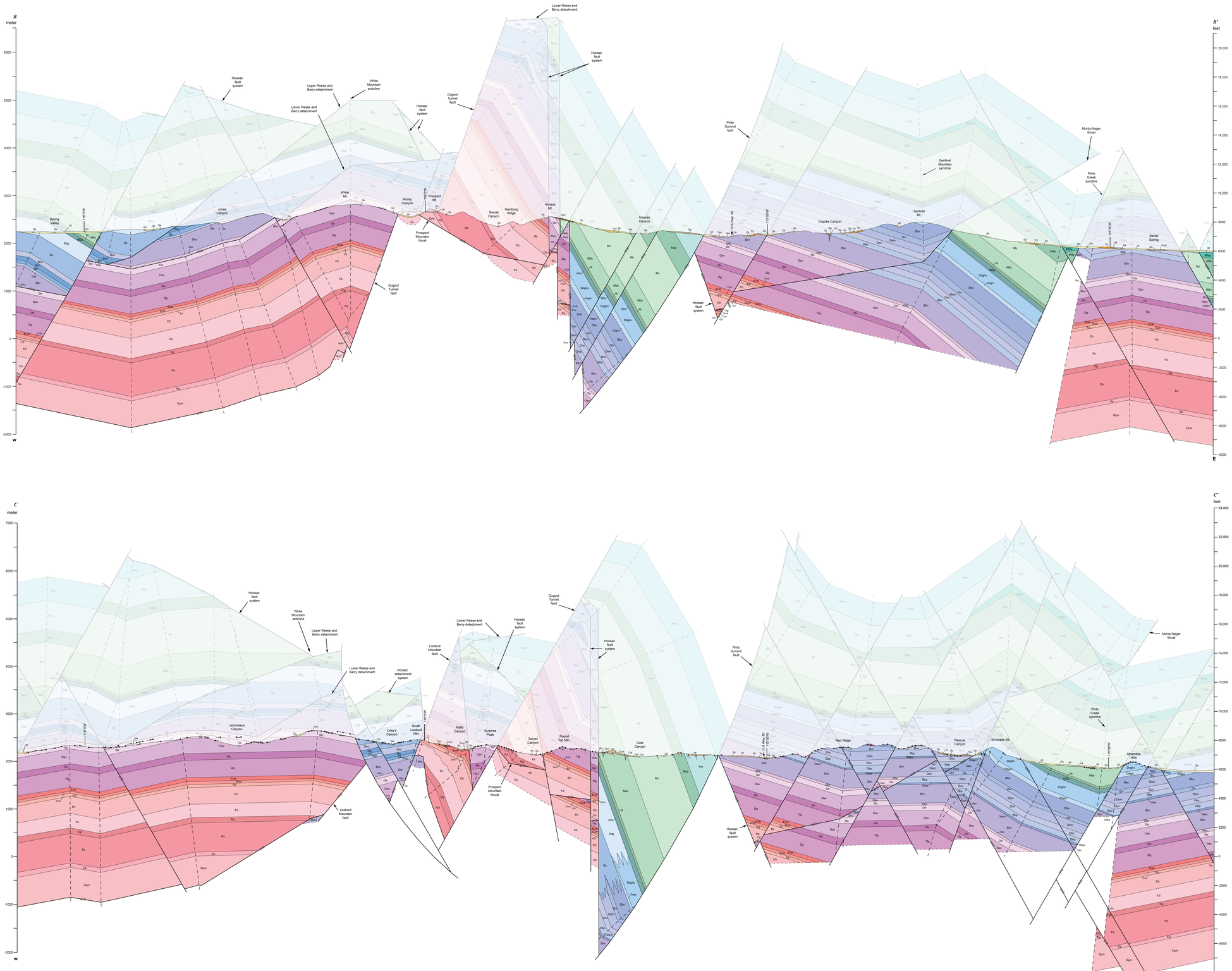
Prepared as part of the STATEMAP component of the National Cooperative Geologic Mapping Program in cooperation with the U.S. Geological Survey and with support from the Nevada Division of Minerals, the Geological Society of Nevada, and Timberline Resources Corporation.



GEOLOGIC MAP OF THE SOUTHERN PART OF THE EUREKA MINING DISTRICT AND SURROUNDING AREAS OF THE FISH CREEK RANGE, MOUNTAIN BOY RANGE, AND DIAMOND MOUNTAINS, EUREKA AND WHITE PINE COUNTIES, NEVADA

Plate 2 of 2

Sean P. Long[1], Christopher D. Henry[1], John L. Muntean[1], Gary P. Edmondo[2], and Robert D. Thomas[3]
[1]Nevada Bureau of Mines and Geology, University of Nevada, Reno, [2]Timberline Resources Corporation, [3]Consulting Geologist

2014

Quaternary

- Qim — Artificial fill, including mine dumps
- Qa, Qf, Qc, Qls — Alluvium (Qa); Terrace deposits (Qt); Alluvial fan deposits (Qf); Colluvium (Qc); Landslide deposits (Qls)
- Q'g — Capping gravel

Tertiary

- Tmh — Maggie Hill Basalt
- Tmc — Conglomerate below Maggie Hill Basalt
- Tnh — Nine Hill Tuff
- Tps — Pancake Summit Tuff
- Tpc — Conglomerate below Pancake Summit Tuff
- Tba — Basalt Peak andesite

Target Hill rhyolite
- Tr, Trx, Tt, Trd, Trq — Lava domes (Tlr); Coarse breccia (Trx); Pyroclastic-flow, fall, and surge deposits (Ttt); Dikes (Trd); Intrusive breccia (Tirx)
- Trmv — Richmond Mountain dacite

Pinto Peak Rhyolite
- Tpr, Tprv, Tprf, Trt, Tprd, Tbr, Tc — Lava domes (Tpr); Coarse breccia (Tprx); Lava flow (Tprf); Pyroclastic-surge, fall, and flow deposits (Tprt); Dikes (Tprd); Older conglomerate of Paleozoic limestone (Tlc); Siltstone and sandstone (Tb)

Ratto Spring Dacite
- Trs, Trrv, Trsd, Trsp — Lava flows (Trs); Coarse volcaniclastic deposits (Trsv); Dikes (Trsd); Breccia and conglomerate of Paleozoic rocks (Trsp)

Late volcaniclastic and sedimentary deposits
- Tgm — Gravel mostly composed of mixed Paleozoic
- Tgv — Gravel mostly composed of mixed volcanic rocks
- Tgrm — Gravel mostly composed of Basalt Peak andesite
- Tgl — Conglomerate composed of Paleozoic limestone clasts
- Tsc — Sandstone

Undivided rhyolite
- Trd, Trt — Dikes (Trd); Pyroclastic-surge, fall, and flow deposits (Trt)

- Tj — Jasperoid of unidentified protolith (alteration likely Cenozoic)

Intrusive igneous rocks
- Cenozoic(?) intrusions
- Late Cretaceous granite

Cretaceous

- KTc — Latest Cretaceous to late Eocene conglomerate
- Knc — Newark Canyon Formation (Lower Cretaceous)

UNCONFORMITY

Pennsylvanian, Permian

- Pcrc — Carbon Ridge Formation, upper conglomerate (Lower Permian)
- Pcr — Carbon Ridge Formation (Lower Permian)

Mississippian

- IPMe — Ely Limestone (Upper Mississippian–Lower Pennsylvanian)
- Mdp — Diamond Peak Formation (Upper Mississippian)
- Mc — Chainman Shale (Upper Mississippian) (possibly equivalent to Middle Mississippian Gap Wash Formation of Trexler et al. [2003])
- Mdc — Dale Canyon Formation (Mississippian)
- Mj — Joana Limestone (Lower Mississippian)
- MDp — Pilot Shale (Upper Devonian–Lower Mississippian)

Devonian

- Ddg — Devil's Gate Limestone (Middle–Upper Devonian) (Ddg)
  - Ddghc — Hayes Canyon member (Ddghc)
  - Ddgm — Meister member (Ddgm)
- Dds — Nevada Formation—Diamond Mountains
  - Dbs — Bay State Dolomite member (Dbs)
  - Dw — Woodpecker Limestone member (Dw)
  - Dsm — Sentinel Mountain Dolomite member (Dsm)
  - Doc — Oxyoke Canyon Sandstone member (Doc)
  - Dbp — Beacon Peak Dolomite member (Dbp)
  - Dbpq — Beacon Peak Dolomite member, basal quartzite (Dbpq)

Nevada Formation—Fish Creek Range and Mountain Boy Range
- Ds — Simonson Dolostone member
- Doc — Oxyoke Canyon Sandstone member
- Dsr — Sadler Ranch member
- Db — Bartine member of the McColley Canyon Formation
- Dbp — Beacon Peak Dolomite member

Silurian

- Slm — Lone Mountain Dolomite (Silurian)

Ordovician

- DOOu — Devonian, Ordovician, or Cambrian carbonate, undivided
- Ohc — Hanson Creek Formation (Upper Ordovician)
- Oe — Eureka Quartzite (Middle Ordovician)
- Opu — Pogonip Group undivided (Lower–Middle Ordovician) (Opu)
  - Oav — Antelope Valley formation (Oav)
  - Onn — Ninemile Formation (Onn)
  - Og — Goodwin Formation (Og)

Cambrian

- €wb — Windfall Formation (Upper Cambrian) (€w)
  - €wb — Bullwhacker member (€wb)
  - €wc — Catlin member (€wc)
- €d — Dunderberg Shale (Upper Cambrian)
- €h — Hamburg dolomite (Middle and Upper Cambrian)
- €s — Secret Canyon Shale (Middle Cambrian)
- €g — Geddes Limestone (Middle Cambrian)
- €e — Eldorado dolomite (Middle Cambrian)
- €p — Pioche Shale (Lower Cambrian)
- €pm — Prospect Mountain Quartzite (Lower Cambrian)

Contact Solid where certain and location accurate, dashed where approximate, dotted where concealed, showing dip bearing.

Internal contact Solid where certain and location accurate.

Normal fault Solid where certain and location accurate, dashed where approximate, dotted where concealed. Ball on downthrown side.
In cross section, T towards observer; A away from observer; arrows show relative motion.

Thrust fault Solid where certain and location accurate, dashed where approximate, dotted where concealed.

Detachment fault Solid where certain and location accurate, dashed where approximate, dotted where concealed.

Anticline Solid where certain and location accurate, dashed where approximate, dotted where concealed.
In cross section, kink axis shown as thin dashed line.

Syncline Solid where certain and location accurate, dashed where approximate, dotted where concealed.
In cross section, kink axis shown as thin dashed line.

Boundary of open pit mine

Line of cross section

Strike and dip of bedding[1]: Inclined; Vertical; Horizontal; Overturned; Apparent dip, in cross section

Strike and dip of bedding[2]: Inclined; Vertical; Overturned; Apparent dip, in cross section

Strike and dip of bedding[3]: Inclined; Overturned; Apparent dip, in cross section

Strike and dip of bedding[4]: Inclined; Vertical; Overturned

Strike and dip of joints[1]: Inclined

Strike and dip of igneous foliation[1]: Inclined

Strike and dip of compaction foliation in ash-flow tuff[1]: Inclined

Sample or drill location with label

[1] From the authors.

[2] Nolan, T.B., 1962, The Eureka Mining District, Nevada: U.S. Geological Survey Professional Paper 406, 78 p.

[3] Nolan, T.B., Merriam, C.W., and Blake, M.C., Jr., 1974, Geologic map of the Pinto Summit quadrangle, Eureka and White Pine counties, Nevada: U.S. Geological Survey Miscellaneous Investigations Series, Map I-793, 1sp., 2 plates, scale 1:31,680.

[4] From Timberline Resources Corporation.

Geologic data from Nolan et al. 1974 shown in gray.

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

Suggested citation:
Long, S.P., Henry, C.D., Muntean, J.L., Edmondo, G.P., and Thomas, R.D., 2014, Geologic map of the southern part of the Eureka mining district and surrounding areas of the Fish Creek Range, Mountain Boy Range, and Diamond Mountains, Eureka and White Pine counties, Nevada: Nevada Bureau of Mines and Geology Map 183, 2 plates, scale 1:24,000, 36 p.

UTM GRID AND
1990 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

Adjoining 7.5' quadrangle names

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15

1 Hay Ranch
2 Diamond Peak
3 Eureka
4 Diamond Peak
5 West of Buck Pass
6 Combs Peak
7 Spring Valley
8 Pinto Summit
9 Silverado Mountain
10 Pancake Summit
11 West of Bellevue Peak
12 Bellevue Peak
13 Pinto Summit SW
14 Black Point
15 Pancake Summit SW

Scale 1:24,000

0 — 0.5 — 1 kilometer

0 — 0.5 — 1 mile

0 — 1000 — 2000 — 3000 — 4000 — 5000 feet

CONTOUR INTERVAL 40–20 FEET

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

Base map: U.S. Geological Survey
Spring Valley Summit 7.5' quadrangle (2012)
Pinto Summit 7.5' quadrangle (2012)
Silverado Mountain 7.5' quadrangle (2012)

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

Map and text first published 2012
Supported by the U.S. Geological Survey STATEMAP Program (Agreement No. G11AC20246) and with support from the Nevada Division of Minerals, the Geological Society of Nevada, and Timberline Resources Corporation (Paul Dorskam, CEO).

PEER-REVIEWED MAP
Office review by Peter Dilles, James Trexler, and Peter Vikre
Field review by Peter Dilles and Peter Vikre

Edited by Jack Hursh
Compilation by Sean P. Long, Christopher D. Henry, and John L. Muntean
Cartography and map production in ESRI ArcGIS v10.1 (ArcGeology v1.3)
by Jeff L. Shaw and Jack Hursh
Symbology (per FGDC-STD-013-2006)
First Edition, April 2015
Printed by Nevada Bureau of Mines and Geology

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Nevada Bureau of Mines and Geology
2175 Raggio Parkway
Reno, NV 89512-1190
ph. (775) 682-8700
www.nbmg.unr.edu; nbmg@unr.edu

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2015