MGG09005012

Laboratory Item No. 280

A SUMMARY OF ENGINEERING PROPERTIES, SIZE AND COMPOSITION OF CORES FROM ST. CROIX AND PUERTO RICO, OCTOBER 1965

Engineering Properties
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Howard D. Huddell

GEOLOGY LAB. FILE COPY

Size and Composition
Prepared by: Howard D. Huddell
Richard F. Rooney

April 1965

Underwater Range Projects
Oceanographic Surveys Dept.

EXPLANATION OF DATA PAGES
CORE ANALYSIS SUMMARY SHEET
Engineering Properties
NAVOCEANO (EXP) 3167/18B (Rev. 1-63)

Results of engineering properties, core analysis performed by the U. S. Naval Oceanographic Office Geological Laboratory are recorded on Core Analysis Summary Sheet Engineering Properties.

The following is a description of the terms employed on the Core Analysis Summary Sheet:

1. Cruise Number. A number assigned to each cruise for identification purposes.

2. Latitude. Expressed in degrees, minutes, and seconds.

3. Longitude. Expressed in degrees, minutes, and seconds.

4. Sample Number. A consecutive number, commencing with 1, applied to each core taken successively throughout the cruise.

5. Date Taken. Day (GMT), month, and year.

6. Water Depth (m). The uncorrected sonic sounding recorded in meters.

7. Type Corer. Identified by the name of device employed.

8. Core Length(cm). Recorded in centimeters as observed in the laboratory.

9. Core Penetration (cm). Recorded in centimeters as observed in the field.

10. Subsample Depth in Core (cm). Interval of subsample as measured in centimeters from the top of the core.

11. Wet Unit Weight (g/cm^3). The weight (solids plus water) per unit volume of the sediment mass.

12. Specific Gravity of Solids. The ratio of weight in air of a given volume of a sediment at 20°C to the weight in air of an equal volume of distilled water at 20°C.

13. Water Content (% dry weight). The ratio, in percent, of the weight of water in a given mass of the sediment sample to the weight of the solid particles.

14. Void Ratio. The ratio of the volume of void spaces to the volume of solid particles in the sediment sample as computed from Wet Unit Weight, Specific Gravity of Solids, and Water Content.

15. Saturated Void Ratio. The Void Ratio at 100 percent saturation as computed from Water Content and Specific Gravity of Solids.

$$\text{Saturated Void Ratio} = \frac{\text{Water Content X Specific Gravity of Solids}}{100}$$

16. Porosity (%). The ratio, usually expressed as a percentage, of the volume of voids of a sediment mass to the total volume of the sediment mass.

17. Liquid Limit. Water Content, in percent, at which a pat of sediment cut by a groove of standard dimension will flow together for a distance of 1/2 inch under the impact of 25 blows in a standard liquid limit apparatus.

18. Plastic Limit. Water Content, in percent, at which a sediment will just begin to crumble when rolled into a thread approximately 1/8 inch in diameter.

19. Plasticity Index. The numerical difference between the Liquid Limit and Plastic Limit of the sediment mass.

20. Liquidity Index. The ratio, expressed in percentage, of (1) the natural water content of the sediment sample minus its Plastic Limit to (2) its Plasticity Index.

21. Compression Index. The slope of the linear portion of the Pressure-Void Ratio curve on a semi-log plot.

22. Compressive Strength. The load per unit area required to shear an unconfined, natural or remolded, sediment mass.

23. Cohesion. The shearing strength per unit area under zero externally applied load.

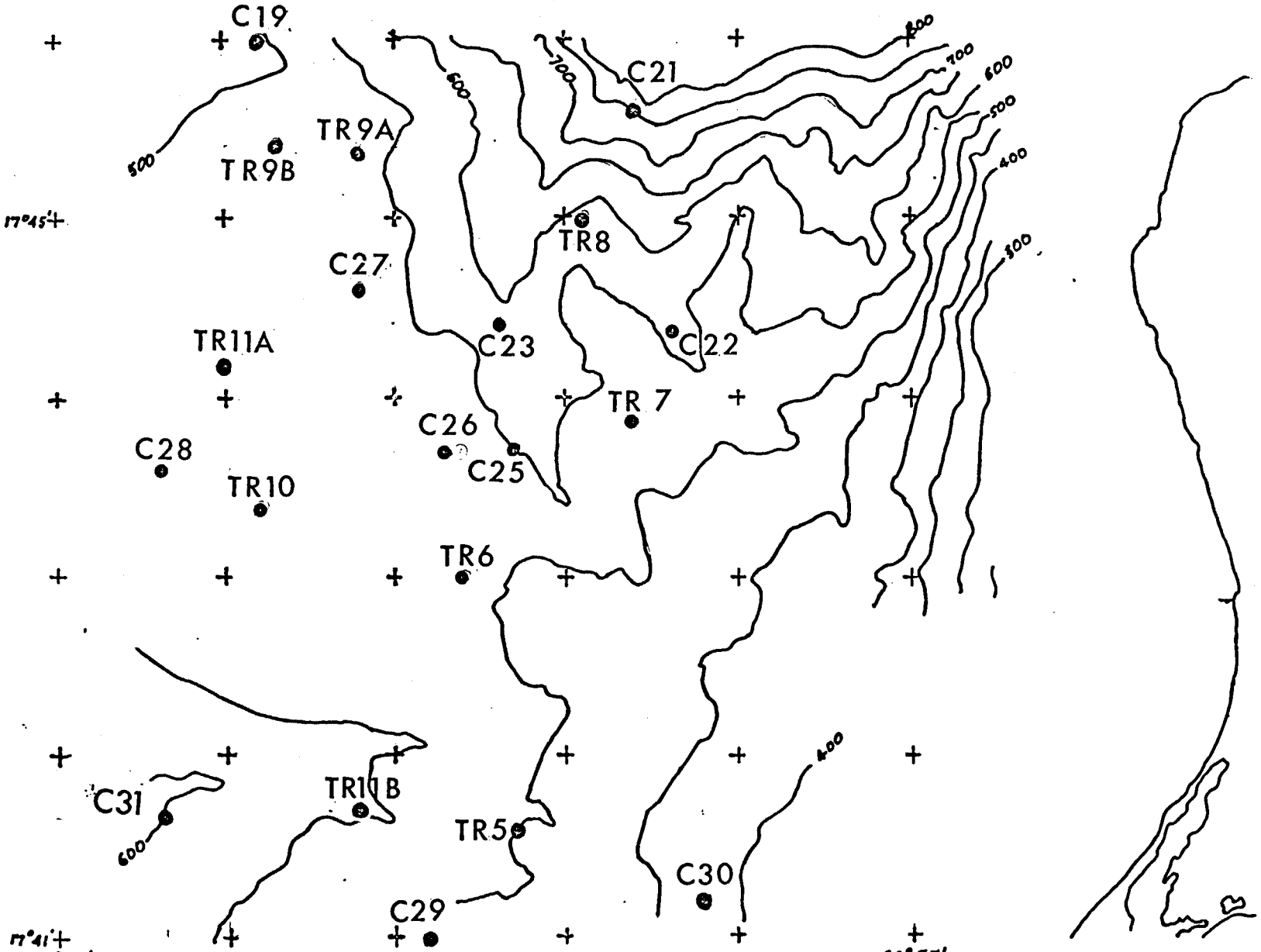
24. Sensitivity. The ratio of the natural to the remolded strength. It is a measure of the loss of strength due to remolding the sediment mass.

25. Angle of Internal Friction (°). The angle between the abscissa and the tangent of the curve representing the relationship of "shearing resistance" to "normal stress" acting within a sediment mass.

26. Activity. The ratio of the Plasticity Index to the clay fraction percentage ($<$ .002 mm) of the sediment mass.

27. Modulus of Elasticity. The ratio of stress to strain of the sediment mass.

28. Slump (%). The ratio, in percent, of the amount of height change immediately before the compressive strength test to the original height of a cylinder of sediment.



SAINT CROIX—WEST COAST

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 30-10-65

1. CRUISE NO. ST CROIX - 65
2. LATITUDE 17° 41.6' "
3. LONGITUDE 64° 57.3' "
4. SAMPLE NO. TR-5
5. DATE TAKEN (Day, month, year) 30-10-65
6. WATER DEPTH (m) 913
7. TYPE CORER KULLENBURG
8. CORE LENGTH (cm) 55
9. CORER PENETRATION (cm) 79.2

10. SUBSAMPLE DEPTH IN CORE (cm)	0-10	10-17	17-27	27-37	37-44	44-55						
11. WET UNIT WEIGHT (g/cm³)		1.67			1.68							
12. SPECIFIC GRAVITY OF SOLIDS		2.73			2.74							
13. WATER CONTENT (% dry weight)	63.40	54.35	48.75	56.83	57.88	54.04						
14. VOID RATIO		1.52			1.57							
15. SATURATED VOID RATIO		1.48			1.59							
16. POROSITY (%)		60.3			61.1							
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)		72.82			109.59							
22. COMPRESSIVE STRENGTH REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
23. COHESION REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 28-10-65

1. CRUISE NO. ST-CROIX - 65	4. SAMPLE NO. TR-6	7. TYPE CORER KULLENBURG
2. LATITUDE 17 °43.0' N	5. DATE TAKEN (Day, month, year) 5-10-65	8. CORE LENGTH (cm) 48.5
3. LONGITUDE 64 °57.6' W	6. WATER DEPTH (m) 933	9. CORER PENETRATION (cm) 61.0

10. SUBSAMPLE DEPTH IN CORE (cm)	0-5	5-12	12-22	22-29	29-39.5	39.5-48.5						
11. WET UNIT WEIGHT (g/cm³)		1.68		1.74								
12. SPECIFIC GRAVITY OF SOLIDS		2.76		2.73								
13. WATER CONTENT (% dry weight)	55.86	60.91	56.04	52.56	51.99	45.01						
14. VOID RATIO		1.65		1.40								
15. SATURATED VOID RATIO		1.68		1.43								
16. POROSITY (%)		62.2		58.4								
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)		73.53		216.35								
REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS Rapid rupture on compression Test at 5-12 cm, Therefore REMOLD not attempted. Core beyond 29 cm. same in color, lithology, and density.

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 30-10-65

1. CRUISE NO. ST CROIX - 65
2. LATITUDE 17° 43.9' N
3. LONGITUDE 64° 56.6' W
4. SAMPLE NO. TR-7
5. DATE TAKEN (Day, month, year) 4-10-65
6. WATER DEPTH (m) 977
7. TYPE CORER PVC
8. CORE LENGTH (cm) 76
9. CORER PENETRATION (cm) 121.9

10. SUBSAMPLE DEPTH IN CORE (cm)	0-10	10-17	17-27	27-37	37-44	44-54	54-64	64-71.5	71.5-76			
11. WET UNIT WEIGHT (g/cm³)		1.69			1.70			1.73				
12. SPECIFIC GRAVITY OF SOLIDS		2.73			2.73			2.73				
13. WATER CONTENT (% dry weight)	53.27	59.96	63.32	45.81	58.12	52.41	53.72	52.46	56.98			
14. VOID RATIO		1.58			1.54			1.41				
15. SATURATED VOID RATIO		1.64			1.59			1.43				
16. POROSITY (%)		61.3			60.6			58.5				
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)		142.82			214.23			291.30				
22. COMPRESSIVE STRENGTH REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
23. COHESION REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

Core appears homogeneous throughout. It is predominantly sandy silt and should give best results for Unconfined Compression Test.

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 28-10-65

1. CRUISE NO. ST. CROIX - 65
2. LATITUDE 17° 45.4' N
3. LONGITUDE 64° 58.7' W
4. SAMPLE NO. TR-9 B
5. DATE TAKEN (Day, month, year) 21-10-65
6. WATER DEPTH (m) 964
7. TYPE CORER KULLEN BURG
8. CORE LENGTH (cm) 41.5
9. CORER PENETRATION (cm) ?

10. SUBSAMPLE DEPTH IN CORE (cm)	0-9.5	9.5-16.5	16.5-23.5	23.5-33.5	33.5-41.5							
11. WET UNIT WEIGHT (g/cm³)			1.63									
12. SPECIFIC GRAVITY OF SOLIDS			2.73									
13. WATER CONTENT (% dry weight)	62.46	79.60	68.45	62.71	61.43							
14. VOID RATIO			1.82									
15. SATURATED VOID RATIO			1.87									
16. POROSITY (%)			64.6									
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)			147.77									
REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

Last 2 cm. of core consisting of mass of coral, echinoid, and sponge fragments.

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 28-10-65

1. CRUISE NO. ST CROIX - 65
2. LATITUDE 17 ° 44.2 ' ▪
3. LONGITUDE 64 ° 59.0 ' ▪
4. SAMPLE NO. TR-11 A
5. DATE TAKEN (Day, month, year) 21-10-65
6. WATER DEPTH (m) 982
7. TYPE CORER KULLENBURG
8. CORE LENGTH (cm) 33
9. CORER PENETRATION (cm) 48.8

10. SUBSAMPLE DEPTH IN CORE (cm)	0-7	7-14	14-33									
11. WET UNIT WEIGHT (g/cm^3)		1.69										
12. SPECIFIC GRAVITY OF SOLIDS		2.74										
13. WATER CONTENT (% dry weight)	59.36	57.23	54.41									
14. VOID RATIO		1.54										
15. SATURATED VOID RATIO		1.57										
16. POROSITY (%)		60.7										
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm^2)		154.84										
REMOLD (g/cm^2)												
23. COHESION NATURAL (g/cm^2)												
REMOLD (g/cm^2)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 28-10-65

1. CRUISE NO. ST. CROIX '65
2. LATITUDE 17° 41.7' N
3. LONGITUDE 64° 58.2' W
4. SAMPLE NO. TR-11 B
5. DATE TAKEN (Day, month, year) 21-10-65
6. WATER DEPTH (m) 1030
7. TYPE CORER KULLENBURG
8. CORE LENGTH (cm) 25.5
9. CORER PENETRATION (cm) ?

10. SUBSAMPLE DEPTH IN CORE (cm)	0-5	5-12	12-17.5	17.5-25.5								
11. WET UNIT WEIGHT (g/cm³)		1.73										
12. SPECIFIC GRAVITY OF SOLIDS		2.74										
13. WATER CONTENT (% dry weight)	59.31	54.32	50.37									
14. VOID RATIO		1.44										
15. SATURATED VOID RATIO		1.49										
16. POROSITY (%)		59.1										
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)		183.83										
REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

Core seems to have same texture, grain size and color throughout entire length.

17.5 – 25.5 TAKEN IN CATCHER & CUTTER – RETAINED AS JAR SAMPLE

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 27-10-65

1. CRUISE NO. ST CROIX '65
2. LATITUDE 17° 45.6' N
3. LONGITUDE 64° 56.6' W
4. SAMPLE NO. C-21
5. DATE TAKEN (Day, month, year) 5-10-65
6. WATER DEPTH (m) 1425
7. TYPE CORER KULLENBURG
8. CORE LENGTH (cm) 59.5
9. CORER PENETRATION (cm) 76.2

10. SUBSAMPLE DEPTH IN CORE (cm)	0-5	5-12	12-22	22-29	29-39	39-51	51-59.5					
11. WET UNIT WEIGHT (g/cm^3)		1.67		1.63								
12. SPECIFIC GRAVITY OF SOLIDS				2.73								
13. WATER CONTENT (% dry weight)	63.43	62.07	71.52	66.93	60.02	59.98	63.51					
14. VOID RATIO				1.79								
15. SATURATED VOID RATIO				1.83								
16. POROSITY (%)				64.2								
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm^2)		84.14		109.59								
22. COMPRESSIVE STRENGTH REMOLD (g/cm^2)												
23. COHESION NATURAL (g/cm^2)												
23. COHESION REMOLD (g/cm^2)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 27-10-65

1. CRUISE NO. ST CROIX '65
2. LATITUDE 17° 43.7' N
3. LONGITUDE 64° 57.6' W
4. SAMPLE NO. C-26
5. DATE TAKEN (Day, month, year) 5-10-65
6. WATER DEPTH (m) 960
7. TYPE CORER MULLEN BURG
8. CORE LENGTH (cm) 37.5
9. CORER PENETRATION (cm) 54.9

10. SUBSAMPLE DEPTH IN CORE (cm)	0-4	4-11	11-15	15-22	22-37.5							
11. WET UNIT WEIGHT (g/cm³)		1.63		1.74								
12. SPECIFIC GRAVITY OF SOLIDS		2.71		2.74								
13. WATER CONTENT (% dry weight)	67.14	69.54	62.68	53.55	53.62							
14. VOID RATIO		1.82		1.42								
15. SATURATED VOID RATIO		1.88		1.47								
16. POROSITY (%)		64.5		58.6								
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)				209.28								
REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY HUDDELL ROONEY EPPERT

DATE 28-10-65

1. CRUISE NO. ST CROIX '65
2. LATITUDE 17° 44.6' "
3. LONGITUDE 64° 58.2' "
4. SAMPLE NO. C-27
5. DATE TAKEN (Day, month, year) 4-10-65
6. WATER DEPTH (m) 975
7. TYPE CORER KULLENBURG
8. CORE LENGTH (cm) 24
9. CORER PENETRATION (cm) ?

10. SUBSAMPLE DEPTH IN CORE (cm)	0-5	5-15	15-24									
11. WET UNIT WEIGHT (g/cm³)												
12. SPECIFIC GRAVITY OF SOLIDS												
13. WATER CONTENT (% dry weight)	56.00	61.05	52.23									
14. VOID RATIO												
15. SATURATED VOID RATIO												
16. POROSITY (%)												
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)												
REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS Unable to run uncontined test as liner was bent in such a way as to prevent insertion of sampling cylinder

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 28-10-65

1. CRUISE NO. ST. CROIX - 65
2. LATITUDE 17° 43.6' N
3. LONGITUDE 64° 59.4' W
4. SAMPLE NO. C - 28
5. DATE TAKEN (Day, month, year) 5-10-65
6. WATER DEPTH (m) 1013
7. TYPE CORER KULLENBURG
8. CORE LENGTH (cm) 45
9. CORER PENETRATION (cm) 54.9

10. SUBSAMPLE DEPTH IN CORE (cm)	0-5	5-13.5	13.5-19.5	19.5-26.5	26.5-36.5	36.5-43.5	43.5-46					
11. WET UNIT WEIGHT (g/cm³)				1.70		1.73						
12. SPECIFIC GRAVITY OF SOLIDS				2.73		2.72						
13. WATER CONTENT (% dry weight)	61.05	47.33	50.98	56.37	59.64	52.71	50.08					
14. VOID RATIO				1.51		1.40						
15. SATURATED VOID RATIO				1.54		1.43						
16. POROSITY (%)				60.2		58.3						
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)				212.829		427.75						
22. COMPRESSIVE STRENGTH REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
23. COHESION REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

Top of core black from anaerobic bacteria.
First 7 cm. fine sand, then 8 cm coarse sand changing abruptly to fine sand again.

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY HUDDELL ROONEY EFFERT

DATE 27-10-65

1. CRUISE NO. ST. CROIX '65
2. LATITUDE 17 ° 41.0 ' "
3. LONGITUDE 64 ° 57.8 ' "
4. SAMPLE NO. C-29
5. DATE TAKEN (Day, month, year) 21-10-65
6. WATER DEPTH (m) 916
7. TYPE CORER KULLENBURG
8. CORE LENGTH (cm) 82
9. CORER PENETRATION (cm) 152.4

10. SUBSAMPLE DEPTH IN CORE (cm)	0-5	5-12	12-22	22-30	30-37	37-47	47-54	54-64	64-71	71-82		
11. WET UNIT WEIGHT (g/cm^3)		1.66			1.67		1.73		1.78			
12. SPECIFIC GRAVITY OF SOLIDS		2.72			2.73				2.73			
13. WATER CONTENT (% dry weight)	66.48	63.83	54.97	40.47	60.47	57.10	53.15	50.61	48.31	44-22		
14. VOID RATIO		1.68			1.62				1.27			
15. SATURATED VOID RATIO		1.74			1.65				1.32			
16. POROSITY (%)		62.7			61.8				56.0			
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm^2)		82.72			110.30		279.28		315.34			
REMOLD (g/cm^2)												
23. COHESION NATURAL (g/cm^2)												
REMOLD (g/cm^2)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 30-10-65

1. CRUISE NO. ST. CROIX - 65
2. LATITUDE 17° 41.2' "
3. LONGITUDE 64° 56.2' "
4. SAMPLE NO. C-30
5. DATE TAKEN (Day, month, year) 21-10-65
6. WATER DEPTH (m) 792
7. TYPE CORER KULLENBURG
8. CORE LENGTH (cm) 79.5
9. CORER PENETRATION (cm) ?

10. SUBSAMPLE DEPTH IN CORE (cm)	0-11	11-18.5	18.5-28.5	28.5-39.5	39.5-47.5	47.5-58.5	58.5-71.5	71.5-79.5				
11. WET UNIT WEIGHT (g/cm³)		1.66			1.75							
12. SPECIFIC GRAVITY OF SOLIDS		2.72			2.73							
13. WATER CONTENT (% dry weight)	67.66	62.09	58.60	60.54	50.00	53.67	56.62					
14. VOID RATIO		1.65			1.34							
15. SATURATED VOID RATIO		1.69			1.36							
16. POROSITY (%)		62.2			57.2							
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)		59.39			273.62							
22. COMPRESSIVE STRENGTH REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
23. COHESION REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

No REMOLDS - Too fluid.

Core, Taken in shallower water, predominately fine sand.

71.5 - 79.5 TAKEN IN CATCHER & CUTTER - RETAINED AS JAR SAMPLE

EXPLANATION OF COMPUTER DATA SHEET
SEDIMENT SIZE AND COMPOSITION

Results of sediment-size and -composition core analysis performed by the U. S. Naval Oceanographic Office Geological Laboratory are tabulated on Computer Data Sheet Sediment Size and Composition.

The following is an explanation of the terms employed on the Computer Data Sheet:

1. CRUISE. A number assigned to each cruise for identification purposes.

2. SAMPLE. A consecutive number applied to each core taken successively throughout the cruise.

3. LATITUDE. Expressed in degrees, minutes, and tenths of minutes.

4. LONGITUDE. Expressed in degrees, minutes, and tenths of minutes.

5. TAKEN. Date in month, day, and year that core was taken.

6. CORER TYPE. Number corresponding to sampling device code below.

1. Hydroplastic piston	6. Orange Peel
2. Hydroplastic gravity	7. Ewing
3. Kullenberg piston	8. Vibrocorer
4. Kullenberg gravity	9. Dredge
5. Phleger gravity	0. Other

7. LENGTH. Length of core recorded in centimeters as observed in the laboratory.

8. PENETRATION. Penetration of coring device recorded in centimeters as observed in the field.

9. DEPTH. The uncorrected sonic sounding recorded in meters.

10. ANALYZED. Date in month, day, and year that core was analyzed in the laboratory.

11. ID. NO. Three digit laboratory project number followed by consecutive number assigned to each subsample analyzed.

12. INTERVAL. Interval of subsample as measured in centimeters from the top of the core.

13. MM. Particle diameter size intervals based on Wentworth size grades in millimeters.

14. PER. Percent of total sample weight within the given size interval.

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

Class ranges are:	Gravel	-	coarser than 2 mm
	Sand	-	2 to 0.0625 mm
	Silt	-	0.0625 to 0.0039 mm
	Clay	-	finer than 0.0039 mm

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

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

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

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

19. 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.

$$\alpha_3 = \frac{1}{100} \sigma^{-3} \sum f (X_i - \bar{X})^3$$

20. KURTOSIS. A measure of the peakedness of the distribution. Positive values denote a "leptokurtic" distribution, or a 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.

$$\alpha_4 = \frac{1}{100} \sigma^{-4} \sum f (X_i - \bar{X})^4 - 3$$

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

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

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

24. DOM MINERAL. Dominant mineral (s) comprising the sample assemblage.

25. SEC MINERAL. Secondary mineral (s) comprising the sample assemblage.

SEDIMENT SIZE AND COMPOSITION DATA

RUISE STCR65 SAMPLE TR5 LATITUDE 17 41.6 LONGITUDE 64 57.3 TAKEN 21/10/65
ORER TYPE 4 LENGTH 55.0 PENETRATION 79.2 DEPTH 913.0 ANALYZED 30/10/65

ID. NO.	280 38	280 39	280 40	280 41		
NTERVAL	10.0- 17.0	30.0- 35.0	25.0- 30.0	37.0- 44.0		
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000	0.000	0.000	0.000		
2.0000	0.000	0.000	0.000	0.000		
1.0000	0.075	0.094	0.067	0.067		
0.5000	0.751	0.469	1.682	0.336		
0.2500	3.381	2.814	26.918	2.692		
0.1250	20.661	16.886	41.723	16.151		
0.0625	32.307	22.983	13.122	26.581		
0.0312	0.000	0.000	0.000	0.000		
0.0156	25.545	36.116	7.066	34.320		
0.0078	0.000	0.000	0.000	0.000		
0.0039	5.635	6.098	2.692	7.739		
0.0020	0.000	0.000	0.000	0.000		
0.0010	2.254	4.690	1.009	3.365		
0.0005	1.878	0.469	1.009	2.019		
0.0000-	7.513	9.381	4.711	6.729		
RAVEL	0.000	0.000	0.000	0.000		
AND	57.175	43.246	83.513	45.828		
ILT	31.180	42.214	9.758	42.059		
LAY	11.645	14.540	6.729	12.113		
EAN (MM)	0.0358	0.0256	0.1052	0.0282		
EAN (PHI)	4.8043	5.2880	3.2483	5.1494		
TAN DEV	2.6803	2.7357	2.4857	2.5900		
KEWNESS	0.6325	0.4914	1.0958	0.5225		
URTOSIS	0.8508	0.2356	4.2312	0.4973		
ACO3	91.000	0.000	0.000	93.000		
RG CARBON	0.850	0.000	0.000	0.810		
OLOR	10Y6/2	10Y6/2	10Y6/2	10Y6/2		
OM MINERAL						
EC MINERAL						

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SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65 SAMPLE TR 5 LATITUDE 17 41.6 LONGITUDE 64 57.3 TAKEN 21/10/65
CORER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 913.0 ANALYZED 19/ 1/66

ID. NO.	280 116					
INTERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.200					
1.0000	0.399					
0.5000	1.597					
0.2500	4.790					
0.1250	21.357					
0.0625	18.962					
0.0312	29.541					
0.0156	7.285					
0.0078	3.493					
0.0039	2.295					
0.0020	2.994					
0.0010	0.000					
0.0005	3.293					
0.0000-	3.792					
RAVEL	0.200					
SAND	47.106					
SILT	42.615					
CLAY	10.080					
MEAN (MM)	0.0461					
MEAN (PHI)	4.4381					
STAN DEV	2.4167					
SKEWNESS	0.6718					
KURTOSIS	1.8327					
CACO3	0.000					
ORG CARBON	0.000					
COLOR	5Y8/1					
DOM MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE STCR65	SAMPLE TR 6	LATITUDE 17 43.0	LONGITUDE 64 57.6	TAKEN 5/10/65
ORER TYPE 4	LENGTH 48.5	PENETRATION 61.0	DEPTH 933.0	ANALYZED 28/10/65

ID. NO.	280 91	280 92	280 93			
NTERVAL	5.0- 12.0	22.0- 29.0	39.5- 49.0			
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000	0.000	0.000			
2.0000	0.372	0.073	0.077			
1.0000	0.743	0.073	0.386			
0.5000	2.602	1.452	1.543			
0.2500	4.089	3.631	3.086			
0.1250	7.063	6.899	6.173			
0.0625	16.729	14.887	11.574			
0.0312	39.777	45.752	40.509			
0.0156	6.320	5.447	10.802			
0.0078	5.948	5.810	6.175			
0.0039	2.230	0.363	4.244			
0.0020	0.372	3.268	2.701			
0.0010	0.000	0.000	0.000			
0.0005	5.948	5.447	5.787			
0.0000-	7.807	6.899	6.944			
RAVEL	0.372	0.073	0.077			
AND	31.227	26.943	22.762			
ILT	54.275	57.371	61.728			
LAY	14.126	15.614	15.432			
EAN (MM)	0.0297	0.0280	0.0240			
EAN (PHI)	5.0725	5.1601	5.3827			
TAN DEV	2.7846	2.6031	2.6244			
KEWNESS	0.5162	0.6116	0.4922			
URTOSIS	0.6947	0.9247	0.5499			
ACC3	87.000	93.000	0.000			
RG CARBON	0.730	0.000	0.650			
OLOR	5Y7/2	5Y7/2	5Y7/2			
OM MINERAL						
EC MINERAL						

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SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65 SAMPLE TR6 LATITUDE 17 43.0 LONGITUDE 64 57.6 TAKEN 05/10/65
CORER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 933.0 ANALYZED 19/ 1/67

ID. NO. 280 122
INTERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.024					
1.0000	0.239					
0.5000	0.957					
0.2500	2.272					
0.1250	10.285					
0.0625	24.396					
0.0312	29.897					
0.0156	11.241					
0.0078	4.305					
0.0039	2.631					
0.0020	3.348					
0.0010	0.000					
0.0005	5.142					
0.0000-	5.262					
GRAVEL	0.024					
SAND	38.149					
SILT	48.075					
CLAY	13.753					
MEAN (MM)	0.0308					
MEAN (PHI)	5.0188					
STAN DEV	2.5098					
SKEWNESS	0.6288					
KURTOSIS	1.0560					
CACO3	0.000					
ORG CARBON	0.000					
COLOR	5Y6/1					
DOM MINERAL						
SEC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65 SAMPLE TR 7 LATITUDE 17 43.9 LONGITUDE 64 56.6 TAKEN 4/10/65
CORER TYPE 2 LENGTH 76.0 PENETRATION 121.9 DEPTH 977.0 ANALYZED 30/10/65

ID. NO.	280 24	280 25	280 26			
INTERVAL	10.0- 17.0	37.0- 44.0	64.0- 71.5			
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000	0.000	0.000			
2.0000	0.000	0.097	0.000			
1.0000	0.119	0.097	0.093			
0.5000	1.784	1.453	1.850			
0.2500	2.973	3.391	3.700			
0.1250	6.540	5.814	4.163			
0.0625	13.674	14.050	7.401			
0.0312	0.000	0.000	0.000			
0.0156	35.672	36.337	36.078			
0.0078	0.000	0.000	0.000			
0.0039	6.540	11.143	11.563			
0.0020	0.000	0.000	0.000			
0.0010	10.702	8.721	12.951			
0.0005	2.378	1.453	3.700			
0.0000-	19.620	17.442	18.501			
RAVEL	0.000	0.097	0.000			
AND	25.089	24.806	17.206			
ILT	42.212	47.481	47.641			
LAY	32.699	27.616	35.153			
EAN (MM)	0.0098	0.0109	0.0077			
EAN (PHI)	6.6700	6.5145	7.0254			
TAN DEV	3.2190	3.0867	3.0906			
KEWNESS	0.1124	0.1480	-0.0009			
URTOSIS	-1.1070	-0.8831	-0.9585			
ACO3	83.000	91.000	88.000			
RG CARBON	0.730	0.000	0.390			
OLOR	10Y6/2	5Y7/2	5Y7/2			
OM MINERAL						
EC MINERAL						

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Grab Sample TR7G

MGG09005012

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65	SAMPLETR 7	LATITUDE 17 43.9	LONGITUDE 64 56.6	TAKEN 04/10/65
CORER TYPE 6	LENGTH 0.0	PENETRATION 0.0	DEPTH 977.0	ANALYZED 19/ 1/66

ID. NO.	280 128
INTERVAL	0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.416					
1.0000	0.832					
0.5000	2.219					
0.2500	5.548					
0.1250	8.599					
0.0625	11.789					
0.0312	27.878					
0.0156	14.563					
0.0078	7.074					
0.0039	5.270					
0.0020	5.964					
0.0010	2.774					
0.0005	1.110					
0.0000-	5.964					
GRAVEL	0.416					
SAND	28.988					
SILT	54.785					
CLAY	15.811					
MEAN (MM)	0.0273					
MEAN (PHI)	5.1949					
STAN DEV	2.6577					
SKEWNESS	0.3084					
KURTOSIS	0.2982					
CACO3	0.000					
ORG CARBON	0.000					
COLOR	5Y6/1					
DOM MINERAL						
SEC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65 SAMPLE TR 8 LATITUDE 17 45.0 LONGITUDE 64 58.9 TAKEN 4/10/65
CORER TYPE 8 LENGTH 0.0 PENETRATION 0.0 DEPTH 105110 ANALYZED 19/ 1/66

ID. NO.	280 134					
INTERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.235					
1.0000	0.706					
0.5000	3.412					
0.2500	8.941					
0.1250	11.647					
0.0625	13.176					
0.0312	24.235					
0.0156	10.588					
0.0078	6.588					
0.0039	4.000					
0.0020	4.941					
0.0010	3.412					
0.0005	1.529					
0.0000-	6.588					
GRAVEL	0.235					
SAND	37.882					
SILT	45.412					
CLAY	16.471					
MEAN (MM)	0.0321					
MEAN (PHI)	4.9600					
STAN DEV	2.8547					
SKEWNESS	0.3581					
KURTOSIS	0.0180					
CACO3	87.000					
ORG CARBON	0.490					
COLOR	10YR7/4					
DOM MINERAL						
SEC MINERAL						

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SEDIMENT SIZE AND COMPOSITION DATA

UISE STCR65	SAMPLE TR 9-A	LATITUDE 17 45.4	LONGITUDE 64 58.2	TAKEN 5/10/65
RER TYPE 6	LENGTH 0.0	PENETRATION 0.0	DEPTH 977.0	ANALYZED 19/ 1/66

D. NO.	280 135					
TERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
.0000	0.000					
.0000	0.029					
.0000	0.289					
.5000	5.634					
.2500	17.336					
.1250	13.002					
.0625	12.135					
.0312	23.693					
.0156	7.223					
.0078	2.745					
.0039	3.034					
.0020	4.912					
.0010	2.023					
.0005	1.878					
.0000-	6.068					
RAVEL	0.029					
AND	48.396					
ILT	36.695					
LAY	14.880					
EAN (MM)	0.0470					
EAN (PHI)	4.4101					
TAN DEV	2.9281					
KEWNESS	0.4799					
URTOSIS	0.2549					
ACO3	88.000					
RG CARBON	0.270					
OLOR	10YR7/4					
OM MINERAL						
EC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE STCR65 SAMPLE TR9-B LATITUDE 17 45.4 LONGITUDE 64 58.7 TAKEN 21/10/65
ORER TYPE 4 LENGTH 41.5 PENETRATION 0.0 DEPTH 964.0 ANALYZED 28/10/65

ID. NO.	280 42	280 43	280 44	280 45	280 46	
NTERVAL	2.5- 7.0	7.0- 13.0	13.0- 16.5	16.5- 23.5	33.5- 39.5	
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000	0.000	0.000	0.000	0.000	
2.0000	0.134	0.571	0.154	0.093	0.463	
1.0000	0.134	1.143	0.768	0.465	0.926	
0.5000	4.016	9.714	6.144	6.041	4.630	
0.2500	9.371	14.286	12.289	11.617	12.037	
0.1250	10.040	9.714	9.985	10.223	12.500	
0.0625	13.387	12.000	11.521	9.294	10.648	
0.0312	0.000	0.000	0.000	0.000	0.000	
0.0156	30.790	25.714	25.346	31.599	25.926	
0.0078	0.000	0.000	0.000	0.000	0.000	
0.0039	10.040	8.000	9.985	10.688	9.259	
0.0020	0.000	0.000	0.000	0.000	0.000	
0.0010	4.016	3.429	4.608	3.717	5.093	
0.0005	6.693	1.143	1.536	3.717	5.093	
0.0000-	11.379	14.286	17.665	12.546	13.426	
RAVEL	0.134	0.571	0.154	0.093	0.463	
AND	36.948	46.857	40.707	37.639	40.741	
ILT	40.830	33.714	35.330	42.286	35.185	
LAY	22.088	18.857	23.810	19.981	23.611	
EAN (MM)	0.0190	0.0309	0.0201	0.0220	0.0212	
EAN (PHI)	5.7169	5.0143	5.6352	5.5074	5.5602	
TAN DEV	3.2898	3.5807	3.6160	3.3678	3.5331	
KEWNESS	0.1928	0.2686	0.1817	0.1953	0.1796	
URTOSIS	-0.8630	-0.7690	-1.0442	-0.8081	-1.0090	
ACO3	87.000	0.000	0.000	90.000	0.000	
RG CARBON	0.420	0.000	0.000	0.000	0.330	
OLOR	10YR8/2	5Y7/2	5Y7/2	5Y7/2	5Y7/2	
OM MINERAL						
EC MINERAL						

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SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STGR65	SAMPLE TR 9 -B	LATITUDE 17 45.4	LONGITUDE 64 58.7	TAKEN 21/10/65
CORER TYPE 6	LENGTH 0.0	PENETRATION 0.0	DEPTH 964.0	ANALYZED 19/01/66

ID. NO.	280 120
INTERVAL	0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.091					
1.0000	0.455					
0.5000	2.821					
0.2500	7.188					
0.1250	8.553					
0.0625	10.737					
0.0312	34.486					
0.0156	7.643					
0.0078	4.823					
0.0039	3.913					
0.0020	3.276					
0.0010	0.000					
0.0005	9.281					
0.0000-	6.733					
GRAVEL	0.091					
SAND	29.754					
SILT	50.864					
CLAY	19.290					
MEAN (MM)	0.0251					
MEAN (PHI)	5.3144					
STAN DEV	2.9694					
SKEWNESS	0.3701					
KURTOSIS	-0.2460					
CACO3	0.000					
ORG CARBON	0.000					
COLOR	10YR5/4					
DOM MINERAL						
SEC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65 SAMPLETR10 LATITUDE 17 43.4 LONGITUDE 64 58.8 TAKEN 5/10/65
CORER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 991.0 ANALYZED 19/ 1/66

ID. NO.	280 118					
INTERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.027					
1.0000	0.266					
0.5000	3.195					
0.2500	7.055					
0.1250	11.715					
0.0625	14.643					
0.0312	26.491					
0.0156	8.919					
0.0078	5.192					
0.0039	3.860					
0.0020	3.994					
0.0010	0.000					
0.0005	7.987					
0.0000-	6.656					
GRAVEL	0.027					
SAND	36.874					
SILT	44.462					
CLAY	18.637					
MEAN (MM)	0.0276					
MEAN (PHI)	5.1786					
STAN DEV	2.9660					
SKEWNESS	0.3936					
KURTOSIS	-0.2192					
CACO3	89.000					
ORG CARBON	0.450					
COLOR	5Y8/1					
DOM MINERAL						
SEC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

:RUISE STCR65 SAMPLE TR11-A LATITUDE 17 44.2 LONGITUDE 64 59.0 TAKEN 21/10/65
:ORER TYPE 4 LENGTH 33.0 PENETRATION 48.8 DEPTH 982.0 ANALYZED 28/10/65

:ID. NO.	280 47	280 48				
NTERVAL	7.0- 14.0	20.0- 31.0				
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000	0.000				
2.0000	0.480	0.000				
1.0000	0.096	0.085				
0.5000	2.402	2.540				
0.2500	4.803	6.774				
0.1250	5.764	5.504				
0.0625	11.047	7.621				
0.0312	0.000	0.000				
0.0156	33.622	34.716				
0.0078	0.000	0.000				
0.0039	10.086	11.854				
0.0020	0.000	0.000				
0.0010	8.165	8.891				
0.0005	5.764	5.080				
0.0000-	17.771	16.935				
RAVEL	0.480	0.000				
AND	24.111	22.523				
ILT	43.708	46.571				
LAY	31.700	30.906				
EAN (MM)	0.0100	0.0100				
EAN (PHI)	6.6374	6.6423				
TAN DEV	3.2946	3.2416				
KEWNESS	0.0388	0.0335				
URTOSIS	-0.9960	-0.9941				
ACO3	84.000	0.000				
RG CARBON	0.510	0.350				
OLOR	5Y7/2	5Y7/2				
OM MINERAL						
EC MINERAL						

XERO COPY

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65	SAMPLE TR11-A	LATITUDE 17 44.2	LONGITUDE 64 59.0	TAKEN 21/10/65
CORER TYPE 6	LENGTH 0.0	PENETRATION 0.0	DEPTH 982.0	ANALYZED 19/ 1/66

ID. NO.	280 115
INTERVAL	0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.000					
1.0000	0.140					
0.5000	1.399					
0.2500	3.916					
0.1250	9.371					
0.0625	10.769					
0.0312	39.021					
0.0156	9.790					
0.0078	4.615					
0.0039	2.937					
0.0020	4.196					
0.0010	0.000					
0.0005	6.993					
0.0000-	6.853					
GRAVEL	0.000					
SAND	25.594					
SILT	56.364					
CLAY	18.042					
MEAN (MM)	0.0242					
MEAN (PHI)	5.3699					
STAN. DEV	2.7259					
SKEWNESS	0.4819					
KURTOSIS	0.1896					
CACO3	0.000					
ORG CARBON	0.000					
COLOR	10YR7/4					
DOM MINERAL						
SEC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

UISE STCR65 SAMPLE TR11-B LATITUDE 17 41.7 LONGITUDE 64 58.2 TAKEN 21/10/65
RER TYPE 4 LENGTH 25.5 PENETRATION 13.3 DEPTH 1030.0 ANALYZED 28/10/65

D. NO.	280 82	280 83	280 145			
TERVAL	0.0- 5.0	5.0- 12.0	17.5- 25.5			
MM	PER	PER	PER	PER	PER	PER
.0000	0.000	0.000	0.000			
.0000	0.101	0.000	0.800			
.0000	0.505	0.118	0.533			
.5000	1.009	1.182	1.867			
.2500	4.036	5.319	6.800			
.1250	19.173	21.868	15.067			
.0625	23.713	36.052	17.867			
.0312	36.831	10.047	25.600			
.0156	2.523	7.092	10.000			
.0078	2.523	0.591	5.333			
.0039	0.505	1.182	4.533			
.0020	0.505	4.137	4.667			
.0010	0.000	0.000	2.400			
.0005	1.009	3.546	1.067			
.0000-	7.568	8.865	3.467			
AVEL	0.101	0.000	0.800			
ND	48.436	64.539	42.133			
LT	42.381	18.913	45.467			
AY	9.082	16.548	11.600			
AN (MM)	0.0478	0.0411	0.0406			
AN (PHI)	4.3880	4.6064	4.6227			
AN DEV	2.4500	2.8991	2.4998			
EWNESS	0.9008	0.6981	0.4121			
RTOSIS	3.1560	0.7855	0.7729			
CO3	0.000	92.000	90.000			
G CARBON	0.770	0.690	0.580			
LOR	5Y7/2	5Y7/2	5Y6/1			
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65 SAMPLE TR 11-B LATITUDE 17 41.7 LONGITUDE 64 58.2 TAKEN 21/10/65
CORER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 1030.0 ANALYZED 19/ 1/66

ID. NO. 280 121
INTERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
4.0000	1.131					
2.0000	1.131					
1.0000	2.100					
0.5000	5.008					
0.2500	8.562					
0.1250	16.317					
0.0625	15.186					
0.0312	28.110					
0.0156	7.431					
0.0078	3.231					
0.0039	2.746					
0.0020	2.100					
0.0010	0.000					
0.0005	3.069					
0.0000-	3.877					
GRAVEL	2.262					
SAND	47.173					
SILT	41.519					
CLAY	9.047					
MEAN (MM)	0.0594					
MEAN (PHI)	4.0735					
STAN DEV	2.7336					
SKEWNESS	0.4039					
KURTOSIS	1.1308					
CACO3	0.000					
ORG CARBON	0.000					
COLOR	5Y6/1					
DOM MINERAL						
SEC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65 SAMPLE C19-A LATITUDE 17 46.0 LONGITUDE 64 58.8 TAKEN 4/10/65
CORER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 914.0 ANALYZED 19/ 1/66

ID. NO. 280 127
INTERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.146					
1.0000	0.582					
0.5000	6.696					
0.2500	16.739					
0.1250	14.702					
0.0625	10.335					
0.0312	24.017					
0.0156	8.443					
0.0078	3.202					
0.0039	2.183					
0.0020	3.493					
0.0010	3.493					
0.0005	0.582					
0.0000-	5.386					
GRAVEL	0.146					
SAND	49.054					
SILT	37.846					
CLAY	12.955					
MEAN (MM)	0.0531					
MEAN (PHI)	4.2351					
STAN DEV	2.8438					
SKEWNESS	0.4912					
KURTOSIS	0.5017					
CACO3	89.000					
ORG CARBON	0.380					
COLOR	10YR7/4					
DOM MINERAL						
SEC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65 SAMPLE C 19-B LATITUDE 17 45.9 LONGITUDE 64 58.8 TAKEN 4/10/65
CORER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 914.0 ANALYZED 19/ 1/68

ID. NO.	280 126					
INTERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.172					
1.0000	0.517					
0.5000	6.379					
0.2500	15.345					
0.1250	14.483					
0.0625	13.448					
0.0312	19.828					
0.0156	9.310					
0.0078	3.621					
0.0039	3.276					
0.0020	3.966					
0.0010	2.414					
0.0005	1.897					
0.0000-	5.345					
GRAVEL	0.172					
SAND	50.172					
SILT	36.034					
CLAY	13.621					
MEAN (MM)	0.0489					
MEAN (PHI)	4.3552					
STAN DEV	2.8911					
SKEWNESS	0.4627					
KURTOSIS	0.2896					
CACO3	89.000					
ORG CARBON	0.330					
COLOR	10YR5/4					
DOM MINERAL						
SEC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65	SAMPLE C 21	LATITUDE 17 45.6	LONGITUDE 64 56.6	TAKEN 5/10/65
CORER TYPE 4	LENGTH 59.5	PENETRATION 76.2	DEPTH 1425.0	ANALYZED 27/10/65

ID. NO.	280 72	280 73	280 74			
NTERVAL	5.0- 12.0	22.0- 29.0	51.0- 59.5			
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000	0.000	0.000			
2.0000	0.086	0.096	0.078			
1.0000	0.086	0.478	0.392			
0.5000	2.142	3.824	3.527			
0.2500	5.570	7.170	6.270			
0.1250	6.855	7.170	5.486			
0.0625	12.853	9.082	5.486			
0.0312	0.000	0.000	0.000			
0.0156	11.140	37.285	33.699			
0.0078	0.000	0.000	0.000			
0.0039	35.133	9.082	12.147			
0.0020	0.000	0.000	0.000			
0.0010	8.997	8.604	8.621			
0.0005	3.856	2.390	6.270			
0.0000-	13.282	14.818	18.025			
RAVEL	0.086	0.096	0.078			
AND	27.506	27.725	21.160			
ILT	46.272	46.367	45.846			
LAY	26.135	25.813	32.915			
EAN (MM)	0.0093	0.0143	0.0093			
EAN (PHI)	6.7485	6.1243	6.7524			
TAN DEV	3.1084	3.2578	3.3363			
KEWNESS	-0.0941	0.1117	-0.0265			
URTOSIS	-0.8726	-0.8334	-0.9844			
ACO3	0.000	91.000	84.000			
RG CARBON	0.000	0.000	0.350			
OLOR	5Y7/2	5Y7/2	5Y7/2			
OM MINERAL						
EC MINERAL						

XERO COPY
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SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65	SAMPLE C 21	LATITUDE 17 45.6	LONGITUDE 64 56.6	TAKEN 05/10/65
CORER TYPE 6	LENGTH 0.0	PENETRATION 0.0	DEPTH 1425.0	ANALYZED 19/ 1/66

ID. NO.	280 133						
INTERVAL	0.0- 0.0						
MM	PER	PER	PER	PER	PER	PER	
4.0000	0.000						
2.0000	0.143						
1.0000	0.430						
0.5000	3.300						
0.2500	6.313						
0.1250	8.752						
0.0625	15.782						
0.0312	22.669						
0.0156	13.486						
0.0078	6.169						
0.0039	4.735						
0.0020	5.739						
0.0010	3.874						
0.0005	1.865						
0.0000-	6.743						
GRAVEL	0.143						
SAND	34.577						
SILT	47.059						
CLAY	18.221						
MEAN (MM)	0.0268						
MEAN (PHI)	5.2231						
STAN. DEV	2.8125						
SKEWNESS	0.3265						
KURTOSIS	-0.0868						
CACO3	0.000						
ORG CARBON	0.000						
COLOR	10YR7/4						
DOM MINERAL							
SEC MINERAL							

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65	SAMPLE C22	LATITUDE 17 44.4	LONGITUDE 64 56.4	TAKEN 04/10/65
CORER TYPE 6	LENGTH 0.0	PENETRATION 0.0	DEPTH 1024.0	ANALYZED 19/ 1/66

ID. NO.	280 130						
INTERVAL	0.0- 0.0						
MM	PER	PER	PER	PER	PER	PER	PER
4.0000	0.000						
2.0000	0.289						
1.0000	1.013						
0.5000	2.605						
0.2500	4.920						
0.1250	8.538						
0.0625	14.472						
0.0312	20.116						
0.0156	15.051						
0.0078	5.933						
0.0039	7.236						
0.0020	6.512						
0.0010	3.618						
0.0005	2.315						
0.0000-	7.381						
GRAVEL	0.289						
SAND	31.548						
SILT	48.336						
CLAY	19.826						
MEAN (MM)	0.0229						
MEAN (PHI)	5.4479						
STAN DEV	2.8706						
SKEWNESS	0.2454						
KURTOSIS	-0.2599						
CACO3	0.000						
ORG CARBON	0.000						
COLOR	10YR7/4						
DOM MINERAL							
SEC MINERAL							

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65 SAMPLE C 23 LATITUDE 17 44.4 LONGITUDE 64 57.4 TAKEN 04/10/65
CORER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 1086.0 ANALYZED 19/ 1/66

ID. NO.	280 132					
INTERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	1.248					
1.0000	3.455					
0.5000	14.395					
0.2500	16.507					
0.1250	10.173					
0.0625	13.148					
0.0312	14.779					
0.0156	9.021					
0.0078	4.798					
0.0039	3.935					
0.0020	2.303					
0.0010	1.440					
0.0005	0.768					
0.0000-	4.031					
GRAVEL	1.248					
SAND	57.678					
SILT	32.534					
CLAY	8.541					
MEAN (MM)	0.0800					
MEAN (PHI)	3.6430					
STAN DEV	2.9192					
SKEWNESS	0.4281					
KURTOSIS	0.4240					
CACO3	89.000					
ORG CARBON	0.360					
COLOR	10YR7/4					
DOM MINERAL						
SEC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE STCR65	SAMPLE C25	LATITUDE 17 43.7	LONGITUDE 64 57.3	TAKEN 4/10/65
ORER TYPE 6	LENGTH 0.0	PENETRATION 0.0	DEPTH 994.0	ANALYZED 19/ 1/66

ID. NO.	280 131
NTERVAL	0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.098					
1.0000	0.098					
0.5000	0.983					
0.2500	2.950					
0.1250	4.425					
0.0625	11.308					
0.0312	29.990					
0.0156	16.224					
0.0078	8.850					
0.0039	5.900					
0.0020	7.375					
0.0010	2.950					
0.0005	1.967					
0.0000-	6.883					
GRAVEL	0.098					
SAND	19.764					
SILT	60.964					
CLAY	19.174					
MEAN (MM)	0.0190					
MEAN (PHI)	5.7183					
STAN DEV	2.5167					
SKEWNESS	0.3622					
KURTOSIS	0.1664					
CACO3	88.000					
ORG CARBON	0.760					
COLOR	5Y6/1					
DOM MINERAL						
SEC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65 SAMPLE C 26 LATITUDE 17 43.7 LONGITUDE 64 57.6 TAKEN 5/10/65
CORER TYPE 4 LENGTH 37.5 PENETRATION 54.9 DEPTH 960.0 ANALYZED 27/10/65

ID. NO.	280 68	280 69	280 70	280 71		
INTERVAL	0.0- 4.0	4.0- 11.0	15.0- 22.0	22.0- 37.5		
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000	0.000	0.000	0.000		
2.0000	0.136	0.117	0.098	0.083		
1.0000	0.679	0.584	0.098	0.413		
0.5000	5.435	4.089	3.933	3.303		
0.2500	7.473	6.425	8.358	7.019		
0.1250	10.870	7.593	7.866	11.974		
0.0625	15.625	14.603	10.324	18.580		
0.0312	0.000	0.000	0.000	0.000		
0.0156	32.609	34.463	39.331	33.031		
0.0078	0.000	0.000	0.000	0.000		
0.0039	10.190	10.514	7.375	7.019		
0.0020	0.000	0.000	0.000	0.000		
0.0010	4.076	5.257	4.425	6.606		
0.0005	1.359	0.584	3.933	3.716		
0.0000-	11.549	15.771	14.258	8.258		
RAVEL	0.136	0.117	0.098	0.083		
AND	40.082	33.294	30.580	41.288		
ILT	42.799	44.977	46.706	40.050		
LAY	16.984	21.612	22.616	18.580		
EAN (MM)	0.0242	0.0171	0.0169	0.0240		
EAN (PHI)	5.3682	5.8715	5.8904	5.3786		
TAN DEV	3.1636	3.2454	3.2391	3.0304		
KEWNESS	0.2581	0.1919	0.1917	0.2894		
URTOSIS	-0.4640	-0.6959	-0.7344	-0.4654		
ACO3	89.000	86.000	92.000	89.000		
RG CARBON	0.520	0.000	0.000	0.400		
OLOR	5Y7/2	5Y7/2	5Y7/2	5Y8/4		
OM MINERAL						
EC MINERAL						

XERO COPY
XERO COPY
XERO COPY

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65 SAMPLE C26 LATITUDE 17 43.7 LONGITUDE 64 57.6 TAKEN 05/10/65
CORER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 960.0 ANALYZED 19/ 1/68

ID. NO.	280 125					
INTERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.118					
1.0000	0.355					
0.5000	2.837					
0.2500	7.565					
0.1250	13.948					
0.0625	15.603					
0.0312	22.104					
0.0156	11.466					
0.0078	5.674					
0.0039	3.546					
0.0020	5.910					
0.0010	2.837					
0.0005	1.773					
0.0000-	6.265					
GRAVEL	0.118					
SAND	40.307					
SILT	42.790					
CLAY	16.785					
MEAN (MM)	0.0322					
MEAN (PHI)	4.9574					
STAN DEV	2.7918					
SKEWNESS	0.4035					
KURTOSIS	0.0873					
CACO3	0.000					
ORG CARBON	0.000					
COLOR	5Y6/1					
DOM MINERAL						
SEC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65 SAMPLE C 27 LATITUDE 17 44.6 LONGITUDE 64 58.2 TAKEN 5/10/65
CORER TYPE 4 LENGTH 24.0 PENETRATION 0.0 DEPTH 978.0 ANALYZED 28/10/65

ID. NO.	280 89	280 90				
INTERVAL	0.0- 5.0	5.0- 15.0				
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000	0.000				
2.0000	0.068	0.000				
1.0000	0.342	0.069				
0.5000	2.738	2.766				
0.2500	4.791	5.187				
0.1250	7.871	5.878				
0.0625	11.978	6.916				
0.0312	43.806	49.447				
0.0156	6.502	5.533				
0.0078	3.765	4.149				
0.0039	2.053	1.037				
0.0020	3.765	2.766				
0.0010	0.000	0.000				
0.0005	5.133	6.570				
0.0000-	7.187	9.682				
RAVEL	0.068	0.000				
AND	27.721	20.816				
ILT	56.126	60.166				
LAY	16.085	19.018				
EAN (MM)	0.0289	0.0238				
EAN (PHI)	5.1119	5.3956				
TAN DEV	2.7225	2.8802				
KEWNESS	0.5171	0.4821				
URTOSIS	0.6110	0.1372				
ACO3	0.000	0.000				
RG CARBON	0.570	0.400				
OLOR	5Y7/2	5Y7/2				
OM MINERAL						
EC MINERAL						

XERO COPY

SEDIMENT SIZE AND COMPOSITION DATA

UISE STCR65	SAMPLE C 27	LATITUDE 17 44.6	LONGITUDE 64 58.2	TAKEN 05/10/65
RER TYPE 6	LENGTH 0.0	PENETRATION 0.0	DEPTH 978.0	ANALYZED 19/ 1/66

D. NO.	280 129					
TERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
0000	0.000					
0000	0.108					
0000	0.432					
5000	3.240					
2500	6.479					
1250	10.907					
0625	15.551					
0312	22.786					
0156	11.663					
0078	6.479					
0039	4.752					
0020	5.292					
0010	3.888					
0005	3.132					
0000-	5.292					
AVEL	0.108					
ND	36.609					
LT	45.680					
AY	17.603					
AN (MM)	0.0286					
AN (PHI)	5.1274					
AN DEV	2.7909					
EWNESS	0.3348					
RTOSIS	-0.1188					
CO3	0.000					
G CARBON	0.000					
LOR	5Y8/1					
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

UISE STCR65	SAMPLE C28	LATITUDE 17 43.6	LONGITUDE 64 59.4	TAKEN 5/10/65
RER TYPE 4	LENGTH 45.0	PENETRATION 54.9	DEPTH 1013.0	ANALYZED 28/10/65

D. NO.	280 84	280 85	280 86	280 87	280 88	
TERVAL	0.0- 5.0	7.0- 15.0	15.0- 19.5	19.5- 26.5	36.5- 43.5	
MM	PER	PER	PER	PER	PER	PER
10000	0.000	0.000	0.000	0.000	0.000	
0000	0.123	0.084	0.000	0.068	0.111	
0000	0.617	0.422	0.099	0.339	0.111	
5000	2.466	12.226	0.994	2.371	2.772	
.2500	4.932	45.953	2.982	5.759	7.761	
.1250	11.097	21.922	4.970	6.436	6.652	
.0625	15.413	5.059	12.425	8.130	8.869	
.0312	33.909	7.167	45.229	37.602	27.716	
.0156	5.549	1.686	3.976	10.163	3.326	
.0078	4.316	0.422	3.479	3.726	3.880	
.0039	1.850	0.422	1.491	3.388	3.880	
.0020	1.850	0.422	4.473	2.033	2.217	
.0010	0.000	0.000	0.000	0.000	0.000	
.0005	8.015	0.422	7.952	8.808	14.967	
.0000-	9.864	3.794	11.928	11.179	17.738	
AVEL	0.123	0.084	0.000	0.068	0.111	
ND	34.525	85.582	21.471	23.035	26.164	
LT	45.623	9.696	54.175	54.878	38.803	
AY	19.729	4.637	24.354	22.019	34.922	
AN (MM)	0.0257	0.1814	0.0181	0.0196	0.0120	
AN (PHI)	5.2818	2.4629	5.7873	5.6714	6.3780	
AN DEV	3.0714	2.2706	2.9757	3.0826	3.6069	
EWNESS	0.4427	1.3489	0.4414	0.3542	0.1193	
RTOSIS	-0.1902	7.7417	-0.4662	-0.4684	-1.3812	
CO3	0.000	0.000	0.000	88.000	90.000	
G CARBON	0.540	0.000	0.000	0.000	0.400	
LOR	5Y7/2	5Y7/2	5Y7/2	5Y7/2	5Y7/2	
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65 SAMPLE C28 LATITUDE 17 43.6 LONGITUDE 64 59.4 TAKEN 05/10/65
CORER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 1013.0 ANALYZED 19/ 1/66

ID. NO. 280 124
INTERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.101					
1.0000	0.402					
0.5000	2.616					
0.2500	4.527					
0.1250	10.060					
0.0625	14.688					
0.0312	23.541					
0.0156	13.179					
0.0078	5.835					
0.0039	3.823					
0.0020	3.521					
0.0010	0.000					
0.0005	8.149					
0.0000-	9.557					
GRAVEL	0.101					
SAND	32.294					
SILT	46.378					
CLAY	21.227					
MEAN (MM)	0.0214					
MEAN (PHI)	5.5473					
STAN DEV	3.0503					
SKEWNESS	0.3404					
KURTOSIS	-0.4512					
CACO3	0.000					
ORG CARBON	0.000					
COLOR	10YR7/4					
DOM MINERAL						
SEC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

UISE STCR65 — SAMPLE C 29 — LATITUDE 17 41.0 — LONGITUDE 64 57.8 — TAKEN 21/10/65
RER TYPE 4 — LENGTH 2.0 — PENETRATION 152.4 — DEPTH 916.0 — ANALYZED 27/10/65

D. NO.	280 75	280 76	280 77	280 78	280 79	280 80
TERVAL	5.0- 12.0	17.5- 22.0	28.0- 30.0	30.0- 37.0	47.0- 54.0	64.0- 71.0
MM	PER	PER	PER	PER	PER	PER
.0000	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	0.000	0.000	0.093	0.000	0.090
.0000	0.084	1.316	0.136	0.093	0.078	0.448
.5000	0.836	7.895	0.679	0.933	1.166	1.344
.2500	1.672	18.421	2.038	2.799	2.722	2.688
.1250	5.853	21.491	6.114	6.530	8.165	6.720
.0625	15.468	10.088	13.587	13.993	12.053	14.785
.0312	0.000	0.000	0.000	0.000	0.000	0.000
.0156	38.880	20.614	38.723	37.313	45.101	40.771
.0078	0.000	0.000	0.000	0.000	0.000	0.000
.0039	11.706	5.702	8.832	8.862	10.109	12.993
.0020	0.000	0.000	0.000	0.000	0.000	0.000
.0010	10.452	3.070	9.511	13.526	7.776	6.720
.0005	2.090	1.316	6.793	1.866	2.722	1.792
.0000-	12.960	10.088	13.587	13.993	10.109	11.649
RAVEL	0.000	0.000	0.000	0.093	0.000	0.090
AND	23.913	59.211	22.554	24.347	24.184	25.986
ILT	50.585	26.316	47.554	46.175	55.210	53.763
LAY	25.502	14.474	29.891	29.384	20.607	20.161
EAN (MM)	0.0116	0.0490	0.0101	0.0110	0.0146	0.0145
EAN (PHI)	6.4356	4.3509	6.6332	6.5047	6.0980	6.1120
TAN DEV	2.8470	3.3304	2.9697	2.9867	2.7536	2.8336
KEWNESS	0.2069	0.4670	0.1530	0.1439	0.2555	0.2221
URTOSIS	-0.7414	-0.1616	-0.9849	-0.9012	-0.3662	-0.3723
ACO3	90.000	0.000	0.000	81.000	93.000	94.000
RG CARBON	0.870	0.000	0.000	0.000	0.000	0.000
OLOR	5Y7/2	5Y7/2	5Y7/2	5Y7/2	5Y7/2	5Y7/2
GM MINERAL						
EC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE STCR65 SAMPLE C 29 LATITUDE 17 41.0 LONGITUDE 64 57.8 TAKEN 21/10/65
ORER TYPE 4 LENGTH 82.0 PENETRATION 152.4 DEPTH 916.0 ANALYZED 27/10/65

ID. NO. 280 81
NTERVAL 71.0- 82.0

MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.096					
1.0000	0.480					
0.5000	1.921					
0.2500	6.244					
0.1250	12.008					
0.0625	12.968					
0.0312	20.653					
0.0156	13.449					
0.0078	6.724					
0.0039	3.362					
0.0020	4.323					
0.0010	0.000					
0.0005	6.724					
0.0000-	11.047					
RAVEL	0.096					
AND	33.622					
ILT	44.188					
LAY	22.094					
EAN (MM)	0.0213					
EAN (PHI)	5.5557					
TAN DEV	3.1227					
EWNESS	0.3267					
RTOSIS	-0.5490					
CO3	0.000					
G CARBON	0.710					
LOR	5Y7/2					
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65 SAMPLE C29 LATITUDE 17 41.0 LONGITUDE 64 57.8 TAKEN 21/10/65
CORER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 916.0 ANALYZED 19/ 1/6

ID. NO. 280 119
INTERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.026					
1.0000	0.131					
0.5000	1.309					
0.2500	1.832					
0.1250	7.459					
0.0625	13.478					
0.0312	30.097					
0.0156	16.357					
0.0078	6.150					
0.0039	4.187					
0.0020	5.627					
0.0010	0.000					
0.0005	6.935					
0.0000-	6.412					
GRAVEL	0.026					
SAND	24.208					
SILT	56.791					
CLAY	18.974					
MEAN (MM)	0.0206					
MEAN (PHI)	5.6029					
STAN DEV	2.6379					
SKEWNESS	0.4281					
KURTOSIS	0.0663					
CACO3	0.000					
ORG CARBON	0.000					
COLOR	5Y6/1					
DOM MINERAL						
SEC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65 SAMPLE C 30 LATITUDE 17 41.2 LONGITUDE 64 58.2 TAKEN 21/10/65
CORER TYPE 4 LENGTH 79.5 PENETRATION 0.0 DEPTH 792.0 ANALYZED 30/10/65

ID. NO.	280 27	280 28	280 29	280 142		
INTERVAL	11.0- 18.5	39.5- 47.5	66.5- 71.0	71.5- 79.5		
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000	0.000	0.000	0.000		
2.0000	0.079	0.000	0.106	0.945		
1.0000	0.079	0.096	0.106	0.590		
0.5000	1.572	0.478	1.592	2.715		
0.2500	9.434	10.516	5.839	13.341		
0.1250	22.799	37.763	13.270	26.919		
0.0625	18.475	28.203	23.355	21.251		
0.0312	0.000	0.000	0.000	16.293		
0.0156	27.516	10.038	35.032	5.785		
0.0078	0.000	0.000	0.000	2.952		
0.0039	7.075	2.868	7.962	2.479		
0.0020	0.000	0.000	0.000	2.243		
0.0010	3.145	2.868	1.062	0.826		
0.0005	1.572	0.478	1.062	0.354		
0.0000-	8.255	6.692	10.616	3.306		
RAVEL	0.079	0.000	0.106	0.945		
AND	52.358	77.055	44.161	64.817		
ILT	34.591	12.906	42.994	27.509		
LAY	12.972	10.038	12.739	6.730		
EAN (MM)	0.0354	0.0647	0.0272	0.0754		
EAN (PHI)	4.8215	3.9503	5.1996	3.7290		
TAN DEV	2.9070	2.6578	2.8348	2.3515		
KEWNESS	0.4847	0.8973	0.4626	0.7062		
URTOSIS	0.1541	2.3121	0.2878	2.5927		
ACO3	92.000	92.000	0.000	90.000		
RG CARBON	0.940	0.000	1.020	0.870		
OLOR	5Y7/2	5Y7/2	5Y7/2	5Y6/1		
OM MINERAL						
EC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65 SAMPLE C 30 LATITUDE 17 41.2 LONGITUDE 64 56.2 TAKEN 21/10/65
CORER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 792.0 ANALYZED 19/ 1/66

ID. NO. 280 117
INTERVAL 0.0- 0.0

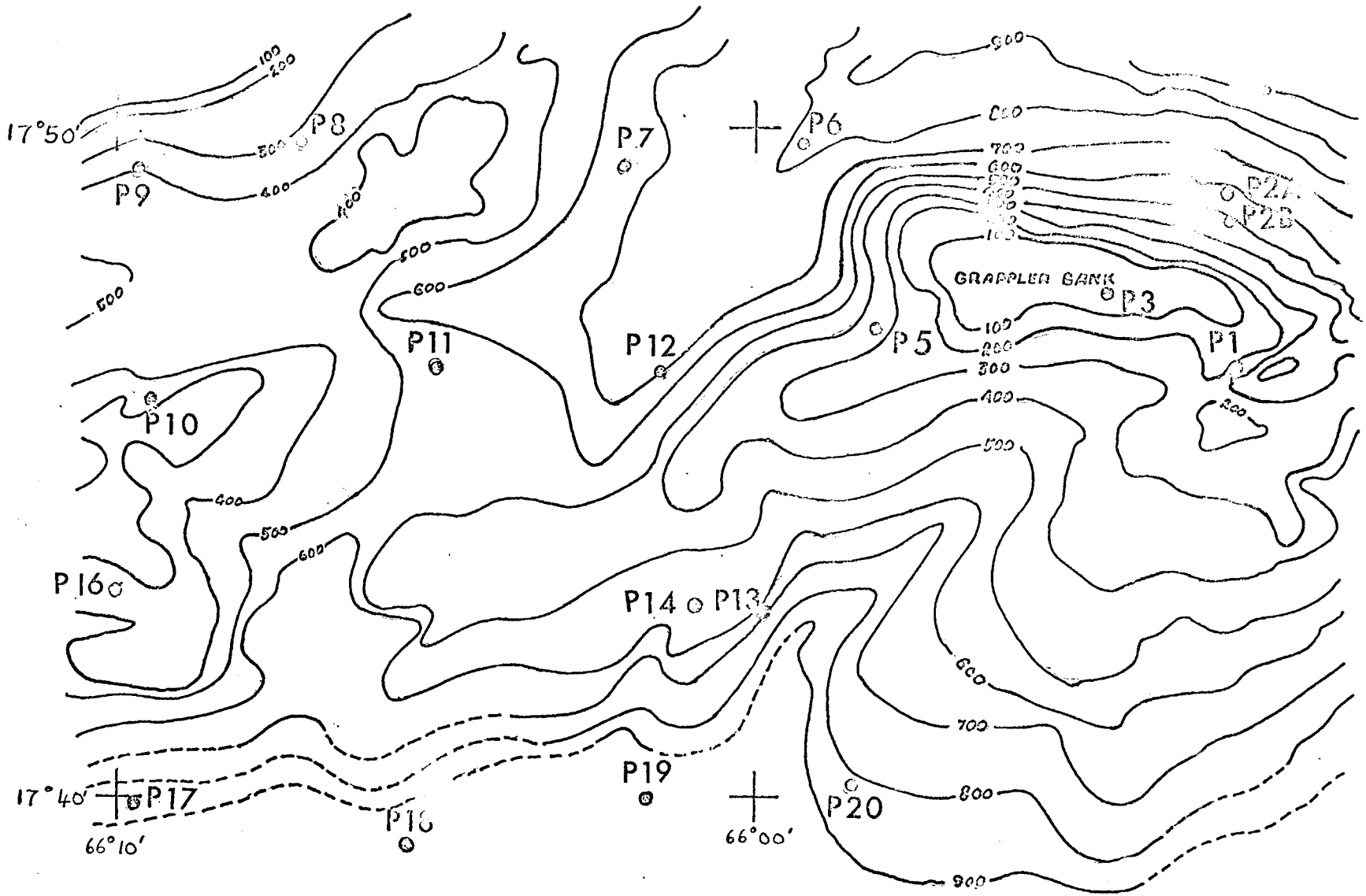
MM	PER	PER	PER	PER	PER	PER
4.0000	0.649					
2.0000	0.108					
1.0000	0.757					
0.5000	1.622					
0.2500	4.649					
0.1250	15.568					
0.0625	5.405					
0.0312	41.730					
0.0156	8.649					
0.0078	4.432					
0.0039	3.676					
0.0020	3.676					
0.0010	0.000					
0.0005	4.108					
0.0000-	4.973					
GRAVEL	0.757					
SAND	28.000					
SILT	58.486					
CLAY	12.757					
MEAN (MM)	0.0343					
MEAN (PHI)	4.8676					
STAN DEV	2.6199					
SKEWNESS	0.4258					
KURTOSIS	0.9497					
CACO3	0.000					
ORG CARBON	0.000					
COLOR	5GY6/1					
DOM MINERAL						
SEC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE STCR65 SAMPLE C 31 LATITUDE 17 41.7 LONGITUDE 64 59.4 TAKEN 5/10/65
CORER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 1116.0 ANALYZED 19/ 1/66

ID. NO. 280 123
INTERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.030					
1.0000	0.149					
0.5000	0.448					
0.2500	1.793					
0.1250	11.955					
0.0625	21.668					
0.0312	36.013					
0.0156	9.414					
0.0078	4.035					
0.0039	2.241					
0.0020	2.391					
0.0010	0.000					
0.0005	4.782					
0.0000-	5.081					
GRAVEL	0.030					
SAND	36.013					
SILT	51.704					
CLAY	12.253					
MEAN (MM)	0.0325					
MEAN (PHI)	4.9435					
STAN DEV	2.4146					
SKEWNESS	0.7199					
KURTOSIS	1.5824					
CACO3	92.000					
ORG CARBON	0.620					
COLOR	10YR7/4					
DOM MINERAL						
SEC MINERAL						



GRAPPLER BANK AREA—PUERTO RICO

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 30-10-65

1. CRUISE NO. PUERTO RICO - 65
2. LATITUDE 17° 48.6' N
3. LONGITUDE 65° 52.5' W
4. SAMPLE NO. P-2B
5. DATE TAKEN (Day, month, year) 23-10-65
6. WATER DEPTH (m) 969
7. TYPE CORER KULLENBERG
8. CORE LENGTH (cm) 57.5
9. CORER PENETRATION (cm) 79

10. SUBSAMPLE DEPTH IN CORE (cm)	0-10	10-17.5	17.5-27.5	27.5-37.5	37.5-47.5	47.5-57.5						
11. WET UNIT WEIGHT (g/cm³)		1.66				1.75						
12. SPECIFIC GRAVITY OF SOLIDS		2.69				2.71						
13. WATER CONTENT (% dry weight)	79.40	55.86	48.79	49.46	64.30	43.18						
14. VOID RATIO		1.53				1.22						
15. SATURATED VOID RATIO		1.50				1.17						
16. POROSITY (%)		60.5				54.9						
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)		364.83				371.90						
REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 29-10-65

1. CRUISE NO. PUERTO RICO - 65
2. LATITUDE 17° 47.0' "
3. LONGITUDE 65° 58.1' "
4. SAMPLE NO. P-5
5. DATE TAKEN (Day, month, year) 23-10-65
6. WATER DEPTH (m) 786
7. TYPE CORER KULLENBERG
8. CORE LENGTH (cm) 106
9. CORER PENETRATION (cm) 137

10. SUBSAMPLE DEPTH IN CORE (cm)	0-10	10-17	17-27	27-37	37-47	47-57	57-67	67-75	75-82	82-94	94-106
11. WET UNIT WEIGHT (g/cm³)		1.60							1.69		
12. SPECIFIC GRAVITY OF SOLIDS		2.71							2.67		
13. WATER CONTENT (% dry weight)	79.23	69.55	59.83	49.58	51.22	58.88	57.91	61.56	59.75	66.75	54.60
14. VOID RATIO		1.87							1.53		
15. SATURATED VOID RATIO		1.88							1.60		
16. POROSITY (%)		65.2							60.5		
17. LIQUID LIMIT											
18. PLASTIC LIMIT											
19. PLASTICITY INDEX											
20. LIQUIDITY INDEX											
21. COMPRESSION INDEX FROM LL											
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)		200.80							274.33		
22. COMPRESSIVE STRENGTH REMOLD (g/cm²)											
23. COHESION NATURAL (g/cm²)											
23. COHESION REMOLD (g/cm²)											
24. SENSITIVITY											
25. ANGLE OF INTERNAL FRICTION (°)											
26. ACTIVITY											
27. MODULUS OF ELASTICITY											
28. SLUMP (%)											

29. REMARKS

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 31-10-65

1. CRUISE NO. PUERTO RICO - 65
2. LATITUDE 17° 49.7' "
3. LONGITUDE 65° 59.3' "
4. SAMPLE NO. P-6
5. DATE TAKEN (Day, month, year)
6. WATER DEPTH (m) 1472
7. TYPE CORER KULLENBERG
8. CORE LENGTH (cm) 37
9. CORER PENETRATION (cm) 67

10. SUBSAMPLE DEPTH IN CORE (cm)	0-10	10-17	17-27	27-37								
11. WET UNIT WEIGHT (g/cm³)		1.64										
12. SPECIFIC GRAVITY OF SOLIDS		2.74										
13. WATER CONTENT (% dry weight)	65.86	64.07	65.08	46.60								
14. VOID RATIO		1.74										
15. SATURATED VOID RATIO		1.76										
16. POROSITY (%)		63.5										
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)		144.23										
REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 30-10-65

1. CRUISE NO. PUERTO RICO - 65
2. LATITUDE 17 ° 49.4' "
3. LONGITUDE 66 ° 02.1' "
4. SAMPLE NO. P-7
5. DATE TAKEN (Day, month, year) 23-10-65
6. WATER DEPTH (m) 1304
7. TYPE CORER KULLENBERG
8. CORE LENGTH (cm) 44
9. CORER PENETRATION (cm) 67

10. SUBSAMPLE DEPTH IN CORE (cm)	0-10	10-17	17-27	27-37	37-44							
11. WET UNIT WEIGHT (g/cm³)		1.60										
12. SPECIFIC GRAVITY OF SOLIDS		2.71										
13. WATER CONTENT (% dry weight)	74.92	68.89	64.46	60.95								
14. VOID RATIO		1.87										
15. SATURATED VOID RATIO		1.87										
16. POROSITY (%)		65.1										
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)		89.09										
REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

Only one unconfined compression test run; bottom portion seems dessicated.

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 28-10-65

1. CRUISE NO. PUERTO RICO 65
2. LATITUDE 17° 49.8' "
3. LONGITUDE 66° 07.1' "
4. SAMPLE NO. P-8
5. DATE TAKEN (Day, month, year) 23-10-65
6. WATER DEPTH (m) 750
7. TYPE CORER KULLENBERG
8. CORE LENGTH (cm) 17.5
9. CORER PENETRATION (cm) ?

10. SUBSAMPLE DEPTH IN CORE (cm)	0-5	5-12	12-17.5									
11. WET UNIT WEIGHT (g/cm³)		1.64										
12. SPECIFIC GRAVITY OF SOLIDS		2.70										
13. WATER CONTENT (% dry weight)	85.78	66.71	59.67									
14. VOID RATIO		1.75										
15. SATURATED VOID RATIO		1.80										
16. POROSITY (%)		63.6										
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)		149.89										
REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 31-10-65

1. CRUISE NO. PUERTO RICO - 65
2. LATITUDE 17° 49.4' N
3. LONGITUDE 66° 09.6' W
4. SAMPLE NO. P-9
5. DATE TAKEN (Day, month, year) 23-10-65
6. WATER DEPTH (m) 371
7. TYPE CORER KULLENBERG
8. CORE LENGTH (cm) 49
9. CORER PENETRATION (cm) ?

10. SUBSAMPLE DEPTH IN CORE (cm)	0-10	10-20	20-30	30-41.5	41.5-49							
11. WET UNIT WEIGHT (g/cm³)												
12. SPECIFIC GRAVITY OF SOLIDS	2.72											
13. WATER CONTENT (% dry weight)	47.73	37.13	39.34	30.77								
14. VOID RATIO												
15. SATURATED VOID RATIO												
16. POROSITY (%)												
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)												
REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS Unconfined compression tests not run due to coarseness of core.

41.5 - 49 TAKEN IN CATCHER & CUTTER - RETAINED AS JAR SAMPLE

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 23-10-65

1. CRUISE NO. PUERTO RICO - 65
2. LATITUDE 17° 46.0' N
3. LONGITUDE 66° 09.5' W
4. SAMPLE NO. P-10
5. DATE TAKEN (Day, month, year) 23-10-65
6. WATER DEPTH (m) 966
7. TYPE CORER KULLENBERG
8. CORE LENGTH (cm) 38
9. CORER PENETRATION (cm) 88

10. SUBSAMPLE DEPTH IN CORE (cm)	0-10	10-15	15-22	22-30	30-38							
11. WET UNIT WEIGHT (g/cm³)			1.61									
12. SPECIFIC GRAVITY OF SOLIDS			2.73									
13. WATER CONTENT (% dry weight)	79.06	69.30	68.89	73.64	93.02							
14. VOID RATIO			1.87									
15. SATURATED VOID RATIO			1.88									
16. POROSITY (%)			65.1									
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)			139.28									
REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. [illegible]

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 28-10-65

1. CRUISE NO. PUERTO RICO - 65
2. LATITUDE 17° 46.5' N
3. LONGITUDE 66° 05.0' W
4. SAMPLE NO. P-11
5. DATE TAKEN (Day, month, year) 23-10-65
6. WATER DEPTH (m) 1020
7. TYPE CORER KULLENBERG
8. CORE LENGTH (cm) 29
9. CORER PENETRATION (cm) ?

10. SUBSAMPLE DEPTH IN CORE (cm)	0-5	5-12	12-21	21-29								
11. WET UNIT WEIGHT (g/cm³)		1.76										
12. SPECIFIC GRAVITY OF SOLIDS		2.66										
13. WATER CONTENT (% dry weight)	52.78	49.06	46.46									
14. VOID RATIO		1.26										
15. SATURATED VOID RATIO		1.30										
16. POROSITY (%)		55.7										
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)		132.92										
22. COMPRESSIVE STRENGTH REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
23. COHESION REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

Sediment dense + compact
Core seems somewhat dessicated.
21-29 TAKEN IN CATCHER AND CUTTER - RETAINED AS JAR SAMPLE

63

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE

1. CRUISE NO. PUERTO RICO - 65	4. SAMPLE NO. P-12	7. TYPE CORER KULLENBERG
2. LATITUDE 17° 46.4' N	5. DATE TAKEN (Day, month, year) 23-10-65	8. CORE LENGTH (cm) 113
3. LONGITUDE 66° 01.5' W	6. WATER DEPTH (m) 1277	9. CORER PENETRATION (cm) 180

10. SUBSAMPLE DEPTH IN CORE (cm)	0-7	7-15	15-25	25-34	34-44	44-54	54-65	65-72.5	72.5-82.5	82.5-91.5	91.5-102.5	102.5-113
11. WET UNIT WEIGHT (g/cm³)		1.51		1.58				1.67		1.69		
12. SPECIFIC GRAVITY OF SOLIDS		2.72		2.72				2.72		2.71		
13. WATER CONTENT (% dry weight)	88.72	91.30	77.41	74.07	61.39	43.28	36.89	61.91	62.53	54.82		
14. VOID RATIO		2.44		1.99				1.64		1.48		
15. SATURATED VOID RATIO		2.48		2.01				1.68		1.49		
16. POROSITY (%)		70.9		66.6				62.1		59.7		
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)		57.98		135.75				360.59				
REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS No REMOLD because of fluidity of sediment.

P-13

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 29-10-65

1. CRUISE NO. PUERTO RICO – 65
2. LATITUDE 17° 42.8' "
3. LONGITUDE 65° 59.9' "
4. SAMPLE NO. P-13
5. DATE TAKEN (Day, month, year) 23-10-65
6. WATER DEPTH (m) 1024
7. TYPE CORER KULLENBERG
8. CORE LENGTH (cm) 157.5
9. CORER PENETRATION (cm) 183

10. SUBSAMPLE DEPTH IN CORE (cm)	0-7	7-15	15-25	25-32	32-40	40-50	50-60	60-70	70-80	80-89	89-95	95-105
11. WET UNIT WEIGHT (g/cm³)		1.58		1.66		1.64						
12. SPECIFIC GRAVITY OF SOLIDS		2.72		2.72		2.68						
13. WATER CONTENT (% dry weight)	90.23	77.07	72.74	64.34	63.33	64.68	70.94	66.54	65.78	82.56	72.38	67.40
14. VOID RATIO		2.05		1.70		1.70						
15. SATURATED VOID RATIO		2.10		1.75		1.73						
16. POROSITY (%)		67.2		62.9		62.9						
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)		120.20		170.39								
REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS No remolds after compression tests as sediment too moist to confine to sampling cylinder.
Dense, coarse, compacted sediment past 32 cm — unable to compression test.

P-13

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 29-10-65

1. CRUISE NO. PUERTO RICO - 65
2. LATITUDE 17° 42.8' "
3. LONGITUDE 65° 59.9' "
4. SAMPLE NO. P-13
5. DATE TAKEN (Day, month, year) 23-10-65
6. WATER DEPTH (m) 1024
7. TYPE CORER KULLENBERG
8. CORE LENGTH (cm) 157.5
9. CORER PENETRATION (cm) 183

10. SUBSAMPLE DEPTH IN CORE (cm)	105 - 115	115 - 122.5	122.5 - 132.5	132.5 - 142.5	142.5 - 157.5							
11. WET UNIT WEIGHT (g/cm³)		1.63										
12. SPECIFIC GRAVITY OF SOLIDS		2.71										
13. WATER CONTENT (% dry weight)	68.31	72.08	71.26	78.37	74.24							
14. VOID RATIO		1.86										
15. SATURATED VOID RATIO		1.95										
16. POROSITY (%)		65.1										
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)												
REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 30-10-65

1. CRUISE NO. PUERTO RICO - 65
2. LATITUDE 17° 39.9' °
3. LONGITUDE 66° 09.7' °
4. SAMPLE NO. P-17
5. DATE TAKEN (Day, month, year) 22-10-65
6. WATER DEPTH (m) 947
7. TYPE CORER KULLENBERG
8. CORE LENGTH (cm) 58
9. CORER PENETRATION (cm) 79

10. SUBSAMPLE DEPTH IN CORE (cm)	0-10	10-17	17-26	26-34	34-42	42-58						
11. WET UNIT WEIGHT (g/cm^3)		1.60			1.70							
12. SPECIFIC GRAVITY OF SOLIDS		2.70			2.68							
13. WATER CONTENT (% dry weight)	84.64	72.13	62.44	57.25	53.11	54.54						
14. VOID RATIO		1.90			1.42							
15. SATURATED VOID RATIO		1.95			1.42							
16. POROSITY (%)		65.5			58.6							
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm^2)		138.37			434.82							
REMOLD (g/cm^2)												
23. COHESION NATURAL (g/cm^2)												
REMOLD (g/cm^2)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 28-10-65

1. CRUISE NO. PUERTO RICO - 65
2. LATITUDE 17° 39.3' "
3. LONGITUDE 66° 05.5' "
4. SAMPLE NO. P - 18
5. DATE TAKEN (Day, month, year) 23-10-65
6. WATER DEPTH (m) 1079
7. TYPE CORER KULLENBERG
8. CORE LENGTH (cm) 26.5
9. CORER PENETRATION (cm) ?

10. SUBSAMPLE DEPTH IN CORE (cm)	0-5	5-12	12-18.5	18.5-22.5	22.5-26.5							
11. WET UNIT WEIGHT (g/cm³)		1.54										
12. SPECIFIC GRAVITY OF SOLIDS		2.71										
13. WATER CONTENT (% dry weight)	94.65	86.36	81.62									
14. VOID RATIO		2.26										
15. SATURATED VOID RATIO		2.34										
16. POROSITY (%)		69.4										
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)		132.92										
REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

18.5 - 22.5 IS CORE CATCHER SAMPLE
22.5 - 26.5 IS CORE CUTTER SAMPLE

Core seems homogeneous in grain size and color throughout.

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 29-10-65

1. CRUISE NO. PUERTO RICO - 65
2. LATITUDE 17° 40.0' "
3. LONGITUDE 66° 01.7' "
4. SAMPLE NO. P-19
5. DATE TAKEN (Day, month, year) 23-10-65
6. WATER DEPTH (m) 1262
7. TYPE CORER KULLENBERG
8. CORE LENGTH (cm) 133
9. CORER PENETRATION (cm) 183

10. SUBSAMPLE DEPTH IN CORE (cm)	0-27	27-37	37-45	45-55	55-65	65-75	75-85	85-92	92-102	102-112	112-123	123-133
11. WET UNIT WEIGHT (g/cm³)			1.55					1.53				
12. SPECIFIC GRAVITY OF SOLIDS			2.72					2.68				
13. WATER CONTENT (% dry weight)		94.34	81.64	74.76	65.98	100.09	74.80	80.77	92.98	70.28	73.21	69.20
14. VOID RATIO			2.19					2.16				
15. SATURATED VOID RATIO			2.22					2.16				
16. POROSITY (%)			68.7					68.4				
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm²)			99.69					101.81				
22. COMPRESSIVE STRENGTH REMOLD (g/cm²)												
23. COHESION NATURAL (g/cm²)												
23. COHESION REMOLD (g/cm²)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

Too fluid for remold

0-27 cms slipped from core liner — now for sample

PRNC-NAVOCEANO-3167/18 B (4-63)

CORE ANALYSIS SUMMARY SHEET
ENGINEERING PROPERTIES

ANALYZED BY ROONEY EPPERT HUDDELL

DATE 28-10-65

1. CRUISE NO. PUERTO RICO - 65
2. LATITUDE 17 ° 40.2 ' "
3. LONGITUDE 65 ° 58.5 ' "
4. SAMPLE NO. P-20
5. DATE TAKEN (Day, month, year) 23-10-65
6. WATER DEPTH (m) 1426
7. TYPE CORER KULLENBERG
8. CORE LENGTH (cm) 28.5
9. CORER PENETRATION (cm) ?

10. SUBSAMPLE DEPTH IN CORE (cm)	0-7	7-14	14-20.5	20.5-28.5								
11. WET UNIT WEIGHT (g/cm^3)		1.54										
12. SPECIFIC GRAVITY OF SOLIDS		2.71										
13. WATER CONTENT (% dry weight)	95.96	85.69	77.45									
14. VOID RATIO		2.26										
15. SATURATED VOID RATIO		2.32										
16. POROSITY (%)		69.4										
17. LIQUID LIMIT												
18. PLASTIC LIMIT												
19. PLASTICITY INDEX												
20. LIQUIDITY INDEX												
21. COMPRESSION INDEX FROM LL												
22. COMPRESSIVE STRENGTH NATURAL (g/cm^2)		130.09										
REMOLD (g/cm^2)												
23. COHESION NATURAL (g/cm^2)												
REMOLD (g/cm^2)												
24. SENSITIVITY												
25. ANGLE OF INTERNAL FRICTION (°)												
26. ACTIVITY												
27. MODULUS OF ELASTICITY												
28. SLUMP (%)												

29. REMARKS

Moisture Content very high; No REMOLD.

20.5 - 28.5 TAKEN IN CATCHER & CUTTER - RETAINED AS JAR SAMPLE

SEDIMENT SIZE AND COMPOSITION DATA

UISE P R 65	SAMPLE P 1	LATITUDE 17 46.4	LONGITUDE 65 52.5	TAKEN 24/10/65
RER TYPE 6	LENGTH 0.0	PENETRATION 0.0	DEPTH 640.0	ANALYZED 19/ 1/66

D. NO.	280 108					
TERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
.0000	0.000					
.0000	1.557					
.0000	2.768					
.5000	8.304					
.2500	14.533					
.1250	25.606					
.0625	3.460					
.0312	15.225					
.0156	6.747					
.0078	3.460					
.0039	2.941					
.0020	3.114					
.0010	0.000					
.0005	7.266					
.0000-	5.017					
AVEL	1.557					
ND	54.671					
LT	28.374					
AY	15.398					
AN (MM)	0.0587					
AN (PHI)	4.0900					
AN DEV	3.2899					
EWNESS	0.4407					
RTOSIS	-0.1080					
CO3	0.000					
G CARBON	0.000					
LOR	10YR7/4					
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE P R 65 SAMPLE P 2-A LATITUDE 17 49.9 LONGITUDE 65 52.6 TAKEN 23/10/65
ORER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 1006.0 ANALYZED 19/ 1/66

ID. NO. 280 106
NTERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.524					
1.0000	0.698					
0.5000	7.504					
0.2500	13.613					
0.1250	9.250					
0.0625	6.283					
0.0312	20.070					
0.0156	9.599					
0.0078	5.585					
0.0039	4.014					
0.0020	3.839					
0.0010	0.000					
0.0005	12.042					
0.0000-	6.981					
RAVEL	0.524					
AND	37.347					
ILT	39.267					
LAY	22.862					
EAN (NM)	0.0278					
EAN (PHI)	5.1702					
TAN DEV	3.4385					
KEWNESS	0.2302					
URTOSIS	-0.8699					
CO3	86.000					
RG CARBON	0.340					
OLOR	10YR7/4					
OM MINERAL						
EC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE P R 65	SAMPLE P 2-B	LATITUDE 17 48.6	LONGITUDE 65 52.5	TAKEN 23/10/65
ORER TYPE 6	LENGTH 0.0	PENETRATION 0.0	DEPTH 969.0	ANALYZED 19/ 1/66

ID. NO.	280 107					
NTERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.543					
1.0000	1.764					
0.5000	7.327					
0.2500	12.347					
0.1250	9.634					
0.0625	6.784					
0.0312	18.860					
0.0156	10.041					
0.0078	6.377					
0.0039	2.849					
0.0020	3.799					
0.0010	0.000					
0.0005	11.940					
0.0000-	7.734					
RAVEL	0.543					
AND	37.856					
ILT	38.128					
LAY	23.474					
EAN (MM)	0.0276					
EAN (PHI)	5.1784					
TAN DEV	3.4958					
KEWNESS	0.2194					
URTOSIS	-0.8812					
ACO3	0.000					
RG CARBON	0.000					
OLOR	10YR5/4					
IM MINERAL						
EC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE P R 65	SAMPLE P2-B	LATITUDE 17 48.6	LONGITUDE 65 52.5	TAKEN 23/10/65
RER TYPE 4	LENGTH 57.5	PENETRATION 79.2	DEPTH 969.0	ANALYZED 30/10/65

D. NO.	280 30	280 31	280 32	280 33	280 34	
TERVAL	10.0- 17.5	17.5- 20.0	20.0- 27.0	47.5- 52.5	52.5- 57.5	
MM	PER	PER	PER	PER	PER	PER
.0000	0.000	0.000	0.000	0.000	0.000	
.0000	0.543	2.989	0.962	0.120	0.000	
.0000	1.630	12.383	2.885	0.598	0.067	
.5000	7.609	41.845	9.615	5.383	2.674	
.2500	15.217	28.181	14.904	16.746	14.372	
.1250	15.761	5.978	13.942	20.335	29.078	
.0625	9.239	1.281	8.173	10.766	17.714	
.0312	0.000	0.000	0.000	0.000	0.000	
.0156	20.109	2.220	21.635	18.541	20.053	
.0078	0.000	0.000	0.000	0.000	0.000	
.0039	7.609	0.427	7.692	5.981	0.668	
.0020	0.000	0.000	0.000	0.000	0.000	
.0010	4.891	0.427	7.692	5.981	4.345	
.0005	5.978	0.427	0.962	1.794	2.005	
.0000-	11.413	3.843	11.538	13.756	9.024	
AVEL	0.543	2.989	0.962	0.120	0.000	
ND	49.457	89.667	49.519	53.828	63.904	
LT	27.717	2.647	29.327	24.522	20.722	
AY	22.283	4.697	20.192	21.531	15.374	
AN (MM)	0.0302	0.3787	0.0358	0.0320	0.0477	
AN (PHI)	5.0489	1.4009	4.8029	4.9653	4.3897	
AN DEV	3.6695	2.5010	3.6506	3.5876	3.0914	
EWNESS	0.2488	1.4738	0.2512	0.3418	0.6107	
RTOSIS	-1.0093	8.8240	-0.8870	-0.8496	0.3889	
CO3	90.000	0.000	0.000	90.000	0.000	
G CARBON	0.290	0.000	0.000	0.000	0.140	
LOR	10YR7/4	10YR7/4	10YR7/4	10YR7/4	10YR7/4	
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

UISE P R 65 SAMPLE P 3 LATITUDE 17 47.6 LONGITUDE 65 54.6 TAKEN 23/10/65
RER TYPE 4 LENGTH 22.0 PENETRATION 0.0 DEPTH 69.0 ANALYZED 28/10/65

D. NO.	280 49	280 50				
TERVAL	0.0- 9.0	9.0- 22.0				
MM	PER	PER	PER	PER	PER	PER
.0000	38.868	30.100				
.0000	16.226	16.890				
.0000	9.057	11.371				
.5000	7.925	9.866				
.2500	7.170	7.358				
.1250	6.415	6.522				
.0625	3.774	4.348				
.0312	0.000	0.000				
.0156	5.283	7.023				
.0078	0.000	0.000				
.0039	1.132	2.174				
.0020	0.000	0.000				
.0010	0.377	0.669				
.0005	0.377	0.334				
.0000-	3.396	3.344				
AVEL	55.094	46.990				
ND	34.340	39.465				
LT	6.415	9.197				
AY	4.151	4.348				
AN (MM)	0.9857	0.7347				
AN (PHI)	0.0208	0.4448				
AN DEV	3.3681	3.4591				
EWNESS	1.0681	0.8904				
RTOSIS	3.0031	1.8184				
CO3	0.000	0.000				
G CARBON	0.250	0.000				
LOR	5Y7/2	5Y7/2				
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

UISE P R 65 SAMPLE P5 LATITUDE 17 47.0 LONGITUDE 65 58.1 TAKEN 23/10/65
RER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 786.0 ANALYZED 19/ 1/66

D. NO.	280 97					
TERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
.0000	0.000					
.0000	0.000					
.0000	0.292					
.5000	4.665					
.2500	13.265					
.1250	18.367					
.0625	10.641					
.0312	29.009					
.0156	4.519					
.0078	3.061					
.0039	1.603					
.0020	2.478					
.0010	0.000					
.0005	6.851					
.0000-	5.248					
AVEL	0.000					
ND	47.230					
LT	38.192					
AY	14.577					
AN (MM)	0.0455					
AN (PHI)	4.4592					
AN DEV	2.9324					
EWNESS	0.5484					
RTOSIS	0.4479					
CO3	0.000					
G CARBON	0.000					
LOR	10YR7/4					
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE P R 65 SAMPLE P 5 LATITUDE 17 47.0 LONGITUDE 65 58.1 TAKEN 23/10/65
DRER TYPE 4 LENGTH 109.7 PENETRATION 137.2 DEPTH 786.0 ANALYZED 29/10/65

D. NO.	280 12	280 13	280 14	280 15		
TERVAL	10.0- 17.0	37.0- 47.0	75.0- 82.0	94.0-106.0		
MM	PER	PER	PER	PER	PER	PER
.0000	0.000	0.000	0.000	0.000		
.0000	0.000	0.000	0.120	0.120		
.0000	0.106	0.123	0.602	0.120		
.5000	3.700	1.233	3.610	1.803		
.2500	14.271	9.248	11.432	6.010		
.1250	21.670	33.292	26.474	18.029		
.0625	15.856	26.510	17.449	18.029		
.0312	0.000	0.000	0.000	0.000		
.0156	20.085	11.714	19.254	19.832		
.0078	0.000	0.000	0.000	0.000		
.0039	4.228	1.850	2.407	8.413		
.0020	0.000	0.000	0.000	0.000		
.0010	4.757	1.233	6.017	6.010		
.0005	3.700	3.699	1.203	5.409		
.0000-	11.628	11.097	11.432	16.226		
AVEL	0.000	0.000	0.120	0.120		
ND	55.603	70.407	59.567	43.990		
LT	24.313	13.564	21.661	28.245		
AY	20.085	16.030	18.652	27.644		
AN (MM)	0.0328	0.0451	0.0382	0.0167		
AN (PHI)	4.9281	4.4692	4.7094	5.9050		
AN DEV	3.3978	3.1651	3.3073	3.4908		
EWNESS	0.4080	0.6745	0.4783	0.2161		
RTOSIS	-0.6123	0.4472	-0.2750	-1.1991		
CO3	89.000	0.000	91.000	0.000		
G CARBON	0.300	0.000	0.000	0.180		
LOR	5Y7/2	10YR8/2	10YR8/2	10YR8/2		
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

UISE P R 65	SAMPLE P 6	LATITUDE 17 49.7	LONGITUDE 65 59.3	TAKEN 23/10/65
RER TYPE 6	LENGTH 0.0	PENETRATION 0.0	DEPTH 1472.0	ANALYZED 19/ 1/66

D. NO.	280 105
TERVAL	0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
.0000	0.000					
.0000	0.255					
.0000	0.892					
.5000	5.732					
.2500	9.936					
.1250	10.318					
.0625	10.955					
.0312	25.350					
.0156	7.898					
.0078	5.860					
.0039	3.057					
.0020	3.694					
.0010	0.000					
.0005	9.299					
.0000-	6.752					
AVEL	0.255					
ND	37.834					
T	42.166					
Y	19.745					
AN (MM)	0.0299					
AN (PHI)	5.0631					
AN DEV	3.1886					
WNESS	0.3192					
RTOSIS	-0.4603					
CO3	0.000					
G CARBON	0.000					
LOR	10YR7/4					
MINERAL						
MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

UISE P R 65 SAMPLE P 6 LATITUDE 17 49.7 LONGITUDE 65 59.3 TAKEN 23/10/65
RER TYPE 4 LENGTH 37.0 PENETRATION 67.1 DEPTH 1472.0 ANALYZED 31/10/65

D. NO.	280 6	280 7	280 8			
TERVAL	10.0- 17.0	17.0- 20.0	27.0- 38.0			
MM	PER	PER	PER	PER	PER	PER
.0000	0.000	0.000	1.826			
.0000	0.000	0.000	3.653			
.0000	0.403	0.104	2.283			
.5000	4.435	2.601	4.566			
.2500	10.484	18.210	10.959			
.1250	17.742	43.704	11.416			
.0625	15.323	19.771	10.502			
.0312	0.000	0.000	0.000			
.0156	20.161	6.243	24.201			
.0078	0.000	0.000	0.000			
.0039	6.452	0.520	6.849			
.0020	0.000	0.000	0.000			
.0010	5.645	0.520	5.023			
.0005	7.661	0.520	5.023			
.0000-	11.694	7.804	13.699			
AVEL	0.000	0.000	5.479			
ND	48.387	84.391	39.726			
LT	26.613	6.764	31.050			
AY	25.000	8.845	23.744			
AN (MM)	0.0231	0.0912	0.0281			
AN (PHI)	5.4355	3.4542	5.1530			
AN DEV	3.5247	2.6803	3.9074			
EWNESS	0.2538	1.0912	0.1084			
RTOSIS	-1.0761	3.8697	-0.9781			
CO3	84.000	0.000	85.000			
G CARBON	0.240	0.000	0.250			
LOR	10YR7/4	10YR7/4	10YR8/2			
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

:UISE P R 65 SAMPLE P 7 LATITUDE 17 49.4 LONGITUDE 66 2.1 TAKEN 23/10/65
:RER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 1304.0 ANALYZED 19/ 1/66

D. NO.	280 99					
:TERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
.0000	0.000					
.0000	0.328					
.0000	0.493					
.5000	5.419					
.2500	8.867					
.1250	6.897					
.0625	6.568					
.0312	27.750					
.0156	5.583					
.0078	5.747					
.0039	5.090					
.0020	5.090					
.0010	0.000					
.0005	12.972					
.0000-	9.195					
AVEL	0.328					
ND	28.243					
LT	44.171					
AY	27.258					
AN (MM)	0.0190					
AN (PHI)	5.7184					
AN DEV	3.3908					
EWNESS	0.1679					
RTOSIS	-0.9746					
CO3	0.000					
G CARBON	0.000					
LOR	10YR5/4					
" MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

:UISE P R 65	SAMPLE P 7	LATITUDE 17 49.4	LONGITUDE 66 2.1	TAKEN 23/10/65
)RER TYPE 4	LENGTH 44.0	PENETRATION 67.1	DEPTH 1304.0	ANALYZED 30/10/65

:D. NO.	280 1	280 2				
;TERVAL	10.0- 17.0	34.0- 43.0				
MM	PER	PER	PER	PER	PER	PER
;.0000	0.000	0.000				
:.0000	0.472	0.097				
.0000	0.943	0.970				
).5000	5.660	3.395				
).2500	8.491	8.244				
).1250	5.660	10.184				
).0625	4.717	10.669				
).0312	0.000	0.000				
).0156	31.604	31.523				
).0078	0.000	0.000				
).0039	10.849	7.274				
).0020	0.000	0.000				
).0010	8.019	7.759				
).0005	5.660	3.880				
).0000-	17.925	16.004				
:AVEL	0.472	0.097				
\ND	25.472	33.463				
:LT	42.453	38.797				
.AY	31.604	27.643				
:AN (MM)	0.0117	0.0153				
:AN (PHI)	6.4198	6.0267				
'AN DEV	3.5751	3.4488				
:EWNESS	-0.0251	0.1278				
IRTOSIS	-1.0532	-1.0371				
\CO3	83.000	86.000				
:G CARBON	0.320	0.250				
)LOR	10YR7/4	10YR7/4				
:: MINERAL						
'C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE P R 65	SAMPLE P8	LATITUDE 17 49.8	LONGITUDE 66 7.1	TAKEN 23/10/65
CORER TYPE 6	LENGTH 0.0	PENETRATION 0.0	DEPTH 750.0	ANALYZED 19/ 1/66

ID. NO.	280 100					
INTERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.933					
1.0000	1.711					
0.5000	5.288					
0.2500	8.554					
0.1250	9.642					
0.0625	10.731					
0.0312	28.616					
0.0156	8.554					
0.0078	4.355					
0.0039	3.421					
0.0020	3.421					
0.0010	0.000					
0.0005	8.554					
0.0000-	6.221					
GRAVEL	0.933					
SAND	35.925					
SILT	44.946					
CLAY	18.196					
MEAN (MM)	0.0323					
MEAN (PHI)	4.9510					
STAN DEV	3.1483					
SKEWNESS	0.3076					
KURTOSIS	-0.2573					
CACO3	0.000					
ORG CARBON	0.000					
COLOR	10YR5/4					
DOM MINERAL						
SEC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

UISE P R 65 SAMPLE P8 LATITUDE 17 49.8 LONGITUDE 66 7.1 TAKEN 23/10/65
RER TYPE 4 LENGTH 17.5 PENETRATION 0.0 DEPTH 750.0 ANALYZED 28/10/65

D. NO. 280 52
TERVAL 5.0- 12.0

MM	PER	PER	PER	PER	PER	PER
.0000	0.000					
.0000	0.109					
.0000	1.092					
.5000	3.275					
.2500	6.550					
.1250	9.825					
.0625	11.463					
.0312	0.000					
.0156	24.563					
.0078	0.000					
.0039	12.009					
.0020	0.000					
.0010	7.642					
.0005	7.642					
.0000-	15.830					
AVEL	0.109					
ND	32.205					
LT	36.572					
AY	31.114					
AN (MM)	0.0122					
AN (PHI)	6.3548					
AN DEV	3.4982					
EWNESS	0.0352					
RTOSIS	-1.1738					
CO3	80.000					
G CARBON	0.570					
LOR	5Y7/2					
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE P R 65 SAMPLE P 9 LATITUDE 17 49.4 LONGITUDE 66 9.5 TAKEN 23/10/65
RER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 371.0 ANALYZED 19/ 1/66

D. NO.	280 103					
NTERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
.0000	3.275					
.0000	2.293					
.0000	5.240					
.5000	12.991					
.2500	16.812					
.1250	14.956					
.0625	8.297					
.0312	16.157					
.0156	6.223					
.0078	3.057					
.0039	2.183					
.0020	1.310					
.0010	0.000					
.0005	3.712					
.0000-	3.493					
AVEL	5.568					
ND	58.297					
LT	27.620					
AY	8.515					
AN (MM)	0.1108					
AN (PHI)	3.1736					
AN DEV	3.1452					
EWNESS	0.4460					
RTOSIS	0.5398					
CO3	0.000					
G CARBON	0.000					
LOR	BY271					
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE P R 65	SAMPLE P 9	LATITUDE 17 49.4	LONGITUDE 66 9.5	TAKEN 23/10/65
RER TYPE 4	LENGTH 49.0	PENETRATION 0.0	DEPTH 371.0	ANALYZED 31/10/65

D. NO.	280 9	280 10	280 11	280 141		
TERVAL	0.0- 10.0	10.0- 20.0	30.0- 41.0	41.0- 49.0		
MM	PER	PER	PER	PER	PER	PER
.0000	0.000	0.000	8.784	26.881		
.0000	4.950	4.015	6.419	10.275		
.0000	5.941	5.474	9.459	17.523		
.5000	16.832	17.518	15.541	9.083		
.2500	20.297	23.358	19.932	21.193		
.1250	14.356	12.409	11.824	9.358		
.0625	8.911	8.394	4.730	2.294		
.0312	0.000	0.000	0.000	0.917		
.0156	15.842	16.423	12.838	0.275		
.0078	0.000	0.000	0.000	0.092		
.0039	2.475	2.190	3.041	0.092		
.0020	0.000	0.000	0.000	0.367		
.0010	0.990	1.460	1.014	0.275		
.0005	0.495	0.365	0.338	0.183		
.0000-	8.911	8.394	6.081	1.193		
AVEL	4.950	4.015	15.203	37.156		
ND	66.337	67.153	61.486	59.450		
LT	18.317	18.613	15.878	1.376		
AY	10.396	10.219	7.432	2.018		
AN (MM)	0.1101	0.1116	0.2117	0.9681		
AN (PHI)	3.1832	3.1642	2.2399	0.0468		
AN DEV	3.4481	3.3891	3.5255	2.4435		
EWNESS	0.5816	0.6004	0.5784	1.1553		
RTOSIS	0.6086	0.6985	0.6507	5.3062		
CO3	91.000	0.000	95.000	99.000		
G CARBON	0.350	0.000	0.270	0.230		
LOR				10YR8/2		
. MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE P R 65 SAMPLE P 10 LATITUDE 17 46.0 LONGITUDE 66 9.5 TAKEN 23/10/65
DRER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 966.0 ANALYZED 19/ 1/66

D. NO. 280 96
TERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
.0000	0.654					
.0000	0.131					
.0000	0.784					
.5000	4.183					
.2500	7.059					
.1250	7.320					
.0625	7.582					
.0312	34.510					
.0156	6.667					
.0078	5.882					
.0039	4.837					
.0020	5.229					
.0010	0.000					
.0005	8.627					
.0000-	6.536					

AVEL	0.784
ND	26.928
LT	51.895
AY	20.392

AN (MM)	0.0250
AN (PHI)	5.3196
AN DEV	3.0736
EWNESS	0.2399
RTOSIS	-0.3227

CO3	0.000
G CARBON	0.000
LOR	10YR7/4
M MINERAL	
C MINERAL	

SEDIMENT SIZE AND COMPOSITION DATA

RUISE P R 65 SAMPLE P10 LATITUDE 17 46.0 LONGITUDE 66 9.5 TAKEN 23/10/65
)RER TYPE 4 LENGTH 38.0 PENETRATION 88.4 DEPTH 966.0 ANALYZED 30/10/65

[D. NO.	280 3	280 4	280 5			
ITERVAL	3.0- 8.0	15.0- 22.0	27.5- 38.0			
MM	PER	PER	PER	PER	PER	PER
).0000	0.000	0.000	13.830			
).0000	0.132	0.090	0.532			
).0000	0.132	0.452	1.064			
).5000	3.303	2.260	5.851			
).2500	6.605	5.877	12.234			
).1250	8.587	9.494	21.809			
).0625	8.587	10.850	15.426			
).0312	0.000	0.000	0.000			
).0156	29.723	28.481	13.830			
).0078	0.000	0.000	0.000			
).0039	14.531	9.494	2.128			
).0020	0.000	0.000	0.000			
).0010	9.247	9.946	1.596			
).0005	1.321	6.329	1.596			
).0000-	17.834	16.727	10.106			
AVEL	0.132	0.090	14.362			
ND	27.213	28.933	56.383			
LT	44.254	37.975	15.957			
AY	28.402	33.002	13.298			
AN (MM)	0.0117	0.0109	0.0987			
AN (PHI)	6.4207	6.5244	3.3404			
AN DEV	3.3278	3.3951	3.8998			
EWNESS	0.0515	0.0431	0.3438			
RTOSIS	-1.0029	-1.1763	-0.2526			
CO3	77.000	81.000	0.000			
G CARBON	0.550	0.000	0.350			
LOR	10YR7/4	10YR7/4	10YR7/4			
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

UISE P R 65 SAMPLE P11 LATITUDE 17 46.5 LONGITUDE 66 5.0 TAKEN 23/10/65
RER TYPE 4 LENGTH 29.0 PENETRATION 0.0 DEPTH 1020.0 ANALYZED 28/10/65

D. NO.	280 51	280 143				
TERVAL	5.0- 12.0	21.0- 29.0				
MM	PER	PER	PER	PER	PER	PER
.0000	0.000	1.266				
.0000	0.000	0.759				
.0000	0.091	0.380				
.5000	0.456	1.013				
.2500	4.106	9.241				
.1250	5.018	12.785				
.0625	9.580	9.367				
.0312	0.000	21.139				
.0156	30.566	10.000				
.0078	0.000	12.658				
.0039	22.810	1.772				
.0020	0.000	6.962				
.0010	14.599	4.810				
.0005	3.193	3.165				
.0000-	9.580	4.684				
AVEL	0.000	2.025				
ND	19.252	32.785				
LT	53.376	45.570				
AY	27.372	19.620				
AN (MM)	0.0094	0.0287				
AN (PHI)	6.7400	5.1228				
AN DEV	2.7562	2.9523				
EWNESS	0.0041	0.1586				
RTOSIS	-0.7129	-0.2238				
CO3	65.000	66.000				
G CARBON	0.240	0.220				
LOR		5Y6/1				
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

JISE P R 65	SAMPLE P12	LATITUDE 17 46.4	LONGITUDE 66 1.5	TAKEN 23/10/65
ER TYPE 6	LENGTH 0.0	PENETRATION 0.0	DEPTH 1277.0	ANALYZED 19/ 1/66

. NO.	280 102					
ERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
.0000	0.000					
0000	0.034					
0000	0.034					
5000	1.190					
2500	2.209					
1250	3.399					
0625	3.909					
0312	21.074					
0156	13.426					
0078	8.668					
0039	5.438					
0020	4.589					
0010	0.000					
0005	16.315					
0000-	19.714					
VEL	0.034					
D	10.741					
T	48.606					
Y	40.619					
N (MM)	0.0064					
N (PHI)	7.2886					
N DEV	3.1697					
WNESS	0.0091					
TOSIS	-1.2879					
O3	0.000					
CARBON	0.000					
OR	10YR5/4					
MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE P R 65 SAMPLE P 12 LATITUDE 17 46.4 LONGITUDE 66 1.5 TAKEN 23/10/65
DRER TYPE 4 LENGTH 113.0 PENETRATION 179.8 DEPTH 1277.0 ANALYZED 29/10/65

ID. NO.	280 16	280 17	280 18	280 19	280 20	280 21
NTERVAL	7.0- 15.0	21.0- 25.0	25.0- 34.0	54.0- 65.0	65.0- 72.5	72.5- 82.5
MM	PER	PER	PER	PER	PER	PER
8.0000	0.000	0.000	0.000	24.042	0.000	0.000
2.0000	1.744	0.136	0.469	7.137	2.151	0.000
1.0000	1.163	0.679	0.469	14.651	2.151	0.166
0.5000	6.395	6.114	4.225	22.539	3.763	0.166
0.2500	8.140	8.152	8.451	18.032	8.065	3.322
0.1250	11.628	6.114	5.634	6.011	10.753	8.306
0.0625	5.233	4.755	5.164	1.503	9.140	14.950
0.0312	0.000	0.000	0.000	0.000	0.000	0.000
0.0156	19.767	25.136	29.108	1.578	20.968	6.645
0.0078	0.000	0.000	0.000	0.000	0.000	0.000
0.0039	10.465	16.304	13.615	0.376	15.054	13.289
0.0020	0.000	0.000	0.000	0.000	0.000	0.000
0.0010	11.628	6.114	7.981	0.376	4.839	19.103
0.0005	4.070	6.793	6.103	0.376	6.452	9.967
0.0000-	19.767	19.701	18.779	3.381	16.667	24.086
AVEL	1.744	0.136	0.469	31.180	2.151	0.000
ND	32.558	25.815	23.944	62.735	33.871	26.910
LT	30.233	41.440	42.723	1.953	36.022	19.934
AY	35.465	32.609	32.864	4.132	27.957	53.156
AN (MM)	0.0129	0.0101	0.0100	0.7666	0.0154	0.0046
AN (PHI)	6.2733	6.6318	6.6408	0.3835	6.0215	7.7741
AN DEV	3.9045	3.6090	3.5111	2.9133	3.7563	3.3997
EWNESS	-0.0411	-0.0662	-0.0520	1.2054	0.0073	-0.2414
RTOSIS	-1.2853	-1.1190	-1.0471	5.4709	-1.1067	-1.2524
CC3	79.000	0.000	82.000	0.000	81.000	0.000
G CARBON	0.450	0.000	0.000	0.000	0.000	0.000
LOR	10YR7/4	5Y7/2	5Y7/2	10YR8/2	10YR7/4	10YR7/4
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

UISE P R 65	SAMPLE P12	LATITUDE 17 46.4	LONGITUDE 66 1.5	TAKEN 23/10/65
RER TYPE 4	LENGTH 113.0	PENETRATION 179.8	DEPTH 1277.0	ANALYZED 29/10/65

D. NO.	280 22
TERVAL	82.5- 91.5

MM	PER	PER	PER	PER	PER	PER
.0000	0.000					
.0000	0.125					
.0000	0.125					
.5000	0.623					
.2500	2.494					
.1250	6.234					
.0625	8.105					
.0312	0.000					
.0156	31.172					
.0078	0.000					
.0039	12.469					
.0020	0.000					
.0010	16.209					
.0005	6.234					
.0000-	16.209					
AVEL	0.125					
ND	17.581					
LT	43.641					
AY	38.653					
AN (MM)	0.0069					
AN (PHI)	7.1858					
AN DEV	3.0316					
EWNESS	-0.0447					
RTOSIS	-1.0398					
CO3	0.000					
G CARBON	0.180					
LOR	10YR7/4					
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE P R 65	SAMPLE P 13	LATITUDE 17 42.8	LONGITUDE 65 59.9	TAKEN 23/10/65
ORER TYPE 6	LENGTH 0.0	PENETRATION 0.0	DEPTH 1024.0	ANALYZED 19/ 1/66

D. NO.	280 110
NTERVAL	0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.000					
1.0000	0.034					
0.5000	0.675					
0.2500	1.689					
0.1250	6.248					
0.0625	6.754					
0.0312	25.329					
0.0156	10.132					
0.0078	6.923					
0.0039	5.235					
0.0020	3.546					
0.0010	0.000					
0.0005	15.873					
0.0000-	17.562					
RAVEL	0.000					
AND	15.400					
ILT	47.619					
AY	36.981					
EAN (MM)	0.0081					
EAN (PHI)	6.9485					
TAN DEV	3.2136					
KEWNESS	0.1029					
URTOSIS	-1.3872					
ACC3	0.000					
RG CARBON	0.000					
OLOR	10YR5/4					
OM MINERAL						
IC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE P R 65 SAMPLE P 13 LATITUDE 17 42.8 LONGITUDE 65 59.9 TAKEN 23/10/65
ORER TYPE 4 LENGTH 157.5 PENETRATION 182.9 DEPTH 1024.0 ANALYZED 29/10/65

D. NO.	280 53	280 54	280 55	280 56	280 57	280 58
ITERVAL	7.0- 15.0	15.0- 21.5	25.0- 32.0	32.0- 40.0	40.0- 50.0	80.0- 89.0
MM	PER	PER	PER	PER	PER	PER
.0000	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.092	0.170	0.102	0.000	0.000	0.100
.0000	0.092	0.170	0.102	0.098	0.108	0.100
.5000	6.007	2.555	2.546	1.469	1.080	1.497
.2500	11.091	8.518	8.147	8.815	4.860	5.988
.1250	9.242	10.221	15.275	23.017	14.579	18.962
.0625	8.780	10.221	13.747	23.017	24.298	22.455
.0312	0.000	0.000	0.000	0.000	0.000	0.000
.0156	24.492	23.850	27.495	21.058	26.998	24.451
.0078	0.000	0.000	0.000	0.000	0.000	0.000
.0039	8.780	13.629	10.692	7.346	6.479	7.485
.0020	0.000	0.000	0.000	0.000	0.000	0.000
.0010	10.166	5.111	4.582	2.449	7.559	4.990
.0005	6.470	5.963	4.582	1.469	0.540	1.497
.0000-	14.787	19.591	12.729	11.263	13.499	12.475
AVEL	0.092	0.170	0.102	0.000	0.000	0.100
ND	35.213	31.687	39.817	56.415	44.924	49.002
LT	33.272	37.479	38.187	28.404	33.477	31.936
AY	31.423	30.664	21.894	15.181	21.598	18.962
AN (MM)	0.0147	0.0114	0.0194	0.0332	0.0208	0.0249
AN (PHI)	6.0841	6.4489	5.6904	4.9114	5.5907	5.3273
AN DEV	3.6215	3.5329	3.2869	3.0930	3.1346	3.1552
EWNESS	0.0604	0.0520	0.2344	0.5014	0.3562	0.3916
RTOSIS	-1.2720	-1.2378	-0.8842	-0.0738	-0.6534	-0.5039
CO3	85.000	0.000	88.000	0.000	86.000	84.000
G CARBON	0.350	0.000	0.000	0.000	0.000	0.140
LOR	10YR7/4	10YR7/4	10YR7/2	10YR7/4	10YR7/4	10YR7/4
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE P R 65 SAMPLE P 13 LATITUDE 17 42.8 LONGITUDE 65 59.9 TAKEN 23/10/65
JRER TYPE 4 LENGTH 157.5 PENETRATION 182.9 DEPTH 1024.0 ANALYZED 29/10/65

ID. NO.	280 59	280 60	280 61			
NTERVAL	115.0-122.5	132.5-142.5	142.5-157.5			
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000	0.000	0.000			
2.0000	0.000	0.106	0.000			
1.0000	0.092	0.529	0.127			
0.5000	1.375	1.586	1.272			
0.2500	5.500	6.871	6.361			
0.1250	13.291	14.799	15.267			
0.0625	18.332	22.199	19.720			
0.0312	0.000	0.000	0.000			
0.0156	26.581	26.956	27.990			
0.0078	0.000	0.000	0.000			
0.0039	7.333	6.871	7.634			
0.0020	0.000	0.000	0.000			
0.0010	12.374	4.757	5.725			
0.0005	2.291	6.342	3.817			
0.0000-	12.832	8.985	12.087			
AVEL	0.000	0.106	0.000			
ND	38.588	45.983	42.748			
LT	33.914	33.827	35.623			
AY	27.498	20.085	21.628			
AN (MM)	0.0160	0.0236	0.0203			
AN (PHI)	5.9665	5.4027	5.6196			
AN DEV	3.2302	3.1312	3.1713			
EWNESS	0.2061	0.3281	0.3121			
RTOSIS	-1.0579	-0.6190	-0.7518			
CO3	87.000	0.000	0.000			
G CARBON	0.000	0.000	0.180			
LOR	10YR7/4	10YR8/2	10YR8/2			
MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

UISE P R 65 SAMPLE P14 LATITUDE 17 42.9 LONGITUDE 66 1.0 TAKEN 23/10/65
RER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 819.0 ANALYZED 19/ 1/66

D. NO.	280 101					
TERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
.0000	0.000					
.0000	0.428					
.0000	0.857					
.5000	11.991					
.2500	19.914					
.1250	10.278					
.0625	6.424					
.0312	15.846					
.0156	7.495					
.0078	5.353					
.0039	1.927					
.0020	2.570					
.0010	0.000					
.0005	10.064					
.0000-	6.852					
AVEL	0.428					
ND	49.465					
LT	30.621					
AY	19.486					
AN (MM)	0.0439					
AN (PHI)	4.5107					
AN DEV	3.5226					
EWNESS	0.3616					
RTOSIS	-0.6520					
CO3	89.000					
G CARBON	0.290					
LOR	10YR5/4					
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

:UISE P R 65	SAMPLE P 16	LATITUDE 17 43.1	LONGITUDE 66 9.8	TAKEN 22/10/65
:RER TYPE 6	LENGTH 0.0	PENETRATION 0.0	DEPTH 805.0	ANALYZED 19/ 1/66

D. NO.	280 112					
:TERVAL	0.0- 0.0					
MM	PER	PER	PER	PER	PER	PER
.0000	0.000					
.0000	0.355					
.0000	0.946					
.5000	7.565					
.2500	17.258					
.1250	16.903					
.0625	12.411					
.0312	19.740					
.0156	5.792					
.0078	3.191					
.0039	1.773					
.0020	2.955					
.0010	0.000					
.0005	5.792					
.0000-	5.319					
AVEL	0.355					
ND	55.083					
LT	30.496					
AY	14.066					
AN (MM)	0.0559					
AN (PHI)	4.1619					
AN DEV	3.0534					
EWNESS	0.5275					
RTOSIS	0.3682					
CO3	88.000					
G CARBON	0.330					
LOR	10YR5/4					
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE P R 65 SAMPLE P17 LATITUDE 17 39.9 LONGITUDE 66 9.7 TAKEN 22/10/65
CRER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 947.0 ANALYZED 19/ 1/66

ID. NO. 280 111
NTERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
4.0000	0.000					
2.0000	0.026					
1.0000	0.261					
0.5000	3.910					
0.2500	9.776					
0.1250	6.257					
0.0625	5.865					
0.0312	28.415					
0.0156	8.212					
0.0078	5.605					
0.0039	4.432					
0.0020	4.692					
0.0010	0.000					
0.0005	13.556					
0.0000-	8.994					
RAVEL	0.026					
AND	26.069					
ILT	46.663					
LAY	27.242					
EAN (MM)	0.0178					
EAN (PHI)	5.8097					
TAN DEV	3.3040					
KEWNESS	0.1891					
URTOSIS	-0.9662					
ACO3	0.000					
RG CARBON	0.000					
OLOR	10YR5/4					
OM MINERAL						
EC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

UISE P R 65	SAMPLE P17	LATITUDE 17 39.9	LONGITUDE 66 9.7	TAKEN 22/10/65
RER TYPE 4	LENGTH 61.0	PENETRATION 79.2	DEPTH 947.0	ANALYZED 30/10/65

D. NO.	280 35	280 36	280 37			
TERVAL	10.0- 17.0	34.0- 42.0	42.0- 58.0			
MM	PER	PER	PER	PER	PER	PER
.0000	0.000	0.000	0.000			
.0000	0.124	0.083	0.088			
.0000	0.620	0.416	0.884			
.5000	5.583	3.747	5.305			
.2500	10.546	13.739	23.431			
.1250	8.685	22.065	33.156			
.0625	8.065	14.988	23.431			
.0312	0.000	0.000	0.000			
.0156	21.092	20.816	7.515			
.0078	0.000	0.000	0.000			
.0039	14.268	7.077	0.442			
.0020	0.000	0.000	0.000			
.0010	7.444	4.580	0.442			
.0005	8.685	0.833	0.442			
.0000-	14.888	11.657	4.863			
AVEL	0.124	0.083	0.088			
ND	33.499	54.954	86.207			
LT	35.360	27.893	7.958			
AY	31.017	17.069	5.747			
AN (MM)	0.0132	0.0350	0.1154			
AN (PHI)	6.2419	4.8364	3.1154			
AN DEV	3.6351	3.3002	2.3709			
EWNESS	0.0065	0.4157	1.1439			
RTOSIS	-1.2602	-0.4237	5.5712			
CO3	85.000	90.000	92.000			
G CARBON	0.390	0.000	0.120			
LOR	10YR7/4	10YR7/4	10YR7/4			
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

UISE P R 65 SAMPLE P 18 LATITUDE 17 39.3 LONGITUDE 66 5.5 TAKEN 23/10/65
RER TYPE 6 LENGTH 0.0 PENETRATION 0.0 DEPTH 1079.0 ANALYZED 19/ 1/66

D. NO. 280 113
TERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
.0000	0.000					
.0000	0.163					
.0000	0.489					
.5000	7.015					
.2500	12.398					
.1250	10.767					
.0625	6.362					
.0312	18.108					
.0156	8.809					
.0078	6.688					
.0039	2.610					
.0020	4.731					
.0010	0.000					
.0005	12.887					
.0000-	8.972					
AVEL	0.163					
ND	37.031					
LT	36.215					
AY	26.591					
AN (MM)	0.0233					
AN (PHI)	5.4250					
AN DEV	3.5272					
EWNESS	0.2044					
RTOSIS	-1.0515					
CO3	0.000					
G CARBON	0.000					
LOR	10YR5/4					
M MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE P R 65	SAMPLE P 18	LATITUDE 17 39.3	LONGITUDE 66 5.5	TAKEN 23/10/65
RER TYPE 4	LENGTH 26.5	PENETRATION 0.0	DEPTH 1079.0	ANALYZED 28/10/65

D. NO.	280 94	280 137				
NTERVAL	5.0- 12.0	18.5- 22.5				
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000	0.682				
2.0000	0.110	0.136				
1.0000	0.552	0.819				
0.5000	5.519	6.548				
0.2500	12.693	12.960				
0.1250	9.382	11.733				
0.0625	8.278	6.548				
0.0312	20.971	12.278				
0.0156	7.174	9.823				
0.0078	7.726	5.048				
0.0039	2.208	3.411				
0.0020	3.311	4.775				
0.0010	0.000	5.866				
0.0005	13.245	8.049				
0.0000-	8.830	11.323				
RAVEL	0.110	0.819				
AND	36.424	38.608				
ILT	38.079	30.559				
LAY	25.386	30.014				
EAN (MM)	0.0232	0.0219				
EAN (PHI)	5.4316	5.5136				
TAN DEV	3.4637	3.6869				
KEWNESS	0.2316	0.1350				
URTOSIS	-0.9784	-1.1737				
ACO3	85.000	84.000				
RG CARBON	0.330	0.000				
OLOR	10YR7/4	10YR7/4				
OM MINERAL						
EC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

ISE P R 65 — SAMPLE P19 — LATITUDE 17 40.0 — LONGITUDE 66 1.7 — TAKEN 23/10/65
ER TYPE 6 — LENGTH 0.0 — PENETRATION 0.0 — DEPTH 1262.0 — ANALYZED 19/ 1/66

. NO. 280 114
ERVAL 0.0- 0.0

MM	PER	PER	PER	PER	PER	PER
.0000	0.759					
.0000	0.190					
.0000	1.139					
.5000	4.364					
.2500	16.509					
.1250	8.539					
.0625	5.503					
.0312	16.698					
.0136	7.590					
.0078	5.503					
.0089	4.554					
.0020	6.262					
.0010	0.000					
.0005	13.093					
.0000-	9.298					
AVEL	0.949					
ND	36.053					
LT	34.345					
AY	28.653					
AN (MM)	0.0222					
AN (PHI)	5.4924					
AN DEV	3.6466					
EWNESS	0.1360					
RTOSIS	-1.1286					
CO3	0.000					
G CARBON	0.000					
LOR	10YR5/4					
N MINERAL						
C MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE P R 65 SAMPLE P19 LATITUDE 17 40.0 LONGITUDE 66 1.7 TAKEN 23/10/65
CORER TYPE 4 LENGTH 137.2 PENETRATION 182.9 DEPTH 1262.0 ANALYZED 29/10/65

ID. NO.	280 138	280 139	280 140	280 62	280 63	280 64
NTERVAL	0.0- 6.0	6.0- 12.0	12.0- 27.0	37.5- 45.5	65.5- 75.5	76.5- 85.5
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000	0.000	0.000	0.000	0.000	0.000
2.0000	0.922	0.611	0.163	0.562	1.176	0.535
1.0000	2.995	1.679	0.326	0.562	8.235	1.070
0.5000	7.834	5.802	3.752	8.427	18.824	4.813
0.2500	8.525	8.244	8.483	15.169	21.176	9.626
0.1250	11.982	13.740	13.703	11.798	12.941	11.230
0.0625	16.820	19.695	14.192	8.989	10.588	9.626
0.0312	22.811	22.443	19.086	0.000	0.000	0.000
0.0156	6.912	5.802	9.135	7.865	11.765	25.668
0.0078	3.687	2.901	5.546	0.000	0.000	0.000
0.0039	1.613	1.527	2.284	11.236	3.529	8.021
0.0020	2.995	3.359	4.241	0.000	0.000	0.000
0.0010	3.456	3.969	5.873	9.551	1.176	11.230
0.0005	2.074	3.664	5.383	8.989	1.176	4.813
0.0000-	7.373	6.565	7.830	16.854	9.412	13.369
GRAVEL	0.922	0.611	0.163	0.562	1.176	0.535
SAND	48.157	49.160	40.457	44.944	71.765	36.364
SILT	35.023	32.672	36.052	19.101	15.294	33.690
CLAY	15.899	17.557	23.328	35.393	11.765	29.412
MEAN (MM)	0.0460	0.0412	0.0261	0.0164	0.1032	0.0168
MEAN (PHI)	4.4424	4.6023	5.2586	5.9326	3.2765	5.8957
STAN DEV	3.1321	3.0697	3.1716	4.0666	3.5059	3.5726
SKEWNESS	0.3970	0.4277	0.3085	0.0436	0.6112	0.0814
KURTOSIS	0.1072	0.0528	-0.6665	-1.5575	0.5024	-1.1534
CACO3	89.000	89.000	86.000	85.000	0.000	0.000
ORG CARBON	0.220	0.000	0.000	0.000	0.000	0.000
COLOR	10YR8/2	10YR8/2	5Y8/1	10YR7/4	10YR8/2	10YR7/4
COM MINERAL						
SEC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE P R 65	SAMPLE P 19	LATITUDE 17 40.0	LONGITUDE 66 1.7	TAKEN 23/10/65
ORER TYPE 4	LENGTH 137.2	PENETRATION 182.9	DEPTH 1262.0	ANALYZED 29/10/65

ID. NO.	280 65	280 66	280 67			
NTERVAL	85.5- 92.5	112.5-123.5	128.5-132.5			
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000	0.000	0.000			
2.0000	1.111	0.649	0.114			
1.0000	1.667	0.649	0.571			
0.5000	5.556	2.597	1.712			
0.2500	7.778	5.844	4.566			
0.1250	10.000	12.338	13.699			
0.0625	12.222	20.779	19.406			
0.0312	0.000	0.000	0.000			
0.0156	25.000	21.429	29.110			
0.0078	0.000	0.000	0.000			
0.0039	8.333	7.792	6.279			
0.0020	0.000	0.000	0.000			
0.0010	8.333	10.390	9.703			
0.0005	5.000	1.948	3.425			
0.0000-	15.000	15.584	11.416			
RAVEL	1.111	0.649	0.114			
AND	37.222	42.208	39.954			
ILT	33.333	29.221	35.388			
LAY	28.333	27.922	24.543			
EAN (MM)	0.0175	0.0171	0.0184			
EAN (PHI)	5.8389	5.8701	5.7603			
TAN DEV	3.6563	3.4659	3.1829			
KEWNESS	0.0827	0.1731	0.2449			
URTOSIS	-1.1012	-1.0715	-0.8452			
ACO3	80.000	0.000	0.000			
RG CARBON	0.000	0.000	0.200			
ILCR	10YR7/4	10YR7/4	10YR7/4			
IN MINERAL						
EC MINERAL						

SEDIMENT SIZE AND COMPOSITION DATA

RUISE P R 65	SAMPLE P20	LATITUDE 17 40.2	LONGITUDE 65 58.5	TAKEN 23/10/65
RER TYPE 6	LENGTH 0.0	PENETRATION 0.0	DEPTH 1426.0	ANALYZED 19/ 1/66

D. NO.	280 109						
TERVAL	0.0- 0.0						
MM	PER	PER	PER	PER	PER	PER	PER
.0000	0.000						
.0000	0.033						
.0000	0.033						
.5000	0.489						
.2500	0.815						
.1250	3.424						
.0625	8.151						
.0312	30.323						
.0156	9.129						
.0078	6.358						
.0039	5.543						
.0020	2.608						
.0010	0.000						
.0005	13.857						
.0000-	19.237						
RAVEL	0.033						
AND	12.912						
LT	51.353						
AY	35.703						
AN (MM)	0.0080						
AN (PHI)	6.9695						
AN DEV	3.1572						
EWNESS	0.1553						
RTOSIS	-1.4059						
CO3	0.000						
G CARBON	0.000						
LOR	10YR5/4						
H MINERAL							
C MINERAL							

SEDIMENT SIZE AND COMPOSITION DATA

CRUISE P R 65 SAMPLE P 20 LATITUDE 17 40.2 LONGITUDE 65 58.5 TAKEN 23/10/65
CORER TYPE 4 LENGTH 28.5 PENETRATION 0.0 DEPTH 1426.0 ANALYZED 28/10/6

ID. NO.	280 95	280 136				
INTERVAL	7.0- 14.0	20.5- 24.5				
MM	PER	PER	PER	PER	PER	PER
4.0000	0.000	0.000				
2.0000	0.131	2.123				
1.0000	0.657	1.470				
0.5000	10.512	23.358				
0.2500	15.112	4.084				
0.1250	11.170	2.614				
0.0625	7.884	0.653				
0.0312	3.285	13.590				
0.0156	9.198	9.627				
0.0078	7.884	6.861				
0.0039	1.314	3.737				
0.0020	5.256	6.044				
0.0010	0.000	7.024				
0.0005	15.769	8.657				
0.0000-	11.827	10.127				
GRAVEL	0.131	2.123				
SAND	45.335	32.179				
SILT	21.682	33.845				
CLAY	32.852	31.852				
MEAN (MM)	0.0212	0.0245				
MEAN (PHI)	5.5565	5.3510				
STAN DEV	3.9372	4.0168				
SKEWNESS	0.1301	0.026[illegible]				
KURTOSIS	-1.4242	-1.3314				
CACO3	86.000	84.000				
ORG CARBON	0.290	0.000				
COLOR	10YR7/4	10YR7/[illegible]				
DOM MINERAL						
SEC MINERAL						

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VESSEL Oceanic

CRUISE St. Croix '65

BOTTOM SEDIMENT NO. (BS-)	DATE (19 65)	SAMPLE POSITION LATITUDE (N)	SAMPLE POSITION LONGITUDE (W)	DEPTH (FATHOMS)	GEOMORPHOLOGY OF IMMEDIATE AREA (M)	TYPE OF SAMPLER
C-19a	10/4	17°46.0'	64°58.8'	500	914 on tripping time 10' free fall	OP PVC PISTON
C-19b	"	45.9'	58.8'	500	914 10' fall	OP PVC GRAVITY
C-20	"	45.0'	57.4'	610	1116 10 ft. fall	OP PVC
TR-8	"	45.0'	56.9'	575	1051 10 ft. fall	OP PVC
C-22	"	44.4'	56.4'	560	1024 10 ft. fall	OP PVC
TR-7	"	43.9'	56.6'	534	977 10 ft. fall	OP PVC
C-25	"	43.7'	57.3'	544	994 10 ft. fall	OP PVC
C-23	"	44.4'	57.4'	594	1086 10 ft. fall	OP PVC
C-24	10/5	44.6'	58.0'	537	982 10 ft. fall	OP PVC
TR-9-a	"	45.4'	58.2'	534	977 10 ft. fall	OP KULL
C-21	"	45.6'	56.6'	779	1425 10 ft.fall	OP KULL
C-27	"	44.6'	58.2'	535	978 10 ft. fall	OP KULL
C-28	"	43.6'	59.4'	554	1013 10 ft. fall	OP KULL
TR-10	"	43.4'	58.8'	542	991 10 ft. fall	OP KULL
C-26	"	43.7'	57.6'	525	960 10 ft. fall	OP KULL
TR-6	"	43.0'	57.6'	510	933 10 ft. fall	OP KULL
C-31	"	41.7'	59.4'	610	1116 10 ft. fall	OP KULL
TR-9b(repeat)	10/21	45.4'	58.7'	527	964 15 ft. fall	KULL + OP
TR-11A	"	44.2'	59.0'	537	982 15 ft. fall	KULL + OP
TR-11B-2	"	41.7'	58.2'	503	1030 15 ft. fall	KULL + OP
C-29	"	41.0'	57.8'	501	916 15 ft. fall	KULL + OP
TR-5	"	41.6'	57.3'	499	913 15 ft. fall	KULL + OP
C-30	"	41.2'	56.2'	433	792 15 ft. fall	KULL + OP
TR-11B-1	"	41.8'	58.4'	560	1024 15 ft. fall	KULL + OP

CHECKED BY

DATE CHECKED 11/10/65

weights are present but illegible on original data sheet

WEIGHT OF SAMPLER	APPROX. PENE-TRATION	LENGTH OF CORE	ROCK COLOR CHART CORE NUMBER		FIELD DESCRIPTION OF CORE AND REMARKS	OBS. INIT.
			CORE TOP	CORE BOTTOM		
	0.5'	0			silty sand 5Y 7/2 + sample from corer. piston sucked seds. from thin layer over hard MH.	CO
	0	0			same as above cutter dented	CO
	0	0			no samples - cutter dented	LW
	0	0			calc. silty sand 5Y 7/2	HCE
	0	0			calc. silty sand 5Y 7/2	HCE
	121.4 4'	06.7 3.5	(76)		calc. silty sand 5Y 7/2 200 lb pullout	HCE
	0	0			calc. silty sand 5Y 7/2	HCE
	0	0			calc. silty sand 5Y 7/2	HCE
	0	0			no samples	CO
	0	0			calc. silty sand 5Y 7/2	CO
	76.2 2.5'	67.1 2.2	(59.5)		sandy clay + silt 5Y 7/2	CO
	?	74.4 ?.5	(24)		silt-clay 5Y 7/2	CO
	54.9 1.8'	45.7 1.5'	(45)		silty clay 5Y 7/2	CO
	0	0			sandy silty clay 5Y 7/2	CO
	54.9 1.8'	36.5 ?	(37.5)		gray silt	JW
	61.0 2.0	31.8 .7'	(48.5)		white silt	JW
	0	0			?	JW
	?	42.7 1.4'	(41.5)		5Y 7/2 silty sand w/forams	
	48.8 1.6'	36.6 1.2'	(33)		5Y 7/2 silty sand.	
	?	? 0.6'	(25.5)		10Y 6/2 silty sand. core w/sponge spicules,pteropods cutter w/ dense motl.	
	152.4 5.0	? 2.8'	(82)		10Y 6/2 silty sand worms + worm tubes-fewer pteropods than 11B	
	79.2 2.6'	57.9 1.9'	(55)		10Y 6/2 silty sand	
	?	79.2 2.6'	(79.5)		5Y 7/2 silty sand	
	0	0			no sample, core or grab	

SHIP = STATE WAVE

BOTTOM SAMPLES 1965 - 1967

BOTTOM SEDIMENT NO. (BS-)	DATE (19 67)	SAMPLE POSITION LATITUDE (N)	SAMPLE POSITION LONGITUDE (W)	DEPTH (FATHOMS) &METERS	SAMPLER	WEIGHT OF SAMPLER (LBS)	APPROX. PENE-TRATION (CM)	LENGTH OF CORE (CM)	ROCK COLOR CHART CORE NUMBERS CORE TOP	ROCK COLOR CHART CORE NUMBERS CORE BOTTOM	DESCRIPTION OF CORE AND REMARKS
1	5 APR	18°03.88'	65°33.64'	250 460	Kbg + OP	200	-	-	-	-	grab only. coral frags. & rounded pebbles
2		18°04.20'	65°39.86'	370 677	"	200	-	-	5Y 7/2	-	grab only. sandy silt w/shell + pebbles
3		18°01.57'	65°44.42'	200 366	"	200	-	-	-	-	no grab or core. coral and shell frags in core catcher
4		17°59.95'	65°48.89'	200 366	"	200	-	-	-	-	no grab or core. shell and coral frags in core catcher
5		17°57.37'	65°53.25'	350 640	"	200	127	71	5Y 5/2	5Y 7/2	clayey silt to 61 cm. silty mud 61-91 cm.
6		17°54.10'	65°52.90'	955 1746	"	200	102	27	10YR 6/4	10YR 7/4	clayey silt except 10-19 cm silty sand w/wood frags.
7		17°56.01'	65°50.02'	980 1792	Boomerang	100		45	5Y 7/4	10Y 6/2	clayey silt to 25 cm,25-33cm coarse sand,silty sand 33-45 cm
8		17°56.65'	65°46.87'	960 1756	"	100		57	10YR 6/4	5Y 8/1	clayey silt
9	6 APR	18°00.93'	65°37.78'	910 1664	"	100		-			no core - hard bottom
10		19°58.98'	65°38.79'	1025 1875	"	100		22	5Y 7/2	10Y 6/2	silty mud to 10 cm,clayey silt below.corer bottomed on hard sand
11		19°55.88'	65°38.17'	1065 1948	"	100		70	10YR 7/4	5Y 5/2	clayey silt. corer bottomed on hard sand.
12		19°53.70'	65°41.83'	1062 1842	"	100		14	10YR 6/4	10YR 7/4	clayey silt
13		19°50.41'	65°48.42'	1053 1928	Kbg + OP	200	?	57	10YR 6/4	5GY 6/2	clayey silt w/silty sand 6-8cm corer bottomed on sand.
14		19°59.24'	65°47.85'	580 1061	"	200	97	79	5Y 5/2	5Y 8/1	clayey silt to 69 cm.sandy silt 69-79cm.corer bottomed on dense gray sa

Kbg = Kullenberg gravity corer OP = Orange peel grab sampler

SHIP: R/V STATE WAVE

BOTTOM SAMPLES 1965 - 1967

BOTTOM SEDIMENT NO. (BS-)	DATE (19)	SAMPLE POSITION LATITUDE (N)	SAMPLE POSITION LONGITUDE (W)	DEPTH (FATHOMS) &METERS	SAMPLER	WEIGHT OF SAMPLER (LBS)	APPROX. PENE-TRATION (CM)	LENGTH OF CORE (CM)	ROCK COLOR CHART CORE NUMBERS CORE TOP	ROCK COLOR CHART CORE NUMBERS CORE BOTTOM	DESCRIPTION OF CORE AND REMARKS
15	6 APR.	17°59.20'	65°43.72'	525 960	Kbg+OP	200	?	119	10YR5/4	5Y8/1	clayey silt
16	12 APR.	17°51.52'	65°40.73'	750 1392	Boomerang	100		37	10YR7/4	10YR8/2	silty mud becoming clayey mud below 30 cm.
17	↓	17°55.92'	65°41.05'	1050 1920	"	100		22	10YR7/4	5Y6/1	clayey silt becoming silt below 17 cm.
18	↓	17°58.65'	65°41.61'	900 1649	"	100		52	10YR5/4	10YR8/2	clayey silt
19	↓	17°55.21'	65°44.41'	1051 1922	"	100		19	10YR7/4	5GY6/1	clayey silt
20	13 APR.	17°53.64'	65°45.31'	1050 1920	"	100		32	10YR6/4	5GY6/1	clayey silt becomes denser at bottom
21	↓	17°53.18'	65°49.42'	1040 1902	"	100		-	5Y6/2	--	sandy silt. corer bottomed on dense sand
22	17 APR.	17°58.62'	65°45.90'	760 1390	Kbg+OP	200	107	72	10YR5/4	5Y6/1	clayey silt to 40cm:becoming silty mud below.sand layer 41-43 ;silty sand below 61cm.bottomed on sand.
23	↓	17°57.22'	65°44.17'	865 1582	"	200	99	86	10YR5/4	10YR8/1	clayey silt
24	19 APR.	18°03.24'	65°35.87'	320 585	"	200	79	70	5Y7/2	5Y6/1	silty mud to 20cm.clayey silt 30-60 sandy silt below 60cm.bottomed on dense sand w/pebbles.
25	↓	18°00.53'	65°37.92'	925 1691	"	200	79?	19	10YR6/4	5Y8/1	silty mud&silty sand.shell 17-19cm bottomed on coarse sand w/shell

Kbg = Kullenberg gravity corer OP = Orange peel grab sampler

SHIP: R/V OCEANIC 1965 cores from Grappler Bank Area

BOTTOM SAMPLES 1965 - 1967

BOTTOM SEDIMENT NO. (BS-)	DATE (1965)	SAMPLE POSITION LATITUDE (N)	SAMPLE POSITION LONGITUDE (W)	DEPTH (FATHOMS) &METERS	SAMPLER	WEIGHT OF SAMPLER (LBS)	APPROX. PENE-TRATION (CM)	LENGTH OF CORE (CM)	ROCK COLOR CHART CORE NUMBERS CORE TOP	ROCK COLOR CHART CORE NUMBERS CORE BOTTOM	DESCRIPTION OF CORE AND REMARKS
P-1	24 OCT.	17°46.4'	65°52.5'	350 640	Kbg+OP	250		0	10YR7/4		grab only - silty sand. core catcher contained coral & rock fragments.
P-2A	23 OCT.	17°49.9'	65°52.6'	550 1006	"	250		0	10YR7/4		grab only - silty mud. core cutter smashed
P-2B		17°48.6'	65°52.5'	530 969	"	250	79	58	10YR5/4	10YR7/4	sandy mud w/sand 18-20cm, and silty sand 53-58 cm.
P-3		17°47.6'	65°54.6'	38 69	"	250	?	22	5Y7/2	5Y7/2	sandy gravel - biogenetic detritus
P-4		17°46.5'	65°55.7'	168 307	"	250		0			no samples. core barrel bent, cutter smashed.
P-5		17°47.0'	65°58.1'	430 786	"	250	137	106	10YR7/4	5YR8/2	sandy muds and silty sands.
P-6		17°49.7'	65°59.3'	805 1472	"	250	67	37	10YR7/4	10YR8/2	sandy mud w/sand 18-21cm and mass of biogenetic debris 21-25 cm
P-7		17°49.4'	66°02.1'	713 1304	"	250	67	44	10YR5/4	10YR7/4	silty mud
P-8		17°49.8'	66°07.1'	410 750	"	250	?	18	10YR5/4	5Y7/2	silty sand w/coral frags. below 12 cm.
P-9		17°49.4'	66°09.5'	203 371	"	250	?	49	5Y6/1	10YR8/2	silty sand. below 39cm. silty sand w/coral frags&other biogenetic detri
P-10		17°46.0'	66°09.5'	588 966	"	250	88	38	10YR7/4	10YR7/4	silty mud. mass of calcareous detrital mtl. below 26 cm.
P-11		17°46.5'	66°05.0'	558 1020	"	250	?	29	-	5Y6/1	clayey silt above dense silty sand core barrel bent.
P-12		17°46.4'	66°01.5'	698 1277	"	250	180	113	10YR5/4	10YR7/4	sandy & silty muds. calcareous de-tritus(sand size)51-62cm;finer below
P-13	↓	17°42.9'	65°59.8'	560 1024	"	250	183	158	10YR5/4	10YR8/7	sandy & silty muds.

Kbg = Kullenberg gravity corer OP = Orange peel grab sampler

SHIP: OCEANIC 1965 cores from Grappler Bank Area

BOTTOM SAMPLES 1965 - 1967

BOTTOM SEDIMENT NO. (BS-)	DATE (19 65)	SAMPLE POSITION LATITUDE (N)	SAMPLE POSITION LONGITUDE (W)	DEPTH (FATHOMS) &METERS	SAMPLER	WEIGHT OF SAMPLER (LBS)	APPROX. PENE-TRATION (CM)	LENGTH OF CORE (CM)	ROCK COLOR CHART CORE NUMBERS CORE TOP	ROCK COLOR CHART CORE NUMBERS CORE BOTTOM	DESCRIPTION OF CORE AND REMARKS
P-14	23 OCT.	17°42.9'	66°01.0'	448 819	Kbg + OP	250		0	10YR7/4	-	grab only silty sand w/shell
P-15A	22 OCT.	17°43.3'	66°05.6'	566 1035	"	250		0			no samples
P-15B		17°43.1'	66°05.8'	510 933	"	250		0			no samples
P-16		17°43.1'	66°09.8'	440 805	"	250		0	10YR5/4	-	grab only - silty sand
P-17		17°39.9'	66°09.7'	518 947	"	250	79	61	10YR5/4	10YR7/4	silty mud becoming silty sand below sand below 42 cm.
P-18	23 OCT.	17°39.3'	66°05.5'	590 1079	"	250	?	18	10YR5/4	10YR7/4	silty mud&sandy mud.corer bottomed on pebbles&coral frags,+plant mtl.
P-19		17°40.0'	66°01.7'	690 1262	"	250	183	138	10YR5/4	5Y8/1	sandy muds&silty sands.69-76cm a mass of calc.detritus.132-133cm coarse bio genetic mtl.
P-20		17°40.2'	65°58.5'	784 1426	"	250	?	29	10YR5/4	10YR7/4	sandy and silty mud becoming pebbley below 25 cms.

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The 18 pages of photographs in this file were not scanned. They can be viewed in the paper or microfiche copies of this report.