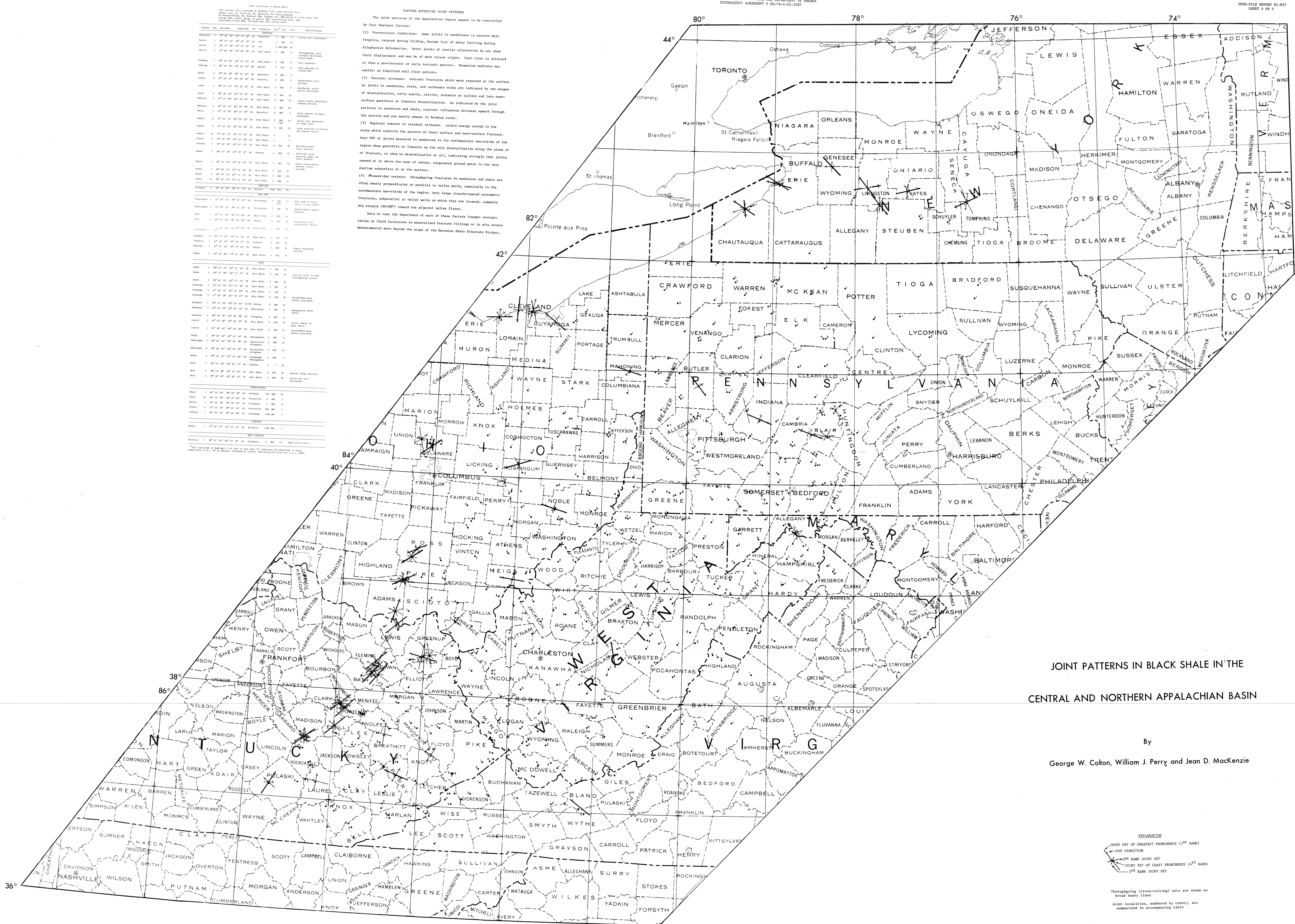




JOINT PATTERNS IN BLACK SHALE IN THE
CENTRAL AND NORTHERN APPALACHIAN BASIN

By
George W. Colton, William J. Perry, and Jean D. MacKenzie

EXPLANATION
JOINT SET OF GREATEST PROMINENCE (1ST RANK)
DIP DIRECTION
2ND RANK JOINT SET
JOINT SET OF LEAST PROMINENCE (4TH RANK)
3RD RANK JOINT SET

Throughgoing (cross-cutting) sets are shown as
broad heavy lines.
Joint localities, numbered by county, are
summarized in accompanying table.

U.S. Geological Survey
Open-File Report

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

