

# **APPENDIXES**

## Appendix A: Lithologic Description of Cores

### Middle Key Core (GLW603-MKA)

Depth (cm)	Description
0-12	Light olive gray carbonate mud, with <5% silt sized grains. <i>Halodule</i> shoots in the upper part of segment; rootlets throughout. <i>Peneropolis</i> and small gastropods relatively abundant. Calcareous grains and shells.
12-30	Light olive gray to brownish gray carbonate mud, with very fine sand to silt sized grains. Increasing mud content in lower portion of segment. Scattered wood debris ( <i>Rhizophora?</i> ). <i>Thalassia</i> rhizomes throughout and interspersed <i>Halodule</i> rootlets. Scattered small burrows (< 4mm). Scattered small shells and calcareous debris.
30-44	Brownish gray to olive gray carbonate mud. In situ <i>Thalassia</i> rhizomes, wood debris (probably <i>Rhizophora</i> ). Scattered <i>Halodule</i> rootlets. Calcareous grains and shell debris rare.
44-62	Dark to pale yellowish brown mud with increasing organic content downcore. Wood debris and <i>Thalassia</i> rhizomes relatively abundant. Fresh water gastropod at 50 cm. Visible calcareous grains relatively rare.
62-68	Dark yellowish brown mud. Shell debris content higher than overlying. Wood debris and relatively abundant. <i>Thalassia</i> rhizomes and <i>Halodule</i> rootlets present.
68-92	Dusky brown to grayish brown mud, with spongy texture. Scattered shell debris and calcareous grains; larger shell fragments are poorly preserved (increased acidity due to increased organics?). Wood material abundant. Scattered <i>Halodule</i> rootlets.
92-102	Transitional zone - gradational with overlying sediment but contains limestone rubble.
102-114.5 (bottom)	Dusky yellowish brown calcareous mud matrix with silt to very fine quartz sand. Scattered calcareous grains (primarily from LS rubble) and wood material ( <i>Rhizophora?</i> ) present. Some <i>Thalassia</i> rootlets. Mottled appearance - light areas seem to be decayed limestone rubble.

### Black Point North Core (GLW603-BPNA)

Depth (cm)	Description
0-14	Very fine quartz sand and mud; poorly sorted. Relatively abundant shell debris and large whole mollusks. Upper portion has <i>Thalassia</i> blades and rhizomes, some live root material.
14-24	Gradational with overlying, somewhat better sorted than above. Sediment is very fine quartz sand, mottled dark brown sediment with light calcareous grains and whole shells. Scattered <i>Thalassia</i> rootlets.
24-44	Very fine quartz sand and silt, with mud; poorly sorted. Scattered black grains (phosphate?) and calcareous grains. Shell content increases

	downward in segment. Sediment very mottled throughout; possible burrows because lighter material contains increased shell fragments. Wood (probably <i>Rhizophora</i> ) appears near bottom. Some surfaces near top of segment covered with small holes, probably <i>Halodule</i> root casts. Scattered bits of <i>Thalassia</i> .
44-64	Dark, fine silty sand; not mottled like overlying segment; increasing clay content downward. Scattered black grains, and shell material. Scattered wood fragments (probably <i>Rhizophora</i> ). Large oyster attached to wood in lower portion of segment.
64-86.5 (bottom)	Gradational with overlying, increasing clay content, disseminated organics. Interbedded zones of higher sand vs. higher clay content. Scattered calcareous grains and shell fragments. Scattered wood fragments (probably <i>Rhizophora</i> ) and <i>Rhizophora</i> leaf near bottom. Root casts near bottom of segment. Lowest sample contains fresh <i>Thalassia</i> - drag-down during coring process.

### Chicken Key Core (GLW603-CKA)

Depth (cm)	Description
0-18	White to light gray, fine to very fine quartz sand, with disseminated organics, <i>Halodule</i> rootlets and some scattered <i>Thalassia</i> . Mollusk shells and fragments. Burrow from 14-18 cm. Small area of underlying mud - possible erosional surface?
18-28	Dark brown mud with high organic content, and varying amounts of fine quartz sand, coarsening downwards. Spongy texture. Abundant shell debris. Rare <i>Thalassia</i> rhizoids.
28-48	Fine quartz sand with high mud/organic content giving sediment dark brown color and sticky texture. Scattered shells and calcareous fragments. <i>Thalassia</i> root hairs, rare. Scattered small areas (<1 cm) of pure white very fine quartz sand. Scattered black grains (phosphate?) appear near bottom of segment.
48-68	General lithology same as overlying - fine quartz sand with high mud/organic content, but texture becomes spongy here, probably due to increased plant material. Spongy texture increases downward. Wood material (probably <i>Rhizophora</i> ). Areas of pure white sand present as in overlying, but have swirled or marbled appearance. Calcareous fragments rare - no obvious SAV remains.
68-77.5 (bottom)	Dark brown mud with scattered fine quartz grains (most abundant at top of segment). Higher clay content makes texture slippery to sticky, crumbly in some sections. No obvious calcareous grains or plant remains.