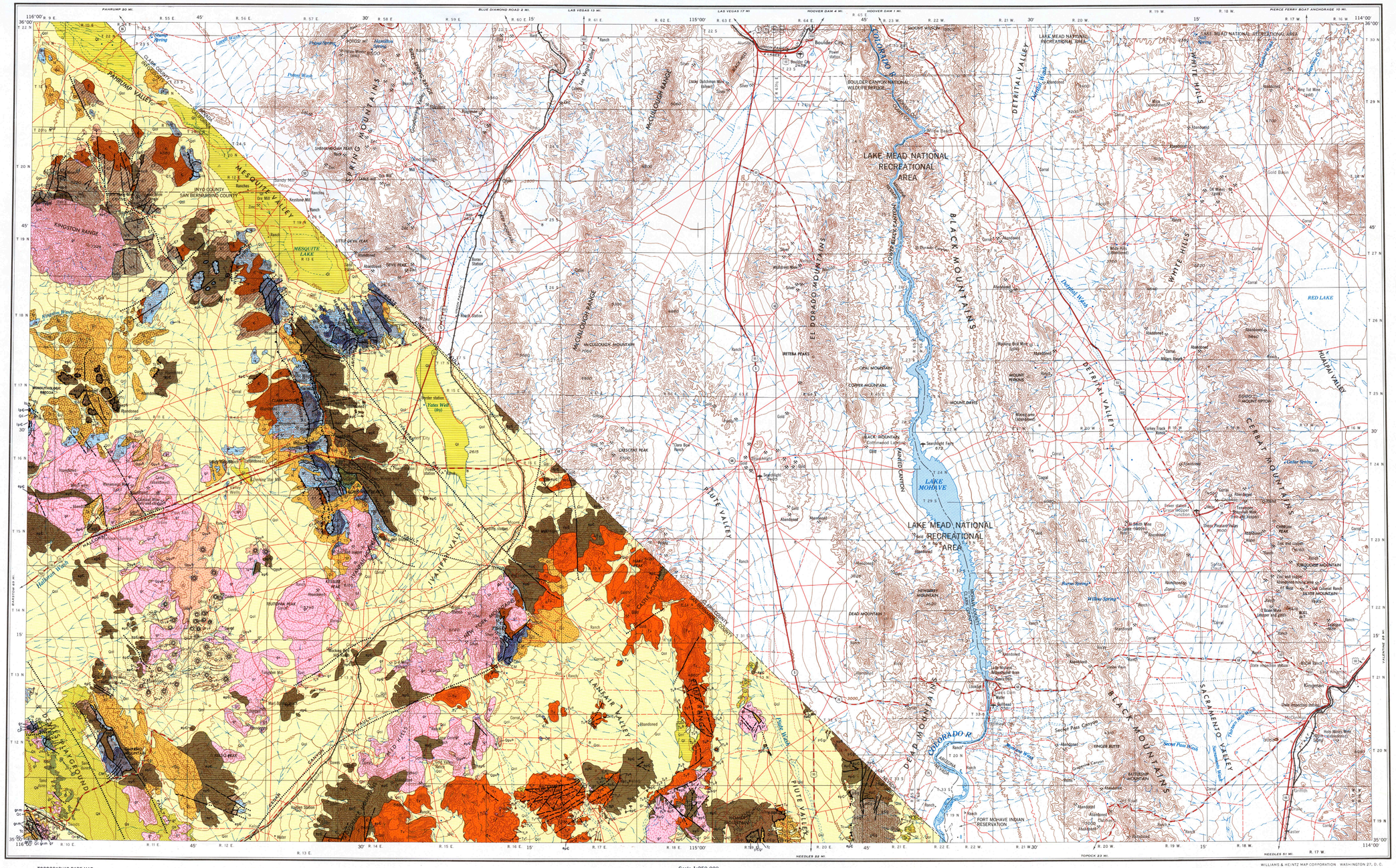
DIVISION OF MINES
IAN CAMPBELL, CHIEF
GORDON B. OAKESHOTT, DEPUTY CHIEF

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

GEOLOGIC MAP OF CALIFORNIA
KINGMAN SHEET



TOPOGRAPHIC BASE MAP

Prepared by the Army Map Service (CGSX), Corps of Engineers, U.S. Army, Washington, D.C. Compiled in 1956 by U.S. Coast and Geodetic Survey by photogrammetric methods and from Arizona, 1:62,500, USGS, Davis Dam, 1950. Planimetric detail revised by photo-planimetric methods. Horizontal and vertical control by USC&GS, USGS, and CE. Photography field annotated 1954.

Land net prepared by U.S. Geological Survey

LOCATION MAP FOR KINGMAN SHEET

Contact
(Dashed where approximately located, gradational or inferred)

Fault
(Dashed where approximately located; dotted where concealed)

Thrust fault
(Barbs on upper plate; dashed where approximately located, dotted where concealed)

Scale 1:250,000

5 0 5 10 15 20 Statute Miles

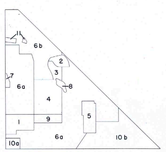
5 0 5 10 15 20 25 30 Kilometers

CONTOUR INTERVAL 200 FEET
TRANSVERSE MERCATOR PROJECTION

GEOLOGIC MAP OF CALIFORNIA
OLAF P. JENKINS EDITION
KINGMAN SHEET

COMPILATION BY CHARLES W. JENNINGS 1961

SECOND PRINTING 1973



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1. Barca, Richard A., unpublished
2. Clary, Michael R., unpublished
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4. Evans, James R., unpublished
5. Haskell, Barry S., unpublished
6a. Hewett, D. Foster, 1956
6b. Hewett, D. Foster, 1956
7. Kupfer, Donald H., 1960
8. Olson, J. C., Shawe, D. R., Pray, L. C., and Sharp, W. P., 1954
9. Sharp, Robert P., 1957
10a. Southern Pacific Company, Land Department, unpublished
10b. Southern Pacific Company, Land Department, unpublished
11. Wright, Lauren A., unpublished

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EXPLANATION

SEDIMENTARY AND METASEDIMENTARY ROCKS

CENOZOIC — QUATERNARY — Recent
- Qs — Dune sand
- Qal — Alluvium
- Qsc — Stream channel deposits (GREAT VALLEY)
- Qf — Fan deposits (GREAT VALLEY)
- Qb — Basin deposits (GREAT VALLEY)
- Qst — Salt deposits
- Ql — Quaternary lake deposits

CENOZOIC — QUATERNARY — Pleistocene
- Qg — Glacial deposits
- Qt — Quaternary nonmarine terrace deposits
- Qm — Pleistocene marine and marine terrace deposits
- Qc — Pleistocene nonmarine

CENOZOIC — TERTIARY — Pliocene
- QTc — Plio-Pleistocene nonmarine
- Pnu — Undivided Pliocene nonmarine
- Pnu — Upper Pliocene nonmarine
- Pu — Upper Pliocene marine
- Pnm — Middle and/or lower Pliocene nonmarine
- Pm — Middle and/or lower Pliocene marine

CENOZOIC — TERTIARY — Miocene
- Mnu — Undivided Miocene nonmarine
- Mnu — Upper Miocene nonmarine
- Mu — Upper Miocene marine
- Mnm — Middle Miocene nonmarine
- Mm — Middle Miocene marine
- Ml — Lower Miocene marine

CENOZOIC — TERTIARY — Oligocene
- Onc — Oligocene nonmarine
- O — Oligocene marine

CENOZOIC — TERTIARY — Eocene
- Enc — Eocene nonmarine
- E — Eocene marine

CENOZOIC — TERTIARY — Paleocene
- Pnc — Paleocene nonmarine
- P — Paleocene marine

CENOZOIC — TERTIARY — Undivided
- TQc — Cenozoic nonmarine
- Tnu — Tertiary nonmarine
- Tl — Tertiary lake deposits
- Tm — Tertiary marine

MESOZOIC — CRETACEOUS
- K — Undivided Cretaceous marine
- Ku — Upper Cretaceous marine
- Kl — Lower Cretaceous marine
- Kn — Knoxville Formation

MESOZOIC — JURASSIC
- Ju — Upper Jurassic marine
- Jm — Middle and/or Lower Jurassic marine

MESOZOIC — TRIASSIC
- TR — Triassic marine

MESOZOIC — UNDIVIDED
- PzMz — Pre-Cretaceous metamorphic rocks (ls = limestone or dolomite)
- Mzs — Pre-Cretaceous metasedimentary rocks
- PzMz — Paleozoic marine (ls = limestone or dolomite)

PALEOZOIC — PERMIAN
- Pl — Permian marine

PALEOZOIC — CARBONIFEROUS
- C — Undivided Carboniferous marine
- CP — Pennsylvanian marine
- CM — Mississippian marine

PALEOZOIC — DEVONIAN
- D — Devonian marine

PALEOZOIC — SILURIAN
- S — Silurian marine

PALEOZOIC — ORDOVICIAN
- Pzs — Pre-Silurian metasedimentary rocks
- Ordovician marine

PALEOZOIC — CAMBRIAN
- Cambrian marine
- Cambrian – Precambrian marine

PRECAMBRIAN
- Undivided Precambrian metamorphic rocks pCg = gneiss, pCs = schist
- Later Precambrian sedimentary and metamorphic rocks
- Earlier Precambrian metamorphic rocks

IGNEOUS AND META-IGNEOUS ROCKS

- Qv — Recent volcanic: Qv^r –rhyolite; Qv^a –andesite; Qv^b –basalt; Qv^p –pyroclastic rocks
- Qv — Pleistocene volcanic: Qv^r –rhyolite; Qv^a –andesite; Qv^b –basalt; Qv^p –pyroclastic rocks
- Qv — Quaternary and/or Pliocene cinder cones
- Pv — Pliocene volcanic: Pv^r –rhyolite; Pv^a –andesite; Pv^b –basalt; Pv^p –pyroclastic rocks
- Mv — Miocene volcanic: Mv^r –rhyolite; Mv^a –andesite; Mv^b –basalt; Mv^p –pyroclastic rocks
- Ov — Oligocene volcanic: Ov^r –rhyolite; Ov^a –andesite; Ov^b –basalt; Ov^p –pyroclastic rocks
- Ev — Eocene volcanic: Ev^r –rhyolite; Ev^a –andesite; Ev^b –basalt; Ev^p –pyroclastic rocks
- QTv — Cenozoic volcanic: QTv^r –rhyolite; QTv^a –andesite; QTv^b –basalt; QTv^p –pyroclastic rocks
- Tv — Tertiary intrusive (hypabyssal) rocks: Tv^r –rhyolite; Tv^a –andesite; Tv^b –basalt
- Tv — Tertiary volcanic: Tv^r –rhyolite; Tv^a –andesite; Tv^b –basalt; Tv^p –pyroclastic rocks
- Kfv — Franciscan volcanic and metavolcanic rocks
- Kgr — Mesozoic granitic rocks: Kgr^a–granite and adamellite; Kgr^d–granodiorite; Kgr^t –tonalite and diorite
- Ks — Mesozoic basic intrusive rocks
- Kus — Mesozoic ultrabasic intrusive rocks
- Jtv — Jura-Trias metavolcanic rocks
- Mzv — Pre-Cretaceous metavolcanic rocks
- Mzi — Pre-Cenozoic granitic and metamorphic rocks
- Pzv — Paleozoic metavolcanic rocks
- Pv — Permian metavolcanic rocks
- Cv — Carboniferous metavolcanic rocks
- Dv — Devonian metavolcanic rocks
- Dvt — Devonian and pre-Devonian? metavolcanic rocks
- Pzs — Pre-Silurian metamorphic rocks
- Pzv — Pre-Silurian metavolcanic rocks
- pCi — Precambrian igneous and metamorphic rock complex
- pCgr — Undivided Precambrian granitic rocks
- pCan — Precambrian anorthosite

HEAVY BORDER ON BOXES INDICATES UNITS THAT APPEAR ON THIS SHEET