

# JET PROBE LOG

**PROJECT:** Collier County

**JET PROBE:** CCJP-02-21

**COORDINATES:**

N = 669411

E = 357025

**DATE:** 12/18/02

**START TIME:** 1324

**END TIME:** 1333

**WATER DEPTH:** 29.7 FT

**TOP DIVER:** TP

**BOTTOM DIVER:** MDA

| NOTES  | ELEV.                 | DEPTH | SYMBOL | DESCRIPTION                          |
|--|-----------------------|-------|--------|--------------------------------------|
| LENGTH OF PVC PIPE: 20.0'<br>PENETRATION DEPTH: 8.0'<br>JET PUMP TYPE: BRIGGS & STRATON 3.0 HP<br>GAL/HR: 8460<br>DIAMETER OF PIPE: 1.5"   | -29.7                 | 0     |        | SEA FLOOR                            |
|  | -30.7                 | 1     |        | Fine Silty Sand                      |
|  |                       | 2     |        | Sand with little Shell Hash          |
|  |                       | 3     |        |                                      |
| SUPPORT VESSEL: CPE II<br>POSITIONING: DIFFERENTIAL GPS USCG BEACON<br>NAVIGATION SYSTEM: "HYPACK"   | -33.7                 | 4     |        | Shell Fragments                      |
|  |                       | 5     |        | Silty Sand with some Shell Fragments |
|  |                       | 6     |        |                                      |
| WEATHER:<br><br>WIND:<br>DIR: EAST<br>SPEED: 5 - 10 Kt.<br><br>WAVES:<br>DIR: EAST<br>HEIGHT: 1 to 2 Ft.<br><br>CURRENT:<br>DIR: SOUTH<br>SPEED: SLIGHT  | -37.2                 | 7     |        | Rubble                               |
|  | -37.7                 | 8     |        |                                      |
|  | -38                   | 9     |        | Refusal @ 8.0'                       |
|  |                       | 10    |        |                                      |
| SAND SAMPLES<br><br>TOP: 0.20 mm (visual estimate)<br>Munsell Color: Wet 5Y-6/2 Dry 5Y-7/2<br><br>MID: 0.23 mm, Silt: 2.04%, Shell: 14%<br>Munsell Color: Wet 5Y-6/1 Dry 5Y-7/2<br><br>BOTTOM: 0.28 mm (visual estimate)<br>Munsell Color: Wet 5Y-6/1 Dry 5Y-7/1 |                       | 11    |        |                                      |
|  |                       | 12    |        |                                      |
|  |                       | 13    |        |                                      |
|  |                       | 14    |        |                                      |
|  |                       | 15    |        |                                      |
|  |                       | 16    |        |                                      |
|  |                       | 17    |        |                                      |
|  |                       | 18    |        |                                      |
|  |                       | 19    |        |                                      |
|  |                       | 20    |        |                                      |
|  |                       | 21    |        |                                      |
| TURBIDITY:<br>TOP (0' - 4.0'): Moderate<br>BOTTOM: (4.0' - 8.0'): High   |                       | 22    |        |                                      |
|  |                       | 23    |        |                                      |
| DRAWN BY: JB<br>JOB NO: 8500.04  | CHECKED BY: MDA / JLA | 24    |        |                                      |

## Gradation Analysis Report

Project Name: Collier County

Sample Name: CCJP-02-21 MID

Sample Date: 01/05/03

Analyzed By: ID



**Coastal Planning & Engineering, Inc.**

2481 N.W. Boca Raton Blvd.  
Boca Raton, FL 33431

|                    |                     |   |                   |
|--------------------|---------------------|---|-------------------|
| Easting:<br>357025 | Northing:<br>669411 | Coordinate System:<br>State Plane 1983 FL East Feet | Elevation:<br>N/A |
|--------------------|---------------------|---|-------------------|

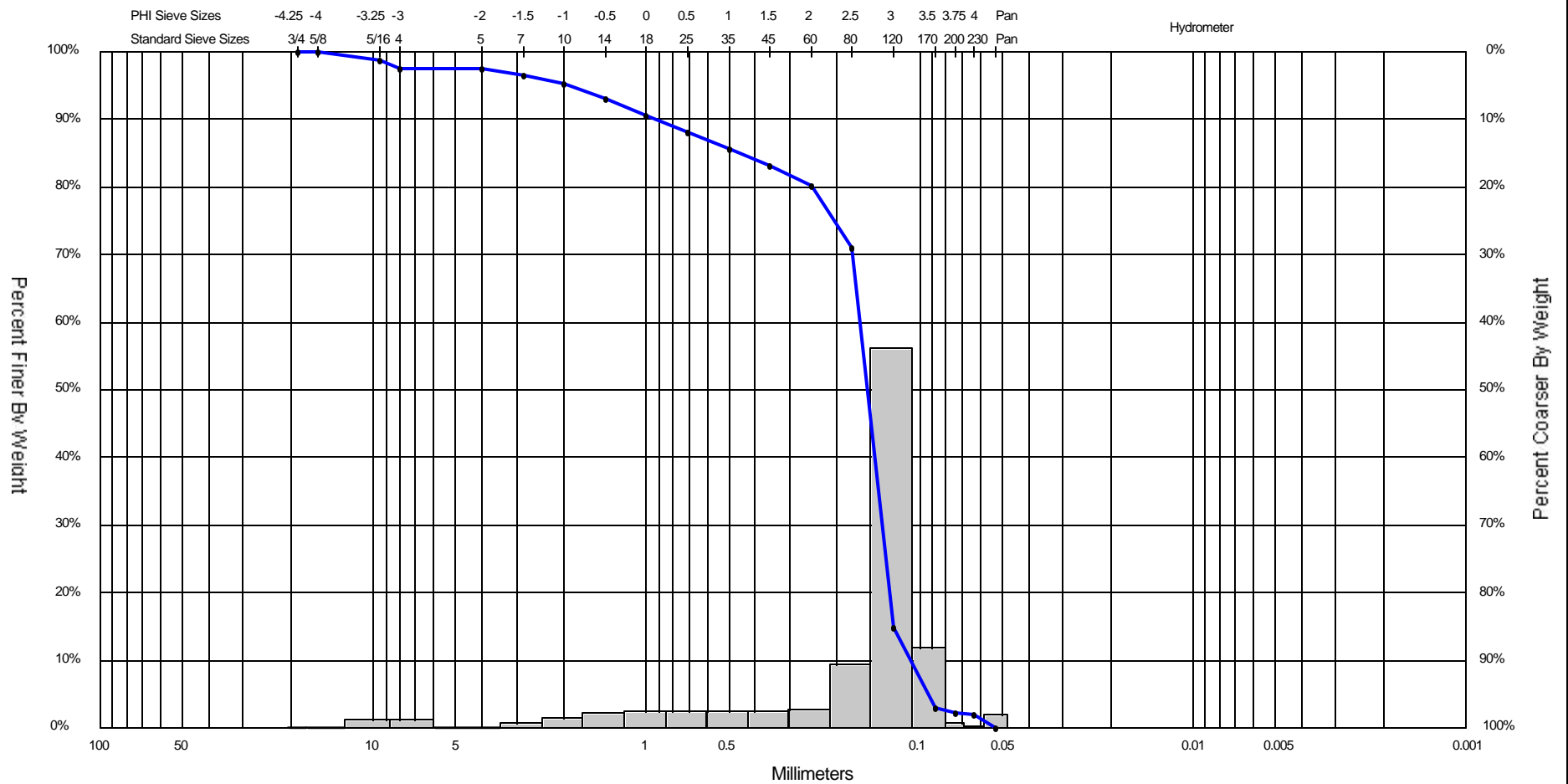
|             |                       |                       |   |
|-------------|-----------------------|-----------------------|---|
| USCS:<br>SW | Dry Munsel:<br>5Y-7/2 | Wet Munsel:<br>5Y-6/1 | Comments:<br>See logs for estimated % shell content |
|-------------|-----------------------|-----------------------|---|

|                      |                       |                     |                       |   |
|----------------------|-----------------------|---------------------|-----------------------|---|
| Dry Weight:<br>87.26 | Wash Weight:<br>85.53 | Sieve Loss:<br>0.02 | Percent Silt:<br>2.04 | Estimated Percent Shell Content:<br>N/A |
|----------------------|-----------------------|---------------------|-----------------------|---|


| Sieve Number | Sieve Size (Phi) | Sieve Size (Millimeters) | Grams Retained | % Weight Retained | Cum. Grams Retained | C. % Weight Retained |
|--------------|------------------|--------------------------|----------------|-------------------|---------------------|----------------------|
| 3/4          | -4.25            | 19.02                    | 0.00           | 0.00              | 0.00                | 0.00                 |
| 5/8          | -4.00            | 16.00                    | 0.00           | 0.00              | 0.00                | 0.00                 |
| 5/16         | -3.25            | 9.51                     | 1.14           | 1.31              | 1.14                | 1.31                 |
| 4            | -3.00            | 8.00                     | 1.04           | 1.19              | 2.18                | 2.50                 |
| 5            | -2.00            | 4.00                     | 0.05           | 0.06              | 2.23                | 2.56                 |
| 7            | -1.50            | 2.82                     | 0.69           | 0.79              | 2.92                | 3.35                 |
| 10           | -1.00            | 2.00                     | 1.29           | 1.48              | 4.21                | 4.82                 |
| 14           | -0.50            | 1.41                     | 1.94           | 2.22              | 6.15                | 7.05                 |
| 18           | 0.00             | 1.00                     | 2.07           | 2.37              | 8.22                | 9.42                 |
| 25           | 0.50             | 0.70                     | 2.17           | 2.49              | 10.39               | 11.91                |
| 35           | 1.00             | 0.50                     | 2.24           | 2.57              | 12.63               | 14.47                |
| 45           | 1.50             | 0.35                     | 2.16           | 2.48              | 14.79               | 16.95                |
| 60           | 2.00             | 0.25                     | 2.39           | 2.74              | 17.18               | 19.69                |
| 80           | 2.50             | 0.17                     | 8.14           | 9.33              | 25.32               | 29.02                |
| 120          | 3.00             | 0.12                     | 48.98          | 56.13             | 74.30               | 85.15                |
| 170          | 3.50             | 0.08                     | 10.40          | 11.92             | 84.70               | 97.07                |
| 200          | 3.75             | 0.07                     | 0.56           | 0.64              | 85.26               | 97.71                |
| 230          | 4.00             | 0.06                     | 0.22           | 0.25              | 85.48               | 97.96                |
| Pan          | Pan              | Pan                      | 1.76           | 2.02              | 87.24               | 99.98                |

|       |        |        |        |        |        |        |
|-------|--------|--------|--------|--------|--------|--------|
| Phi 5 | Phi 16 | Phi 25 | Phi 50 | Phi 75 | Phi 84 | Phi 95 |
| -0.96 | 1.31   | 2.28   | 2.69   | 2.91   | 2.99   | 3.41   |

|            |          |         |         |          |          |
|------------|----------|---------|---------|----------|----------|
| Statistics | Mean Phi | Mean mm | Sorting | Skewness | Kurtosis |
| Graphic    | 1.89     | 0.27    | 1.08    | -2.24    | 2.87     |
| Moment     | 2.09     | 0.23    | 1.50    | -1.23    | 2.99     |



| Gravel |      | Sand   |        |      | Silt and Clay |
|--------|------|--------|--------|------|---------------|
| Coarse | Fine | Coarse | Medium | Fine |               |

| Sample  | Symbol | Elev. | Comments            | USCS | % Silt | Median | Mean | Skew  | Kurt | Sort | Sample Information |                               |
|---|--------|-------|---------------------|------|--------|--------|------|-------|------|------|--------------------|-------------------------------|
| CCJP-02-21 MID  |        | N/A   |                     | SW   | 2.04   | 0.15   | 0.23 | -1.23 | 2.99 | 1.50 | Project Name:      | Collier County                |
| Incremental % Weight  |        | N/A   | Use Left Hand Scale |      |        |        |      |       |      |      | Collection Date:   | 01/05/03                      |
|   |        |       |                     |      |        |        |      |       |      |      | Analyzed By:       | ID                            |
|  <div> <b>Coastal Planning &amp; Engineering, Inc.</b><br/> 2481 N.W. Boca Raton Blvd.<br/> Boca Raton, FL 33431<br/> ph 561 391-8102      fax 561 391-9116 </div> |        |       |                     |      |        |        |      |       |      |      | Easting (X):       | 357025                        |
|   |        |       |                     |      |        |        |      |       |      |      | Northing (Y):      | 669411                        |
|   |        |       |                     |      |        |        |      |       |      |      | Horizontal System: | State Plane 1983 FL East Feet |
|   |        |       |                     |      |        |        |      |       |      |      | Vertical System:   | N/A                           |