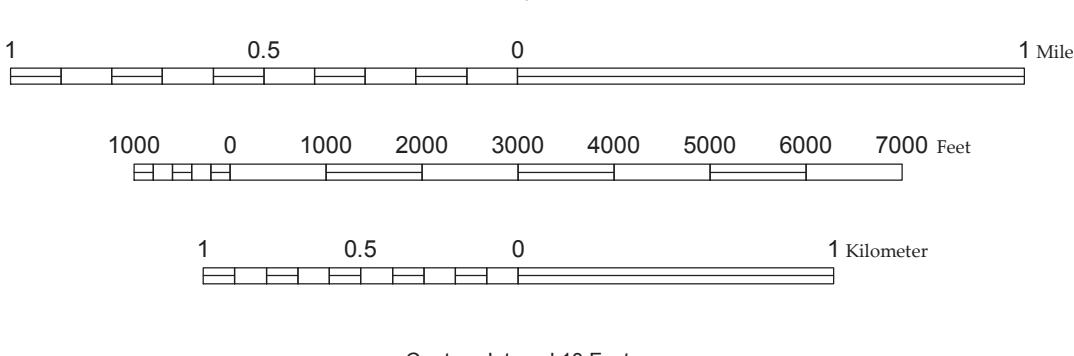


Base map from U.S. Geological Survey 2013.  
North American Datum of 1983 (NAVD88) World Geodetic System of 1984 (WGS84).  
Projection and 1000-meter grid: Universal Transverse Mercator, Zone 13S  
10,000-foot ticks: New Mexico Coordinate System of 1983 (west zone), shown in blue.

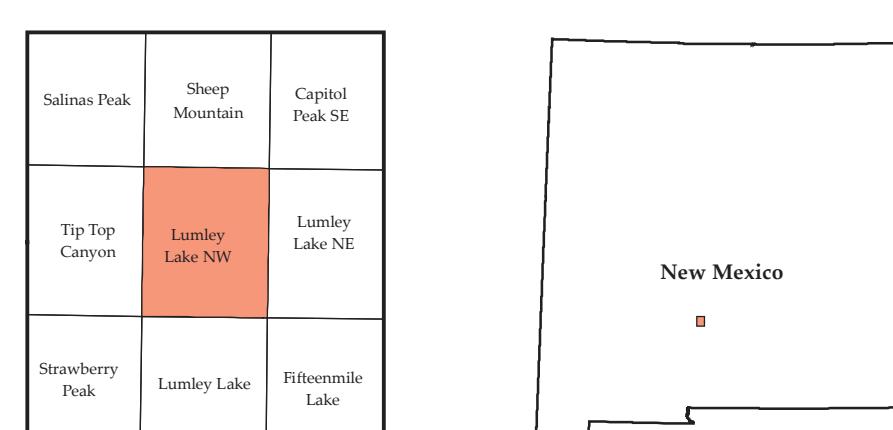
Roads: ©2006-2013 TomTom  
Names: USGS 2013  
Hydrography: National Hydrography Dataset, 2009  
Contours: National Elevation Dataset, 2000

1:24,000



### New Mexico Bureau of Geology and Mineral Resources Open-File Geologic Map 254

Mapping of this quadrangle was funded by the New Mexico Bureau of Geology and Mineral Resources. (Matthew Rhoades, Director and State Geologist; Dr. J. Michael Timmons, Assoc. Director for Mapping Programs/Deputy Director.)



#### Quadrangle Location

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This and other STATEMAP quadrangles are available  
for free download in both PDF and ArcGIS formats at:

<http://geoinfo.nmt.edu>



by  
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August, 2015

This draft geologic map is preliminary and will undergo revision. It was produced from either scans of hand-drawn originals or from digitally drafted original maps and figures using a wide variety of software, and is currently in cartographic production. It is being distributed in this draft form as part of the bureau's Open-File map series (OFGM), due to high demand for current geologic map data in these areas where STATEMAP quadrangles are located, and it is the bureau's policy to disseminate geologic data to the public as soon as possible.

After this map has undergone review, editing, and final cartographic production adhering to bureau map standards, it will be released in our Geologic Map (GM) series. This final version will receive a new GM number and will supersede this preliminary open-file geologic map.

**DRAFT**

#### Comments to Map Users

A geologic map displays information on the distribution, nature, orientation, and age relationships of irregular surfaces that form boundaries between different types or ages of units. Data depicted on the geologic quadrangle map may be based on any of the following: reconnaissance field mapping, compilation of published and unpublished work, and photogeologic interpretation. Locations of contacts are not surveyed, but are plotted by interpretation of the position of a given contact onto a topographic base map; therefore, the accuracy of contact locations depends on the scale of mapping and the interpretation of the geologist(s). Any embayment of this map could cause misunderstanding in the detail of mapping and may result in erroneous interpretations. Site-specific conditions should be verified by detailed surface mapping or subsurface exploration. Topographic and cultural changes may not be shown due to recent development.

Cross sections are constructed based upon the interpretations of the author made from geologic mapping, and available geophysical, and subsurface (drillhole) data. Cross sections should be used as an aid to understanding the general geologic framework of the map area, and not be the sole source of information for use in locating or designing wells, buildings, roads, or other man-made structures.

The New Mexico Bureau of Geology and Mineral Resources created the Open-File Geologic Map Series to expedite dissemination of these geologic maps and map data to the public as rapidly as possible while allowing for map revision as geologists continued to work in map areas. Each map sheet carries the original date of publication below the map as well as the latest revision date in the upper right corner. In most cases, the original date of publication coincides with the date of the map product delivered to the National Cooperative Geologic Mapping Program (NCCMP) as part of New Mexico's STATEMAP agreement. While maps are produced, maintained, and updated in an ArcGIS geodatabase, at the time of the STATEMAP deliverable, each map goes through cartographic production and internal review prior to uploading to the Internet. Even if additional updates are carried out on the ArcGIS map data files, citations to these maps should reflect this original publication date and the original authors listed. The views and conclusions contained in these map documents are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the State of New Mexico, or the U.S. Government.