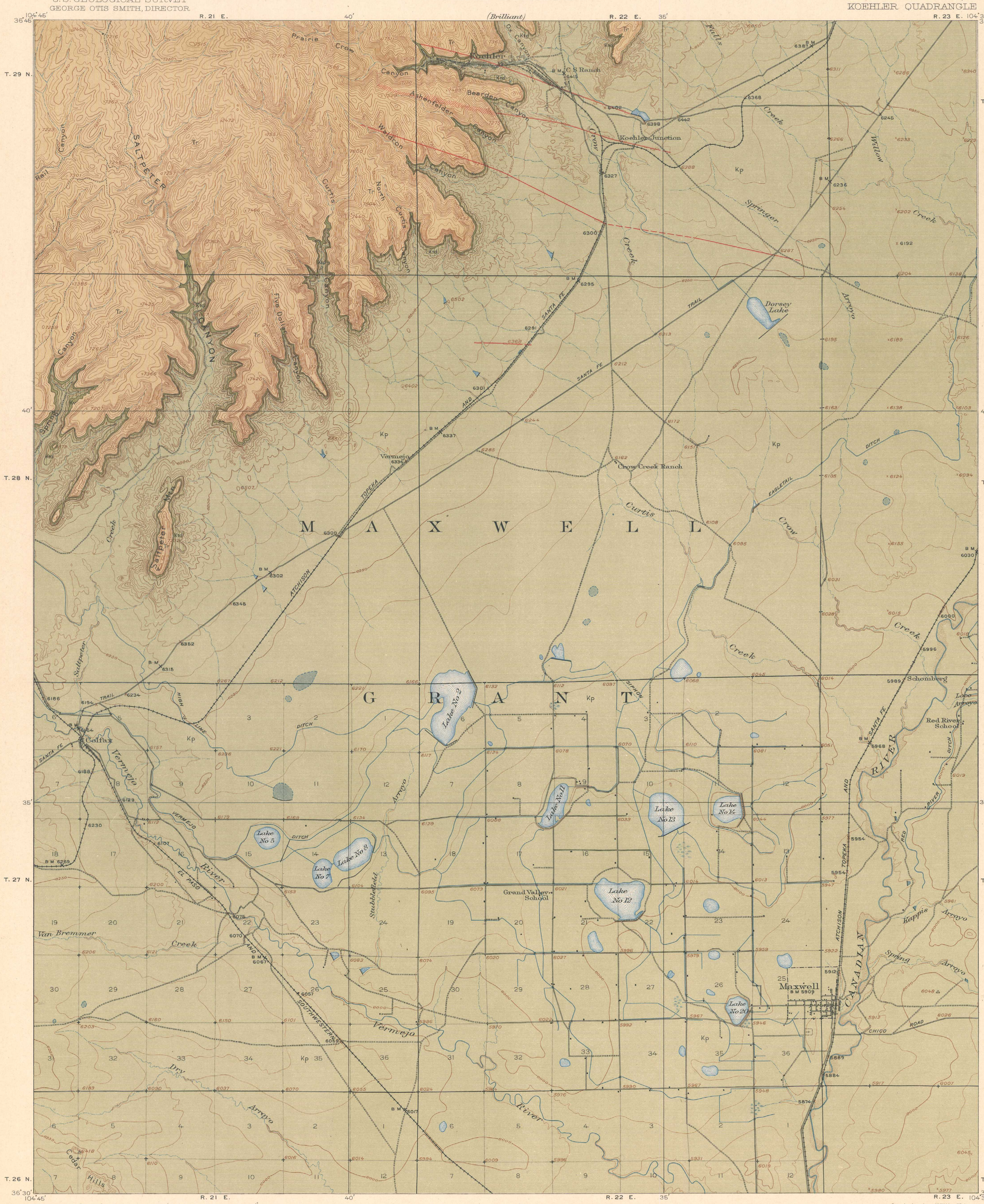
DEPARTMENT OF THE INTERIOR
FRANKLIN K. LANE, SECRETARY
U. S. GEOLOGICAL SURVEY
GEORGE OTIS SMITH, DIRECTOR

AREAL GEOLOGY

NEW MEXICO
(COLFAX COUNTY)
KOEHLER QUADRANGLE



EXPLANATION

SEDIMENTARY ROCKS

(Areas of sedimentary deposits are shown by patterns of parallel lines)

TERTIARY

Eocene

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

UNCONFORMITY

CRETACEOUS

Upper Cretaceous

Montana group

Kv — Vermejo formation (dark shale, light-colored friable sandstone, and 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 southeast parts of Raton and Koehler quadrangles includes representatives of Niobrara limestone and Benton shale, of underlying Colorado group, not readily separable from Pierre shale)

IGNEOUS ROCKS

QUATERNARY

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

R.B. Marshall, Chief Geographer.
Sledge Tatum, Geographer in charge.
Topography by R.W. Berry.
Control by J.R. Ellis and C.C. Holder.
Surveyed in 1915.

TRUE NORTH
MAGNETIC NORTH
13½°
APPROXIMATE MEAN DECLINATION, 1920.

Scale $\frac{1}{62500}$

1 ½ 0 1 2 3 4 Miles

1 ½ 0 1 2 3 4 5 Kilometers

Contour interval 50 feet.
Datum is mean sea level.

Edition of Sept. 1921.

Geology by Willis T. Lee.
Surveyed in 1913.