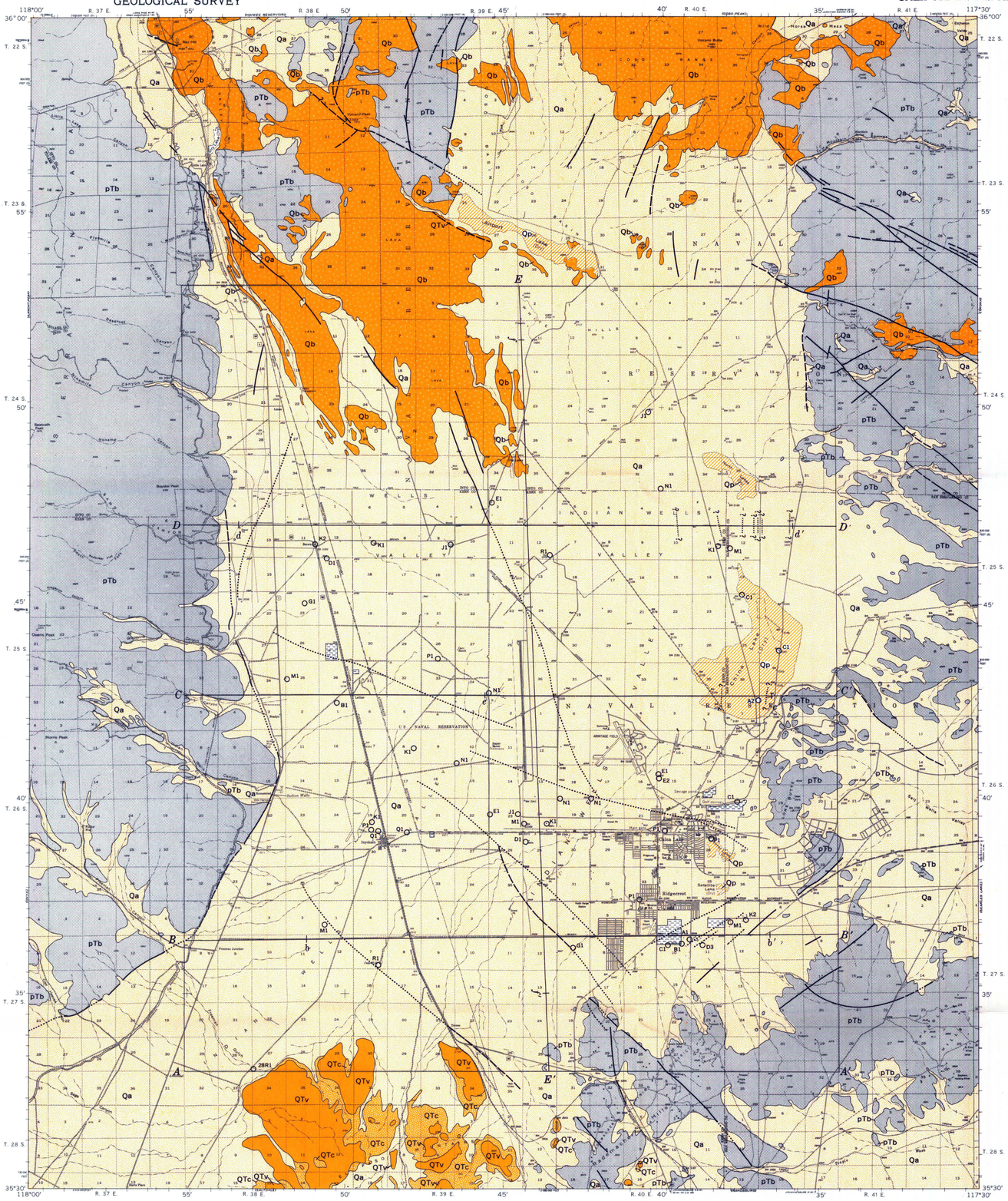
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE
CALIFORNIA DEPARTMENT OF WATER RESOURCES

WATER-SUPPLY PAPER 2007
PLATE 1



Base from the U.S. Geological Survey 1:62,500: Inyokern, 1943; Little Lake, 1954; Ridgecrest, and Mountain Springs Canyon, 1953

APPROXIMATE MEAN DECLINATION, 1972

SCALE 1:125,000

2 0 2 4 6 MILES

2 0 2 4 6 KILOMETERS

Geology and location of wells from Moyle, (1963); Seismic data from Zbur (1963). Map compiled by W. R. Moyle, Jr., F. W. Fenzel

Block diagram by W. R. Moyle, Jr., F. W. Fenzel, and M. E. Olsen

EXPLANATION

WATER-BEARING STRATIGRAPHIC UNITS

Holocene

Qp — Playa deposits
Unconsolidated silt and clay beneath small lakebeds; yield small quantities of water to wells, generally of poor quality

Pleistocene and Holocene

Qa — Alluvium
Unconsolidated, moderately to well-sorted gravel, sand, silt, and clay; carried moderate distance from source area; yields large quantities of water to wells

Pleistocene to Pleistocene(?)

QTc — Continental deposits
Include the Coso, Ricardo, and Goler Formations
The Coso Formation consists of steeply dipping beds of white pumice, composed of particles from one-eighth to several inches in diameter, and some silt, sand and gravel; locally above the regional water table. Age: late Pliocene or early Pleistocene
The Ricardo Formation consists of moderately to highly compacted siltstone, sandstone, limestone, clay, shale, opal chert, conglomerate, tuff; yields little water to wells, generally of poor quality. Age: Pliocene
The Goler Formation consists of arkosic sandstone, clay, shale, and conglomerate; yields very small quantities of water to wells. Age: Paleocene and Eocene

NON-WATER-BEARING STRATIGRAPHIC UNITS

QUATERNARY

Qb — Basalt
Flows of extrusive vesicular to dense basalt, locally includes small pumice cones

TERTIARY AND QUATERNARY(?)

QTv — Volcanic rocks
Black Mountain Basalt (Hulin, 1925), flows of vesicular to dense basalt, perlitic pumice, and rhyolite with some obsidian; generally above the water table

PRE-TERTIARY

pTb — Basement complex
Undifferentiated plutonic, hypabyssal, and metamorphic rocks; yields little or no water to wells

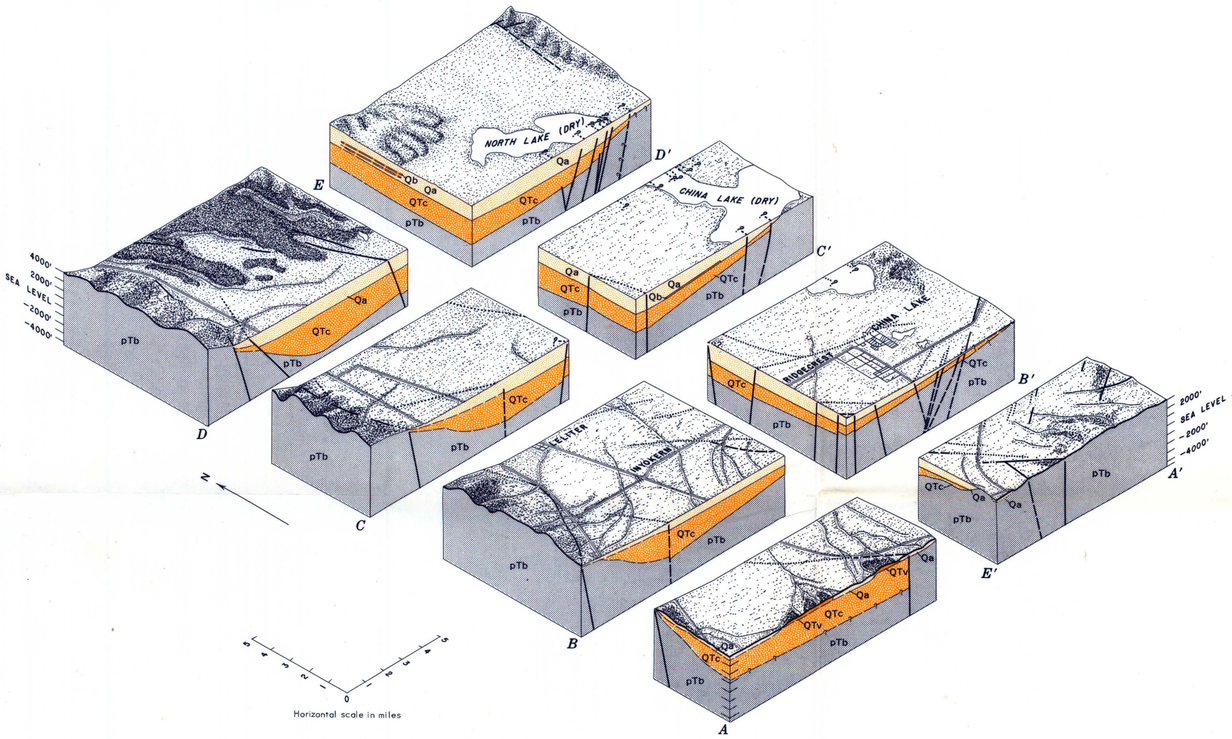
Irrigation acreage

Fault
Dashed where approximately located; dotted where concealed

Approximate contact

B — b — b′ — B′
Line of geologic section and seismic profile
Capital letters indicate geologic section. Lowercase letters indicate seismic refraction profile

C1
Well



GEOLOGIC MAP AND BLOCK DIAGRAM OF INDIAN WELLS VALLEY, CALIFORNIA

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