United States Department of the Interior
Geological Survey

Open-file Report 84-111
Plate 11 of 31

STRATIGRAPHIC CROSS SECTIONS I-I', J-J', AND K-K' SHOWING THE DEVONIAN BLACK SHALES AND RELATED ROCKS IN THE SOUTHERN PART OF THE APPALACHIAN BASIN

Black shale

Gray to greenish-gray mudstone and claystone

Silty greenish-gray mudstone and claystone

Siltstone

Sandstone

Limestone

Cherty limestone

Dolomite

Ash bed

Chert nodules

Phosphate nodules

Pyrite

Covered

102
Number refers to well, core hole, or surface section location on index map

Formation or member boundary, zone, or bed, queried where uncertain. Heavy line indicates Southwestern Virginia stratigraphic unit boundary

Unconformity

DATA SOURCE:
Gamma-ray logs, scintillometer profiles, and core and outcrop descriptions

This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature.

Corrigenda

Based on lithologic similarity and gamma-ray log characteristics, the Three Lick Bed in Ohio and Kentucky was correlated with the middle unit of the Gassaway Member of the Chattanooga shale of central Tennessee. The Fosterita zone in the Ohio and Chattanooga shales of Ohio and Kentucky is stratigraphically below the Three Lick Bed and therefore was thought to occur below the middle unit of the Gassaway Member in central Tennessee. Subsequent to the completion of these stratigraphic sections, Fosterita was found in a central Tennessee outcrop above the middle unit of the Gassaway (R. C. Kepferle, communication, 1983). The reported position of Fosterita suggests that the Three Lick Bed does not correlate with the middle unit of the Gassaway in central Tennessee as previously thought. The reader is therefore advised that the application of the term Three Lick Bed in sections 127 and 122 of cross sections KK' is invalid. The name Three Lick Bed as used in sections 127 and 122 should be replaced by the informal term "middle unit." Elsewhere on these cross sections the application of the name Three Lick Bed is correct.