

Herschel T. Vinyard Jr.
Secretary



OPEN-FILE MAP SERIES 103, Plate 1
GEOLOGIC MAP OF THE WESTERN PORTION OF THE USGS
INVERNESS 30 X 60 MINUTE QUADRANGLE, CENTRAL FLORIDA
2012
BY
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Jonathan D. Arthur
State Geologist and Director

INVERNESS, FLORIDA

30 X 60 MINUTE SERIES (TOPOGRAPHIC)

GULF OF MEXICO

CRYSTAL BAY

SUWANNEE RIVER

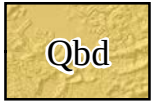
CHASSAHOWITZKA SWAMP

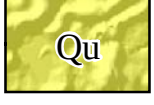
INVERNESS, FLORIDA 2012

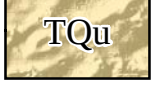
SCALE 1:100,000

CONTOUR INTERVAL 5 METERS
BATHYMETRIC INTERVAL 1 METER
Elevations shown to the nearest meter
National Geodetic Vertical Datum of 1929

Projection: FDEP Albers HARN North American Datum 1983 (NAD83)
Basemap: Digital data compiled by the
Florida Department of Environmental Protection / Florida Geological Survey (2012)

Quaternary Beach Ridge and Dunes
 Beach Ridge and Dune sediments are dominantly siliciclastic sands and are unconsolidated to poorly consolidated. Organics typically occur as disseminated organic matrix, roots and plant debris, sometimes as carbonized remains or charcoal.

Undifferentiated Quaternary Sediments
 Light brown to tan, medium to fine quartz sand with variable admixtures of clay and organics, unconsolidated to poorly indurated. This unit may contain significant amounts of clay and organics.

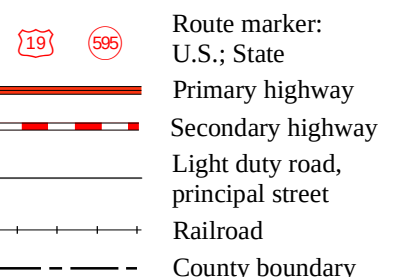
Undifferentiated Tertiary-Quaternary Sediments
 White to gray to orange to blue-green, fine- to coarse-grained, clean to clayey unfossiliferous sands, sandy clays, and clays with variable admixtures of organics. Undifferentiated Tertiary-Quaternary sediments are siliciclastics that are separated from the Undifferentiated Quaternary Sediments solely on the basis of elevation. Pleistocene sea levels reached a maximum of approximately 100 feet (30.5 meters) above MSL. These sediments are predominantly older than Pleistocene but include sediments reworked during the Pleistocene. This unit may include fluvial and aeolian deposits.

Suwannee Limestone
 The Lower Oligocene Suwannee Limestone is cream to tan, crystalline, poorly to well-indurated, poorly to well-sorted, vuggy and muddy carbonate (grainstone to packstone) containing echinoids (*Rhyncholampas gouldii*), mollusks, corals and benthic foraminifera (*Discorinopsis gunteri*, *Fallotella* spp. The unit is variably dolomitic; dolostone may be interbedded with limestone beds. Chert nodules may be present. Limited fossiliferous beds present.

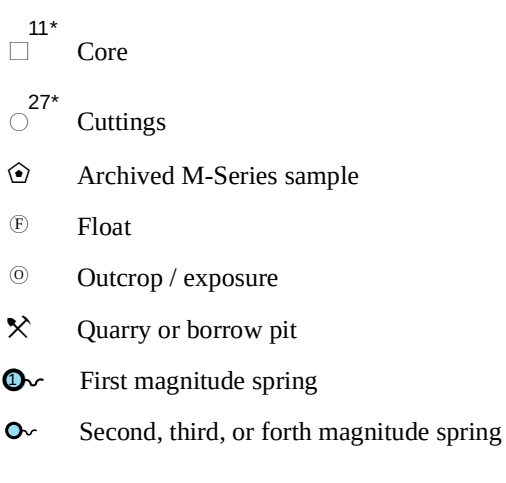
Ocala Limestone
 The Upper Eocene Ocala Limestone is white to cream, fine- to coarse-grained, poorly to well-indurated, moderately to well-sorted, fossiliferous limestone (wackestone, packstone, and grainstone). Fossils commonly include foraminifera, bryozoans, mollusks, and echinoids. Foraminifera present may include *Lepidocyclina ocalana*, *Nummulites* [*Camerina*] *vanderstoki*, *Amphistegina pinarensis*, and *Nummulites* [*Operculinoides*] *ocalana*. Algae and crustaceans may also be present.

Avon Park Formation
 The Middle Eocene Avon Park Formation consists of cream to light brown to tan, poorly indurated to well-indurated, variably fossiliferous limestone (grainstone to wackestone, with rare mudstone). The limestones are interbedded with tan to brown, very poorly to well-indurated, very fine to medium crystalline, fossiliferous (molds and casts), vuggy dolostones. Fossils present in the unit include mollusks, foraminifera (*Spirolina coryensis*, *Lituanella floridana*, *Bolivina* sp., and *Cushmania* [*Dictyoconus*] *americana*), echinoids (*Neotaganum dalli*), algae, and carbonized plant remains.

LEGEND



- Route marker:
 - U.S., State
 - Primary highway
 - Secondary highway
 - Light duty road, principal street
- Railroad
- County boundary
- National or State reservation boundary
- Contours: 5 meter interval
- Index
- Intermediate
- Bathymetry: 1 meter interval
- Index
- Intermediate
- River or stream
- Lake or pond
- Wetland
- U.S. Public Lands Survey Township/Range
- U.S. Public Lands Survey Section

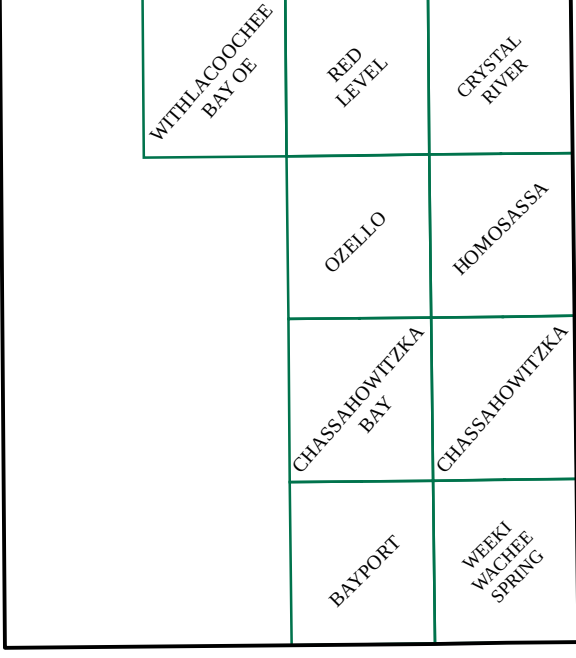


- 11" Core
- 27" Cuttings
- Archived M-Series sample
- Float
- Outcrop / exposure
- Quarry or borrow pit
- First magnitude spring
- Second, third, or forth magnitude spring

*Refer to Open-File Report 97, Appendix A for well information

* Wells numbered 1 - 48 are used in cross-sections on OFMS 103, Plate 2

Basemap Coordinate Explanation
HARN North American Datum 1983
10,000-meter grid, zone 17 North Universal Transverse Mercator
40 = 400000 E
25,000-foot grid ticks based on Florida coordinate system, west zone
250 = 250,000 FEET (WEST)



1:24,000 Quadrangle Grid

ADJOINING MAPS

WITH COACHE	RED	CRYSTAL
BEACH CO.	LEVEL	BAY
	CEZELLO	HOMONASSA
	CHASSAHOWITZKA	CHASSAHOWITZKA
	SWAMP	SWAMP

1 2 3
4 5 6

1 Cedar Keys
2 Ocala
3 Daytona Beach
4 Orlando
5 Tarpon Springs
6 Kissimmee

5° 16'

APPROXIMATE MEAN DECLINATION, 2012

For more information or to order maps contact Librarian:
Florida Geological Survey
903 W. Tennessee Street
Tallahassee, FL 32304-7716
850/617-0316
<http://www.dep.state.fl.us/geology/programs/statemap.htm>

This map was created using Florida Department of Environmental Protection (FDEP) databases and data obtained from the Florida Geological Survey (FGS). It was completed August 31, 2012, by the FDEP FGS Geological Investigations Section. This document was prepared for the presentation of the geologic information shown and is not intended to replace site-specific or use-specific investigations. The FGS does not guarantee this document to be free from errors or inaccuracies and disclaims any responsibility or liability for inappropriate change of scale, interpretations, or decisions based thereon. Cooperatively funded by the FGS and the U.S. Geological Survey (USGS), National Cooperative Geologic Mapping Program, under USGS assistance award number G11AC20418. The views and conclusions in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Government.

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