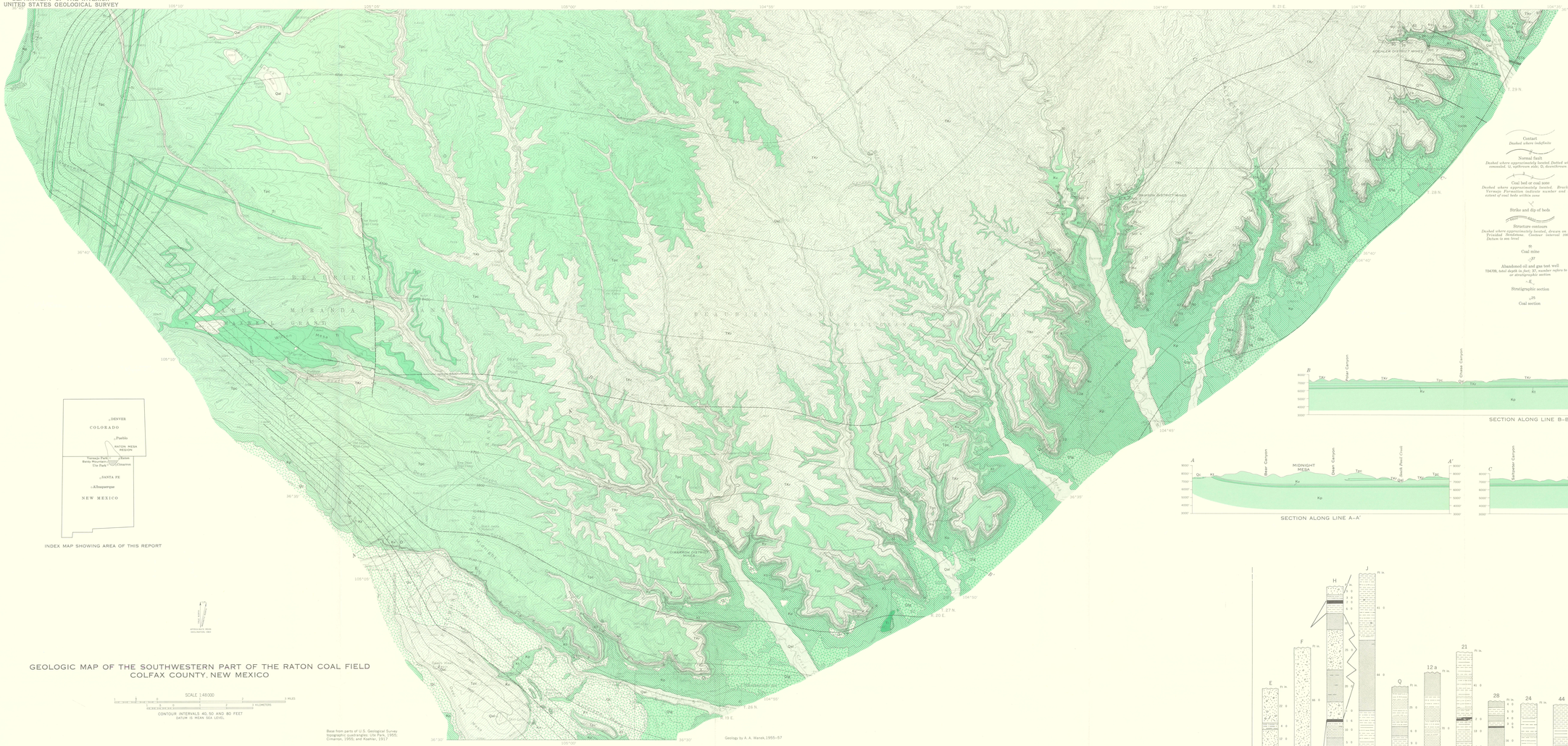


Base from parts of U.S. Geological Survey topographic quadrangles: Ute Park, 1955; Cimarron, 1955; and Koehler, 1957

Geology by A. A. Wanek, 1955–57

GEOLOGIC MAP OF THE SOUTHWESTERN PART OF THE RATON COAL FIELD COLFAX COUNTY, NEW MEXICO

SCALE 1:48 000

CONTOUR INTERVALS 40, 50 AND 80 FEET
DATUM IS MEAN SEA LEVEL

INDEX MAP SHOWING AREA OF THIS REPORT

EXPLANATION

QUATERNARY

Pleistocene and Recent

Qal — Alluvium
Soil, sand, and gravel

Qtg — Colluvium
Heterogeneous rock detritus such as talus and landslide material

Qtg — High-level terrace and pediment gravels
Gravel and boulder deposits of alluvial origin

TERTIARY AND QUATERNARY

QTb — Basalt
In dikes

TERTIARY

Tp — Dacite and dacite porphyry
In sills and dikes

Paleocene

Tpc — Poison Canyon Formation
Massive cliff-forming buff cross-laminated coarse-grained arkosic sandstone interculated with grit, conglomerate beds, and thick silty gray shale. 0–1,000+ feet thick. Intertongues with Raton Formation

TKr — Raton Formation
Gray to buff cross-laminated fine- to medium-grained sandstone and dark-gray carbonaceous shale and thin coaldeds; 0–1,400+ feet thick. Intertongues with Poison Canyon Formation. Heavy line indicates coal zone

CRETACEOUS

Upper Cretaceous

Kv — Vermejo Formation
Buff to gray medium-grained sandstone, dark-gray to black carbonaceous shale, and thick coal beds; 0–275+ feet thick. Intertongues with Trinidad Sandstone. Heavy line indicates coal bed or coal zone

Kt — Trinidad Sandstone
Massive cliff-forming light- to dark-gray cross-laminated fine- to medium-grained marine sandstone which contains abundant concretionary concretions of several horizons; 0–100+ feet thick. Intertongues with Vermejo Formation. Line indicates this interval in the subsurface; it is used to delate the 37-coded tids upper and lower sandstone units and is an extension of the mapped tongue of the Vermejo Formation

Kp — Pierre Shale
Soft dark-gray marine shale which in the upper part contains calcareous concretions at several horizons. About 1000 feet thick. Intertongues with base of Trinidad Sandstone

Contact
Dashed where indefinite

Normal fault
Dashed where approximately located. Dotted where concealed. U, upthrown side; D, downthrown side

Coal bed or coal zone
Dashed where approximately located. Brackets in Vermejo Formation indicate number and lower extent of coal beds within zone

Strike and dip of beds

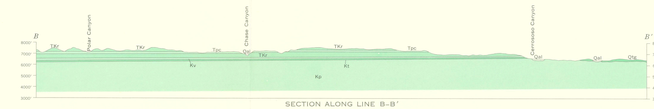
Structure contours
Dashed where approximately located. Drawn on top of Trinidad Sandstone. Contour interval 100 feet. Datum is sea level

19
Coal mine

37
Abandoned oil and gas test, well
T24N3N, total depth in feet; 37, number refers to coal or stratigraphic section

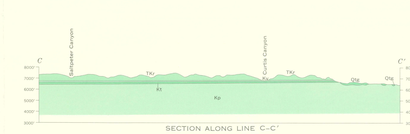
E
Stratigraphic section

25
Coal section

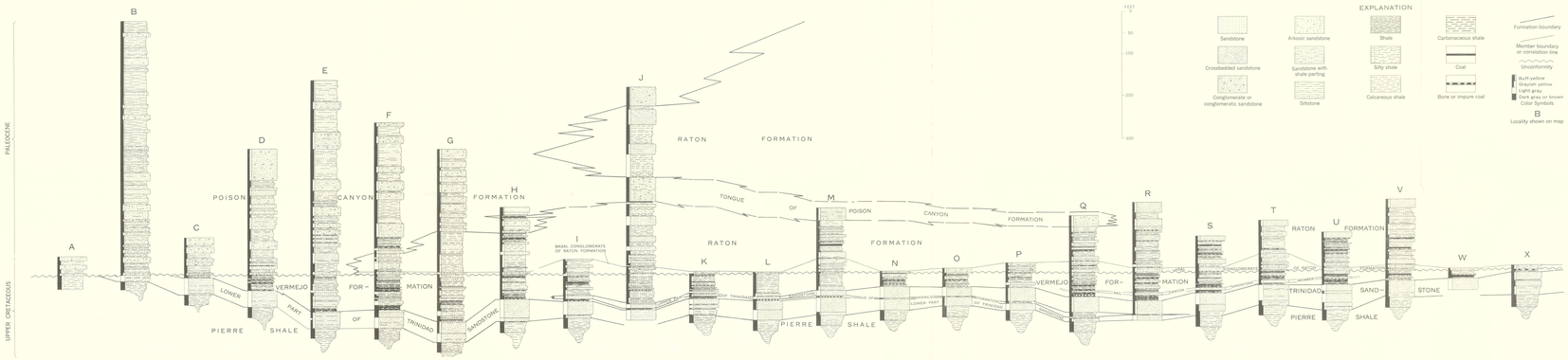


SECTION ALONG LINE B–B'

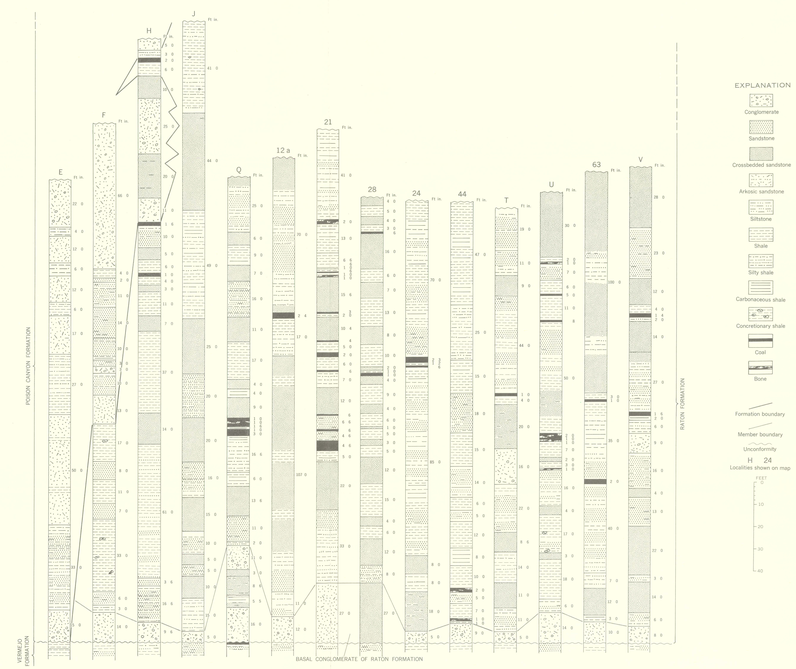
SECTION ALONG LINE A–A'



SECTION ALONG LINE C–C'



STRATIGRAPHIC SECTIONS OF UPPER CRETACEOUS AND PALEOCENE ROCKS IN THE SOUTHERN PART OF THE RATON COAL FIELD, COLFAX COUNTY, N. MEX.



COAL BEDS IN THE LOWER PART OF THE RATON FORMATION

GEOLOGY AND FUEL RESOURCES OF THE SOUTHWESTERN PART OF THE RATON COAL FIELD, COLFAX COUNTY, NEW MEXICO

By
Alexander A. Wanek

1963

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1963-K1

For sale by U. S. Geological Survey, price $1.00 per set