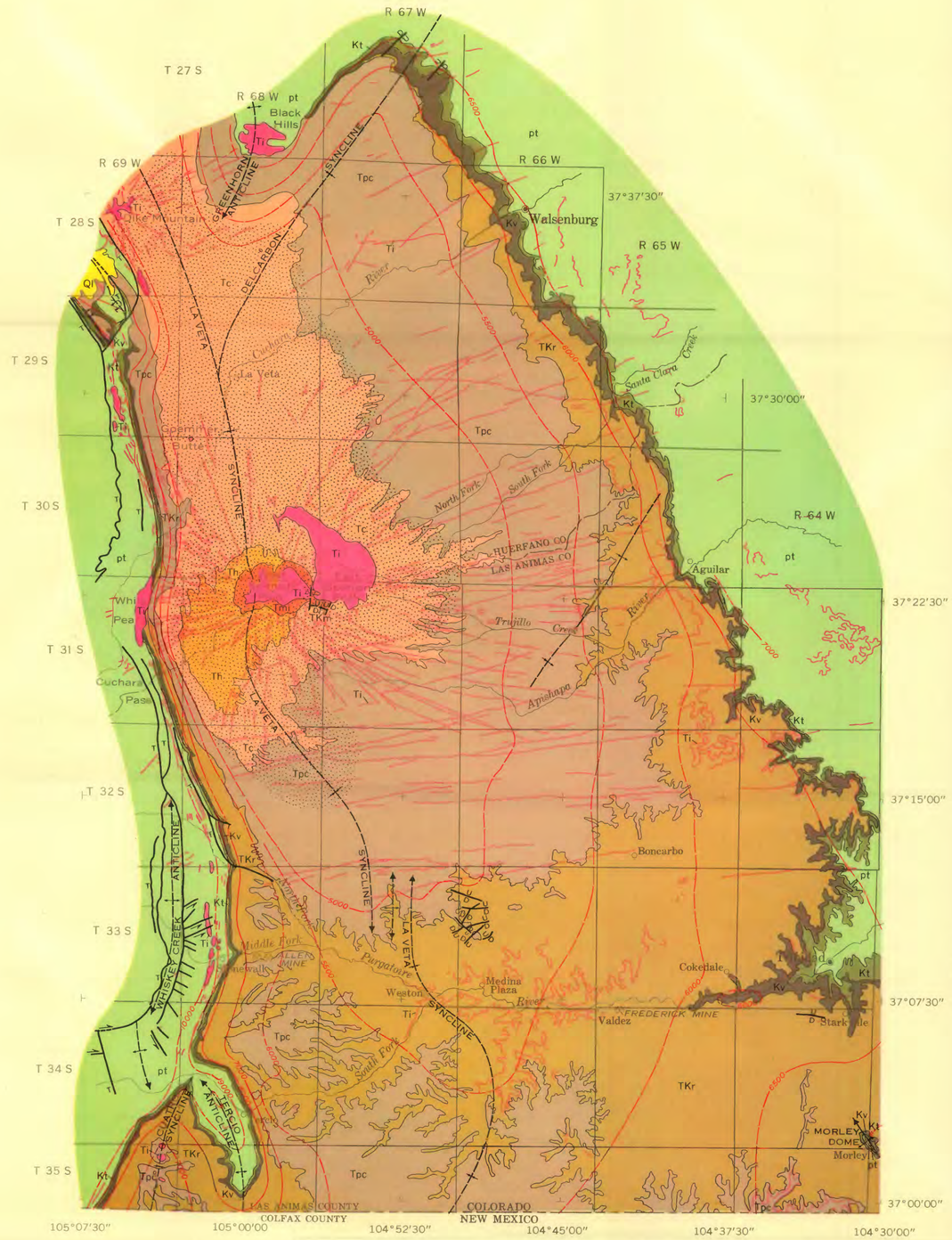
SYSTEM, SERIES, AND GROUP	FORMATION	THICKNESS IN FEET	LITHOLOGIC DESCRIPTION
TERTIARY, Eocene	Huerfano(?) formation (Th)	3000±	Reddish-brown to gray arkosic and graywacke conglomerate, conglomeratic sandstone, siltstone, and a few claystone beds
			Locally conformable
	Cuchara formation (Tc)	1400–5000±	Red, pink, and white sandstone and conglomerate beds, with red, tan, and gray siltstone and claystone beds
			Locally unconformable
TERTIARY, Paleocene	Poison Canyon formation (Tpc)	1900–2500	Buff to red sandstone and conglomerate beds with thin yellow shale and siltstone beds
			Locally unconformable
	Raton formation (TKr)	0–1700	Light-gray to buff arkose, graywacke, and sandstone beds with dark-gray to black siltstone and shale beds. Conglomerate or conglomeratic sandstone at base. Coal
CRETACEOUS, Upper, Montana group	Vermejo formation (Kv)	0–550	Gray to black silty and coaly shale with buff to gray carbonaceous siltstone and sandstone beds. Coal
	Trinidad sandstone (Kt)	45–310	Light-gray to buff sandstone beds with light-gray to tan silty shale beds

GENERALIZED COLUMNAR SECTION OF MESOZOIC AND CENOZOIC FORMATIONS IN THE TRINIDAD COAL FIELD, HUERFANO AND LAS ANIMAS COUNTIES, COLORADO



EXPLANATION

SEDIMENTARY ROCKS

- Ql — Landslide
- UNCONFORMITY
- Th — Huerfano(?) formation
- UNCONFORMITY *Locally conformable*
- Tc — Cuchara formation
- UNCONFORMITY *Locally conformable*
- Tpc — Poison Canyon formation
- LOCAL UNCONFORMITY
- TKr — Raton formation
- Kv — Vermejo formation
- Kt — Trinidad sandstone
- pt — Pre-Trinidad rocks

IGNEOUS ROCKS

- Ti — Intrusive rocks *Laccoliths, stocks, plugs, dikes, and sills*

METAMORPHIC ROCKS

- Tmi — Metamorphic and igneous complex of quartzite, slate, hornfels, and mafic intrusive rocks: *Includes Huerfano(?) formation and Cuchara formation and many sills*
- TKm — Quartzite, slate, and slightly altered sandstone *Metamorphosed Raton, Vermejo, and older rocks*
- Approximate area under which all coal beds are overlain by more than 3000 feet of overburden

Pleistocene and Recent — QUATERNARY
Eocene — TERTIARY
Paleocene — TERTIARY
Upper Cretaceous and Paleocene — CRETACEOUS AND TERTIARY
Upper Cretaceous — CRETACEOUS

Contact

Fault
Dashed where approximately located or inferred. U, upthrown side; D, downthrown side

Tear fault
Dashed where inferred; arrow shows direction of relative movement

Thrust fault
Dashed where inferred. T, upper plate

Anticline
Showing trace of axial plane and direction of plunge; dashed where approximately located

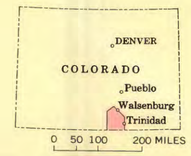
Syncline
Showing trace of axial plane and direction of plunge; dashed where approximately located

Overturned anticline
Showing trace of axial plane; dashed where approximately located

Overturned syncline
Showing trace of axial plane; dashed where approximately located

Monocline
Showing trace of axial plane; dashed where approximately located

Structure contour
Drawn on top of Trinidad sandstone; solid where approximate; dashed where control is inadequate. Contour interval is 500 and 1000 feet; datum is mean sea level



INDEX MAP OF COLORADO, SHOWING AREA OF TRINIDAD COAL FIELD

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—10281

Base map by Forest Service, 1940, with modifications by U. S. Geological Survey

GEOLOGIC MAP OF THE TRINIDAD COAL FIELD, HUERFANO AND LAS ANIMAS COUNTIES, COLORADO

Geology compiled by R. B. Johnson, 1959

SCALE 1:250 000

4 2 0 4 8 12 16 20 MILES