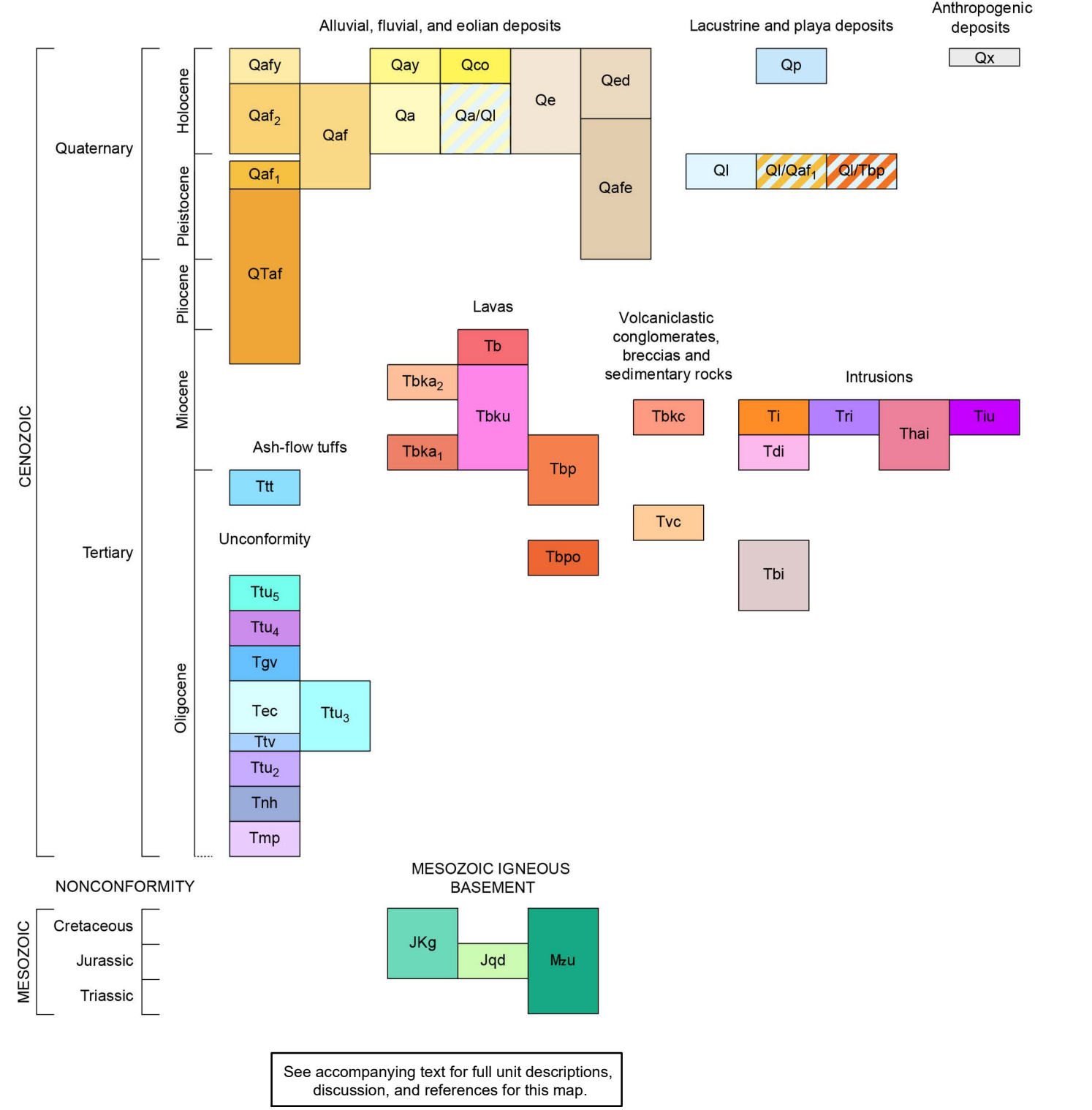
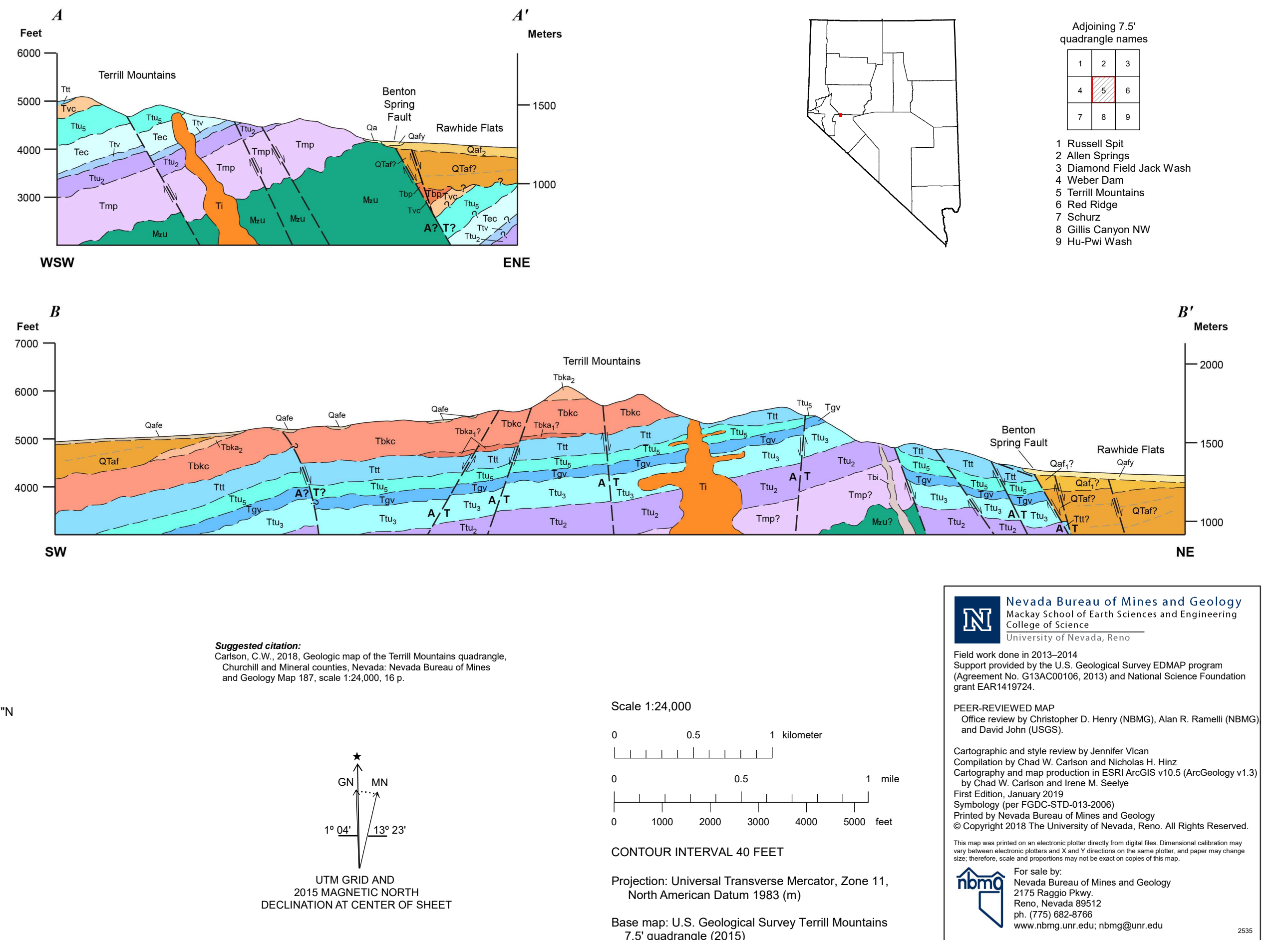


- QUATERNARY DEPOSITS**
- Anthropogenic deposits**
- Qx Anthropogenic deposits and altered surfaces (Historical)
- Eolian deposits**
- Qe Eolian sand deposits (Holocene)
 - Qed Sand dunes (Holocene)
 - Qafe Alluvial-fan deposits with veneer of sands and silts (Holocene to early Pleistocene)
- Alluvial deposits**
- Qay Deposits in recently active washes (Holocene)
 - Qa Alluvium (Holocene)
 - Qa/Ql Alluvium deposits over lacustrine deposits (Holocene)
 - Qco Colluvium (Holocene)
- Lacustrine and playa deposits**
- Qp Playa deposits (Holocene)
 - Ql Lacustrine deposits (late Pleistocene)
 - Ql/Qay Lacustrine deposits over alluvial-fan deposits (late Pleistocene)
 - Ql/Qp Lacustrine deposits on plagioclase basalts (late Pleistocene)
- Alluvial-fan deposits**
- Qaf Recently active alluvial-fan deposits (Holocene)
 - Qaf₁ Alluvial-fan deposits (Holocene)
 - Qaf₂ Alluvial-fan deposits (late Pleistocene)
 - Qaf Alluvial-fan deposits, undivided (Holocene to late Pleistocene)
 - Qaf₃ Alluvial-fan deposits (middle Pleistocene to Late Miocene)
- TERTIARY ROCKS**
- Oligocene-Miocene volcanic and sedimentary rocks**
- Tb Basaltic lavas (late Miocene)
 - Tbk₁ Lavas and clastic rocks of Brown Knob, undivided (early Miocene)
 - Tbk₂ Younger andesitic lavas of Brown Knob (early Miocene)
 - Tbk₃ Volcaniclastic conglomerates, breccias, and sandstone of Brown Knob (early Miocene)
 - Tbk₄ Older basaltic andesite lavas of Brown Knob (early Miocene)
 - Tbp Plagioclase basalts (early Miocene to late Oligocene)
 - Tvc Volcaniclastic conglomerates and breccias (late Oligocene)
 - Tbpc₁ Oldest plagioclase basalts (late Oligocene)
- Tertiary intrusions**
- Ttr Rhyolitic intrusion (early Miocene)
 - Tt Plagioclase hornblende intrusions, dikes, and sills (early Miocene)
 - Ttd Tertiary dikes, undivided (early Miocene)
 - Tth Hornblende andesite intrusion (early Miocene)
 - Tdi Dacitic intrusions (early Miocene)
 - Tbi Basaltic intrusions (late Oligocene)
- Oligocene ash-flow tuffs**
- Tt₁ Tuff of Toiyabe (late Oligocene)
 - Tt₂ Unknown tuff 5 (late Oligocene)
 - Tt₃ Unknown tuff 4 (late Oligocene)
 - Tgv Tuff of Gabbs Valley (late Oligocene)
 - Tt₃ Unknown tuff 3, undivided (late Oligocene)
 - Tec Tuff of Elevenmile Canyon (late Oligocene)
 - Tv Unknown tuff vitrophyre (late Oligocene)
 - Tt₂ Unknown tuff 2 (late Oligocene)
 - Tth Nine Hill Tuff (late Oligocene)
 - Tmp Guild Mine Member of Mickey Pass Tuff (late Oligocene)
- PRE-TERTIARY ROCKS**
- Jkg Gabbro (Cretaceous to Jurassic)
 - Jqd Quartz diorite (Jurassic)
 - Mu Basement rocks, undivided (Mesozoic)



- Table 1. Radiogenic Ages (⁴⁰Ar/³⁹Ar)**
- | Sample ID | Map Unit | Mineral Dated | Age (Ma) | ±2 sigma | Latitude (NAD 83) | Longitude (NAD 83) | Source |
|------------|------------------|------------------------|----------|----------|-------------------|--------------------|------------|
| CC15-021-3 | Tb | groundmass concentrate | 5.79 | 0.06 | N39.02860° | W118.67542° | This Study |
| MBK06-4 | Tbk ₂ | plagioclase | 19.15 | 0.23 | N39.06489° | W118.70792° | This Study |
| CC15-021-1 | Tt | plagioclase | 22.67 | 0.15 | N39.05908° | W118.68935° | This Study |
| NTM-093-1 | Tt | sanidine | 23.29 | 0.02 | N39.10677° | W118.74935° | This Study |
| STM04-2 | Tgv | sanidine | 24.95 | 0.02 | N39.03399° | W118.69279° | This Study |
| PMA01-2 | Tnh | sanidine | 25.44 | 0.02 | N39.10161° | W118.72333° | This Study |
- Note:** Age determinations completed by the New Mexico Geochronology Research Laboratory. See "Appendix A" of accompanying text for techniques, analytical data, and incremental release spectra.
- Geochronological sample points**
- Sample
- Line of cross section**
- A — A'



GEOLOGIC MAP OF THE TERRILL MOUNTAINS QUADRANGLE, CHURCHILL AND MINERAL COUNTIES, NEVADA

Chad W. Carlson

Nevada Bureau of Mines and Geology, University of Nevada, Reno

2018

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UTM GRID AND 2015 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

GN MN
1° 04' 12° 23'

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

Base map: U.S. Geological Survey Terrill Mountains 7.5' quadrangle (2015)

Nevada Bureau of Mines and Geology
Mackay School of Earth Sciences and Engineering
College of Science
University of Nevada, Reno

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PEER-REVIEWED MAP
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Compilation by Chad W. Carlson and Nicholas H. Hinz.
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For sale by:
Nevada Bureau of Mines and Geology
2175 Regatta Pkwy.
Reno, Nevada 89512
ph. (775) 682-8766
www.nbmng.unr.edu; nbmg@unr.edu

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