EXPLANATION

Pleistocene (?)

Terrace gravel

UNCONFORMITY

QUATERNARY

Upper Cretaceous — *Mesaverde formation*

Kab — Allison barren member (*Alternating sandstone and clay with little or no coal*)

Khu, Km, Khl — Hosta sandstone member (*Massive and thick-bedded sandstone. Undivided member, Kh; upper tongue, Khu; lower tongue, Khl*)

Kgu, Kgl, Kgb — Gibson coal member and Bartlett barren member (*Gibson coal member, Kg; alternating sandstone and clay with important beds of coal; toward east, divides into upper tongue, Kgu, and lower tongue, Kgl. Bartlett barren member, Kgb, alternating sandstone and clay with little coal*)

Kds — Dalton sandstone member (*Massive and thick-bedded sandstone*)

Kdc, Kdp — Dilco coal member and Gallup sandstone member (*Dilco coal member, Kdc, alternating sandstone and clay with important beds of coal. Gallup sandstone member, Kdp, massive sandstone, clay, and shale, with some thick lenses of coal*)

Km, Kms, Kmm — Mancos shale (*Chiefly gray marine shale. Main body, Km; Mulatto tongue, Kmm; Sultan tongue, Kms*)

CRETACEOUS

* *For intertonguing relations of the Mesaverde formation and the Mancos shale see diagrammatic east-west section below.*

Outcrops of coal beds (*Solid lines are coal beds 14 inches or more thick; lines are broken into long dashes where position is inferred. Short dashed lines are coal beds less than 14 inches thick. Blue lines and numbers refer to measured sections*)

Approximate boundary (*Contact studied in field but position not surveyed*)

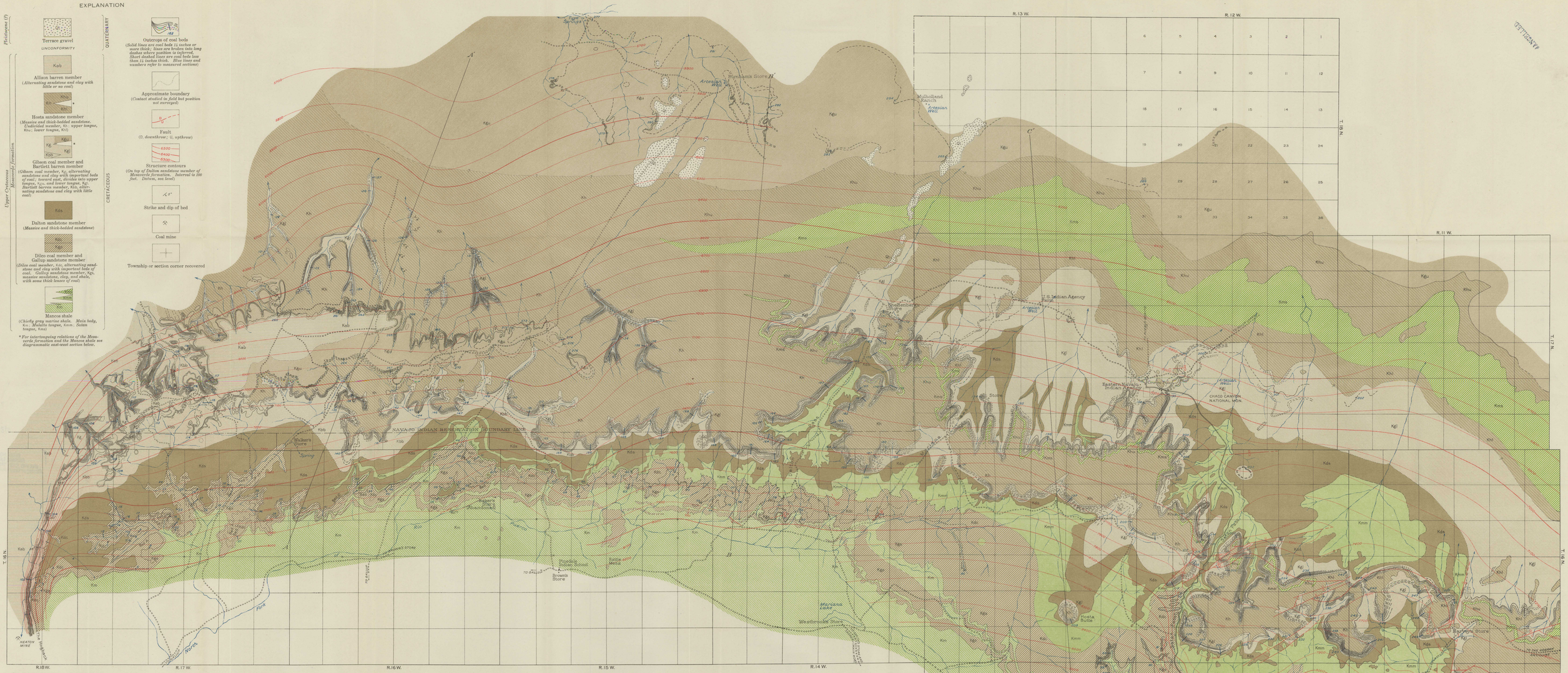
Fault (*D, downthrow; U, upthrow*)

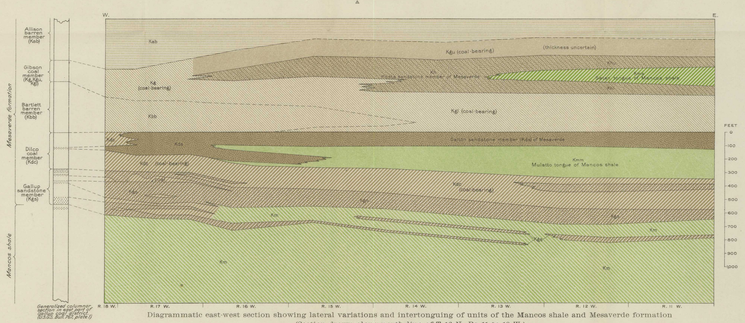
Structure contours (*On top of Dalton sandstone member of Mesaverde formation. Interval is 100 feet. Datum, sea level*)

Strike and dip of bed

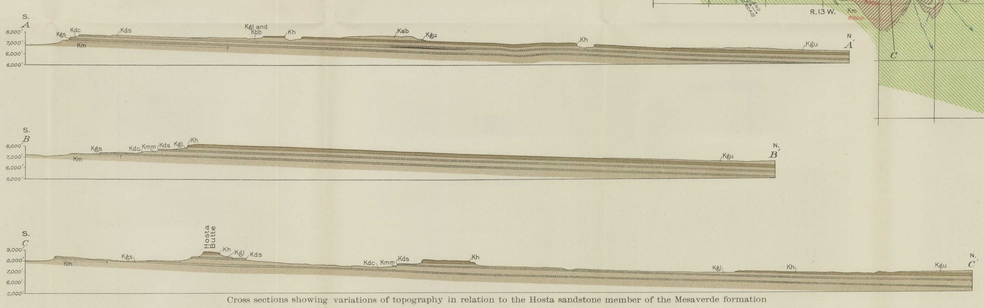
Coal mine

Township or section corner recovered





Diagrammatic east-west section showing lateral variations and intertonguing of units of the Mancos shale and Mesaverde formation (Section drawn along north line of T. 16 N., Rs. 11 to 18 W.)



Cross sections showing variations of topography in relation to the Hosta sandstone member of the Mesaverde formation

GEOLOGIC MAP AND SECTIONS OF THE COAL FIELD EASTWARD FROM GALLUP, IN THE SOUTHERN PART OF THE SAN JUAN BASIN, NEW MEXICO

SCALE $\frac{1}{62,500}$

1934

Geology by J. D. Sears, T. A. Hendricks, A. W. Quinn, and W. S. Fike, Jr., in 1929
Upper part of Hosta sandstone in T. 17 N., Rs. 11 and 12 W., by C. E. Dobbin in 1931