70-0935

(Laboratory Item) 395

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MS 116

A SUMMARY OF SEDIMENT SIZE, CHEMISTRY AND SPECIFIC GRAVITY FOR SEVENTEEN GRAB SAMPLES FROM THE PATUXENT RIVER

Prepared by:
Eugene V. Kelly
P. Burr Loomis
Scott M. McKellar

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Geological Laboratory - Laboratories Branch
Nearshore Surveys Division
Oceanographic Surveys Department

U. S. Naval Oceanographic Office
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DOM CONST Dominant constituent (s) comprising the sample assemblage.

SEC CONST Secondary constituent (s) comprising the sample assemblage.

ABBREVIATIONS

AGL	Agglutinated	LS	Limestone
ALG	Algae, Algal	MAF	Mafic
ALGY	Algae	MAG	Magnetite
ASH	Volcanic Ash	MIC	Mica
BAS	Basalt, Basaltic	MIN	Mineral
BIT	Biotite	MLSC	Mollusc
BKN	Broken	MN	Manganese
BRKN	Broken	MSC	Mollusc
BRY	Bryozoa	NOD	Nodules
BUR	Burrow, (-s), (-ed)	OOL	Oolites
BURW	Burrow, (-s), (-ed)	ORG	Organic Material
CAL	Calcite, Calcareous	OST	Ostracods
CHL	Chlorite	PCY	Pelecypods
CHT	Chert	PEB	Pebbles
CL	Clay	PHS	Phosphate
CMT	Cement (-ed)	PLCY	Pelecypods
COA	Coal	PLT	Plant Material
COB	Cobble (-s)	PTER	Pteropods
COR	Corals	PTR	Pteropods
DIA	Diatoms	PUM	Pumice
DOL	Dolomite	PYR	Pyrite
DK	Dark	QTZ	Quartz
ECH	Echinoid	RAD	Radiolaria
EPD	Epidote	RX	Rocks
FEL	Feldspars	SCH	Schist, Schistose
FMN	Ferromanganese	SH	Shale, Shaly
FOR	Foraminifera	SHD	Shards
FRAG	Fragments	SHL	Shell
FRG	Fragments	SID	Siderite
FRI	Friable	SLS	Siltstone
GLAUC	Glauconite	SLTST	Siltstone
GLB	Globigerina	SPC	Sponge Spicules
GLC	Glauconite	SPCL	Sponge Spicules
GRT	Granite, Granitic	SPD	Echinoid Spines
GRV	Gravel	SERP	Serpentinite
GST	Gastropods	SRP	Serpentinite
GSTR	Gastropods	SS	Sandstone
HAL	Halimeda	TRL	Trail
HSH	Hash	TUB	Worm Tube
HVY	Heavy Minerals	TUF	Tuff, Tuffaceous
KSP	Potassium Feldspar	WRM	Worm
LMN	Limonite	ZEO	Zeolite

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		

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 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.

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

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.

$$\text{Skewness} = \frac{1}{100} \quad 2\ s^{-3} \sum f \quad (X_i - X)^3$$

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. A normal curve has a kurtosis of 0.

$$\text{Kurtosis} = \frac{1}{100} \quad s^{-4} \quad \sum f \quad (X_i - X)^4 - 3$$

$CACO_3$ — Percent calcium carbonate of the total weight as determined by the insoluble residue method.

ORG CARBON — Percent organic carbon of the total sample weight as determined by the Allison method

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

DOM CONST	Dominant constituent (s) comprising the sample assemblage.
SEC CONST	Secondary constituent (s) comprising the sample assemblage.

MGG99005033

LOG FOR GRAB SAMPLES

Project No: 395
Location: PAX RIVER

Logged: P. B. LOOMIS
Date Logged: 9 July 70

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: 1 Lat: 38°20'49.8"N Long: 76°28'27"W Date: Water depth: 8.0	395 1	Surface 10Y4/2 Inside N2	NO	Clayey Silt	Slight H_2S
Sample No: 2 Lat: 38°20'41.5"N Long: 76°28'35"W Date: Water depth: 8.0	395 2	Surface 10Y4/2 Inside SG 2/1	No	Clayey Silt	Surface mottled 5YR4/4 (Goethite?) Slight H_2S
Sample No: 3 Lat: 38°20'21.2"N Long: 76°28'45.4"W Date: Water depth: 8.0	395 3	Surface 5Y5/2 Inside 5GY4/1	No	Silty Clay	Slight H_2S
Sample No: 4 Lat: 38°19'52.5"N Long: 76°29'02.3"W Date: Water depth: 8.0	395 4	Surface 10YR4/2 Inside 5Y3/2	Yes	Sandy Silt	Pelecypod shells
Sample No: 6 Lat: 38°20'11.9"N Long: 76°29'26.4"W Date: Water depth: 8.0	395 5	10YR5/4	Yes	Fine Sand	Shell Secondary mottling of 5YR4/4
Sample No: 8 Lat: 38°20'55"N Long: 76°29'42.3"W Date: Water depth: 8.0	395 6	Surface 5Y4/1 Inside N2	Yes	Silty Clay	Oyster shells some H_2S
Sample No: 9 Lat: 38°21'28.2"N Long: 76°29'48"W Date: Water depth: 8.0	395 7	Surface 10Y4/2 Inside N2	No	Silty Clay	Some H_2S
Sample No: 10 Lat: 38°21'28.1"N Long: 76°29'47.9"W Date: Water depth: 8.0	395 8	Surface 5GY3/2 Inside N2	No	Silty Clay	H_2S
Sample No: 11 Lat: 38°21'48.4"N Long: 76°30'18"W Date: Water depth: 8.0	395 9	10YR5/4	Yes	Sand	Shell

LOG FOR GRAB SAMPLES

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Project No: 395
Location: PAX RIVER

Logged By P.B. LOOMIS
Date Logged 9 July 70

	La No.	Color	Calc. Mat.	Sediment Type	Remarks
Sample No: 12 Lat: 38°22'34"N Long: 76°30'43"W Date: Water depth: 8.0	395 10	Surface 5Y5/2 Inside 5Y3/2	No	Silty Clay	
Sample No: 14 Lat: 38°23'06"N Long: 76°30'38"W Date: Water depth: 8.0	395 11	Surface 5Y4/4 Inside N3	No	Silty Clay	Surface mottled 5YR5/6 H_2S
Sample No: 15 Lat: 38°23'04"N Long: 76°30'03"W Date: Water depth: 8.0	395 12	Outside 5Y4/4 Inside 10Y4/2	No	Fine Sand	Some H_2S
Sample No: 16 Lat: 38°22'25.7"N Long: 76°29'38.5"W Date: Water depth: 8.0	395 13	Surface 10YR4/2 Inside 10Y4/2	Yes	Fine Sand	Shell
Sample No: 17 Lat: 38°22'19.8"N Long: 76°29'36.5"W Date: Water depth: 8.0	395 14	Surface 5Y5/2 Inside 5Y3/2	Yes	Sandy Silt	Shell H_2S
Sample No: 18 Lat: 38°22'02.2"N Long: 76°29'20.9"W Date: Water depth: 8.0	395 15	Surface 10Y4/2 Inside 5Y3/2	Yes	Silty Clay	Surface mottled 10YR5/4 Oyster Shells H_2S
Sample No: 20 Lat: 38°21'05"N Long: 76°29'10"W Date: Water depth: 8.0	395 16	Surface 10YR4/2 Inside 5Y3/2	Yes	Fine Sand	Shell
Sample No: 21 Lat: 38°20'52"N Long: 76°28'48"W Date: Water depth: 8.0	395 17	Surface 10Y4/2 Inside N3	No	Silty Clay	Surface Mottled 10YR5/4
Sample No: Lat: Long: Date: Water depth:					

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PATUXT SAMPLE 1 LATITUDE 38 20.8 N LONGITUDE 76 28.5 W TAKEN 0 0 MARSDEN SQ. 116
CORER TYPE SPK LENGTH 0.0 PENETRATION 0.0 DEPTH 8.0 ANALYZED 0JUL70

ID. NO. 395 1
INTERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
16.0000	0.000					
8.0000	0.000					
4.0000	0.000					
2.0000	0.752					
1.0000	0.273					
0.5000	0.205					
0.2500	0.615					
0.1250	10.595					
0.0625	30.690					
0.0312	4.921					
0.0156	2.051					
0.0078	6.494					
0.0039	3.418					
0.0020	7.519					
0.0010	6.835					
0.0010-	25.632					
GRAVEL	0.752					
SAND	42.379					
SILT	16.883					
CLAY	39.986					
MEAN (MM)	0.0124					
MEAN (PHI)	6.3291					
STAN DEV	3.2465					
SKEWNESS	0.0411					
KURTOSIS	-1.4775					
CACO3	6.000					
ORG CARBON	2.360					
COLOR	N2					
DOM CONST	QUARTZ					
SEC CONST	ORGANIC MAT.					

REMARKS 1 -
REMARKS 2 - SPECIFIC GRAVITY 2.58

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SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PATUXT SAMPLE 2 LATITUDE 38 20.7 N LONGITUDE 76 28.6 W TAKEN 0 0 MARSDEN SQ. 116
CORER TYPE SPK LENGTH 0.0 PENETRATION 0.0 DEPTH 8.0 ANALYZED 0JUL70

ID. NO. 395 2
INTERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
16.0000	0.000					
8.0000	0.000					
4.0000	0.000					
2.0000	0.000					
1.0000	0.453					
0.5000	0.340					
0.2500	0.453					
0.1250	2.265					
0.0625	7.701					
0.0312	2.152					
0.0156	5.663					
0.0078	5.096					
0.0039	10.193					
0.0020	11.325					
0.0010	11.891					
0.0010-	42.469					
GRAVEL	0.000					
SAND	11.212					
SILT	23.103					
CLAY	65.685					
MEAN (MM)	0.0030					
MEAN (PHI)	8.3879					
STAN DEV	2.5518					
SKEWNESS	-0.5664					
KURTOSIS	0.3250					
CACO3	7.000					
ORG CARBON	3.118					
COLOR	5GY2/1					
DOM CONST	QUARTZ					
SEC CONST	ORGANIC MAT.					

REMARKS 1 -
REMARKS 2 - SPECIFIC GRAVITY 2.55

MC09005033

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PATUXT SAMPLE 3 LATITUDE 38 20.4 N LONGITUDE 76 28.8 W TAKEN 0 0 MARSDEN SQ. 116
CORER TYPE SPK LENGTH 0.0 PENETRATION 0.0 DEPTH 8.0 ANALYZED 0JUL70

ID. NO. 395 3
INTERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
16.0000	0.000					
8.0000	0.000					
4.0000	0.000					
2.0000	0.396					
1.0000	0.297					
0.5000	0.297					
0.2500	0.990					
0.1250	3.168					
0.0625	7.228					
0.0312	5.941					
0.0156	3.465					
0.0078	4.950					
0.0039	11.881					
0.0020	7.426					
0.0010	16.337					
0.0010-	37.624					
GRAVEL	0.396					
SAND	11.980					
SILT	26.238					
CLAY	61.386					
MEAN (MM)	0.0035					
MEAN (PHI)	8.1455					
STAN DEV	2.7169					
SKEWNESS	-0.5263					
KURTOSIS	0.1360					
CACO3	8.000					
ORG CARBON	2.247					
COLOR	5GY4/1					
DOM CONST	QUARTZ					
SEC CONST	ORGANIC MAT.					

REMARKS 1 -
REMARKS 2 - SPECIFIC GRAVITY 2.63

0900 5038

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PATUXT SAMPLE 4 LATITUDE 38 19.9 N LONGITUDE 76 29.0 W TAKEN 0 0 MARSDEN SQ. 116
CORER TYPE SPK LENGTH 0.0 PENETRATION 0.0 DEPTH 8.0 ANALYZED 0JUL70

ID. NO. 395 4
INTERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
16.0000	0.000					
8.0000	0.000					
4.0000	0.454					
2.0000	0.287					
1.0000	0.382					
0.5000	0.765					
0.2500	5.186					
0.1250	50.430					
0.0625	30.641					
0.0312	0.980					
0.0156	0.717					
0.0078	2.032					
0.0039	0.120					
0.0020	2.032					
0.0010	0.598					
0.0010-	5.378					
GRAVEL	0.741					
SAND	87.404					
SILT	3.848					
CLAY	8.007					
MEAN (MM)	0.0937					
MEAN (PHI)	3.4159					
STAN DEV	2.1606					
SKEWNESS	1.0626					
KURTOSIS	4.7665					
CACO3	6.000					
ORG CARBON	0.435					
COLOR	5Y3/2					
DOM CONST	QUARTZ					
SEC CONST	SHELL					

REMARKS 1 -
REMARKS 2 - SPECIFIC GRAVITY 2.64

0 0 0 5 0 3 8

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PATUXT SAMPLE 6 LATITUDE 38 20.2 N LONGITUDE 76 29.4 W TAKEN 0 0 MARSDEN SQ. 116
CORER TYPE SPK LENGTH 0.0 PENETRATION 0.0 DEPTH 8.0 ANALYZED 0JUL70

ID. NO. 395 5
INTERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
16.0000	0.000					
8.0000	0.000					
4.0000	0.000					
2.0000	0.088					
1.0000	0.110					
0.5000	2.225					
0.2500	44.295					
0.1250	50.441					
0.0625	1.278					
0.0312	1.564					
0.0156	0.000					
0.0078	0.000					
0.0039	0.000					
0.0020	0.000					
0.0010	0.000					
0.0010-	0.000					
GRAVEL	0.088					
SAND	98.348					
SILT	1.564					
CLAY	0.000					
MEAN (MM)	0.2415					
MEAN (PHI)	2.0498					
STAN DEV	0.6547					
SKEWNESS	0.1799					
KURTOSIS	2.4233					
CACO3	3.000					
ORG CARBON	0.091					
COLOR	10YR5/4					
DOM CONST	QUARTZ					
SEC CONST	SHELL					

REMARKS 1 -
REMARKS 2 - SPECIFIC GRAVITY 2.63

NO 109005033

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PATUXT SAMPLE 8 LATITUDE 38 20.9 N LONGITUDE 76 29.7 W TAKEN 0 0 MARSDEN SQ. 116
CORER TYPE SPK LENGTH 0.0 PENETRATION 0.0 DEPTH 8.0 ANALYZED 0JUL70

ID. NO.	395 6					
INTERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
16.0000	61.728					
8.0000	0.000					
4.0000	0.388					
2.0000	0.647					
1.0000	0.776					
0.5000	0.550					
0.2500	0.453					
0.1250	1.003					
0.0625	4.238					
0.0312	0.615					
0.0156	2.103					
0.0078	3.235					
0.0039	1.779					
0.0020	3.073					
0.0010	3.882					
0.0010-	15.529					
GRAVEL	62.763					
SAND	7.020					
SILT	7.732					
CLAY	22.485					
MEAN (MM)	0.9141					
MEAN (PHI)	0.1296					
STAN DEV	6.2522					
SKEWNESS	0.3740					
KURTOSIS	-1.2583					
CACO3	25.000					
ORG CARBON	2.332					
COLOR	N2					
DOM CONST	SHELL					
SEC CONST	QUARTZ					

REMARKS 1 -
REMARKS 2 - SPECIFIC GRAVITY 2.59

MGG09005033

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PATUXT SAMPLE 9 LATITUDE 38 21.5 N LONGITUDE 76 29.8 W TAKEN 0 0 MARSDEN SQ. 116
CORER TYPE SPK LENGTH 0.0 PENETRATION 0.0 DEPTH 8.0 ANALYZED 0JUL70

ID. NO. 395 7
INTERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
16.0000	0.000					
8.0000	0.000					
4.0000	1.659					
2.0000	1.073					
1.0000	0.488					
0.5000	0.390					
0.2500	0.585					
0.1250	1.073					
0.0625	4.195					
0.0312	2.244					
0.0156	6.829					
0.0078	11.707					
0.0039	3.415					
0.0020	11.220					
0.0010	7.317					
0.0010-	47.805					
GRAVEL	2.732					
SAND	6.732					
SILT	24.195					
CLAY	66.341					
MEAN (MM)	0.0032					
MEAN (PHI)	8.2863					
STAN DEV	2.9770					
SKEWNESS	-0.8072					
KURTOSIS	2.5302					
CACO3	10.000					
ORG CARBON	3.270					
COLOR	N2					
DOM CONST	SHELL					
SEC CONST	QUARTZ					

REMARKS 1 -
REMARKS 2 - SPECIFIC GRAVITY 2.59

0090033

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PATUXT SAMPLE 10 LATITUDE 38 21.5 N LONGITUDE 76 29.8 W TAKEN 0 0 MARSDEN SQ. 116
CORER TYPE SPK LENGTH 0.0 PENETRATION 0.0 DEPTH 8.0 ANALYZED 0JUL70

ID. NO. 395 8
INTERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
16.0000	0.000					
8.0000	0.000					
4.0000	1.544					
2.0000	1.433					
1.0000	0.662					
0.5000	0.551					
0.2500	0.772					
0.1250	7.938					
0.0625	8.159					
0.0312	1.213					
0.0156	6.064					
0.0078	6.064					
0.0039	12.679					
0.0020	6.615					
0.0010	12.128					
0.0010-	34.179					
GRAVEL	2.977					
SAND	18.082					
SILT	26.020					
CLAY	52.922					
MEAN (MM)	0.0056					
MEAN (PHI)	7.4713					
STAN DEV	3.3173					
SKEWNESS	-0.5155					
KURTOSIS	0.2746					
CACO3	12.000					
ORG CARBON	3.565					
COLOR	N2					
DOM CONST	QUARTZ					
SEC CONST	SHELL					

REMARKS 1 -
REMARKS 2 - SPECIFIC GRAVITY 2.54

MCG0090503

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PATUXT SAMPLE 11 LATITUDE 38 21.8 N LONGITUDE 76 30.3 W TAKEN 0 0 MARSDEN SQ. 116
CORER TYPE SPK LENGTH 0.0 PENETRATION 0.0 DEPTH 8.0 ANALYZED 0JUL70

ID. NO.	395 9					
INTERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
16.0000	0.000					
8.0000	0.000					
4.0000	0.075					
2.0000	0.174					
1.0000	0.249					
0.5000	0.697					
0.2500	41.279					
0.1250	55.710					
0.0625	0.547					
0.0312	1.269					
0.0156	0.000					
0.0078	0.000					
0.0039	0.000					
0.0020	0.000					
0.0010	0.000					
0.0010-	0.000					
GRAVEL	0.249					
SAND	98.482					
SILT	1.269					
CLAY	0.000					
MEAN (MM)	0.2355					
MEAN (PHI)	2.0860					
STAN DEV	0.6280					
SKEWNESS	-0.1466					
KURTOSIS	5.3027					
CACO3	3.000					
ORG CARBON	0.050					
COLOR	10YR5/4					
DOM CONST	QUARTZ					
SEC CONST	SHELL					

REMARKS 1 -
REMARKS 2 - SPECIFIC GRAVITY 2.64

MGG09005033

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PATUXT SAMPLE 12 LATITUDE 38 22.6 N LONGITUDE 76 30.7 W TAKEN 0 0 MARSDEN SQ. 116
CORER TYPE SPK LENGTH 0.0 PENETRATION 0.0 DEPTH 8.0 ANALYZED 0JUL70

ID. NO.	395 10					
INTERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
16.0000	0.000					
8.0000	0.000					
4.0000	0.000					
2.0000	0.372					
1.0000	0.466					
0.5000	1.397					
0.2500	3.631					
0.1250	10.335					
0.0625	4.842					
0.0312	0.745					
0.0156	7.449					
0.0078	6.518					
0.0039	6.983					
0.0020	6.052					
0.0010	10.242					
0.0010-	40.968					
GRAVEL	0.372					
SAND	20.670					
SILT	21.695					
CLAY	57.263					
MEAN (MM)	0.0049					
MEAN (PHI)	7.6611					
STAN DEV	3.2421					
SKEWNESS	-0.4072					
KURTOSIS	-0.7004					
CACO3	10.000					
ORG CARBON	2.799					
COLOR	5Y3/2					
DOM CONST	QUARTZ					
SEC CONST	SHELL					

REMARKS 1 -
REMARKS 2 - SPECIFIC GRAVITY 2.60

0900503

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PATUXT SAMPLE 14 LATITUDE 38 23.1 N LONGITUDE 76 30.6 W TAKEN 0 0 MARSDEN SQ. 116
CORER TYPE SPK LENGTH 0.0 PENETRATION 0.0 DEPTH 8.0 ANALYZED 0JUL70

ID. NO.	395 11					
INTERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
16.0000	0.000					
8.0000	0.000					
4.0000	0.314					
2.0000	0.627					
1.0000	1.066					
0.5000	1.694					
0.2500	1.631					
0.1250	18.946					
0.0625	17.440					
0.0312	2.447					
0.0156	7.215					
0.0078	6.901					
0.0039	2.196					
0.0020	5.332					
0.0010	7.215					
0.0010-	26.976					
GRAVEL	0.941					
SAND	40.778					
SILT	18.758					
CLAY	39.523					
MEAN (MM)	0.0137					
MEAN (PHI)	6.1857					
STAN DEV	3.4740					
SKEWNESS	-0.0105					
KURTOSIS	-1.3892					
CACO3	8.000					
ORG CARBON	2.497					
COLOR	N3					
DOM CONST	QUARTZ					
SEC CONST	SHELL					

REMARKS 1 -
REMARKS 2 - SPECIFIC GRAVITY 2.54

MGG09005038

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PATUXT SAMPLE 15 LATITUDE 38 23.1 N LONGITUDE 76 30.0 W TAKEN 0 0 MARSDEN SQ. 116
CORER TYPE SPK LENGTH 0.0 PENETRATION 0.0 DEPTH 8.0 ANALYZED 0JUL70

ID. NO.	395 12					
INTERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
16.0000	0.000					
8.0000	0.000					
4.0000	0.120					
2.0000	0.060					
1.0000	0.120					
0.5000	1.081					
0.2500	7.884					
0.1250	76.843					
0.0625	8.845					
0.0312	5.046					
0.0156	0.000					
0.0078	0.000					
0.0039	0.000					
0.0020	0.000					
0.0010	0.000					
0.0010-	0.000					
GRAVEL	0.180					
SAND	94.774					
SILT	5.046					
CLAY	0.000					
MEAN (MM)	0.1676					
MEAN (PHI)	2.5769					
STAN DEV	0.6760					
SKEWNESS	-0.0003					
KURTOSIS	7.2184					
CACO3	4.000					
ORG CARBON	0.228					
COLOR	10Y4/2					
DOM CONST	QUARTZ					
SEC CONST	ORGANIC MAT.					

REMARKS 1 -
REMARKS 2 - SPECIFIC GRAVITY 2.60

MC09005033

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PATUXT SAMPLE 16 LATITUDE 38 22.4 N LONGITUDE 76 29.6 W TAKEN 0 0 MARSDEN SQ. 116
CORER TYPE SPK LENGTH 0.0 PENETRATION 0.0 DEPTH 8.0 ANALYZED 0JUL70

ID. NO.	395 13					
INTERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
16.0000	0.000					
8.0000	0.000					
4.0000	0.120					
2.0000	0.140					
1.0000	0.260					
0.5000	0.480					
0.2500	7.153					
0.1250	77.542					
0.0625	4.755					
0.0312	0.360					
0.0156	0.899					
0.0078	0.599					
0.0039	0.899					
0.0020	0.599					
0.0010	1.698					
0.0010-	4.496					
GRAVEL	0.260					
SAND	90.190					
SILT	2.757					
CLAY	6.793					
MEAN (MM)	0.1195					
MEAN (PHI)	3.0646					
STAN DEV	2.0582					
SKEWNESS	1.3871					
KURTOSIS	6.9912					
CACO3	4.000					
ORG CARBON	0.649					
COLOR	10Y4/2					
DOM CONST	QUARTZ					
SEC CONST	SHELL					

REMARKS 1 -
REMARKS 2 - SPECIFIC GRAVITY 2.63

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SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PATUXT SAMPLE 17 LATITUDE 38 22.3 N LONGITUDE 76 29.6 W TAKEN 0 0 MARSDEN SQ. 116
CORER TYPE SPK LENGTH 0.0 PENETRATION 0.0 DEPTH 8.0 ANALYZED 0JUL70

ID. NO.	395 14					
INTERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
16.0000	0.000					
8.0000	0.000					
4.0000	0.581					
2.0000	0.399					
1.0000	0.472					
0.5000	4.354					
0.2500	28.592					
0.1250	38.062					
0.0625	10.849					
0.0312	0.544					
0.0156	0.544					
0.0078	0.544					
0.0039	0.000					
0.0020	3.266					
0.0010	1.814					
0.0010-	9.978					
GRAVEL	0.980					
SAND	82.329					
SILT	1.633					
CLAY	15.058					
MEAN (MM)	0.0983					
MEAN (PHI)	3.3465					
STAN DEV	2.9516					
SKEWNESS	0.7883					
KURTOSIS	1.3137					
CACO3	5.000					
ORG CARBON	0.981					
COLOR	5Y3/2					
DOM CONST	QUARTZ					
SEC CONST	SHELL					

REMARKS 1 -
REMARKS 2 - SPECIFIC GRAVITY 2.62

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SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PATUXT SAMPLE 18 LATITUDE 38 22.0 N LONGITUDE 76 29.3 W TAKEN 0 0 MARSDEN SQ. 116
CORER TYPE SPK LENGTH 0.0 PENETRATION 0.0 DEPTH 8.0 ANALYZED 0JUL70

ID. NO. 395 15
INTERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
16.0000	38.338					
8.0000	0.000					
4.0000	0.350					
2.0000	0.300					
1.0000	0.350					
0.5000	0.501					
0.2500	0.751					
0.1250	2.753					
0.0625	7.558					
0.0312	1.051					
0.0156	0.751					
0.0078	2.503					
0.0039	6.507					
0.0020	7.257					
0.0010	2.503					
0.0010-	28.529					
GRAVEL	38.989					
SAND	11.912					
SILT	10.811					
CLAY	38.288					
MEAN (MM)	0.1091					
MEAN (PHI)	3.1962					
STAN DEV	6.5426					
SKEWNESS	-0.0743					
KURTOSIS	-1.7526					
CACO3	9.000					
ORG CARBON	2.690					
COLOR	5Y3/2					
DOM CONST	QUARTZ					
SEC CONST	SHELL					

REMARKS 1 -
REMARKS 2 - SPECIFIC GRAVITY 2.59

MGG09005038

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PATUXT SAMPLE 20 LATITUDE 38 21.1 N LONGITUDE 76 29.2 W TAKEN 0 0 MARSDEN SQ. 116
CORER TYPE SPK LENGTH 0.0 PENETRATION 0.0 DEPTH 8.0 ANALYZED 0JUL70

ID. NO. 395 16
INTERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
16.0000	0.000					
8.0000	0.000					
4.0000	0.000					
2.0000	0.210					
1.0000	0.189					
0.5000	0.567					
0.2500	11.330					
0.1250	80.361					
0.0625	2.518					
0.0312	4.826					
0.0156	0.000					
0.0078	0.000					
0.0039	0.000					
0.0020	0.000					
0.0010	0.000					
0.0010-	0.000					
GRAVEL	0.210					
SAND	94.964					
SILT	4.826					
CLAY	0.000					
MEAN (MM)	0.1789					
MEAN (PHI)	2.4830					
STAN DEV	0.6360					
SKEWNESS	0.1710					
KURTOSIS	7.3718					
CACO3	3.000					
ORG CARBON	0.252					
COLOR	5Y3/2					
DOM CONST	QUARTZ					
SEC CONST	ORGANIC MAT.					

REMARKS 1 -
REMARKS 2 - SPECIFIC GRAVITY 2.62

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SEDIMENT SIZE AND COMPOSITION DATA

CRUISE PATUXT SAMPLE 21 LATITUDE 38 20.9 N LONGITUDE 76 28.8 W TAKEN 0 0 MARSDEN SQ. 116
CORER TYPE SPK LENGTH 0.0 PENETRATION 0.0 DEPTH 8.0 ANALYZED 0JUL70

ID. NO. 395 17
INTERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
16.0000	0.000					
8.0000	0.000					
4.0000	0.000					
2.0000	0.754					
1.0000	0.377					
0.5000	0.226					
0.2500	0.452					
0.1250	8.214					
0.0625	13.564					
0.0312	5.953					
0.0156	3.391					
0.0078	4.521					
0.0039	14.695					
0.0020	4.898					
0.0010	4.145					
0.0010-	38.809					
GRAVEL	0.754					
SAND	22.833					
SILT	28.561					
CLAY	47.852					
MEAN (MM)	0.0059					
MEAN (PHI)	7.4103					
STAN DEV	3.1249					
SKEWNESS	-0.2713					
KURTOSIS	-0.9722					
CACO3	10.000					
ORG CARBON	2.599					
COLOR	N3					
DOM CONST	QUARTZ					
SEC CONST	ORGANIC MAT.					

REMARKS 1 -
REMARKS 2 - SPECIFIC GRAVITY 2.55

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