:		5Y6/2 light olive gray	Yes	Sand	Shell fragments
Sample No: 4-B-3 Lat: Long: Date: Water depth:		5Y5/2 olive grey	Yes	Sand	Shell fragments
Sample No: 4-C-1 Lat: Long: Date: Water depth:		5Y5/2 olive grey	Yes	Sand	Shell fragments
Sample No: 4-C-2 Lat: Long: Date: Water depth:		5Y6/2 light olive gray	Yes	Sand	Shell fragments
Sample No: 4-C-3 Lat: Long: Date: Water depth:		5Y5/2 olive gray	Yes	Sand	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: 517
Location: Mayport

MCG09005071

Logged By L.M. Reynolds
Date Logged 20 April, 78

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: 5-B-1 Lat: 30°18.84' N Long: 81°18.02' W Date: Water depth:		5Y4/3 Olive	Yes	Sand	Shell fragments
Sample No: 5-B-2 Lat: Long: Date: Water depth:		5Y5/2 Olive gray	Yes	Sand	Shell fragments
Sample No: 5-B-3 Lat: Long: Date: Water depth:		5Y4/2 Olive gray	Yes	Silty Sand	Shell fragments
Sample No: 5-C-1 Lat: Long: Date: Water depth:		5Y4/2 Olive gray	Yes	Sand	Shell fragments
Sample No: 5-C-2 Lat: Long: Date: Water depth:		5Y5/2 Olive gray	Yes	Sand	Shell fragments
Sample No: 5-C-3 Lat: Long: Date: Water depth:		5Y4/2 Olive gray	Yes	Sand	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 MGG09005071

Project No: 517
Location: Mayport

Logged By L.M. Reynolds
Date Logged 20 April, 78

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: 6-B-1 Lat: 30°22.18'N Long: 81°18.00'W Date: Water depth:		5Y4/3 olive	Yes	Sand	Shell fragments
Sample No: 6-B-2 Lat: Long: Date: Water depth:		5Y4/2 olive gray	Yes	Sand	Shell fragments
Sample No: 6-B-3 Lat: Long: Date: Water depth:		5Y6/1 gray	Yes	Sand	Shell fragments
Sample No: 6-C-1 Lat: Long: Date: Water depth:		5Y4/2 olive gray	Yes	Sand	Shell fragments
Sample No: 6-C-2 Lat: Long: Date: Water depth:		5Y3/2 dark olive gray	Yes	Sand	Shell fragments
Sample No: 6-C-3 Lat: Long: Date: Water depth:		5Y6/2 light olive gray	Yes	Sand	Shell fragments
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date:					

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE TAKEN 0 0 LATITUDE 30 21 .16 N MARSDEN SQUARE LENGTH .0 ANALYZED APR78
SAMPLE 18 DEPTH .0 LONGITUDE 81 18 .00 W CORER TYPE DOC PENETRATION .0

DIAM (PHI)	DIAM (MM)	SUBSAMPLE ID. 5171 1 181 PERCENT	5172 182 PERCENT	5173 183 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	2.495	.000	.000
-2 TO -1	4.000 TO 2.000	4.124	.179	.328
-1 TO 0	2.000 TO 1.000	3.866	.653	.475
0 TO 1	1.000 TO .500	9.166	2.623	2.646
1 TO 2	.500 TO .250	16.639	11.770	10.459
2 TO 3	.250 TO .125	41.241	62.981	62.155
3 TO 4	.125 TO .063	9.089	8.682	9.817
4 TO 5	.063 TO .031	2.366	.618	.984
5 TO 6	.031 TO .016	1.784	1.876	2.874
6 TO 7	.016 TO .008	1.952	1.995	4.715
7 TO 8	.008 TO .004	1.551	1.378	1.108
8 TO 9	.004 TO .002	.892	.808	4.839
9 TO 10	.002 TO .001	.802	.629	.000
>10	<.001	4.034	5.819	.000
	GRAVEL (>2.0 MM)	6.619	.178	.328
	SAND (2.0-.063 MM)	80.000	86.698	85.052
	SILT (.063-.004 MM)	7.654	5.867	9.781
	CLAY (<.004 MM)	5.727	7.257	4.839
	MEAN (MM)	.1738	.1114	.1206
	MEAN (PHI)	2.524	3.166	3.052
	STANDARD DEVIATION	2.551	2.266	1.782
	SKEWNESS	.636	1.125	.862
	KURTOSIS	2.705	4.487	2.824
	ORGANIC CARBON	.382	.612	.202
	NITROGEN (KJELDAHL)	.038	.054	.019
	COLOR (GSA)	2.5Y4/2	2.5Y3/2	2.5Y5/2

MGG09005071

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE		TAKEN 0 0	LATITUDE 30 21.16 N	MARSDEN SQUARE III E	LENGTH	.0	ANALYZED	APR78
SAMPLE	1C	DEPTH .0	LONGITUDE 81 18.00 W	CORER TYPE DOC	PENETRATION	.0		

DIAM (PHI)	SUBSAMPLE ID. DIAM (MM)	5173 4 1C1 PERCENT	5175 1C2 PERCENT	5176 1C3 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	.448	1.210	.000
-2 TO -1	4.000 TO 2.000	1.343	.981	1.408
-1 TO 0	2.000 TO 1.000	2.332	2.159	2.872
0 TO 1	1.000 TO .500	8.857	7.197	5.553
1 TO 2	.500 TO .250	20.071	12.496	13.127
2 TO 3	.250 TO .125	38.893	36.964	28.073
3 TO 4	.125 TO .063	7.326	13.903	30.818
4 TO 5	.063 TO .031	1.272	1.536	.670
5 TO 6	.031 TO .016	1.484	3.729	3.678
6 TO 7	.016 TO .008	2.968	5.005	4.335
7 TO 8	.008 TO .004	2.686	3.009	1.750
8 TO 9	.004 TO .002	2.097	1.897	1.190
9 TO 10	.002 TO .001	1.932	1.374	.301
>10	<.001	8.292	8.440	6.085
	GRAVEL (>2.0 MM)	1.790	2.192	1.408
	SAND (2.0-.063 MM)	77.479	72.718	80.583
	SILT (.063-.004 MM)	8.410	13.379	10.433
	CLAY (<.004 MM)	12.320	11.711	7.676
	MEAN (MM)	.1018	.0833	.0956
	MEAN (PHI)	3.297	3.586	3.387
	STANDARD DEVIATION	2.978	2.956	2.614
	SKEWNESS	.658	.524	.670
	KURTOSIS	.862	.543	1.863
	ORGANIC CARBON	.560	.691	.233
	NITROGEN (KJELDAHL)	.091	.073	.034
	COLOR (GSA)	2.5Y4/2	5Y4/2	2.5Y5/2

MGG09005071

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE TAKEN 0 0 LATITUDE 30 21.46 N MARSDEN SQUARED INE LENGTH .0 ANALYZED APR78
SAMPLE 28 DEPTH .0 LONGITUDE 81 18.00 W CORER TYPE DOC PENETRATION .0

DIAM (PHI)	DIAM (MM)	SUBSAMPLE ID. 517 7 281 PERCENT	517 8 282 PERCENT	517 9 283 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	1.629
-2 TO -1	4.000 TO 2.000	.004	.336	3.801
-1 TO 0	2.000 TO 1.000	.162	.301	4.330
0 TO 1	1.000 TO .500	1.052	.743	4.466
1 TO 2	.500 TO .250	5.461	5.698	14.872
2 TO 3	.250 TO .125	28.195	57.193	56.251
3 TO 4	.125 TO .063	12.904	15.997	6.841
4 TO 5	.063 TO .031	2.670	1.416	.258
5 TO 6	.031 TO .016	8.738	2.124	1.004
6 TO 7	.016 TO .008	9.385	3.486	1.357
7 TO 8	.008 TO .004	6.432	2.230	.706
8 TO 9	.004 TO .002	3.236	1.663	.670
9 TO 10	.002 TO .001	5.461	1.522	.434
>10	<.001	16.302	7.291	3.380
	GRAVEL (>2.0 MM)	.004	.336	5.430
	SAND (2.0-.063 MM)	47.773	79.933	86.860
	SILT (.063-.004 MM)	27.224	9.255	3.326
	CLAY (<.004 MM)	24.999	10.476	4.384
	MEAN (MM)	.0230	.0770	.1861
	MEAN (PHI)	5.441	3.698	2.426
	STANDARD DEVIATION	3.141	2.503	2.207
	SKEWNESS	.214	.872	.794
	KURTOSIS	-1.251	1.989	5.184
	ORGANIC CARBON	.999	.538	.213
	NITROGEN (KJELDAHL)	.176	.079	.030
	COLOR (GSA)	5Y3/2	5Y4/2	5Y4/2

MCG09005071

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE TAKEN 0 0 LATITUDE 30 21.46 N MARSDEN SQUARE 11 F LENGTH .0 ANALYZED APR78
SAMPLE 2C DEPTH .0 LONGITUDE 81 18.00 W CORER TYPE DOC PENETRATION .0

DIAM (PHI)	DIAM (MM)	SUBSAMPLE ID. 517 10 2C1 PERCENT	517 11 2C2 PERCENT	517 12 2C3 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	.509
-2 TO -1	4.000 TO 2.000	.035	.002	.553
-1 TO 0	2.000 TO 1.000	.247	.285	1.749
0 TO 1	1.000 TO .500	1.209	.814	3.457
1 TO 2	.500 TO .250	5.838	4.989	12.439
2 TO 3	.250 TO .125	29.672	52.880	55.445
3 TO 4	.125 TO .063	11.354	16.697	8.389
4 TO 5	.063 TO .031	6.079	2.423	2.789
5 TO 6	.031 TO .016	7.737	2.790	2.191
6 TO 7	.016 TO .008	8.428	4.602	3.232
7 TO 8	.008 TO .004	6.736	2.240	1.505
8 TO 9	.004 TO .002	3.938	1.873	1.239
9 TO 10	.002 TO .001	4.560	1.995	.675
>10	<.001	14.162	8.410	5.888
	GRAVEL (>2.0 MM)	.035	.002	1.062
	SAND (2.0-.063 MM)	48.325	75.665	81.518
	SILT (.063-.004 MM)	28.981	12.054	9.717
	CLAY (<.004 MM)	22.660	12.278	7.703
	MEAN (MM)	.0265	.0649	.1087
	MEAN (PHI)	5.239	3.945	3.201
	STANDARD DEVIATION	3.072	2.620	2.435
	SKEWNESS	.256	.774	.865
	KURTOSIS	-1.107	1.124	2.875
	ORGANIC CARBON	1.356	.667	.822
	NITROGEN (KJELDAHL)	.167	.096	.091
	COLOR (GSA)	5Y3/2	2.5Y3/2	2.5Y3/2

MGG09005071

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE		TAKEN 0 0	LATITUDE 30 21.06 N	MARSDEN SQUARE 11 F	LENGTH	.0	ANALYZED	APR78
SAMPLE	39	DEPTH .0	LONGITUDE 81 17.62 W	CORER TYPE DOC	PENETRATION	.0		

DIAM (PHI)	DIAM (MM)	SUBSAMPLE ID. 517 13 381 PERCENT	517 14 382 PERCENT	517 15 383 PERCENT
<-4	>16.000	.000	.000	.000
-4 TO -3	16.000 TO 8.000	.000	.462	.539
-3 TO -2	8.000 TO 4.000	.295	.031	.300
-2 TO -1	4.000 TO 2.000	.443	.293	.268
-1 TO 0	2.000 TO 1.000	1.827	.678	1.001
0 TO 1	1.000 TO .500	17.033	2.667	5.893
1 TO 2	.500 TO .250	23.990	12.779	22.447
2 TO 3	.250 TO .125	46.946	53.049	59.810
3 TO 4	.125 TO .063	7.160	14.722	7.783
4 TO 5	.063 TO .031	.867	.971	.813
5 TO 6	.031 TO .016	.000	.277	.175
6 TO 7	.016 TO .008	.000	.247	.075
7 TO 8	.008 TO .004	.000	.694	.013
8 TO 9	.004 TO .002	1.439	3.129	.100
9 TO 10	.002 TO .001	.000	.000	.125
>10	<.001	.000	.000	1.339
	GRAVEL (>2.0 MM)	.738	.786	.926
	SAND (2.0-.063 MM)	96.955	93.895	97.135
	SILT (.063-.004 MM)	.867	2.189	.375
	CLAY (<.004 MM)	1.439	3.129	1.564
	MEAN (MM)	.2487	.1577	.2045
	MEAN (PHI)	2.007	2.665	2.293
	STANDARD DEVIATION	1.270	1.428	1.349
	SKEWNESS	.734	.913	1.342
	KURTOSIS	8.465	9.076	19.242
	ORGANIC CARBON	.093	.186	.159
	NITROGEN (KJELDAHL)	.018	.035	.020
	COLOR (GSA)	5Y5/2	5Y4/2	5Y6/2

MGG09005071

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE TAKEN 0 0 LATITUDE 30 21.06 N MARSDEN SQUARE 11 E LENGTH .0 ANALYZED APR78
SAMPLE 3C DEPTH .0 LONGITUDE 81 17.62 W CORER TYPE DOC PENETRATION .0

DIAM (PHI)	DIAM (MM)	517 3 E 3C1 PERCENT	517 17 3C2 PERCENT	6 17 1 E 3C3 PERCENT
SUBSAMPLE ID.				
<-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	.412	.728	1.295
-2 TO -1	4.000 TO 2.000	.756	.686	.851
-1 TO 0	2.000 TO 1.000	2.356	1.203	1.814
0 TO 1	1.000 TO .500	10.206	7.165	13.184
1 TO 2	.500 TO .250	22.566	23.037	21.568
2 TO 3	.250 TO .125	52.607	55.962	46.534
3 TO 4	.125 TO .063	8.351	7.767	6.754
4 TO 5	.063 TO .031	.574	.295	.567
5 TO 6	.031 TO .016	.221	.338	.615
6 TO 7	.016 TO .008	.118	.298	.807
7 TO 8	.008 TO .004	.236	.317	1.134
8 TO 9	.004 TO .002	.015	.063	.729
9 TO 10	.002 TO .001	.029	.074	.518
>10	<.001	1.443	2.068	3.369
GRAVEL (>2.0 MM)		1.178	1.414	2.187
SAND (2.0-.063 MM)		96.186	95.135	89.974
SILT (.063-.004 MM)		1.149	1.245	3.223
CLAY (<.004 MM)		1.487	2.206	4.616
MEAN (MM)		.2201	.2000	.1989
MEAN (PHI)		2.184	2.322	2.404
STANDARD DEVIATION		1.456	1.586	2.147
SKEWNESS		1.205	1.333	1.022
KURTOSIS		14.480	13.795	6.010
ORGANIC CARBON		.145	.141	.246
NITROGEN (KJELDAHL)		.022	.020	.060
COLOR (GSA)		5Y5/2	5Y5/2	5Y4/2

MGG09005071

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE TAKEN 0 0 LATITUDE 30 21.16 N MARSDEN SQUARE 11 E LENGTH .0 ANALYZED APR78
SAMPLE 49 DEPTH .0 LONGITUDE 81 19.18 W CORER TYPE DOC PENETRATION .0

DIAM (PHI)	DIAM (MM)	SUBSAMPLE ID. 517 19 481 PERCENT	517 20 482 PERCENT	517 21 483 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	.533	1.197	.815
-2 TO -1	4.000 TO 2.000	.873	1.398	1.362
-1 TO 0	2.000 TO 1.000	1.173	2.344	2.480
0 TO 1	1.000 TO .500	15.951	21.384	18.113
1 TO 2	.500 TO .250	60.865	52.645	51.067
2 TO 3	.250 TO .125	17.948	18.387	22.749
3 TO 4	.125 TO .063	1.105	1.469	1.830
4 TO 5	.063 TO .031	.155	.282	1.464
5 TO 6	.031 TO .016	.000	.000	.000
6 TO 7	.016 TO .008	.000	.000	.000
7 TO 8	.008 TO .004	.000	.000	.000
8 TO 9	.004 TO .002	1.396	.895	.000
9 TO 10	.002 TO .001	.000	.000	.000
>10	<.001	.000	.000	.000
	GRAVEL (>2.0 MM)	1.406	2.595	2.257
	SAND (2.0-.063 MM)	97.043	96.228	96.239
	SILT (.063-.004 MM)	.155	.282	1.464
	CLAY (<.004 MM)	1.396	.895	.000
	MEAN (MM)	.3360	.3702	.3538
	MEAN (PHI)	1.573	1.434	1.499
	STANDARD DEVIATION	1.134	1.152	.892
	SKEWNESS	1.365	.709	.291
	KURTOSIS	18.267	12.593	2.938
	ORGANIC CARBON	.100	.063	.065
	NITROGEN (KJELDAHL)	.017	.014	.013
	COLOR (GSA)	5Y6/2	5Y6/2	5Y5/2

MGG09005071

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE TAKEN 0 0 LATITUDE 30 21.16 N MARSDEN SQUARED 11 E LENGTH .0 ANALYZED APR78
SAMPLE 4C DEPTH .0 LONGITUDE 81 19.18 W CORER TYPE DOC PENETRATION .0

DIAM (PHI)	DIAM (MM)	SUBSAMPLE ID. 517 22 4C1 PERCENT	517 23 4C2 PERCENT	517 24 4C3 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	.362	.509	1.097
-2 TO -1	4.000 TO 2.000	.579	.301	1.079
-1 TO 0	2.000 TO 1.000	1.195	.972	2.301
0 TO 1	1.000 TO .500	16.117	1.436	23.153
1 TO 2	.500 TO .250	59.323	17.898	54.431
2 TO 3	.250 TO .125	19.270	51.123	15.118
3 TO 4	.125 TO .063	1.186	23.964	1.168
4 TO 5	.063 TO .031	.109	2.431	.180
5 TO 6	.031 TO .016	.072	1.366	.072
6 TO 7	.016 TO .008	.072	.000	.036
7 TO 8	.008 TO .004	.091	.000	.108
8 TO 9	.004 TO .002	.054	.000	.000
9 TO 10	.002 TO .001	.009	.000	.000
>10	<.001	1.566	.000	1.258
	GRAVEL (>2.0 MM)	.941	.810	2.175
	SAND (2.0-.063 MM)	97.085	95.392	96.171
	SILT (.063-.004 MM)	.344	3.797	.395
	CLAY (<.004 MM)	1.629	.000	1.258
	MEAN (MM)	.3164	.1702	.3659
	MEAN (PHI)	1.660	2.555	1.451
	STANDARD DEVIATION	1.381	.978	1.373
	SKEWNESS	2.039	.396	1.672
	KURTOSIS	24.869	4.689	22.523
	ORGANIC CARBON	.102	.073	.108
	NITROGEN (KJELDAHL)	.016	.022	.013
	COLOR (GSA)	5Y5/2	5Y6/2	5Y5/2

MG0090050 71

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE TAKEN 0 0 LATITUDE 30 19.84 N MARSDEN SQUARE 11 E LENGTH .0 ANALYZED APR78
SAMPLE 58 DEPTH .0 LONGITUDE 81 19.02 W CORER TYPE DOC PENETRATION .0

DIAM (PHI)	DIAM (MM)	SUBSAMPLE ID. 517 25 581 PERCENT	517 26 582 PERCENT	517 27 583 PERCENT
<-4	>16.000	.000	.000	.000
-4 TO -3	16.000 TO 8.000	.000	1.191	.298
-3 TO -2	8.000 TO 4.000	.117	1.109	.762
-2 TO -1	4.000 TO 2.000	.350	.808	.643
-1 TO 0	2.000 TO 1.000	.719	1.451	1.049
0 TO 1	1.000 TO .500	1.185	4.257	3.264
1 TO 2	.500 TO .250	4.838	13.865	11.173
2 TO 3	.250 TO .125	50.087	44.292	48.886
3 TO 4	.125 TO .063	33.651	25.568	24.824
4 TO 5	.063 TO .031	1.341	.931	.953
5 TO 6	.031 TO .016	.583	.547	.555
6 TO 7	.016 TO .008	.661	.452	.786
7 TO 8	.008 TO .004	1.049	.671	.929
8 TO 9	.004 TO .002	.894	.698	.786
9 TO 10	.002 TO .001	.874	.671	1.013
>10	<.001	3.653	3.480	4.038
	GRAVEL (>2.0 MM)	.466	3.107	1.703
	SAND (2.0-.063 MM)	90.480	89.433	89.196
	SILT (.063-.004 MM)	3.633	2.601	3.264
	CLAY (<.004 MM)	5.421	4.859	5.837
	MEAN (MM)	.1049	.1452	.1238
	MEAN (PHI)	3.253	2.784	3.014
	STANDARD DEVIATION	1.891	2.142	2.129
	SKEWNESS	1.238	.712	.943
	KURTOSIS	7.236	5.668	5.543
	ORGANIC CARBON	.233	.224	.244
	NITROGEN (KJELDAHL)	.057	.038	.045
	COLOR (GSA)	5Y4/3	5Y5/3	5Y4/3

MCG09005071

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE TAKEN 0 0 LATITUDE 30 18.24 N MARSDEN SQUARE 11 E LENGTH .0 ANALYZED APR78
SAMPLE 5C DEPTH .0 LONGITUDE 81 18.02 W CORER TYPE DOC PENETRATION .0

DIAM (PHI)	DIAM (MM)	SUBSAMPLE ID. 517 28 5C1 PERCENT	517 29 5C2 PERCENT	517 30 5C3 PERCENT
<-4	>16.000	.000	.000	.000
-4 TO -3	16.000 TO 8.000	.263	.829	.000
-3 TO -2	8.000 TO 4.000	.366	.435	.000
-2 TO -1	4.000 TO 2.000	.446	.578	.527
-1 TO 0	2.000 TO 1.000	.446	1.164	.205
0 TO 1	1.000 TO .500	1.668	3.759	.846
1 TO 2	.500 TO .250	8.639	17.388	5.776
2 TO 3	.250 TO .125	43.332	49.703	69.421
3 TO 4	.125 TO .063	29.848	15.195	15.397
4 TO 5	.063 TO .031	.526	.871	.722
5 TO 6	.031 TO .016	.469	.519	.576
6 TO 7	.016 TO .008	.389	.435	.617
7 TO 8	.008 TO .004	.628	.753	.420
8 TO 9	.004 TO .002	.640	.611	.791
9 TO 10	.002 TO .001	3.840	1.666	.898
>10	<.001	8.502	6.095	3.844
	GRAVEL (>2.0 MM)	1.074	1.842	.527
	SAND (2.0-.063 MM)	83.933	87.208	91.746
	SILT (.063-.004 MM)	2.011	2.578	2.234
	CLAY (<.004 MM)	12.981	8.372	5.493
	MEAN (MM)	.0784	.1248	.1217
	MEAN (PHI)	3.672	3.002	3.039
	STANDARD DEVIATION	2.685	2.471	1.871
	SKEWNESS	.800	.895	1.470
	KURTOSIS	1.913	3.901	9.030
	ORGANIC CARBON	.223	.206	.241
	NITROGEN (KJELDAHL)	.045	.027	.027
	COLOR (GSA)	5Y4/3	5Y5/2	5Y4/2

MGG09005071

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE TAKEN 0 0 LATITUDE 30 22.18 N MARSDEN SQUARE 11 E LENGTH .0 ANALYZED APR78
SAMPLE 68 DEPTH .0 LONGITUDE 81 18.08 W CORER TYPE DOC PENETRATION .0

DIAM (PHI)	DIAM (MM)	SUBSAMPLE ID. 517 31 681 PERCENT	517 32 682 PERCENT	517 33 683 PERCENT
<-4	>16.000	.000	.000	.000
-4 TO -3	16.000 TO 8.000	1.615	.361	.613
-3 TO -2	8.000 TO 4.000	1.223	.644	2.377
-2 TO -1	4.000 TO 2.000	1.176	1.185	1.463
-1 TO 0	2.000 TO 1.000	2.602	2.156	2.023
0 TO 1	1.000 TO .500	13.090	10.684	11.213
1 TO 2	.500 TO .250	33.798	31.613	41.150
2 TO 3	.250 TO .125	28.939	33.099	35.849
3 TO 4	.125 TO .063	4.891	5.204	4.154
4 TO 5	.063 TO .031	.351	.120	.075
5 TO 6	.031 TO .016	.784	.240	.028
6 TO 7	.016 TO .008	1.380	.206	.056
7 TO 8	.008 TO .004	1.677	6.046	.037
8 TO 9	.004 TO .002	1.411	6.390	.923
9 TO 10	.002 TO .001	1.850	.163	.000
>10	<.001	5.205	1.889	.000
	GRAVEL (>2.0 MM)	4.013	2.190	4.353
	SAND (2.0-.063 MM)	83.320	82.755	94.529
	SILT (.063-.004 MM)	4.201	6.613	.195
	CLAY (<.004 MM)	8.465	8.442	.923
	MEAN (MM)	.1810	.1515	.3080
	MEAN (PHI)	2.466	2.722	1.699
	STANDARD DEVIATION	2.773	2.565	1.346
	SKEWNESS	.756	.692	.026
	KURTOSIS	2.600	1.513	7.521
	ORGANIC CARBON	.406	.255	.048
	NITROGEN (KJELDAHL)	.055	.024	.011
	COLOR (GSA)	5Y4/3	5Y4/2	5Y6/1

MGG09005071

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE TAKEN 0 0 LATITUDE 30 22.18 N MARSDEN SQUARE 11 E LENGTH .0 ANALYZED APR79
SAMPLE 6C DEPTH .0 LONGITUDE 81 18.00 W CORER TYPE DOC PENETRATION .0

DIAM (PHI)	DIAM (MM)	SUBSAMPLE ID. 517 34 6C1 PERCENT	517 35 6C2 PERCENT	517 36 6C3 PERCENT
<-4	>16.000	12.680	.000	.000
-4 TO -3	16.000 TO 8.000	.000	.406	1.170
-3 TO -2	8.000 TO 4.000	1.536	1.891	1.419
-2 TO -1	4.000 TO 2.000	1.167	2.141	2.144
-1 TO 0	2.000 TO 1.000	3.870	3.359	2.969
0 TO 1	1.000 TO .500	17.445	15.609	10.495
1 TO 2	.500 TO .250	33.858	38.188	35.438
2 TO 3	.250 TO .125	17.736	27.281	39.435
3 TO 4	.125 TO .063	2.431	4.172	5.329
4 TO 5	.063 TO .031	.233	.328	.238
5 TO 6	.031 TO .016	.856	.500	.119
6 TO 7	.016 TO .008	1.011	.594	.032
7 TO 8	.008 TO .004	.972	.875	.032
8 TO 9	.004 TO .002	1.439	1.000	1.159
9 TO 10	.002 TO .001	.428	.281	.000
>10	<.001	4.337	3.375	.000
	GRAVEL (>2.0 MM)	15.383	4.438	4.733
	SAND (2.0-.063 MM)	75.340	88.609	93.686
	SILT (.063-.004 MM)	3.073	2.297	.422
	CLAY (<.004 MM)	6.204	4.656	1.159
	MEAN (MM)	.4083	.2533	.2966
	MEAN (PHI)	1.292	1.981	1.753
	STANDARD DEVIATION	3.276	2.252	1.452
	SKEWNESS	.293	1.005	.027
	KURTOSIS	1.716	6.057	6.560
	ORGANIC CARBON	.521	.480	.049
	NITROGEN (KJELDAHL)	.059	.039	.012
	COLOR (GSA)	5Y4/2	5Y3/2	5Y6/2

MGG09005071

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE TAKEN 0 0 LATITUDE 30 22.16 N MARSDEN SQUARE 11 E LENGTH .0 ANALYZED APR78
SAMPLE 1 DEPTH .0 LONGITUDE 81 18.08 W CORER TYPE SPK PENETRATION .0

DIAM (PHI)	DIAM (MM)	517 37 1A PERCENT	517 38 1B PERCENT	517 39 1C PERCENT	517 40 1D PERCENT	517 41 1E PERCENT
<-4	>16.000	.000	.000	.000	.000	.000
-4 TO -3	16.000 TO 8.000	.000	.000	.000	2.020	.000
-3 TO -2	8.000 TO 4.000	1.577	.736	.000	7.222	.000
-2 TO -1	4.000 TO 2.000	3.525	3.720	.000	7.099	.386
-1 TO 0	2.000 TO 1.000	6.092	5.029	.812	12.546	1.648
0 TO 1	1.000 TO .500	12.523	11.815	2.140	21.053	6.996
1 TO 2	.500 TO .250	15.306	18.152	3.985	25.428	20.037
2 TO 3	.250 TO .125	20.161	18.316	7.380	15.698	26.117
3 TO 4	.125 TO .063	8.009	9.444	2.952	4.712	8.022
4 TO 5	.063 TO .031	5.257	3.271	1.402	.000	.513
5 TO 6	.031 TO .016	.518	3.066	5.683	.000	2.821
6 TO 7	.016 TO .008	9.957	3.475	13.679	.000	5.092
7 TO 8	.008 TO .004	3.216	3.230	12.177	.000	4.615
8 TO 9	.004 TO .002	2.474	3.352	9.373	.337	3.993
9 TO 10	.002 TO .001	1.793	2.412	8.487	.061	3.810
>10	<.001	9.493	13.982	32.030	3.825	15.971
	GRAVEL (>2.0 MM)	5.102	4.456	.000	18.340	.366
	SAND (2.0-.063 MM)	62.090	62.756	17.269	75.437	62.821
	SILT (.063-.004 MM)	19.048	13.042	32.841	.000	13.040
	CLAY (<.004 MM)	13.760	19.747	49.889	4.223	23.773
	MEAN (MM)	.0990	.0725	.0066	.4797	.0445
	MEAN (PHI)	3.490	3.787	7.452	1.060	4.489
	STANDARD DEVIATION	3.430	3.665	3.021	2.543	3.547
	SKEWNESS	.349	.353	.409	.859	.325
	KURTOSIS	.436	.720	.372	5.222	-1.102
	ORGANIC CARBON	.656	.738	6.817	.132	1.205
	NITROGEN (KJELDAHL)	.091	.116	.357	.022	.126
	COLOR (GSA)	5Y3/2	5Y4/2	5Y2.5/1	5Y5/2	5Y3/2

MGG09005071

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE TAKEN 0 0 LATITUDE 30 21.46 N MARSDEN SQUARE 11 E LENGTH .0 ANALYZED APR78
SAMPLE 2 DEPTH .0 LONGITUDE 81 18.00 W CORER TYPE SPK PENETRATION .0

DIAM (PHI)	DIAM (MM)	SUBSAMPLE ID. 517 42 2A PERCENT	517 43 2B PERCENT	517 44 2C PERCENT	517 45 2D PERCENT	517 46 2E PERCENT
<-4	>16.000	.000	.000	.000	.000	.000
-4 TO -3	16.000 TO 8.000	.000	.000	9.802	.000	.549
-3 TO -2	8.000 TO 4.000	.000	.355	5.437	2.298	1.193
-2 TO -1	4.000 TO 2.000	.000	.609	7.455	2.607	2.768
-1 TO 0	2.000 TO 1.000	.073	1.268	7.661	5.566	4.104
0 TO 1	1.000 TO .500	.510	3.095	9.720	16.836	12.073
1 TO 2	.500 TO .250	2.697	11.416	14.951	23.243	24.815
2 TO 3	.250 TO .125	10.641	28.209	12.874	14.317	34.001
3 TO 4	.125 TO .063	1.749	6.646	3.707	6.054	4.247
4 TO 5	.063 TO .031	4.592	1.826	1.483	2.740	2.458
5 TO 6	.031 TO .016	4.738	3.856	2.430	2.784	2.434
6 TO 7	.016 TO .008	11.006	7.255	3.707	3.270	3.412
7 TO 8	.008 TO .004	11.808	7.357	3.748	3.491	1.694
8 TO 9	.004 TO .002	9.184	6.088	4.448	3.535	1.002
9 TO 10	.002 TO .001	9.913	5.175	2.654	1.944	.310
>10	<.001	33.090	16.844	9.926	10.915	4.939
	GRAVEL (>2.0 MM)	.000	.964	22.694	4.905	4.510
	SAND (2.0-.063 MM)	15.671	50.634	49.012	66.416	79.241
	SILT (.063-.004 MM)	32.143	20.294	11.387	12.285	9.998
	CLAY (<.004 MM)	52.187	28.108	16.928	18.394	6.251
	MEAN (MM)	.0050	.0273	.1789	.1045	.1711
	MEAN (PHI)	7.635	5.196	2.483	3.258	2.547
	STANDARD DEVIATION	2.893	3.502	4.285	3.590	2.653
	SKEWNESS	.355	.139	.289	.434	.695
	KURTOSIS	.675	1.335	.770	.383	2.381
	ORGANIC CARBON	5.045	1.118	1.419	.873	.234
	NITROGEN (KJELDAHL)	.298	.174	.154	.113	.042
	COLOR (GSA)	5Y2.5/2	5Y3/2	5Y3/2	5Y4/2	5Y4/1

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MGG09005071

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE TAKEN 0 0 LATITUDE 30 21.06 N MARSDEN SQUARE 11 F LENGTH .0 ANALYZED APR78
SAMPLE 3 DEPTH .0 LONGITUDE 81 17.62 W CORER TYPE SPK PENETRATION .0

DIAM (PHI)	DIAM (MM)	517 47 3A PERCENT	517 48 3B PERCENT	517 49 3C PERCENT	517 50 3D PERCENT	517 51 3E PERCENT
<-4	>16.000	.000	.000	.000	.000	.000
-4 TO -3	16.000 TO 8.000	.000	.000	.770	.000	.884
-3 TO -2	8.000 TO 4.000	.377	.000	.159	1.161	.581
-2 TO -1	4.000 TO 2.000	.226	.852	2.648	1.706	1.302
-1 TO 0	2.000 TO 1.000	.414	1.172	2.894	4.193	2.674
0 TO 1	1.000 TO .500	1.355	6.367	19.060	16.939	17.833
1 TO 2	.500 TO .250	6.024	18.274	43.881	35.916	42.432
2 TO 3	.250 TO .125	44.239	54.422	26.228	33.689	24.111
3 TO 4	.125 TO .063	19.541	16.649	3.105	5.046	3.418
4 TO 5	.063 TO .031	3.727	.986	.212	.403	.860
5 TO 6	.031 TO .016	3.050	.000	.000	.000	.605
6 TO 7	.016 TO .008	4.367	.000	.000	.000	.558
7 TO 8	.008 TO .004	2.786	.000	.000	.000	.651
8 TO 9	.004 TO .002	.452	1.279	1.141	.948	.140
9 TO 10	.002 TO .001	3.050	.000	.000	.000	.651
>10	<.001	10.392	.000	.000	.000	3.302
	GRAVEL (>2.0 MM)	.602	.852	3.478	2.867	2.767
	SAND (2.0-.063 MM)	71.574	96.883	95.169	95.783	90.467
	SILT (.063-.004 MM)	13.931	.986	.212	.403	2.674
	CLAY (<.004 MM)	13.893	1.279	1.141	.948	4.092
	MEAN (MM)	.0575	.1916	.3437	.3153	.2593
	MEAN (PHI)	4.120	2.384	1.641	1.665	1.947
	STANDARD DEVIATION	2.825	1.154	1.310	1.299	2.145
	SKEWNESS	.628	.624	.466	.353	1.147
	KURTOSIS	.520	9.409	9.183	6.863	7.589
	ORGANIC CARBON	.117	.138	.094	.062	.192
	NITROGEN (KJELDAHL)	.111	.022	.015	.016	.027
	COLOR (GSA)	5Y3/2	5Y5/2	5Y5/2	5Y5/2	5Y4/2

MGG09005071

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE TAKEN 0 0 LATITUDE 30 21.16 N MARSDEN SQUARE 11 E LENGTH .0 ANALYZED APR78
SAMPLE 4 DEPTH .0 LONGITUDE 81 19.18 W CORER TYPE SPK PENETRATION .0

DIAM (PHI)	DIAM (MM)	SUBSAMPLE ID. 517 52 4A PERCENT	517 53 4B PERCENT	517 54 4C PERCENT	517 55 4D PERCENT	517 56 4E PERCENT
<-4	>16.000	.000	.000	.000	.000	.000
-4 TO -3	16.000 TO 8.000	.000	.000	.000	.000	.000
-3 TO -2	8.000 TO 4.000	.284	.200	.144	.572	.155
-2 TO -1	4.000 TO 2.000	.379	1.050	.374	.737	.981
-1 TO 0	2.000 TO 1.000	1.043	1.450	.849	.889	1.498
0 TO 1	1.000 TO .500	13.324	17.529	13.405	14.521	17.149
1 TO 2	.500 TO .250	62.162	60.190	62.813	60.837	59.607
2 TO 3	.250 TO .125	20.792	17.779	20.771	20.069	18.388
3 TO 4	.125 TO .063	.901	.775	.834	1.062	.826
4 TO 5	.063 TO .031	.024	.025	.259	.282	.103
5 TO 6	.031 TO .016	.000	.000	.000	.000	.000
6 TO 7	.016 TO .008	.000	.000	.000	.000	.000
7 TO 8	.008 TO .004	.000	.000	.000	.000	.000
8 TO 9	.004 TO .002	1.091	1.000	.849	.932	1.291
9 TO 10	.002 TO .001	.000	.000	.000	.000	.000
>10	<.001	.000	.000	.000	.000	.000
	GRAVEL (>2.0 MM)	.664	1.250	.518	1.409	1.136
	SAND (2.0-.063 MM)	98.222	97.724	98.274	97.378	97.469
	SILT (.063-.004 MM)	.024	.025	.259	.282	.103
	CLAY (<.004 MM)	1.091	1.000	.849	.932	1.291
	MEAN (MM)	.3240	.3486	.3234	.3336	.3399
	MEAN (PHI)	1.626	1.520	1.629	1.584	1.557
	STANDARD DEVIATION	1.010	1.030	.870	1.036	1.096
	SKEWNESS	1.525	1.332	1.649	1.099	1.463
	KURTOSIS	22.233	19.998	22.653	18.477	19.288
	ORGANIC CARBON	.065	.048	.084	.075	.061
	NITROGEN (KJELDAHL)	.015	.012	.014	.011	.016
	COLOR (GSA)	5Y5/2	5Y5/2	5Y5/2	5Y5/2	5Y5/2

MGG09005071

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE
SAMPLE 5

TAKEN 0 0
DEPTH .0

LATITUDE 30 17.04 N
LONGITUDE 81 18.03 W

MARSDEN SQUARE 10 E
CORER TYPE SPK

LENGTH .0
PENETRATION .0

ANALYZED APR78

DIAM (PHI)	DIAM (MM)	SUBSAMPLE ID. 517 57 SA PERCENT	517 58 SB PERCENT	517 59 SC PERCENT	517 60 SD PERCENT	517 61 SE PERCENT
<-4	>16.000	.000	.000	.000	.000	.000
-4 TO -3	16.000 TO 8.000	.000	.000	.000	.000	.000
-3 TO -2	8.000 TO 4.000	.000	.000	.024	.000	.464
-2 TO -1	4.000 TO 2.000	.197	.468	.189	.482	.364
-1 TO 0	2.000 TO 1.000	.360	.725	.508	.602	.331
0 TO 1	1.000 TO .500	.885	1.029	.871	1.180	.861
1 TO 2	.500 TO .250	1.802	1.894	1.669	2.048	1.789
2 TO 3	.250 TO .125	39.089	47.217	40.218	23.007	40.510
3 TO 4	.125 TO .063	44.397	39.266	47.037	61.865	44.253
4 TO 5	.063 TO .031	1.933	1.450	1.258	2.578	1.954
5 TO 6	.031 TO .016	.885	.491	.774	.843	1.126
6 TO 7	.016 TO .008	.754	.351	.218	.579	.397
7 TO 8	.008 TO .004	.655	.935	1.016	.964	1.325
8 TO 9	.004 TO .002	1.966	.678	.952	.410	.629
9 TO 10	.002 TO .001	.688	.281	.048	.723	.497
>10	<.001	6.339	5.215	5.200	4.722	5.499
	GRAVEL (>2.0 MM)	.197	.468	.153	.482	.828
	SAND (2.0-.063 MM)	86.533	90.131	90.302	88.702	87.744
	SILT (.063-.004 MM)	4.227	3.227	3.265	4.963	4.803
	CLAY (<.004 MM)	9.043	6.174	6.239	5.854	6.625
	MEAN (MM)	.0772	.0951	.0884	.0803	.0867
	MEAN (PHI)	3.695	3.395	3.500	3.638	3.527
	STANDARD DEVIATION	2.170	1.976	1.928	1.886	2.051
	SKEWNESS	1.104	1.256	1.297	1.189	1.100
	KURTOSIS	4.304	6.852	7.028	6.893	5.742
	ORGANIC CARBON	.368	.131	.266	.271	.269
	NITROGEN (KJELDAHL)	.066	.042	.045	.048	.047
	COLOR (GSA)	5Y4/2	5Y4/2	5Y4/2	5Y4/2	5Y4/2

MCG09005071

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE TAKEN 0 0 LATITUDE 30 22.18 N MARSDEN SQUARE [illegible] LENGTH .0 ANALYZED APR78
SAMPLE 6 DEPTH .0 LONGITUDE 81 18.00 W CORER TYPE SPK PENETRATION .0

DIAM (PHI)	DIAM (MM)	SUBSAMPLE ID. 517 62 6A PERCENT	517 63 6B PERCENT	517 64 6C PERCENT	517 65 6D PERCENT	517 66 6E PERCENT
<-4	>16.000	.000	.000	.000	.000	.000
-4 TO -3	16.000 TO 8.000	.000	.000	.000	.000	.000
-3 TO -2	8.000 TO 4.000	.109	.844	1.221	.993	.333
-2 TO -1	4.000 TO 2.000	1.306	1.105	1.321	1.836	4.781
-1 TO 0	2.000 TO 1.000	4.626	1.338	5.108	4.814	8.956
0 TO 1	1.000 TO .500	28.930	3.519	21.555	21.687	23.328
1 TO 2	.500 TO .250	42.122	18.819	34.587	38.983	33.828
2 TO 3	.250 TO .125	19.619	66.696	32.146	27.841	22.905
3 TO 4	.125 TO .063	1.224	4.916	1.670	1.513	2.027
4 TO 5	.063 TO .031	1.034	1.513	1.246	1.191	2.148
5 TO 6	.031 TO .016	.000	.000	.000	.000	.000
6 TO 7	.016 TO .008	.000	.000	.000	.000	.000
7 TO 8	.008 TO .004	.000	.000	.000	.000	.000
8 TO 9	.004 TO .002	.980	1.251	1.047	1.042	1.694
9 TO 10	.002 TO .001	.000	.000	.000	.000	.000
>10	<.001	.000	.000	.000	.000	.000
	GRAVEL (>2.0 MM)	1.415	1.949	2.542	2.829	5.113
	SAND (2.0-.063 MM)	96.571	95.288	95.166	84.938	91.044
	SILT (.063-.004 MM)	1.034	1.513	1.246	1.191	2.148
	CLAY (<.004 MM)	.980	1.251	1.047	1.042	1.694
	MEAN (MM)	.3804	.2074	.3393	.3508	.3833
	MEAN (PHI)	1.394	2.269	1.659	1.511	1.384
	STANDARD DEVIATION	1.190	1.158	1.321	1.302	1.548
	SKEWNESS	.979	.392	.501	.570	.697
	KURTOSIS	11.154	12.024	7.316	7.948	5.991
	ORGANIC CARBON	.053	.075	.062	.058	.064
	NITROGEN (KJELDAHL)	.015	.016	.013	.013	.017
	COLOR (GSA)	5Y6/2	5Y6/3	5Y6/2	5Y6/2	5Y6/2

MGG09005071

MGG09005071 SHEET

Chemical Analysis Summary - Laboratory Item 517

Field Identification	Kjeldahl Nitrogen First %N	Second %N	Third %N	$\bar{x}$ %N	Standard Deviation		Organic Carbon First %C	Second %C	$\bar{x}$ %C	Standard Deviation
1A2	.099	.084	.090	.091	.008		.663	.669	.666	.004
1B2	.114	.118	.115	.116	.002		.737	.738	.738	.001
1C2	.358	.358	.355	.357	.002		6.312	6.317	6.317	.005
1D2	.021	.021	.023	.022	.001		.128	.135	.132	.005
1E2	.125	.126	.128	.126	.002		1.209	1.200	1.205	.006
2A2	.297	.297	.299	.298	.001		5.048	5.041	5.045	.005
2B2	.176	.176	.171	.174	.003		1.120	1.115	1.118	.004
2C2	.155	.151	.156	.154	.003		1.122	1.116	1.119	.004
2D2	.116	.114	.110	.113	.003		.875	.870	.873	.004
2E2	.044	.042	.040	.042	.002		.237	.231	.234	.004
3A2	.110	.111	.113	.111	.002		.109	.113	.111	.003
3B2	.020	.022	.024	.022	.002		.137	.139	.138	.001
3C2	.016	.015	.013	.015	.002		.093	.094	.094	.001
3D2	.016	.016	.016	.016	.000		.061	.062	.062	.001
3E2	.027	.028	.026	.027	.001		.193	.191	.192	.001
4A2	.014	.016	.014	.015	.001		.064	.065	.065	.001
4B2	.013	.013	.010	.012	.002		.050	.045	.048	.004
4C2	.015	.012	.016	.014	.002		.081	.087	.084	.004
4D2	.012	.011	.010	.011	.001		.072	.078	.075	.004
4E2	.015	.016	.016	.016	.001		.061	.061	.061	.000
5A2	.064	.069	.064	.066	.003		.368	.367	.368	.001
5B2	.044	.040	.041	.042	.002		.131	.130	.131	.001
5C2	.045	.046	.045	.045	.001		.265	.267	.266	.001
5D2	.047	.051	.045	.048	.003		.269	.272	.271	.002
5E2	.050	.050	.041	.047	.005		.275	.262	.269	.009
6A2	.018	.014	.014	.015	.002		.051	.054	.053	.002
6B2	.015	.018	.016	.016	.002		.077	.072	.075	.004
6C2	.012	.014	.013	.013	.001		.063	.061	.062	.001
6D2	.013	.014	.013	.013	.001		.059	.057	.058	.001
6E2	.017	.016	.018	.017	.001		.065	.062	.064	.002

MGG09005071 MGG09005071

SHEET

LAB ITEM 517

VOLATILE SOLIDS SUMMARY

Sample Number	%VS	%VS	%VS	%VS	Average %VS	Standard Deviation				
1A2	3.72	3.58			3.65	.0990				
1B2	6.47	6.47			6.47	0				
1C2	19.73	16.50	17.63		17.95	1.6390				
1D2	1.51	1.59			1.55	.0566				
1E2	6.28	6.74	7.13		6.72	.4255				
2A2	18.27	17.52	15.60		17.13	1.3771				
2B2	8.12	7.98			8.05	.0990				
2C2	6.64	7.26	4.39	5.40	5.92	1.2813				
2D2	6.23	6.28	6.13		6.21	.0764				
2E2	3.97	4.78	2.34	2.96	3.51	1.0795				
3A2	7.80	7.11	6.93	7.59	7.36	.4057				
3B2	.48	.55	.52	.69	.56	.0913				
3C2	.59	.53	.59	.52	.56	.0377				
3D2	.57	.46	.69	.75	.62	.1289				
3E2	1.38	.82	.88	1.26	1.08	.2768				
4A2	.43	.46			.44	.0212				
4B2	.31	.32			.32	.0071				
4C2	.42	.41			.42	.0071				
4D2	.29	.25			.27	.0283				
4E2	.61	.80	.58		.66	.1193				
5A2	2.72	2.66			2.69	.0424				
5B2	2.13	2.04			2.08	.0636				
5C2	2.54	2.38	2.11		2.34	.2173				
5D2	2.30	2.30			2.30	0				
5E2	2.69	2.42	2.26	2.26	2.41	.2029				
6A2	.51	.57	.62	.55	.54	.0457				
6B2	.61	.59			.60	.0141				
6C2	.35	.36			.36	.0071				
6D2	.51	.48			.50	.0212				
6E2	.55	.56			.56	.0071				

MGG09005071 SHEET

LAB ITEM 517

VOLATILE SOLIDS SUMMARY

Sample Number	%VS	%VS	%VS	%VS	Average %VS	Standard Deviation				
1B1	1.21	1.11			1.16	.0707				
1B2	3.00	3.02			3.01	.0141				
1B3	2.34	2.14			2.24	.1414				
1C1	3.80	3.96	3.57		3.78	.1960				
1C2	4.89	4.81			4.85	.0566				
1C3	2.50	2.08	2.10		2.23	.2369				
2B1	7.68	7.97	7.85		7.91	.0848				
2B2	3.28	2.64	2.17	1.54	2.41	.7358				
2B3	1.49	1.43			1.46	.0424				
2C1	6.86	6.40			6.63	.3253				
2C2	4.54	4.84			4.69	.2121				
2C3	3.72	3.52			3.62	.1414				
3B1	.80	.86			.83	.0424				
3B2	1.57	1.64			1.60	.0495				
3B3	.42	.59	.68	.56	.56	.1078				
3C1	.82	.74			.78	.0566				
3C2	1.12	1.09	1.02		1.08	.0513				
3C3	1.98	1.92	2.01		1.96	.0636				
4B1	.50	.49			.50	.0071				
4B2	.42	.53	.45	.60	.50	.0812				
4B3	.62	.61			.62	.0071				
4C1	.47	.45			.46	.0141				
4C2	.56	.63	.54	.62	.59	.0442				
4C3	.69	.72			.70	.0212				
5B1	1.51	1.42			1.46	.0636				
5B2	1.67	1.58			1.62	.0636				
5B3	1.98	1.89			1.94	.0636				
5C1	2.00	1.70	1.60	2.08	1.84	.2312				
5C2	1.50	1.37			1.44	.0919				
5C3	1.46	1.60			1.53	.0990				
6B1	1.95	2.04	2.08		2.02	.0666				
6B2	1.14	1.06			1.10	.0566				
6B3	.55	.55			.55	0				
6C1	2.36	2.32			2.34	.0283				
6C2	1.77	2.12	2.41	1.58	1.97	.3689				
6C3	.62	.65			.64	.0212				

MGG09005071 SHEET

Chemical Analysis Summary - Laboratory Item 517

Field Identification	Kjeldahl Nitrogen First %N	Second %N	Third %N	$\bar{x}$ %N	Standard Deviation		Organic Carbon First %C	Second %C	$\bar{x}$ %C	Standard Deviation
1B1	.037	.038	.038	.038	.001		.380	.384	.382	.003
1B2	.050	.053	.059	.054	.005		.614	.610	.612	.003
1B3	.019	.020	.017	.019	.002		.202	.202	.202	.000
1C1	.083	.093	.096	.091	.007		.558	.562	.560	.003
1C2	.071	.073	.075	.073	.002		.692	.690	.691	.001
1C3	.037	.032	.034	.034	.003		.231	.235	.233	.003
2B1	.178	.173	.178	.176	.003		1.000	.998	.999	.001
2B2	.075	.080	.081	.079	.003		.539	.538	.538	.001
2B3	.030	.031	.028	.030	.002		.213	.213	.213	.000
2C1	.169	.165	.167	.167	.002		1.352	1.359	1.356	.005
2C2	.097	.097	.095	.096	.001		.662	.671	.667	.006
2C3	.090	.095	.088	.091	.004		.824	.820	.822	.003
3B1	.015	.022	.017	.018	.004		.093	.092	.093	.001
3B2	.036	.033	.037	.035	.002		.184	.187	.186	.002
3B3	.022	.019	.020	.020	.002		.163	.155	.159	.006
3C1	.023	.023	.021	.022	.001		.141	.148	.145	.005
3C2	.020	.020	.019	.020	.001		.140	.142	.141	.001
3C3	.059	.059	.061	.060	.001		.244	.248	.246	.003
4B1	.016	.018	.018	.017	.001		.101	.098	.100	.002
4B2	.012	.013	.016	.014	.002		.064	.061	.063	.002
4B3	.014	.013	.011	.013	.002		.063	.067	.065	.003
4C1	.015	.016	.018	.016	.002		.102	.101	.102	.001
4C2	.021	.020	.025	.022	.003		.074	.071	.073	.002
4C3	.015	.012	.013	.013	.002		.110	.106	.108	.003
5B1	.063	.050	.059	.057	.007		.236	.230	.233	.004
5B2	.037	.037	.040	.038	.002		.224	.224	.224	.000
5B3	.050	.043	.043	.045	.004		.245	.242	.244	.002
5C1	.048	.045	.043	.045	.003		.223	.222	.223	.001
5C2	.027	.026	.028	.027	.001		.204	.208	.206	.003
5C3	.026	.028	.026	.027	.001		.245	.237	.241	.006

MGG09005071 SHEET

Chemical Analysis Summary - Laboratory Item 517

Field Identification	Kjeldahl Nitrogen First %N	Second %N	Third %N	$\bar{x}$ %N	Standard Deviation		Organic Carbon First %C	Second %C	$\bar{x}$ %C	Standard Deviations
6B1	.058	.052	.056	.055	.003		.405	.407	.406	.001
6B2	.025	.026	.022	.024	.002		.252	.257	.255	.003
6B3	.010	.011	.011	.011	.001		.047	.049	.048	.001
6C1	.063	.058	.055	.059	.004		.517	.525	.521	.006
6C2	.039	.040	.037	.039	.002		.479	.480	.480	.001
6C3	.013	.013	.010	.012	.002		.048	.050	.049	.001