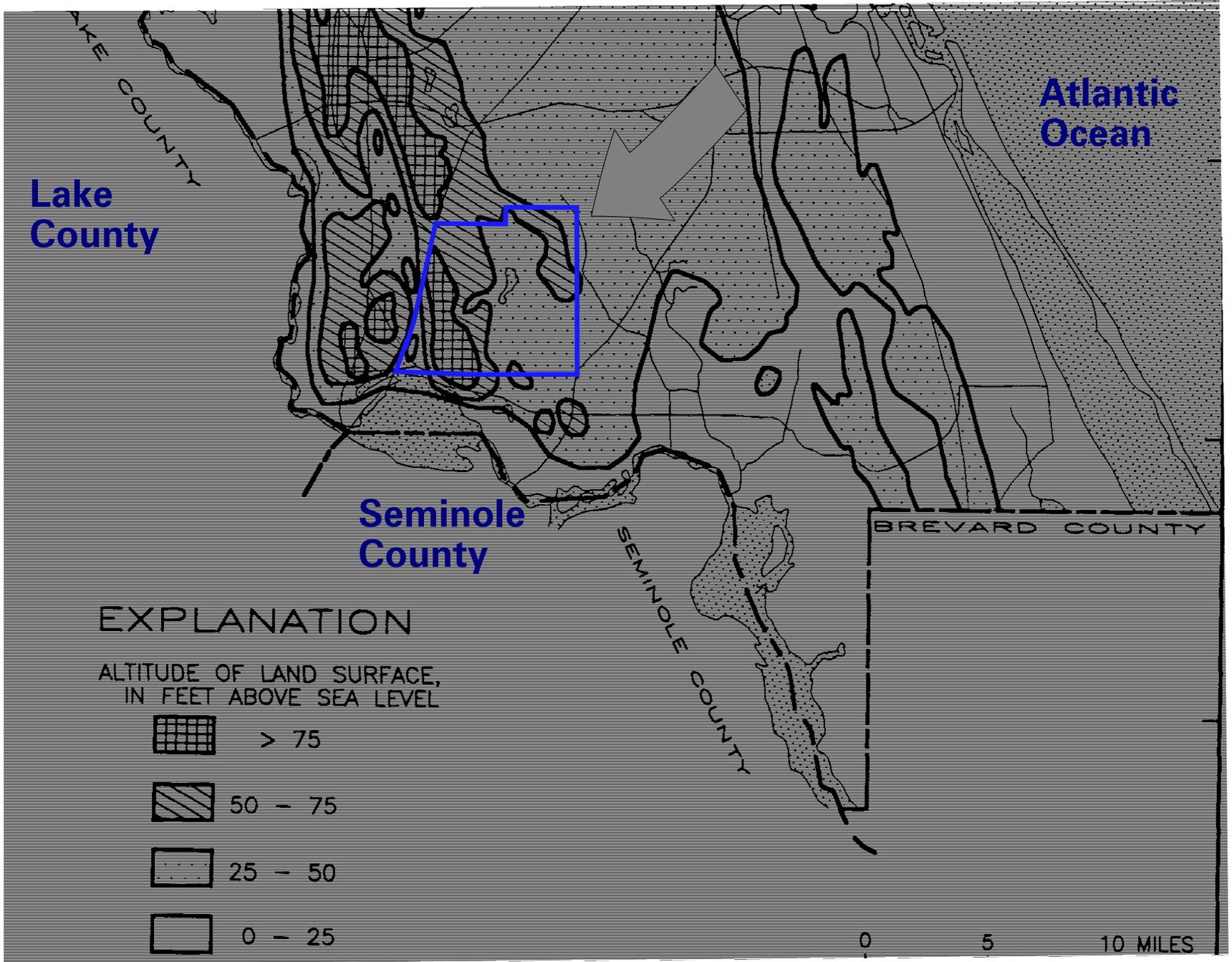


City of Deltona Stormwater Management Master Plan

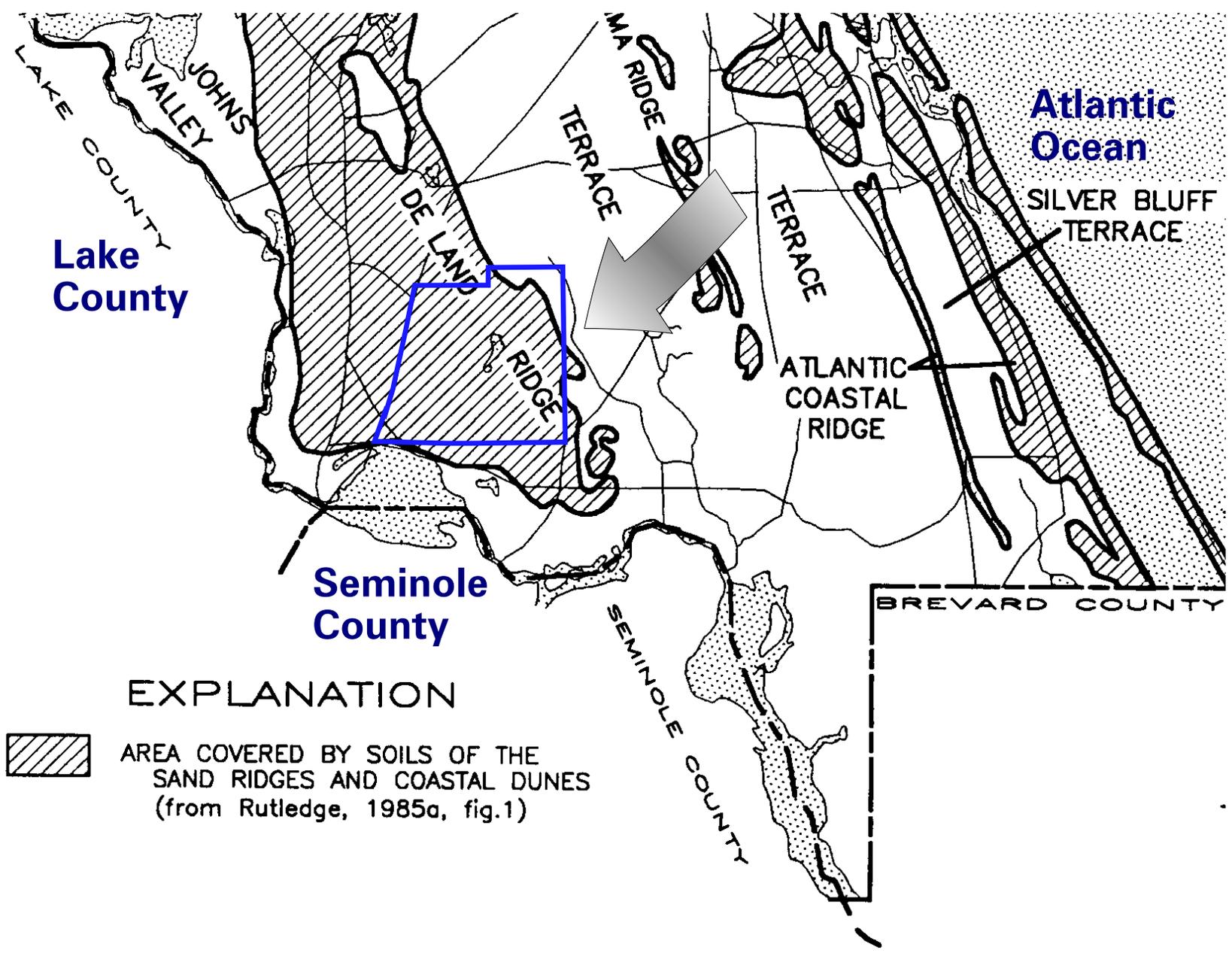
Hydro-geotechnical Considerations for Modeling Stormwater Management Systems in Deltona

presented by
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Professional Geotechnical Engineer
www.iag.net/~devo
a member of the PEC Team

TOPOGRAPHY OF THE DELTONA AREA



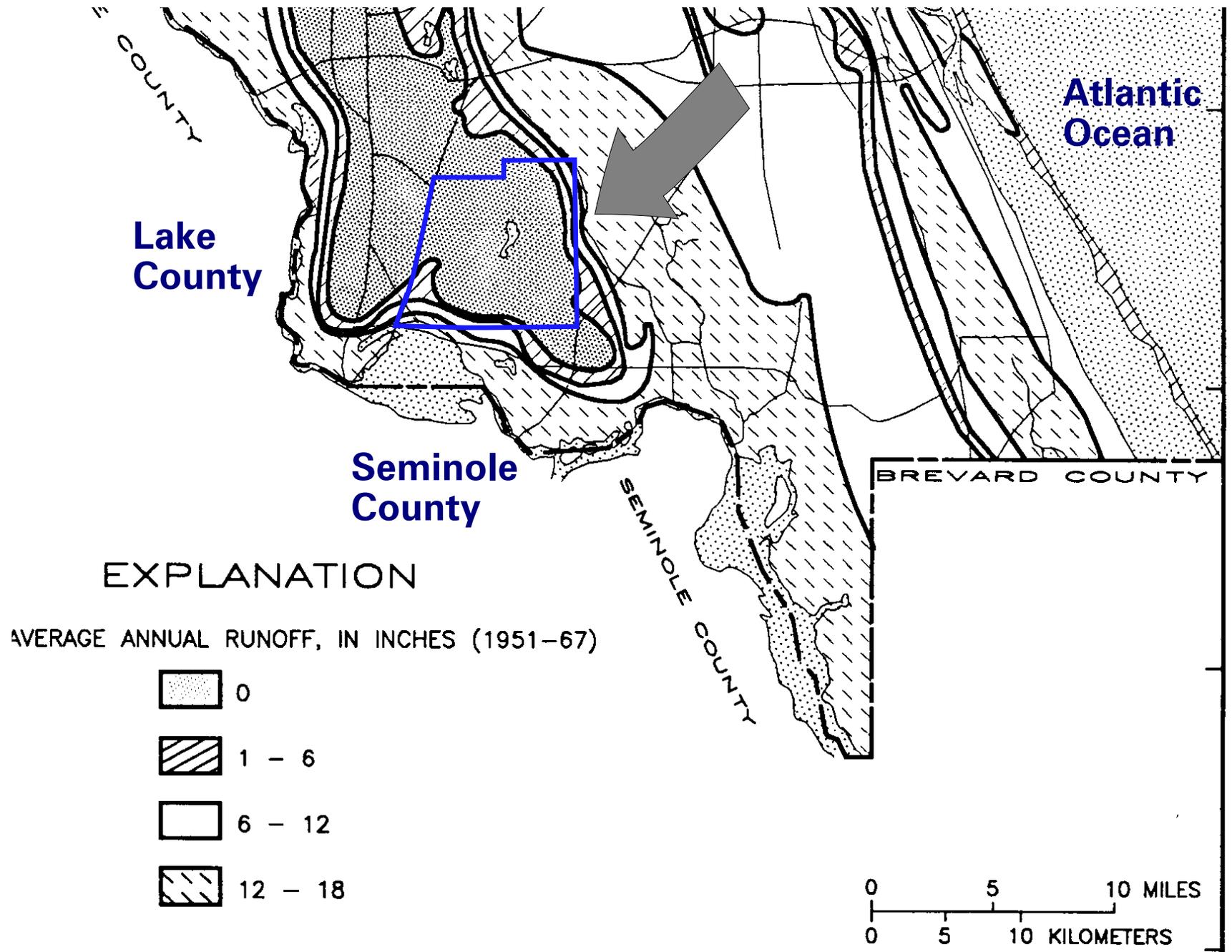
PHYSIOGRAPHIC REGIONS



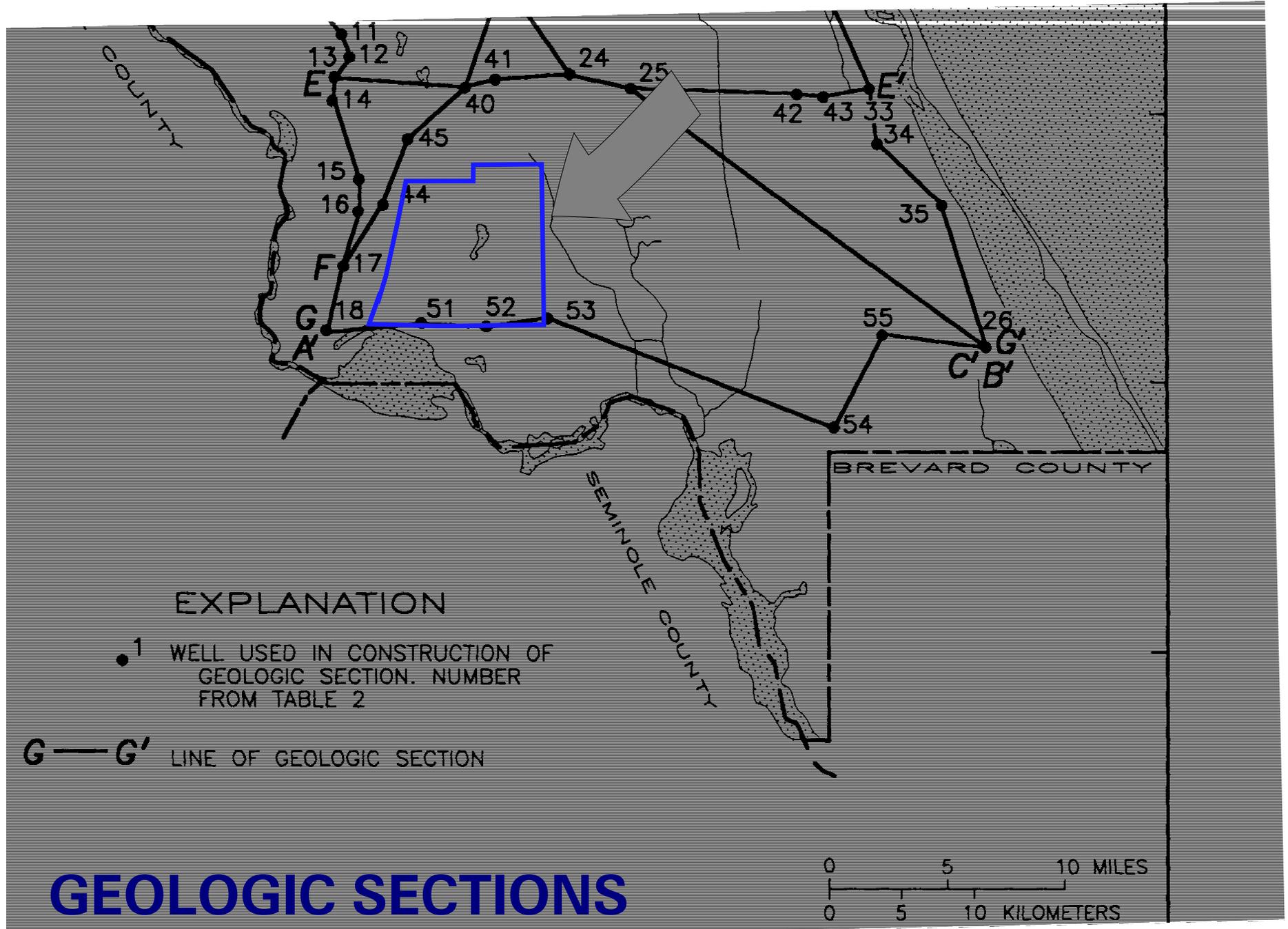
EXPLANATION

 AREA COVERED BY SOILS OF THE SAND RIDGES AND COASTAL DUNES (from Rutledge, 1985a, fig.1)

AVERAGE ANNUAL RUNOFF



note: over 75% of the soils are Type A, excessively drained soils



EXPLANATION

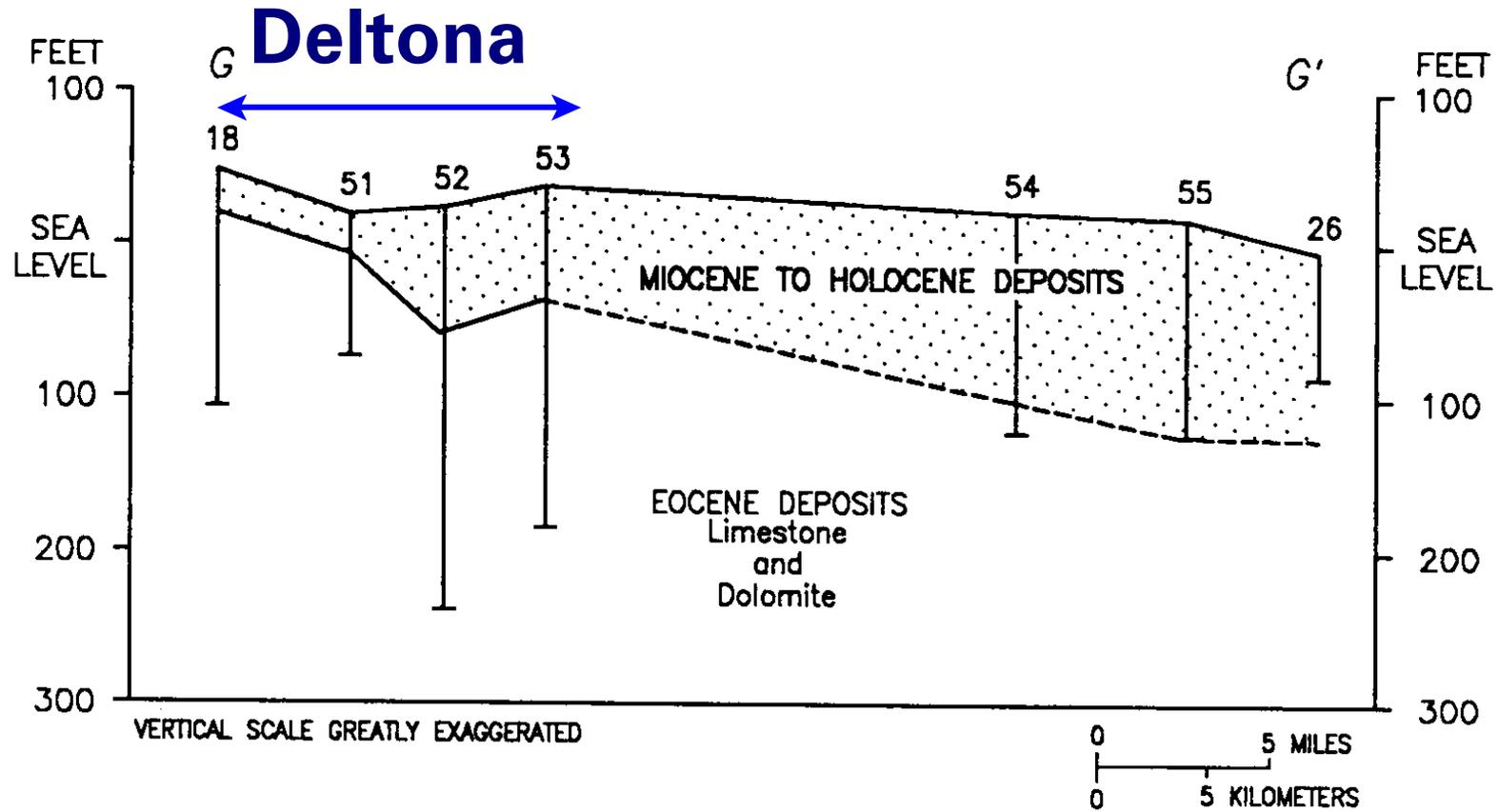
● 1 WELL USED IN CONSTRUCTION OF GEOLOGIC SECTION. NUMBER FROM TABLE 2

G—G' LINE OF GEOLOGIC SECTION

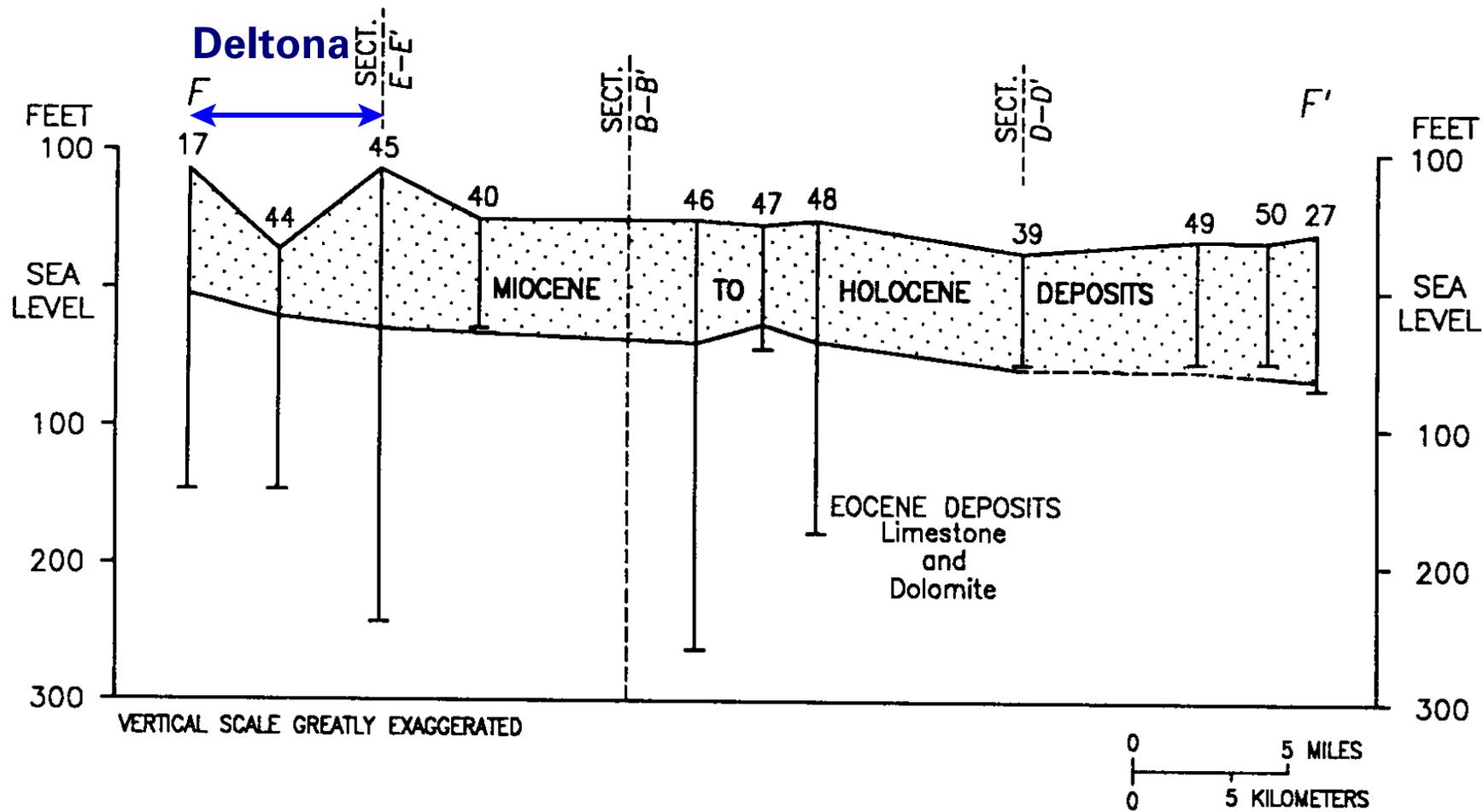
**GEOLOGIC SECTIONS
DELTONA VICINITY**

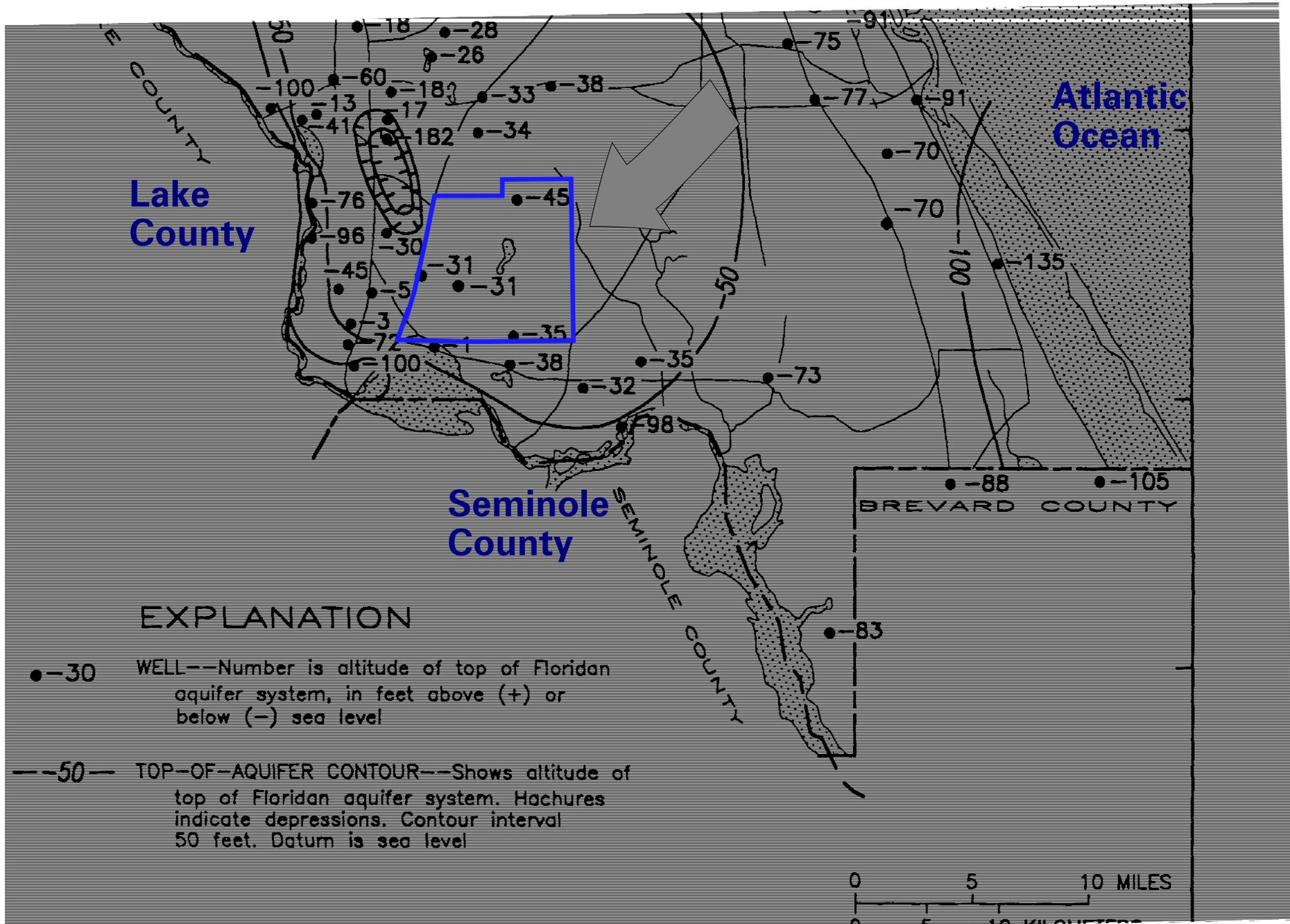


east-west transect along southern boundary of Deltona

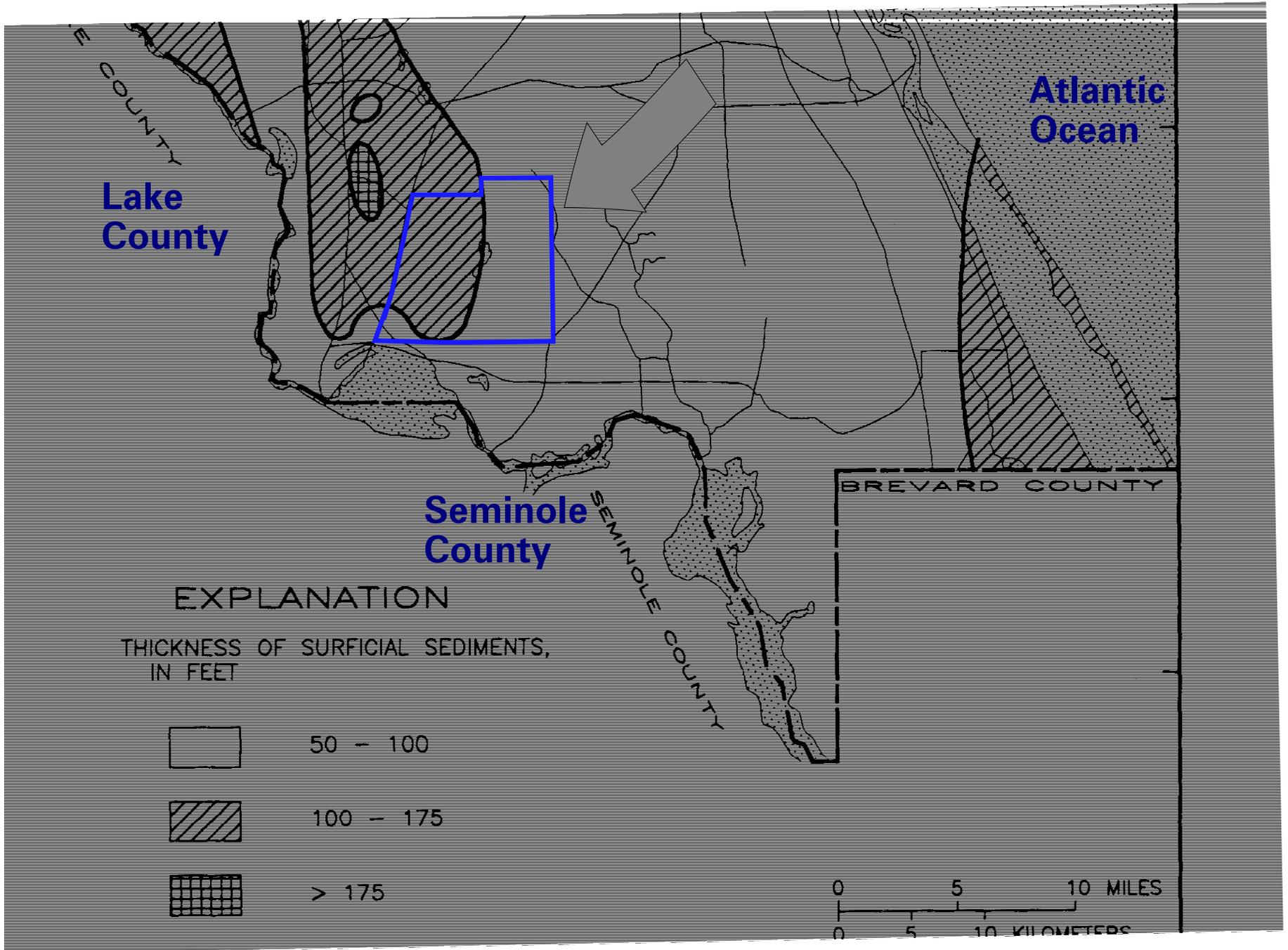


north-south transect along western boundary of Deltona

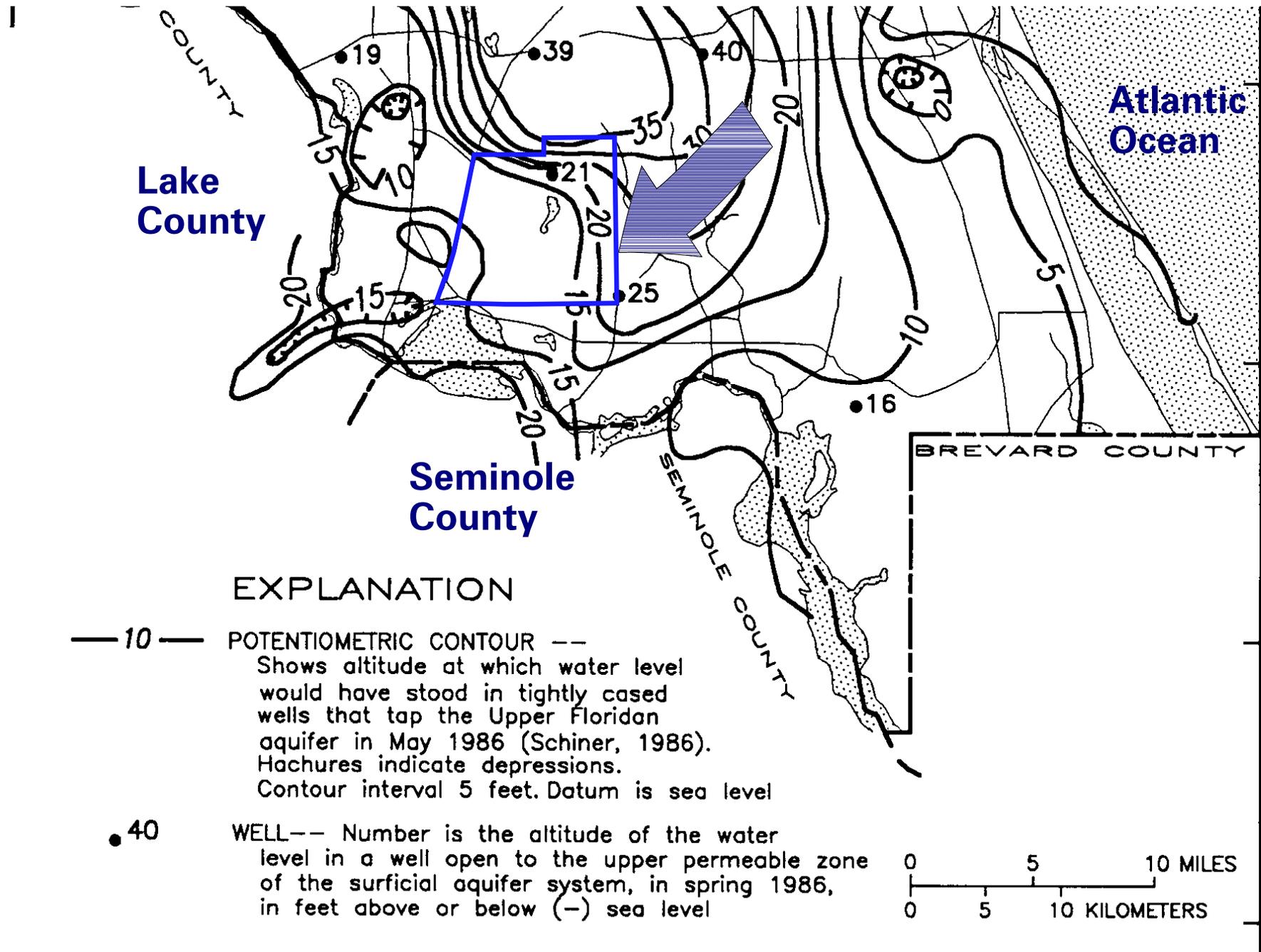




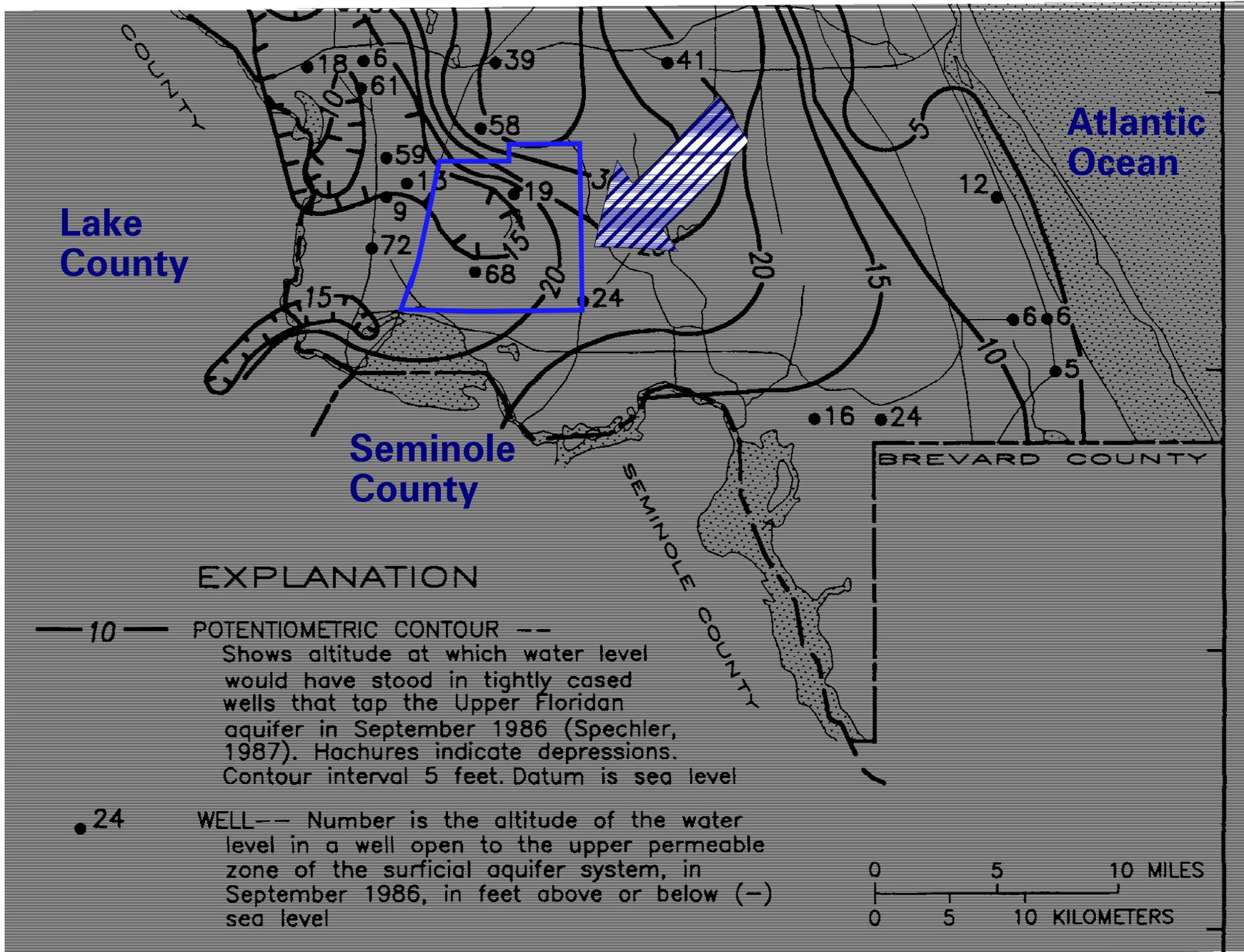
ALTITUDE OF TOP OF FLORIDAN AQUIFER



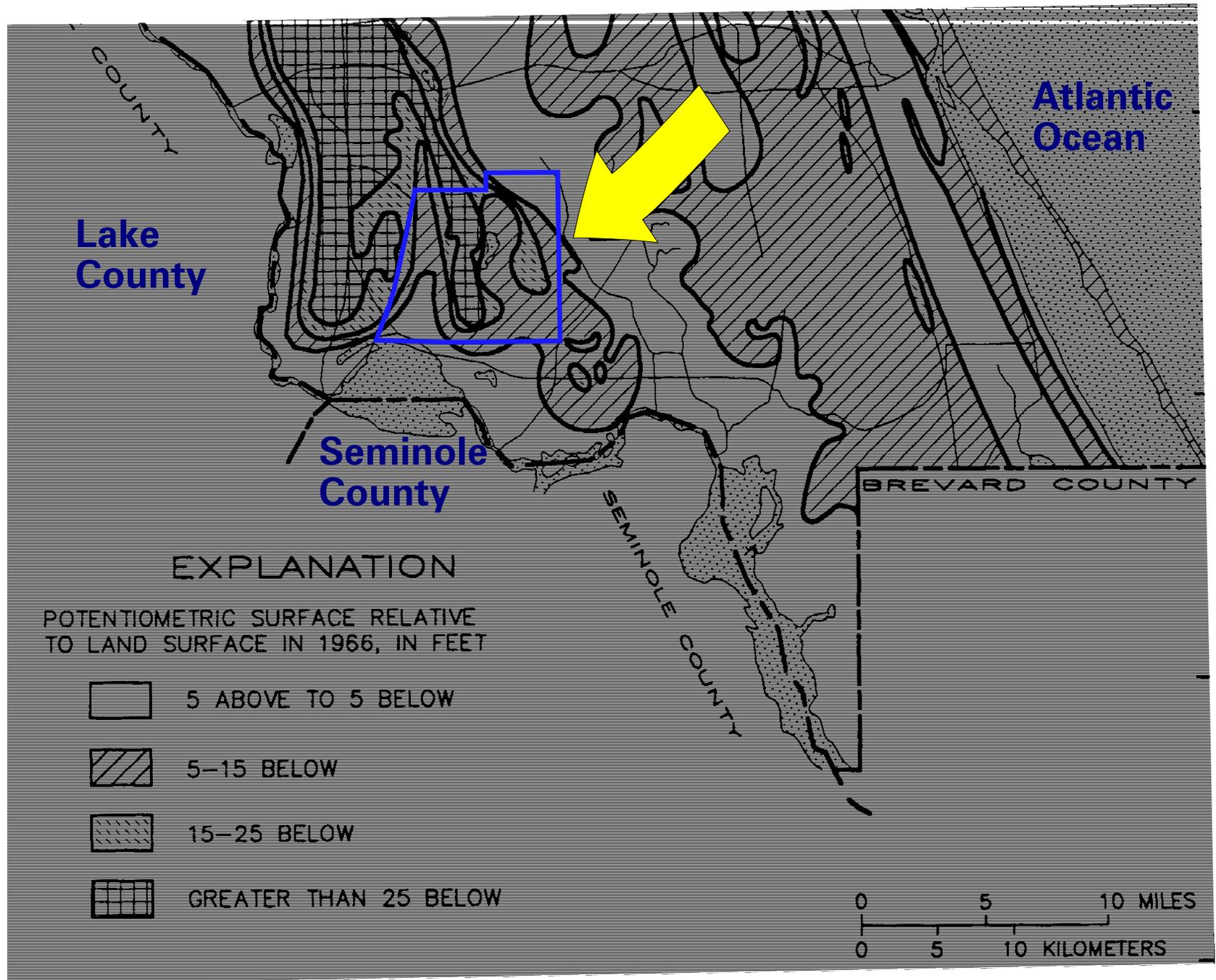
THICKNESS OF SEDIMENTS OVERLYING FLORIDAN AQUIFER



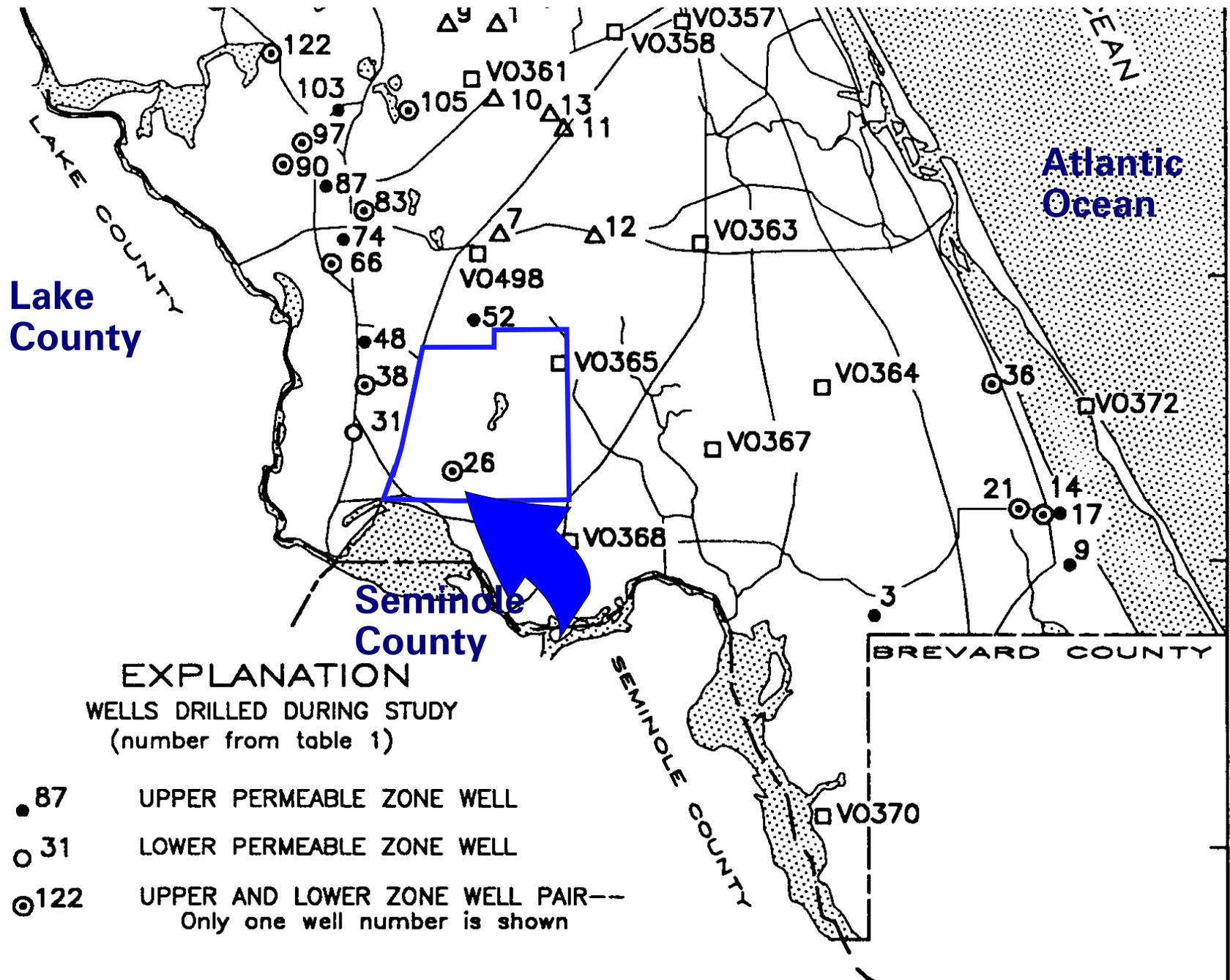
water levels in surficial aquifer & potentiometric surface - may 1986



water levels in surficial aquifer & potentiometric surface - september 1986

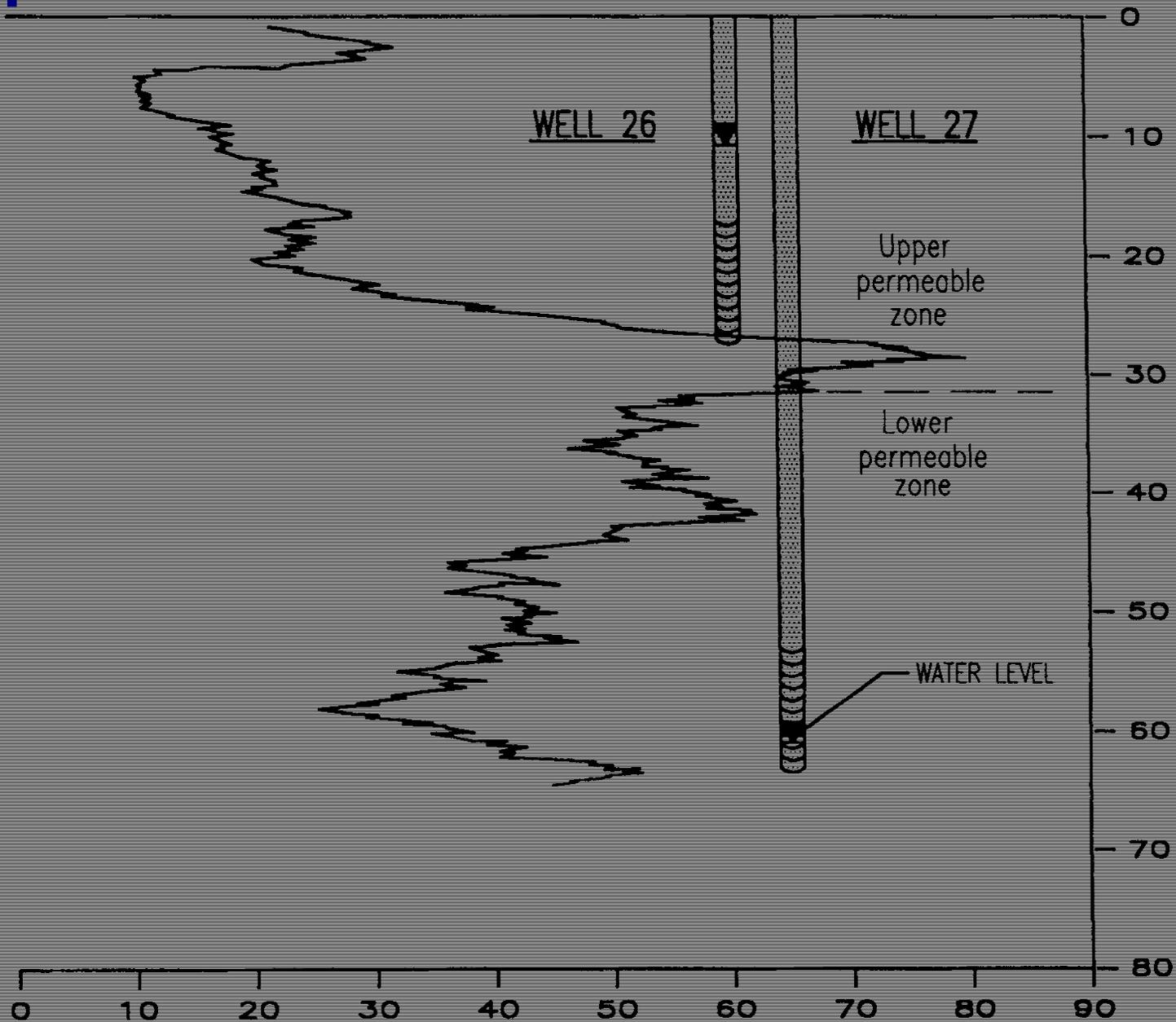


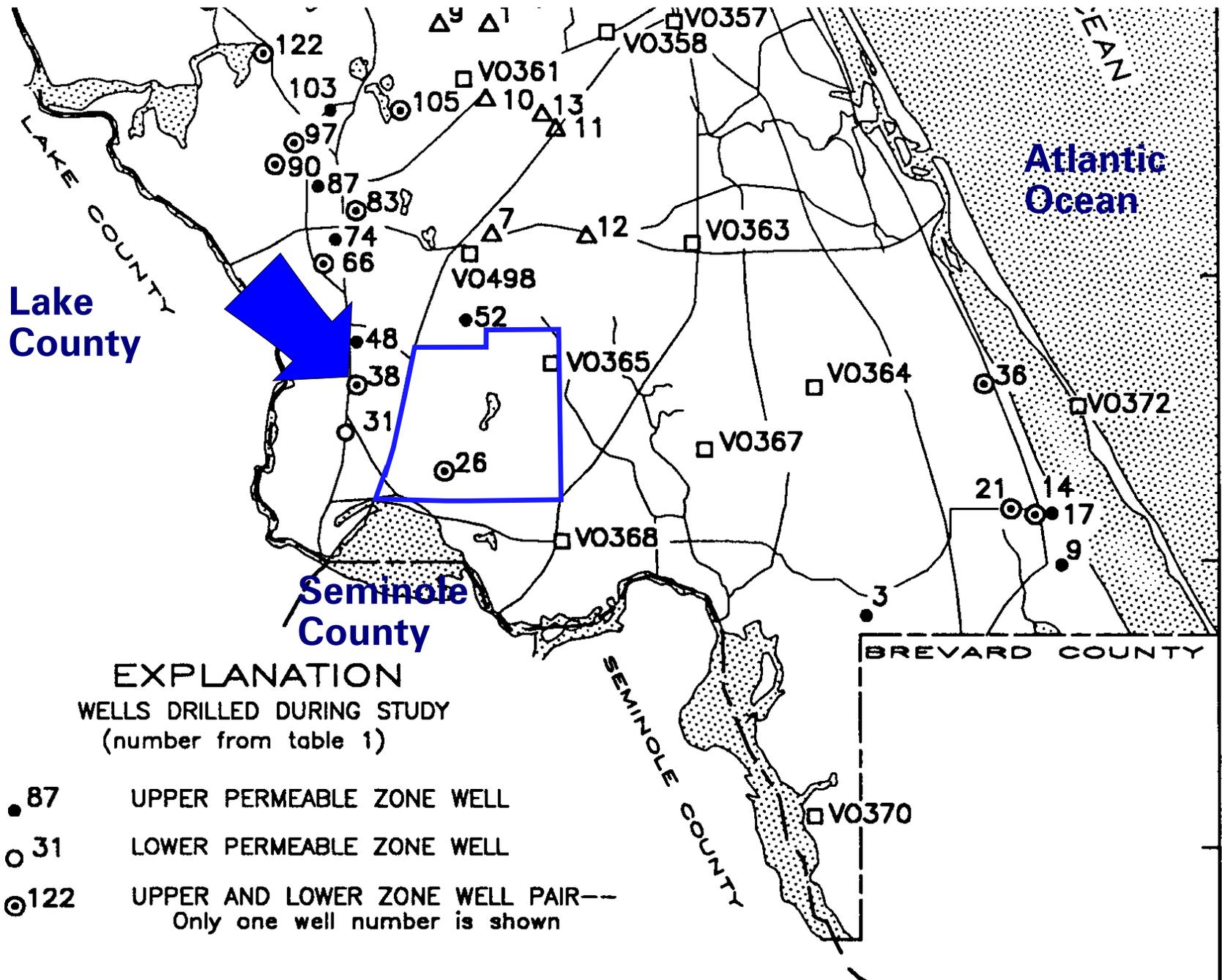
**Depth from land surface to potentiometric surface
feasibility of drain wells**



Locations of test wells in Deltona area

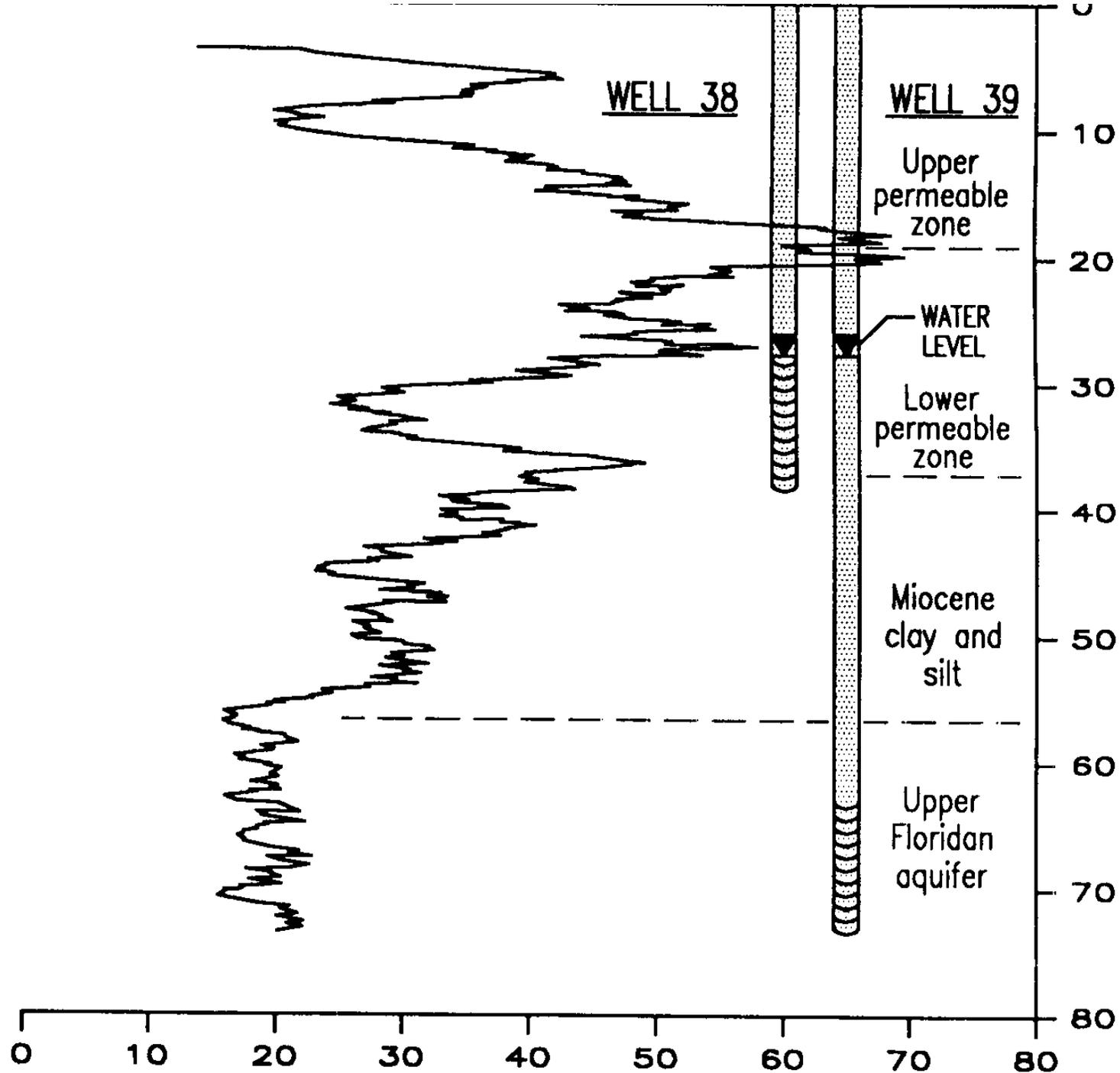
**notice upper & lower permeable zones
perched condition in this area**

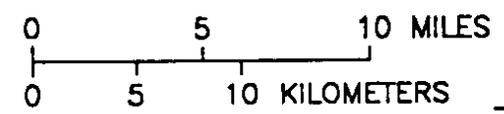
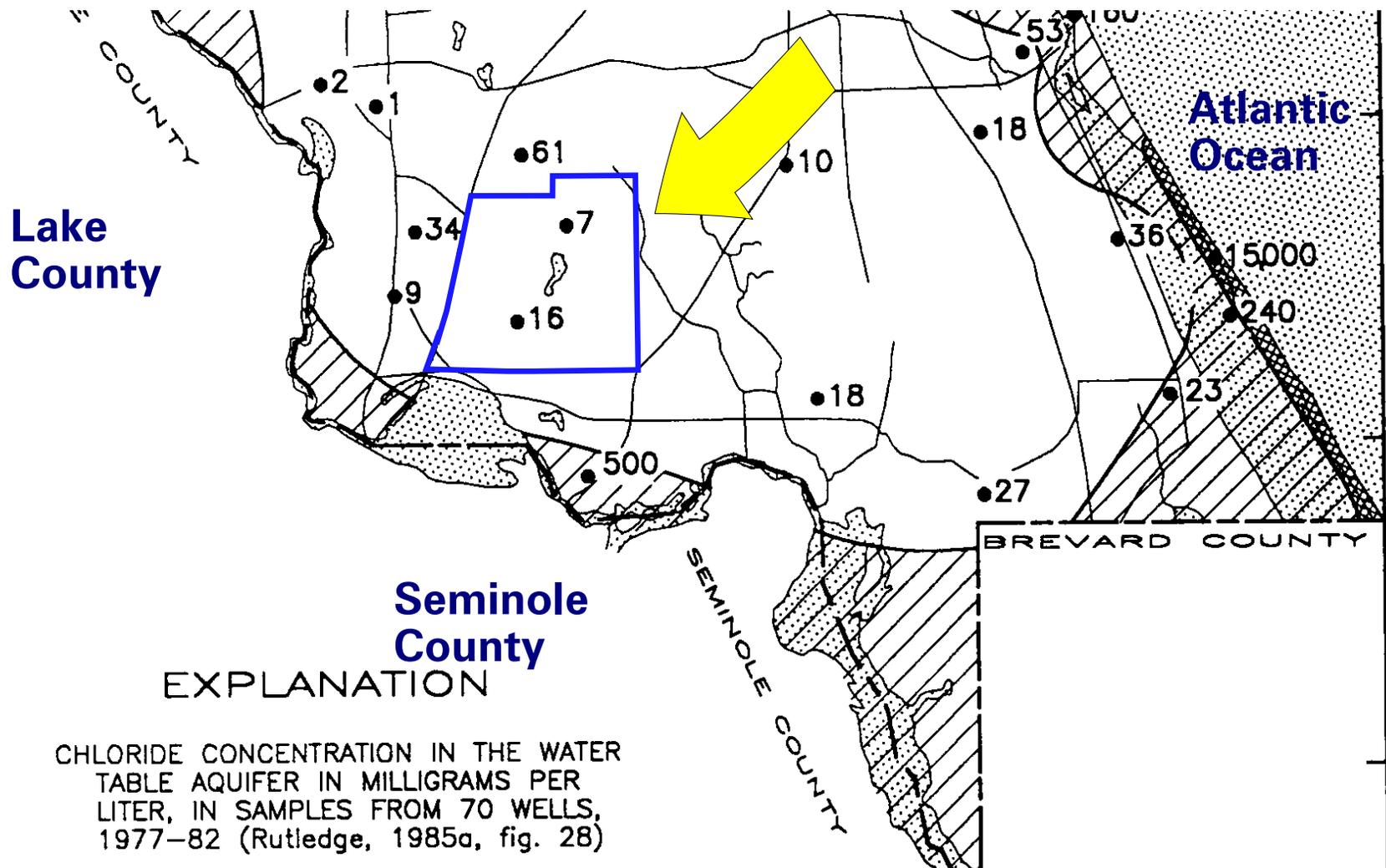




Locations of test wells in Deltona area

**notice upper & lower permeable zones
no perched condition in this area**





WATER QUALITY IN THE SURFICIAL AQUIFER IS GOOD