

Figure 18: Fence Profile for Line 12

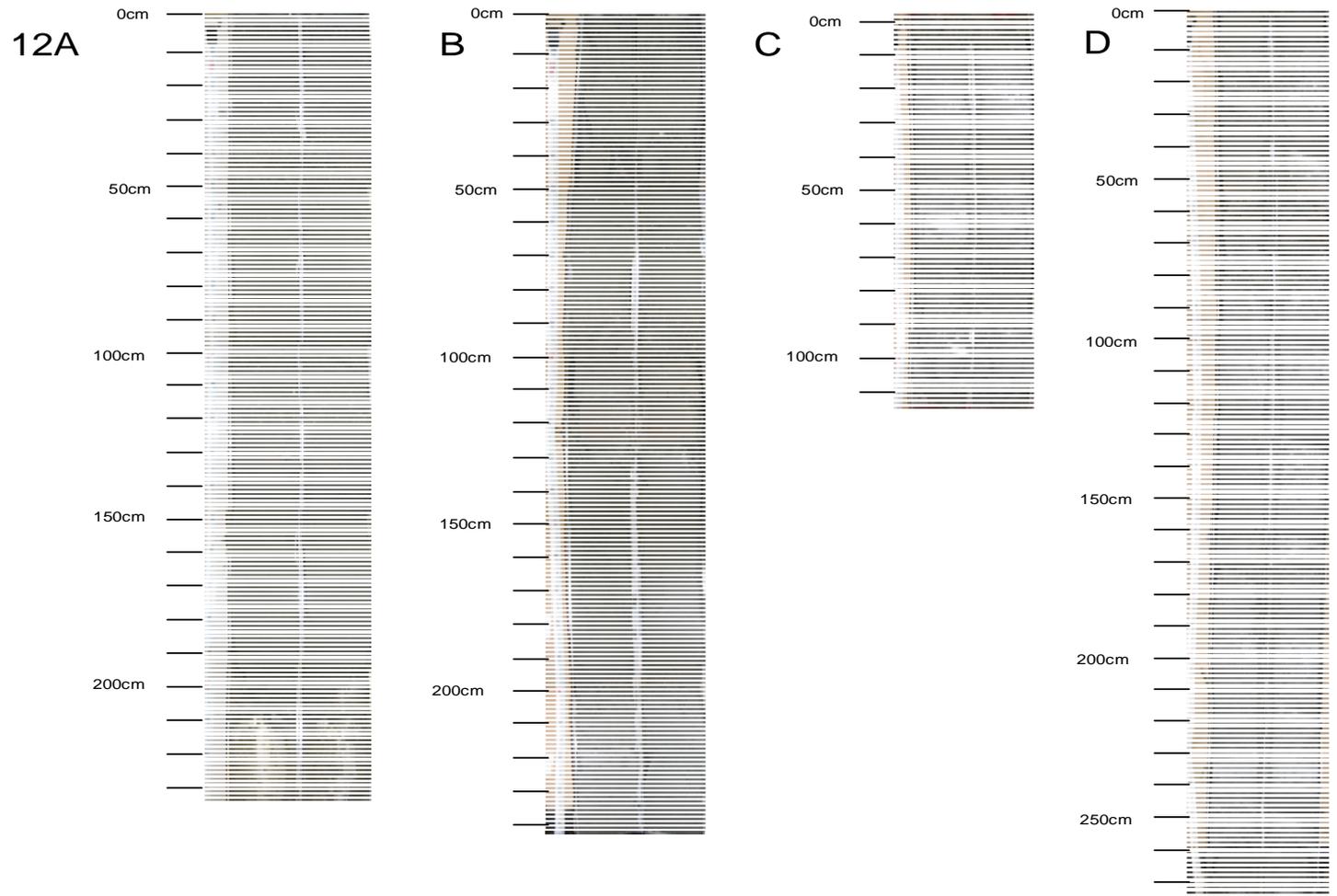


Figure 19: Core photographs of Line 12

## **CORE 12C:**

Core 12C was taken at a water depth of 7.9m (25.9ft.) (Table 1) and had a total length of 144cm (43.8in) (Figures 34&35). A total of 9 grain size samples were taken at depths of 1-10cm (0.4-3.9in), 11-21cm (4.3- 8.3in), 21-30cm (8.3-11.8in), 31-40cm (12.2 15.7in), 41-50cm (16.1-19.7), 51-60cm (20-23.6in), 61-65cm (24-25.6in), 65-70cm (25.6-27.6), 101-110cm (39.3-49.8in). The top of this core down to approximately 65cm (25.6in) contained a mud with sand laminations and had percent sand decreasing from 81 to 15%. At the bottom of the core there was an observed sand layer from approximately 70 to 101cm (27.6 to 39.3in) which had above 77% (Tables 25&26). Sand and shell weights are shown in Table 24. Percent sand, silt and clay are shown in Table 25. Median grain size, mean grain size, skewness and sorting index are shown in Table 26. Graphs of the results are located in figures 36-39.

It was determined that core 12C had approximately 60cm (23.6in) of sediment contained at least 50% sand, of which 50cm (19.7in) was located shallower than 1m (39.4in) depth. The average grain size in the upper 1m (3.28ft) was determined to be 0.0928mm.

Core#: 12C  
 Core Date: 7/8/05

Date Split/subsampled	Length: <u>114cm</u>
<u>7/14/05</u>	Lat:
	Long:

Centi-Meters	Munsell Soil Color	Depths Sampled	Description:
0-11cm	WC 5y 4/1	0-1cm	1-11cm → shell hash layers w/ sand
11-65cm	Gley 4/P	10-11cm	11-65cm → mud w/ fine sand laminations
65-114cm	5y 4/1	70-71cm	65-68cm → sand w/ trace shell hash
		71-101cm	68-71cm → shell hash w/ sand
		101-105cm	71-101cm → sand w/ trace shell hash
		105-114cm	101-105cm → sand hash w/ sand
			105-114cm → sand w/ trace shell hash
			Additional GS
		21-30cm	
		31-40cm	
		41-50cm	
		51-60cm	

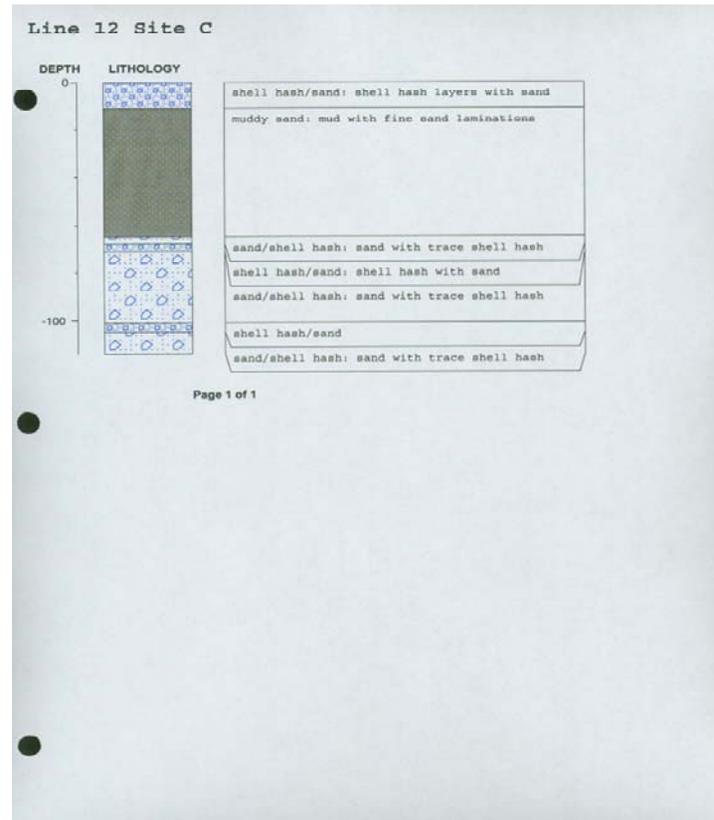


Figure 34: Core log of 12C for depths of 0-114cm  
 Figure 35: Computerized core log of 12C

Core ID	Sample Depth (cm)	#10/ 2.0mm Screen Sample Weight (g)	#14/ 1.40mm Screen Sample Weight (g)	#18/ 1.00mm Screen Sample Weight (g)	#25/ 710µm Screen Sample Weight (g)	#35/ 500µm Screen Sample Weight (g)	#45/ 355µm Screen Sample Weight (g)	#60/ 250µm Screen Sample Weight (g)	#80/ 180µm Screen Sample Weight (g)	#125/ 125µm Screen Sample Weight (g)	#170/ 90µm Screen Sample Weight (g)	#200/ 75µm Screen Sample Weight (g)	#230/ 63µm Screen Sample Weight (g)
12C	1-10	0.88	0.60	0.42	0.32	0.18	0.29	0.35	0.98	12.65	65.58	12.31	9.27
12C	11-21											24.66	1.18
12C	21-30											15.99	1.77
12C	31-40											9.85	1.05
12C	41-50											20.72	2.67
12C	51-60											30.76	4.30
12C	61-65											3.64	0.91
12C	65-70	0.10	0.18	0.16	0.15	0.11	0.13	0.16	0.51	5.52	60.07	19.67	8.61
12C	101-110	0.18	0.27	0.21	0.21	0.16	0.16	0.33	2.61	14.58	46.66	12.70	6.55

Table 22: RO-TAP data for core 12C

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
<b>Core ID</b>	<b>Sample Depth (cm)</b>	<b>% finer than N10/ 2.0mm/ -1.0Φ Screen</b>	<b>% finer than N14/ 1.40mm/ -0.5Φ Screen</b>	<b>% finer than N18/ 1.00mm/ 0.0Φ Screen</b>	<b>% finer than N25/ 710µm/ 0.5Φ Screen</b>	<b>% finer than N35/ 500µm/ 1.0Φ Screen</b>	<b>% finer than N45/ 355µm/ 1.5Φ Screen</b>	<b>% finer than N60/ 250µm/ 2.0Φ Screen</b>	<b>% finer than N80/ 180µm/ 2.5 Φ Screen</b>	<b>% finer than N125/ 125µm/ 3.0Φ Screen</b>	<b>% finer than N170/ 90µm / 3.5Φ Screen</b>	<b>% finer than N200/ 75µm / 4.0Φ Screen</b>	<b>% finer than 4µm/ 8Φ</b>
Observed Contents of the sample		shell only	shell only	shell only	shell only	shell only	shell only	shell only	sand	sand	sand	sand	silt
12C	1-10	99.2	98.7	98.3	98.0	97.9	97.6	97.3	96.4	85.2	27.2	16.3	4.3
12C	11-21											45.4	24.8
12C	21-30											67.0	48.9
12C	31-40											78.5	60.5
12C	41-50											62.2	45.3
12C	51-60											57.6	34.8
12C	61-65											85.0	60.7
12C	65-70	99.9	99.8	99.6	99.5	99.4	99.3	99.1	98.7	93.7	40.3	22.8	7.0
12C	101-110	99.8	99.5	99.3	99.1	98.9	98.7	98.4	95.6	79.9	29.9	16.3	23.6

Table 23: Percent Finer table for core 12C

Core ID	Sample Depth (cm)	shell weight	200+ weight	200-230 weight	sand + shell
12C	1-10	2.69	91.87	9.27	94.56
12C	11-21		24.66	1.18	24.66
12C	21-30		15.99	1.77	15.99
12C	31-40		9.85	1.05	9.85
12C	41-50		20.72	2.67	20.72
12C	51-60		30.76	4.30	30.76
12C	61-65		3.64	0.91	3.64
12C	65-70	0.83	85.93	8.61	86.76
12C	101-110	1.19	76.88	6.55	78.07

Table 24: Shell and Sand weights for core 12C

Core ID	sample id	mid sample depth	% shell	% sand	%silt	%clay	total %
CC12C	1-10	5.5	2.4	81.4	11.9	4.3	100
CC12C	11-21	15.5		54.6	20.7	24.8	100
CC12C	21-30	25.5		33.0	18.1	48.9	100
CC12C	31-40	35.5		21.5	18.0	60.5	100
CC12C	41-50	45.5		37.8	16.9	45.3	100
CC12C	51-60	55.5		42.4	22.8	34.8	100
CC12C	61-65	63		15.0	24.3	60.7	100
CC12C	65-70	67	0.7	76.5	15.8	7.0	100
CC12C	101-110	105.5	1.3	82.4	-7.3	23.6	100

Yellow- data error

Table 25: Percent Shell, Sand, Silt and clay for core 12C

Station ID	Average Depth	Median Grain Size	Median Grain Size	Mean Grain Size	Mean Grain Size	Skewness	Sorting Index
	(cm)	(phi)	(mm)	(phi)	(mm)		
CC12C/1-10	5.5	3.293	0.1016	3.3552	0.0973	0.2551	0.3796
CC12C/11-21	16						
CC12C/21-30	25.5						
CC12C/31-40	35.5						
CC12C/41-50	45.5						
CC12C/51-60	55.5						
CC12C/61-65	63						
CC12C/65-70	67.5	3.409	0.0937	3.4948	0.0883	0.6084	1.6744
CC12C/101-110	105.5	3.296	0.0556	3.3324	0.0988	0.4991	1.8546

Pink- upper sand layer

Table 26: Median grain size, Mean grain size, Skewness and Sorting Index for core 12C

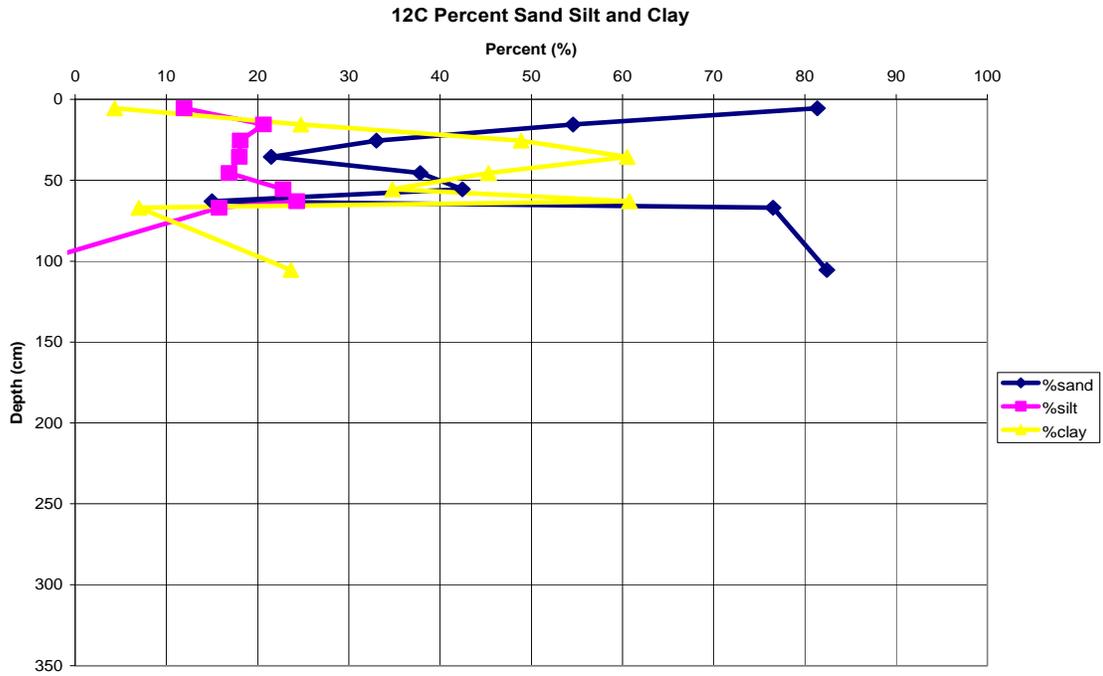


Figure 36: Percent Sand, Silt and Clay graph for core 12C

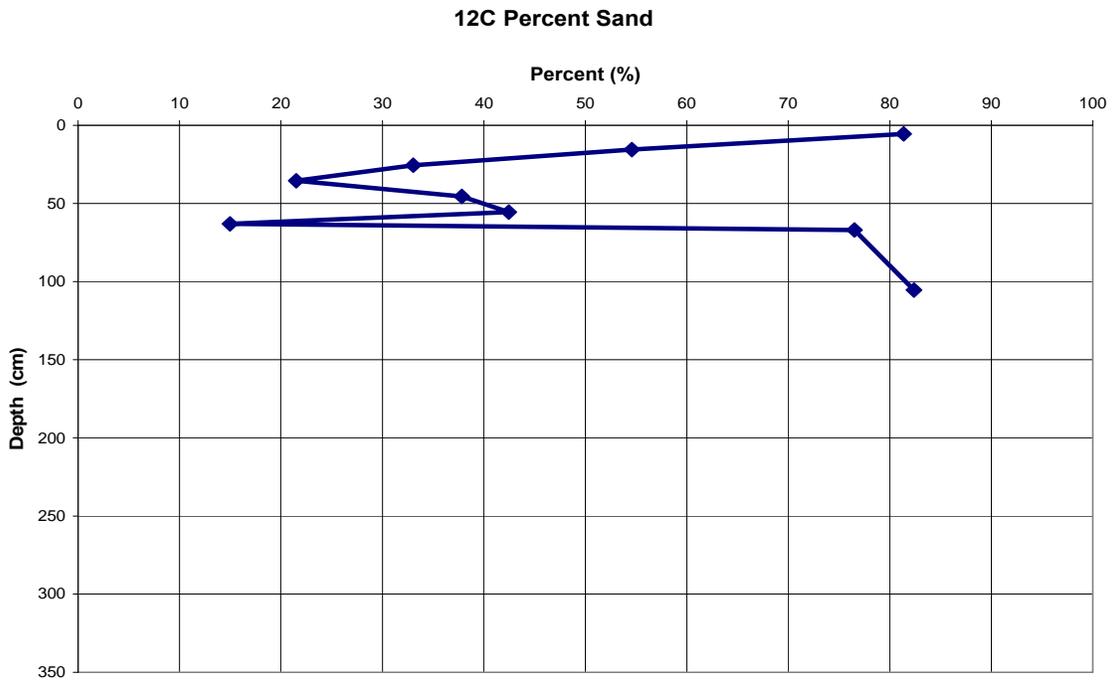


Figure 37: Percent Shell for core 12C

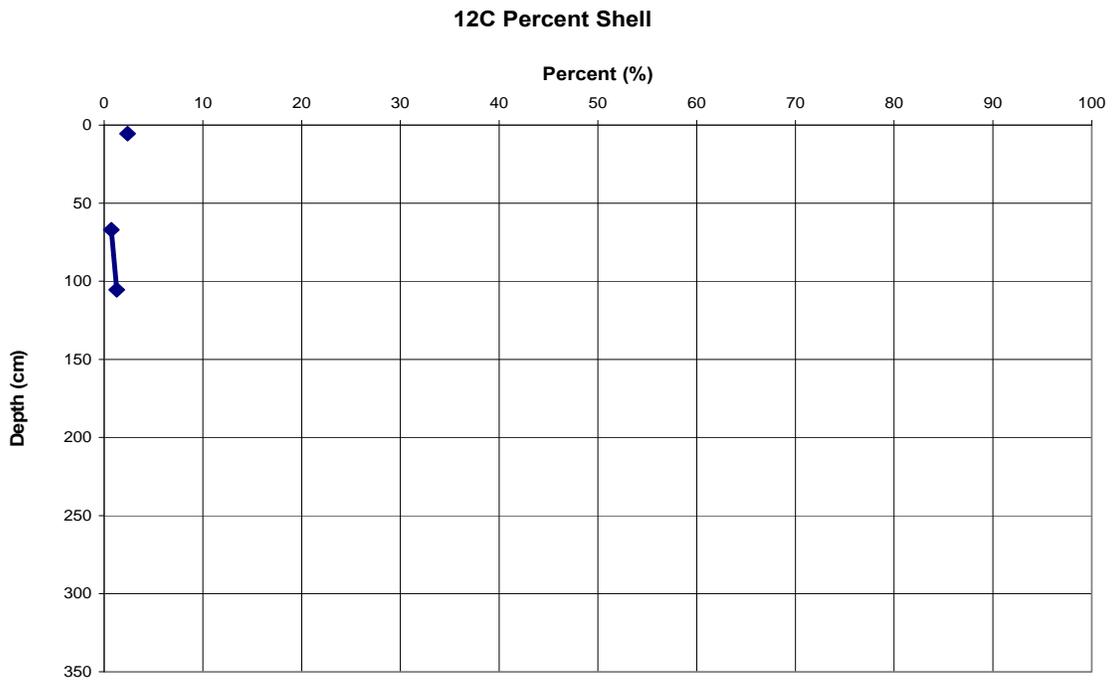


Figure 38: Percent Shell graph for core 12C

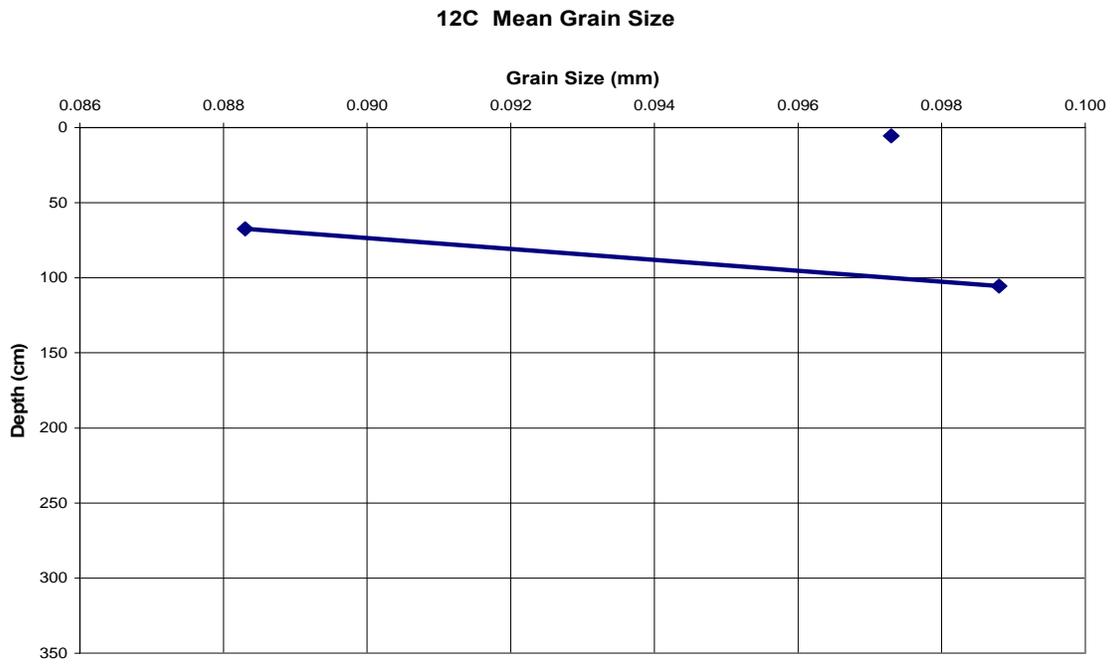


Figure 39: Mean Grain Size graph for core 12C