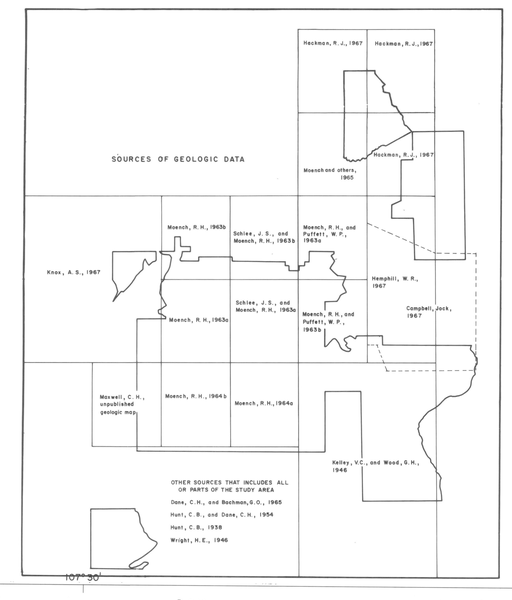
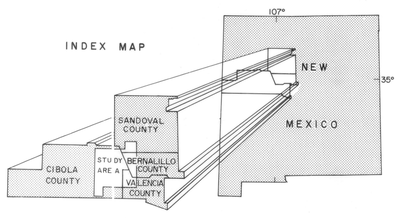
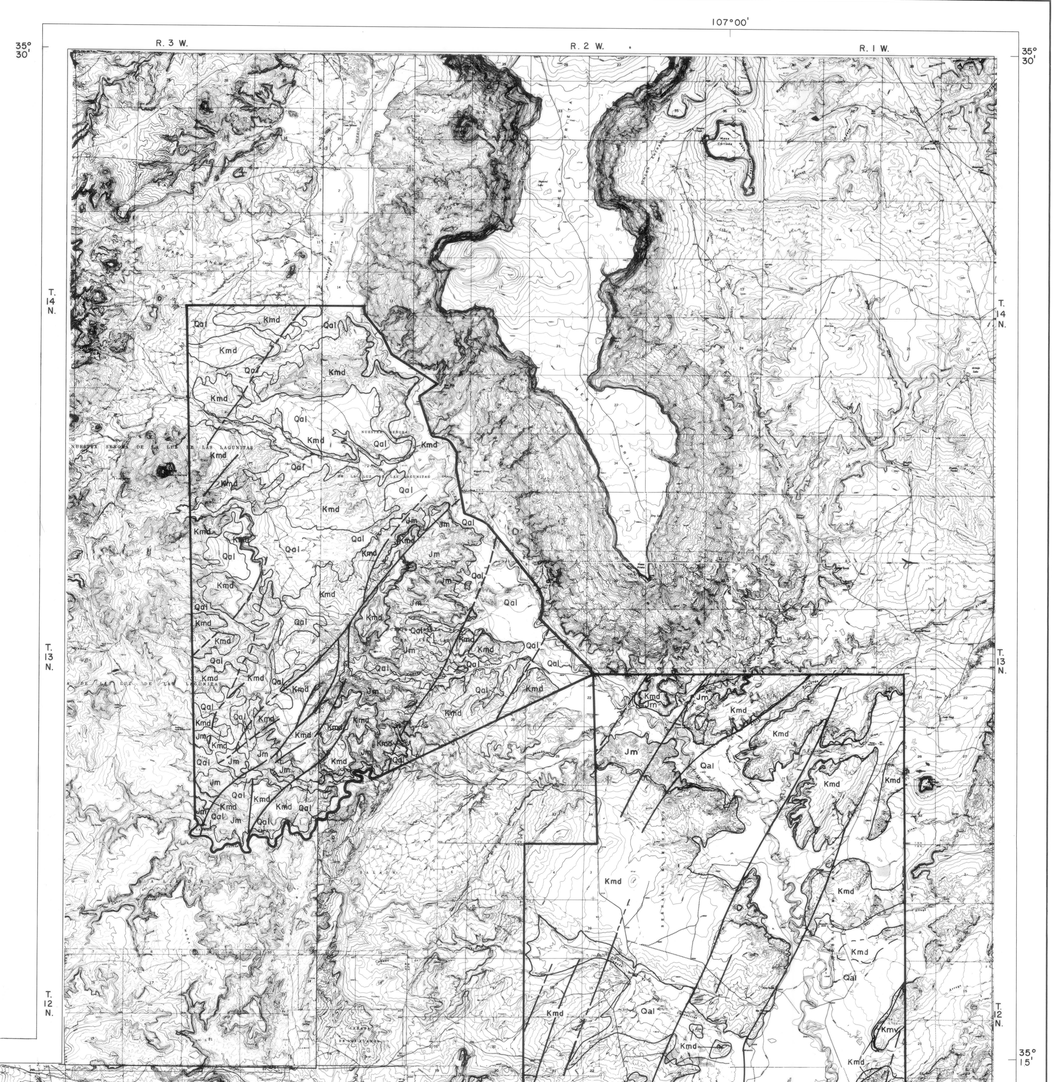
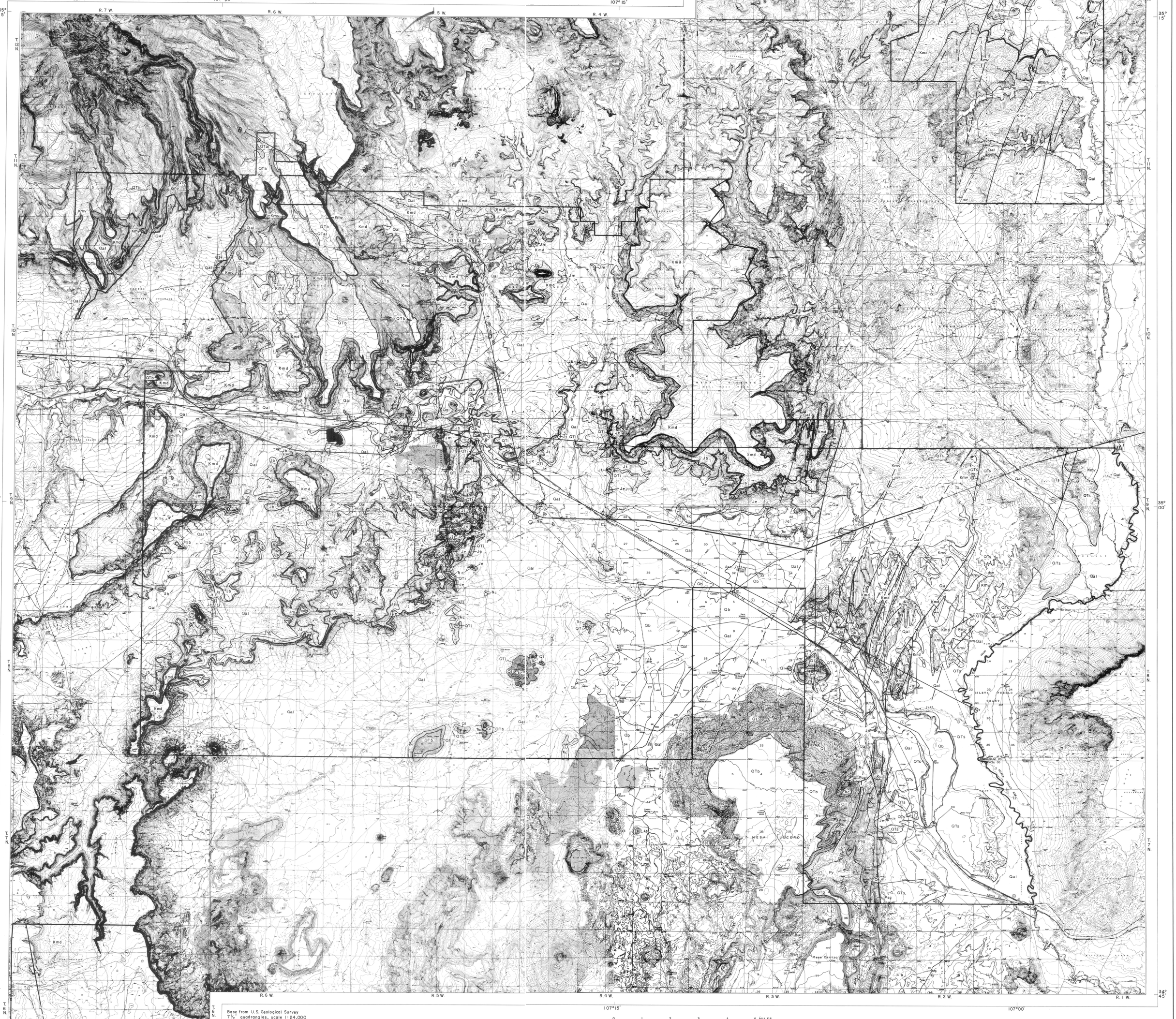
83-4038









Base from U.S. Geological Survey
7½' quadrangles, scale 1:24,000

0 1 2 3 4 5 MILES
0 1 2 3 4 5 6 7 KILOMETERS

CONTOUR INTERVAL 20 AND 40 FEET
DATUM IS SEA LEVEL

EXPLANATION

CORRELATION OF MAP UNITS

Qal Qb Ql Qt	QUATERNARY
QTal QTb QTi QTs	QUATERNARY OR TERTIARY
Kmv, Kmd	CRETACEOUS
Jm, Jb, Js, Jt, Je	JURASSIC
℞c	TRIASSIC
Psg, Py	PERMIAN

DESCRIPTION OF MAP UNITS

Qal ALLUVIUM - (HOLOCENE AND PLEISTOCENE) Mainly valley-fill sediments, but includes aeolian deposits in places. Yields of 450 gallons per minute possible in parts of the Rio San Jose valley.

Qb BASALT - (HOLOCENE AND PLEISTOCENE) Lava flows. Source of water for many springs

Ql LANDSLIDE MATERIALS - (HOLOCENE AND PLEISTOCENE) Generally present on mesas underlain by shales. Not water bearing except for a few small springs.

Qt TRAVERTINE - (HOLOCENE AND PLEISTOCENE) Spring deposits east of Mesa Lucero.

QTal ALLUVIUM - (PLEISTOCENE AND PLIOCENE) Mostly gravel derived from Mount Taylor volcanics. May contribute water to some springs near Mount Taylor.

QTb BASALT - (PLEISTOCENE AND PLIOCENE) Lava flows capping many mesas. Source of water for many good-quality springs near Mount Taylor.

QTi IGNEOUS INTRUSIVES - (PLEISTOCENE, PLIOCENE AND MIOCENE) Dikes and sills. Not water bearing

QTs SANTA FE GROUP - (PLEISTOCENE, PLIOCENE, AND MIOCENE) Unconsolidated silt, clay, sand, and gravel. Yields water to a few stock and public-supply wells near the Rio Puerco.

Kmv MESAVERDE GROUP - (UPPER CRETACEOUS) Alternating beds of shale, siltstone, and sandstone with thin layers of coal in places. Sandstone units yield water to stock wells and a few small springs.

Kmd MANCOS SHALE AND DAKOTA SANDSTONE, UNDIVIDED - (UPPER AND LOWER CRETACEOUS) Four sandstone units, fine-to medium-grained, interbedded with dark sh Sandstone units yield water to stock wells and a few small springs.

Jm MORRISON FORMATION - (UPPER JURASSIC) Predominantly grayish-green mudstone with lenticular sandstone. Sandstones are capable of yielding 100 gallons per minute or more near Paguate and on parts of Montano Grant.

SAN RAFAEL GROUP - (MIDDLE JURASSIC)

Jb BLUFF SANDSTONE - Fine-to medium-grained, well-sorted sandstone. Yields water to numerous stock wells and springs.

Js SUMMERVILLE FORMATION - Interbedded sandstones and mudstones. Not water bearing.

Jt TODILTO FORMATION - Laminated limestone overlain by gypsum in some areas. Not water bearing except for possible cavernous zones north of Laguna and near Suwanee.

Je ENTRADA SANDSTONE- Very fine to coarse-grained sandstone with thinner siltstone units. Yields adequate quantities to stock wells in some areas.

℞c CHINLE FORMATION - (UPPER TRIASSIC) Predominantly red, purple and gray shale with lenticular arkosic sandstones. Sandstone unit near Mesita yields water to stock and domestic wells. Shale is non-water bearing

Psg SAN ANDRES LIMESTONE AND GLORIETA SANDSTONE, UNDIVIDED - (LOWER PERMIAN) Alternating beds of limestone and fine-to medium-grained, well-cemented sandstone. Gypsum comprises about half of thickness in outcrops. Very low yielding. Water quality is poor.

Py YESO FORMATION - (LOWER PERMIAN) Predominantly siltstone interbedded with gypsum, limestone, and sandstone. Yields probably very low. Water quality is poor.

Contact between geologic units, dashed where approximately located

Fault, dashed where approximately located

A A' Location of geologic section (See plate 3)

Pueblo boundary

PLATE 2.--GENERALIZED GEOLOGIC MAP OF THE PUEBLO OF LAGUNA, NEW MEXICO.