

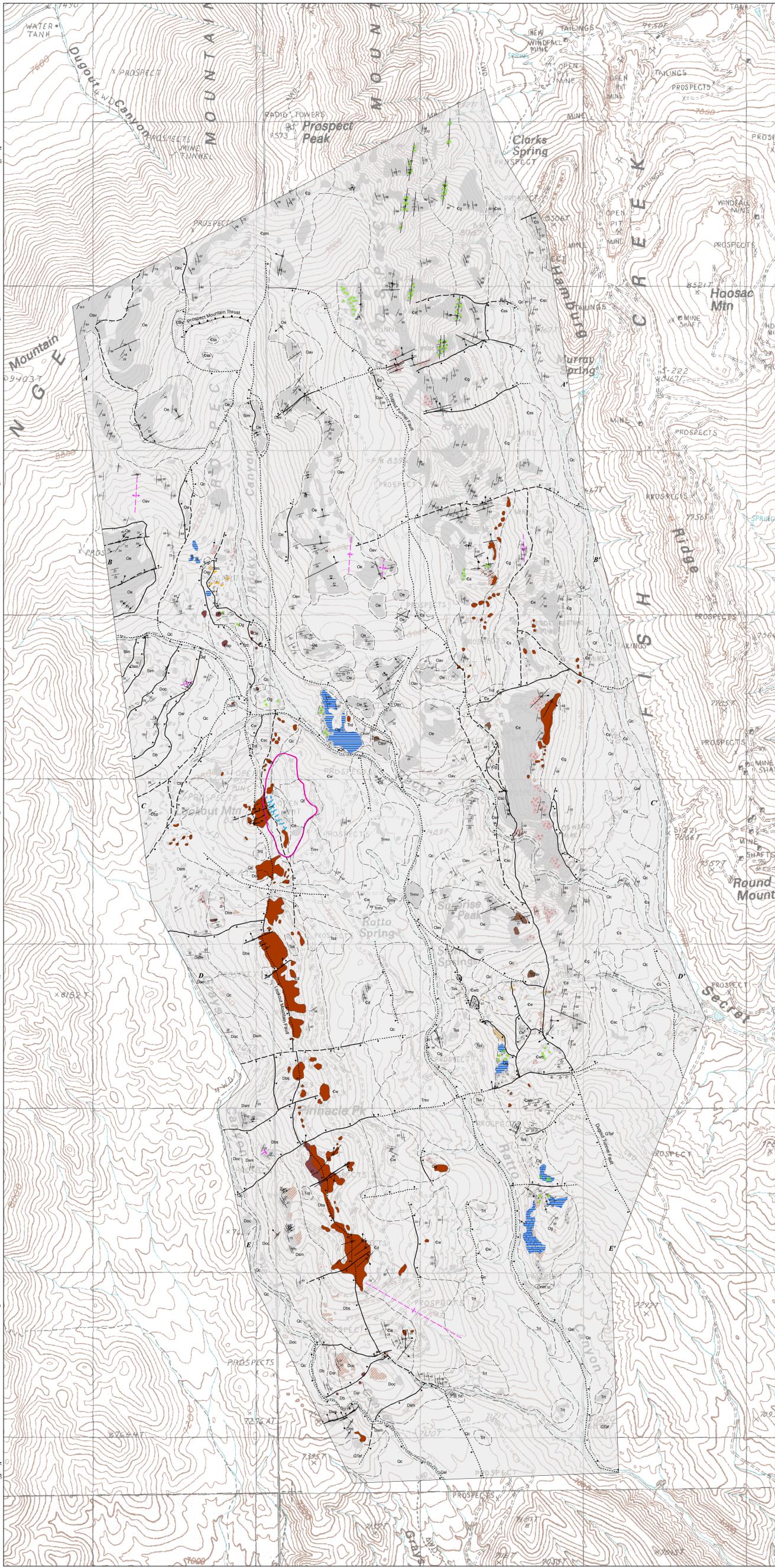
PRELIMINARY GEOLOGIC AND ALTERATION MAPS OF LOOKOUT MOUNTAIN, RATIO RIDGE AND ROCKY CANYON, SOUTHERN EUREKA MINING DISTRICT, EUREKA COUNTY, NEVADA

Plate 2 of 2

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2014



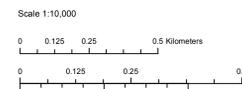
- Collapse breccia Resulting from first-order karsting, as indicated by clasts exhibiting silty horizons, graded bedding, and fluvial re-working. Enhanced by secondary hydrothermal dissolution, consisting of sandstone (chemically rounded, rhombohedral dolomite crystals) dolomite and accumulated non-soluble quartz. Sanding process results in variable amounts of volume loss, commonly developed within Heringburg Dolomite.
- Jasperoid Fine-grained quartz replacement contemporaneous with dissolution of carbonate host rock, localized in fault zones. Exhibits a fine-scale to smooth crypto-crystalline texture. Ridge and cliff forming; outcrops very well.
- Fracture-controlled jasperoid Jasperoid replacement confined to fractures in unaltered host rock.
- Jasperoid replacement of breccia matrix, clasts of protolith remain unaltered.
- Decarbonization Yields volume loss. Manifests as increased porosity, vuggy outcrop texture, and/or destruction of original rock texture.
- Dolomitization Secondary (hydrothermal) dolomitization of carbonate rock. Carbonate exhibits weak reaction to 10% HCl solution.
- Limonite after sulfide; goossan Goossan outcrops are resistant to weathering, while obliteration of protolith yields brown, yellow, to red purpy outcrops.
- Limonite; fracture controlled iron oxide replacement confined to fractures in outcrop.
- Structural breccia
- Quartz veining Primarily milky-white, fine grained, and fracture controlled. Centim scale thickness.
- Calcite veining Generally fracture-controlled, but also vug- and pocket-filling/encrusting.

NOTE: gray fill indicates outcrop, light gray shaded fill indicates interpreted extent of stratigraphic unit. See Plate 1 for explanation of units.

Symbology per FGDC-STD-013-2006

- Contact Dashed where approximate, dotted where concealed.
- Normal fault Solid where certain and location accurate, dashed where approximate, dotted where concealed, queried if density or existence uncertain. Ball on downthrown side.
- Thrust fault Dotted where concealed. Sawtooth on upper plate.
- Detachment fault Solid where certain and location accurate, dashed where approximate, dotted where concealed. Half-churches on footwall.
- Anticline Dashed where approximate. Arrow shows direction of dip.
- Syncline Dashed where approximate. Arrow shows direction of dip.
- Fault showing orientation of slickenlines. Showing dip; diamond showing bearing and plunge of slickenline.
- Outline of Lookout Mountain Pit
- Strike and dip of bedding Inclined Vertical Overturned
- Strike and dip of joints Inclined
- Strike and dip of foliation Inclined Vertical

Suggested Citation
 Di Fiori, R. V., Long, S. P., Muntean, J. L., and Edmondo, G. P.,
 Preliminary geologic and alteration maps of Lookout Mountain,
 Ratio Ridge and Rocky Canyon, southern Eureka mining
 district, Eureka County, Nevada: Nevada Bureau of Mines and
 Geology Open-File Report 14-8, scale 1:10,000.



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 (1990)
 Base map: U.S. Geological Survey Pinto Summit
 7.5 quadrangle (1990)
 Base map: U.S. Geological Survey Pinto Summit SW
 7.5 quadrangle (1990)
 Base map: U.S. Geological Survey Bellevue Peak
 7.5 quadrangle (1990)



- Adjoining 7.5 quadrangle names
- | | | | |
|---|----|----|----|
| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |
- 1 Hay Ranch
 - 2 Denon Peak
 - 3 Eureka
 - 4 Diamond Peak
 - 5 Combs Peak
 - 6 Spring Valley Summit
 - 7 Pinto Summit
 - 8 Silverado Mountain
 - 9 West of Bellevue Peak
 - 10 Bellevue Peak
 - 11 Pinto Summit SW
 - 12 Black Point

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DRAFT
 Preliminary geologic map
 See not otherwise noted or field review

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