

Modified base from U.S. Geological Survey, 1985,  
Cuddoback Lake, Orderville Mountains, Ridgecrest,  
and Soda Mountains, 1:62,500 topographic map  
(1:100,000 scale)

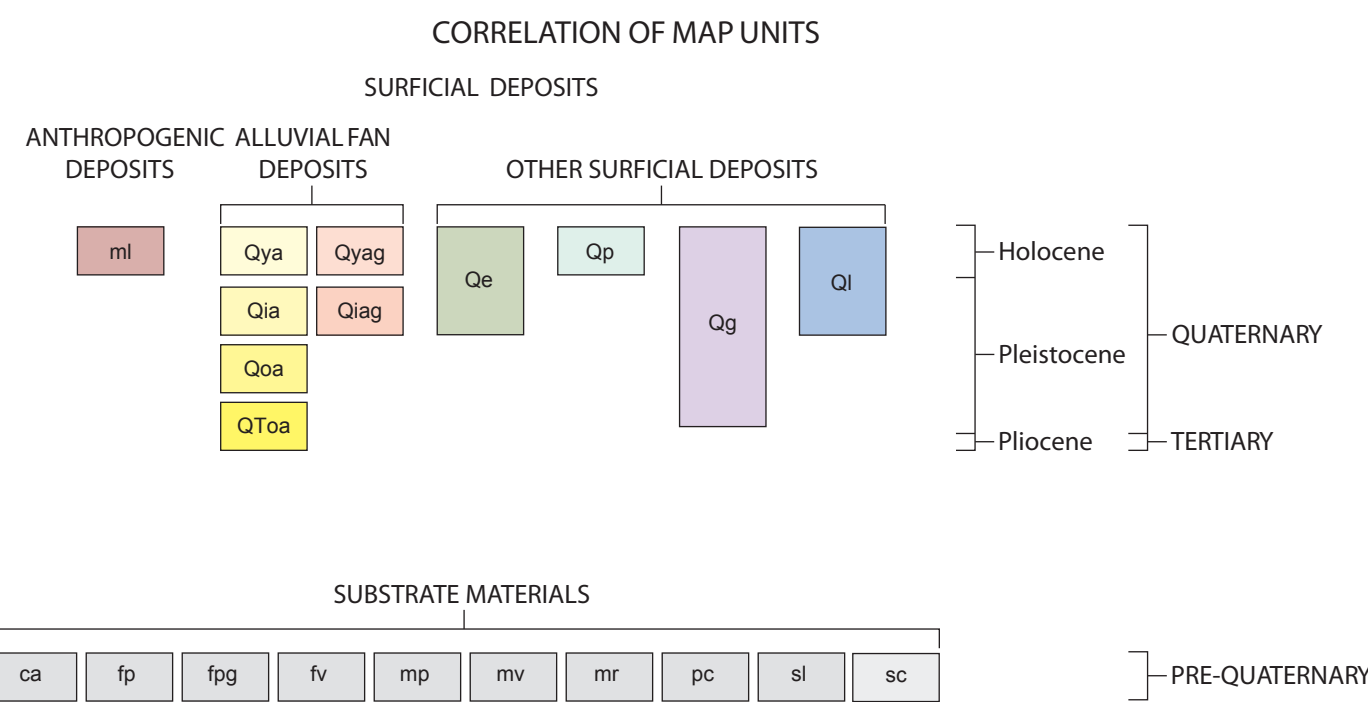
Universal Transverse Mercator projection, zone 11  
1983 North American Datum

APPROXIMATE MEAN  
DEVIATION, 2011

SCALE 1:100,000  
0 1 2 3 4 5 6 7 8 MILES  
0 1 2 3 4 5 6 7 8 KILOMETERS  
CONTINUOUS INTERNAL, 50 METERS  
NATIONAL GEODETIC VERTICAL DATUM OF 1929

MAP LOCATION

Surficial geology mapped by D.M. Miller, C.M.  
Menges, and D.J. Lidke (2003-2009).  
GIS database and digital cartography by D.M. Miller,  
P. Condit, and A.M. Menges.  
Edited by J.L. Zuber.  
Manuscript approved for publication October 31, 2014.  
DOI:10.1130/OFR2013-10248  
http://dx.doi.org/10.1130/OFR2013-10248



- LIST OF MAP UNITS
- SURFICIAL DEPOSITS
- ANTHROPOGENIC DEPOSITS
- ALLUVIAL FAN DEPOSITS
- OTHER SURFICIAL DEPOSITS
- SUBSTRATE MATERIALS

Buried rock and partly consolidated materials that underlie pediment and hillslope veneers. Ages range from Pliocene to Proterozoic. Substrate materials are subdivided based on weathering characteristics and erosional products:

ca Carbonate rocks  
tp Felsic plutonic rocks  
tpg Felsic plutonic rocks that weather to gus  
fv Felsic volcanic rocks  
mp Mafic plutonic rocks  
mv Mafic volcanic rocks  
mr Metamorphic rocks  
pc Partly consolidated materials  
sl Siliciclastic rocks  
sc Schistose rocks

SYMBOL EXPLANATION

Contact

Fault—Dashed where approximate; dotted where concealed;  
gapped where uncertain

Blind thrust fault—Drawn at crest of fold above thrust

## Generalized Surficial Geologic Map of the Fort Irwin area, San Bernardino County, California

By  
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2014

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Digital file available at: <http://dx.doi.org/10.1130/OFR2013-10248>  
\*Approved for release under the President John F. Kennedy Library Act, 1964, as amended, by the U.S. Geological Survey, San Bernardino County, California, Map 9  
in black, red, and green and geophysics center for geophysical hydrology at Fort Irwin, California, U.S. Geological Survey Open-File Report 2013-10248, 11 p.,  
with 100,000, <http://dx.doi.org/10.1130/OFR2013-10248>