

Geologic Map of the Wahoo Ranch 7.5-Minute Quadrangle, Catron and Socorro Counties, New Mexico

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Open-file Digital Geologic Map OF-GM 68

Scale 1:24,000

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af **Man-made deposits (Holocene)** – Earthen dams for man-made tanks.

Qtz **Quartz veins (unknown age)** – Quartz veins. Only occur along very southern boundary of the Wahoo Ranch map area.

Qv **Valley alluvium (Holocene)** – Active alluvium in valleys, gulleys, and along active stream beds, generally incised <3m.

Qc **Talus and colluvium (Holocene - Quaternary)** – Talus and colluvium. Thickness: 0-10 meters.

Qt **Inset terrace deposits (Quaternary)** – Inset terrace deposits composed of thin (<3 m) deposits of soil-modified alluvium inset into deeply incised deposits of piedmont gravel (QTp).

Qf **Young alluvial fans** -- Small discrete fans. Mapped where large enough and morphology clearly displayed on photos. Age equivalent of Qv.

Qpy **Younger Pleistocene Piedmont surfaces (Quaternary)** – Piedmont surfaces developed on poorly to partially consolidated sand and gravel deposits (QTp). The surfaces consist of thin soil modified deposits generally < 3 meters thick. The younger surfaces generally post-date the most recent faults in the area which do cut the older surfaces (Qpm and Qpo).

Qpo **Older Pleistocene Piedmont surfaces (Quaternary)** – Piedmont surfaces developed on poorly to partially consolidated sand and gravel deposits (QTp). The surfaces consist of thin soil modified deposits generally < 3 meters thick.

Twr **Rhyolite of Wahoo Canyon (Oligocene)** – Phenocryst-poor rhyolite lava. Thickness: 0-150 meters. Tan to dark blue gray in color. Contains 1-5 percent feldspar phenocrysts and a few large rounded quartz phenocrysts.

Twrt **tuffaceous member rhyolite of Wahoo Canyon** -- Phenocryst poor, bedded tuffs and sediments immediately below and assumed to be related to eruption of overlying rhyolite. Typically tan to light brown cross bedded sandstone and perhaps fall deposits.

Tst **Volcaniclastic and nonwelded pyroclastic rocks (Oligocene)** – Volcaniclastic sandstone, pebbly sandstone and sparse conglomerate interbedded with variable amounts of nonwelded, felsic tuff. Deposits occur at several stratigraphic intervals in the map area. Commonly, sandstone intervals occur in thick-bedded sets with high-angle cross-stratification suggestive of eolian deposition. Thickness: 0-75 meters.

Tvp Vicks Peak Tuff (Oligocene) – Densely welded rhyolitic ash-flow tuff containing 1-15% phenocrysts, chiefly sanidine up to 4mm, lesser plagioclase up to 2mm, and sparse pyroxene, hornblende, and biotite <2 mm. The tuff contains 2-25% strongly flattened pumice lapilli up to 1m long, and sparse <10 cm lithic lapilli. The tuff is typically light gray and the pumice lapilli are commonly recessive on weathered surfaces. Thickness: 0-260 meters.

Tdt Dacitic ignimbrite (Oligocene) – Densely welded dacitic ignimbrite containing ~15% 2-4 mm plagioclase with up to 3% 1-3mm biotite. The ignimbrite is closely associated with the Dacitic lava (Tdd). Thickness: 0-15 meters. Texturally zoned in some exposure in Wahoo from ~3% to 15% phenocrysts.

Tdt2 Dacitic ignimbrite (Oligocene) – Densely welded dacitic ignimbrite containing ~15% 2-4 mm plagioclase with up to 3% 1-3mm biotite. 0-15 meters. Occurs near southern boundary of quadrangle as small isolated outcrops with no stratigraphic context.

Tdd Dacitic lava (Oligocene) – Dacitic lava with pink to purple matrix containing 15% 1-3mm plagioclase and ~2% <0.5mm opaque and/or altered mafic phenocrysts. Thickness: 0-70 meters.

Tda Andesitic lava (Oligocene) – Andesitic lava containing 15% <1mm feldspar, 3% 1mm green mafic phenocrysts. The lava occurs at the base of the volcanic section in Wahoo Canyon where it is probably correlative to Spears Formation andesitic lavas which are abundant just to the south in the Wahoo Ranch map area. Thickness: 0-100 meters.

Tds Volcaniclastic sandstones and conglomerates (Oligocene)- Volcaniclastic sandstones, conglomerates and mudstones. Sandstones are typically light tan whereas conglomerates often gray. Sandstones often well bedded with steep cross beds.

Tdu Andesitic lavas and volcaniclastic sediments undivided (Oligocene)- Andesitic lavas and volcaniclastic sediments mapped together in areas where exposure were poor or outcrop areas too small to readily separate the rock types.

Pl Paleozoic Limestones --Massive, coarsely recrystallized, light gray limestones but also medium-bedded, medium-gray to pink, finely recrystallized limestone. Exotic blocks of Pennsylvanian limestones were mapped just to the south within debris flows of the Rubio Peak Formation. Cikoski and others 2012.

Cikoski, C. T., Harrison, R. W., Konig, D. J., and Jahns, R. H., 2012, Geologic map of the Iron Mountain 7.5' quadrangle, Sierra County, New Mexico: New Mexico Bureau of Geology Open-file Geologic Map 229, 1:24,000 scale.