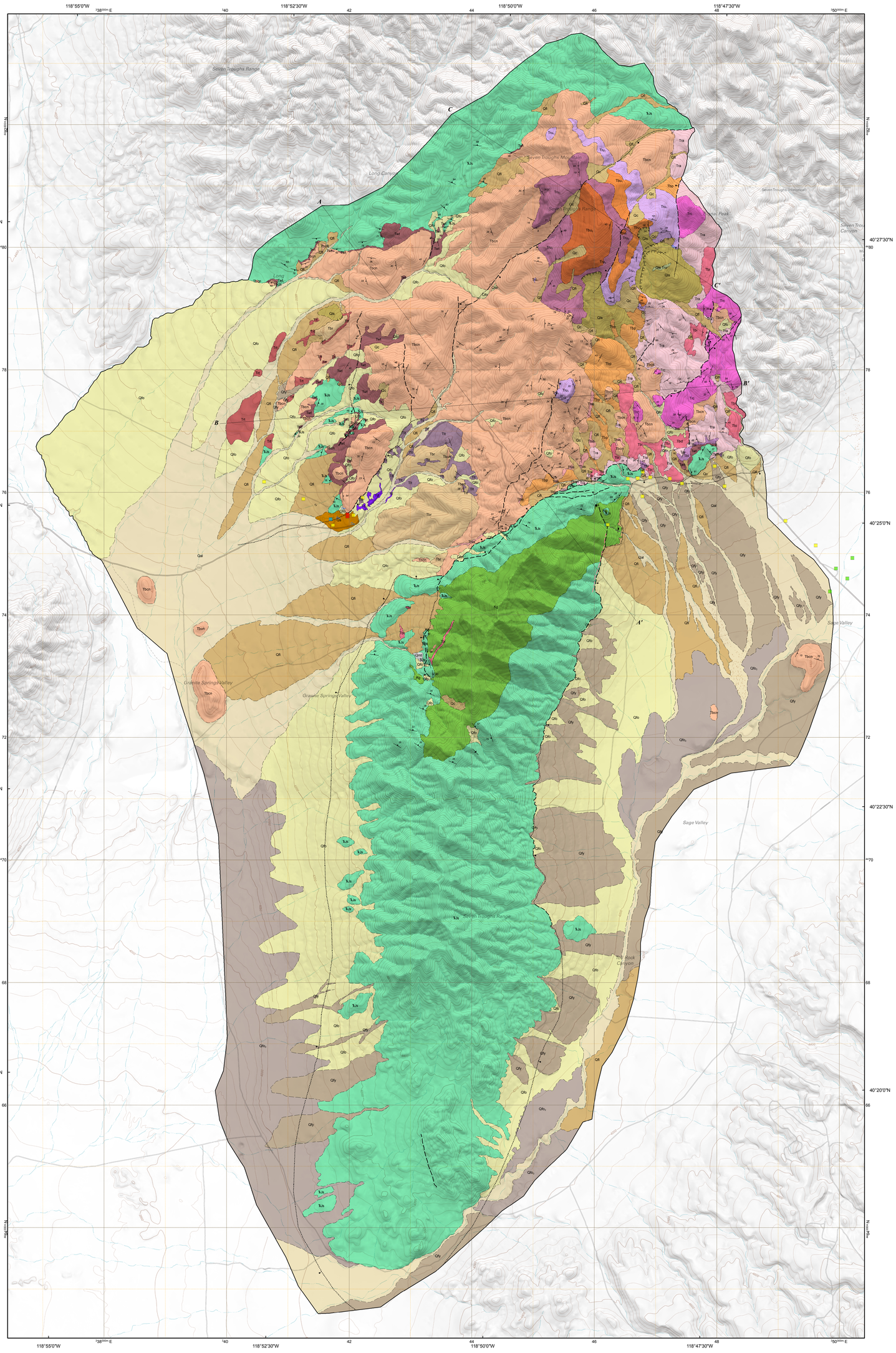
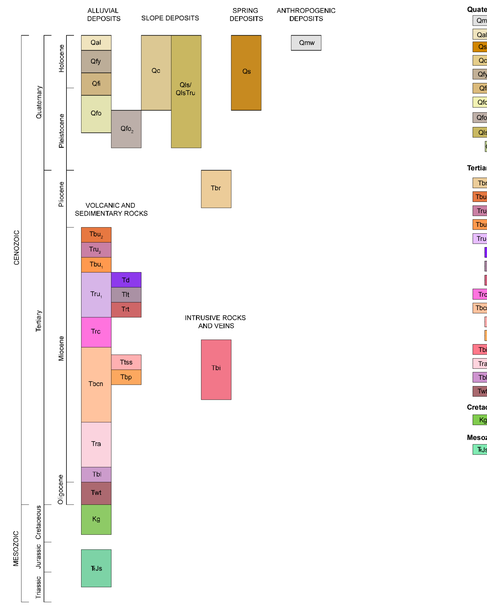
Prepared with support from the U.S. Department of Energy





Quaternary Deposits

- Qmw Mine waste
- Qal Active stream channels and channel deposits undivided
- Qs Active spring deposits and older spring deposits undivided
- Qc Colluvium and talus deposits
- Qfy Young active fan alluvium and recently abandoned fan alluvium, undivided
- Qfi Intermediate-age fan alluvium, undivided
- Qfo Old fan alluvium, undivided
- Qfo_2 Oldest Fan Alluvium, undivided
- Qls Lanslide deposits and lesser talus and colluvium, undivided
  - Qls:Tru Subunit of Qls:Landslide deposit consisting of upper and intermediate age rhyolite (Tru 1&2)

Tertiary Volcanic and Sedimentary Rocks

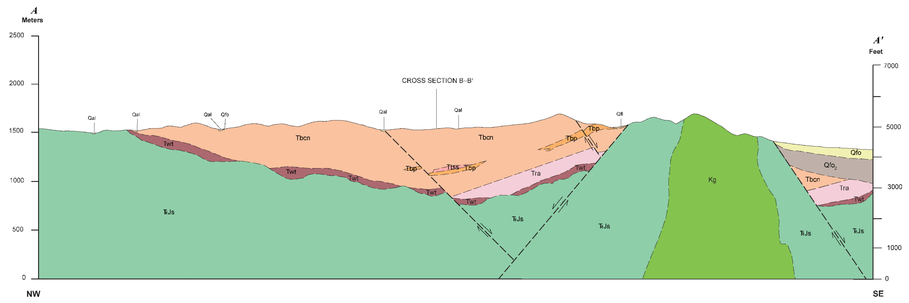
- Tbr Sedimentary breccia
- Tbu_3 Uppermost basalt flows
- Tru_3 Uppermost rhyolite flows
- Tbu_1 Intermediate-age basalt flows
- Tru_1 Intermediate-age rhyolite flows
  - Td Diatomaceous sedimentary rocks
  - Tlt Lithic tuff
  - Trt Rhyolite tuff and reworked ash
- Trc "Cap rock" rhyolite (13.78 Ma [Hudson, 2005])
- Tbcn Basalt flows, and lesser cinder cones and volcanic necks, undivided
  - Tbss Tuffaceous sandstone
  - Tbp Porphyritic basalt
- Tbi Basaltic dikes (14.2 Ma [Hudson, 2005])
- Tra Rhyolite flows, domes and interbedded epiclastic sediments, hydrothermally altered (14.11–14.43 Ma [Hudson, 2005])
- Tbl Lowest basalt flow
- Twt Welded ash-flow tuff

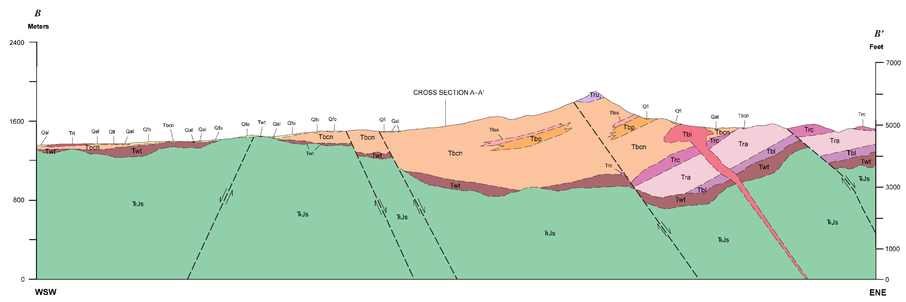
Cretaceous Intrusive Rock

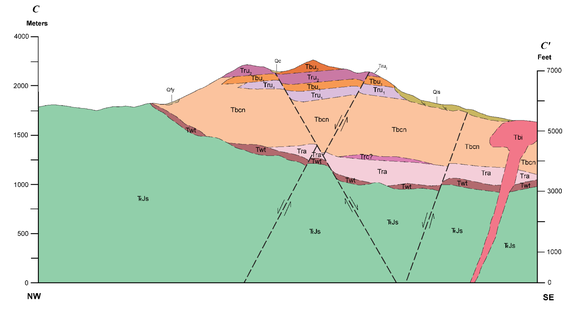
- Kg Granodiorite intrusion

Mesozoic Metasedimentary Rocks of the Auld Lang Syne Group

- TRJs Interbedded slate, phyllite, argillite, and sandstone







Contact Dashed where approximate, dotted where concealed, queried if identity or existence uncertain.

Normal fault Dashed where approximate, dotted where concealed; queried if identity or existence uncertain. Ball on downthrown side. Dip symbol where fault dip was measured. Arrow shows trend of striations.

Head or main scarp of landslide Dashed where inactive, subdued, indistinct and (or) approximate. Hachures point downscarp.

Tbi

Dike Dashed where approximate

Strike and dip of bedding

Inclined

Strike and dip of compaction foliation in ash-flow tuff

Inclined

Strike and dip of flow banding or flow foliation in volcanic rocks

Inclined Vertical

Strike and dip of average orientation of layering in volcanic sequence

Inclined

Strike and dip of flow foliation in metamorphic rocks

Inclined Vertical

Strike and dip of a joint

Inclined Vertical

Fresh water cold springs

Springs

2 meter temperature measurements (°C)

- 7.90 – 10.00
- 10.01 – 12.00
- 12.01 – 15.00
- 15.01 – 17.00
- 17.01 – 19.30

Line of cross section

A — A'

GN MN
1° 10' 14° 11'
UTM GRID AND
2011 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

Scale 1:24,000

0 0.5 1 kilometer

0 0.5 1 mile

0 1000 2000 3000 4000 5000 feet

CONTOUR INTERVAL 10 TO 40 FEET

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

Base maps: U.S. Geological Survey Seven Troughs NW 7.5' quadrangle (2012)
Seven Troughs 7.5' quadrangle (2012)
Trinity Pass NW 7.5' quadrangle (2012)
Blue Wing Flat North 7.5' quadrangle (2012)
Seven Troughs SE 7.5' quadrangle (2012)
Trinity Pass 7.5' quadrangle (2012)

Adjoining 7.5' quadrangle names

1	2	3
4	5	6
7	8	9

1 Dead Horse Canyon
2 Juniper Canyon
3 Rocky Canyon
4 Seven Troughs NW
5 Seven Troughs
6 Trinity Pass NW
7 Blue Wing Flat North
8 Seven Troughs SE
9 Trinity Pass

Map location

Suggested Citation:
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See accompanying text for unit descriptions and full list of references

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DRAFT
Preliminary geologic map
Has not undergone office or field review

Compilation by Corina Forson
Cartography and map production in ESRI ArcGIS v10.1 (ArcGeology v1.3) by Katie E. Ryan and Irene M. Seeyle

First Edition, October 2015
Symbology per FGDC-STD-013-2006
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PRELIMINARY GEOLOGIC MAP OF THE SOUTHERN AND CENTRAL SEVEN TROUGHS RANGE, POTENTIAL GEOTHERMAL AREA, PERSHING COUNTY, NEVADA

Corina Forson, James E. Faulds, and Mitchell D. Allen
Nevada Bureau of Mines and Geology

2015