

CORE 3A:

Core 3A was taken at water depth of 4.7m (15.5ft) (Table 1) and had a total length of 262cm (103in) (Figures 1-4). A total of 13 grain size samples were taken at depths of 1-10cm (0.4-3.9in), 31-40cm (12.2-15.8in), 71-80cm (28-31.5in), 81-90cm (31.9-35.4in), 101-110cm (39.8-43.3in), 111-120 (43.7-47.2in), 141-150cm (55.5-59.1in), 171-180cm (67.3-70.9in), 191-200cm (75.2-78.7in), 201-210cm (79.1-82.7in), 211-220cm (83-86.6in), 231-240cm (90.9-94.5in), and 251-260cm (98.8-102.4in). The grain size analysis revealed that the upper 70cm (27.6in) ranged from 93 to 86% sand and had a mean grain size ranging from 0.1096mm (3.18phi) to 0.1294mm (2.95phi). At the depths of 71cm (28in) to 90cm (35.4in) there is a decrease in sand percentages from 86 to 67% and an increase in mean grain size from 0.1181mm (3.1phi) to 0.174mm (2.5phi). From 90cm (35.4in) to 200cm (78.7in) percent sand remained above 81% and had a mean grain size that ranged from 0.174mm (2.5phi) to 0.098mm (3.3phi). From depths of 200cm (78.7in) to 240cm (94.5in) there is a decrease in the percent sand ranging from 90% to 47% with a mean grain size ranging from 0.0939mm (3.4phi) to 0.2694mm (1.9phi). From 231cm (90.9in) to the bottom of the core, percent sand increased from 47% to 88% sand and from had a mean grain size that decreased from 0.2694mm (1.9phi) to 0.1456mm (2.8phi).

Sand and shell weights are shown in Table 2. Percent shell, sand, silt and clay are shown in Table 3. Median grain size, mean grain size, skewness and sorting index are shown in Table 6. Graphs of the results are located in Figures 5-8.

It was determined that core 3A had approximately 260cm (102.4in) of sediment that contained at least 50% sand, of which 100cm (39.4in) was located at less than 1m (3.28ft) depth.

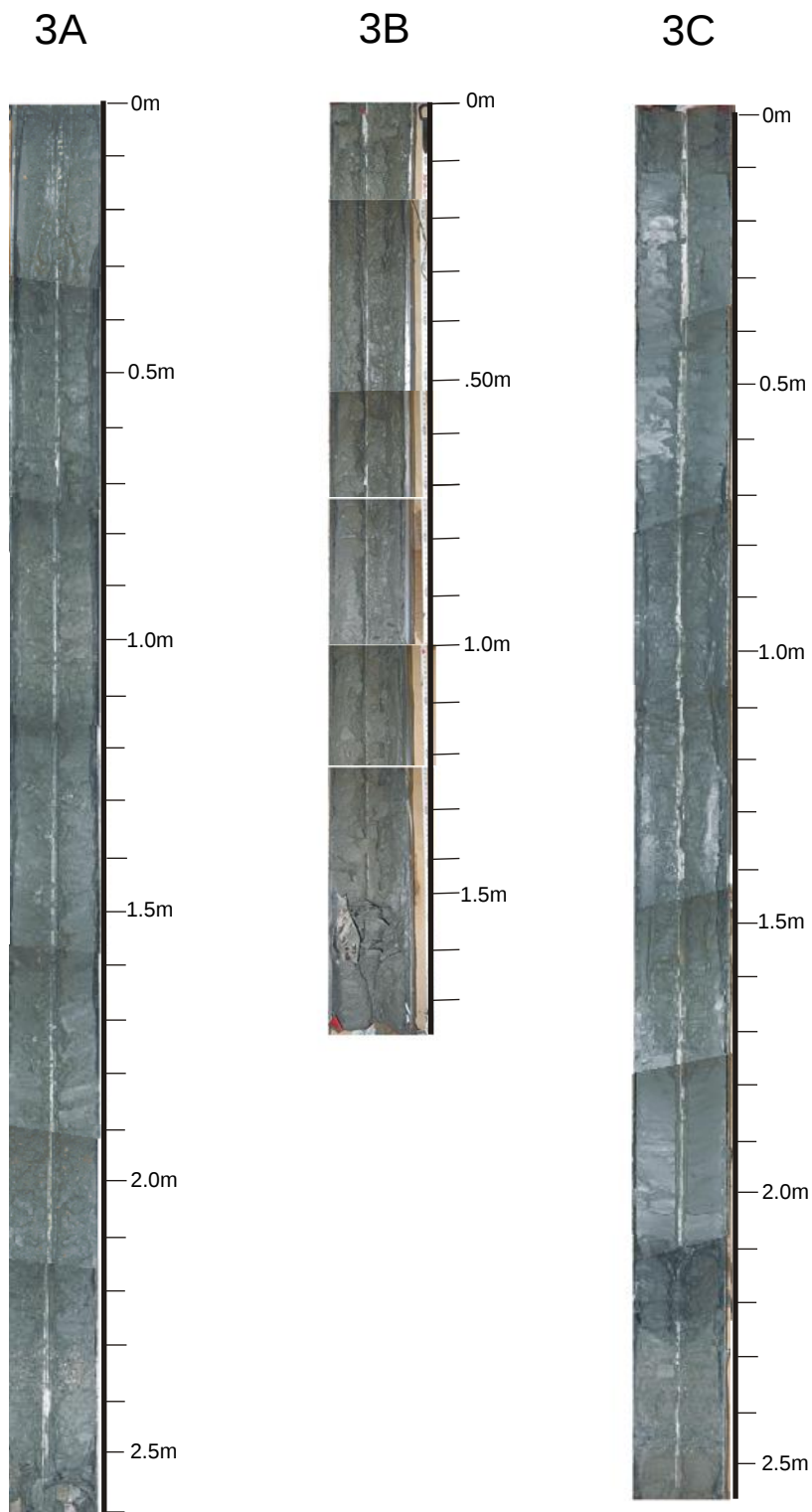


Figure 1: Core photographs for Line 3

Core#: 3A
 Core Date: 07/19/05

Date Split/subsampled	Length: <u>262cm</u>
<u>08/15/2005</u>	Lat: <u>21 18.08</u>
	Long: <u>94 45.851</u>

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	Long: <u>94 45.851</u>

Centi-Meters	Munsell Soil Color	Depths Sampled	Description:
		<u>GS</u>	
	0-11 cm	1-10 cm	0-83 → SAND w/ ABUNDANT SHELL HASH
	5Y 3/1	31-40 cm	83-108 → SHELL HASH w/ SAND
		71-80 cm	
	11-240 cm	81-90 cm	108-173 → SAND w/ SHELL HASH
	5Y 4/1	101-110 cm	173-179 → SHELL HASH w/ SAND
		111-120 cm	
	240-263	141-150 cm	179-197 → SAND w/ SHELL HASH
	5Y 5/1	171-180 cm	197-202 → SHELL HASH w/ SAND
		191-200 cm	202-221 → SAND w/ SHELL HASH
		201-210 cm	221-240 → SHELL w/ SAND
		211-220 cm	240-262 → SAND w/ SHELL HASH
		231-240 cm	
		251-260 cm	
		<u>WC</u>	
		0-1 cm	
		10-11 cm	
		20-21 cm	
		30-31 cm	
		40-41 cm	
		50-51 cm	
		60-61 cm	
		70-71 cm	
		80-81 cm	
		90-91 cm	
		100-101 cm	
		110-111 cm	
		120-121 cm	
		130-131 cm	
		140-141 cm	
		150-151 cm	
		160-161 cm	
		170-171 cm	
		180-181 cm	
		190-191 cm	
		200-201 cm	

Centi-Meters	Munsell Soil Color	Depths Sampled	Description:
		<u>WC</u>	
		<u>continued</u>	
		210-211 cm	
		220-221 cm	
		230-231 cm	
		240-241 cm	
		250-251 cm	
		260-261 cm	

Figure 2: Core log for 3A fore depths 0-150cm

Figure 3: Core log for 3A for depths 150-262cm

Line 3 Site A

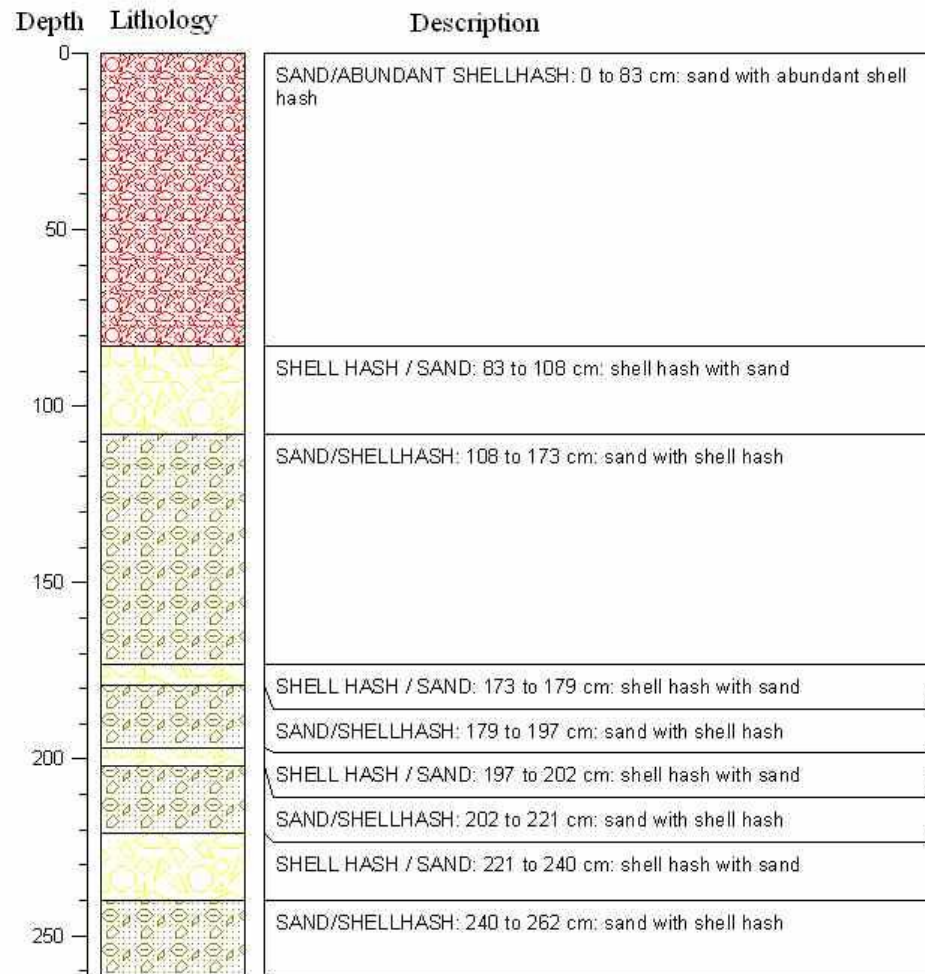


Figure 4: Computer Core Log for 3A

Core ID	Sample Depth (cm)	shell weight (g)	200+ weight (g)	200-230 weight (g)	overall sand weight (g)
3A	1-10	4.37	101.41	1.65	101.41
3A	31-40	1.35	100.58	1.34	100.58
3A	71-80	5.75	88.11	1.90	88.11
3A	81-90	27.80	82.74	8.26	82.74
3A	101-110	13.23	81.81	1.66	81.81
3A	111-120	0.97	76.56	4.89	76.56
3A	141-150	0.88	86.39	4.26	86.39
3A	171-180	2.08	81.15	5.24	81.15
3A	191-200	3.43	104.64	2.08	104.64
3A	201-210	2.27	76.09	3.56	76.09
3A	211-220	3.12	75.14	5.39	75.14
3A	231-240	52.80	61.40	1.99	61.40
3A	251-260	5.11	72.81	0.45	72.81

Table 2: Shell and Sand Weights for core 3A

Core ID	Sample Depth (cm)	% shell	% sand	%silt	%clay
3A	1-10	3.89	90.29	3.02	2.80
3A	31-40	1.25	93.19	2.50	3.05
3A	71-80	5.67	86.93	4.39	3.00
3A	81-90	22.62	67.32	7.76	2.29
3A	101-110	13.03	80.57	3.67	2.73
3A	111-120	1.04	81.76	13.76	3.44
3A	141-150	0.88	86.04	9.02	4.06
3A	171-180	2.16	84.30	10.04	3.50
3A	191-200	2.94	89.83	3.90	3.33
3A	201-210	2.52	84.31	9.17	4.00
3A	211-220	3.22	77.51	13.72	5.55
3A	231-240	40.75	47.39	7.52	4.35
3A	251-260	6.16	87.82	2.58	3.43

Table 3: Percent Shell, Sand, Silt and Clay for core 3A

Core ID	Sample Depth (cm)	N10/ 2.0mm Screen Sample Weight (g)	N14/ 1.40mm Screen Sample Weight (g)	N18/ 1.00mm Screen Sample Weight (g)	N25/ 710µm Screen Sample Weight (g)	N35/ 500µm Screen Sample Weight (g)	N45/ 355µm Screen Sample Weight (g)	N60/ 250µm Screen Sample Weight (g)	N80/ 180µm Screen Sample Weight (g)	N125/ 125µm Screen Sample Weight (g)	N170/ 90µm Screen Sample Weight (g)	N200/ 75µm Screen Sample Weight (g)	N230/ 63µm Screen Sample Weight (g)	CATCH Pan
3A	1-10	1.07	1.03	0.79	0.62	0.46	0.40	0.42	0.87	62.74	33.89	3.49	1.65	0.51
3A	31-40	0.08	0.27	0.28	0.23	0.19	0.30	0.38	1.25	26.21	62.30	10.44	1.34	0.38
3A	71-80	1.65	1.30	1.04	0.86	0.56	0.34	0.67	1.72	33.35	46.39	5.98	1.90	0.50
3A	81-90	4.98	2.47	1.88	1.54	0.97	15.96	0.93	2.96	38.67	37.08	3.10	8.26	0.21
3A	101-110	4.25	3.11	1.97	1.70	1.15	1.05	1.07	4.75	40.31	31.60	4.08	1.66	0.57
3A	111-120	0.08	0.23	0.18	0.21	0.15	0.12	0.25	0.88	16.76	52.27	6.40	4.89	3.89
3A	141-150	0.21	0.19	0.11	0.13	0.10	0.14	0.22	0.74	14.60	57.63	13.20	4.26	1.65
3A	171-180	0.96	0.41	0.24	0.21	0.14	0.12	0.24	0.58	12.63	57.06	10.64	5.24	1.89
3A	191-200	0.96	0.76	0.66	0.48	0.30	0.27	0.29	1.02	33.55	61.88	7.90	2.08	0.61
3A	201-210	0.68	0.62	0.37	0.30	0.18	0.12	0.20	0.57	11.59	56.54	7.19	3.56	1.31
3A	211-220	1.01	0.59	0.55	0.48	0.30	0.19	0.32	0.78	9.63	55.13	9.28	5.39	2.79
3A	231-240	12.05	10.66	9.68	9.57	6.62	4.22	1.91	2.42	19.24	33.07	4.76	1.99	0.77
3A	251-260	1.71	0.94	0.77	0.76	0.54	0.39	0.69	3.86	59.02	7.97	1.27	0.45	0.10

Table 4: RO-TAP data for core 3A

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
3A	1-10	99.0	98.1	97.4	96.9	96.5	96.1	95.7	95.0	39.1	8.9	5.8	2.8
3A	31-40	99.9	99.7	99.4	99.2	99.0	98.7	98.4	97.2	73.0	15.2	5.6	3.1
3A	71-80	98.4	97.1	96.1	95.2	94.7	94.3	93.7	92.0	59.1	13.3	7.4	3.0
3A	81-90	95.9	93.9	92.4	91.2	90.4	77.4	76.6	74.2	42.8	12.6	10.1	2.3
3A	101-110	95.8	92.8	90.8	89.1	88.0	87.0	85.9	81.2	41.5	10.4	6.4	2.7
3A	111-120	99.9	99.7	99.5	99.3	99.1	99.0	98.7	97.8	79.9	24.0	17.2	3.4
3A	141-150	99.8	99.6	99.5	99.4	99.3	99.1	98.9	98.2	83.6	26.2	13.1	4.1
3A	171-180	99.0	98.6	98.3	98.1	98.0	97.8	97.6	97.0	83.9	24.6	13.5	3.5
3A	191-200	99.2	98.5	98.0	97.5	97.3	97.1	96.8	95.9	67.1	14.0	7.2	3.3
3A	201-210	99.2	98.6	98.1	97.8	97.6	97.5	97.3	96.6	83.8	21.1	13.2	4.0
3A	211-220	99.0	98.3	97.8	97.3	97.0	96.8	96.5	95.6	85.7	28.8	19.3	5.5
3A	231-240	90.7	82.5	75.0	67.6	62.5	59.3	57.8	55.9	41.1	15.5	11.9	4.3
3A	251-260	97.9	96.8	95.9	95.0	94.3	93.8	93.0	88.3	17.2	7.5	6.0	3.4

Table 5: Percent Finer table for core 3A

Station ID	Average Depth	Median Grain Size	Median Grain Size	Mean Grain Size	Mean Grain Size	Skewness	Sorting Index
	(cm)	(phi)	(mm)	(phi)	(mm)		
3A	1-10	2.907	0.1328	2.9451	0.1294	0.2906	0.3765
3A	31-40	3.192	0.1089	3.1834	0.1096	-0.0060	0.3340
3A	71-80	3.089	0.1170	3.0750	0.1181	-0.2371	0.7141
3A	81-90	2.907	0.1328	2.5181	0.1740	-0.5514	1.2534
3A	101-110	2.906	0.1329	2.8979	0.1336	-0.2953	0.9665
3A	111-120	3.250	0.1046	3.3403	0.0983	0.3335	0.4627
3A	141-150	3.288	0.1019	3.3164	0.0999	0.2569	0.4113
3A	171-180	3.277	0.1027	3.3123	0.1002	0.2307	0.3732
3A	191-200	3.150	0.1121	3.1385	0.1130	0.0789	0.4012
3A	201-210	3.258	0.1040	3.2849	0.1021	0.2672	0.3738
3A	211-220	3.302	0.1009	3.4060	0.0939	0.6285	1.6850
3A	231-240	2.778	0.1452	1.8882	0.2694	-0.4158	2.0535
3A	251-260	2.769	0.1461	2.7742	0.1456	0.1002	0.9498

Table 6: Median grain size, Mean grain size, Skewness and Sorting Index for core 3A

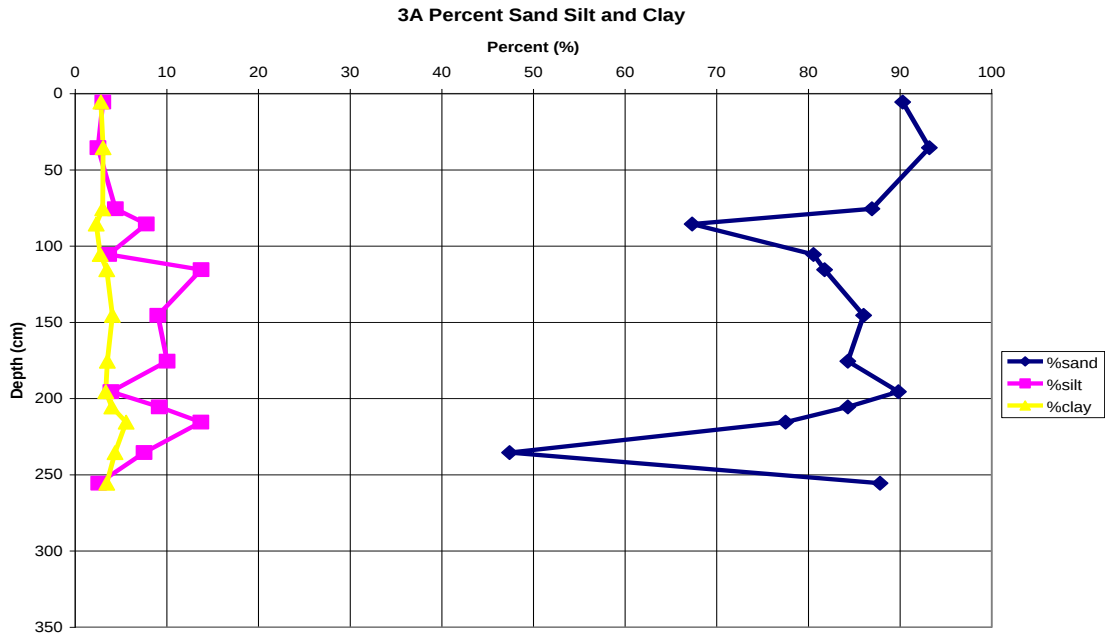


Figure 5: Percent Sand, Silt and Clay graph for core 3A

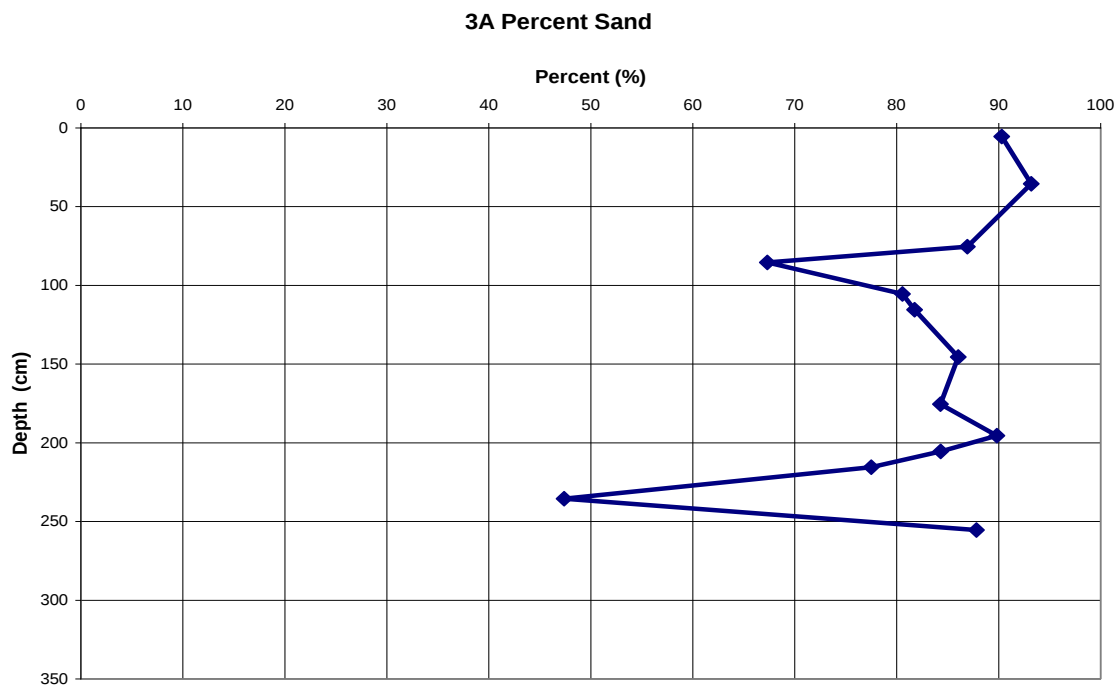


Figure 6: Percent Sand graph for core 3A

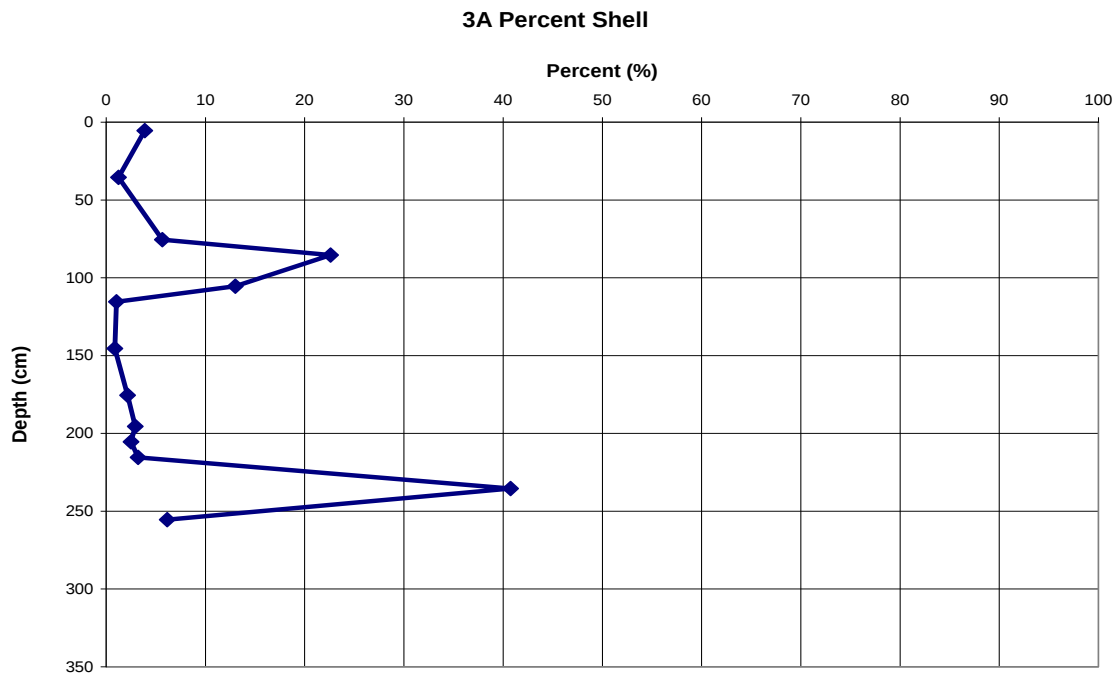


Figure 7: Percent Shell graph for core 3A

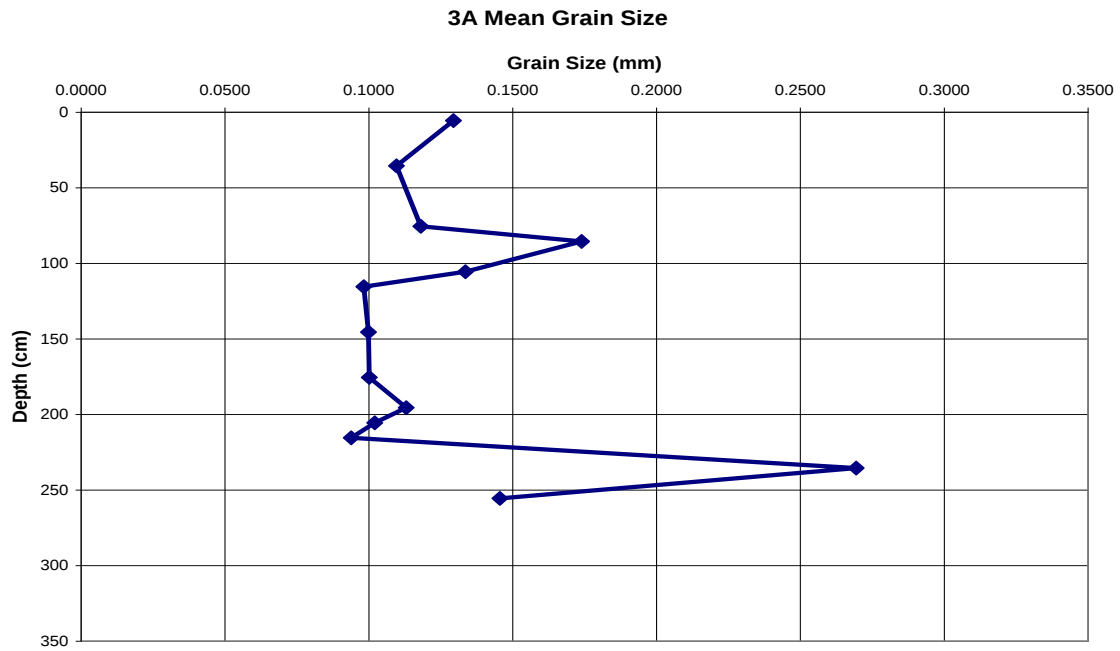


Figure 8: Mean grain size graph for core 3A