

Plate 4.3.
Ohio River (east-central) cross section,
Chapter 4: Geologic Carbon Storage
(Sequestration) Potential in Kentucky

West

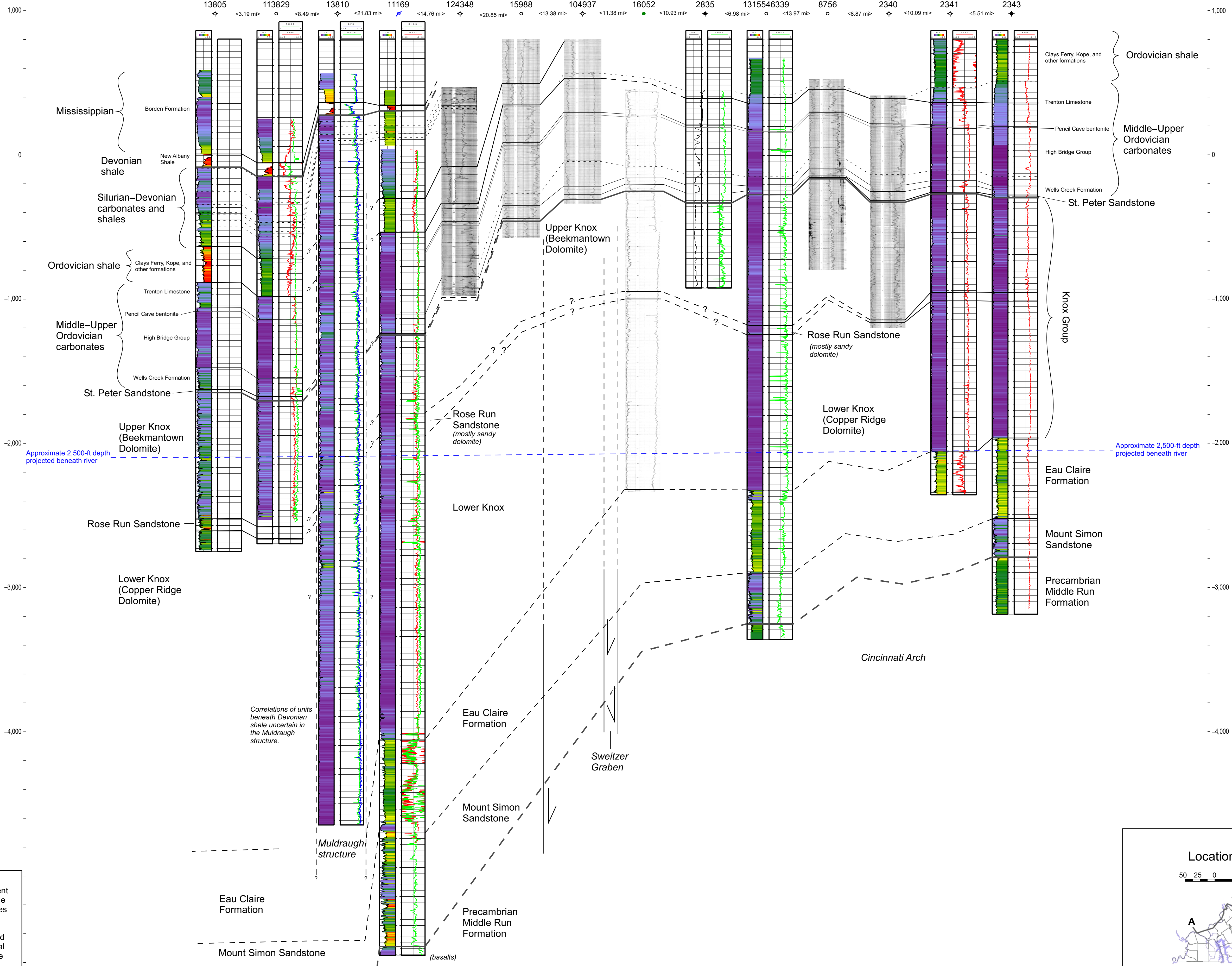
East

A''

A'''

Depth relative to sea level (ft)

Depth relative to sea level (ft)



Mississippian

Devonian shale

Silurian-Devonian carbonates and shales

Ordovician shale

Middle-Upper Ordovician carbonates

St. Peter Sandstone

Upper Knox (Beekmantown Dolomite)

Rose Run Sandstone

Lower Knox (Copper Ridge Dolomite)

Eau Claire Formation

Mount Simon Sandstone

Precambrian Middle Run Formation

Ordovician shale

Middle-Upper Ordovician carbonates

St. Peter Sandstone

Knox Group

Rose Run Sandstone (mostly sandy dolomite)

Lower Knox (Copper Ridge Dolomite)

Eau Claire Formation

Mount Simon Sandstone

Precambrian Middle Run Formation

Approximate 2,500-ft depth projected beneath river

Approximate 2,500-ft depth projected beneath river

Correlations of units beneath Devonian shale uncertain in the Muldraugh structure.

Muldraugh structure

Sweitzer Graben

Cincinnati Arch

Eau Claire Formation

Mount Simon Sandstone

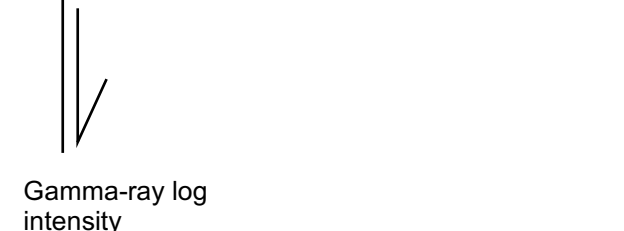
Precambrian Middle Run Formation

(basalts)

EXPLANATION

- Correlation lines (dashed where inferred):
- Regional unconformity
 - - - Sequestration interval
 - Formation level
 - - - Member and bed level
 - - - Undiscussed correlation

- Faults
- | | | Arrow on downthrown side.



No horizontal scale

The rock unit intervals correlated in this cross section are described in the accompanying report. Correlations represent interpretations of approximate depths and thicknesses of the units based on available data. Actual depths and thicknesses may vary, especially in faulted areas. It is also important to understand that an interval described as a potential saline reservoir will not have characteristics that allow injection and carbon storage across the entire thickness shown. Potential storage will only be possible in much smaller zones of those intervals, as discussed in the accompanying report.

