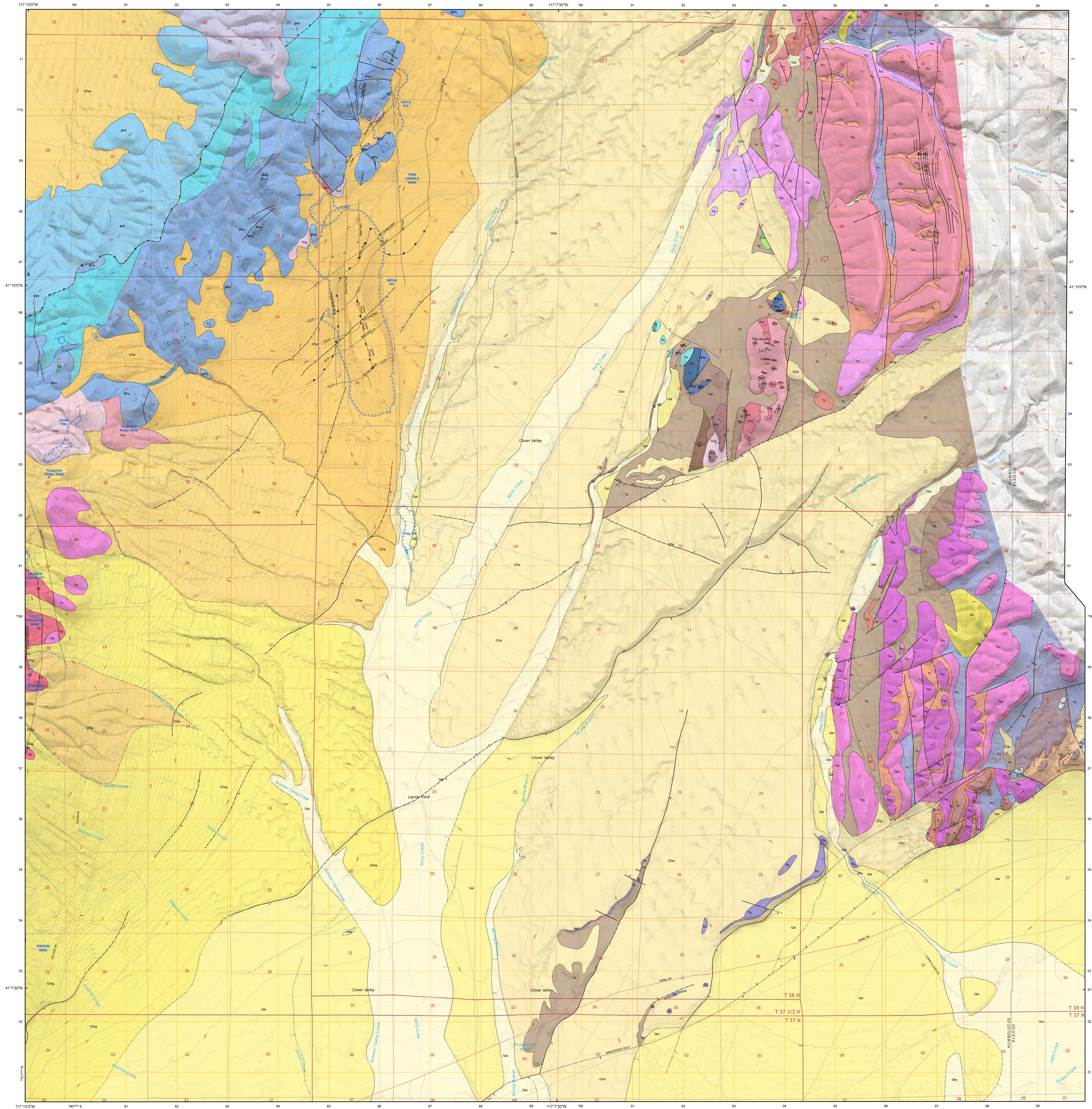
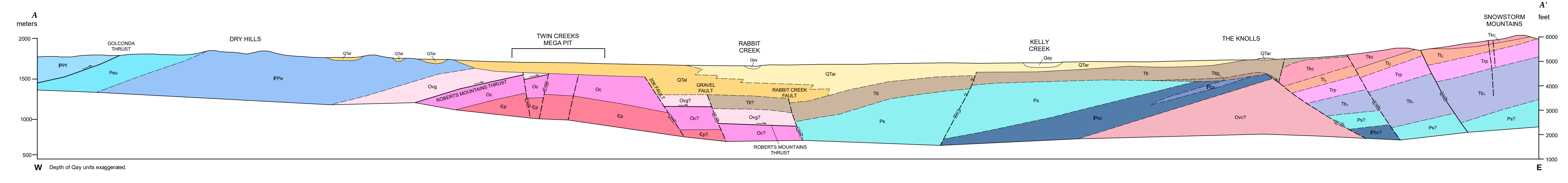
Prepared with support from the Geological Society of Nevada.

PRELIMINARY GEOLOGIC MAP OF THE KELLY CREEK AREA, HUMBOLDT, ELKO, AND LANDER COUNTIES, NEVADA
PLATE 1 OF 2

Joseph A. Laravie
Great Basin GIS, Spring Creek, NV

2018





Depth of Qay units exaggerated.

QUATERNARY DEPOSITS

Qae	Eolian silt and sand
Qls	Landslide deposits
Qay	Active and recent alluvial deposits
Qat	Inactive fluvial terrace and distal alluvial-fan deposits
QTs	Hot and cold spring-related deposits
QTar	Older alluvial-fan deposits of rhyolitic provenance
QTag	Older alluvial-fan deposits of granitic provenance
QTap	Older alluvial-fan deposits of phyllite, siltstone, and shale provenance
QTal	Older alluvial-fan deposits of limestone provenance

TERTIARY VOLCANIC AND SEDIMENTARY ROCKS

Tb_2	Basalt
Ttl	Tuffaceous sand, silt, and clay
Ttc	Gravel and sand, provenance mostly unit Tbr
Ttlp	Basal conglomerate facies of unit Ttl
UNCONFORMITY	
Tr	Rhyolite porphyry
Tt_3	Unwelded tuff and tuffaceous sediments
ANGULAR UNCONFORMITY	
Tkc	Porphyritic latite lave flow
Trp_2	Rhyolite porphyry and welded ash-flow tuff
Tt_2	Poorly welded to non-welded tuff and sediments
Trp	Rhyolite porphyry, undivided
Trp_1	Rhyolite porphyry
Tt_1	Unwelded tuff and tuffaceous sediments
Tb_1	Vesicular basalt flows
Tla	Lake beds
Twt	Coarse-grained rhyolite porphyry
Tgs	Tuffaceous sandstone and siltstone
Tb_0	Basalt of Dry Hills
Tbr	Biotite rhyolite

UNCONFORMITY?

PALEOZOIC SEDIMENTARY ROCKS

PPf	Farrell Canyon Formation
Peu	Siltstone and fine sandstone (Upper Etchart formation of Osterberg, 1990)
PPe	Etchart Limestone
Ps	Siltstone and very fine grained sandstone
Pbs	Sandstone of the Battle Formation
Pbc	Conglomerate of the Battle Formation
UNCONFORMITY	
Ovg	Greenstone, related basaltic tuffs and volcaniclastic rocks of the Valmy Formation
Ovc	Chert of the Valmy Formation
Ovs	Siltstone and shale of the Valmy Formation
Ovq	Quartzite of the Valmy Formation
Oc	Shale, limestone, and tuff of the Comus Formation
Єp	Phyllite and limestone of the Preble Formation

INTRUSIVE ROCKS

Kg	Granodiorite of Osgood Mountains

Contact Solid where certain and location accurate, dashed where approximately located.

Fault Solid where certain and location accurate, dashed where approximately located, dotted where concealed; queried if identity or existence uncertain. Ball-and-bar on downthrown side, arrows show relative motion. *In cross section, arrows show relative motion.*

Thrust fault Solid where certain and location accurate, dashed where approximately located, dotted where concealed. Saw teeth on upper plate.

Offset in surface elevation L on lower side. Interpreted as resulting from erosion, not faulting. In some locations also forms geologic contacts.

Vegetational lineament Single short dot-dash where certain and location accurate, double short dot-dash where approximately located. No offset visible in surface.

Ridge forming welded or cemented unit

Syncline Dashed where approximately located.

Area disturbed by mining 2010

Open pit 2006-2010

Dam

Strike and dip of bedding

41 Inclined

Strike and dip of bedding from air photos

29 Inclined — Vertical

Strike and dip of joint

13 Inclined joint

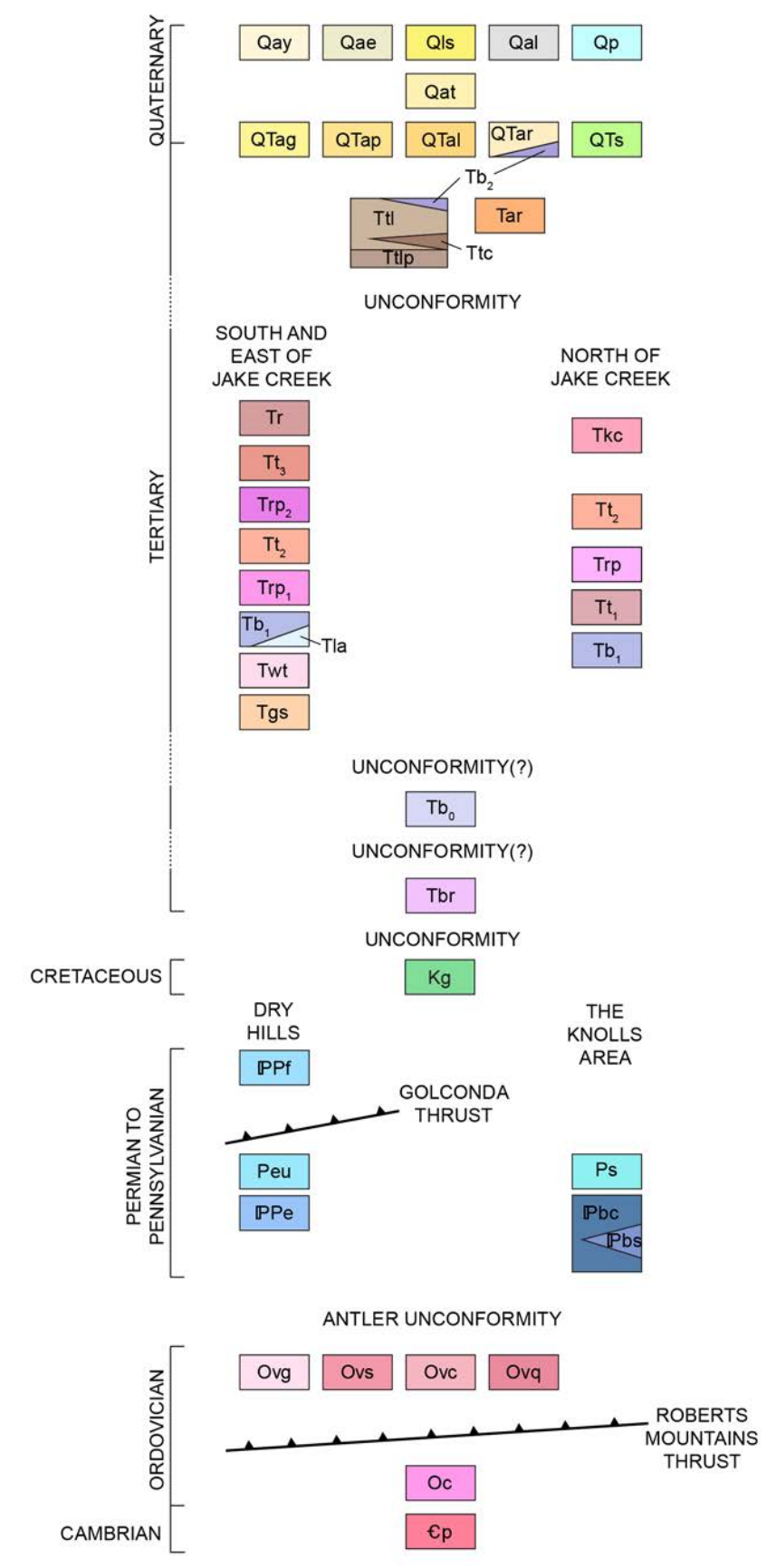
Strike and dip of minor quartz vein

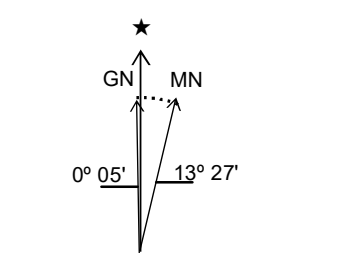
43 Inclined — Vertical or near vertical

A — *A'*
Line of cross section

▨ Brown sand beds mapped from airphotos (Etchart Limestone)

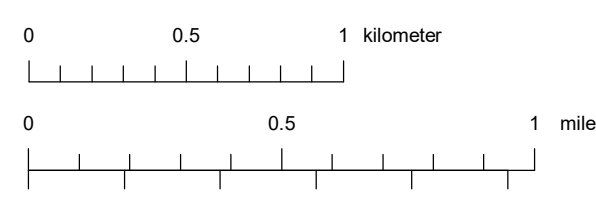
▨ Silicification, very weak to very strong





UTM GRID AND
2015 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

Scale 1:24,000

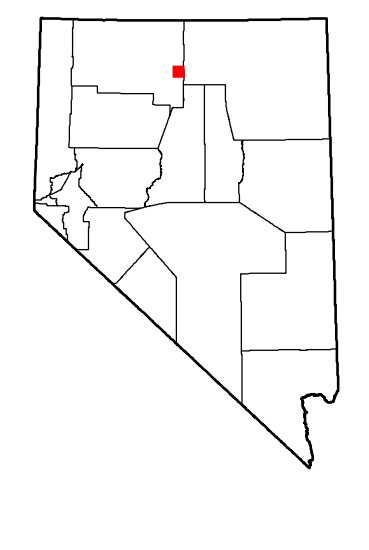


CONTOUR INTERVAL 10 or 20 FEET

Adjoining 7.5' quadrangle names

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20

1 Spring Creek
2 Chimney Reservoir
3 Layton Spring
4 Rodear Flat
5 Eden Valley
6 Dry Hills North
7 Kenny Creek
8 Snowstorm Mountain
9 Adam Peak
10 Dry Hills South
11 The Knolls
12 Jake Creek Mountain
13 Red House Flat West
14 Red House Flat East
15 Elevenmile Well
16 Midas SW
17 Iron Point
18 Knight
19 Hot Pot
20 Izzenhood Ranch



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

Base maps: U.S. Geological Survey Dry Hills North 7.5' quadrangle (2016)
U.S. Geological Survey Kenny Creek 7.5' quadrangle (2016)
U.S. Geological Survey Dry Hills South 7.5' quadrangle (2016)
U.S. Geological Survey The Knolls 7.5' quadrangle (2016)
U.S. Geological Survey Red House Flat East 7.5' quadrangle (2016)
U.S. Geological Survey Elevenmile Well 7.5' quadrangle (2016)

See text for full unit descriptions, discussion, and references for this map.

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DRAFT
Preliminary geologic map
Has not undergone office, field review, or full editing
Will be revised before publication

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Nevada Bureau of Mines and Geology
2175 Raggio Pkwy.
Reno, Nevada 89512
ph. (775) 682-8766
www.nbmg.unr.edu; nbmg@unr.edu
2544