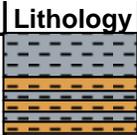
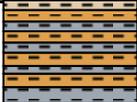
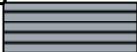


Sample Description For Virginia Beach Geoprobe Site 61C 39

Depth	Lithology	Recovery	Description
0-4		90+	Gray sandy silt. Lenses of orangish-brown material that do not seem to differ from the gray material other than their color.
4-8		95	4-4.5 ft: Med brown, silty sand. 4.5-6.8 ft: same orange & gray sandy silt seen from 2-4 ft. 6.8 ft marks a noticeable increase in water content, although not sure if below the WT.
8-12		100+	Upper portion of sample is being pushed out of the end of the liner. 8-8.5 ft: Same material as above. 8.5-11.5 ft: gray, sandy silt or silty sand. DM abundant. Very near the water table. By 10 ft definitely below the WT. 11.5-12 ft, the material coarsens to a gray, clean, v fine to med pebbly, coarse to v coarse qtz sand. Colored grains are common. Very good water bearing zone.
12-16		90+	12-12.5 ft: Same gray, v coarse sand. 12.5-15 ft: gray, slightly pebbly, upper med to coarse sand. 15-16 ft: clean, subrounded to well rounded, fine sand. DM abundant. Mica uncommon. H ₂ S odor noted.
16-18			Driller Note: Hard driving from 16-22 ft
18-22		not noted	Liner shattered upon retrieval from barrel. No samples collected. Exact position and thickness of beds uncertain, although the relative positions are correct. Upper portion is the same gray, fine sand seen at 15-16 ft. This grades to a v fine pebbly, coarse to v coarse sand. This grades to a gray, clean, rounded to well rounded, med sand. Mica scarce. DM common. H ₂ S odor noted. SC = 934 μS/cm.
22-30			Driller Note: Drive until we are out of this sandy material. Switching to 2 ft sampler. Driving softens a bit at 29 ft. Pushing to collect sample is very easy - no hammering.
30-32		not noted	30-31.3 ft: v fine sandy silt. Shell frags up to 4-5 mm. 31.3-32 ft: clean, rounded to well rounded, well sorted, upper med to lower coarse sand. Shell frags abundant and generally smaller than upper coarse sand-sized. SC = 1051 μS/cm.
32-38			Driller Note: Very easy driving from 32-38 ft - no hammering needed and the truck is not rocking up and down.
38-40		55+	38-38.5 ft: similar to that seen from 31-32 ft. There is much free water in the liner, but I am unsure if it is from this depth or is running in from the coarse sands above 29 ft. The shell fraction declines from 38.5-38.8 ft and disappears entirely by 39 ft. The lowest material is a silty clay. It has
40-50			Driller Note: Same easy pushing from 40-50 ft.

Sample Description For Virginia Beach Geoprobe Site 61C 39

50-52		90+	50-51.6 ft: Gray sandy, shelly, clayey silt. 51.6-52 ft: shelly, silty sand.
52-65			Driller Note: Same easy pushing from 52-58 ft. 58-64.5 ft: a bit more resistant, but still just pushing. Firmed up at 64.5 ft and much more difficult by 65 ft - hammering needed.
65-67		not noted	Very stiff, very plastic clay. Little to no silt. The tightest clay we've yet encountered in Virginia Beach. Felt just like a clean fine to med sand when driving. We were very surprised when we pulled the sample.
67-76			Driller Note: Driving as difficult as above from 67-76 ft. Slightly easier interbeds encountered every 2-3 ft.
76-77.5		50	76-77 ft: wet, slimy, silty, clay. Very plastic, but has some liquid associated with it. At 77 ft, the material abruptly changes to a shelly, med to
77.5-93			Driller Note: No difference in driving from 78-90 ft - light to moderate hammering required. Gradually became more difficult between 90 & 92 ft. At 92-93 ft, driving is very hard.
93-94		100+	Liner shattered during retrieval from barrel - able to salvage the lower foot. Material is a grayish green, clean, well sorted, subrounded to well