

GAHAGAN & BRYANT ASSOCIATES

LOG OF BORING

PROJECT: JUPITER ISLAND

BORING LOCATION: X= 795,500

Y= 1,024,500

BORING NO.: 18

DATE: May 18, 1989

DRILLING CO.: Exmar

ELEVATION TOP OF HOLE: 35.2

DRILLING RIG: Ocean Explorer

DATUM: MLW

DRILL DESIGNATION: vibracore

TOTAL DEPTH OF HOLE: 17.0

CORE DIAMETER: 3"

LENGTH RECOVERED: 16.7

INSPECTOR: C. Bryant

| ELEVATION | DEPTH IN FEET | LEGEND | MATERIAL DESCRIPTION | SAMPLE NUMBER | REMARKS |
|-----------|---------------|--------|--|---------------|--------------------|
| 35.2 | 0 | | | | |
| | 1 | | SAND, gray, medium to coarse, shell sand with quartz. (SP) | 18A | 85% crushed shell. |
| 38.1 | 2 | | | | |
| | 3 | | | | |
| | 4 | | SAND, tan, medium to coarse shell. (SP) | 18B | 90% crushed shell. |
| | 5 | | | | |
| 41.7 | 6 | | | | |
| | 7 | | | | |
| | 8 | | SAND, gray, fine to medium, shell sand, fine quartz. (SP) | 18C | 60% crushed shell. |
| | 9 | | | | |
| | 10 | | | | |
| | 11 | | | | |
| 47.7 | 12 | | | | |
| | 13 | | SAND, lt. gray, very fine to fine, silty. (SM) | 18D | |
| | 14 | | | | |
| | 15 | | | | |
| 51.9 | 16 | | | | |
| | 17 | | | | |
| | 18 | | | | |
| | 19 | | | | |
| | 20 | | | | |

GAHAGAN AND BRYANT ASSOCIATES, INC

SIEVE ANALYSIS DATA

SAMPLE: 18A

PROJECT: JUPITER ISLAND

DATE: MAY 1989

BORING NO. : 18

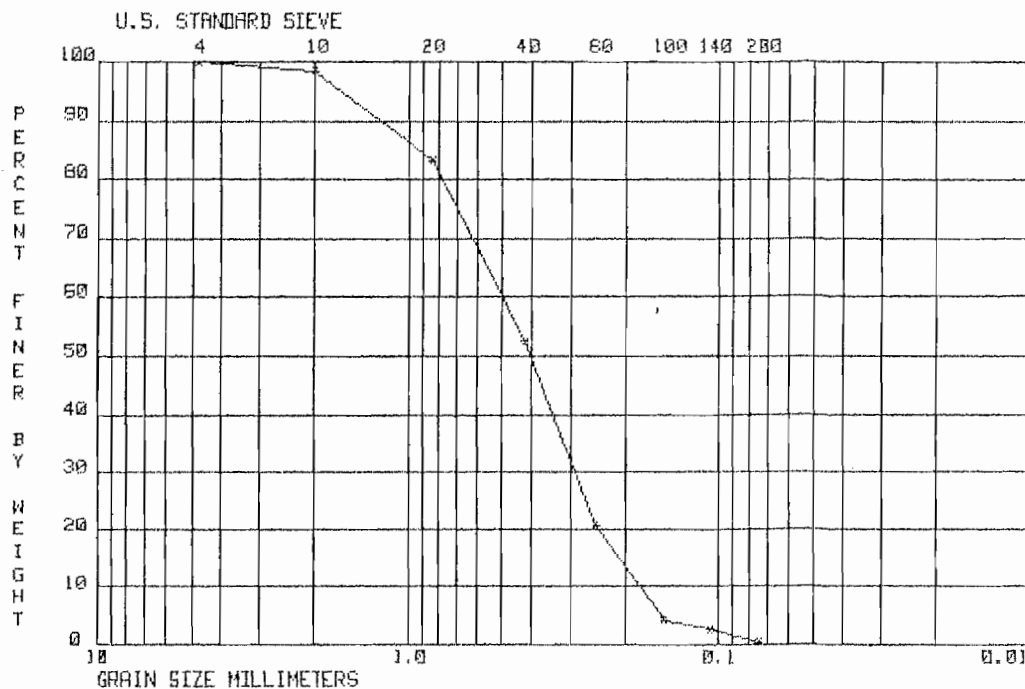
ANALYST: HAMBY

DEPTH (FT.): 0.0-2.9

ESTIMATED PERCENT OF SHELL: 85%

WEIGHT (grams) OF WHOLE SAMPLE (DRY): 200.30

| SIEVE NO. | WEIGHT RETAINED | WEIGHT PERCENT | CUMULATIVE % RETAINED | PERCENT PASSING | DESCRIPTION OF MATERIAL RETAINED |
|-----------|-----------------|----------------|-----------------------|-----------------|----------------------------------|
| 4 | .10 | .05 | .05 | 99.95 | SHELL |
| 10 | 3.20 | 1.60 | 1.65 | 98.35 | SHELL, GRAY |
| 20 | 30.30 | 15.13 | 16.77 | 83.23 | SHELL, GRAY |
| 40 | 61.50 | 30.70 | 47.48 | 52.52 | SHELL, GRAY |
| 60 | 63.80 | 31.85 | 79.33 | 20.67 | SHELL, GRAY |
| 100 | 33.40 | 16.67 | 96.01 | 3.99 | SAND/SHELL, GRAY |
| 140 | 3.00 | 1.50 | 97.50 | 2.50 | SAND, GRAY |
| 200 | 4.30 | 2.15 | 99.65 | .35 | SAND, GRAY |
| PAN | .60 | .30 | 99.95 | | SILT, GRAY |



GAHAGAN AND BRYANT ASSOCIATES, INC

SIEVE ANALYSIS DATA

SAMPLE: 18B

PROJECT: JUPITER ISLAND

DATE: MAY 1989

BORING NO. : 18

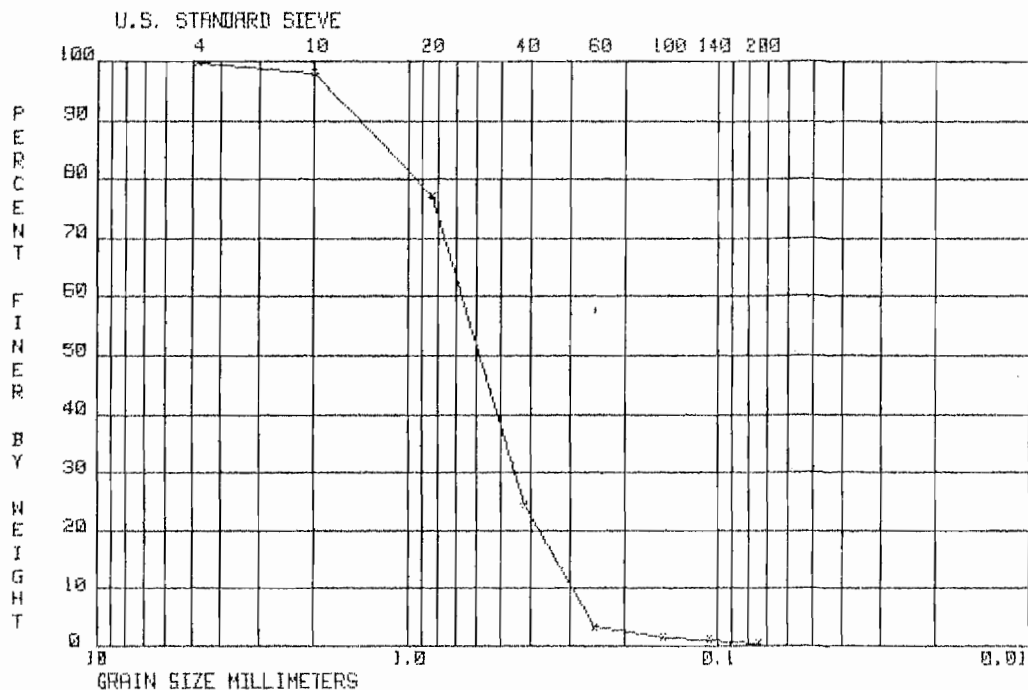
ANALYST: HAMBY

DEPTH (FT.): 2.9-6.5

ESTIMATED PERCENT OF SHELL: 90%

WEIGHT (grams) OF WHOLE SAMPLE (DRY): 200.20

| SIEVE NO. | WEIGHT RETAINED | WEIGHT PERCENT | CUMULATIVE % RETAINED | PERCENT PASSING | DESCRIPTION OF MATERIAL RETAINED |
|-----------|-----------------|----------------|-----------------------|-----------------|----------------------------------|
| 4 | .20 | .10 | .10 | 99.90 | SHELL FRAGS, TAN |
| 10 | 3.80 | 1.90 | 2.00 | 98.00 | SHELL FRAGS, TAN |
| 20 | 42.00 | 20.98 | 22.98 | 77.02 | SHELL, TAN |
| 40 | 105.30 | 52.60 | 75.57 | 24.43 | SHELL, TAN |
| 60 | 42.50 | 21.23 | 96.80 | 3.20 | SHELL, TAN |
| 100 | 3.80 | 1.90 | 98.70 | 1.30 | SAND GRAY/TAN |
| 140 | .70 | .35 | 99.05 | .95 | SAND GRAY |
| 200 | 1.30 | .65 | 99.70 | .30 | SAND, GRAY |
| PAN | .50 | .25 | 99.95 | | SILT, GRAY |



GAHAGAN AND BRYANT ASSOCIATES, INC

SIEVE ANALYSIS DATA

SAMPLE: 18C

PROJECT: JUPITER ISLAND

DATE: MAY 1989

BORING NO. : 18

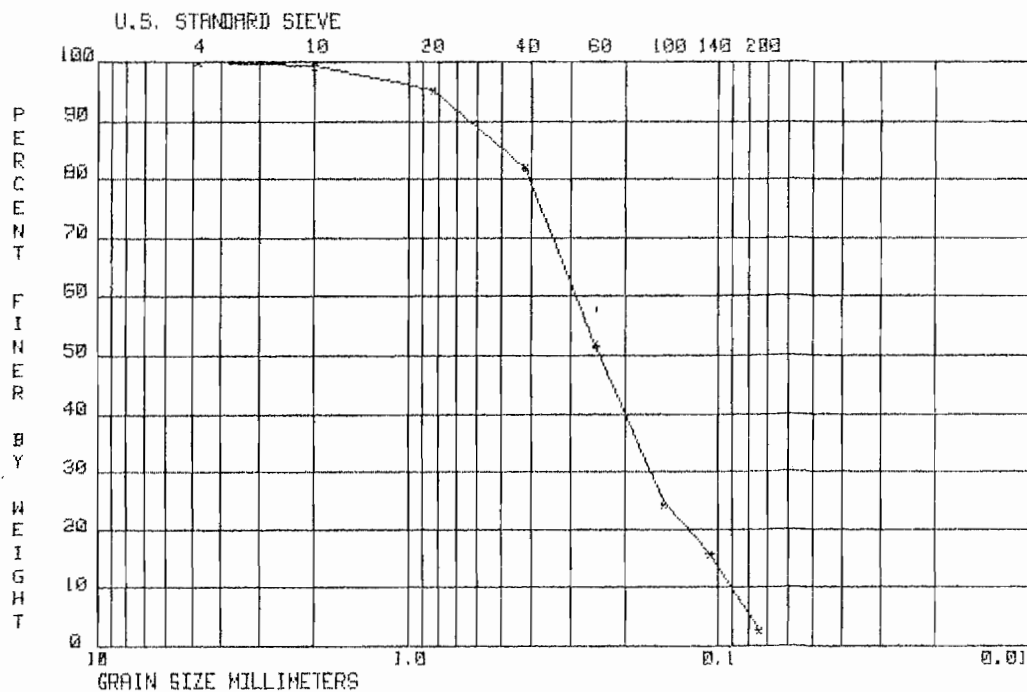
ANALYST: HAMBY

DEPTH (FT.): 6.5-12.5

ESTIMATED PERCENT OF SHELL: 60%

WEIGHT (grams) OF WHOLE SAMPLE (DRY): 200.50

| SIEVE NO. | WEIGHT RETAINED | WEIGHT PERCENT | CUMULATIVE % RETAINED | PERCENT PASSING | DESCRIPTION OF MATERIAL RETAINED |
|-----------|-----------------|----------------|-----------------------|-----------------|----------------------------------|
| 4 | 0.00 | 0.00 | 0.00 | 100.00 | |
| 10 | 1.40 | .70 | .70 | 99.30 | SHELL, GRAY |
| 20 | 8.20 | 4.09 | 4.79 | 95.21 | SHELL, GRAY |
| 40 | 27.00 | 13.47 | 18.25 | 81.75 | SHELL GRAY |
| 60 | 60.30 | 30.07 | 48.33 | 51.67 | SHELL/SAND, GRAY |
| 100 | 55.10 | 27.48 | 75.81 | 24.19 | SAND, GRAY |
| 140 | 17.00 | 8.48 | 84.29 | 15.71 | SAND, GRAY |
| 200 | 26.40 | 13.17 | 97.46 | 2.54 | SAND, GRAY |
| PAN | 5.00 | 2.49 | 99.95 | | SILT, GRAY |



GAHAGAN AND BRYANT ASSOCIATES, INC

SIEVE ANALYSIS DATA

SAMPLE: 180

PROJECT: JUPITER ISLAND

DATE: MAY 1989

BORING NO. : 18

ANALYST: HAMBY

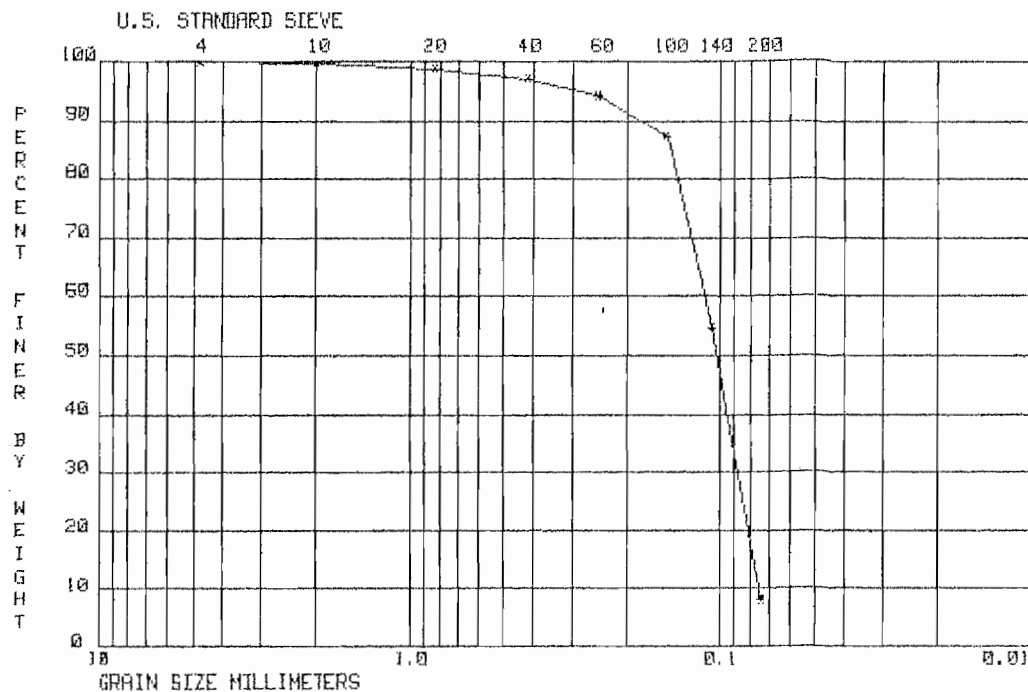
DEPTH (FT.): 12.5-16.7

ESTIMATED PERCENT OF SHELL: 2 %

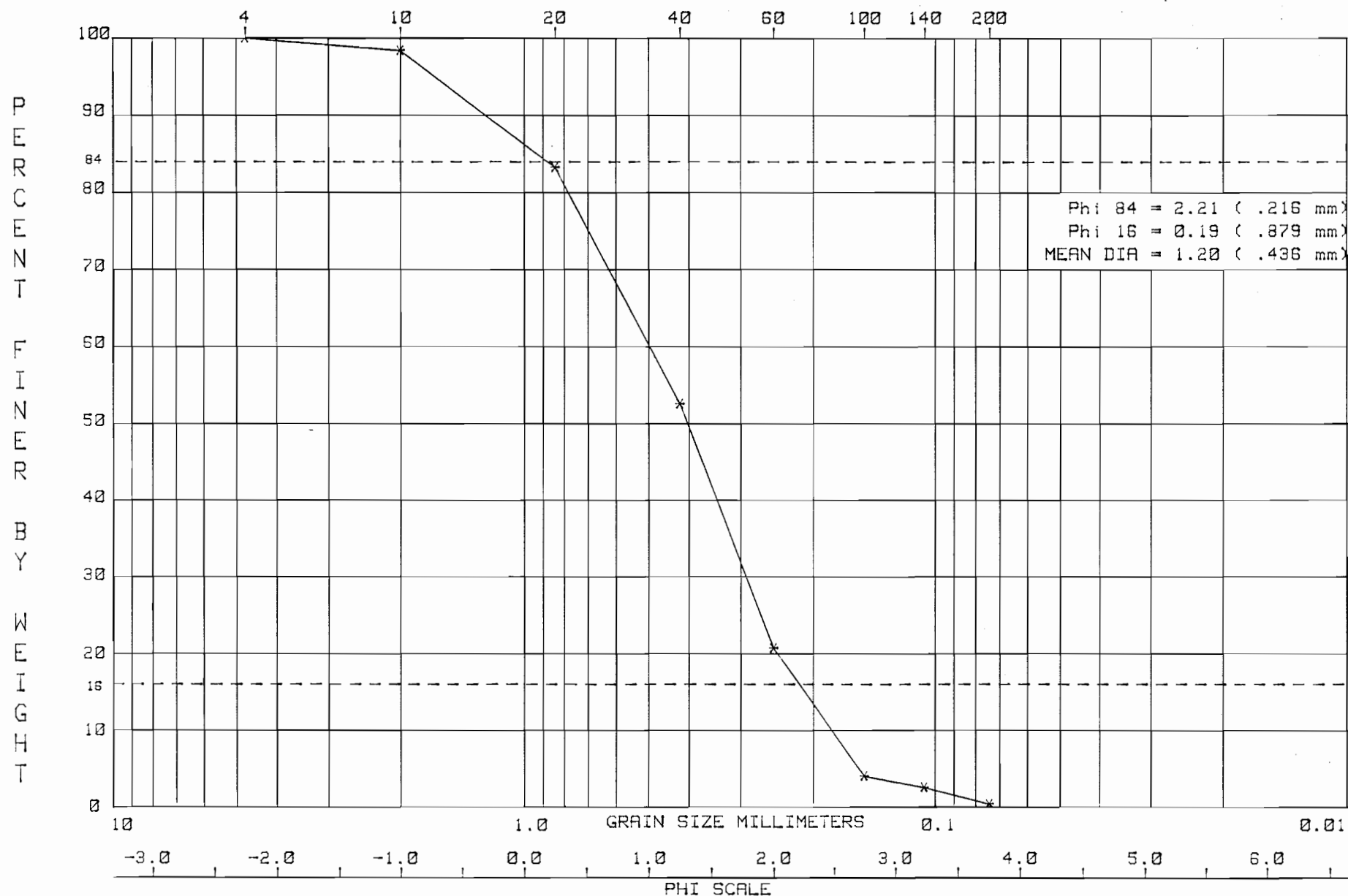
WEIGHT (grams) OF WHOLE SAMPLE (DRY): 200.10

| SIEVE NO. | WEIGHT RETAINED | WEIGHT PERCENT | CUMULATIVE % RETAINED | PERCENT PASSING | DESCRIPTION OF MATERIAL RETAINED |
|-----------|-----------------|----------------|-----------------------|-----------------|----------------------------------|
|-----------|-----------------|----------------|-----------------------|-----------------|----------------------------------|

| | | | | | |
|-----|-------|-------|-------|--------|-------------|
| 4 | 0.00 | 0.00 | 0.00 | 100.00 | |
| 10 | .20 | .10 | .10 | 99.90 | GRAVEL |
| 20 | 2.20 | 1.10 | 1.20 | 98.80 | SHELL, GRAY |
| 40 | 3.50 | 1.75 | 2.95 | 97.05 | SAND, GRAY |
| 60 | 5.60 | 2.80 | 5.75 | 94.25 | SAND, GRAY |
| 100 | 14.10 | 7.05 | 12.79 | 87.21 | SAND, GRAY |
| 140 | 65.00 | 32.48 | 45.28 | 54.72 | SAND, GRAY |
| 200 | 93.50 | 46.73 | 92.00 | 8.00 | SAND, GRAY |
| PAN | 15.60 | 7.80 | 99.80 | | SILT, GRAY |



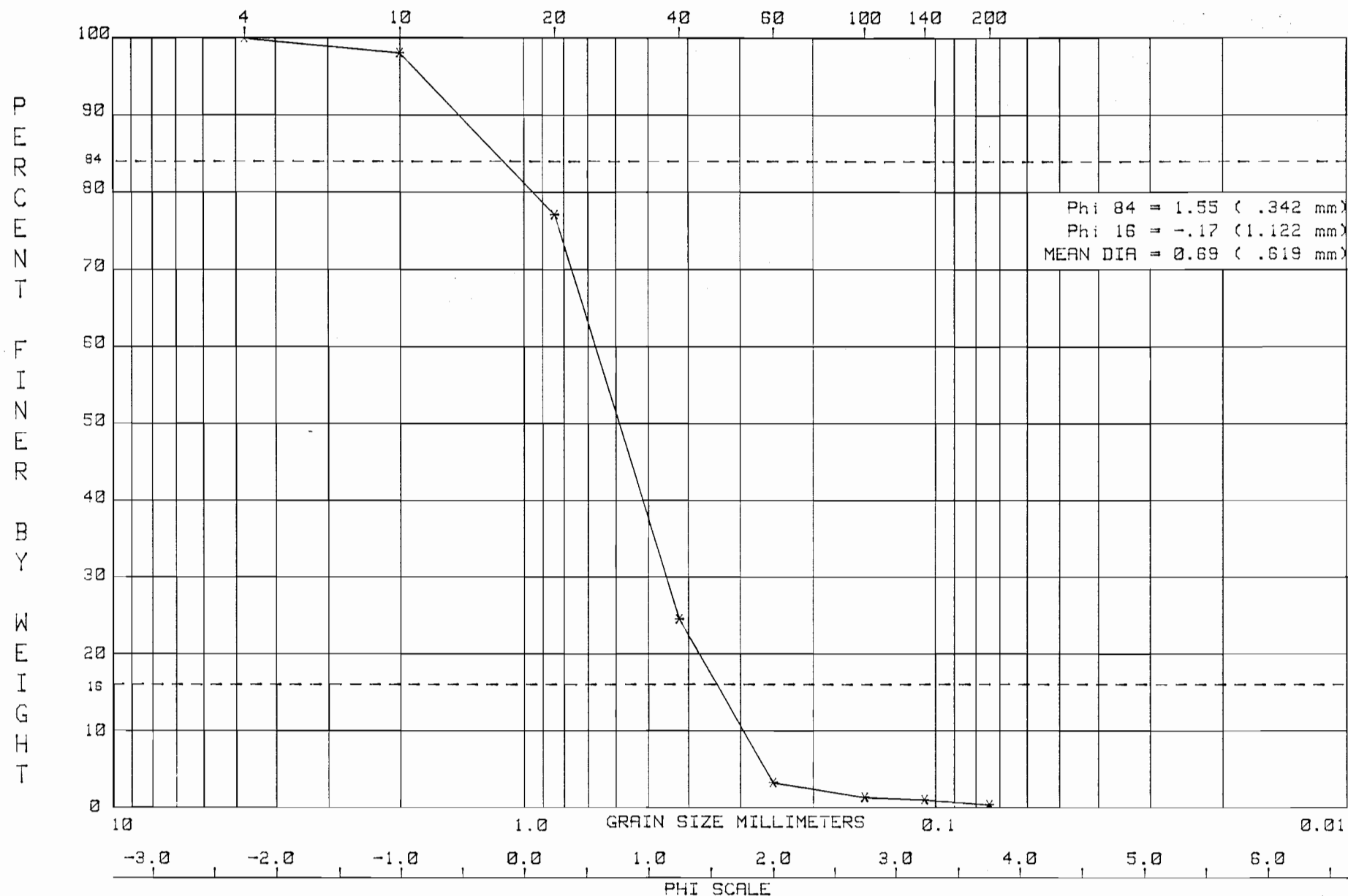
U.S. STANDARD SIEVE



JUPITER ISLAND, MAY 89
 SAMPLE: 18A

BORING NO. : 18
 DEPTH (FT): 0.0-2.9

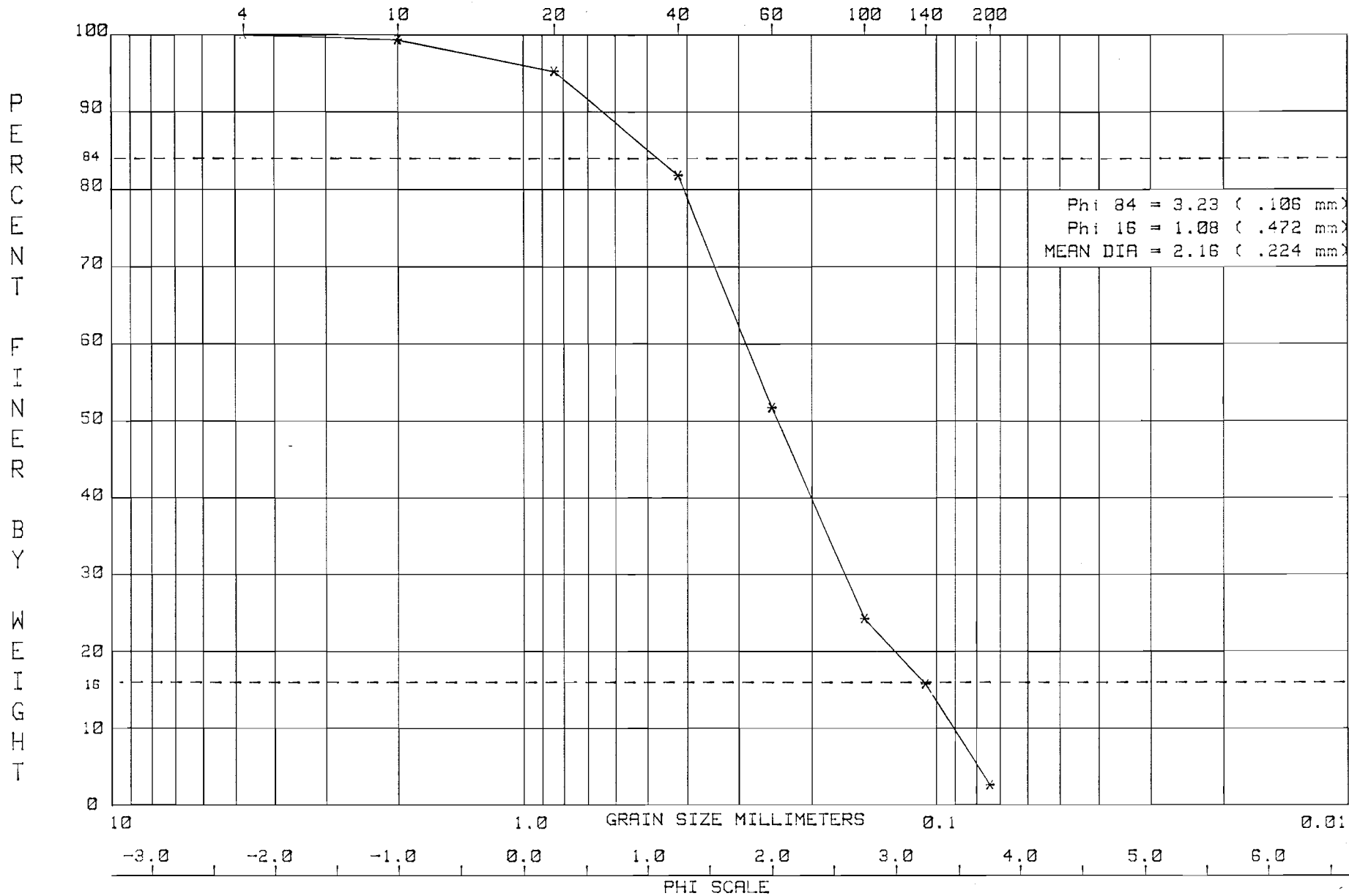
U.S. STANDARD SIEVE



JUPITER ISLAND, MAY 89
SAMPLE: 18B

BORING NO. : 18
DEPTH (FT): 2.9-6.5

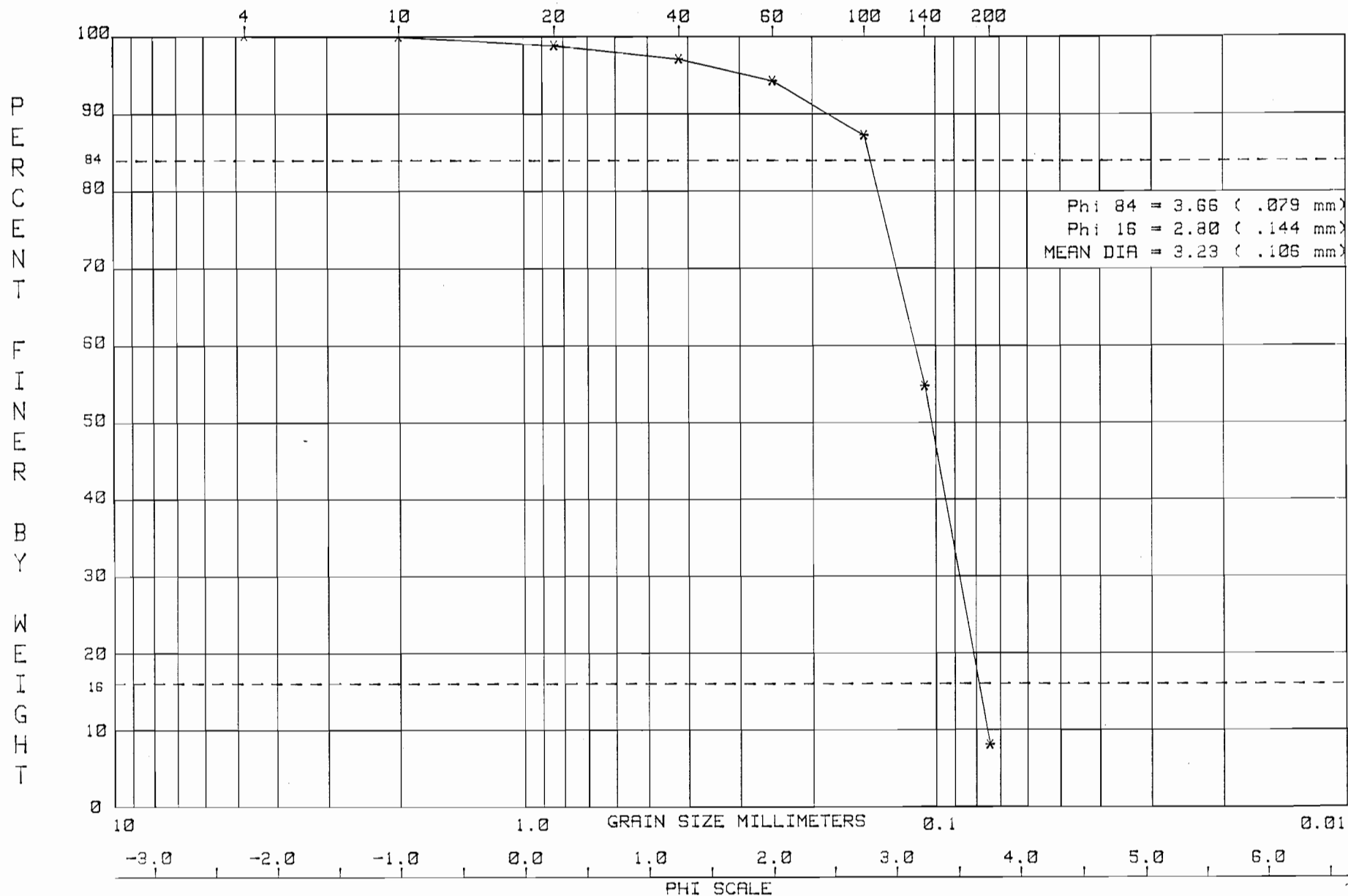
U.S. STANDARD SIEVE



JUPITER ISLAND, MAY 89
 SAMPLE: 18C

BORING NO. : 18
 DEPTH (FT): 6.5-12.5

U.S. STANDARD SIEVE



JUPITER ISLAND, MAY 89
SAMPLE: 18D

BORING NO. : 18
DEPTH (FT): 12.5-16.7