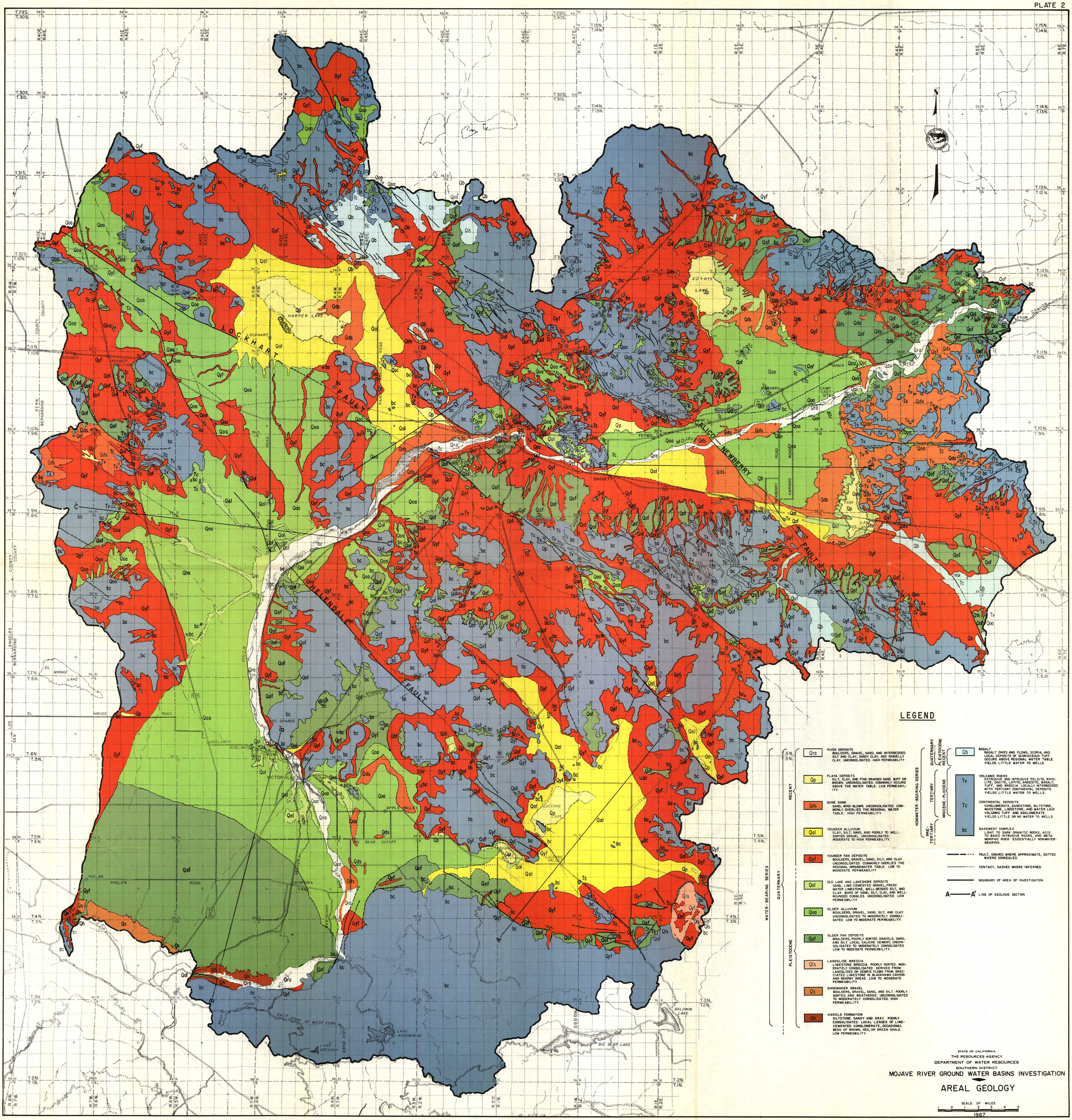
LOCKHART FAULT
HELENDALE FAULT
CALICO-NEWBERRY FAULT
LOCKHART
HARPER LAKE
COYOTE LAKE
BARSTOW
DAGGETT
YERMO
NEWBERRY
HARVARD
MANIX
CAMP CADY SITE
ROY
ADELANTO
VICTORVILLE
APPLE VALLEY
LUCERNE VALLEY
LUCERNE LAKE
HESPERIA
HESPERIA LAKE
PHELAN
ORO GRANDE
STODDARD
EL MIRAGE LAKE
LAKE ARROWHEAD
LAKE GREGORY
BIG BEAR LAKE
BALDWIN LAKE
MOJAVE RIVER
EAST FORK OF WEST FORK MOJAVE RIVER
SAN BERNARDINO COUNTY
KERN COUNTY
LOS ANGELES COUNTY
LEGEND
QUATERNARY
RECENT
PLEISTOCENE
WATER-BEARING SERIES
NONWATER-BEARING SERIES
TERTIARY
PLIOCENE
MIOCENE-PLIOCENE
PRE-TERTIARY
Qra RIVER DEPOSITS
BOULDERS, GRAVEL, SAND, AND INTERBEDDED SILT AND CLAY, SANDY CLAY, AND GRAVELLY CLAY. UNCONSOLIDATED. HIGH PERMEABILITY
Qp PLAYA DEPOSITS
SILT, CLAY, AND FINE-GRAINED SAND. BUFF OR BROWN. UNCONSOLIDATED. COMMONLY OCCURS ABOVE THE WATER TABLE. LOW PERMEABILITY.
Qds DUNE SAND
SAND, WIND-BLOWN. UNCONSOLIDATED. COMMONLY OVERLIES THE REGIONAL WATER TABLE. HIGH PERMEABILITY.
Qal YOUNGER ALLUVIUM
CLAY, SILT, SAND, AND POORLY TO WELL-SORTED GRAVEL. UNCONSOLIDATED. MODERATE TO HIGH PERMEABILITY.
Qyf YOUNGER FAN DEPOSITS
BOULDERS, GRAVEL, SAND, SILT, AND CLAY. UNCONSOLIDATED. COMMONLY OVERLIES THE REGIONAL GROUNDWATER TABLE. LOW TO MODERATE PERMEABILITY
Qol OLD LAKE AND LAKESHORE DEPOSITS
SAND, LIME-CEMENTED GRAVEL, FRESH WATER LIMESTONE, WELL-BEDDED SILT, AND CLAY. BARS OF SAND, SILT, CLAY, AND WELL-ROUNDED COBBLES. UNCONSOLIDATED. LOW PERMEABILITY.
Qoa OLDER ALLUVIUM
BOULDERS, GRAVEL, SAND, SILT, AND CLAY. UNCONSOLIDATED TO MODERATELY CONSOLIDATED. LOW TO MODERATE PERMEABILITY.
Qof OLDER FAN DEPOSITS
BOULDERS, POORLY SORTED GRAVELS, SAND, AND SILT. LOCAL CALICHE CEMENT. UNCONSOLIDATED TO MODERATELY CONSOLIDATED. LOW TO MODERATE PERMEABILITY.
Qls LANDSLIDE BRECCIA
LIMESTONE BRECCIA. POORLY SORTED. MODERATELY CONSOLIDATED. DERIVED FROM LANDSLIDES OR DEBRIS FLOWS FROM BRECCIATED LIMESTONE IN BLACKHAWK CANYON AND NEARBY AREAS. LOW TO MODERATE PERMEABILITY.
Qs SHOEMAKER GRAVEL
BOULDERS, GRAVEL, SAND, AND SILT. POORLY SORTED AND WEATHERED. UNCONSOLIDATED TO MODERATELY CONSOLIDATED. HIGH PERMEABILITY.
Qh HAROLD FORMATION
SILTSTONE. SANDY AND GRAY. POORLY CONSOLIDATED. LOCAL LENSES OF LIME-CEMENTED CONGLOMERATE; OCCASIONAL BEDS OF BROWN, RED, OR GREEN SHALE. LOW PERMEABILITY.
Qb BASALT
BASALT DIKES AND FLOWS, SCORIA, AND LOCAL DEPOSITS OF SCORIACEOUS TUFF. OCCURS ABOVE REGIONAL WATER TABLE. YIELDS LITTLE WATER TO WELLS.
Tv VOLCANIC ROCKS
EXTRUSIVE AND INTRUSIVE FELSITE, RHYOLITE, DACITE, LATITE, ANDESITE, BASALT, TUFF, AND BRECCIA. LOCALLY INTERBEDDED WITH TERTIARY CONTINENTAL DEPOSITS. YIELDS LITTLE WATER TO WELLS.
Tc CONTINENTAL DEPOSITS
CONGLOMERATE, SANDSTONE, SILTSTONE, MUDSTONE, LIMESTONE, AND WATER LAID VOLCANIC TUFF AND AGGLOMERATE. YIELDS LITTLE OR NO WATER TO WELLS
bc BASEMENT COMPLEX
LIGHT TO DARK GRANITIC ROCKS, ACID TO BASIC INTRUSIVE ROCKS, AND METAMORPHIC ROCK. ESSENTIALLY NONWATER-BEARING.
FAULT, DASHED WHERE APPROXIMATE, DOTTED WHERE CONCEALED
CONTACT, DASHED WHERE INFERRED
BOUNDARY OF AREA OF INVESTIGATION
A—A' LINE OF GEOLOGIC SECTION
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT
MOJAVE RIVER GROUND WATER BASINS INVESTIGATION
AREAL GEOLOGY
SCALE OF MILES
1 0 1 2 3 4 5
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