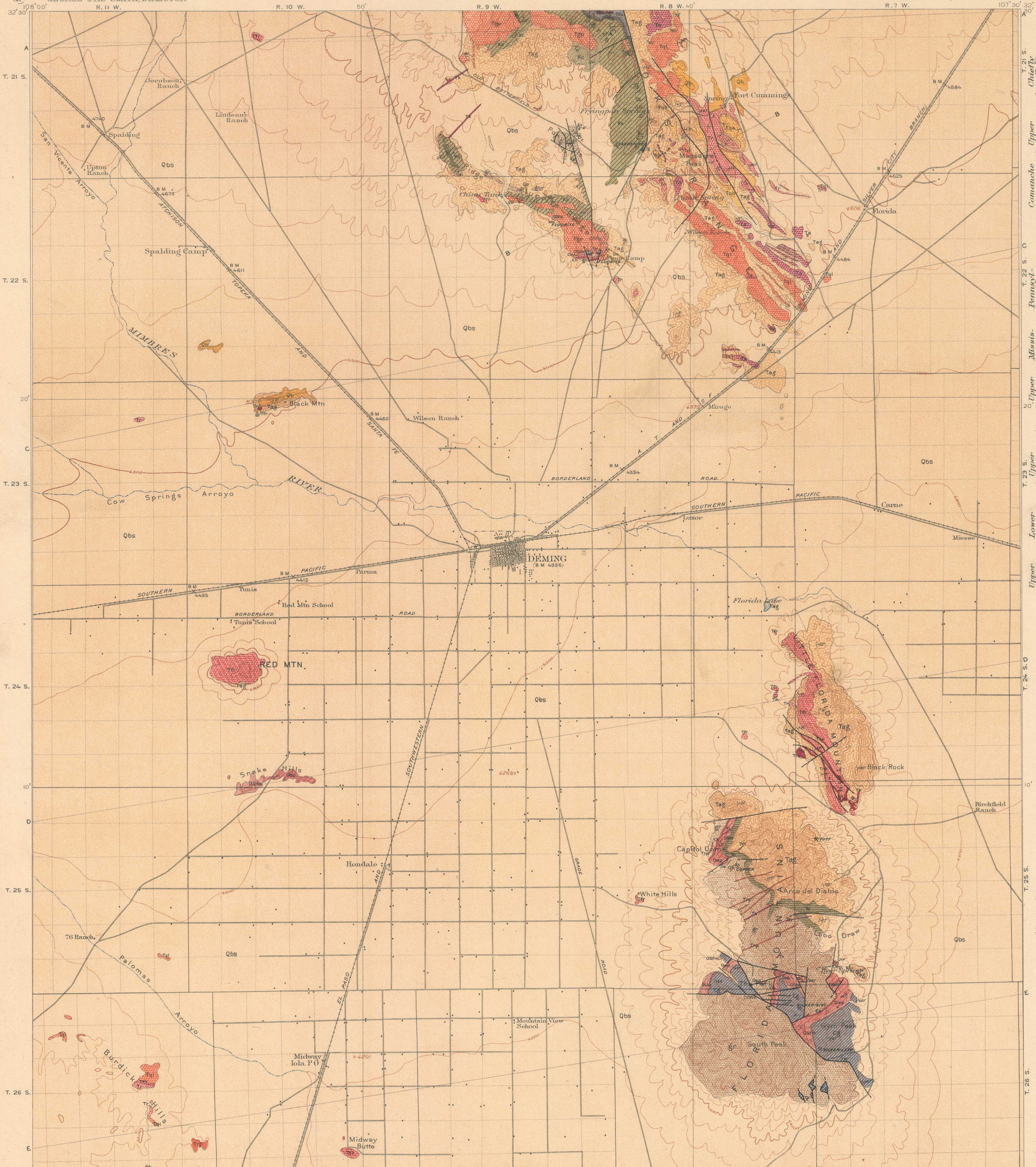
DEPARTMENT OF THE INTERIOR
FRANKLIN K. LANE, SECRETARY
U.S. GEOLOGICAL SURVEY
GEORGE OTIS SMITH, DIRECTOR

AREAL GEOLOGY

NEW MEXICO
(LUNA COUNTY)
DEMING QUADRANGLE



A.H. Thompson, Geographer.
R.U. Goode, Topographer in charge.
Triangulation by Wheeler Survey.
Topography by R.O. Gordon.
Surveyed in 1892.
Culture revised by E.P. Davis, 1914.
R.B. Marshall, Chief Geographer.

TRUE NORTH — MAGNETIC NORTH 12½°
APPROXIMATE MEAN DECLINATION 1914.

Scale $\frac{1}{125000}$

1 ½ 0 1 2 3 4 5 Miles

1 ½ 0 1 2 3 4 5 Kilometers

Contour interval 100 feet.

Datum is mean sea level.

Edition of April 1916.

DIAGRAM OF TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Geology by N.H. Darton.
Surveyed in 1910-1913.

LEGEND

SEDIMENTARY ROCKS

(Areas of subaerial deposits are shown by patterns of dots and circles; subaqueous deposits by patterns of parallel lines)

QUATERNARY

Qbs — Bolson deposits *(gravel, sand, clay, and caliche flooring bolsons or enclosed desert plains)*

UNCONFORMITY

TERTIARY — *Chiefly later Tertiary*

Tag — Agglomerate and associated detrital rocks *(chiefly coarse agglomerate or mud-flow breccia of andesite and latite fragments, tuff, and volcanic ash, and some sandstone and conglomerate)*

UNCONFORMITY

CRETACEOUS

Upper Cretaceous — Kc — Colorado shale *(dark-gray shale with limy concretions and sandy layers)*

UNCONFORMITY

Comanche (Lower Cretaceous) — Ks — Sarten sandstone *(massive, hard, light-gray sandstone)*

UNCONFORMITY

TRIASSIC?

Tl — Lobo formation *(red and gray shale, impure limestone, and conglomerate)*

UNCONFORMITY

CARBONIFEROUS

Pennsylvanian — Cg — Gym limestone *(gray massive limestone, in part brecciated, and dark-gray shale)*

UNCONFORMITY

Mississippian — Clv — Lake Valley limestone *(gray limestone and limy shale with some chert at top)*

DEVONIAN

Upper Devonian — Dp — Percha shale *(dark-gray to black fissile shale)*

UNCONFORMITY ?

SILURIAN / ORDOVICIAN

Niagara age / Upper Ordovician, Richmond age — OSfm — Fusselman and Montoya limestones *(dark massive limestone at base and gray limestone in part interbedded with chert layers comprise Montoya limestone of Richmond age; overlain locally by gray massive Fusselman limestone of Niagara age)*

UNCONFORMITY

Lower Ordovician, Beekmantown age — Oep — El Paso limestone *(light-gray slabby limestone)*

UNCONFORMITY ?

CAMBRIAN

Upper Cambrian — Єb — Bliss sandstone *(massive gray to buff sandstone, shaly near top)*

RESTS ON SMOOTHED ERODED SURFACE OF PRE-CAMBRIAN GRANITE

IGNEOUS ROCKS

(Areas of igneous rocks are shown by patterns of triangles and rhombs)

QUATERNARY

Qb — Basalt *(chiefly lava flows of hard black basic rock; includes some dikes)*

TERTIARY — *Chiefly later Tertiary*

Trp — Rhyolite porphyry *(dikes)*

Tfr, Tro — Felsitic rhyolite *(chiefly lava flows of white felsite with black volcanic glass or obsidian, Tro, locally at base; includes some dikes)*

Tr — Rhyolite *(hornblende-biotite rhyolite, in part porphyritic; chiefly lava flows; includes some dikes)*

Tk — Keratophyre *(dikes and sheets interbedded in the agglomerate)*

Tqb — Quartz basalt *(lava flows interbedded in the agglomerate)*

Ta — Andesite *(chiefly lava flows interbedded in the agglomerate; includes some dikes)*

Tql — Quartz latite *(lava flows interbedded in the agglomerate)*

Earlier Tertiary — Tgp — Granite porphyry *(including quartz-monzonite porphyry, laccoliths, sills, and dikes)*

PRE-CAMBRIAN

gr — Granite *(mostly red, coarse, massive; locally gneissic; diorite and dikes of amphibolite and diabase included in mapping)*

Faults

Concealed faults *(covered by younger deposits)*

40° Strike and dip of stratified rocks

⚒ **Mines and quarries** *Zinc, lead, silver, copper, fluorite, and building stone.*

Economic data: *Lead, zinc, and silver have been mined from Gym limestone, and small amounts of copper from veins in granite in Florida Mountains. Fluorite veins in granite porphyry have been mined in Fluorite Ridge. Sarten sandstone has been quarried in Sarten Ridge and tuff in the agglomerate of Florida Mountains and are generally available for building stone. Limestone for lime and cement material is obtainable from any of the limestone formations, and sand and gravel for concrete from the bolson deposits. Underground-water resources are shown on the artesian-water map.*