GEOLOGIC MAP OF THE CLARK PEAK QUADRANGLE, JACKSON AND LARIMER COUNTIES, COLORADO

By
Karl S. Kellogg, Chester A. Ruleman, Ralph R. Shroba, and William A. Braddock
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Scientific Investigations Map 3010, version 2.0

NOTE: The GIS database for this map has been approved for release and publication by the Director of the USGS. Although this database has been subjected to rigorous review and is substantially complete, the USGS reserves the right to revise the data pursuant to further analysis and review. Furthermore, it is released on condition that neither the USGS nor the United States Government may be held liable for any damages resulting from its authorized or unauthorized use.

The database can be downloaded from the USGS server on URL http://pubs.usgs.gov/sim/2010/3010/. In addition, a PDF file of the map may be downloaded, from which paper copies may be printed. Additional mapping and reinterpretation of the Clark Peak 7½-minute quadrangle (Kellogg and others, 2008, version 1.0) has resulted in several modifications. Most of these changes concern the structural interpretation of some of the faults and have not significantly changed the position of unit contacts.

As a result, version 2.0 of the map contains the following changes as compared to version 1.0:

1. Rhyolite tuff (Try) of version 1.0 has been remapped and divided into three units in version 2.0: rhyolite (Tr), dacite (Tdc), and andesite (Ta), all lava flows. The Description of Map Units has been modified to reflect these changes.

2. Three north-trending thrust faults in the south-central part of version 1.0 are reinterpreted as normal faults.

3. A thrust fault in the southeastern part of version 1.0 near the southern border, 0.6 km west of Wiley Lumber Camp, is reinterpreted as a depositional contact.

4. A north-striking, east-directed thrust fault in version 1.0 near Wiley Lumber Camp in the southeastern part of the map is reinterpreted as an east-dipping normal fault.

5. The two cross sections have been modified to reflect the above changes.

6. A concealed east-striking accommodation fault running along the Michigan River has been added to account for the profound change in structural style north and south (O'Neill, 1981) of the Michigan River.

7. One small outcrop of biotite-hornblende gneiss (Xbh) in the south-central part of the map is added.

8. The structure diagram has been modified to show the changes on the map. On this diagram, the speculative caldera margin on the structure diagram of version 1.0 has been eliminated.

The database and other files are as follows:

Readme file—
00readme.pdf

Metadata file—
clarkpeak_v2_meta.txt

Base files—
clarkpkbase_r.tif
clarkpkbase_r.tfw

Shapefiles—
clarkpeak_geo_fold.dbf
clarkpeak_geo_fold.prj
clarkpeak_geo_fold.sbn
clarkpeak_geo_fold.sbx
clarkpeak_geo_fold.shp
clarkpeak_geo_fold.shx
clarkpeak_geo_line.dbf
clarkpeak_geo_line.prj
clarkpeak_geo_line.sbn
clarkpeak_geo_line.sbx
clarkpeak_geo_line.shp
clarkpeak_geo_line.shp.xml
clarkpeak_geo_line.shx
clarkpeak_geo_pnt.dbf
clarkpeak_geo_pnt.prj
clarkpeak_geo_pnt.sbn
clarkpeak_geo_pnt.sbx
clarkpeak_geo_pnt.shp
clarkpeak_geo_pnt.shx
clarkpeak_geo_poly.dbf
clarkpeak_geo_poly.prj
clarkpeak_geo_poly.sbn
clarkpeak_geo_poly.sbx
clarkpeak_geo_poly.shp
clarkpeak_geo_poly.shp.xml
clarkpeak_geo_poly.shx