

Toiyabe Hills Folio E
Geologic Interpretation Map
 October 31, 2024

EXPLANATION

- Qal** Quaternary. Loose sediments, composed of gravels, sands, silts, and clays.
- Tint** Tertiary Intrusive (undifferentiated). Tan, orange and light to medium green dikes and sills. Lithified groundmass with rare 0.5-2mm rounded to embayed quartz eyes. Hydrothermal alteration includes limonite oxidation, variable amounts of brassy to fine grained pyrite, and propylitization. Along the Carlin Trend, petrographic work by Newmont defined texturally similar intrusive rocks as lamprophyres.
- Ttfp** Tertiary quartz feldspar porphyry. Tan to light gray dikes and sills; ophitic groundmass with rare 0.5 to 3mm phenocrysts of quartz and feldspar; hydrothermal alteration includes sulfidated groundmass, sericite, pyrite, limonite. Visually the same intrusive type as quartz feldspar (± biotite) sills and dikes observed in the Ada St. F Canyon, and Corral Hills deposits ~10km east-northeast of Toiyabe.
- Ov** Western Siliceous Sandstone (undifferentiated). Tan, gray, black, thin to medium bedded cherty mudstone with Monocle structures and a black spider web texture, thin to medium to medium bedded siliceous mudstone and siltstone, quartzite, and locally greenstone. Proximal to the Roberts Mountains Thrust fault, these rocks are pervasively folded. Rock types and textural features are reminiscent of the Vinton and/or Valley Formations.
- Ov-ls** Ordovician Vinton Limestone. Dark brown, thin to medium bedded platy limestone.
- Ov-qtzt** Quartzite. Gray/tan/brown, bold angular and massive outcrops to angular subcrop. Currently interpreted as the Valley Formation.
- Dw** Devonian Wenker Formation. Tan, red, orange, maroon (oxidized) to black (carbonaceous); thin to medium bedded micritic, silty limestone and silty micritic limestone; planar to wavy laminated; may contain elliptical to bulbous black phosphatic lenses.
- Dw/Ov** Devonian Wenker Formation. Tan, red, orange, maroon (oxidized) to black (carbonaceous); thin to medium bedded micritic, silty limestone and silty micritic limestone; planar to wavy laminated; may contain elliptical to bulbous black phosphatic lenses. Significant component of Ov cherty mudstone float.

Mapping Symbolology

- Quartz Veins within the Dw section
- - - Fault, dashed where inferred
- ▲ Thrust fault with teeth on the upper plate
- Anticline, with plunge direction
- ↪ Syncline, with plunge direction

