116-66

LABORATORY ITEM #461

MGG09005047

A SUMMARY OF SEDIMENT SIZE AND CHEMISTRY OF ~~EIGHT~~ SEVEN CORES FROM THE NORFOLK NAVAL STATION. NAVY DIVERS. OCTOBER - NOVEMBER 1973.

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Prepared for: Code 6110

March 1974

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WASHINGTON, D. C. 20373

MGG09005047

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.

MGG09005047

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 CORE SAMPLES

MGG09005047.

116-66

Project No: 461
Location: Norfolk Naval Station

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Date Logged 5 Feb 79

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: N2-4 Lat: 36° 57'N Long: 76° 20'W Date: 26/10-73 to 7/11-73 Water depth:	1	Black N2.5	No	Silt	0-12" (0-30 cm) Oily odor
Sample No: N2-4 Lat: 36° 57'N Long: 76° 20'W Date: 26/10-73 to 7/11-73 Water depth:	2	Black N2.5	Yes	Silt	12-45" (30-64 cm) Shell fragments
Sample No: N2-4 Lat: 36° 57'N Long: 76° 20'W Date: 26/10-73 to 7/11-73 Water depth:	3	Pale brown 10YR 6/3	No	Clayey Silt	25-38" (64-97 cm)
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
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Sample No: Lat: Long: Date: Water depth:					

LOG FOR CORE SAMPLES

M0090005047

116-66

5

Project No: 461
Location: Norfolk Naval Station

Logged By J. C. Bowman
Date Logged 5 Feb 79

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: N2-11 Lat: 36° 57' N Long: 76° 20' W Date: 26/10-73 to 7/11-73 Water depth:	4	Black N 2.5	No	Silt	0-12" (0-30 cm) Oily odor Decaying Organic Matter Odor Plant fragments (?)
Sample No: N2-11 Lat: 36° 57' N Long: 76° 20' W Date: 26/10-73 to 7/11-73 Water depth:	5	Black N 2.5	Yes	Clayey Silt	12-28" (30-71 cm) Shell fragments Oily odor
Sample No: N2-11 Lat: 36° 57' N Long: 76° 20' W Date: 26/10-73 to 7/11-73 Water depth:	6	Black N 2.5	No	Silt	28-44" (71-112 cm) Oily odor
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:					
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Sample No: Lat: Long: Date: Water depth:					

LOG FOR CORE SAMPLES

Project No: 461
Location: Norfolk Naval Station

MGG09005047
116-66

Logged By J.C. Bowman
Date Logged 5 Feb 73

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: N2-17 Lat: 36° 57'N Long: 76° 20'w Date: 26/10-73 to 7/11-73 Water depth:	7	Black N2.5	No	Silty Clay	0-12" (0-30cm) Oily odor Possible Ammonia odor
Sample No: N2-17 Lat: 36° 57'N Long: 76° 20'w Date: 26/10-73 to 7/11-23 Water depth:	8	Black N 2.5	NO	Silt	12-46" (30-117cm) Oily odor
Sample No: N2-17 Lat: 36° 57'N Long: 76° 20'w Date: 26/10-73 to 7/11-73 Water depth:	9	Black N 2.5	No	Silt	46-80" (117-203cm) Oily odor.
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
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Sample No: Lat: Long: Date: Water depth:					

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MGG09005047

116-66

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	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: N2-20 Lat: 36° 57'N Long: 76° 20'W Date: 26/10-73 to 7/11-73 Water depth:	10	Black N2.5	No	Silt	0-12" (0-30 cm) "Oil Slicks"
Sample No: N2-20 Lat: 36° 57'N Long: 76° 20'W Date: 26/10-73 to 7/11-73 Water depth:	11	Black N2.5	No	Silty Clay	12-43" (30-109cm) "Oil Slicks" Oily odor
Sample No: N2-20 Lat: 36° 57'N Long: 76° 20'W Date: 26/10-73 to 7/11-73 Water depth:	12	Black N2.5	No	Clayey Silt	43-74" (109-188cm) "Oil Slicks" Oily odor
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
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LOG FOR CORE SAMPLES
MGG09005047

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116-66

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	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: N2-22 Lat: 36°57'N Long: 76° 20'W Date: 26/10-73 to 7/11-73 Water depth:	13	Black N2.5	NO	Silty Clay	0-12" (0-30cm) "Oil Slicks"
Sample No: N2-22 Lat: 36°57'N Long: 76° 20'W Date: 26/10-73 to 7/11-73 Water depth:	14	Black N2.5	NO	Silt	12-22" (30-81cm) "Oil Slicks" Oily odor
Sample No: N2-22 Lat: 36°57'N Long: 76° 20'W Date: 26/10-73 to 7/11-73 Water depth:	15	Black N2.5	NO	Silt	22-55" (81-135cm) Numerous "Oil Slicks" Very Strong Oil odor
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
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MGG09005047

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116-66

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	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: N2-2S Lat: 36° 57' N Long: 76° 20' W Date: 26/10-73 to 7/11-73 Water depth:	16	Black N2.5	No	Silty Clay	0-12" (0-30cm) Oily odor
Sample No: N2-2S Lat: 36° 57' N Long: 76° 20' W Date: 26/10-73 to 7/11-73 Water depth:	17	Dark greenish gray 5GY4/1	Yes	Clay	12-40" (30-102 cm) Oily odor Shell fragments
Sample No: N2-2S Lat: 36° 57' N Long: 76° 20' W Date: 26/10-73 to 7/11-73 Water depth:	18	Dark greenish gray 5GY4/1	Yes	Clay	40-69" (102-175cm) Oily odor Shell fragments.
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
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MGG09005047

116-66

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	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: N2-26 Lat: 36° 57'N Long: 76° 20'W Date: 26/10-73 to 7/11-73 Water depth:	19	Black N2.5	NO	Silt	0-12" (0-30 cm) Oily odor Ammonia odor
Sample No: N2-26 Lat: 36° 57'N Long: 76° 20'W Date: 26/10-73 to 7/11-73 Water depth:	20	Black N2.5	No	Silt	12-42" (30-107cm) "Oil Slicks"
Sample No: N2-26 Lat: 36° 57'N Long: 76° 20'W Date: 26/10-73 to 7/11-73 Water depth:	21	Black N2.5	NO	Silt	42-72" (107-183cm)
Sample No: Lat: Long: Date: Water depth:					
Sample No: Lat: Long: Date: Water depth:					
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Sample No: Lat: Long: Date: Water depth:					

116-66 MGG09005047

SHEET

Biochemical Oxygen Demand — Norfolk — Lab Item 461

Performed 4 weeks after Original Sample.

Sample Number	Run one mg/L	Run Two mg/L	Average mg/L	Standard Deviation		Run one mg/L	Run Two mg/L	Average mg/L	Standard Deviation	
1		121.6								
2	230.2	243.7	237.0	9.546						
3	119.2	130.2	124.7	7.778						
4	175.4	163.9	169.6	8.132						
5	176.2	191.0	183.6	10.465						
6	184.4	187.0	185.7	1.838						
7	224.8	240.6	232.7	11.172						
8	173.8	153.6	163.7	14.284						
9	167.6	171.4	169.5	2.687						
10	244.9	258.8	251.8	9.829						
11	310.0	322.6	316.3	8.910						
12	211.2	177.6	194.4	23.759						
13	330.0	326.8	328.4	2.263						
14	371.6	365.4	368.5	4.384						
15	236.7	242.6	239.6	4.172						
16	178.7	166.9	172.8	8.344						
17	155.1	181.4	168.2	18.597						
18	174.6	178.0	176.3	2.404						
19	181.1	179.7	180.0	1.485						
20	154.1	159.0	156.6	3.465						
21	679.2	765.6	722.4	61.094		765.0	761.9	763.4	2.192	
22	722.0	718.8	720.4	2.263		759.7	777.8	768.8	12.799	
23	717.9	726.8	722.4	6.293		446.0	364.6	405.3	57.558	
24	672.4	681.1	676.8	6.152		687.6	679.9	683.8	5.445	
25	667.5	665.3	666.4	1.556		446.2	401.1	423.6	31.891	
26	524.6	556.8	540.7	22.769		468.4	550.3	509.4	57.912	

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE NORFLK TAKEN OCT73 LATITUDE 36 57.00 N MARSDEN SQUARE 116-66 LENGTH 97.0 ANALYZED FEB74
SAMPLE N2-4 DEPTH LONGITUDE 76 20.00 W CORER TYPE DOC PENETRATION

	SUBSAMPLE ID.	461 1	461 2	461 3
	DEPTH INTERVAL	.0-30.0	30.0-64.0	64.0-97.0
DIAM (PHI)	DIAM (MM)	PERCENT	PERCENT	PERCENT
<-4	>16.000	.000	4.695	.000
-4 TO -3	16.000 TO 8.000	.000	1.406	.000
-3 TO -2	8.000 TO 4.000	.000	1.025	.000
-2 TO -1	4.000 TO 2.000	.391	4.647	.327
-1 TO 0	2.000 TO 1.000	.682	13.632	1.520
0 TO 1	1.000 TO .500	1.492	34.056	2.419
1 TO 2	.500 TO .250	1.678	15.705	7.085
2 TO 3	.250 TO .125	1.077	3.861	4.372
3 TO 4	.125 TO .063	.496	.477	1.369
4 TO 5	.063 TO .031	.675	.596	5.904
5 TO 6	.031 TO .016	2.427	1.907	9.547
6 TO 7	.016 TO .008	3.586	2.026	10.678
7 TO 8	.008 TO .004	68.391	1.787	7.914
8 TO 9	.004 TO .002	.950	2.026	9.547
9 TO 10	.002 TO .001	2.111	1.549	10.301
>10	<.001	16.042	10.605	29.018
	GRAVEL (>2.0 MM)	.391	11.773	.327
	SAND (2.0-.063 MM)	5.425	67.731	16.765
	SILT (.063-.004 MM)	75.082	6.316	34.043
	CLAY (<.004 MM)	19.103	14.180	48.866
	MEAN (MM)	.0053	.2633	.0069
	MEAN (PHI)	7.560	1.925	7.178
	STANDARD DEVIATION	2.041	3.933	3.213
	SKEWNESS	-.788	.534	-.359
	KURTOSIS	4.874	.344	-.568
	ORGANIC CARBON	2.914	.825	.307
	NITROGEN (KJELDAHL)	.220	.058	.057
	COLOR (GSA)	N2.5	N2.5	10YR 6/3

MGG09005047

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE NORFLK TAKEN OCT73 LATITUDE 36 57.00 N MARSDEN SQUARE 116-66 LENGTH 11.2 ANALYZED FEB74
SAMPLE N2-11 DEPTH LONGITUDE 76 20.00 W CORER TYPE DOC PENETRATION

	SUBSAMPLE ID.	461 4	461 5	461 6
	DEPTH INTERVAL	.0- 30.0	30.0- 71.0	71.0-112.0
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	2.568	.000
-2 TO -1	4.000 TO 2.000	.913	1.077	2.768
-1 TO 0	2.000 TO 1.000	4.619	4.958	1.771
0 TO 1	1.000 TO .500	22.313	17.058	11.756
1 TO 2	.500 TO .250	38.368	27.977	28.574
2 TO 3	.250 TO .125	10.207	16.084	16.177
3 TO 4	.125 TO .063	.857	3.099	4.421
4 TO 5	.063 TO .031	1.863	1.948	4.100
5 TO 6	.031 TO .016	2.049	4.132	4.164
6 TO 7	.016 TO .008	2.049	3.099	4.004
7 TO 8	.008 TO .004	2.421	2.656	2.723
8 TO 9	.004 TO .002	1.676	2.066	2.563
9 TO 10	.002 TO .001	1.490	1.918	13.294
>10	<.001	11.175	11.362	3.684
	GRAVEL (>2.0 MM)	.913	3.645	2.768
	SAND (2.0-.063 MM)	76.364	69.175	62.700
	SILT (.063-.004 MM)	8.381	11.834	14.992
	CLAY (<.004 MM)	14.342	15.346	19.541
	MEAN (MM)	.1336	.1106	.0747
	MEAN (PHI)	2.904	3.177	3.742
	STANDARD DEVIATION	3.371	3.516	3.393
	SKEWNESS	.694	.501	.373
	KURTOSIS	.490	-.118	-.801
	ORGANIC CARBON	1.156	2.654	2.262
	NITROGEN (KJELDAHL)	.060	.069	.083
	COLOR (6SA)	N2.5	N2.5	N2.5

MGG09005047

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE NORFLK TAKEN OCT73 LATITUDE 36 57.00 N MARSDEN SQUARE 116-66 LENGTH 203.2 ANALYZED FEB74
SAMPLE N2-17 DEPTH LONGITUDE 76 20.00 W CORER TYPE DOC PENETRATION

	SUBSAMPLE ID.	461 7	461 8	461 9
	DEPTH INTERVAL	.0- 30.0	30.0-117.0	117.0-203.0
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	.923	.000	.000
-2 TO -1	4.000 TO 2.000	.439	.066	.208
-1 TO 0	2.000 TO 1.000	.255	.101	.260
0 TO 1	1.000 TO .500	.346	.505	.473
1 TO 2	.500 TO .250	6.742	3.313	3.113
2 TO 3	.250 TO .125	13.313	8.172	10.976
3 TO 4	.125 TO .063	2.918	2.131	5.677
4 TO 5	.063 TO .031	3.258	8.172	36.240
5 TO 6	.031 TO .016	8.073	4.174	4.021
6 TO 7	.016 TO .008	21.528	23.724	4.021
7 TO 8	.008 TO .004	10.622	9.446	10.645
8 TO 9	.004 TO .002	2.974	2.856	14.430
9 TO 10	.002 TO .001	4.674	5.931	4.968
>10	<.001	23.936	31.412	4.968
	GRAVEL (>2.0 MM)	1.362	.066	.208
	SAND (2.0-.063 MM)	23.573	14.221	20.500
	SILT (.063-.004 MM)	43.481	45.514	54.927
	CLAY (<.004 MM)	31.584	40.199	24.365
	MEAN (MM)	.0110	.0064	.0199
	MEAN (PHI)	6.504	7.282	5.650
	STANDARD DEVIATION	3.169	2.851	2.484
	SKEWNESS	-.186	-.214	.123
	KURTOSIS	-.678	-.835	-.804
	ORGANIC CARBON	4.409	3.779	7.752
	NITROGEN (KJELDAHL)	.215	.220	.253
	COLOR (GSA)	N2.5	N2.5	N2.5

MGG09005047

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE NORFLK TAKEN OCT73 LATITUDE 36 57.00 N MARSDEN SQUARE 116-66 LENGTH 188.2 ANALYZED FEB74
SAMPLE N2-20 DEPTH LONGITUDE 76 20.00 W CORER TYPE DOC PENETRATION

	SUBSAMPLE ID.	461 10	461 11	461 12
	DEPTH INTERVAL	.0- 30.0	30.0-109.0	109.0-188.0
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	1.194	.000	.701
-1 TO 0	2.000 TO 1.000	.746	85.778	.783
0 TO 1	1.000 TO .500	.398	.000	3.753
1 TO 2	.500 TO .250	.285	.087	14.298
2 TO 3	.250 TO .125	.344	.076	13.690
3 TO 4	.125 TO .063	.377	.000	2.434
4 TO 5	.063 TO .031	1.131	.000	1.251
5 TO 6	.031 TO .016	12.988	2.168	7.506
6 TO 7	.016 TO .008	54.047	.759	11.260
7 TO 8	.008 TO .004	3.771	2.168	7.328
8 TO 9	.004 TO .002	1.676	.650	3.753
9 TO 10	.002 TO .001	2.933	.867	4.468
>10	<.001	20.111	6.448	28.775
	GRAVEL (>2.0 MM)	1.194	.000	.701
	SAND (2.0-.063 MM)	2.149	86.941	34.959
	SILT (.063-.004 MM)	71.937	5.094	27.345
	CLAY (<.004 MM)	24.719	7.966	36.996
	MEAN (MM)	.0073	.6092	.0140
	MEAN (PHI)	7.100	.715	6.162
	STANDARD DEVIATION	2.199	3.205	3.662
	SKEWNESS	-.259	1.191	-.084
	KURTOSIS	2.652	3.963	-1.440
	ORGANIC CARBON	2.641	2.288	1.797
	NITROGEN (KJELDAHL)	.300	.298	.152
	COLOR (GSA)	N2.5	N2.5	N2.5

MGG09005047

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE NORFLK TAKEN OCT73 LATITUDE 36 57.00 N MARSDEN SQUARE 116-66 LENGTH 135.2 ANALYZED FEB74
SAMPLE N2-22 DEPTH LONGITUDE 76 20.00 W CORER TYPE DOC PENETRATION

	SUBSAMPLE ID.	461 13	461 14	461 15
	DEPTH INTERVAL	.0- 30.0	30.0- 81.0	81.0-135.0
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	.000	.381	.505
-1 TO 0	2.000 TO 1.000	.037	.317	.368
0 TO 1	1.000 TO .500	.265	.508	1.742
1 TO 2	.500 TO .250	.463	.949	3.996
2 TO 3	.250 TO .125	.257	5.330	16.433
3 TO 4	.125 TO .063	.081	4.156	5.563
4 TO 5	.063 TO .031	2.941	2.538	3.932
5 TO 6	.031 TO .016	7.721	7.614	7.513
6 TO 7	.016 TO .008	11.397	9.518	7.513
7 TO 8	.008 TO .004	9.926	8.725	7.353
8 TO 9	.004 TO .002	7.353	8.090	5.595
9 TO 10	.002 TO .001	8.824	7.614	12.469
>10	<.001	50.735	44.259	27.016
	GRAVEL (>2.0 MM)	.000	.381	.505
	SAND (2.0-.063 MM)	1.103	11.260	28.103
	SILT (.063-.004 MM)	31.985	28.396	26.312
	CLAY (<.004 MM)	66.912	59.964	45.080
	MEAN (MM)	.0022	.0035	.0090
	MEAN (PHI)	8.850	8.152	6.792
	STANDARD DEVIATION	2.063	2.770	3.339
	SKEWNESS	-.525	-.507	-.183
	KURTOSIS	.418	.117	-1.272
	ORGANIC CARBON	2.471	2.335	3.735
	NITROGEN (KJELDAHL)	.304	.257	.189
	COLOR (GSA)	N2.5	N2.5	N2.5

MGG09005047

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE NORFLK TAKEN OCT73 LATITUDE 36 57.00 N MARSDEN SQUARE 116-66 LENGTH 175.2 ANALYZED FEB74
SAMPLE N2-25 DEPTH LONGITUDE 76 20.00 W CORER TYPE DOC PENETRATION

	SUBSAMPLE ID.	461 16	461 17	461 18
	DEPTH INTERVAL	.0- 30.0	30.0-102.0	102.0-175.0
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	2.491
-2 TO -1	4.000 TO 2.000	1.107	1.926	.887
-1 TO 0	2.000 TO 1.000	.477	1.460	1.231
0 TO 1	1.000 TO .500	.272	.744	.815
1 TO 2	.500 TO .250	.250	.482	.453
2 TO 3	.250 TO .125	.474	.647	2.773
3 TO 4	.125 TO .063	.698	.753	1.521
4 TO 5	.063 TO .031	2.785	4.668	2.571
5 TO 6	.031 TO .016	8.802	9.336	9.233
6 TO 7	.016 TO .008	11.202	10.426	9.776
7 TO 8	.008 TO .004	9.922	9.959	8.690
8 TO 9	.004 TO .002	9.122	8.092	10.319
9 TO 10	.002 TO .001	18.244	8.247	17.560
>10	<.001	36.647	43.259	31.681
	GRAVEL (>2.0 MM)	1.107	1.926	3.378
	SAND (2.0-.063 MM)	2.170	4.086	6.792
	SILT (.063-.004 MM)	32.710	34.389	30.269
	CLAY (<.004 MM)	64.012	59.598	59.560
	MEAN (MM)	.0028	.0035	.0044
	MEAN (PHI)	8.460	8.179	7.834
	STANDARD DEVIATION	2.359	2.838	3.121
	SKEWNESS	-.764	-.718	-.776
	KURTOSIS	3.087	2.003	2.198
	ORGANIC CARBON	2.014	1.778	1.829
	NITROGEN (KJELDAHL)	.228	.225	.204
	COLOR (GSA)	N2.5	5G4/1	5G4/1

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SEDIMENT SIZE AND COMPOSITION DATA

CRUISE NORFLK TAKEN OCT73 LATITUDE 36 57.00 N MARSDEN SQUARE 116-66 LENGTH 102.2 ANALYZED FEB74
SAMPLE N2-26 DEPTH LONGITUDE 76 20.00 W CORER TYPE DOC PENETRATION

	SUBSAMPLE ID.	461 19	461 20	461 21
	DEPTH INTERVAL	.0- 30.0	30.0-107.0	107.0-183.0
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	1.131	.226	.776
-1 TO 0	2.000 TO 1.000	.575	.157	.072
0 TO 1	1.000 TO .500	.402	.242	.163
1 TO 2	.500 TO .250	.323	.282	.261
2 TO 3	.250 TO .125	.571	.677	1.036
3 TO 4	.125 TO .063	.461	.645	.574
4 TO 5	.063 TO .031	2.955	4.435	9.451
5 TO 6	.031 TO .016	4.728	8.265	10.103
6 TO 7	.016 TO .008	27.976	31.448	6.192
7 TO 8	.008 TO .004	17.337	13.910	11.732
8 TO 9	.004 TO .002	19.307	3.024	5.866
9 TO 10	.002 TO .001	6.304	5.241	5.540
>10	<.001	17.928	31.448	48.234
	GRAVEL (>2.0 MM)	1.131	.226	.776
	SAND (2.0-.063 MM)	2.333	2.004	2.105
	SILT (.063-.004 MM)	52.997	58.057	37.479
	CLAY (<.004 MM)	43.540	39.713	59.640
	MEAN (MM)	.0050	.0044	.0030
	MEAN (PHI)	7.652	7.839	8.392
	STANDARD DEVIATION	2.141	2.185	2.518
	SKEWNESS	-.626	-.157	-.513
	KURTOSIS	3.771	.039	.629
	ORGANIC CARBON	2.399	2.360	2.259
	NITROGEN (KJELDAHL)	.300	.262	.239
	COLOR (GSA)	N2.5	N2.5	N2.5

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