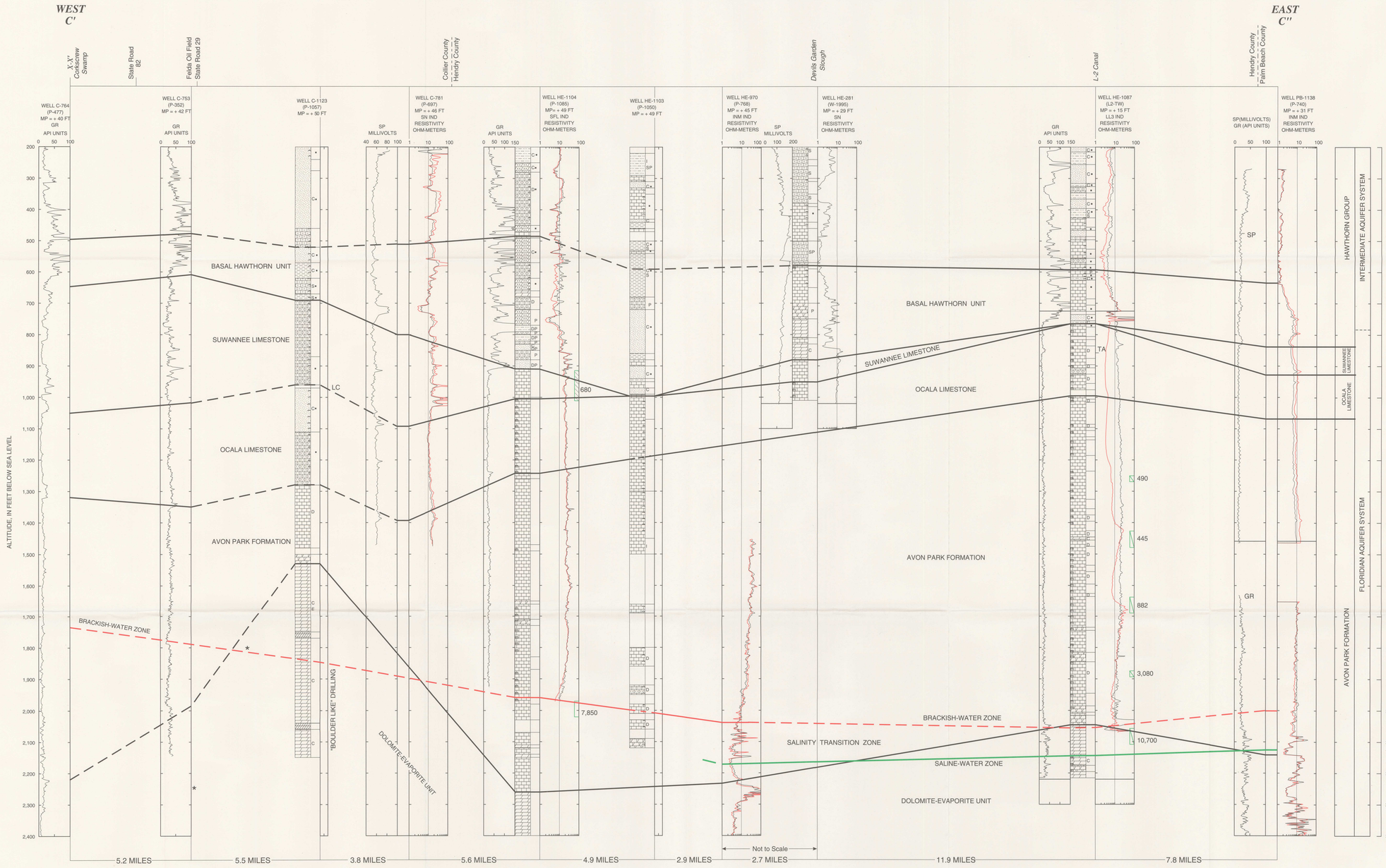
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE
SOUTH FLORIDA WATER MANAGEMENT DISTRICT

WATER-RESOURCES INVESTIGATIONS REPORT 98–4253
Hydrogeologic section C'–C'' – Plate 4
Reese, R.S. 2000, Hydrogeology and the Distribution of Salinity in the Floridan Aquifer System, Southwestern Florida



0 1 2 3 4 5 MILES
0 1 2 3 4 5 KILOMETERS

VERTICAL SCALE: GREATLY EXAGGERATED

GENERAL EXPLANATION

- Correlation or formation boundary. Dashed line indicates position is uncertain or inferred
- Base of the brackish-water zone. Defined as zone with less than 10,000 milligrams per liter dissolved solids (5,240 milligrams per liter chloride concentration). Dashed line indicates position is uncertain or inferred
- Top of saline-water zone. Defined as zone with greater than or approximately equal to 35,000 milligrams per liter dissolved solids (18,900 milligrams per liter chloride concentration). Dashed line indicates position is uncertain or inferred
- End of log run interval for multiple log runs or total well depth
- MP Altitude of measuring point, in feet above sea level
- Resistivity curves: Black curve is for shallow depth of investigation resistivity. Red curve is for deep depth of investigation resistivity.
- CPS Counts per second
- API American Petroleum Institute standard for gamma ray
- GR Gamma ray curve
- SP Spontaneous potential curve
- IND Deep induction resistivity curve
- INM Medium induction resistivity curve
- LL Medium or deep laterolog resistivity curve
- LL3 or LL8 Shallow laterolog resistivity curve
- SFL Spherically focused resistivity curve
- LN Long normal resistivity curve
- SN Short normal resistivity curve
- SPR Single point resistance curve
- TA Temperature log anomaly (only the first one encountered with increasing depth)
- WF Water flow encountered during drilling
- LC Lost circulation or returns during drilling

LITHOLOGIC EXPLANATION

Rock Types

- Limestone
- Sandy limestone
- Dolomitic limestone or Limestone with interbedded dolomite
- Clayey limestone
- Dolomite
- Sandy dolomite
- Shell bed
- Gravel
- Sand
- Clayey sand
- Silt
- Clay
- Evaporite
- No sample

Accessories

- Sandy
- Calcareous or interbedded limestone
- Dolomitic, includes limestone with trace to minor dolomite
- Interbedded clay or clayey
- Evaporitic
- Phosphate grains, trace to 3%
- Phosphate grains, common to abundant (>3%)
- Cavities
- Vugs
- Fossiliferous (macrofossils)
- Microfossils common

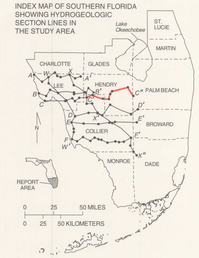
EXPLANATION FOR WATER-QUALITY DATA

- 445 Packer test interval
- 7,850 Completed interval
- 680 Geophysical log evaluation interval

WATER-QUALITY DATA--Number is chloride concentration of water samples collected or of intervals calculated, in milligrams per liter (See appendix II and table 5 in report for additional information on these analyses).

★ Position of base brackish-water zone projected from well L-5009 on section C – C'

INDEX MAP OF SOUTHERN FLORIDA SHOWING HYDROGEOLOGIC SECTION LINES IN THE STUDY AREA



HYDROGEOLOGIC SECTION C'–C''

By
Ronald S. Reese

2000

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—2001