U.S. DEPARTMENT OF INTERIOR
GEOLOGICAL SURVEY

PLATE 3

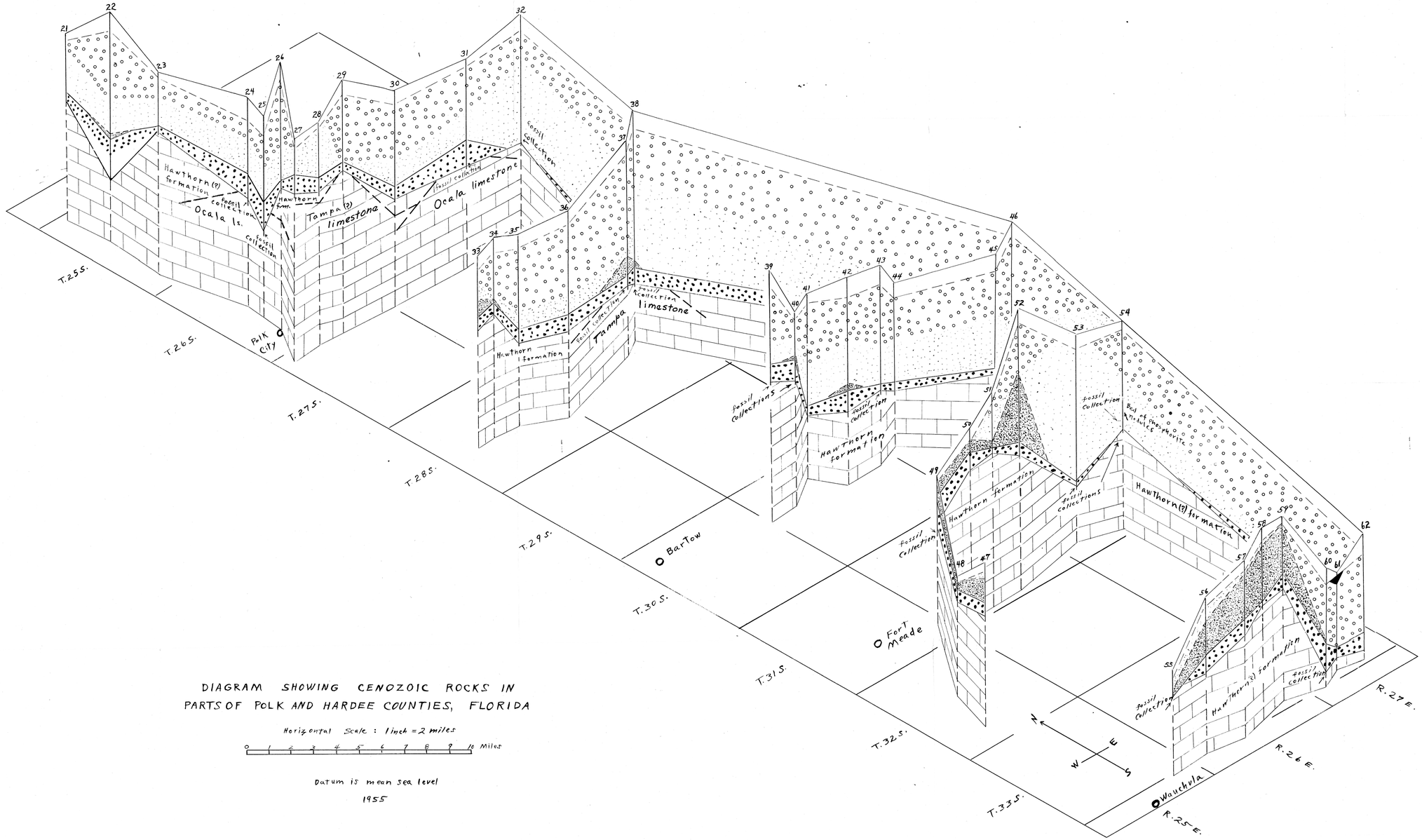

DIAGRAM SHOWING CENOZOIC ROCKS IN PARTS OF POLK AND HARDEE COUNTIES, FLORIDA

Horizontal Scale : 1 inch = 2 miles

0 1 2 3 4 5 6 7 8 9 10 Miles

Datum is mean sea level
1955

EXPLANATION

Recent (in part)	surficial sand Sand, quartz, loose, massive; probably partly Recent wind deposit and partly residual; position of contact uncertain in places.	Quaternary (in part)
Upper Miocene (?)	calcareous sand Possibly equivalent to Bone Valley formation.	Tertiary
Late middle or early upper Miocene	Haines City sand (coarser-grained member) Sand, quartz, clayey, generally medium-grained, white to brown.	
	Haines City sand (finer-grained member) Sand, quartz, clayey, very fine-grained to fine-grained, white, locally dark green; local concentrations of phosphorite nodules in lower part (see site 54).	
Middle Miocene	Hawthorn formation (sand unit) Sand, quartz, fine-grained, gray to brown; interstitial secondary phosphate; more radioactive than Haines City sand (gamma-ray logs not shown); position of upper contact uncertain.	
	Hawthorn formation (phosphorite unit) Sand, quartz and phosphorite, clayey, gray to brown; quartz sand fine-grained; phosphorite nodules range up to pebble size.	
Eocene and Miocene	Hawthorn formation (limestone unit) Limestone, clayey, sandy; phosphorite nodules range up to pebble size.	
	Tampa limestone (limestone unit) Limestone, clayey, sandy; phosphorite nodules of sand size.	
	Ocala limestone Limestone, pure.