

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 2 Date of Coring 940809 Logged by Keil Schmid Date Logged 940914

Location (FRF coordinates, m)

X (cross shore) = 311.8 Y (long shore) = 998.8 Z = 3.40 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		2.0		—	Yellow-brown fine to medium quartz sand. Mean grain size 2.0 phi. Well sorted. Quartz ≈95%, calcium carbonate ≈6%. Trace amounts of heavy minerals.
				0.5	Faint contact (occurred during opening of core??). Yellow-brown medium quartz sand, mean grain size ≈1.7phi. Well sorted. Quartz ≈90%, calcium carbonate ≈10%. Slight fining upwards. Trace amount of heavy minerals.
			1.7		Gray fine quartz sand appears slightly cross-bedded. Iron staining on top of laminae, mean grain size ≈2.3 phi. Very well sorted. Quartz 95%, calcium carbonate 5%, increasing downwards. Trace amount of heavy minerals.
			2.3		Sharp contact. Cross-bedded medium to coarse sand with fine sand. Coarse grains are well rounded. Coarse laminae 75% quartz, 25% calcium carbonate, mean grain size 1.0 phi, well sorted. Fine laminae 90% quartz, 10% calcium carbonate, mean grain size 2.0 phi, well sorted.
			1.0 / 2.0		Sharp contact, gray fine quartz sand cross-bedded with yellow brown medium/coarse quartz sand and shell fragments. Fining upwards section.
				1.5	Sharp contact, gray fine quartz sand, one planar laminae of medium sand. Quartz ≈95%, calcium carbonate 5%.
					Very sharp contact, coarse sand, no bedding. Quartz 70%, calcium carbonate 30%.
					Black-green mud. 95% clay, 5% sand, calcium carbonate, shells. Gorp section.

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Vibracore # 3 Date of Coring 940809 Logged by Keil Schmid Date Logged 940914

Location (FRF coordinates, m)

X (cross shore) = 160.3 Y (long shore) = 1000.7 Z = 1.90 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		2.0			Gray-yellow fine quartz sand. No noticeable structure. 95% quartz, 5% calcium carbonate. Lower contact dips 12° towards shore (W).
		1.8			Medium sand. 90% quartz 10% calcium carbonate. Contacts dip 12°.
		2.2	12 W		
		0.5	14 W		Gray fine quartz sand. Upper contact 12°W lane contact 14°W.
			15 W	0.5	Coarse sand and gravel/pebble, poorly sorted, upper contact 14°W, lower contact 15°W. Large slump area on side of core which could be an artifact of coring process
			18 W		
		2.0	5 E		Gray fine quartz sand upper contact 15°W, slight indications of cross beds dipping 18°W, below 0.55m weak cross-beds dip E at 5°.

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Vibracore # 4 bottom Date of Coring 940811 Logged by Keil Schmid Date Logged 940916

Location (FRF coordinates, m)

X (cross shore) = 183.2 Y (long shore) = 992.7 Z = 1.52 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9			Yellow-gray fine quartz sand.
			12W		
		2.1	15W	1.5	Gray fine sand with 2 thin medium sand laminae dipping 15°. 90% quartz, 10% fine shell, black stained.
		1.5	5E		Medium shelly quartz sand.
		1.8			Medium to fine quartz sand.
		1.7	25W	2.0	Black stained shelly quartz sand. Quartz 85%, calcium carbonate 15%.
		10	10W		
		2.2	0		Olive green clay. Slight lag deposit on top contact. Gorp.
		3.0	0		Silty (?) fine sand with horizontal black shell laminae and one silty olive sand lamina.
		0.5	12W		Coarse sand to gravel.
		2.2	10E		
					Fine gray sand.

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Vibracore # 4 top Date of Coring 940811 Logged by Keil Schmid Date Logged 940915

Location (FRF coordinates, m)

X (cross shore) = 183.2 Y (long shore) = 992.7 Z = 1.52 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		2.0	30E	0.5	Top unit is fine gray-yellow quartz sand. No indications of bedding are visible. Slight fining-upwards from 0.9 m to top of core.
					Laminae indicated on log are very subtle structures.
					Graded contact. Small bioturbation mark at 0.8m.
		1.8	10E	1.0	Slightly higher content of shell material.
		2.0	20W		Gray to yellow fine quartz sand. No visible structures.

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Vibracore # 5 Date of Coring 940811 Logged by Keil Schmid Date Logged 940914

Location (FRF coordinates, m)

X (cross shore) = 206.0 Y (long shore) = 991.8 Z = 1.80 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		2.1			Light gray fine quartz sand. Slight increase in grain size down section. Fining upwards sequence.
		2.0			
		1.9		0.5	Yellow-gray fine to medium quartz sand. Large mottled area, could be an artifact of the coring process.
		1.8			
		1.9			Contacts in the upper 0.75 to 0.8m of the core may be artifacts of coring.
			20W	1.0	Gray fine quartz sand with laminations of darker grains. Fining upwards sequence.
			0		
		2.0	5W		
			10E	1.5	
		2.2	10W		Gray fine quartz sand. Contact is flat with upper bed. Lower contact is dipped 10°.
		0.7			Yellow medium quartz sand. No structures.
		2.2			
					Black stained fine quartz sand, smells estuarine.

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Vibracore # 6 Date of Coring 940811 Logged by Keil Schmid Date Logged 940915

Location (FRF coordinates, m)

X (cross shore) = 169.8 Y (long shore) = 940.9 Z = 1.40 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		2.2		0.0 - 0.5	Fine quartz sand. No visible structures. Dry at time of logging.
		1.8		0.5 - 1.0	Gray fine quartz sand with no obvious structures.
		1.6		1.0 - 1.5	Yellow medium sand. Structure is distorted.
		2.2		1.5 - 2.0	Gray fine quartz sand with no obvious structures.
		2.0	30E	2.0	Contact 30° Fine to medium quartz sand, faint laminae with 5° dip. Fining upwards.
		1.8	5E	2.0 - 2.1	
		1.8	5E	2.1 - 2.2	
		1.9		2.2 - 2.3	Fine quartz sand with very faint horizontal laminae. One coarse layer dips 20° in opposite direction as others found in core.
		0	20W	2.3 - 2.4	
		1.9	0	2.4 - 2.5	
		-1.0		2.5 - 2.6	Horizontal contact. Coarse shelly quartz sand. Abundant lithoclasts and black shells.
		2.0	20W	2.6 - 2.7	Black poorly sorted very fine to medium quartz sand with heavy minerals. Possibly estuarine.

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Vibracore # 7 bottom Date of Coring 940811 Logged by Keil Schmid Date Logged 940929

Location (FRF coordinates, m)

X (cross shore) = 207.9 Y (long shore) = 941.5 Z = 1.77 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.8	10W	—	Top 2-4 cm is yellow/brown medium quartz sand.
		2.0		—	Fairly sharp contact dipping 10° W. Top portion of a fining-upwards sequence. Gray fine to medium quartz sand with no structures evident. Gray medium quartz sand with a calcium carbonate content of up to 25-30% from about 1.1 m to 0.95 m.
		1.8		1.00	
		1.4	5E	—	Medium quartz grain sand with two thin coarser laminae. Curved contact dips 5° E. Coarsening upward sequence.
		1.6	5E	—	
		2.0	4E	—	Medium/fine gray quartz sand. Graded contact with upper lithology. Several heavy mineral laminations dipping 4-5° E.
		2.0	4E	1.25	
		1.8	5W	—	Medium yellow/brown quartz sand. Upper contact dips 5°. Heavy mineral laminations also dip 5°. Section possibly fines upwards?
		1.8	5W	—	
		1.6	5W	—	
		1.5	5W	—	Medium grain, shelly, black stained, quartz sand. Contact dips 5° W.
		2.0	5W	—	Medium/fine black stained quartz sand. Sharp contact dipping at 5° W.
		2.0	5W	1.50	

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Vibracore # 7 top Date of Coring 940811 Logged by Keil Schmid Date Logged 940929

Location (FRF coordinates, m)

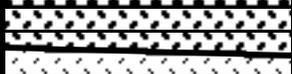
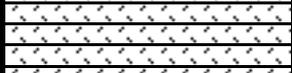
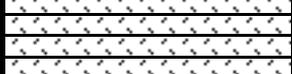
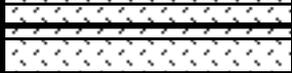
X (cross shore) = 207.9 Y (long shore) = 941.5 Z = 1.77 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		2.0		0.25	Gray-yellow fine quartz sand appears to fine upwards slightly. Above 0.60m core has a mottled look, perhaps due to bioturbation or deformation during coring. Mottled areas are slightly darker. Overall 90% quartz, 10% calcium carbonate, well sorted, unimodal.
		1.8	40W 40W	0.75	Very faint, steeply dipping (40°) laminae, may be artifacts of coring. Laminae are slightly coarser.

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Vibracore # 8 bottom Date of Coring: 940811 Logged by Keil Schmid Date Logged: 04/09/20

Location (FRF coordinates, m)
 X (cross shore) = 169.2 Y (long shore) = 960.7 Z = 1.32 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9			Medium fine quartz sand, no visible structures.
		1.7			Anticlinal looking laminae of slightly coarser quartz sand. (medium)
		2.0	0		Yellow gray fine-medium quartz sand with faint horizontal dark laminations.
		1.8	10E		Yellow-brown medium quartz sand with slightly darker thin laminae at 10°.
		1.6 1.8	0 5W	2.00	Yellow-brown medium to coarse quartz sand, no structure visible.
					Yellow brown medium quartz sand with slightly darker thin laminae at 0°
		2.0	0		Sharp contact dipping 5° W. Gray fine sand with thin horizontal laminae.
			0		Slightly darker fine sand with no laminae.
		2.1			
		0.5		3.00	Sandy gravel with darker colored shells at the bottom of core.

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Vibracore # 8 top Date of Coring 940811 Logged by Keil Schmid Date Logged 940920

Location (FRF coordinates, m)

X (cross shore) = 169.2 Y (long shore) = 960.7 Z = 1.32 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		2.0	50E	0.50	Top ≈0.5m structureless gray-yellow medium to fine quartz sand. No observable bedding planes. Quartz 90%, calcium carbonate 10%.
		1.8		0.5 to 0.75m — strange looking structure (disturbed? during coring) almost an overturned anticline with slightly coarser sediment. Steep laminations below the structure.	
		1.7	Coarsening upwards sequence of structureless medium quartz sand. Increasing shell contact upwards, 15% calcium carbonate.		
		1.8 1.9	30W	1.00	Extremely faint contact. Real?

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Vibracore # 9 Date of Coring 940818 Logged by Keil Schmid Date Logged 940920

Location (FRF coordinates, m)

X (cross shore) = 135.0 Y (long shore) = 940.0 Z = -0.26 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description	
East	West					
		-1.25		0.0	Sandy gravel with no structures evident. Large grains are a mix of shells and lithoclasts. Poor sorting.	
		-1.5		0.5	Moderately sorted.	
		-1.0			1.0	Structureless gray sand with occasional gravel sized grains.
		-1.8	10 W		1.0	Sandy gravel, also structureless.
		-0.5	10 W		1.0	Thin bed of medium to fine quartz sand. (gray)
		1.8	5 W		1.0	Sandy gravel.
		1.7	5 W		1.0	Thin gray fine quartz sand.
		0	5 W		1.0	Grey fine medium quartz sand, structureless contacts are both dipping 10°E
		2.0	10 E		1.0	Gravelly sand, poor sorting.
		1.0	10 E		1.0	

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Vibracore # 10 Date of Coring 940818 Logged by Keil Schmid Date Logged 940923

Location (FRF coordinates, m)

X (cross shore) = 190.2 Y (long shore) = 940.0 Z = 1.69 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		2.0	15 E	0.5	Yellow-gray fine/medium quartz sand. No structures evident. One slightly coarser laminae and an ever-so-slight dark layer dip and curve to the east at 15°. The rest of this section looks mottled, perhaps due to bioturbation. A general fining upwards trend is present.
		1.7			
		1.9	0	1.0	Contact here looks erosional, with slight iron staining.
		1.8			
		2.1	5 E		Fining upwards sequence. Top part is gray, lower portion is yellow brown. Top has horizontal laminations. Lower part is dipping slightly offshore.
		1.9			

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Vibracore # 11 bottom Date of Coring 040818 Logged by Keil Schmid Date Logged 040926

Location (FRF coordinates, m)

X (cross shore) = 220.2 Y (long shore) = 940.0 Z = -2.07 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9			Erosional contact. Yellow-gray fine to medium quartz sand. Quartz 90%, calcium carbonate 10%. Slightly coarser at contact (lag). No structures evident.
			20 W	1.00	Gray fine to medium quartz sand. Very faint bedding structures at 0.9, 1.15 and 1.20 m.
		2.0	5 W 5 W 5 W	1.25	
		1.7	0		
		1.7	0		Horizontal medium to slightly coarse shelly stringers. Shells are angular. Delicate laminations are about 5mm thick.
		0.7	5 E	1.50	Coarse angular and delicate shells overlying coarse quartz sand and rounded shells. Contact dips 5°W.
		1.6	5 W 5 W 0		Yellow medium quartz sand with horizontal laminations having slightly higher concentration of heavy minerals.

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 11 top Date of Coring 940818 Logged by Keil Schmid Date Logged 940928

Location (FRF coordinates, m)

X (cross shore) = 220.2 Y (long shore) = 940.0 Z = -2.07 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		2.0		0.25	Gray/yellow fine quartz sand. No structures evident. 95% quartz, 5% shell. Very homogenous.
		2.0		0.50	No structures evident.
		1.8		0.75	Small curved lamina, slightly coarser, looks like a filled burrow.
		1.8			No structures evident.
		2.0			(This core used as a test for peels.)

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Vibracore # 12 bottom Date of Coring 940818 Logged by Keil Schmid Date Logged 940926

Location (FRF coordinates, m)

X (cross shore) = 240.6 Y (long shore) = 940.0 Z = -2.35 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		2.0			Medium-fine gray quartz sand.
		1.6 2.0 1.6 2.0	20 W 20 W	1.00	Two slightly coarser laminae dip 20°W.
					Fairly sharp contact.
		1.5 1.8 1.5	15 W 15 E		Gray/yellow medium quartz sand with coarse upper and lower contacts both dipping 15°W. One coarse laminae dips 15°E.
		1.8 1.5 2.0	10 W	1.25	Fining upwards medium/fine quartz sand, gray in color, upper contact very sharp dipping 10°W, lower contact slope and almost horizontal.
		1.5 1.2 0.5	2 E 0 E		Fining upwards coarse quartz sand (yellow), gradual change to finer grained, horizontal bedding?
		1.9	5 W 10 E	1.50	Fining upwards yellow-gray medium to medium fine quartz sand, several lineations dip 10°E. One at 1.65m is noticeably coarser. Signs at 1.45m of a west dipping lineation, very weak.
			10 E		
			10 E		
		1.6			

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Vibracore # 12 top Date of Coring 940818 Logged by Keil Schmid Date Logged 940926

Location (FRF coordinates, m)

X (cross shore) = 240.6 Y (long shore) = 940.0 Z = -2.35 (NGVD; top of core)

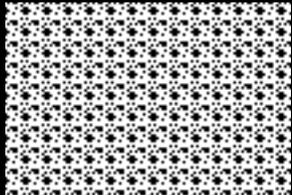
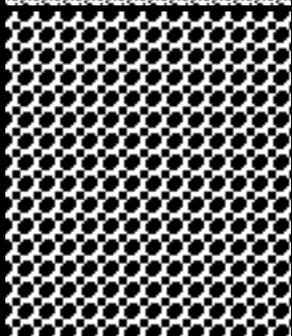
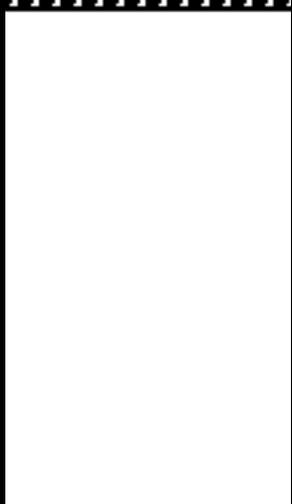
Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
					<p>Extremely uniform gray-yellow fine-medium quartz sand. Slightly mottled laminations, look like bioturbation effects or coring artifact. One visible laminae of slightly darker (heavy mineral) sediment at 0.5m, dips 30°W.</p>

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Vibracore # 13 Date of Coring 940819 Logged by Keil Schmid Date Logged 940926

Location (FRF coordinates, m)

X (cross shore) = 138.6 Y (long shore) = 991.1 Z = -0.52 (NGVD; top of core)

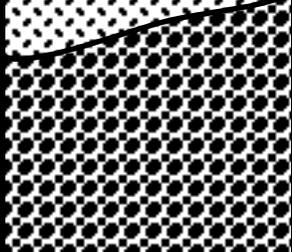
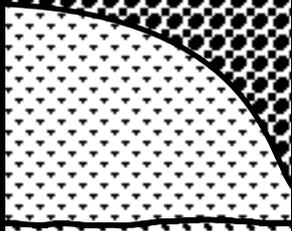
Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.5		0.0	Yellow-brown medium and coarse sand. Bimodal, poorly sorted, no structures. Section does not fine upwards or downwards.
		-1.5		0.5	Fairly sharp contact. Yellow/brown sandy gravel. Slight coarsening upwards. No preserved structures. Poor sorting, bimodal.
		-0.5	0 ?	1.0	Sharp contact, curved as if coring disturbed flat contact. Gray/yellow medium quartz sand.
		1.7	0 ?	1.0	Sharp contact, curved, as above, poor sorting. Yellow/brown sandy gravel, no structures preserved. Slight coarsening upwards. Bimodal.
		-1.0	8 E	1.5	Gray fine quartz sand, slightly dipping laminations, at 8°E. May be disturbed slightly.
		2.0	8 E	2.0	Sharp erosional (?) contact. Clean yellow/brown gravel, no fine sand. Unimodal.
		-1.0		2.5	

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Vibracore # 14 Date of Coring 940819 Logged by Keil Schmid Date Logged 940927

Location (FRF coordinates, m)

X (cross shore) = 146.6 Y (long shore) = 991.0 Z = 1.08 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.6	30 E	0	Yellow-brown medium and coarse quartz sand. Poorly sorted, bimodal.
		0			Sharp contact. Fining upwards sequence(?) of sandy gravel, bimodal. Large pebbles are well rounded lithoclasts. No apparent structures.
		-1.0	70 W	0.5	Sharp, very steeply dipping contact (70°W) Structureless, yellow medium-fine quartz sand with above-average concentration of heavy minerals. Very homogenous. Unimodal.
		-1.5			
		1.2	0	1.0	Gradational horizontal contact. Gray medium-fine quartz sand, fining upwards, with very faint laminations dipping 5°E.
		1.6	5 E		
		1.9	5 E	1.7	Slightly dipping (5°E) gradational contact. Yellow-brown medium to coarse quartz sand.
		1.7	5 E		
		1.2	5 E		

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 15 bottom Date of Coring 9/4/08 19 Logged by Keil Schmid Date Logged 2/4/09 30

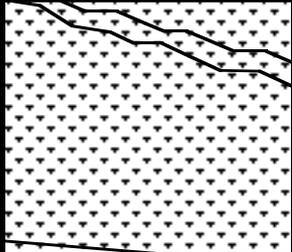
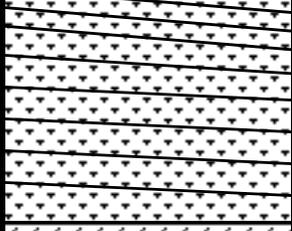
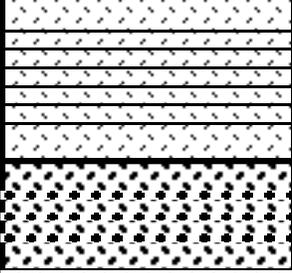
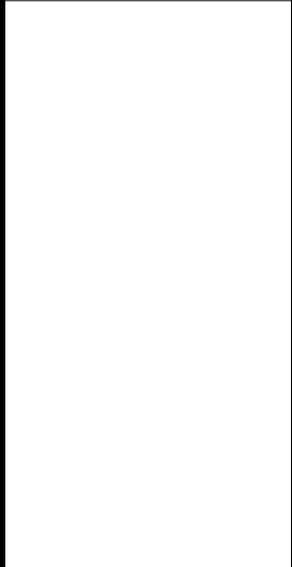
Location (FRF coordinates, m)

X (cross shore) = 219.9

Y (long shore) = 992.2

Z = 1.74

(NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.8	30	0.00	Yellow-gray medium fine quartz sand. Very faint, darker laminations. No trends in grain size.
		1.8	7 5 3 3 3 0	1.00	Fairly sharp horizontal contact. Gray fine quartz sand with horizontal laminae.
		2.0	0 0 0	1.25	Fairly sharp contact (horizontal) yellow/brown medium quartz sand with horizontal beds of coarse quartz sand and one fine horizontal bed at 1.24-1.26m.
		1.3 1.8 1.0	0 0		Sharp contact with fine horizontal bed yellow-brown coarse shelly quartz sand. No structures evident.
		1.8			Sharp horizontal contact. Yellow-gray fine quartz sand.

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 15 top Date of Coring 940819 Logged by Keil Schmid Date Logged 940930

Location (FRF coordinates, m)

X (cross shore) = 219.9 Y (long shore) = 992.2 Z = 1.74 (NGVD; top of core)

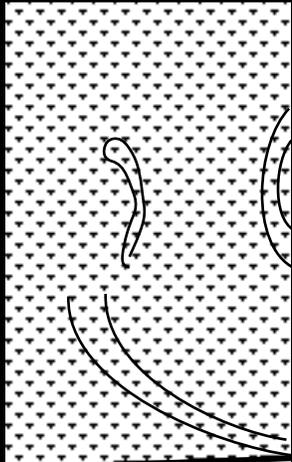
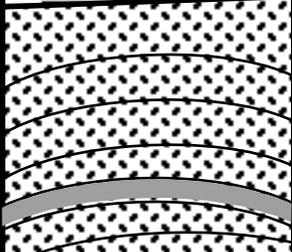
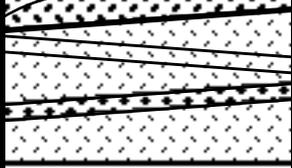
Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		2.0		0.00	<p>Gray-yellow medium-fine quartz sand. Slightly higher percent of shells than other cores with similar sediments. Shells are delicate and angular.</p> <p>Core has a very mottled look. Coarser shells are randomly distributed.</p>
				0.25	
		1.8	2 W	0.50	<p>Same unit.</p> <p>Has deformed structures that dip opposite ways and are curved as if caused by coring process. Laminae are slightly darker color and at 0.52m slightly coarser grains are present.</p>
			3 E	0.50	
			0	0.75	
			5 E	0.75	
		1.9	5 E		
			5 W		
			5 W		
			5 W		

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 16 Date of Coring 940819 Logged by Keil Schmid Date Logged 940927

Location (FRF coordinates, m)

X (cross shore) = 240.8 Y (long shore) = 992.6 Z = -2.08 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9		0.5	Top 0.65m mottled yellow-gray medium-fine quartz sand. There are vertical laminations that appear to be from the coring process, may be bioturbation. No apparent trends in grain size.
		1.5	2 W	1.0	Graded contact dips slightly (2°W). Yellow/brown medium quartz sand with some shells (^a 15%). Bed contains curved laminae that appear to be deformed by coring. Laminations are coarser than matrix. No grain size trends recognizable.
		0.5 1.5 2.0	3 E 0 5 E 5 E		
		2.0	5 W 5 W		Gray medium/fine quartz sand with two slightly darker laminations and one coarser lamina possibly part of a string of fining upwards sequence.

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 17 botom Date of Coring 940819 Logged by Keil Schmid Date Logged 940928

Location (FRF coordinates, m)

X (cross shore) = 242.4 Y (long shore) = 992.6 Z = -2.23 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.7	30 E	1.00	Fining-upward sequence. Yellow-brown medium quartz sand, up to 15% calcium carbonate. Has slightly coarser cross laminae, all dipping east.
		1.4	10 E		
		1.5	15 E	1.25	Weak contact, dipping 10 degrees East. Bimodal medium-fine to coarse quartz sand. Faint laminations dip 15 degrees East.
		2.0	10 E		
		1.8	0	1.50	Strong contact dips 10 degrees East. Gray fine quartz sand, fines upwards.
		1.5	5 E		
		1.2	0	1.25	Strong contact, 5 degrees East. Yellow-brown medium quartz sand, upward fining, no real structures.
		2.1	0		
		1.8	5 W	1.50	Strong contact. Gray fine quartz sand. Upward fining? One cross bed dipping 5 degrees West, some faint laminae that are horizontal.
		1.8	5 W		

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 18 bottom Date of Coring 940819 Logged by Keil Schmid Date Logged 940930

Location (FRF coordinates, m)

X (cross shore) = 220.7 Y (long shore) = 960.0 Z = 1.86 (NGVD; top of core)

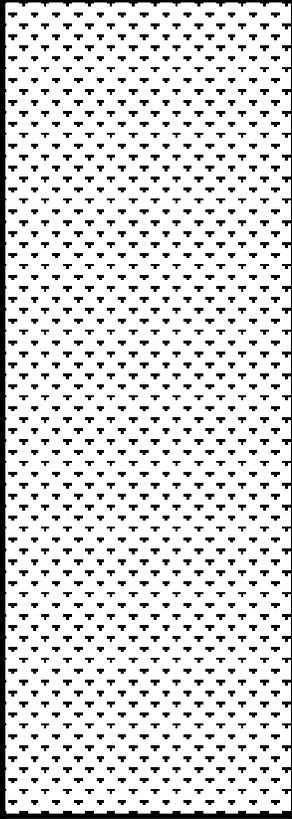
Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.8		0.00	Yellow-brown medium-fine quartz sand structureless, as is top of core.
		2.0		0.05	Graded contact, change in color is fairly sharp. Yellow-gray fine quartz sand. Fining upward section. Iron stain at 0.80m.
			5 E	0.10	
			5 E	0.15	
			5 W	0.20	
			5 W	0.25	0.90m coarse lag below, heavy mineral laminae. One large shell present. These laminae are wavy (below 90cm). Sediment is also coarser below 0.90m.
			0	0.30	
		1.8		0.35	
				0.40	
		1.0	10 E	0.45	Sharp contact (dips 10°E) looks erosional (slight wavy). Yellow-gray fine to medium quartz sand with darker laminations dipping 5°E.
			10 E	0.50	
				0.55	
		1.8	5 E	0.60	
			5 E	0.65	
			5 E	0.70	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 18 top Date of Coring 940819 Logged by Keil Schmid Date Logged 940930

Location (FRF coordinates, m)

X (cross shore) = 220.7 Y (long shore) = 960.0 Z = 1.86 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.8		0.25	Yellow-brown medium-fine quartz sand moderately well sorted with no visible structures. There are some black shells (2%) that are slightly larger than the modal size. No signs of mottling.
		1.8		0.50	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 19 bottom Date of Coring 940819 Logged by Keil Schmid Date Logged 041003

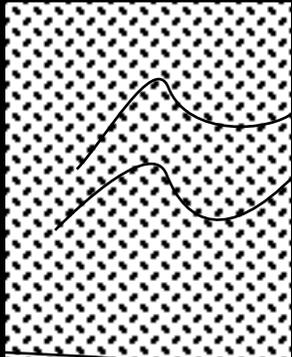
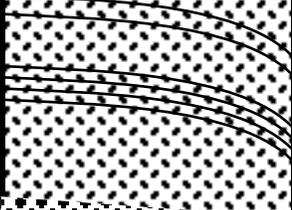
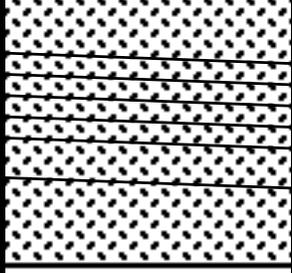
Location (FRF coordinates, m)

X (cross shore) = 205.6

Y (long shore) = 960.5

Z = 1.83

(NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.6		0.75	Yellow/brown medium quartz sand with darker mottled pockets. Structures begin at about 0.80m.
		1.9			
		1.9	10 W	1.00	Several curved cross-beds and laminae present, dipping 10°W.
			10 W		
		1.4	5 W		Coarser bed dips 5°W — no sharp contacts at upper and lower boundary.
			10 W	1.25	Linear dark lamina dips 10°W.
		1.9	10 W		Dark stained sand above contact.
		8.0?	5 W		Very sharp contact at 5°W. Thin bed of olive-brown clay (mud)
			5 W		
		1.6	20 W	1.50	Very sharp contact dips 5°W. Yellow-brown medium quartz sand with clayey cross laminae. Below 125 cm gray medium-fine quartz sand with subtle, darker laminae. This whole sequence seems to be a coarsening-upwards sequence.
			20 W		
			8 W		
		1.8	7 W		
			7 W		
			7 W		
			7 W		

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 19 top Date of Coring 940819 Logged by Keil Schmid Date Logged 941002

Location (FRF coordinates, m)

X (cross shore) = 205.6 Y (long shore) = 960.5 Z = 1.83 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9			Gray/yellow medium to medium-fine quartz sand. Coarsening upwards trend in grain size. One very steep cross-bed, nearly linear.
		1.6		0.25	
		1.9			Very strange contact. Yellow-brown medium quartz sand with a "chunk" of the above sediment on the off-shore (E) side of core. This is assumed to be a disturbance from the coring process.
		1.6		0.50	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 20 bottom Date of Coring 940819 Logged by Keil Schmid Date Logged 941004

Location (FRF coordinates, m)

X (cross shore) = 145.7 Y (long shore) = 961.3 Z = -0.60 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.8			Yellow-brown medium-fine quartz sand with a nearly vertical bed (dips 70°W) of poorly-sorted (bimodal) very coarse sand in fine-medium sand matrix. (Disturbed?)
		1.5			
		0.8	25 W	0.75	Cross-bed of gravelly sand (yellow-brown) upper contact is fairly gradational, bottom contact is very sharp.
		1.9	10 W		
		1.9	10 W		
		1.2	10 W		Very sharp contact (dips 10°W).
		1.2	20 W		Yellow-gray fine sand with a planar-dipping region having a slight color change.
		1.9			Gradational contact (dips @ 10°W).
		1.9	2 W		Yellow-brown poorly-sorted bimodal coarse sand.
		1.7	2 W		
		1.7	7 W	1.00	Fairly sharp contact (dips 20°W). Fining-upward unit top is gray-yellow fine quartz sand. Lower portion is yellow medium quartz sand. Several weak laminae are present.
		1.5			

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 20 top Date of Coring 940819 Logged by Keil Schmid Date Logged 041003

Location (FRF coordinates, m)

X (cross shore) = 145.7 Y (long shore) = 961.3 Z = -0.60 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9		0.25	Gray-yellow heavily mottled fine to medium quartz sand. Mottled areas are yellow-brown medium quartz sand. Structures appear to be caused by coring(?). Possibly a fining-upward sequence.
		1.7		0.50	Bottom contact with coarse sediment, plume shaped, with sharp boundaries.
		1.0			

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 22 bottom Date of Coring 9/4/08 19 Logged by Keil Schmid Date Logged 10/4/1005

Location (FRF coordinates, m)

X (cross shore) = 230.0

Y (long shore) = 939.4

Z = -2.10

(NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9		0.00	Gray-yellow structureless fine to medium quartz sand.
		1.9		0.50	Same bed, but has nicely-preserved structures. Distinct grain size change (coarser) and color is yellow-brown. Laminae are alternately coarser and finer, and exhibit same color change as bulk of the sand.
		1.7	10-15 W	1.00	
		1.5	15 E	1.10	Change in bedding direction.
		1.5	15 E	1.25	
		1.9	3 W	1.30	Sharp erosional (?) contact dipping 15°E. Gray-yellow fine to medium quartz sand. Very fine, closely-spaced sub-horizontal laminations.
		1.7	2 W	1.40	
		1.2	20 E	1.45	Sharp contact dips 2°W. Yellow medium quartz sand, steeper bedding than overlying unit.
		1.7	0	1.50	Sharp contact, horizontal. Medium to coarse poorly sorted quartz sand with shell.
		1.5	15 W	1.55	
		1.0	10 E	1.60	Erosional contact. Yellow-gray poorly sorted medium-fine quartz sand weak bedding, fairly steeply dipping.
		1.0	7 E	1.65	
		1.0		1.70	
		1.5		1.75	Very weak contact dips 10°E. Yellow/brown medium-coarse quartz sand with crossbeds of coarse sand.

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 22 top Date of Coring 940819 Logged by Keil Schmid Date Logged 941004

Location (FRF coordinates, m)

X (cross shore) = 939.4

Y (long shore) = 230.0

Z = -2.10

(NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9		0.25	<p>Grey-yellow mottled fine quartz sand. Evidence of flow structures (from coring?). Some grain size variation from 0.65 m to 0.80 m, otherwise homogenous. No apparent bedding structures, except for possible deformed cross-bed from 0.65 m to 0.80 m. No noticeable grain-size trends.</p>
				0.50	
				0.75	
		1.7			<p>Boundary marked by color change.</p> <p>Slightly coarser grain size with a noticeable increase in shell material.</p>
		1.9			<p>Color change boundary. Gray-yellow structureless medium quartz sand.</p>

Duck94 Field Studies of Nearshore Sedimentary Structures

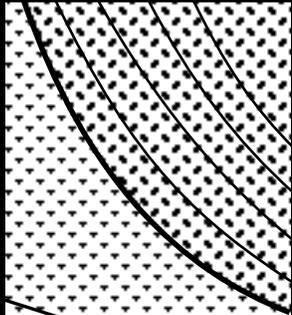
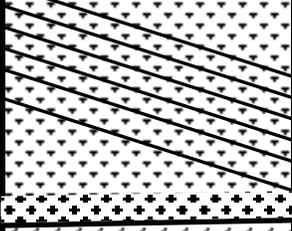
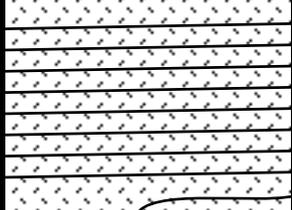
Vibracore # 23 bottom Date of Coring 9/4/08 19 Logged by Keil Schmid Date Logged 10/4/10 05

Location (FRF coordinates, m)

X (cross shore) = 209.8

Y (long shore) = 939.5

Z = 1.86 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.8		1.00	Yellow-brown medium quartz sand. Almost vertical bedding. Nearly vertical border with gray medium-fine quartz sand. Continuation of fining-upward trend found at the bottom of top half of core.
		1.6 1.9	30 W	1.25	Nearly vertical contact. Gray medium/fine quartz sand fining upwards sequence. Below 1.25 m there are crossbeds that dip steeply to the west (30°). Bottom of unit is yellow-brown medium-coarse quartz sand.
		1.4 2.0	30 W 3 W		
		2.0	2 E		
		1.9 2.0	2 E	1.50	Contact looks erosional. Gray-black fine quartz sand. No bedding, possibly bioturbated.
		1.6	5 E	1.75	Medium-coarse sand, curved contact.

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 23 top Date of Coring 940819 Logged by Keil Schmid Date Logged 041005

Location (FRF coordinates, m)

X (cross shore) = 209.8 Y (long shore) = 939.5 Z = 1.86 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
<p>The lithology column is filled with a stippled pattern representing fine to medium quartz sand. It features several vertical, wavy lines indicating flow structures. A dark, irregular shape near the top represents a shell. A distinct horizontal boundary is shown near the 0.50 m mark, representing a graded contact. Below this, the texture changes to represent coarser sand and gravel.</p>		2.0		<p>0.25</p> <p>0.50</p> <p>0.75</p>	<p>Grey-yellow fine to medium quartz sand. Vertical flow structures (due to water escape during coring?).</p> <p>Several large black shells are present.</p> <p>Slight indication of bedding that has been distorted.</p> <p>Graded contact.</p> <p>Very coarse sand to gravel, slightly bimodal. Section is fining upwards and no structures are present.</p>
		1.8			

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 24 top Date of Coring 940819 Logged by Keil Schmid Date Logged 041013

Location (FRF coordinates, m)

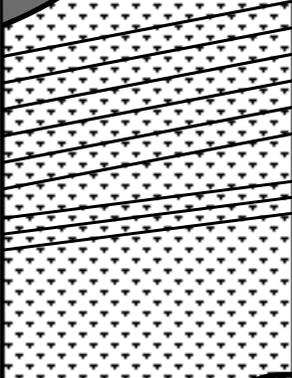
X (cross shore) = 168.8 Y (long shore) = 940.0 Z = 1.54 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
				0.00	Structureless gray-yellow fine-medium quartz sand. No grain size trends. Some pockets of slightly coarser sediment. Only slight mottling is noticeable.
				0.10	No notable features.
				0.25	
				0.30	
				0.40	
				0.50	
				0.60	
				0.75	
				0.85	
				1.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 25 Date of Coring 940819 Logged by Keil Schmid Date Logged 941013

Location (FRF coordinates, m)
 X (cross shore) = 145.4 Y (long shore) = 940.8 Z = -0.88 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9			Yellow-gray fine-medium quartz sand is structureless from top of core to 0.3 m. Possible bioturbation.
		1.0		0.5	Lens-like contact containing a pod of poorly sorted coarse quartz sand to gravel. Bimodal.
		2.0	20-30 E		Disturbed contact (due to coring?). Slightly curved. Sequence of yellow-brown medium-coarse fining upward to fine to medium quartz sand. Upper section (0.5 m to 0.75 m) has distinct dark heavy mineral laminations. Dip angles decrease downwards. Only weak indication of laminae below 0.75m.
		1.8	10 E		
		1.5		1.0	Noticeably coarser.
		-1.5			Contact is somewhat sharp and is horizontal. Yellow-brown sandy gravel to pebble. Bimodal.
		1.8	5		Very sharp contact dips 5°E. Gray-yellow medium-fine sand grading downward into medium-coarse sand. Slight structures in upper portion.
		1.5	5		Graded sharp contact, looks slightly distorted. Yellow-brown very coarse sand to gravel. No structures. Slightly bimodal.
		0.8			
		-1.0		1.5	
				2.0	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 26 bottom Date of Coring 940819 Logged by Keil Schmid Date Logged 041014

Location (FRF coordinates, m)

X (cross shore) = 169.3

Y (long shore) = 951.7

Z = 1.55 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.8	50 W	1.00	Yellow-gray medium-fine quartz sand cross-beds in upper portion of bed may have been deformed during coring. Lower portion has increasingly coarser cross-beds.
		1.6	40 W		Graded contact dips 10°W
		1.6	10 W		Same bed, but coarse sand sequence of cross-beds dipping 10°W.
		1.0	10 W	1.50	Sharp contact dips 10°W. Gray medium-fine sand. Very faint cross-beds dip 10°W. Cross-bedding is much less well-defined than that in the overlying bed. Slight fining-upward sequence.
		1.9	10 W		
		1.7		1.75	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 26 top Date of Coring 940819 Logged by Keil Schmid Date Logged 041014

Location (FRF coordinates, m)

X (cross shore) = 169.3 Y (long shore) = 951.7 Z = 1.55 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9		0.25	Yellow-gray fine-medium quartz sand. No visible cross-bedding in upper 0.95 m. Possibly a slight fining-upward sequence.
				0.50	
				0.75	Flow structures.
				1.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 27 (bot) Date of Coring 940819 Logged by Keil Schmid Date Logged 041014

Location (FRF coordinates, m)

X (cross shore) = 205.8 Y (long shore) = 950.3 Z = 1.79 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9	5 W	1.00	Gray-yellow medium to medium fine quartz sand, fining upward.
		1.7	10 W		Slightly curved cross-beds, dipping at 10°W.
		1.9	5 E	1.25	Sharp, nearly horizontal contact. Gray fine quartz sand with cross beds of medium sand. One very distinct organic layer. Several areas of iron staining, possibly of organic origin.
		1.7			
		1.9	?	1.50	Back to fine-medium quartz sand, very slight indication of cross-bedding.
		1.5			Very strange contact (?) and very sharp medium quartz sand (yellow). Slight indications of cross-bedding.
		1.9	5 W	1.75	Once again a strange contact, very sharp (erosional??). Gray fine-medium quartz sand. Very slight indications of cross-bedding possibly dipping 5°W. Bottom of core at 1.67 m.

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 27 (top) Date of Coring 940819 Logged by Keil Schmid Date Logged 041014

Location (FRF coordinates, m)

X (cross shore) = 205.8 Y (long shore) = 950.3 Z = 1.79 (NGVD; top of core)

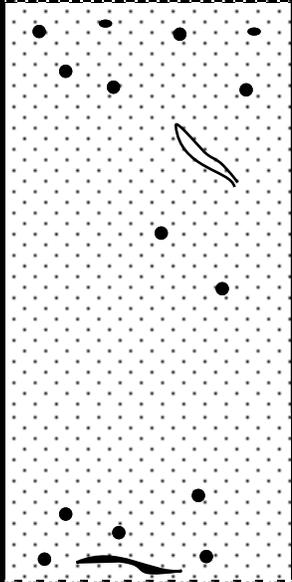
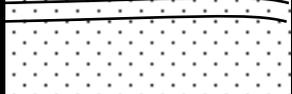
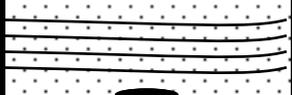
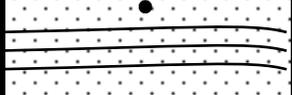
Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9		0.00 - 0.25	Typical yellow-gray medium-fine quartz sand. Very faint flow structures in upper portion of core. Only minor grain size variations.
		1.8	0	0.25 - 0.75	Beginning to see very faint evidence of cross-bedding at bottom of core. Above that there are flow structures.
		1.9	5 W	0.75 - 1.00	Color is more gray, it is wetter or slight difference in sediment grain size or comp.

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 28 (bot) Date of Coring 940825 Logged by Keil Schmid Date Logged 041015

Location (FRF coordinates, m)

X (cross shore) = 599.0 Y (long shore) = 991.5 Z = 5.77 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.5			Gray fine to very fine quartz sand with interbeds of coarse gravel to pebble-sized grains. Crossbeds appear to be horizontal and their contacts are not sharp. Scattered "floating" gravel particles.
		1.2			
		2.0		1.25	Several bioturbation structures filled with yellow fine-medium quartz sand.
		0.8		1.50	Very faint horizontal laminations.
		2.1	0?		
		1.2		1.75	Very faint horizontal laminations.
		2.0	0?		Very faint horizontal laminations.
		2.0	0?		
				2.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 28 (top) Date of Coring 940825 Logged by Keil Schmid Date Logged 041015

Location (FRF coordinates, m)

X (cross shore) = 599.0 Y (long shore) = 991.5 Z = 5.77 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		2.1		0.25	Gray-yellow fine quartz flow structures dominate the structures, heavily disturbed.
		2.0		0.50	Yellow-gray fine sand, nearly devoid of any structures.
		2.1	40 W 38W	0.75	Several silty clasts Silty cross-bed. Below cross-bed there are numerous silty patches and coarse sand to gravel particles. Silty particles appear to be rip-up clasts. Matrix sediment is gray fine quartz sand.
		1.9		1.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 29 (bot) Date of Coring 940825 Logged by Keil Schmid Date Logged 041014

Location (FRF coordinates, m)

X (cross shore) = 498.9 Y (long shore) = 992.3 Z = 4.91 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		2.2			Dark gray very fine quartz sand.
		1.0	30 W		Very coarse/gravel steep cross-bed.
		2.0			
		0.5	20 E	1.25	Very coarse steep cross-bed.
		1.9			Very fine sand with scattered gravel.
		2.2	10 E		Heavy mineral cross-beds and mica? Very fine sand.
		-1.0	5 E 5 E	1.50	Sandy gravel contact at 5°E . Coarsening-upward sequence.
		2.0			Fine quartz sand.
		0.0	10 E		Coarse sand to gravel cross-bed, coarsening upward.
		1.7		1.75	
				2.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 29 (top) Date of Coring 940825 Logged by Keil Schmid Date Logged 041014

Location (FRF coordinates, m)

X (cross shore) = 498.9 Y (long shore) = 992.3 Z = 4.91 (NGVD; top of core)

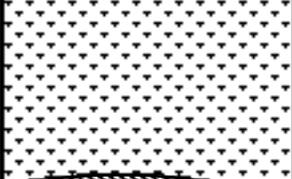
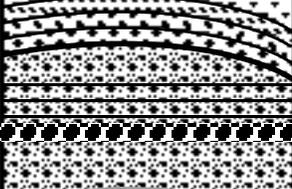
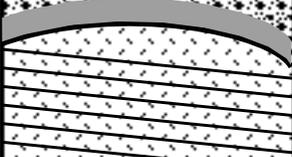
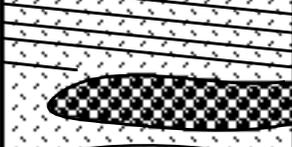
Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		2.0		0.25	Gray fine quartz sand.
					Unusual mottling with some very black stained sand, organic.
		1.8	30 E	0.50	Contact, sharp, st 30°E. Yellow-gray fine-medium quartz sand with faint cross-bedding at 10°E.
		2.0	5 E	0.75	Contact marked by heavy mineral layer. Appears to be deformed, 5°E dip? Gray fine quartz sand. Trace amounts of coarse sand and gravel. No discernible bedding structures.
				1.00	Black sand bed

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 30 (bot) Date of Coring 940825 Logged by Keil Schmid Date Logged 041018

Location (FRF coordinates, m)

X (cross shore) = 400.0 Y (long shore) = 992.6 Z = 4.40 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.7		1.50	(Bottom of #30) Gray fine quartz sand with coarse basal layer, probably the bottom of this fining-upwards sequence.
		2.0			Sharp contact, disturbed by coring? Fining-upwards sequence. Gray fine-medium quartz sand at top, coarsening to yellow-brown coarse sand. Only the faintest indication for cross-bedding in coarse part.
		1.0 2.0 1.5 0.0 1.5	10 W 15 W 0 5 W	1.75	Very sharp contact, curved and dipping 15°W. Small fining-upwards sequence. Gray fine quartz sand coarsening downwards to coarse sand. Faint cross-bedding is noticeable. Some coarse grains in fine-grained matrix.
		1.2 2.0	3 W		Slightly sharp boundary at 5°W. Gray fine quartz sand with numerous coarse grains; strongly bimodal (mixing of layers?). Grades downward into medium-coarse yellow quartz sand (well-sorted).
		0.5	0 0	2.00	Very sharp contact (3°W). Gray fine quartz sand with faint indications of cross-beds at 10°W? A couple of floating coarse sand-size shell fragments.
		2.0	0 0		Sharp contact at 0°. Thin plane bed of yellow-brown coarse quartz sand.
		1.3	0		Sharp contact at 0°. Same bed as above.
		1.8	0		Sharp contact at 0°. Coarsening upwards sequence. Bimodal gray fine quartz sand with coarse sand. One horizontal black bed.

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 30 (mid) Date of Coring 940825 Logged by Keil Schmid Date Logged 041017

Location (FRF coordinates, m)

X (cross shore) = 400.0 Y (long shore) = 992.6 Z = 4.40 (NGVD; top of core)

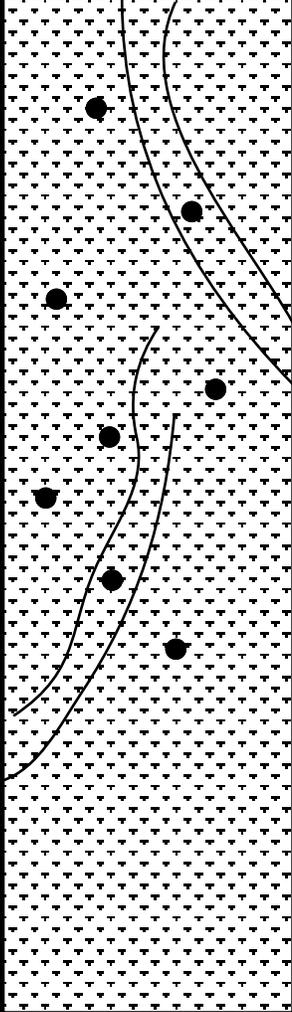
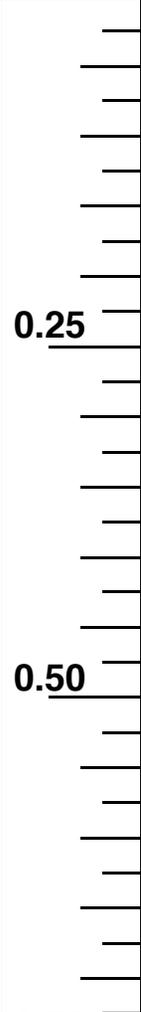
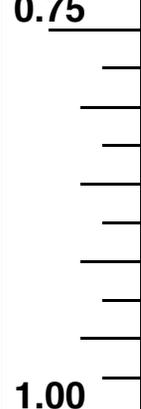
Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		2.0	20 W	1.00	(Top of middle of #30) Gray fine quartz sand. No preserved structures, but evidence of structures destroyed by coring. Scattered coarse sand grains in matrix.
		1.0			
		2.0	30 W	1.25	Yellow-gray fine to medium quartz sand. Abundant coarse grains scattered throughout.
		1.7			
		2.0	30 W	1.50	Yellow-gray fine-medium quartz sand with distinct "pods" of coarse sand to gravel grains. These may have been cross-beds, before coring. Both dip at about 30°W. Fewer floating coarse grains.
		0.0			
		2.0	30 W	2.00	
		0.5			
		2.0			

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 30 (top) Date of Coring 940825 Logged by Keil Schmid Date Logged 041017

Location (FRF coordinates, m)

X (cross shore) = 400.0 Y (long shore) = 992.6 Z = 4.40 (NGVD; top of core)

Lithology East West	Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
				<p>Gray-yellow fine-medium quartz sand. No signs of cross-bedding. Flow-like structures are visible, but in general top 0.75 m of core is fairly homogenous. Numerous coarse sand to granule-sized grains scattered throughout the core.</p>
				

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 31 (bot) Date of Coring 9/4/08 Logged by Keil Schmid Date Logged 10/24/10

Location (FRF coordinates, m)

X (cross shore) = 346.7 Y (long shore) = 991.8 Z = 4.07 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		Highly Variable		0.75	Highly disturbed? Vertical beds of alternating coarse and fine sand.
					Yellow-brown medium to very coarse sand.
		1.0			Irregular contact. Gray fine-medium quartz sand with scattered coarse to very coarse sand. Long bioturbation (?) structure, filled with coarse to very coarse sand.
		1.8		1.00	
		1.5			Relatively undeformed section of core. Yellow-brown medium-coarse sand grading to coarse-very coarse sand. Very faint indication of cross-beds with one easily recognized fine-grained lamination dipping 2° E. Fainter ones are horizontal.
		1.9	0	2 E	
		0.8	0		

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 31 (top) Date of Coring 940825 Logged by Keil Schmid Date Logged 041019

Location (FRF coordinates, m)

X (cross shore) = 346.7 Y (long shore) = 991.8 Z = 4.07 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
				<p>Extremely disturbed core. Appears to have had significant structures</p> <p>A: Yellow medium-fine quartz sand with 5% shell material interspersed in matrix.</p> <p>B: Gray-yellow fine-medium quartz sand, without much shell material.</p> <p>0.25</p> <p>C: Dark (black) fine to coarse heavy-mineral-enriched quartz sand. Very strange bed. Darkest material is at contact with B. Coarse grains on east wall of core tube.</p> <p>0.50</p> <p>D: Yellow medium quartz sand with several gravel pieces. Poorly sorted.</p> <p>Bottom of core section at 0.60 m.</p> <p>0.75</p> <p>1.00</p>	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 32 (bot) Date of Coring 940908 Logged by Keil Schmid Date Logged 041013

Location (FRF coordinates, m)

X (cross shore) = 270.2 Y (long shore) = 939.6 Z = 2.28 (NGVD; top of core)

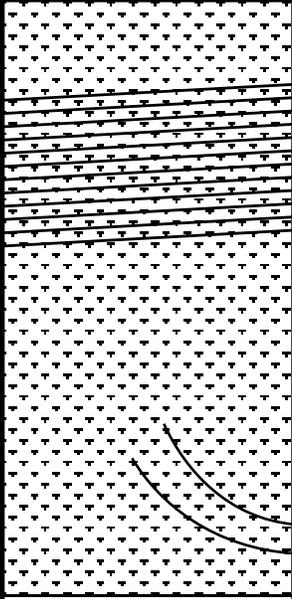
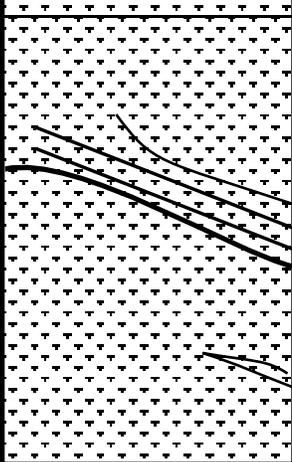
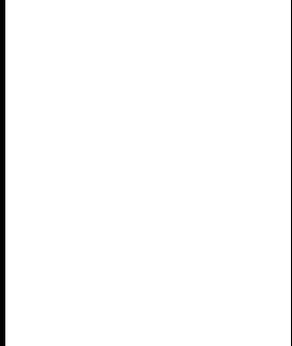
Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.8	5 W	1.00	Yellow-gray medium-fine quartz sand. Very faint cross beds dipping 5°W
			5 W 35 E		Sharp contact dipping 35°E
		2.0	a 2 E	1.25	Gray fine quartz sand. This bed is entirely cross-bedded with heavy mineral banding. All dips are nearly horizontal. No vertical change in grain size.
					1.50
				Cross-bed of olive/brown fine sand.	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 32 (top) Date of Coring 940908 Logged by Keil Schmid Date Logged 041013

Location (FRF coordinates, m)

X (cross shore) = 270.2 Y (long shore) = 939.6 Z = -2.28 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9	5-7 E	0.00	Yellow-gray medium-fine quartz sand. Very slight indications of cross-bedding at 5-7° E.
				0.25	Pockets of slightly coarser sand mainly below 0.5m, otherwise very homogenous. Core has very slight laminations (may show up better with peel)
		1.8	30 W 30 W	0.50	Very slight laminations.
				0.75	Heavy mineral lamination.
			25 W	0.75	Slightly coarser sand.
				1.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 33 (top) Date of Coring 940908 Logged by Keil Schmid Date Logged 041019

Location (FRF coordinates, m)

X (cross shore) = 260.2 Y (long shore) = 940.3 Z = 1.92 (NGVD; top of core)

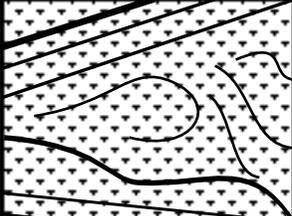
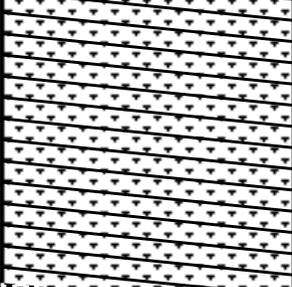
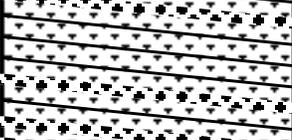
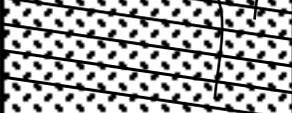
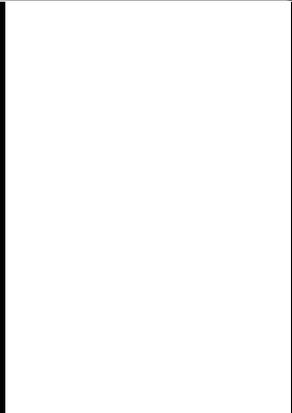
Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.7		0.00	Yellow medium-fine quartz sand. Very faint indication of cross beds in upper 10cm.
		2.0	20 E	0.10	Yellow-gray cross-bedded medium-fine quartz sand. Top cross-bed is thick (5cm) and gray.
		1.8	10 E	0.20	
		1.9	10-15E	0.30	Slight grain size change and slightly steeper cross beds. Slight fining-upwards trend.
		1.8		0.40	
				0.50	
				0.60	
				0.70	
				0.80	
				1.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 34 (bot) Date of Coring 940908 Logged by Keil Schmid Date Logged 041020

Location (FRF coordinates, m)

X (cross shore) = 250.1 Y (long shore) = 940.6 Z = 1.80 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9	20 E	0.75	Gray-yellow fine-medium quartz sand grading into yellow-gray medium-fine quartz sand. Cross-bedding in upper portion at 20°E
				10 W	1.00
				1.7	10 -15 W
				1.5	10 W
				1.5	10 W
				1.9	10 W
				1.5	10 W
				1.5	20 W

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 35 (top) Date of Coring 940908 Logged by Keil Schmid Date Logged 041021

Location (FRF coordinates, m)

X (cross shore) = 239.9 Y (long shore) = 940.5 Z = 1.95 (NGVD; top of core)

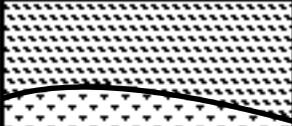
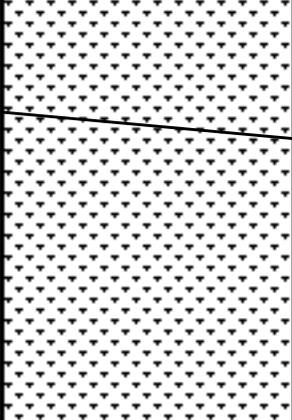
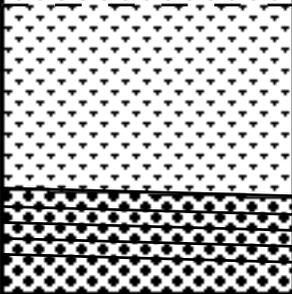
Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		2.0		0.00	Gray-yellow fine-medium quartz sand. No structures.
		1.9	10 W	0.25	Yellow medium-fine quartz sand fining downward to yellow gray fine-medium quartz sand crossbeds to 40 cm below top of core. Beds dip toward the west at 10 to 20 cm from top of core, and at greater depth dip sharply to east. Lower beds may have been disturbed by coring.
			5 W		
			0		
			15 E		
			20 E		
			35 E		
		1.8			
		1.9	20 E	0.50	Contact, possibly erosional. Slight color change to grayish-yellow fine-medium quartz sand. Two very distinct crossbeds that have been disturbed. Below disturbed cross beds sediment is gray fine-medium quartz sand with one distinctly undisturbed cross-bed at 50W.
			5 W		
		2.0		0.75	
				1.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 36 (bot) Date of Coring 9/4/0908 Logged by Keil Schmid Date Logged 10/4/1018

Location (FRF coordinates, m)

X (cross shore) = 230.4 Y (long shore) = 940.5 Z = -2.05 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.8	7 W	1.00	Yellow medium-fine quartz sand, no structures.
		2.0			
			7 W	1.25	Sharp contact, curved slightly, dipping 7°W. Gray fine-medium quartz sand. Fining-upwards unit. Faint cross-beds. Color changes to yellow down core.
			2 W		
		1.4	2 - 5 W	1.50	Medium-coarse quartz sand with abundant shell fragments. Very faint cross-bedding.

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 36 (top) Date of Coring 940908 Logged by Keil Schmid Date Logged 041018

Location (FRF coordinates, m)

X (cross shore) = 230.4 Y (long shore) = 940.5 Z = 2.05 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9		0.25	Yellow medium-fine quartz sand. Occasional flow structures. Very homogeneous, no sign of cross beds.
				0.50	Slightly coarser flow structure.
		1.8	0	0.75	One distinct cross-bed, deformed by coring (?).
				1.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 37 (bot) Date of Coring 940908 Logged by Keil Schmid Date Logged 041024

Location (FRF coordinates, m)

X (cross shore) = 217.7 Y (long shore) = 940.3 Z = 2.05 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9	40 - 50 E	1.00	Gray fine-medium quartz sand coarsening to yellow medium to slightly coarse quartz sand very steeply dipping cross-beds.
		1.7			
		1.4	20 E	1.25	Very sharp contact (erosional?), dipping 20°E.
		2.0	10 E		
			0	1.50	Sharp contact dipping at 5°E, not erosional.
		1.9	5 E		
		1.7	15 E	1.75	Yellow medium to slightly fine quartz sand. Cross-beds change quickly from off to onshore.
			5 W		
		1.7	0		Coarse sand cross-bed, fairly sharp horizontal contacts.
		1.9			
		1.7			
		1.2			
		1.6			

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 37 (top) Date of Coring 940908 Logged by Keil Schmid Date Logged 041022

Location (FRF coordinates, m)

X (cross shore) = 217.7 Y (long shore) = 940.3 Z = 2.05 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9	5 W	0.25	Gray fine-medium quartz sand. No structures.
		1.6		0.50	Slightly deformed contact, yet sharp. Yellow medium quartz sand. Distinctly different bed from bed above, with deformed cross-bedding. Fining upwards slightly.
		1.5		0.75	Sharp contact, but deformed.
		1.4			Gray fine-medium quartz sand with anticlinal cross-beds (deformed).
		2.0		1.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 38 (bot) Date of Coring 940909 Logged by Keil Schmid Date Logged 041031

Location (FRF coordinates, m)

X (cross shore) = 210.3 Y (long shore) = 940.5 Z = 2.06 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.7	30 E	0.75	Yellow-gray medium/fine to fine/medium quartz sand. Top cross beds deformed.
		1.9			
		1.2	20 W		
		1.2	30 W	1.00	
		1.8	15 W		
		1.5	10 W	1.25	
		1.8	5 W		
		1.4	10 W		Very subtle contact.
		1.6	15 E	1.50	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 38 (top) Date of Coring 940909 Logged by Keil Schmid Date Logged 041024

Location (FRF coordinates, m)

X (cross shore) = 210.3 Y (long shore) = 940.5 Z = 2.06 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9		0.25	Gray fine-medium quartz sand, coarsening to yellow medium quartz sand at 30 cm below top of core.
			60 W 75 E		Marginal contact (disturbed)
			75 E	0.50	Yellow medium quartz sand. Cross-beds below 30cm are highly deformed and dip at extreme angles (up to 75°).
		1.5		0.75	
				1.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 39 Date of Coring 940909 Logged by Keil Schmid Date Logged 041031

Location (FRF coordinates, m)

X (cross shore) = 205.1 Y (long shore) = 940.4 Z = -2.07 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.7			Yellow medium fine quartz sand. No apparent structures.
				0.50	
			40 W		Sharp contact dipping 35° - 40° W.
				1.9	
			5 W		1.00
				1.4	
			10 W		
				1.5	
			0		
				1.6	
		2.0		1.50	Gray fine quartz sand. No apparent cross-beds.
				2.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 40 Date of Coring 940909 Logged by Keil Schmid Date Logged 041101

Location (FRF coordinates, m)
 X (cross shore) = 170.4 Y (long shore) = 939.5 Z = -2.11 NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.6	20 W 40 W	0.50	Yellow medium quartz sand. Only faint indications of cross-bedding.
		1.8			0
		1.9	30 W	1.50	Medium-coarse quartz sand.
		1.3			

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 42 Date of Coring 940909 Logged by Keil Schmid Date Logged 041101

Location (FRF coordinates, m)

X (cross shore) = 146.2 Y (long shore) = 940.2 Z = 1.13 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description	
East	West					
		1.7			Yellow-gray medium-fine quartz sand with coarse sand to gravel scattered in matrix. No apparent cross-beds preserved.	
				0.5	Slight contact.	
			50 E			
			20 E	1.9		Gray-yellow fine-medium quartz sand cross-bedded with upper portion slightly disturbed.
			0			
			15 W	1.3		
			20 W	1.7		
			15 W	1.0		
			15 W	1.7		
			15 W	0.0		
				1.0	Large cross-beds, alternating coarse and fine. All dipping onshore (W) at 15°-20°	
				1.5		
				2.0		

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 43 Date of Coring 940909 Logged by Keil Schmid Date Logged 041101

Location (FRF coordinates, m)

X (cross shore) = 219.9 Y (long shore) = 960.7 Z = -2.08 (NGVD; top of core)

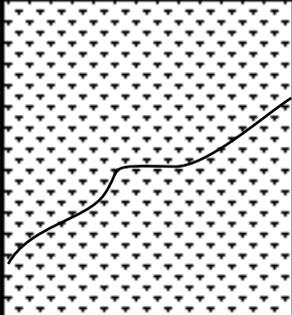
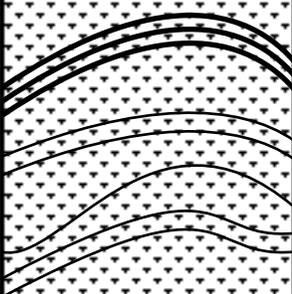
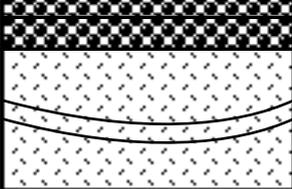
Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.7			Yellow-gray medium-fine quartz sand. No structures evident.
		1.9	0		Gray-yellow fine-medium quartz sand, with deformed structures.
		1.5	0	0.50	Gray fine quartz sand, cross-beds in upper portion, lower portion appears to be bioturbated. No visible cross-beds in lower portion.
		2.0	30 E		
		1.7	15 E	1.00	Fairly sharp contact.
		1.0	15 W		Medium to very coarse sand with cross beds.
		1.6	15 W		Yellow medium quartz sand appears structureless.
				1.50	
				2.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 45 Date of Coring 940909 Logged by Keil Schmid Date Logged 041101

Location (FRF coordinates, m)

X (cross shore) = 270.2 Y (long shore) = 960.2 Z = -2.21 (NGVD; top of core)

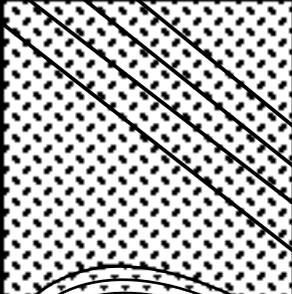
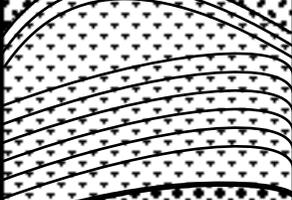
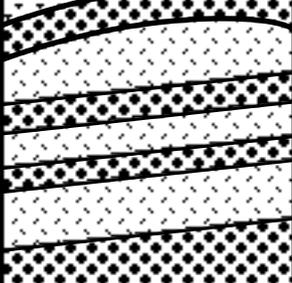
Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.7			Yellow-gray medium-fine quartz sand. Deformed structures.
				0.50	Graded contact.
		1.9	20 E		Gray--yellow fine-medium quartz sand, with disturbed structures.
		1.9			
		1.6	0	1.00	Very sharp erosional contact, horizontal. Fining-upward sequence. Top: yellow medium quartz sand. Bottom: yellow-brown coarse quartz sand appears to have cross-beds.
		1.2			
		0.8	0		Horizontal.
			0		
		2.2	0		Very sharp contact. Gray fine quartz sand with black and cross-beds.
				1.50	
				2.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 46 Date of Coring 940909 Logged by Keil Schmid Date Logged 041101

Location (FRF coordinates, m)

X (cross shore) = 260.1 Y (long shore) = 960.3 Z = 1.94 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.6	45 W	0.50	Yellow medium quartz sand. Cross beds dip steeply onshore. Probably disrupted?
		1.6			
		1.9	35 E	1.00	Yellow-gray medium-fine cross-bedded quartz sand. All cross beds dip offshore (East).
		2.0	20 E		
		1.5	15 E		
		1.4	5 E	1.00	Gray fine quartz sand with cross beds of medium/coarse sand. Cross-bed sets up to 5 cm thick, dipping mainly offshore and fining-upward.
		2.0			
		1.2			
		1.9			
		1.0	0		
		1.9			

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 47 Date of Coring 940909 Logged by Keil Schmid Date Logged 041101

Location (FRF coordinates, m)

X (cross shore) = 239.8 Y (long shore) = 960.1 Z = 1.97 (NGVD; top of core)

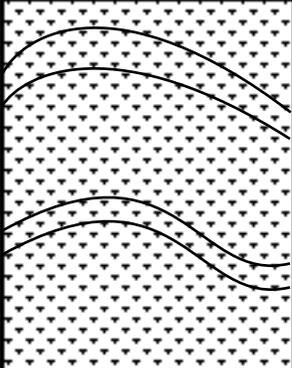
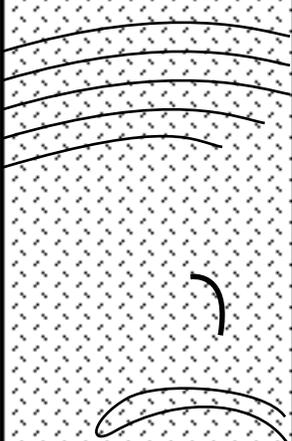
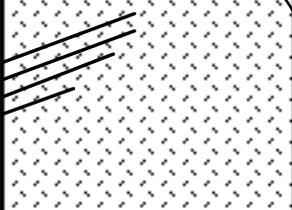
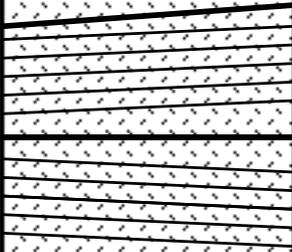
Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9			Yellow-gray fine-medium fining upward to gray fine quartz sand. Many distorted cross-beds.
		1.7			
			45 W		
			0.50		
		1.8			
			15 W		
			40 W		
		2.0			
			30 E	1.00	
			5 E		
		1.5			Yellow-brown medium to very coarse cross-bedded sand. Cross-beds are coarser.
		1.0			
			10 W		
		1.5			Yellow-brown medium quartz cross-bedded sand. Cross-beds are slightly coarser.
			10 W		
			1.50		
			2.00		

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 48 Date of Coring 940909 Logged by Keil Schmid Date Logged 041005

Location (FRF coordinates, m)

X (cross shore) = 230.3 Y (long shore) = 960.0 Z = -2.07 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9		0.25	Yellow-gray fine-medium quartz sand. Several distorted bedding structures.
		1.8			
		2.0	10 E	0.50	Gray fine quartz sand. Graded contact, slight color change. Crude bedding with iron staining (?). Grain size homogeneous from top of core to 0.8 m from top of core.
			15 E	0.75	Very weak indications of bedding.
		2.0	10 E 5 E		Color change, slightly darker.
		1.8	0		
			5 E		
				1.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 49 Date of Coring 940909 Logged by Keil Schmid Date Logged 041101

Location (FRF coordinates, m)

X (cross shore) = 152.9 Y (long shore) = 960.9 Z = 1.51 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.8		0.25	Yellow-gray fine-medium quartz sand. No structures.
		1.5		0.50	Yellow-gray fine-medium quartz sand with numerous gravel "floaters." Poorly sorted, bimodal.
		1.9	20 W		Gray-yellow medium quartz sand. Cross-beds are deformed on the west wall of core pipe.
		0.8	15 E		Sharp contact (15° E)
				0.75	Sandy gravel, no cross-bedding evident. Bimodal.
				1.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 50 Date of Coring 941021 Logged by Keil Schmid Date Logged 941027

Location (FRF coordinates, m)
 X (cross shore) = 370.0 Y (long shore) = 940.3 Z = -3.65 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description	
East	West					
		2.0	50 E	0.0	Yellow-gray fine-medium quartz sand appears to have had some structure, especially below 0.5 m but highly deformed. Fining-upward sequence.	
		1.5		0.50	Erosional contact: sharp color change and slight grain size change. Yellow gray fine-medium quartz sand fining to gray-black fine quartz sand. Lots of cross-beds dipping offshore but somewhat disturbed. Closely spaced.	
		1.9	25 E			
		2.3	25 E			
		2.0	5 W		Color change contact with only slight grain size change. Dips 25°E. Gray fine quartz sand fining to gray-black fine quartz sand. Cross-beds switch from onshore (at top) to offshore.	
		2.1	15 E		1.00	Curved contact? 5°E (deformed) Gray fine quartz sand with curved nearly horizontal black color cross-beds at top. Two prominent coarse sand cross-beds.
		2.0	5 E			
		0.5	15 W			
		0.5	15 W			
		2.0	0			
					1.50	
					2.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 51 Date of Coring 941021 Logged by Keil Schmid Date Logged 941027

Location (FRF coordinates, m)

X (cross shore) = 340.4 Y (long shore) = 939.6 Z = -2.98 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
				0.50	Yellow-gray medium quartz sand coarsening upwards. No major grain size variations.
				1.8	
		1.6	40 E	1.00	Slightly coarser cross-beds
					Possible deformation during coring?
		1.9	30E		Fine quartz sand cross-beds dipping steeply offshore (E).
		1.6	5E	1.50	Fine quartz sand cross-beds dipping shallowly offshore (E).
		2.0			
				2.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 52 Date of Coring 941021 Logged by Keil Schmid Date Logged 941030

Location (FRF coordinates, m)

X (cross shore) = 167.0 Y (long shore) = 939.8 Z = 1.64 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.8		0.00	Yellow-gray fine-medium quartz sand slight fining upwards. Highly cross-bedded but all beds disturbed during coring.
			70 W	0.10	Two pebble-size quartz fragments.
				0.20	
				0.25	
			50 W	0.30	
				0.40	
			35 W	0.50	
			0	0.50	Sudden change in cross bed dip direction with no apparent erosional surface.
			30 W	0.60	
			50 W	0.70	
	1.7	30 W	0.75	Very sharp contact.	
	1.2	30 W	0.80	Yellow-brown medium to very coarse quartz sand, not any shells. Slight cross-bedding.	
	0.0		0.90	Very sharp irregular contact.	
	1.9		1.00	Gray-yellow fine-medium quartz sand.	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 53 Date of Coring 941021 Logged by Keil Schmid Date Logged 941030

Location (FRF coordinates, m)

X (cross shore) = 320.0 Y (long shore) = 939.3 Z = -2.83 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		2.0		0.00	Yellow medium-fine quartz sand has slight flow structures in top 10 cm of core. Disturbed cross-beds below 10 cm.
			10 E	0.10	
			5 W	0.20	
				0.50	
			30 W	0.60	Fairly sharp contact, dipping 30°W, disturbed by coring.
		1.7			
		1.8	35-40 W	0.80	Yellow-gray fining-upward sequence. High angle cross-beds, disturbed by coring. Sharp contact dipping 35°W, disturbed.
		1.5	35 W	1.00	
		2.0	15-20 W	1.10	Gray fine quartz sand. Fining-upward sequence. Cross beds throughout. Coarse-grained cross beds from 100 cm to 125 cm below top of core.
			5 W	1.20	
	10 E	1.30			
	25 E	1.40			
1.5					
	20 E	1.50	Very subtle contact.		
	5 E	1.60			
2.0	10 E	1.70	Gray fine quartz sand with single black cross-bed. Cross-beds are very subtle and dip shallowly off-shore.		
	5E	1.80			
		1.50			
		2.00			

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 55 Date of Coring 941023 Logged by Keil Schmid Date Logged 941030

Location (FRF coordinates, m)

X (cross shore) = 330.0 Y (long shore) = 939.9 Z = -2.42 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.6	Flow	0.50	Yellow-gray medium to slightly fine quartz sand. Flow structures caused by coring extend from top of core to 75 cm below top of core.
		1.7	10 E	1.00	Abundant cross beds dipping 10°E, possibly deformed by coring.
		1.6	35 W	1.50	Beds possible deformed by coring?
		1.9	35 W		Beds likely undeformed.
		1.7	15 W		Sharp contact dipping 10°W
		2.0	10 W		Gray fine quartz sand coarsening downward to gray-yellow fine-medium quartz sand. Horizontal cross beds (?) and some gravel-size grains.
		1.7	0	2.0	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 56 Date of Coring 941023 Logged by Keil Schmid Date Logged 941031

Location (FRF coordinates, m)

X (cross shore) = 309.8 Y (long shore) = 939.6 Z = -2.72 (NGVD; top of core)

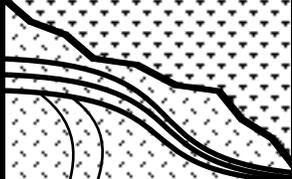
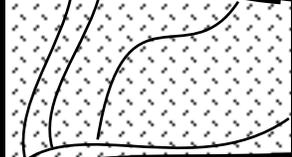
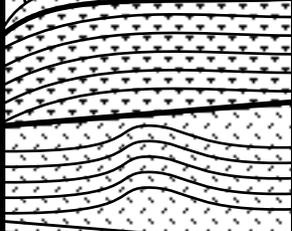
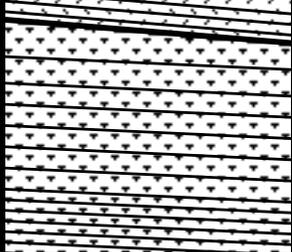
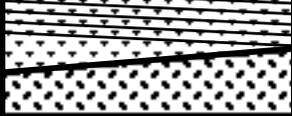
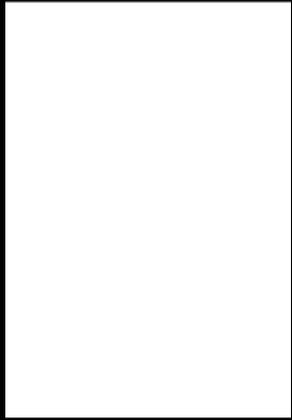
Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
				0.25	Entire core markedly disturbed by coring.
				0.50	Yellow/gray fine-medium quartz sand. Homogeneous grain size.
				0.75	Possible westward-dipping cross beds.
				1.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 57 Date of Coring 941023 Logged by Keil Schmid Date Logged 941027

Location (FRF coordinates, m)

X (cross shore) = 360.2 Y (long shore) = 1006.0 Z = -3.16 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.9			Gray-yellow fine to slightly medium quartz sand. No real structures visible.
		2.0		0.50	Gray fine quartz sand with highly deformed cross-bedding.
		1.7	5 E 10 E 10 E		Yellow fine-medium quartz sand with cross-beds dipping 10°E. Beds are slightly deformed.
		2.0		1.00	Gray fine quartz sand with fine quartz sand cross-beds. Abundant black heavy minerals. Cross-beds are wavy.
		1.6	10 W 5 W		Yellow-gray medium fine quartz sand at top coarsening downward to gray-yellow fine-medium quartz sand. Highly cross-bedded, dipping 5°W.
		1.8 1.3	10 E	1.50	Yellow medium quartz sand. Possible cross-beds.
				2.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 59 Date of Coring 941023 Logged by Keil Schmid Date Logged 941031

Location (FRF coordinates, m)

X (cross shore) = 320.2 Y (long shore) = 1006.1 Z = -2.09 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description	
East	West					
		1.2		0.00	Top 25cm yellow medium/coarse quartz sand. Disturbed.	
				0.25		
		1.5	45 W	0.25	Yellow medium quartz sand. Cross-bedded. All slightly disturbed.	
			25 W			
			20 W			
			10 W			0.50
			0 W			
		1.5	10 E		Shift from offshore dips to onshore dips.	
			20 E			
						0.75
			10 E		Faint contact	
		1.8		1.00		

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 60 Date of Coring 941023 Logged by Keil Schmid Date Logged 941027

Location (FRF coordinates, m)

X (cross shore) = 160.0 Y (long shore) = 940.2 Z = 0.95 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description		
East	West						
		1.8	25 W		<p>Yellow gray medium quartz sand. Fining-upward sequence. Coarser grained cross-beds throughout. Dip angles change with depth, but are uniformly to the west.</p>		
		1.6	5 W				
			5 W				
		1.7	25 W				
			25 W				
		0.8	5 W			1.0	<p>Sharp contact at 5°W. Erosional gray fine quartz sand cross-beds dipping 5°W.</p>
		2.1	5 W				
			5 W				
		0.5	20 W			1.5	<p>Large cross-bed of coarse sand dipping 20°W Bimodal distribution of sand sizes.</p>
		1.3	20 W				
				2.0			

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 61 Date of Coring 941023 Logged by Keil Schmid Date Logged 941031

Location (FRF coordinates, m)

X (cross shore) = 154.8 Y (long shore) = 940.3 Z = 1.19 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.2			Yellow-brown medium-coarse quartz sand. Curved horizontal contact. Sharp.
		1.7	?		Gray-yellow medium/fine quartz sand. Very faint indications of slightly curved cross-beds. No grain size difference between beds.
			?	0.50	
		1.7		1.00	
		1.5			
		1.0			Medium/fine quartz sand. Grading into medium/coarse sand.
		1.7	8 W		
		1.2		1.50	
				2.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 62 (bot) Date of Coring 941025 Logged by Keil Schmid Date Logged 941102

Location (FRF coordinates, m)

X (cross shore) = 320.7 Y (long shore) = 940.8 Z = 2.50 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.7	5 W	1.50	Yellow-gray fine-medium quartz sand, cross-bedded.
		2.0			Gray fine quartz sand, less evidence of cross-bedding.
		0.0	15 E	2.00	Medium sand to gravel cross bed, very sharp contacts dipping at 15°E.
		2.0	15 E		Gray fine quartz sand, increased shell content. No apparent structures.
		1.0	15 W	2.50	Sharp contact dipping 15°W. Yellow-brown medium-coarse quartz sand, slightly mottled look. Appears to have been bioturbated.
		0.8			
		1.7	10 E	3.00	Very sharp contact dipping 2°W. Gray fine quartz sand. Numerous coarse-grained cross beds spaced randomly throughout unit.
		1.0			
		1.7	2 W	3.50	
		1.7	2 W		
		2.0	10 W	4.00	
		2.0	5 W		
			5 E	4.50	
			30 W	5.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 62 (top) Date of Coring 941025 Logged by Keil Schmid Date Logged 041102

Location (FRF coordinates, m)

X (cross shore) = 320.7 Y (long shore) = 940.8 Z = -2.50 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		1.7		0.00	Medium quartz sand. Deformed structures.
				0.30	
		1.7	20 W	0.50	Yellow medium quartz sand Highly cross-bedded. Cross beds are closely spaced and all dip onshore (W). Coarsening upwards sequence.
			30 W		
			20 W		
		1.8	15 W		
		1.9	10 W		
		2.1	15 W	1.00	Faint contact, dipping 10° W Gray fine quartz sand Larger cross-beds than above.
			35 E		
		1.8			
				1.50	
				2.00	

Duck94 Field Studies of Nearshore Sedimentary Structures

Vibracore # 63 (bot) Date of Coring 941025 Logged by Keil Schmid Date Logged 041102

Location (FRF coordinates, m)

X (cross shore) = 317.5 Y (long shore) = 940.8 Z = -2.59 (NGVD; top of core)

Lithology		Grain Size (phi)	Dip (deg)	Distance from top of core (m)	Description
East	West				
		2.1			Apparently structureless gray fine quartz sand.
		1.0	10 W		Fairly sharp contact dipping 10° W Yellow brown coarse quartz sand
		1.8	40 W	2.00	Very steeply dipping contact.
		1.0	0 W		Gray fine-medium quartz sand, increase in fragile shell fragments. Fairly sharp contact.
		0.5	5 W		Yellow-brown coarse quartz sand. Fairly sharp contact.
		1.7	10 W		Gray poorly sorted fine to slightly coarse quartz sand. Definite increase in delicate shells. Appears to be cross-bedded. Fairly sharp contact.
		0.8	5 W		Yellow-brown medium-coarse quartz sand slight mottling. Well-rounded grains. Some shell frags.
			15 E	2.50	
		2.0	0		Extremely sharp erosional contact. Gray fine quartz sand with distinctly coarser cross beds.
		1.7	10 W		
		2.0			
		1.7		3.00	
		1.8			
			20 E		
		0.8			
				3.50	

