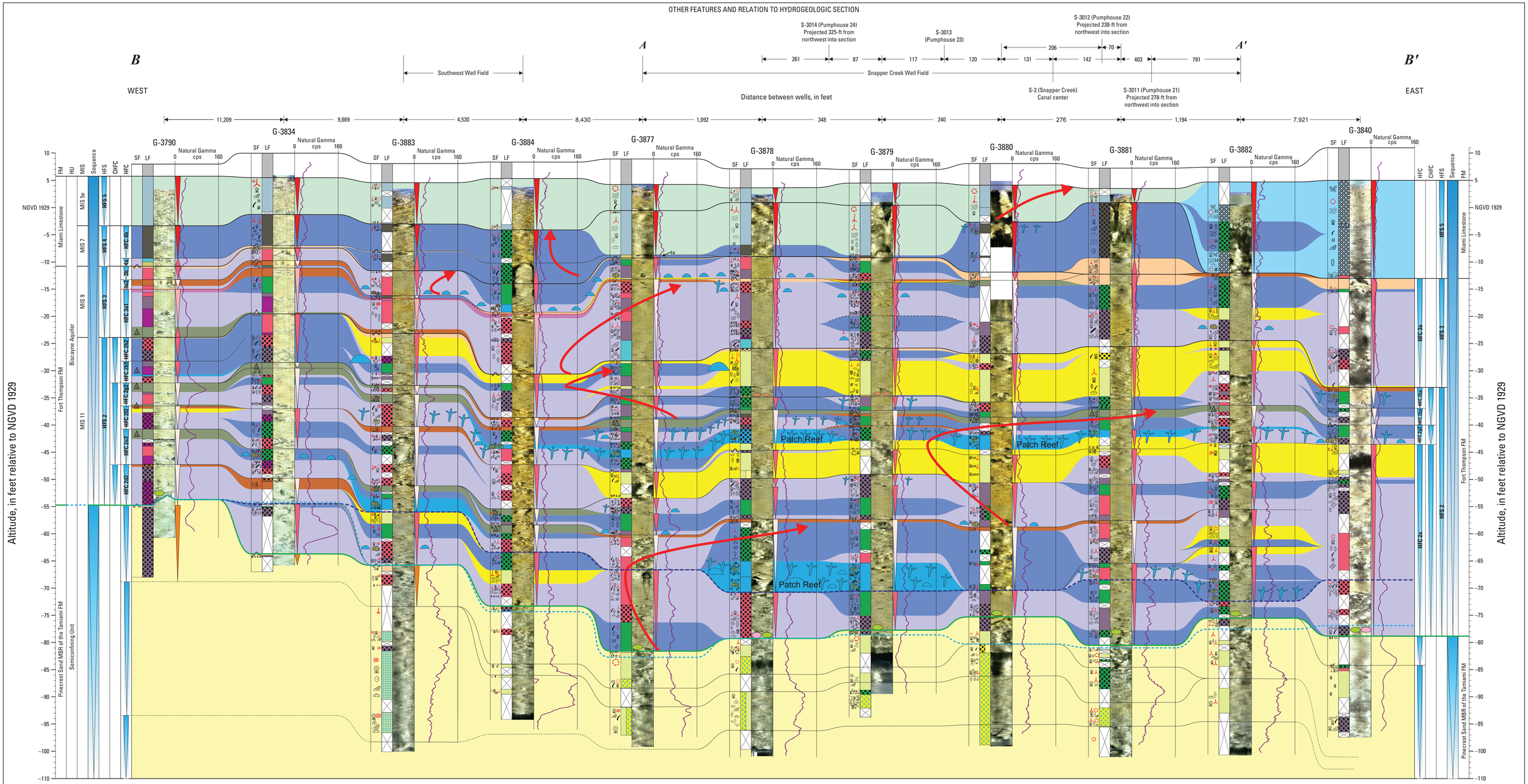
U.S. Department of the Interior
U.S. Geological Survey

Prepared in cooperation with the
Miami-Dade County Water and Sewer Department

Scientific Investigations Report 2014-5138
Plate 2 of 3

OTHER FEATURES AND RELATION TO HYDROGEOLOGIC SECTION



EXPLANATION

VERTICAL SCALE GREATLY EXAGGERATED, HORIZONTAL SCALE NOT TO SCALE

Lithofacies

- Peloid packstone/grainstone
- Ooid grainstone/packstone
- Peloid wackestone/packstone and arenaceous peloid wackestone/packstone
- *Planorbella* floatstone/rudstone and arenaceous *Planorbella* floatstone/rudstone
- Gastropod floatstone/rudstone and arenaceous gastropod floatstone/rudstone
- Conglomerate and arenaceous conglomerate
- Autobreccia
- Pedogenic limestone and arenaceous pedogenic limestone
- Mudstone/wackestone and arenaceous mudstone/wackestone
- Laminated peloid packstone/grainstone
- Skeletal wackestone/packstone and arenaceous skeletal wackestone/packstone
- Skeletal packstone/grainstone and arenaceous skeletal packstone/grainstone
- Coral boundstone and arenaceous coral boundstone
- Pelecypod floatstone/rudstone and arenaceous pelecypod floatstone/rudstone
- Touching-vug pelecypod floatstone/rudstone and arenaceous touching-vug pelecypod floatstone/rudstone
- Quartz sandstone and skeletal quartz sandstone
- Skeletal quartz sand
- Quartz sand
- Fill
- No recovery
- Generic cycle

Miscellaneous

	HFC3A Stromatolite layer
	Cycle boundary--dashed where uncertain
	Top of Tamiami Formation
	Base of Biscayne Aquifer
	Particle assemblage transition
CHFC	Composite high-frequency cycle
cps	counts per second
DBI	Digital borehole image
FM	Formation
FZ	Flow zone
HFC	High-frequency cycle
HFS	High-frequency sequence
HU	Hydrogeologic unit
LF	Lithofacies
MBR	Formation Member
MIS	Marine isotope stage
	Natural gamma ray log
QU	Q-unit (Perkins, 1977)
SF	Significant features

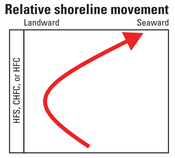
Depositional environments

- Miami Limestone
  - Subaerial exposure related
  - Inner-shelf peloidal lagoon
  - Micrite-rich middle shelf
  - Middle-shelf ooid shoals
- Fort Thompson Formation
  - Subaerial exposure related
  - Freshwater paralic
  - Tidal flat
  - Brackish paralic
  - Micrite-rich middle shelf
  - Coral patch reefs or lone head or stick-shaped corals
  - Middle-shelf quartz sandstone
  - Grain-rich middle shelf
- Tamiami Formation
  - Subaerial exposure related
  - Mixed carbonate-siliciclastic inner ramp

Ideal cycles

- Upward-Shallowing Paralic Cycle
- Upward-Shallowing Peritidal Cycle
- Upward-Shallowing Subtidal Cycle
- Aggradational Subtidal Cycle
- Upward-Deeping Cycle

Relative shoreline movement



Noteworthy features

Miscellaneous

- Bryozoans
- Barnacles
- Echinoids
- Gastropods
- Green Algae
- *Halimeda*
- Laminated calcrete
- Laminated crust
- Ooliths
- Ostracods
- Rhizolith riddled lithoclasts

Ichnofabrics

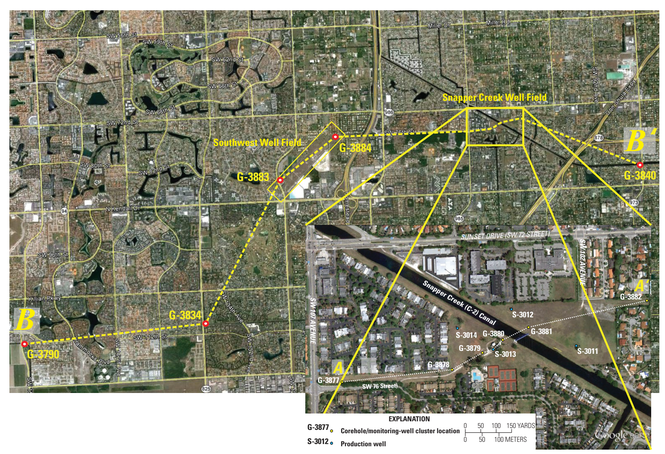
- *Ophiomorpha*
- *Thalassinoides*
- *Ostrea*
- *Planorbella*
- Pelecypod
- Peloids
- Red Algae
- Rhodolith
- *Schizoporella*
- Serpulid tubes
- Skeletal fragment
- Lithoclasts
- Rhizoliths
- Undifferentiated burrows

Corals

- Head Coral (*sp.* unknown)
- *Manicina*
- *Montastrea*
- Branching Coral (*sp.* unknown)
- *Porites porites*
- *Acropora cervicornis*

Forams

- *Ammonia*
- Amphisteginids
- Archaiasinids
- Benthic foram undiferentiated
- *Elphidium*
- Miliolids
- Peneroplids
- Planktic foraminifera
- *Pyrgo*
- Soritids



Geologic Section *B*–*B'* Showing Cyclostratigraphy, Lithology, and Depositional Environments for the Biscayne Aquifer in Central Miami-Dade County, Florida

By
M.A. Wacker, K.J. Cunningham, and J.H. Williams

2014

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