GEOLOGIC MAP AND SECTIONS OF THE RATON COAL FIELD COLFAX COUNTY, N. MEX.

SHOWING OUTCROPS OF COAL BEDS

Geology by Willis T. Lee.
Surveyed in 1913 and 1919.

Base from U. S. Geological Survey topographic maps of Brilliant, Raton, and Koehler quadrangles

Scale 62,500

1 0 1 2 3 4 Miles

1 0 1 2 3 4 5 Kilometers

Contour interval 50 feet.
Datum is mean sea level.

1923

EXPLANATION

SEDIMENTARY ROCKS

Qhg — High-level gravels (sand, gravel, and boulders) — QUATERNARY

Raton formation (sandstone, brown to buff shale, and coal beds; conglomerate at base) — Eocene — TERTIARY

UNCONFORMITY

Kv — Vermejo formation (dark shale, light-colored fissile sandstone, and Raton coal beds)

Ktd — Trinidad sandstone (massive light-gray feldspathic sandstone)

Kp — Pierre shale (drab to black fossiliferous shale, containing limestone concretions in upper part; in Brilliant and Koehler quadrangles includes representatives of Niobrara limestone and Carlile shale; in Trinidad quadrangle, Colorado group, not readily separable from Pierre shale)

Upper Cretaceous — Montana group — CRETACEOUS

IGNEOUS ROCKS

Qa — Andesite flows and stocks (probably intermediate in age between second and youngest basalt flows)

Qb¹ Qb² Qb³ — Basalt lava flows (Qb¹ oldest and highest flow; Qb² second, or intermediate flow; Qb³ youngest and lowest flow. Qb² and Qb³ are locally separated by a thin sheet of soil; second flow is mapped with oldest flow on Johnson Mesa north of Townsaw Peak)

Dikes and sheets, chiefly basalt, some andesite and lamprophyre (Ruled pattern indicates dike rock that replaces coal bed in mine)

QUATERNARY

ECONOMIC DATA

Coal bed outcrops (Raton coal beds 7 in Vermejo formation, Sugarite, 8 & Yankee 9 & Savage 10, 11, 12, 13, 14, 15, 16, 17, 18, Dawson 19, Brilliant 20, Poteau 21, and other coal beds in Raton formation. Coal altered to coke or graphite where in contact with igneous rocks)

⚒ Coal mine entries

X Coal prospects and location of measured surface sections

⊙ Diamond drill tests for coal (Numbers 1 to 608 and letters A to Y, AA to KK refer to sections and descriptions in text. For Nos. 291–332 see Plate XIII, map of Dawson area.)

Mine workings in 1915

Economic note: Bituminous coking coal is extensively mined in the Vermejo and Raton formations.

Land lines on map are based on found corners indicated thus (+)

APPROXIMATE MEAN DECLINATION, 1920

DIAGRAM OF QUADRANGLES

BRILLIANT	RATON
KOEHLER	

SECTION ALONG LINE A-A′

SECTION ALONG LINE B-B′

5500 feet above sea level

ENGRAVED AND PRINTED BY THE U.S. GEOLOGICAL SURVEY