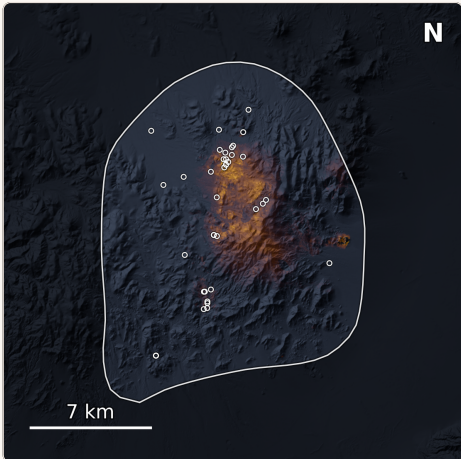




Modelled prospectivity, brighter is higher. White outline is the district boundary, white circles are recorded gold occurrences. Colour is scaled against each district's own region. Viewable in CARTA over imagery.

OVERVIEW

Every one of the district's thirty-two recorded gold occurrences falls in the top quarter of ranked ground and twenty-nine in the top tenth, with the median deposit in the top 2.3% of ranked ground. Gilbert sits in the Walker Lane training region, so these figures measure fit rather than prediction. The anomaly is one coherent silicified body through the rhyolite in the centre of the district, with the recorded workings sitting on it.

LOGIC CHAIN

The largest contribution across the district's top decile is shallow modelled depth to basement, with geodetic strain behind it. Proximity to the strongest phyllic alteration mapped from spectral data follows. The kriged rock geochemistry then adds arsenic, an advanced-argillic index and the copper fraction of the base-metal suite, all modestly elevated and consistent with the silicification on record. The gold here occurs in quartz and chalcedony veins in Tertiary rhyolite, and cinnabar and stibnite at the hot-spring occurrences are the shallow expression of the same system.

COORDINATES

38.1476°N, 117.7019°W · UTM 11N 438,502E / 4,222,422N

DEPOSIT TYPE

Epithermal Au-Ag veins in Tertiary rhyolite with associated hot-spring mercury. Wollastonite skarn and porphyry Mo occurrences also recorded.

MODEL PERFORMANCE IN THIS DISTRICT · IN-SAMPLE

Known deposits in top 25% of ranked ground	100%		1.00
Known deposits in top 10% of ranked ground	91%		0.91
Median deposit rank, against all ranked ground	top 2.3%		0.98
Peak score in district	0.769		0.77

NEAREST KNOWN ANALOG

Mammoth Prospect, the highest-scoring named past producer in the district at 0.692. The Monte Cristo workings follow at 0.592 and 0.540. Eighteen of the district's fifty-one records are past producers, with output recorded between 1925 and 1989.

LOCAL GEOLOGY

Gold in quartz and chalcedony veins hosted mainly in Tertiary rhyolite, with chert, quartzite and andesite hosting further workings. Silicification is the dominant recorded alteration, with pyrite and jarosite. Cinnabar and stibnite occur at hot-spring mercury occurrences in the same district. Ore controls on record are shear zones, fault zones and breccia-veins. A wollastonite skarn and a porphyry molybdenum occurrence are also recorded.

DATA DENSITY

93 rock geochemical samples inside the district, no soil sample · 38 recorded gold occurrences, 18 of them past producers · no drill data · Walker Lane training region, in-sample

SUGGESTED NEXT ACTION

Walk the silicified centre between Mammoth and the Monte Cristo workings, where the anomaly runs continuous across ground carrying no recorded occurrence. Aeromagnetic drone survey, 5 x 5 km AOI, 50 m line spacing, one flying day.

KNOWN UNKNOWN

Gilbert lies inside the training region, so these figures measure fit rather than prediction. The district is polygenetic: hot-spring mercury, epithermal gold-quartz vein, wollastonite skarn and porphyry molybdenum occurrences are all recorded inside it, and only six of fifty-one records carry a deposit-model code. The score cannot separate which system it is responding to.

