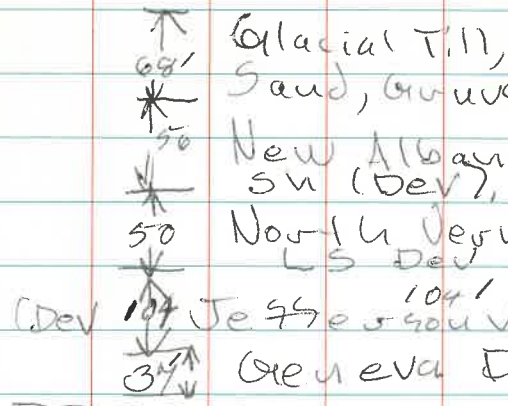
K+E

LEVEL BOOK

62 0040



Mining in the N. Vernon reached by a shaft with a 4:1 grade.

Martin Marietta Aggregates Underground Mine

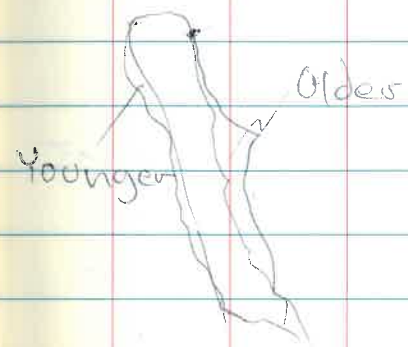
Stapor / Barrier Isl. & sea-level Curves,

1. (Gasparilla — south to Sanibel)
2. Fluctuation of sea-level ± 1 m about present day
3. Each sample on large single mollusk shell

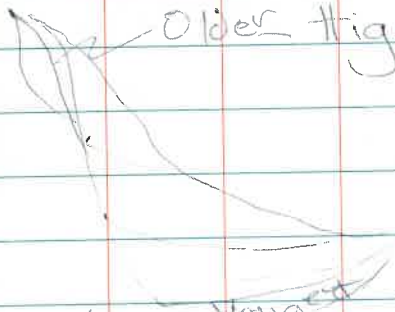
- old
- intermed.
- younge

} Gasparilla

Lacosta



Large age range =
Extensive reworking
Sanibel



(Sea level response to visco-elastic behavior of crust)
(Clark, Farrell, Peltier, 1978)
Sea level fluctuation response at 500 yrs cyclicity.)
Questions (?)
Storm Deposits vs. "long term progradational deposits"

Robbin, Daniel M.
Keys & Reef Tract data re, Sea Level Curves,
Soil stone Crust - Forum on bedrock beneath soil.
1) New relative curve, slow - fast - slow)

Wanless, H.R.,
Mangrove Reefs (N. end of Key Biscayne)
Fossil Black Mangrove

Mar, 22, 2000
Site visit to S2, T15S, R22E.
A.
Visit to ~~the~~/sink in a retention pond. Limestone exposed in walls. Q. Phelps noted the existance of these features to Phil Howell and reported that collapse occured very soon after 1st significant rainfall on to newly dug retention pond. Bottom of the retention pond was flat, the ~~area~~ was ~ 2 meters below the surface (2m deep).
The property in question was covered with thick sand which had been repeatedly furrowed and graded. The sand was gray & contained variable amounts of organic matter. Limestone float was observed. Limestone was not observed near the surface in place. In the subsurface was a

pinnacle configuration, then bulldozing and grading could have sheared off pinnacles and produced float. Alternatively, the float could be landscaping material from a previous land use, the "six guns" attraction.

We next visited a small pond B with cypress trees. There was peat in the bottom of it and hand augering showed sand to lie directly beneath the peat. The city engineer augered on the banks of the pond and found sand, becoming mixed with clay, with increasing depth. The clay may cause the pond to be perched and remain wet. No L.S. was found associated with this pond. We followed

dirt road which paralleled the RR tracks. In the NE corner of the property we found (P. Howell C. spotted) a sink hole, ~20ft across and ~15 to 17 ft deep. The sides were steep and appeared to be sand. Rock was not observed in the walls of the sink. A thin layer of leafs lay in the bottom. Both the steepness of the walls & the minor amount of vegetation in the bottom suggested that collapse occurred fairly recently (Possibly within the year, it didn't look like more than a single season's amount of leaf fall.

The pond which we observed may have been

"constructed" by the previous landowner, possibly utilizing a small pure existing wet feature.

List for future field trips:

G.P.S.

Hammer

Hat

Sun Screen

Field Notebook

Pencils

Camera

Topographic Maps

Air Photos from Terra Server

Atlas.

Geologic County Map