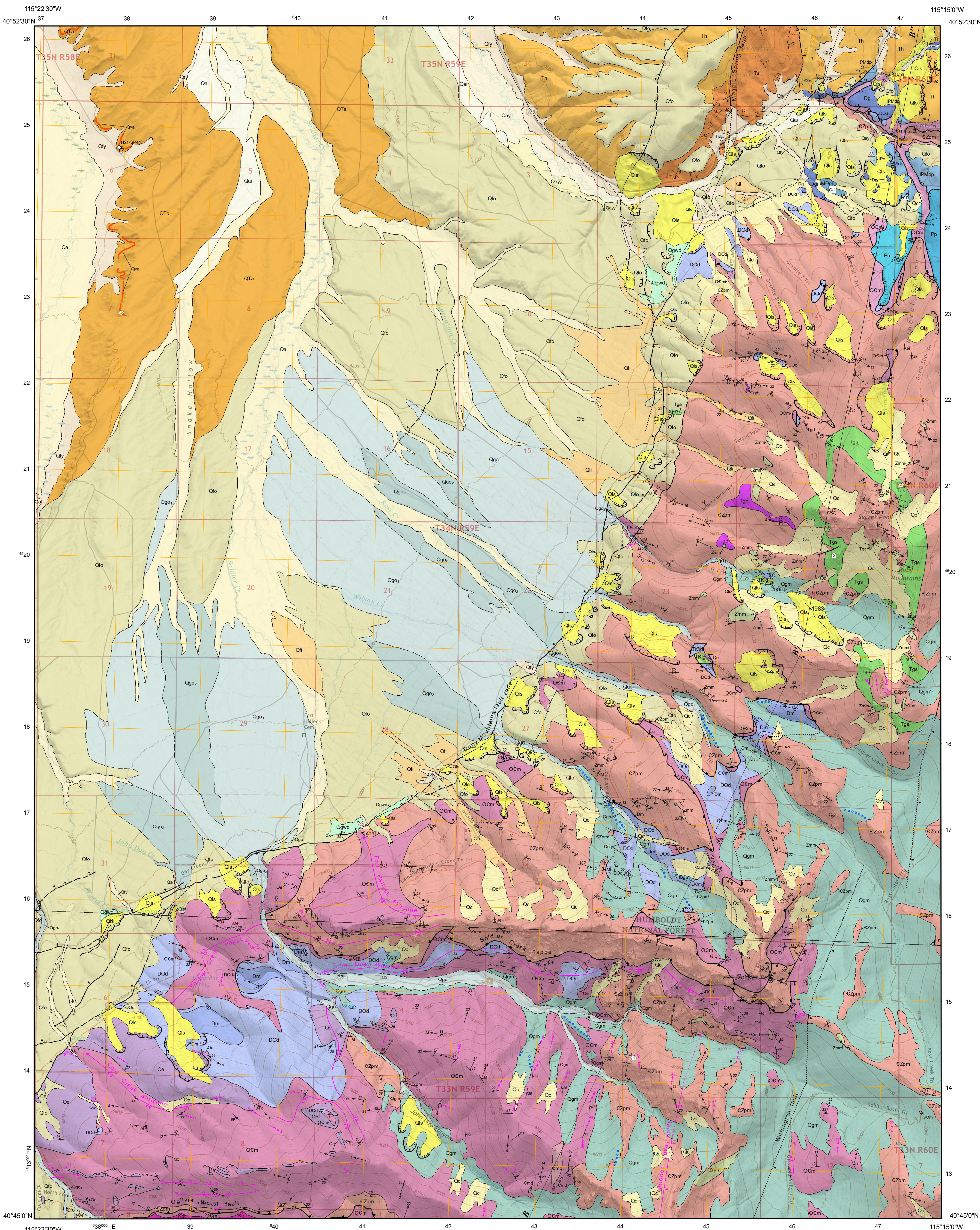


GEOLOGIC MAP OF THE SOLDIER PEAK
QUADRANGLE, ELKO COUNTY, NEVADAArthur W. Snoke¹, Keith A. Howard², and Seth Dee³¹University of Wyoming, Laramie²U.S. Geological Survey, Mountain View, CA³Nevada Bureau of Mines and Geology, University of Nevada, Reno

2022



Contact Solid where certain and location accurate, dashed where approximately located; short-dashed where inferred, dotted where concealed; queried if identity or existence uncertain.

Fault Solid where certain and location accurate, dotted where concealed.

Normal fault Solid where certain and location accurate, dashed where approximately located, dotted where concealed; queried if identity or existence uncertain. Showing dip: ball on downthrown side. In cross section, arrows show relative motion.

Plastic-to-brittle low-angle attenuation fault Solid where certain and location accurate, dashed where approximately located, dotted where concealed.

Brittle low-angle normal fault (detachment fault) Solid where certain and location accurate, dashed where approximately located, dotted where concealed. Commonly associated with chloritic altered rocks.

Premetamorphic thrust fault Solid where certain and location accurate. Sawtooth on upper plate. Metamorphosed; concordant to foliation, lacks fault rock textures. Identified as contact that repeats mapped stratigraphic sequence.

Landslide scarp Solid where certain and location accurate. Hackures point downscarp.

Glacial moraine crests

Anticline Solid where certain and location accurate, dotted where concealed. Direction of plunge shown with arrowhead where applicable.

Overturned anticline Solid where certain and location accurate, dashed where approximately located, dotted where concealed; queried if identity or existence uncertain. Direction of plunge shown with arrowhead where applicable.

Overturned syncline Solid where certain and location accurate, dashed where approximately located, dotted where concealed; queried if identity or existence uncertain. Direction of plunge shown with arrowhead where applicable.

Ultramylonite zone Described in detail in Snoke and Fulagar (1998); locality is in the SE corner of section 14 in T. 34 N., R. 59 E. Showing dip.

Strike and dip of bedding

Strike and dip of compositional layering or foliation in mylonitic metamorphic infrastructure

Strike and dip of foliation in mylonitic shear zone

Bearing and plunge of lineation Includes elongation (stretching) lineations in mylonitic rocks as well as mineral lineations in other rocks. Symbol may be combined with the foliation symbol.

Bearing and plunge of hinge line of mesoscopic fold, with sense of vergence indicated (Z (clockwise) indicates distal sense, whereas S (counterclockwise) indicates sinistral sense. Symbol may be combined with axial surface symbol.

Bearing and plunge of minor parasitic fold

Strike and dip of axial surface showing minor overturned anticline

Sample localities Label shows sample name

U-Pb sample locality

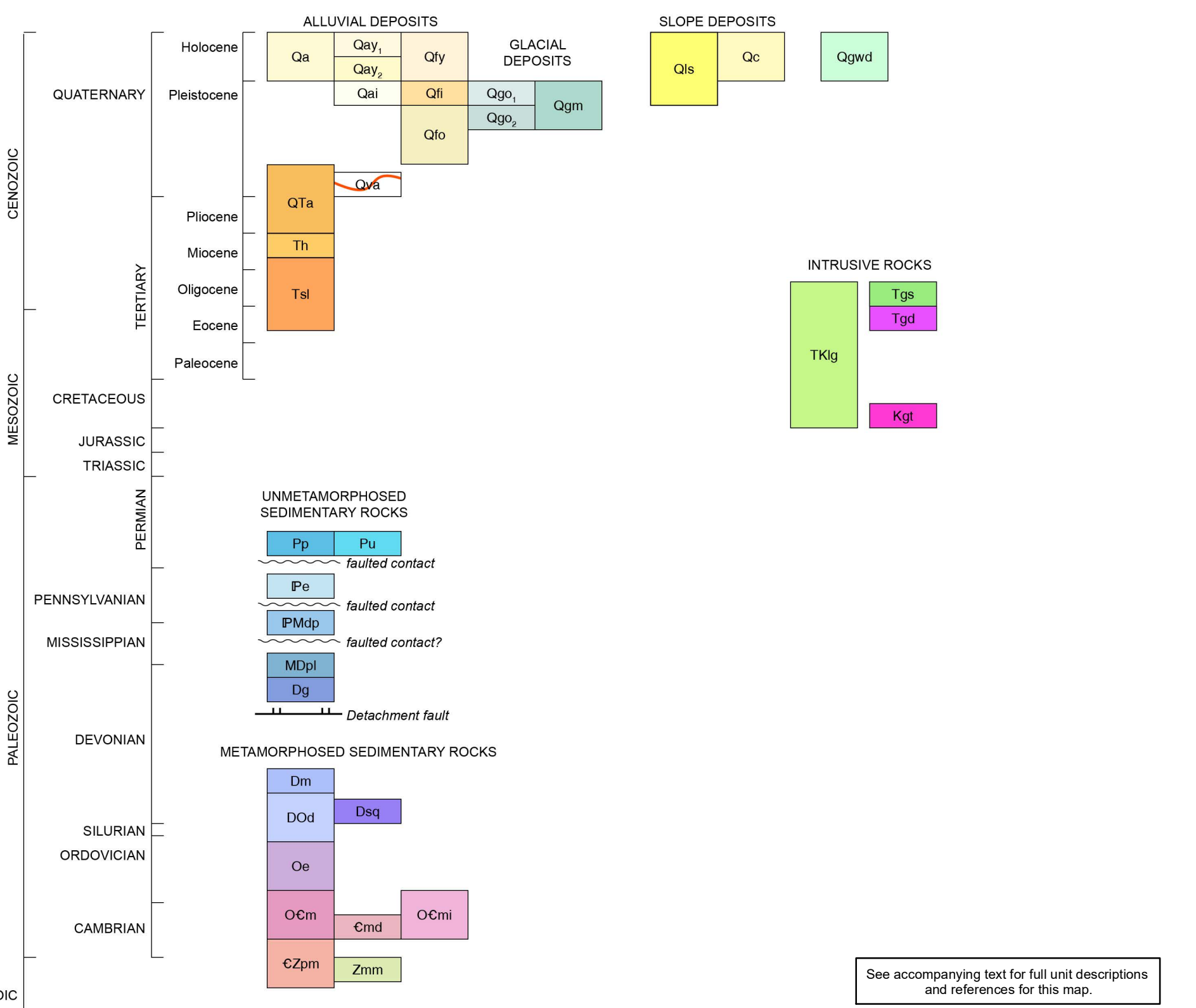
Conodont sample locality

Vitric ash geochemical correlation sample locality

Megafossil/fusulinid sample locality

H21-SF44 Ar⁴⁰/Ar³⁹ date

Line of cross section



Scale 1:24,000

0 0.5 1 kilometer

0 0.5 1 mile

0 1000 2000 3000 4000 5000 feet

CONTOUR INTERVAL 40 FEET

Projection: Universal Transverse Mercator, Zone 11, North American Datum 1983 (m)

Base map: U.S. Geological Survey Soldier Peak 7.5' quadrangle (2021)

Suggested citation:
Snoke, A.W., Howard, K.A., and Dee, S., 2022, Geologic map of the Soldier Peak quadrangle, Elko County, Nevada: Nevada Bureau of Mines and Geology Map 191, scale 1:24,000, 31 p.

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Field work done in 1971-1973, 1977, 1979-1983, 1985-1986, 2021
This geologic map was funded in part by the USGS National Cooperative Geologic Mapping Program under STATEMAP award number G20AC00390. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Government.

PEER-REVIEWED MAP
Office review by David A. John (USGS), Jonathan C. Matt (USGS), Andrew V. Zusa (NEMG), and Christopher D. Henry (NEMG).
Field review by Andrew V. Zusa and Christopher D. Henry.

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Cartography and map production in ESRI ArcGIS v10.8 (GMR) by Rachel McIndoe and Irene M. Egerton
Cartographic and style review by Jennifer Vican
First Edition, December, 2022

Stippling per GSC-670-013-02009
Published by Nevada Bureau of Mines and Geology
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