



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

Centred on the Pansy Lee workings, with 39 recorded deposits. 95% fall in the top quarter of ranked ground. 87% fall in the top tenth. The median deposit outranks 98% of ranked ground. Fourteen are the target class, recorded as low-sulfide gold-quartz veins. A focused anomaly, a documented production record and the target deposit class coincide here.

LOGIC CHAIN

The largest single contribution across the district's top decile is geodetic strain, the present-day rate at which the crust is extending, and unlike most districts it discriminates here: the top decile sits some 2.4 regional standard deviations above the rest of Ten Mile on it. Modelled depth to basement is correspondingly shallow. Kriged soil barium and mercury follow, and the ground sits close to the strongest phyllic alteration mapped from spectral data. Barium proxies for the adularia-sericite alteration the historical descriptions do not name, and mercury is consistent with workings that stop at the sulfide boundary.

COORDINATES

41.0215°N, 117.8741°W · UTM 11N 426,507E / 4,541,515N

DEPOSIT TYPE

Middle Miocene low-sulfidation epithermal Au-Ag with strong supergene enrichment. Classified in MRDS as low-sulfide gold-quartz vein.

HELD-OUT MODEL PERFORMANCE IN THIS DISTRICT

Known deposits in top 25% of ranked ground	95%		0.95
Known deposits in top 10% of ranked ground	87%		0.87
Median deposit rank, against all ranked ground	top 1.8%		0.98
Peak score in district	0.857		0.86

NEAREST KNOWN ANALOG

Pansy Lee Mine, a past producer and the district's highest-scoring record at 0.772. It sits inside the anomaly rather than beside it. Nevada Consolidated at 0.740 and Ten Mile Mine at 0.668 are also captured.

LOCAL GEOLOGY

Veins occupy northeast-trending shear zones in Triassic metasedimentary rocks. Local skarn near Late Triassic diorite. Extensive pediment gravel cover. Primary mineralisation is electrum with petzite at bonanza grades. Workings generally stop at the sulfide boundary. Published geochronology places the district near 16.0 Ma. That groups it with National and Sleeper among the bimodal low-sulfidation systems.

DATA DENSITY

18 rock and 4 soil geochemical samples inside the district · 39 recorded gold occurrences across 30 documented sites · no drill data

SUGGESTED NEXT ACTION

Field-check the top-decile cluster northeast of Pansy Lee. Aeromagnetic drone survey over the cluster. 5 x 5 km AOI, ~25 km², 50 m line spacing, one flying day.

KNOWN UNKNOWNs

Two readings of this district disagree and the score cannot settle between them. Its 16 Ma age and electrum-petzite mineralogy are those of a low-sulfidation epithermal system, the style being targeted. The occurrence records instead describe shear-hosted gold-quartz veins in metasedimentary host rocks, a different style entirely. If the records are the better reading, the district ranks high for a reason other than the one being looked for. Extensive pediment gravel also hides much of the district from any surface-sensing measurement.

TARGETS

VALUE-OF-INFORMATION RANKING

PROSPECTIVITY

EVERY FAMILY COMBINED · POSTERIOR MEAN

GEOCHEMISTRY

ASSAYS KRIGED BETWEEN SAMPLE POINTS

GEOPHYSICS

MAGNETICS REDUCED TO POLE · TILT AND GRADIENT

STRUCTURAL

FAULT ARCHITECTURE · PROXIMITY AND DENSITY

SPECTRAL

ASTER ALTERATION SIGNATURE BAND RATIOS

TERRAIN

ELEVATION MODEL · TERRAIN DERIVATIVES

-  Ranked drill target
-  Drone survey block

5 km

