

Figure 1: Core Photograph of 8D

CORE 8D:

Core 8D was taken at water depth of water depth of 9.7m (31ft) (Table1) and had a total length of 332cm (131in) (Figures 2-5). A total of 8 grain size samples were taken at depths of 1-10cm (0.4-3.9in), 51-60cm (20-23.6in), 101-110cm (39.3-49.8in), 150-160cm (59.4-63in), 200-210cm (78.7-82.7in), 240-250 (94.5-98.4in), 250-260cm (98.4-102.4in), and 300-310cm (118.1-122in). This revealed that the upper 60cm (23.6in) increased from 7 to 41% sand and had a mean grain size ranging from 0.009mm (6.8phi) to 0.06mm (4.1phi). Depths of 61 to 160cm (24 to 63) contained sand ranging from 41 to 26% and a mean grain size ranging from 0.006mm (4.1phi) to 0.015mm (6.0phi). From depths of 160 to 210cm (63 to 82.7in) there is an increase in sand percentages from 26% to 75% and a change in mean grain size from 0.015mm (6.0phi) to 0.088mm (3.5phi). From depths of 210cm to 250cm (82.7 to 98.4in) there is a decrease in the percent sand from 75% to 5% and then an increase in percent sand from 250cm (98.4in) to the bottom of the core, from 5% to 17% sand (Tables 5&6). Sand and shell weights are shown in Table 4. Percent shell, sand, silt and clay are shown in Table 5. Median grain size, mean grain size, skewness and sorting index are shown in Table 6. Graphs of the results are located in figures 8-11.

It was determined that core 8D had approximately 45cm (17.7in) of sediment that contained at least 50% sand, none of which was located at less than 1m (3.28ft). The average grain size in the upper 1m (3.28ft) was determined to be 0.0339mm (4.9phi).

Core#: 8D

Core Date: 7/18/2005

Date Split/subsampled	Length: <u>332 CM</u>
<u>7/12/2005</u>	Lat: <u>94 13.945</u>
	Long: <u>94 50.573</u>

Centi-Meters	Munsell Soil Color	Depths Sampled	Description:
300			
305			
310			
315			
320			
325			
330			
332			

Line 8 Site D

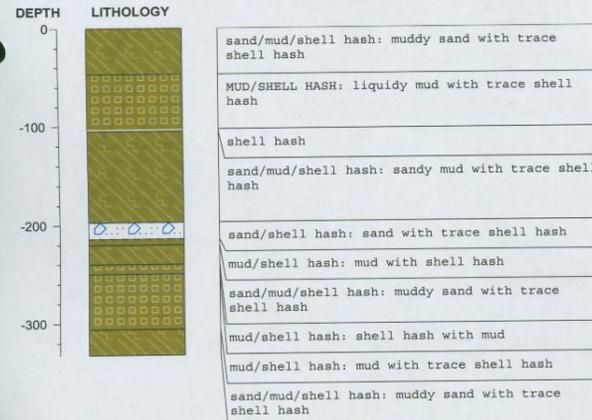


Figure 4: Core Log for 8D for depths 300-332cm

Figure 5: Computerized core log for 8D

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)
8D	1-10											6.46	7.68
8D	51-60											16.81	7.52
8D	101-110											19.11	7.15
8D	150-160											10.79	4.41
8D	200-210	0.01	0.06	0.05	0.06	0.05	0.06	0.12	0.22	2.33	54.37	15.24	10.34
8D	240-250											2.20	1.75
8D	250-260											3.18	1.78
8D	300-310											6.19	2.96

Table 2: RO-TAP data for core 8D

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
8D	1-10											83.2	20.6
8D	51-60											58.7	14.8
8D	101-110											70.7	24.0
8D	150-160											74.1	23.6
8D	200-210	100.0	99.9	99.9	99.8	99.8	99.7	99.6	99.3	96.9	40.4	24.6	3.1
8D	240-250											95.4	30.5
8D	250-260											91.3	35.6
8D	300-310											82.6	29.7

Table 3: Percent Finer table for core 8D

Core ID	Sample Depth (cm)	shell weight	200+ weight	200-230 weight	sand + shell
8D	1-10		6.46	7.68	6.46
8D	51-60		16.81	7.52	16.81
8D	101-110		19.11	7.15	19.11
8D	150-160		10.79	4.41	10.79
8D	200-210	0.29	72.28	10.34	72.57
8D	240-250		2.20	1.75	2.20
8D	250-260		3.18	1.78	3.18
8D	300-310		6.19	2.96	6.19

Table 4: Shell and Sand weights for core 8D

Core ID	sample id	mid sample depth	% shell	% sand	%silt	%clay	total %
CC8D	1-10	5.5		16.8	62.6	20.6	100
CC8D	51-60	55.5		41.3	43.9	14.8	100
CC8D	101-110	105.5		29.3	46.7	24.0	100
CC8D	150-160	155.5		25.9	50.5	23.6	100
CC8D	200-210	205.5	0.3	75.1	21.5	3.1	100
CC8D	240-250	245.5		4.6	64.9	30.5	100
CC8D	250-260	255.5		8.7	55.7	35.6	100
CC8D	300-310	305.5		17.4	53.0	29.7	100

Table 5: Percent Shell, Sand, Silt and Clay for core 8D

Station ID	Average Depth	Median Grain Size	Median Grain Size	Mean Grain Size	Mean Grain Size	Skewness	Sorting Index
	(cm)	(phi)	(mm)	(phi)	(mm)		
CC8D/1-10	5.5	4.188	0.5457	6.8044	0.0089	0.8884	3.6789
CC8D/51-60	55	3.828	0.0701	4.0802	0.0588	0.7824	1.7437
CC8D/100-110	105	4.592	0.0412	6.0500	0.0150	0.7321	2.9357
CC8D/150-160	155	4.756	0.0368	6.0478	0.0150	0.6823	2.8553
CC8D/200-210	205	3.41	0.0937	3.4975	0.0881	0.3495	0.3871
CC8D/240-250	245						
CC8D/250-260	255						
CC8D/300-310	305						

PINK=Upper sand area

Table 6: Median grain size, Mean grain size, Skewness and Sorting Index

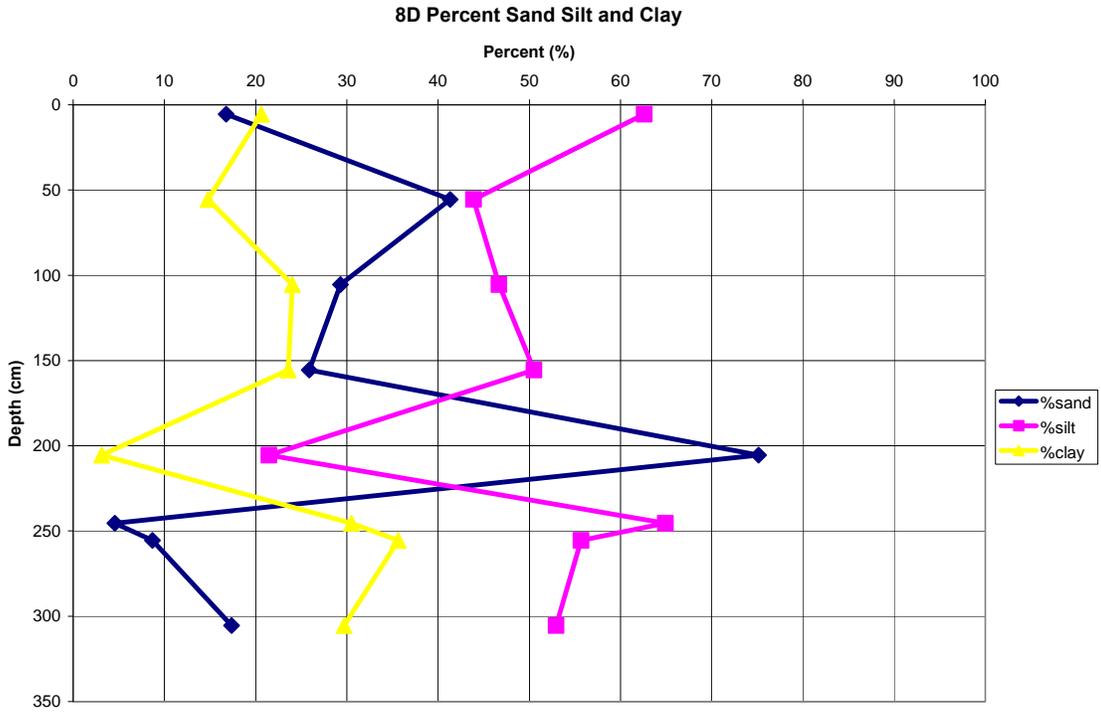


Figure 6: Percent Sand, Silt and Clay for core 8D

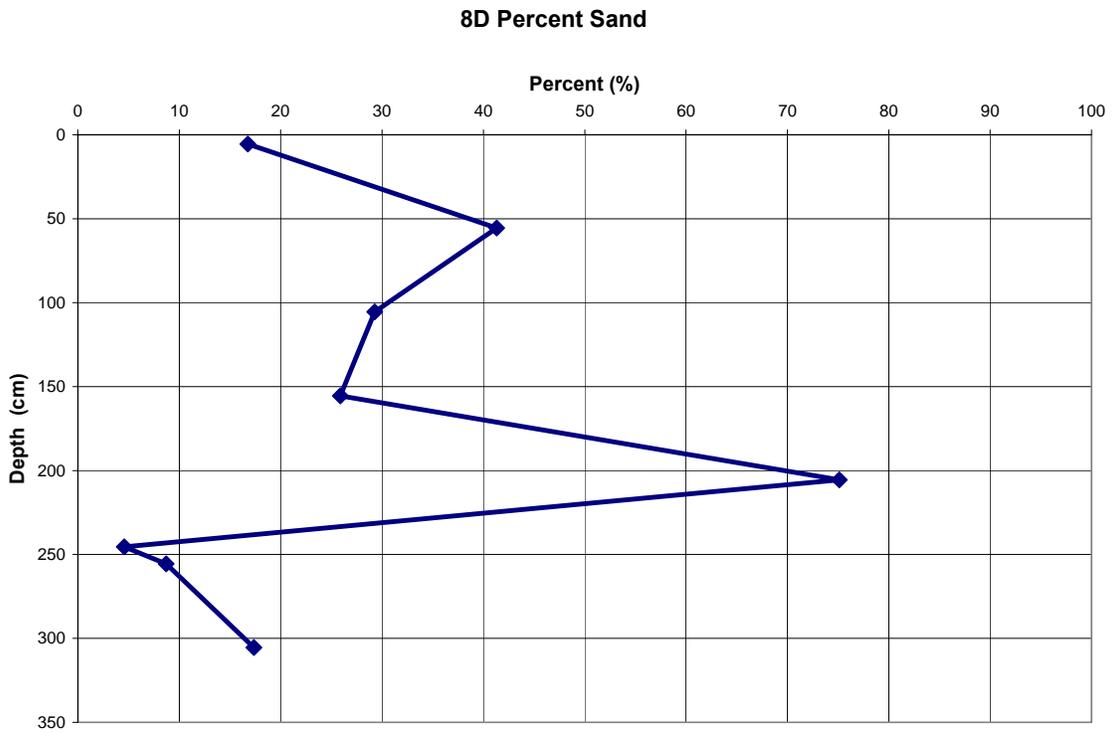


Figure 7: Percent Sand for core 8D

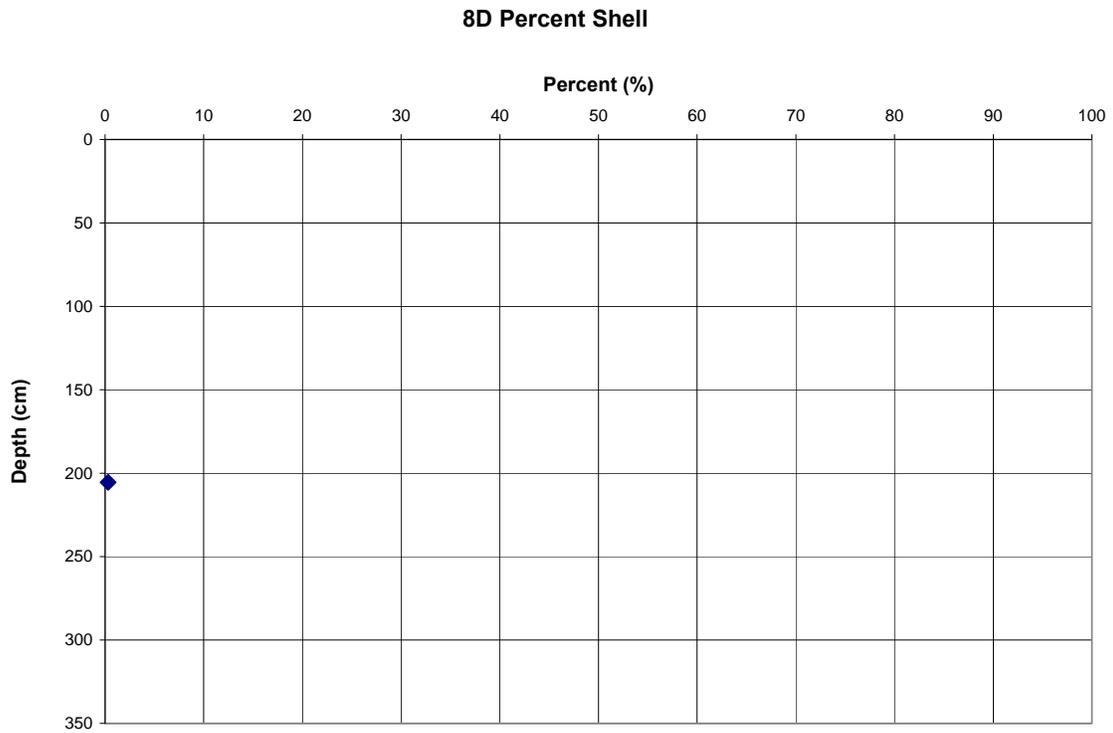


Figure 8: Percent Shell for core 8D

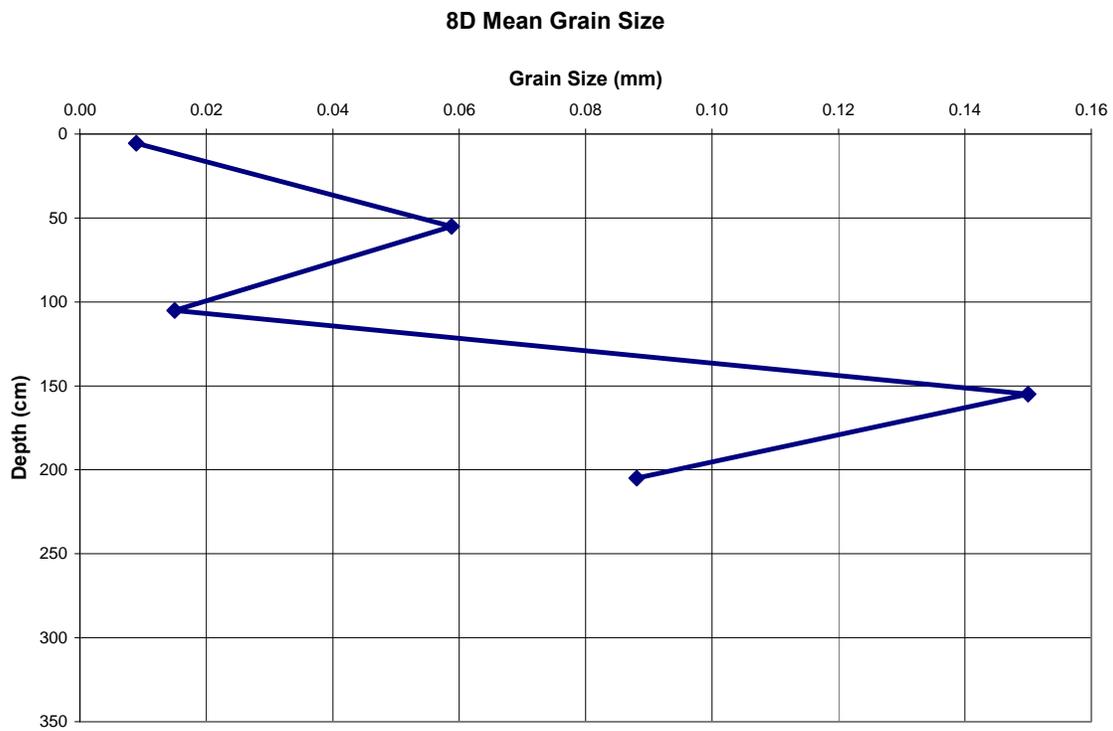


Figure 9 : Mean Grain Size for core 8D