

## Line 13

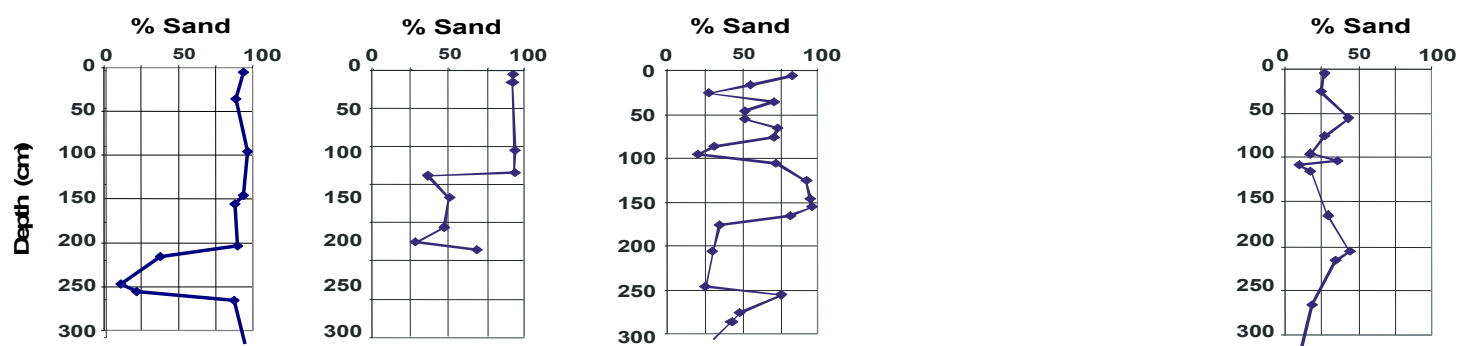


Figure 47: Fence Profile for Line 13

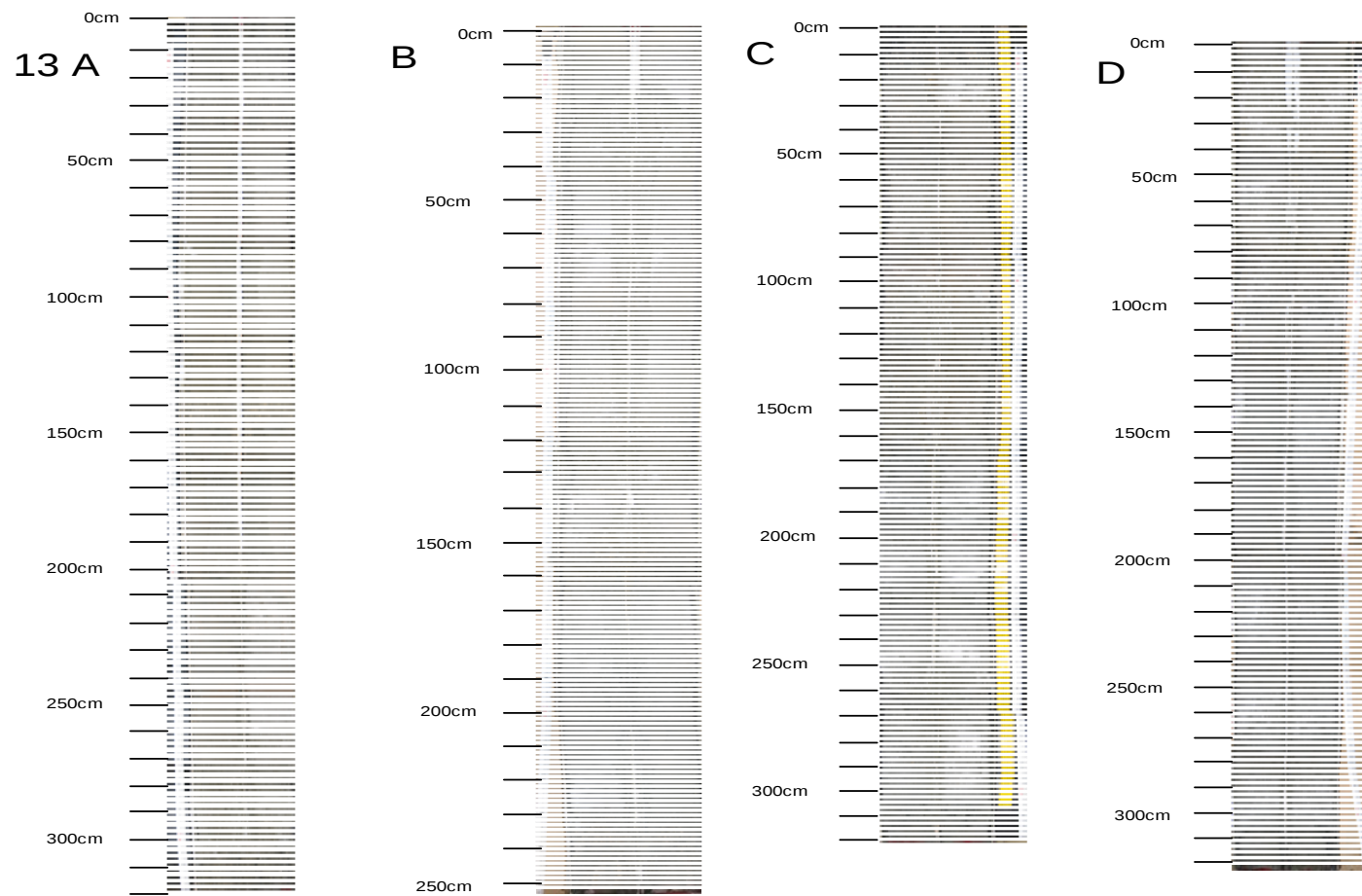


Figure 48: Core Photographs for Line 13

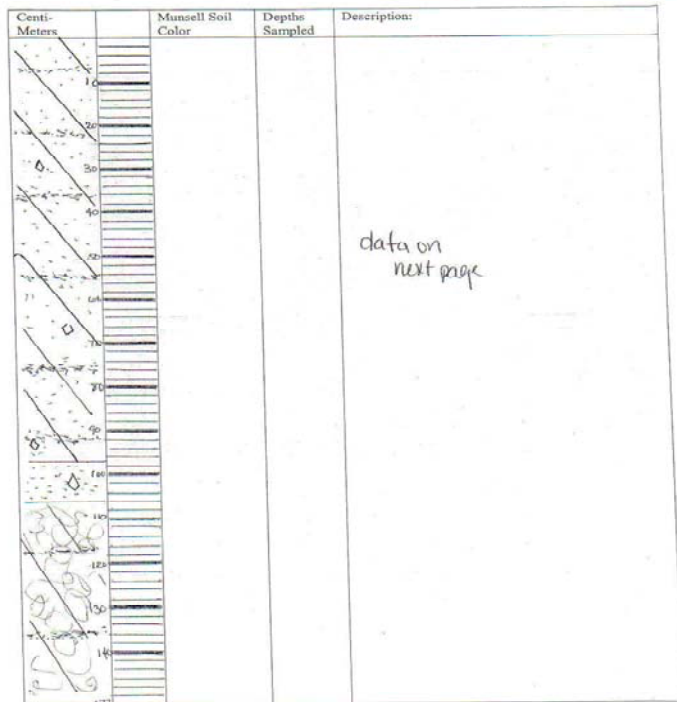
### **CORE 13D:**

Core 13D was taken at a water depth of 9.4m (31ft) (Table 1) and had a total length of 322cm (126.8in) (Figures 72-85). A total of 13 grain size samples were taken at depths of 1-10cm (0.4-3.9in), 21-30 (8.3-11.8in), 51-60cm (20-23.6in), 71-80cm (28-31.5in), 91-100cm(35.8-39.4in), 101-106cm (39.3-41.7in), 106-110cm (41.7-43.3in), 111-120cm (43.7-47.2), 161-170cm(63.3-67in), 201-210cm (78.7-82.7in), 210-220cm (82.7-86.7in), 261-270cm (102.8-106.3in) and 311-320cm (122.4-126in). Grain size analyses revealed that the entire length of the core contained less than 36% sand (Table 50). Sand and shell weights are shown in Table 49. Percent sand, silt and clay are shown in Table 50. Median grain size, mean grain size, skewness and sorting index are shown in Table 51. Graphs of the results are located in Figures 76-79.

It was determined that core 13D had approximately 0cm (0in) of sediment contained at least 50% sand.

Core#: 13D  
Core Date: 7/18/05

|                       |                 |
|-----------------------|-----------------|
| Date Split/subsampled | Length: 302 cm  |
| 7/18/05               | Lat: 29 10.845  |
|                       | Long: 94 55.410 |



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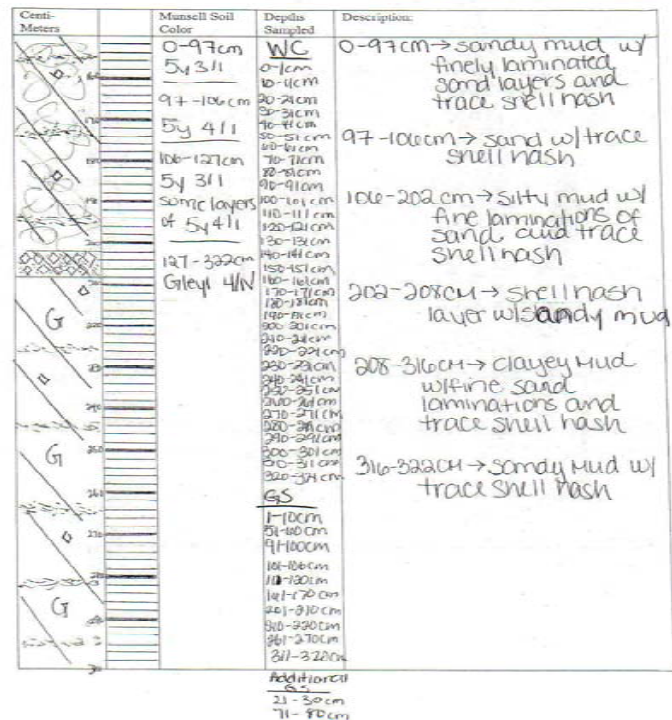


Figure 72: Core log of 13D for depths 0-150cm  
Figure 73: Core log of 13D for depths 150-300cm

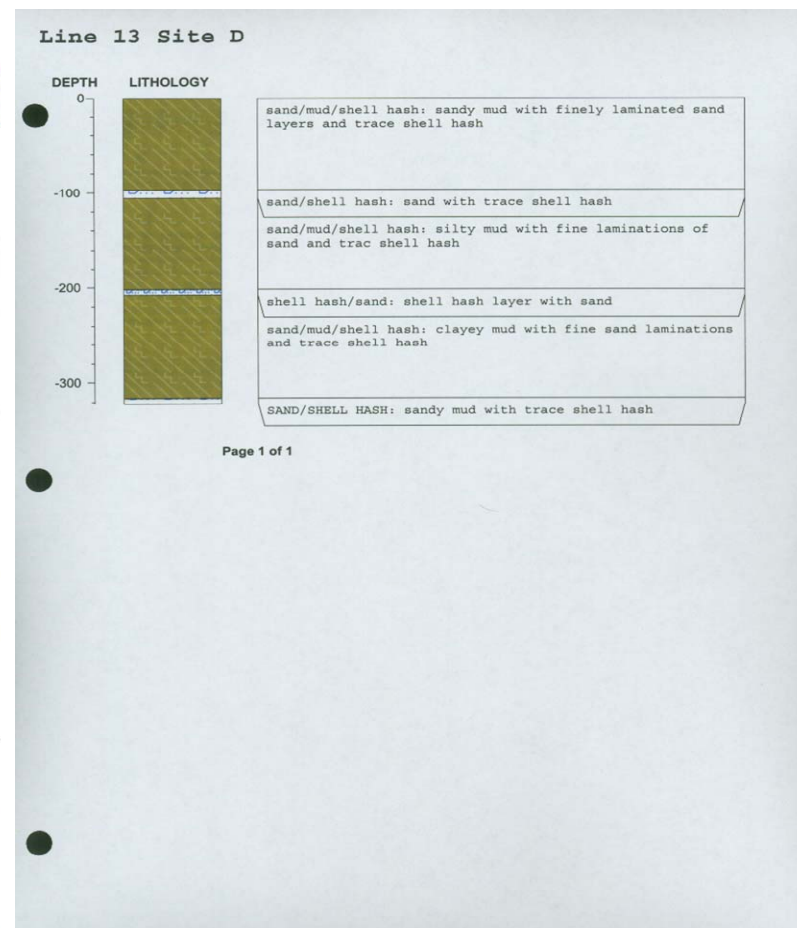
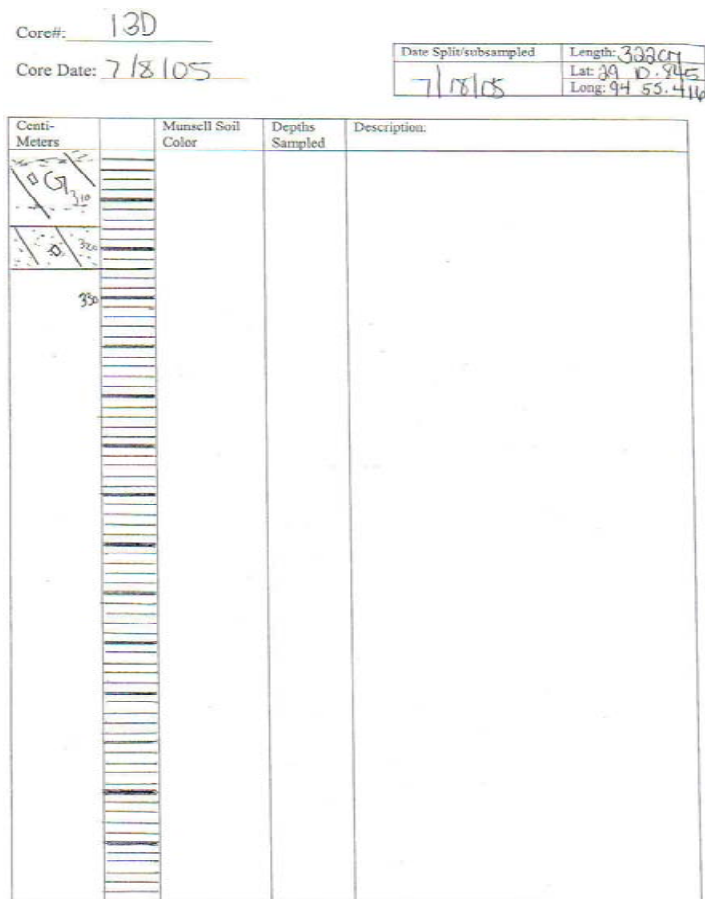


Figure 74: Core log of 13D for depths 300-322cm  
 Figure 75: Computerized core log for 13D

| Core ID | Sample Depth (cm) | #10/<br>2.0mm<br>Screen<br>Sample<br>Weight<br>(g) | #14/<br>1.40mm<br>Screen<br>Sample<br>Weight<br>(g) | N18/<br>1.00mm<br>Screen<br>Sample<br>Weight<br>(g) | #25/<br>710µm<br>Screen<br>Sample<br>Weight<br>(g) | #35/<br>500µm<br>Screen<br>Sample<br>Weight<br>(g) | #45/<br>355µm<br>Screen<br>Sample<br>Weight<br>(g) | #60/<br>250µm<br>Screen<br>Sample<br>Weight<br>(g) | #80/<br>180µm<br>Screen<br>Sample<br>Weight<br>(g) | #125/<br>125µm<br>Screen<br>Sample<br>Weight<br>(g) | #170/<br>90µm<br>Screen<br>Sample<br>Weight<br>(g) | #200/<br>75µm<br>Screen<br>Sample<br>Weight<br>(g) | #230/<br>63µm<br>Screen<br>Sample<br>Weight<br>(g) |
|---------|-------------------|----------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|-----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|
| 13D     | 1-10              |                                                    |                                                     |                                                     |                                                    |                                                    |                                                    |                                                    |                                                    |                                                     |                                                    | 8.83                                               | 2.25                                               |
| 13D     | 21-30             |                                                    |                                                     |                                                     |                                                    |                                                    |                                                    |                                                    |                                                    |                                                     |                                                    | 7.30                                               | 2.86                                               |
| 13D     | 51-60             |                                                    |                                                     |                                                     |                                                    |                                                    |                                                    |                                                    |                                                    |                                                     |                                                    | 20.01                                              | 4.65                                               |
| 13D     | 71-80             |                                                    |                                                     |                                                     |                                                    |                                                    |                                                    |                                                    |                                                    |                                                     |                                                    | 11.65                                              | 5.41                                               |
| 13D     | 91-100            |                                                    |                                                     |                                                     |                                                    |                                                    |                                                    |                                                    |                                                    |                                                     |                                                    | 6.57                                               | 7.95                                               |
| 13D     | 101-106           | 0.06                                               | 0.04                                                | 0.06                                                | 0.04                                               | 0.02                                               | 0.02                                               | 0.07                                               | 0.24                                               | 0.86                                                | 6.60                                               | 11.23                                              | 17.42                                              |
| 13D     | 106-110           |                                                    |                                                     |                                                     |                                                    |                                                    |                                                    |                                                    |                                                    |                                                     |                                                    | 2.16                                               | 1.99                                               |
| 13D     | 111-120           |                                                    |                                                     |                                                     |                                                    |                                                    |                                                    |                                                    |                                                    |                                                     |                                                    | 3.42                                               | 5.35                                               |
| 13D     | 161-170           |                                                    |                                                     |                                                     |                                                    |                                                    |                                                    |                                                    |                                                    |                                                     |                                                    | 13.31                                              | 5.30                                               |
| 13D     | 201-210           |                                                    |                                                     |                                                     |                                                    |                                                    |                                                    |                                                    |                                                    |                                                     |                                                    | 27.08                                              | 8.59                                               |
| 13D     | 210-220           |                                                    |                                                     |                                                     |                                                    |                                                    |                                                    |                                                    |                                                    |                                                     |                                                    | 14.01                                              | 8.17                                               |
| 13D     | 261-270           |                                                    |                                                     |                                                     |                                                    |                                                    |                                                    |                                                    |                                                    |                                                     |                                                    | 4.46                                               | 4.62                                               |
| 13D     | 311-320           |                                                    |                                                     |                                                     |                                                    |                                                    |                                                    |                                                    |                                                    |                                                     |                                                    | 3.34                                               | 2.76                                               |

Table 47: RO-TAP data for core 13D

|                                 |                   |                                       |                                         |                                       |                                       |                                      |                                       |                                     |                                       |                                       |                                       |                                       |                      |
|---------------------------------|-------------------|---------------------------------------|-----------------------------------------|---------------------------------------|---------------------------------------|--------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|----------------------|
| ASTM Classification             |                   | coarse sand                           | medium sand                             | medium sand                           | medium sand                           | medium sand                          | fine sand                             | fine sand                           | fine sand                             | fine sand                             | fine sand                             | fine sand                             | silt                 |
| Wentworth Classification        |                   | granule                               | very coarse sand                        | very coarse sand                      | coarse sand                           | coarse sand                          | medium sand                           | fine sand                           | fine sand                             | fine sand                             | very fine sand                        | very fine sand                        | very fine silt       |
|                                 |                   |                                       |                                         |                                       |                                       |                                      |                                       |                                     |                                       |                                       |                                       |                                       |                      |
| Core ID                         | Sample Depth (cm) | % finer than N10/ 2.0mm/ -1.0Φ Screen | % finer than N14/ 1.40mm / -0.5Φ Screen | % finer than N18/ 1.00mm/ 0.0Φ Screen | % finer than N25/ 710µm / 0.5Φ Screen | % finer than N35/ 500µm/ 1.0Φ Screen | % finer than N45/ 355µm / 1.5Φ Screen | % finer than N60/ 250µm 2.0Φ Screen | % finer than N80/ 180µm/ 2.5 Φ Screen | % finer than N125/ 125µm/ 3.0Φ Screen | % finer than N170/ 90µm / 3.5Φ Screen | % finer than N200/ 75µm / 4.0Φ Screen | % finer than 4µm/ 8Φ |
| Observed Contents of the sample |                   | shell only                            | shell only                              | shell only                            | shell only                            | shell only                           | shell only                            | shell only                          | sand                                  | sand                                  | sand                                  | sand                                  | silt                 |
| 13D                             | 1-10              |                                       |                                         |                                       |                                       |                                      |                                       |                                     |                                       |                                       |                                       | 78.9                                  | 52.7                 |
| 13D                             | 21-30             |                                       |                                         |                                       |                                       |                                      |                                       |                                     |                                       |                                       |                                       | 82.3                                  | 51.9                 |
| 13D                             | 51-60             |                                       |                                         |                                       |                                       |                                      |                                       |                                     |                                       |                                       |                                       | 64.6                                  | 35.8                 |
| 13D                             | 71-80             |                                       |                                         |                                       |                                       |                                      |                                       |                                     |                                       |                                       |                                       | 81.2                                  | 46.2                 |
| 13D                             | 91-100            |                                       |                                         |                                       |                                       |                                      |                                       |                                     |                                       |                                       |                                       | 91.8                                  | 33.3                 |
| 13D                             | 101-106           | 99.9                                  | 99.9                                    | 99.8                                  | 99.8                                  | 99.8                                 | 99.8                                  | 99.7                                | 99.5                                  | 98.6                                  | 92.1                                  | 81.1                                  | 12.3                 |
| 13D                             | 106-110           |                                       |                                         |                                       |                                       |                                      |                                       |                                     |                                       |                                       |                                       | 94.7                                  | 50.2                 |
| 13D                             | 111-120           |                                       |                                         |                                       |                                       |                                      |                                       |                                     |                                       |                                       |                                       | 93.1                                  | 32.5                 |
| 13D                             | 161-170           |                                       |                                         |                                       |                                       |                                      |                                       |                                     |                                       |                                       |                                       | 79.2                                  | 30.2                 |
| 13D                             | 201-210           |                                       |                                         |                                       |                                       |                                      |                                       |                                     |                                       |                                       |                                       | 66.7                                  | 23.2                 |
| 13D                             | 210-220           |                                       |                                         |                                       |                                       |                                      |                                       |                                     |                                       |                                       |                                       | 78.1                                  | 28.1                 |
| 13D                             | 261-270           |                                       |                                         |                                       |                                       |                                      |                                       |                                     |                                       |                                       |                                       | 90.8                                  | 24.4                 |

Table 48: Percent finer table for core 13D

| Core ID | Sample Depth (cm) | shell weight | 200+ weight | 200-230 weight | sand + shell |
|---------|-------------------|--------------|-------------|----------------|--------------|
| 13D     | 1-10              |              | 8.83        | 2.25           | 8.83         |
| 13D     | 21-30             |              | 7.30        | 2.86           | 7.30         |
| 13D     | 51-60             |              | 20.01       | 4.65           | 20.01        |
| 13D     | 71-80             |              | 11.65       | 5.41           | 11.65        |
| 13D     | 91-100            |              | 6.57        | 7.95           | 6.57         |
| 13D     | 101-106           | 0.24         | 19.00       | 17.42          | 19.24        |
| 13D     | 106-110           |              | 2.16        | 1.99           | 2.16         |
| 13D     | 111-120           |              | 3.42        | 5.35           | 3.42         |
| 13D     | 161-170           |              | 13.31       | 5.30           | 13.31        |
| 13D     | 201-210           |              | 27.08       | 8.59           | 27.08        |
| 13D     | 210-220           |              | 14.01       | 8.17           | 14.01        |
| 13D     | 261-270           |              | 4.46        | 4.62           | 4.46         |
| 13D     | 311-320           |              | 3.34        | 2.76           | 3.34         |

Table 49: Shell and Sand weight for core 13D

| Core ID | sample id | mid sample depth | % shell | % sand | %silt | %clay | total % |
|---------|-----------|------------------|---------|--------|-------|-------|---------|
| 13D     | 1-10      | 5.5              |         | 21.1   | 26.2  | 52.7  | 100     |
| 13D     | 21-30     | 25.5             |         | 17.7   | 30.4  | 51.9  | 100     |
| 13D     | 51-60     | 55.5             |         | 35.4   | 28.7  | 35.8  | 100     |
| 13D     | 71-80     | 75.5             |         | 18.8   | 35.0  | 46.2  | 100     |
| 13D     | 91-100    | 95.5             |         | 8.2    | 58.5  | 33.3  | 100     |
| 13D     | 101-106   | 103.5            | 0.2     | 18.7   | 68.8  | 12.3  | 100     |
| 13D     | 106-110   | 108              |         | 5.3    | 44.5  | 50.2  | 100     |
| 13D     | 111-120   | 115.5            |         | 6.9    | 60.5  | 32.5  | 100     |
| 13D     | 161-170   | 165.5            |         | 20.8   | 49.1  | 30.2  | 100     |
| 13D     | 201-210   | 205.5            |         | 33.3   | 43.5  | 23.2  | 100     |
| 13D     | 210-220   | 215.5            |         | 21.9   | 50.0  | 28.1  | 100     |
| 13D     | 261-270   | 265.5            |         | 9.2    | 66.4  | 24.4  | 100     |

Table 50: Percent Shell, Sand, Silt and Clay weights for core 13D

| Station ID    | Average Depth | Median Grain Size | Median Grain Size | Mean Grain Size | Mean Grain Size | Skewness | Sorting Index |
|---------------|---------------|-------------------|-------------------|-----------------|-----------------|----------|---------------|
|               | (cm)          | (phi)             | (mm)              | (phi)           | (mm)            |          |               |
| CC13D/1-10    | 5.5           |                   |                   |                 |                 |          |               |
| CC13D/21-30   | 25.5          |                   |                   |                 |                 |          |               |
| CC13D/51-60   | 55.5          |                   |                   |                 |                 |          |               |
| CC13D/71-80   | 75.5          |                   |                   |                 |                 |          |               |
| CC13D/91-100  | 95.5          |                   |                   |                 |                 |          |               |
| CC13D/101-106 | 103.5         | 4.2313            | 0.0529            | 4.2879          | 0.0509          | 0.5059   | 1.8126        |
| CC13D/106-110 | 108           |                   |                   |                 |                 |          |               |
| CC13D/111-120 | 115.5         |                   |                   |                 |                 |          |               |
| CC13D/161-170 | 165.5         |                   |                   |                 |                 |          |               |
| CC13D/201-210 | 205.5         |                   |                   |                 |                 |          |               |
| CC13D/210-220 | 215           |                   |                   |                 |                 |          |               |
| CC13D/261-270 | 265.5         |                   |                   |                 |                 |          |               |
| CC13D/311-320 | 315.5         |                   |                   |                 |                 |          |               |

PINK=Upper sand area

Table 51: Median grain size, Mean grain size, Skewness and Sorting Index for core 13D

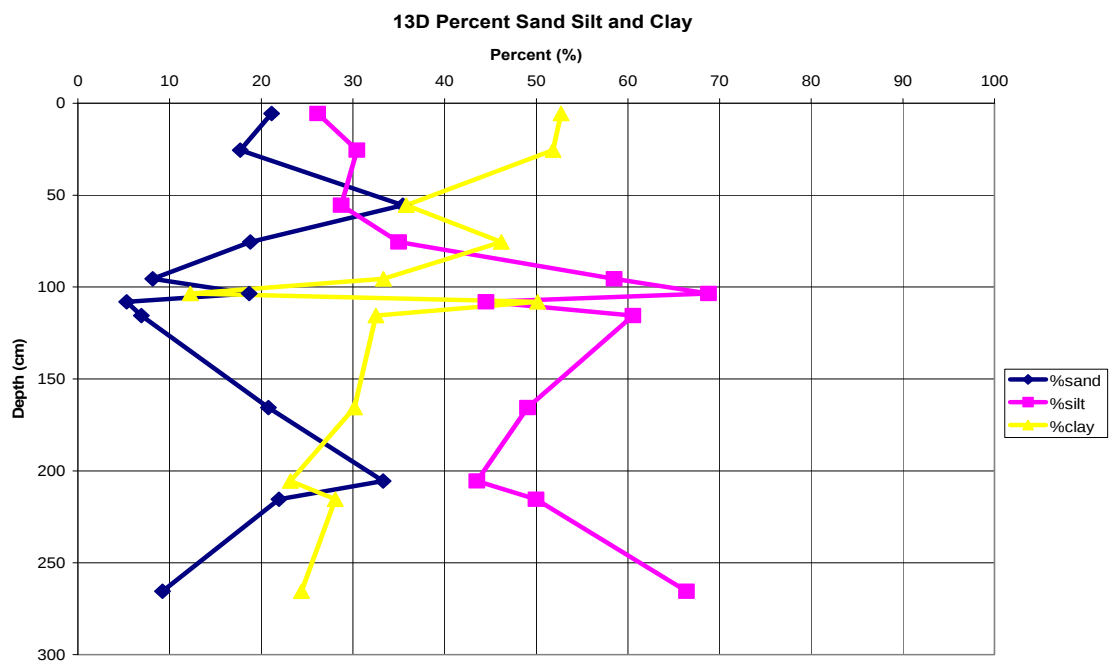


Figure 76: Percent Sand, Silt and Clay graph for core 13D

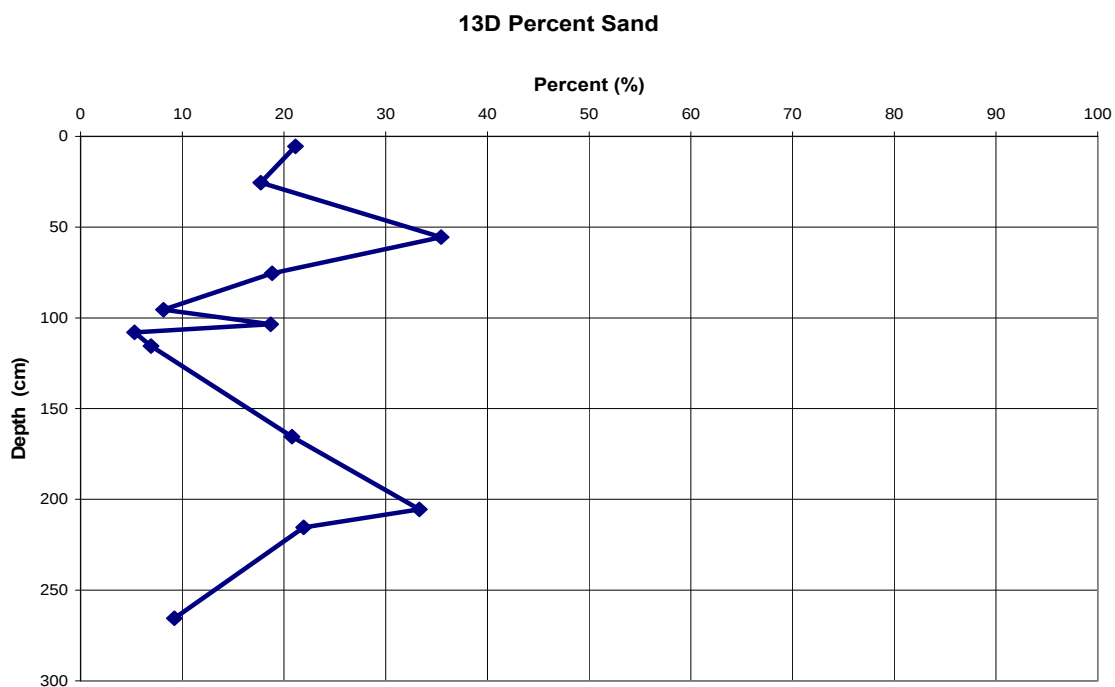


Figure 77: Percent Sand graph for core 13D

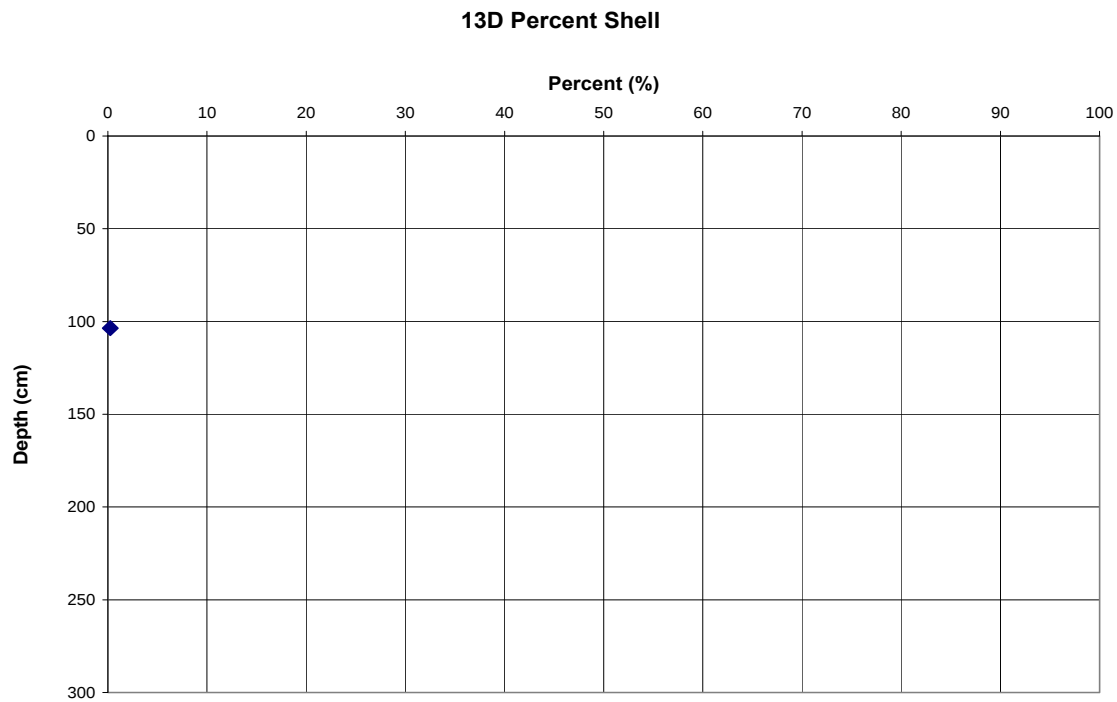


Figure 78: Percent Shell graph for core 13D

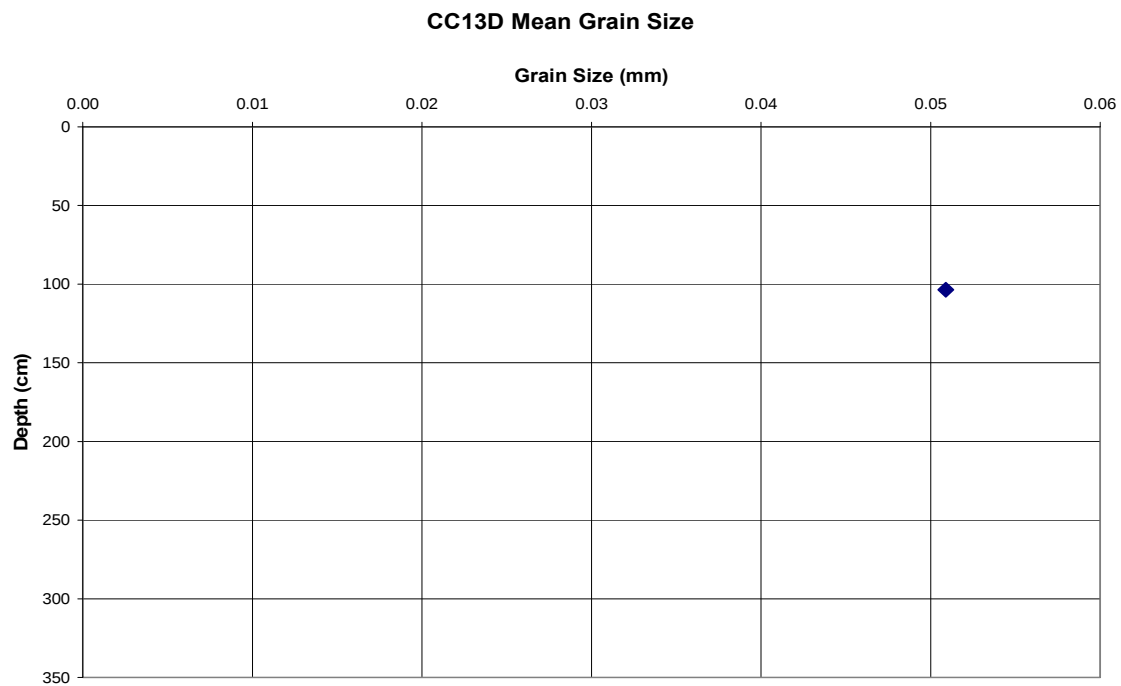


Figure 79: Mean grain size graph for core 13D