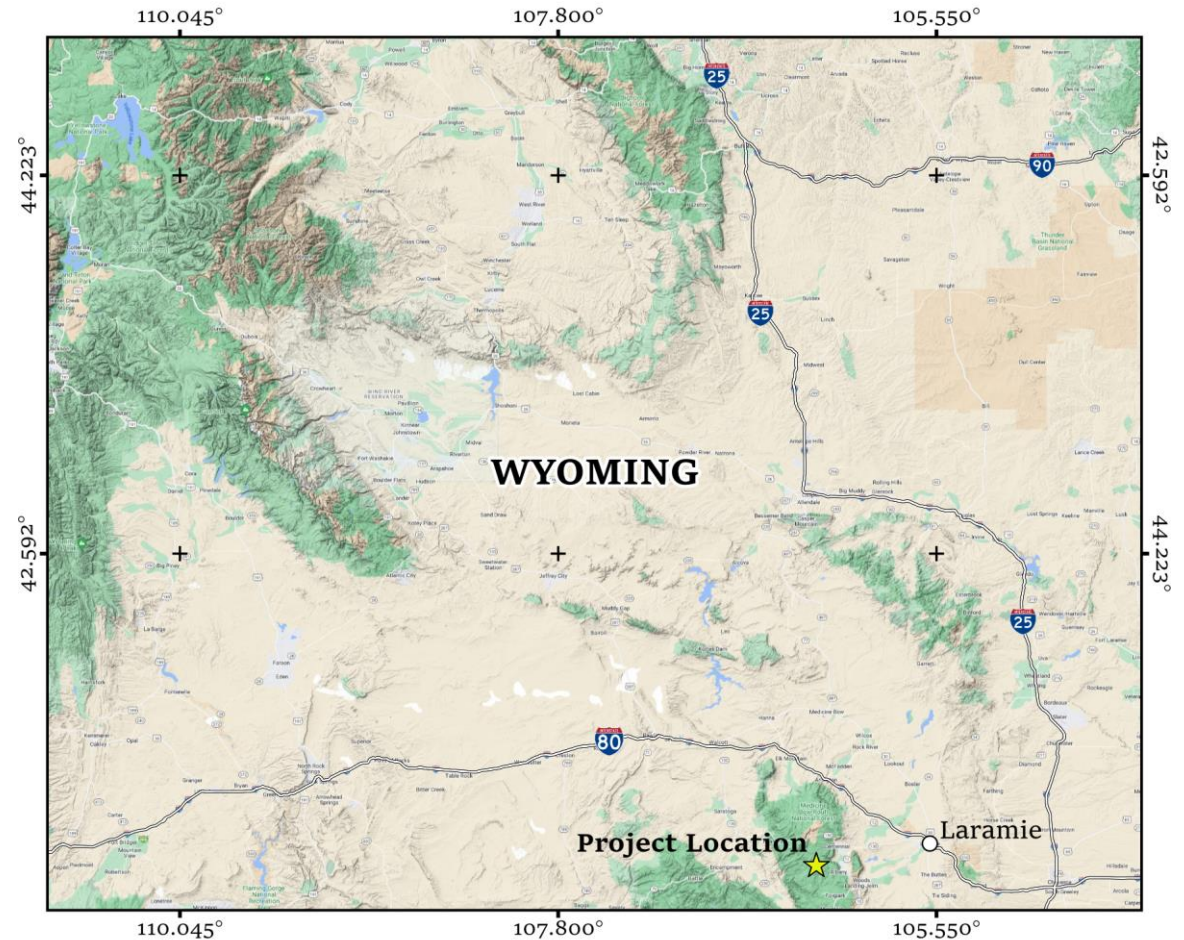


Shambhala Phase I Exploration

Surface sampling, Assay results, Geostatistics, Conclusions
prepared by Justin Mistikawy, M.S.
for BYRG – Red Beryl Mining Co.

Shambhala Platinum Project - Introduction

- Located in Medicine Bow-Routt National Forest, Albany Co., WY
- Part of the historic New Rambler Mining District (Au, Cu, Pt)
- Historically mined for Cu then Pt
- Last mined in 1918, mining activity ceased due to a mill fire
- BYRG owns 71 lode mining claims around the New Rambler



SCALE 1:5,000,000



EPSG:4979

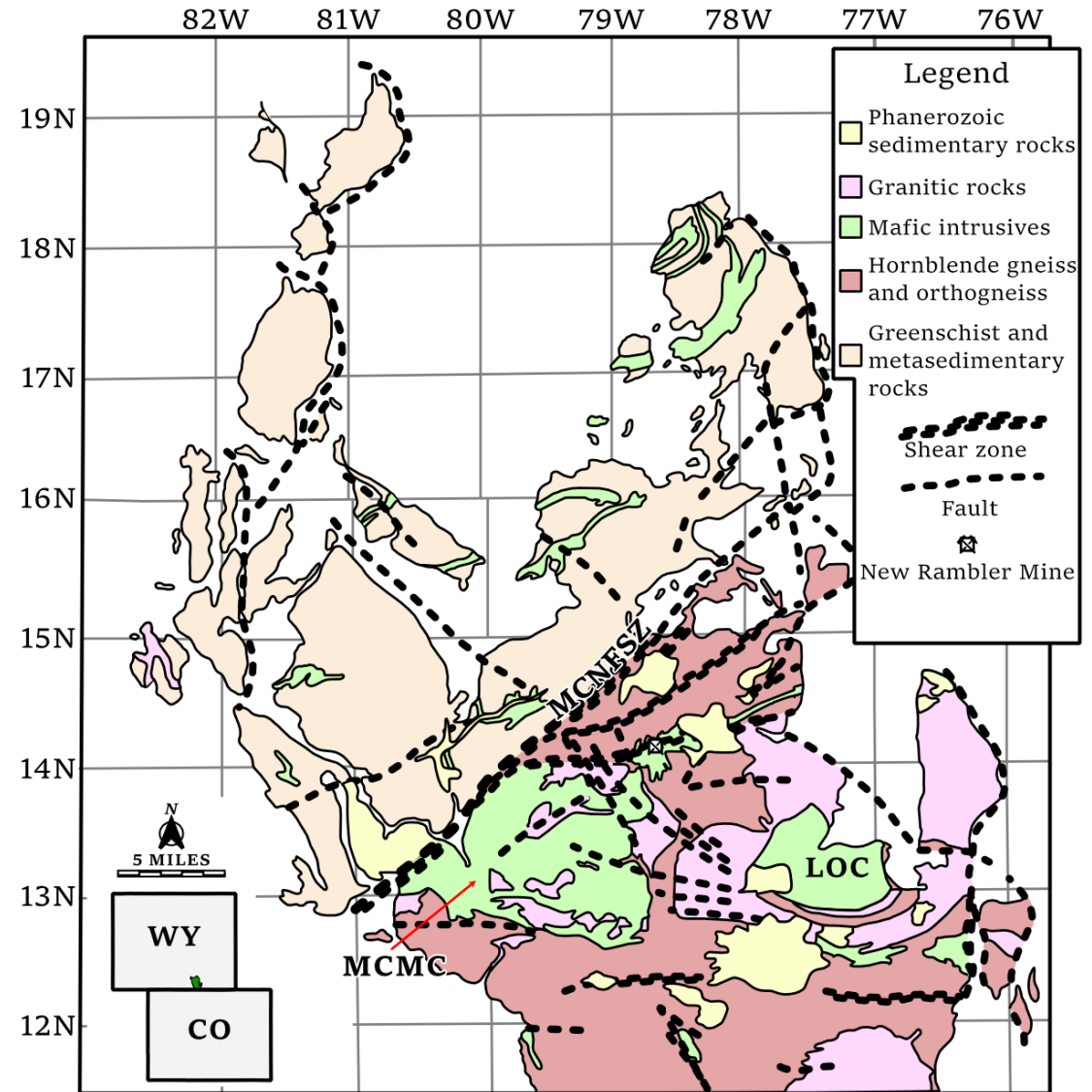


Hard Rock Consulting
7114 W Jefferson Ave., Ste 308
Lakewood, CO., 80235

Shambhala Platinum Project – Local Geology

- Archean province of the WY craton
- Major regional structure is the Mullen Creek Nash Fork Shear Zone (aka the Cheyenne Belt)
- ~1,730 to 1,780 m.y. old, compositionally variable intrusions
- Complex structural history ranging from Paleoproterozoic to Tertiary
- New Rambler area at intersection of shear zones and mafic-to-ultramafic intrusions

(McCallum et al., 1976; Duebendorfer and Houston, 1987)



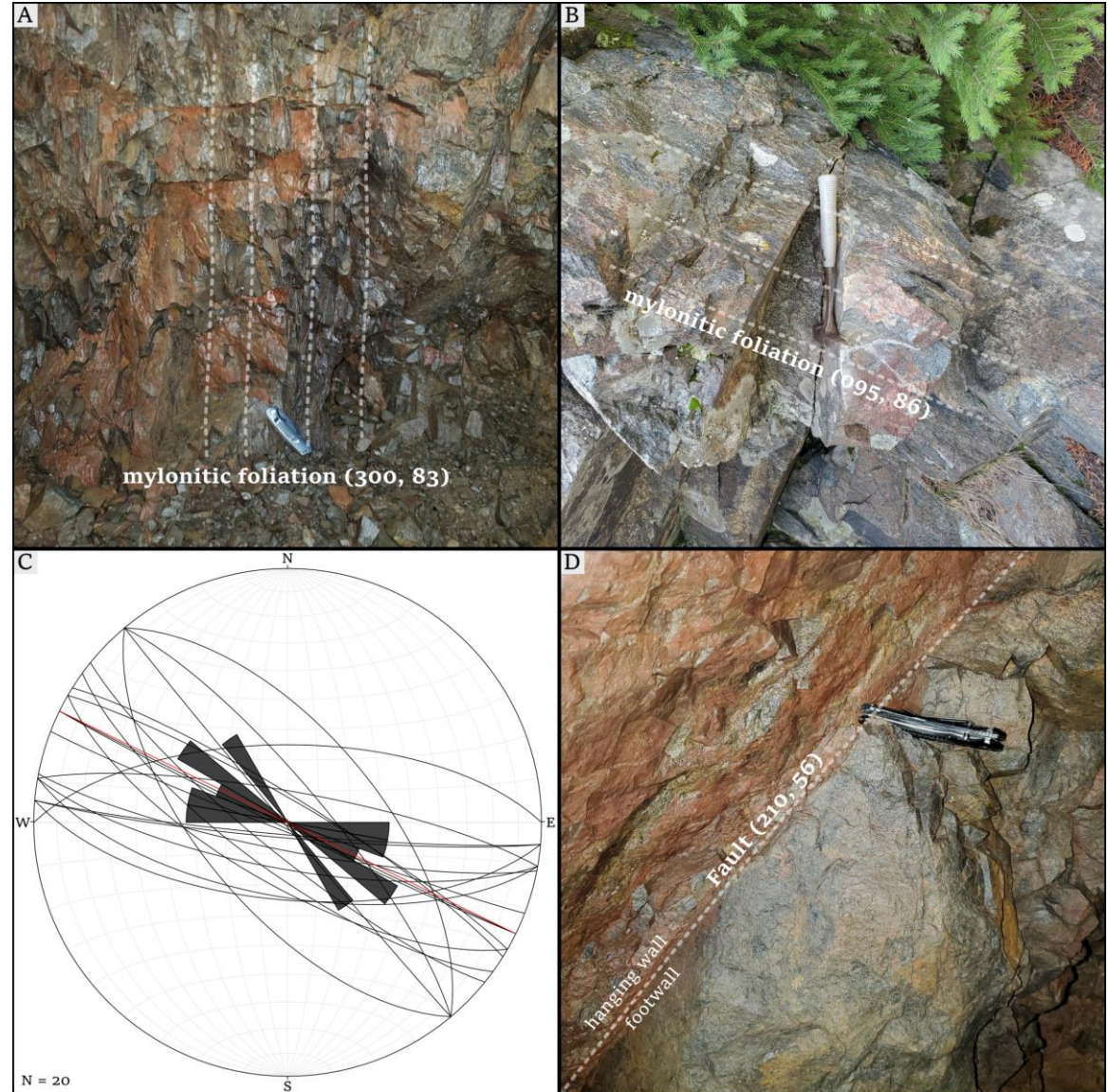
Shambhala Platinum Project – Local Geology

- Very poor exposure and thick Quaternary cover and soil (up to 16')
- Project area dominated by variably deformed and altered amphibolitic mafic-to-ultramafic intrusions and younger, felsic intrusives
- Rock types include: metagabbro, metapyroxenite, metavolcanics, mylonitic/ultramylonitic orthogneisses, and quartz monzonite
- Historic workings evidently focused on shear zones and quartz veins



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Shambhala Platinum Project – Local Geology

- New Rambler is 3 large, irregular bodies with sharp, complicated contacts (Kemp, 1904)
- Mineralization in highly weathered, deformed mafic-to-ultramafic meta-igneous rocks at the intersection of a NE-striking shear zone and NW-striking faults (Orback, 1958)
- Host rocks are metadiorite and metagabbro, grade into pyroxenite and peridotite (Kasteler and Frey, 1949)
- Deposit exhibits zoning with depth (McCallum et al., 1976)

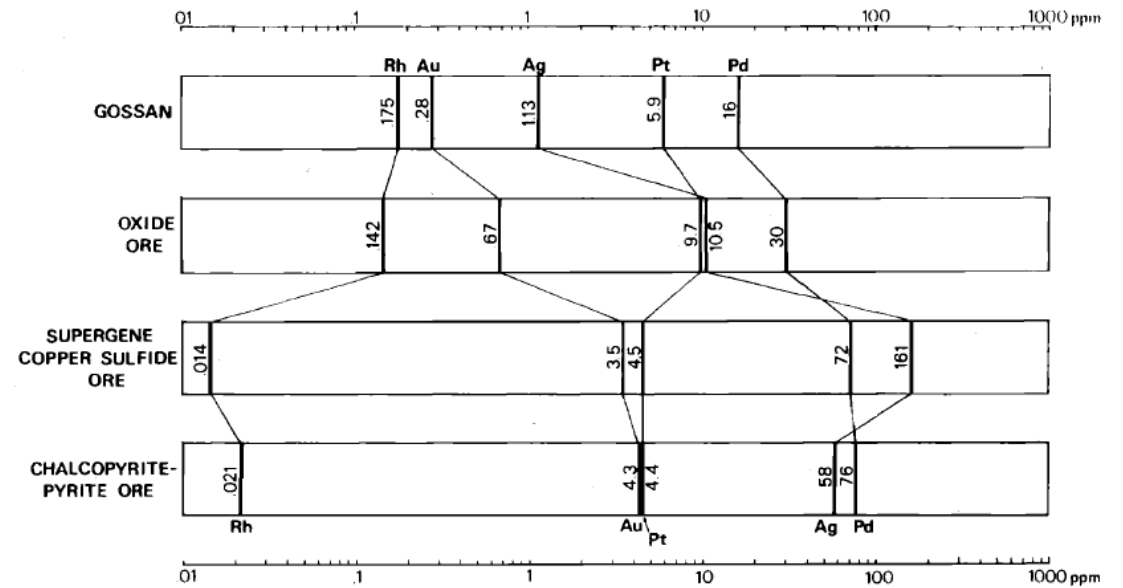


FIG. 6. Schematic section of the New Rambler deposit showing variation of average precious metal contents (in ppm) between horizons of the weathered profile. (Log scale)

Shambhala Platinum Project – Local Geology

- **New Rambler is 3 large, irregular bodies with sharp, complicated contacts** (Kemp, 1904)
 1. Upper pod from 30 – 70', with a Cu-leached upper zone and Cu-rich lower zone (oxidized)
 2. ~100' deep sulfide pocket (25' thick)
 3. Immediately west jasperoid pocket
- Pt assemblage contains chalcopyrite, pyrrhotite, minor pyrite and unique base and precious metals (sphalerite, pentlandite, electrum, sperrylite, etc.) (McCallum et al., 1976)

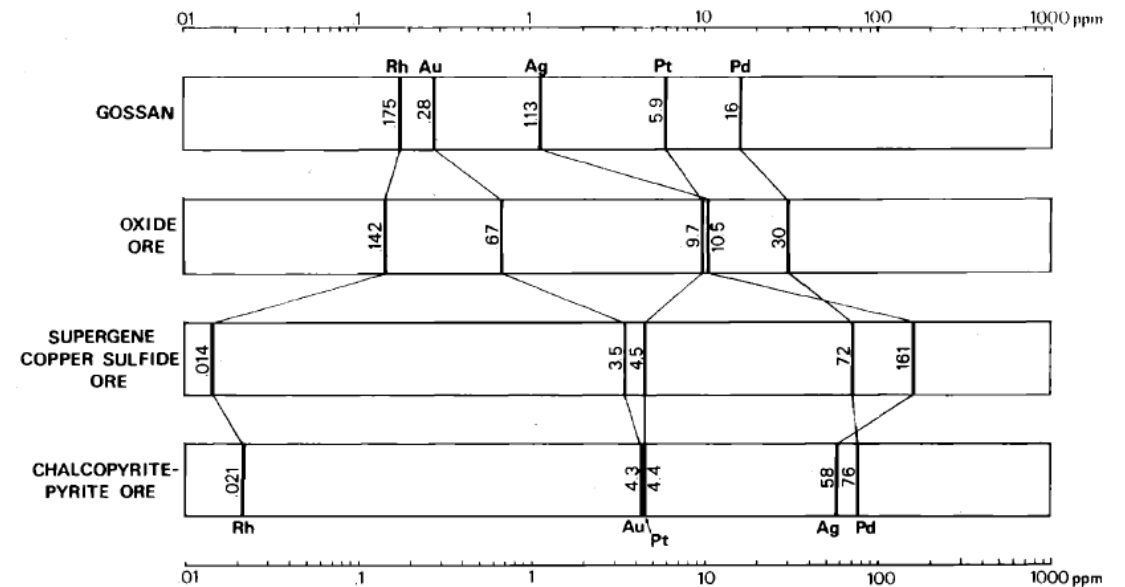
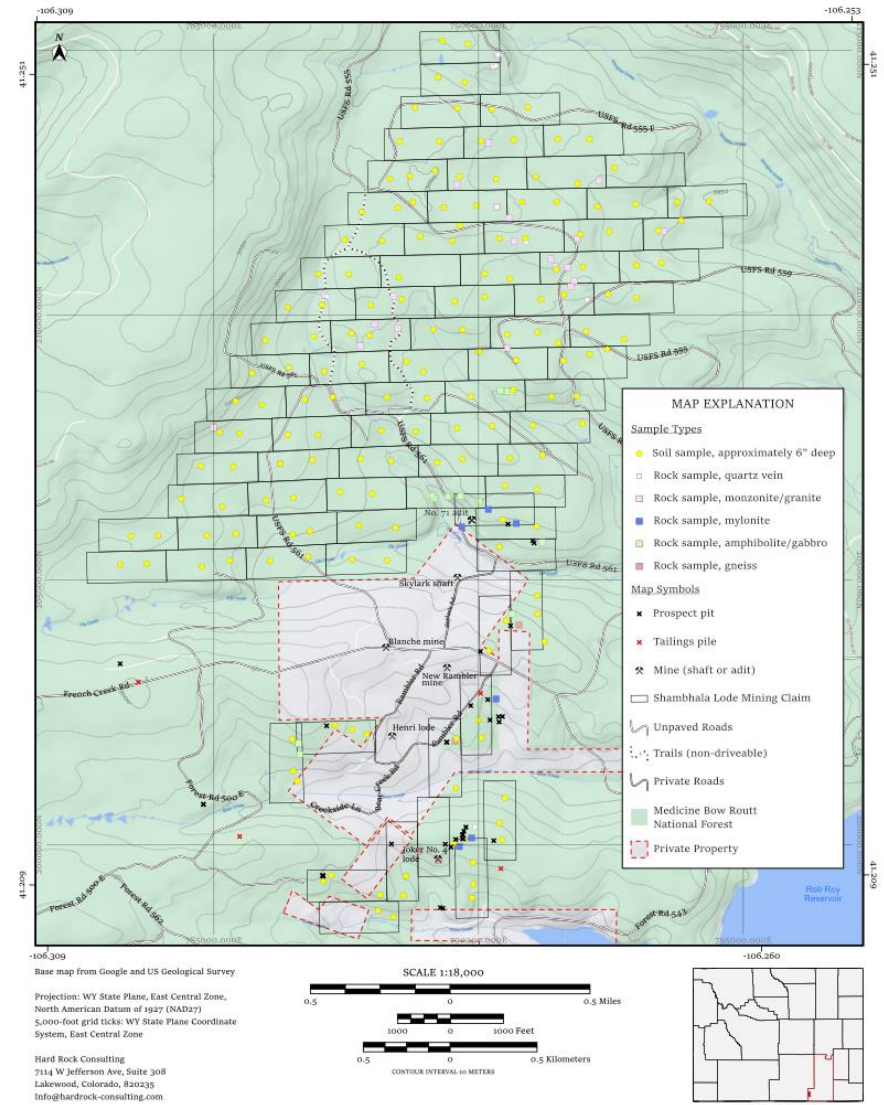


FIG. 6. Schematic section of the New Rambler deposit showing variation of average precious metal contents (in ppm) between horizons of the weathered profile. (Log scale)

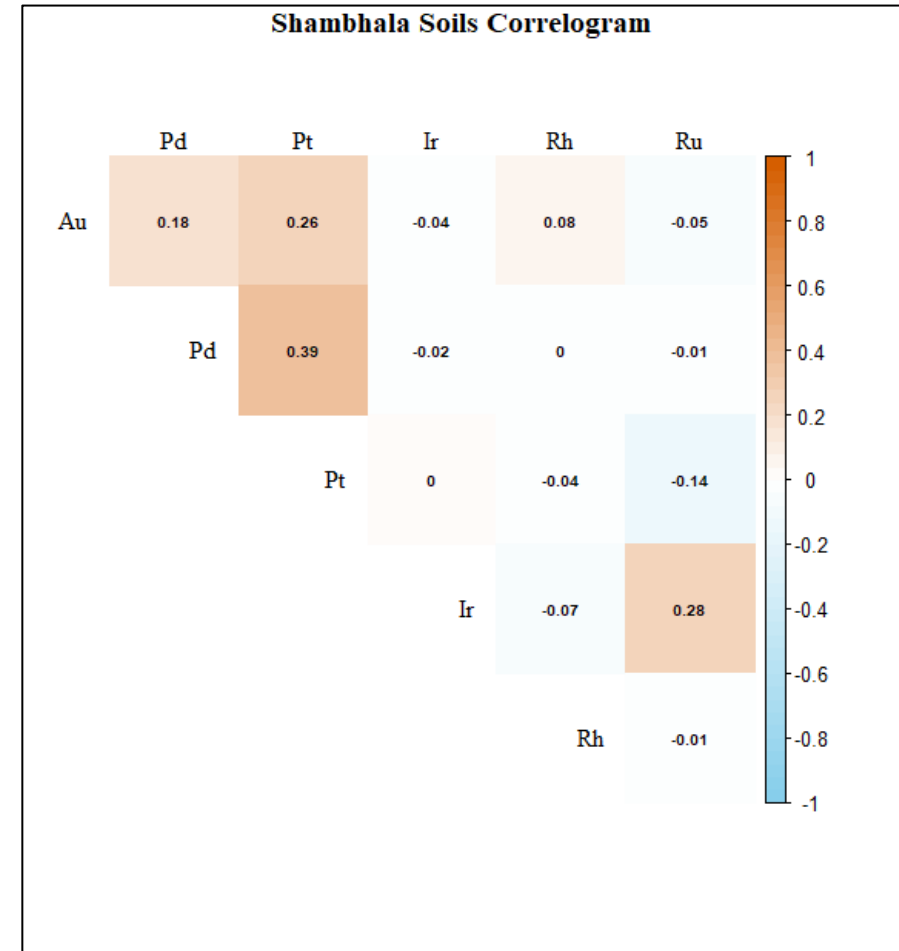
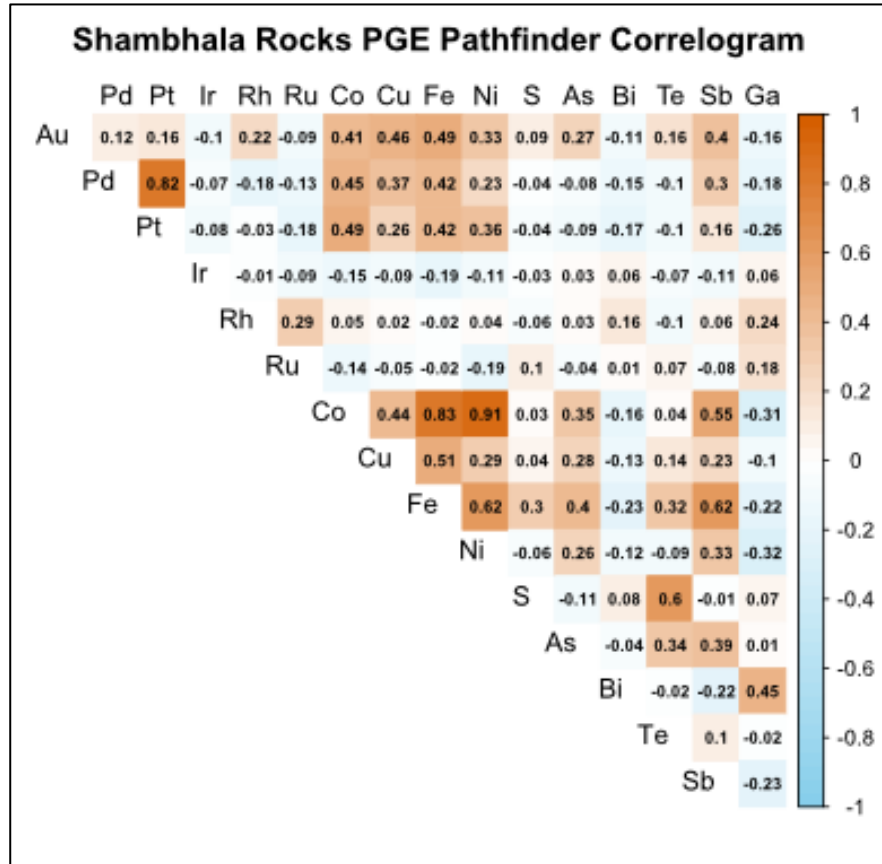
Shambhala Platinum Project – 2023 Surface Sampling

- **64 rock samples & 176 soil samples, 270 unique localities visited**
- Rocks from outcrops, prospect pits, trenches, mining shafts, etc...
- Analyzed by AAL for:
 - **Soils:** Au + PGEs
 - **Mafic Rocks:** Au, PGEs, 28 Elements
 - **Felsic Rocks:** Au, PGEs, 52 Elements (Sn, W, Cr, Cs, La, Y, Li)

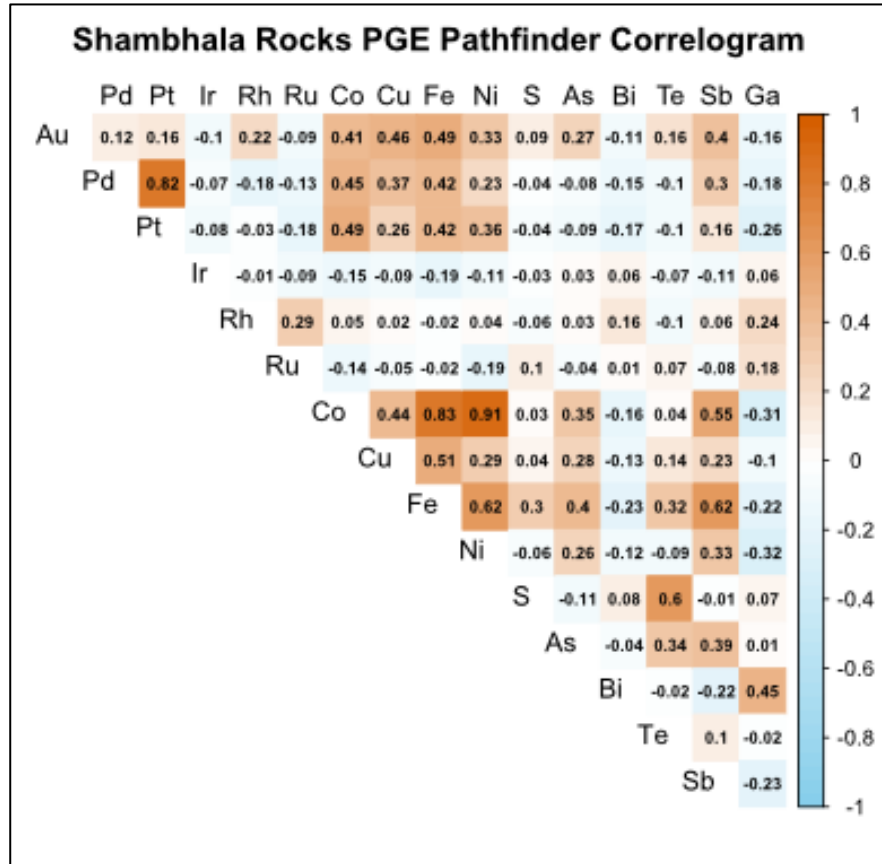


2023 SURFACE SAMPLE MAP OF THE SHAMBHALA PROJECT AREA
MEDICINE BOW MOUNTAINS, ALBANY COUNTY, WYOMING

Shambhala Platinum Project – 2023 Surface Sampling

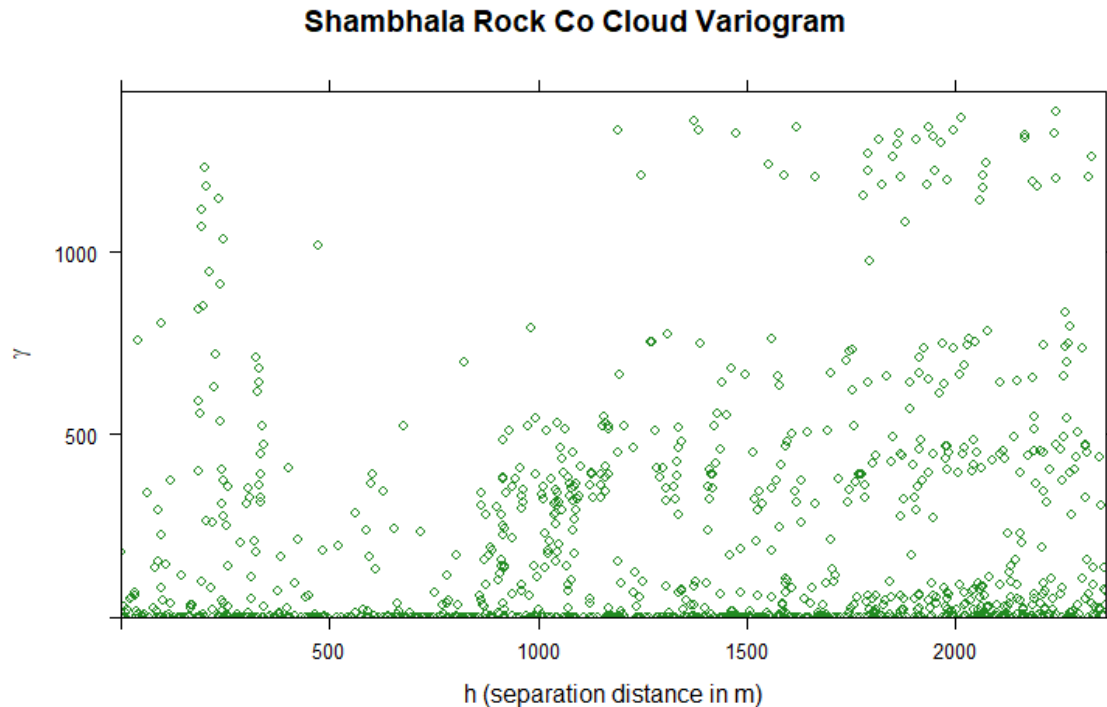


Shambhala Platinum Project – 2023 Surface Sampling



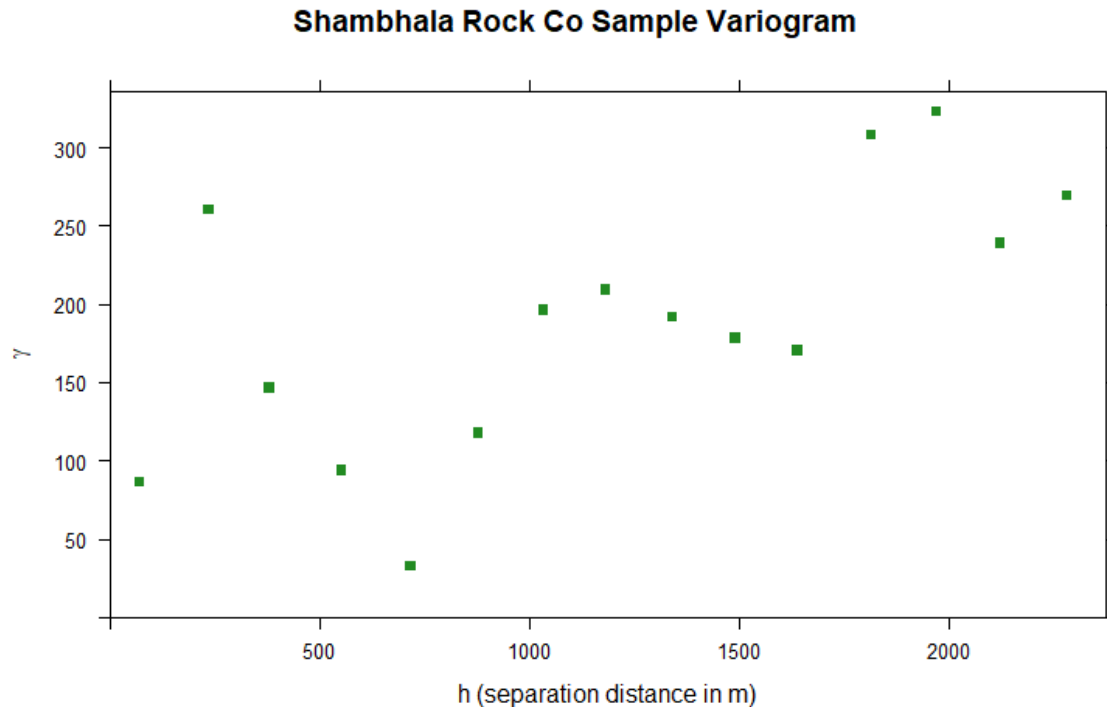
- In rock, high correlative strengths between **Au**, **Pt/Pd**, and **base metals** → common in magmatic PGE deposits (Mountain and Wood, 1988)
- Moderate correlation between **base metals** and **As, Sb, Te**, and **S** → indicative of sulfide weathering to unstable arsenides, tellurides, antimonides, and sulfates (Hattori and Cameron, 2004).
- High correlation between **Pd/Pt** → likely share a source and leaching pathways

Shambhala Platinum Project – Geochemical Interpolations



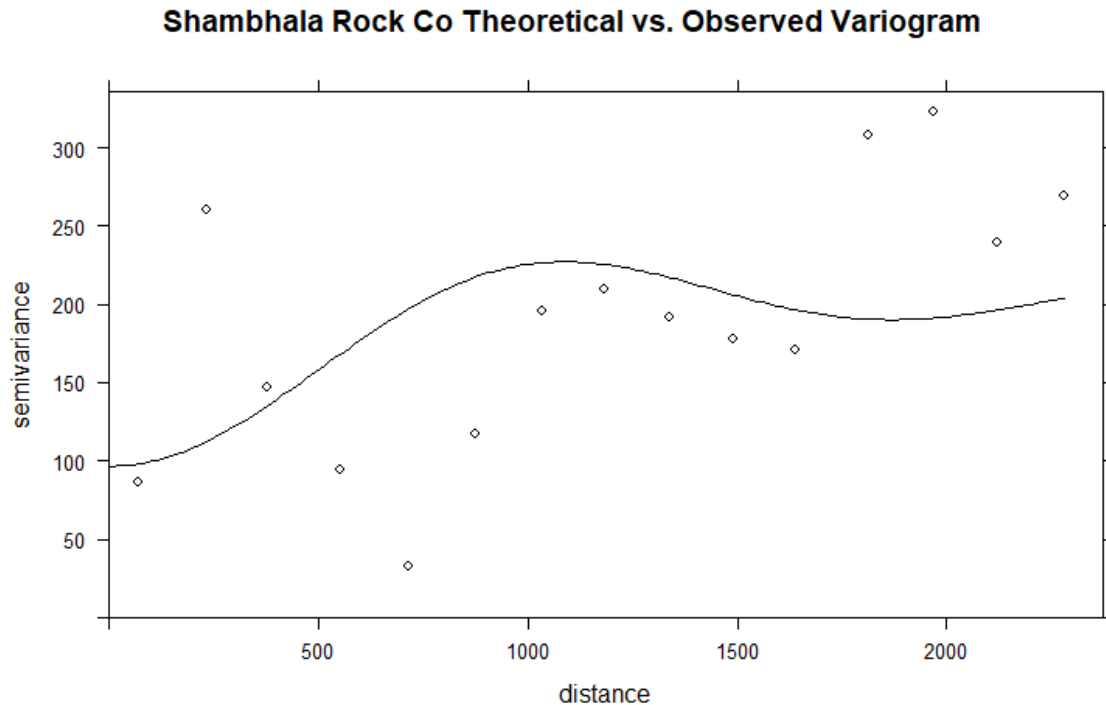
- Based on pathfinders and relationships observed in correlograms
- Employed both IDW and Ordinary Kriging in R Studio with the following packages: gstat, sf, and sp
- Data sets for soil and rock assays were filtered to remove and reassign values below DL to $\frac{1}{2}$ DL; duplicate locations jittered (slightly changed) to accommodate Ordinary Kriging
- **Ordinary Kriging models were numerically fit to observed variograms**

Shambhala Platinum Project – Geochemical Interpolations



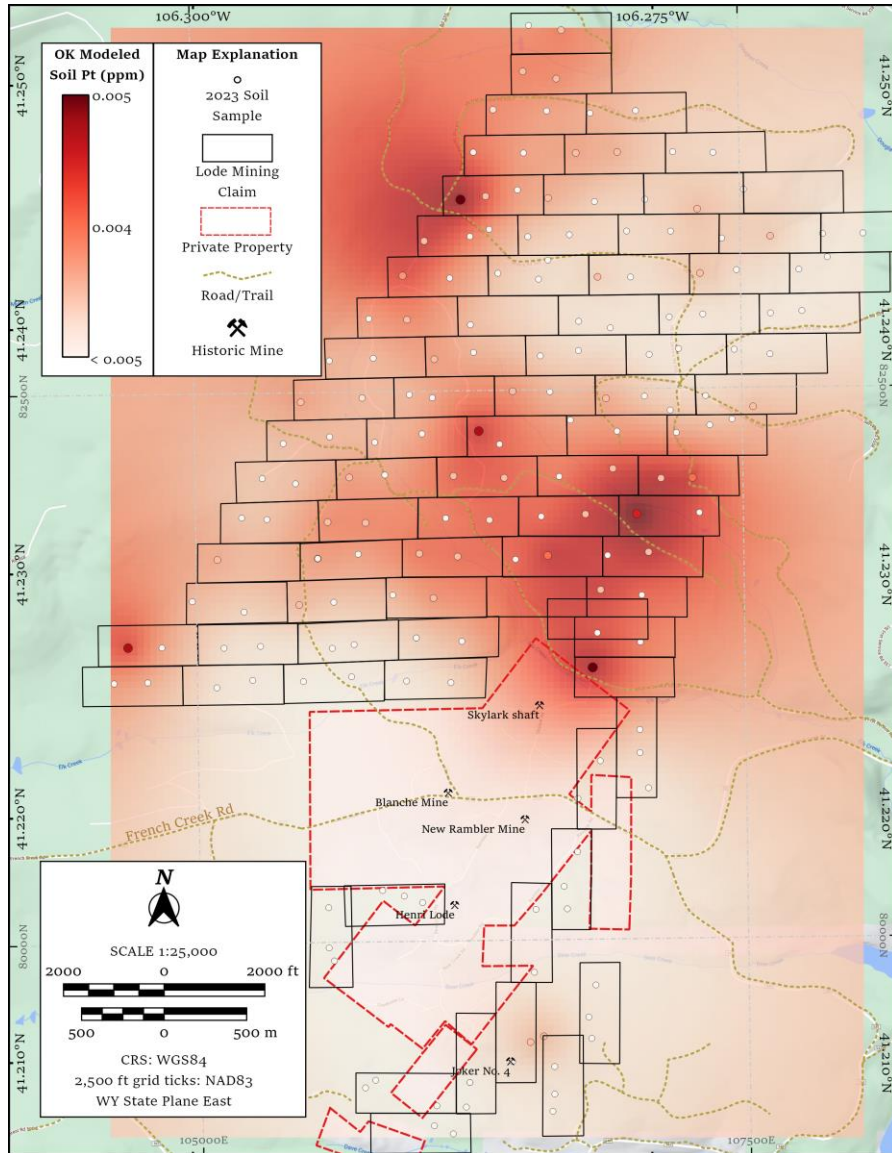
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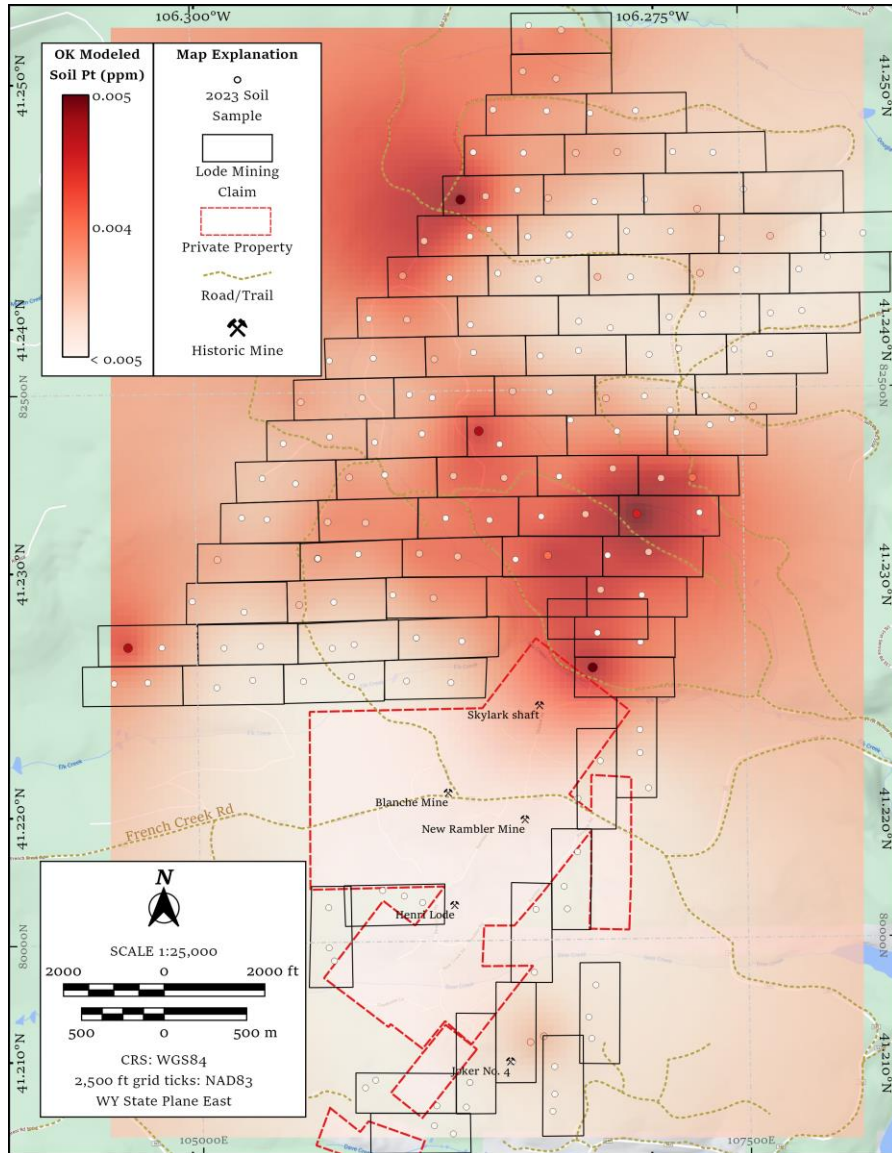
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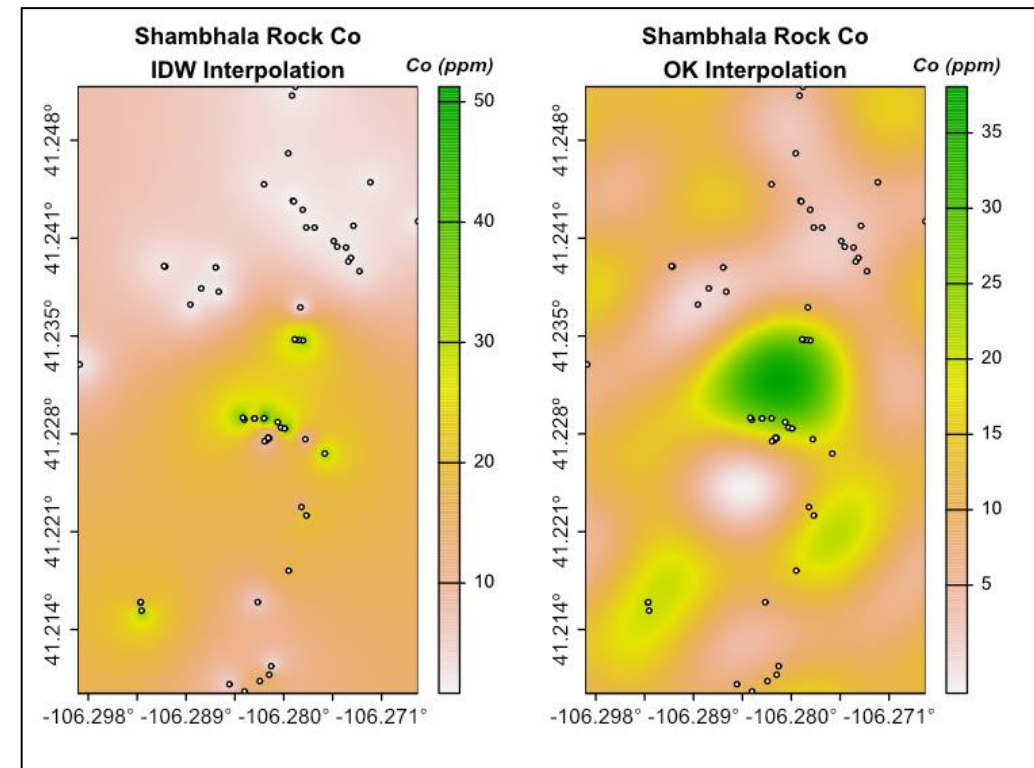


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- Ultimate goal is to produce a heatmap...

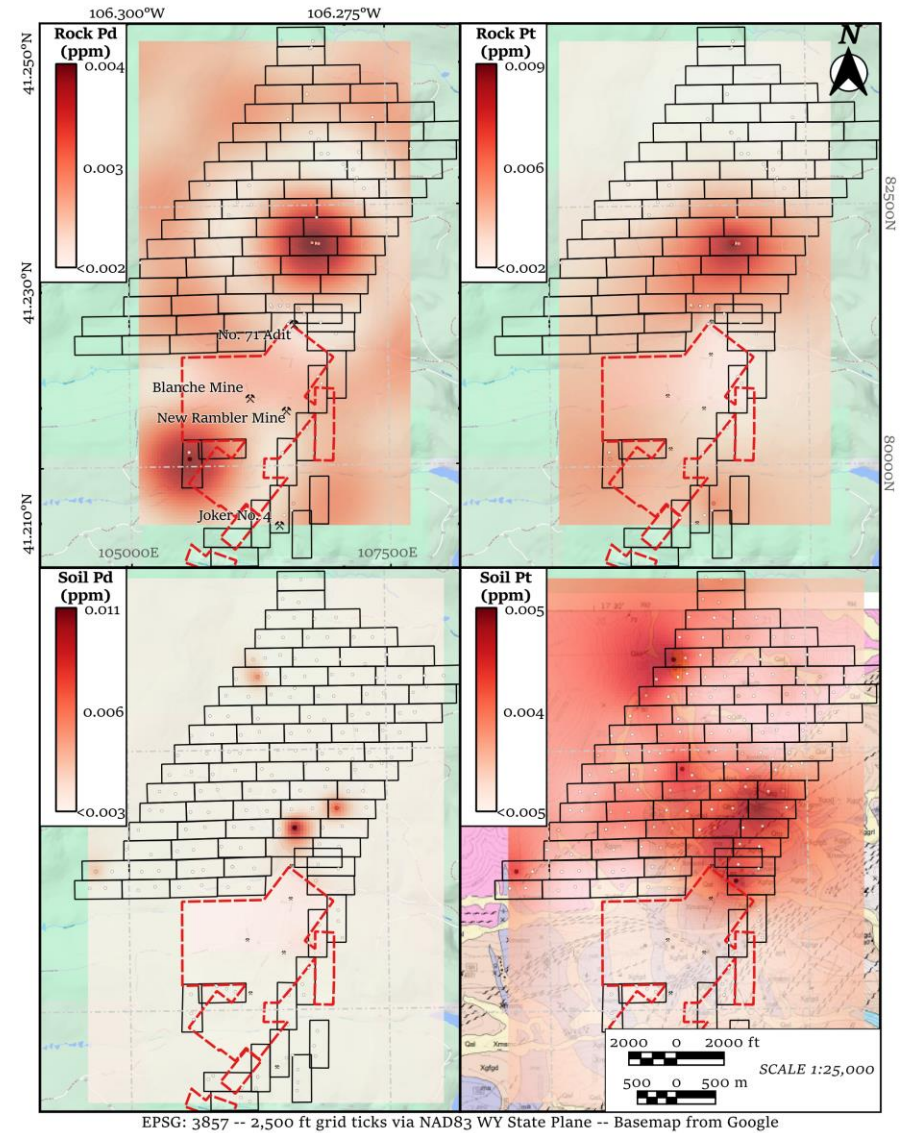
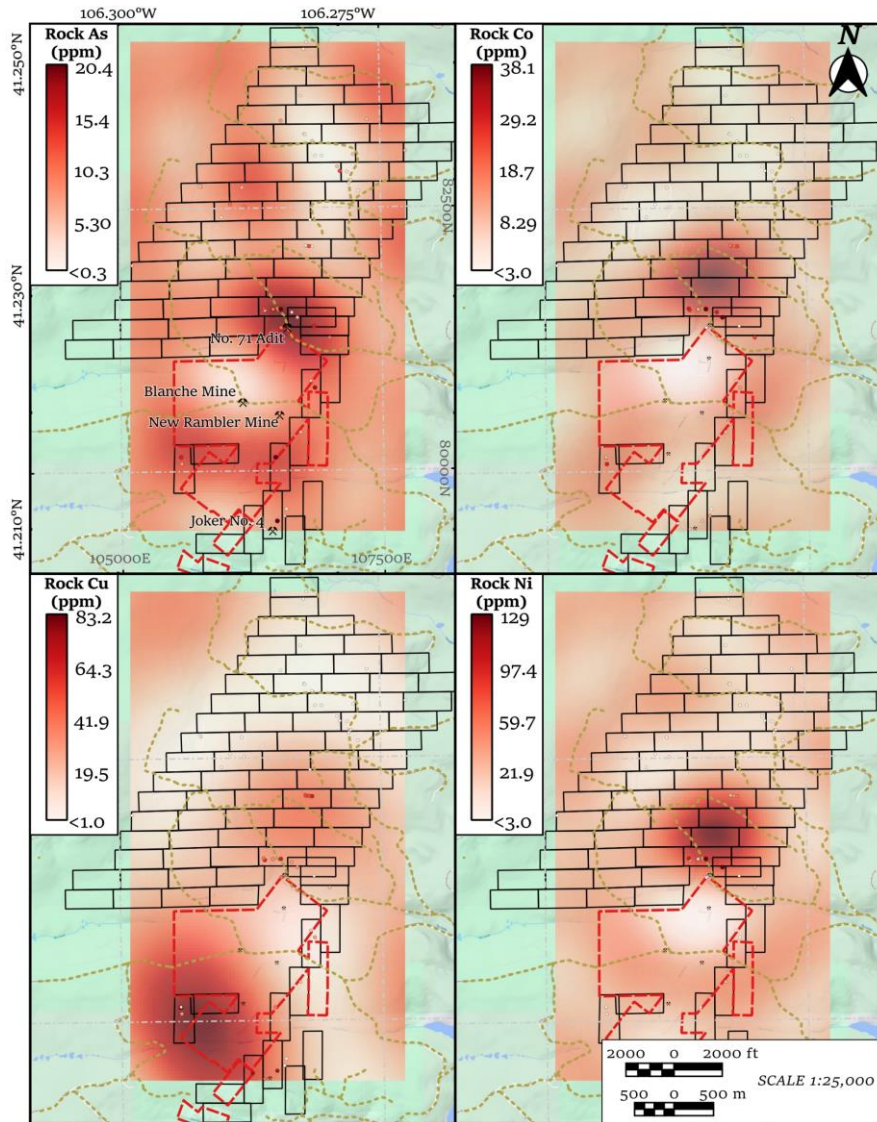
Shambhala Platinum Project – Geochemical Interpolations



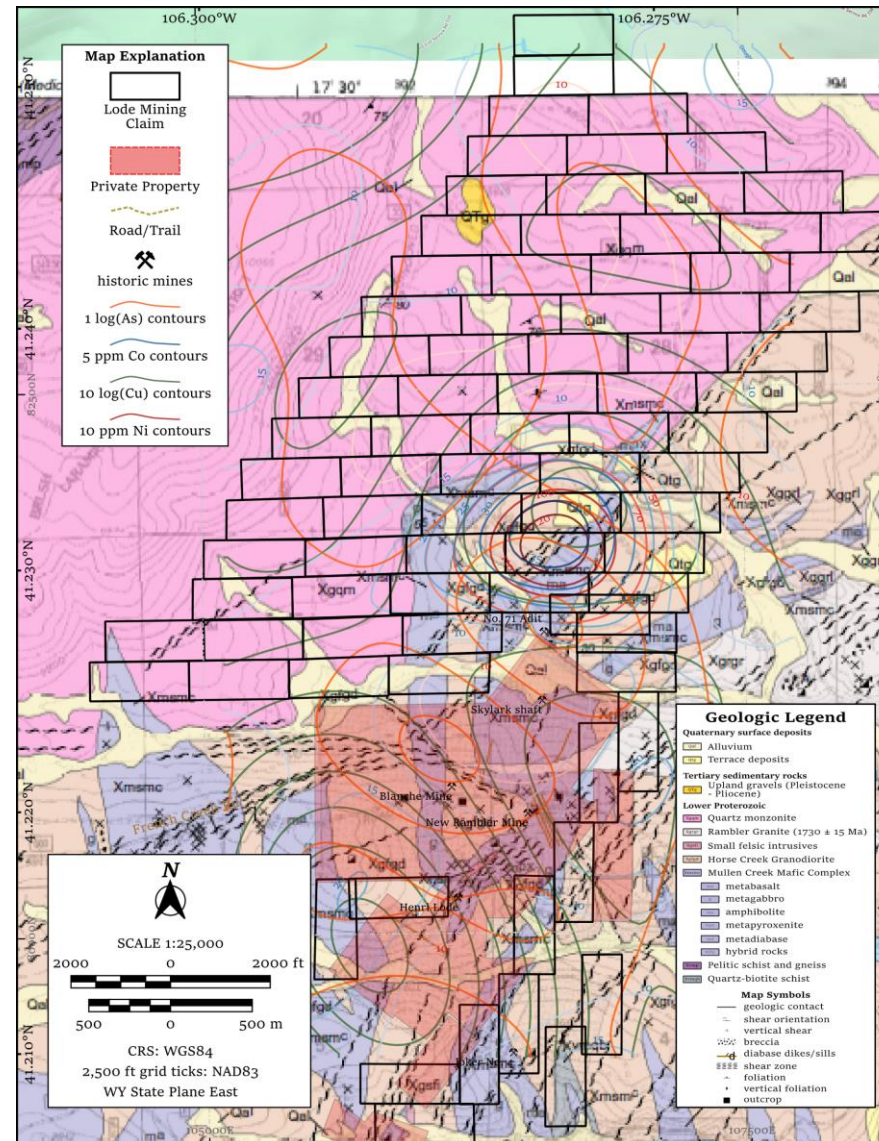
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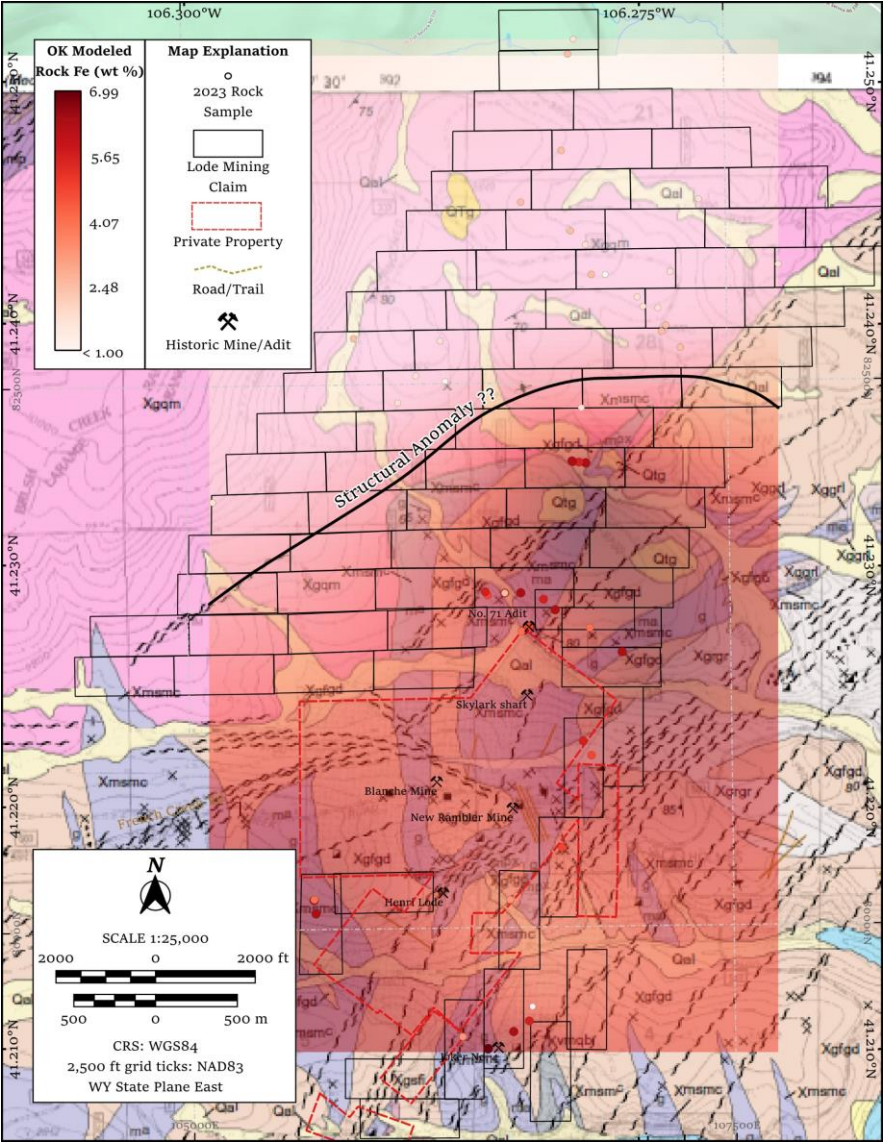
Shambhala Platinum Project – Geochemical Anomaly #1



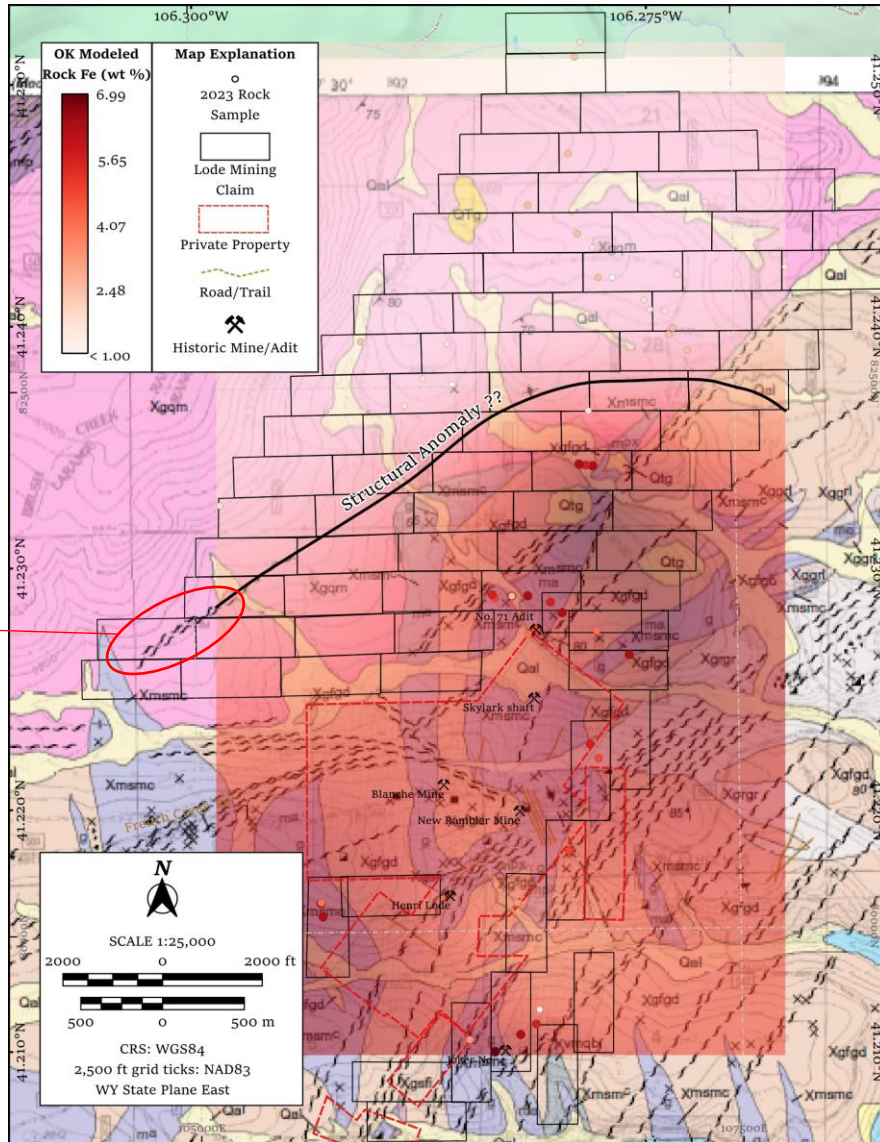
Shambhala Platinum Project – Geochemical Anomaly #1



Shambhala Platinum Project – Geochemical Anomaly #2



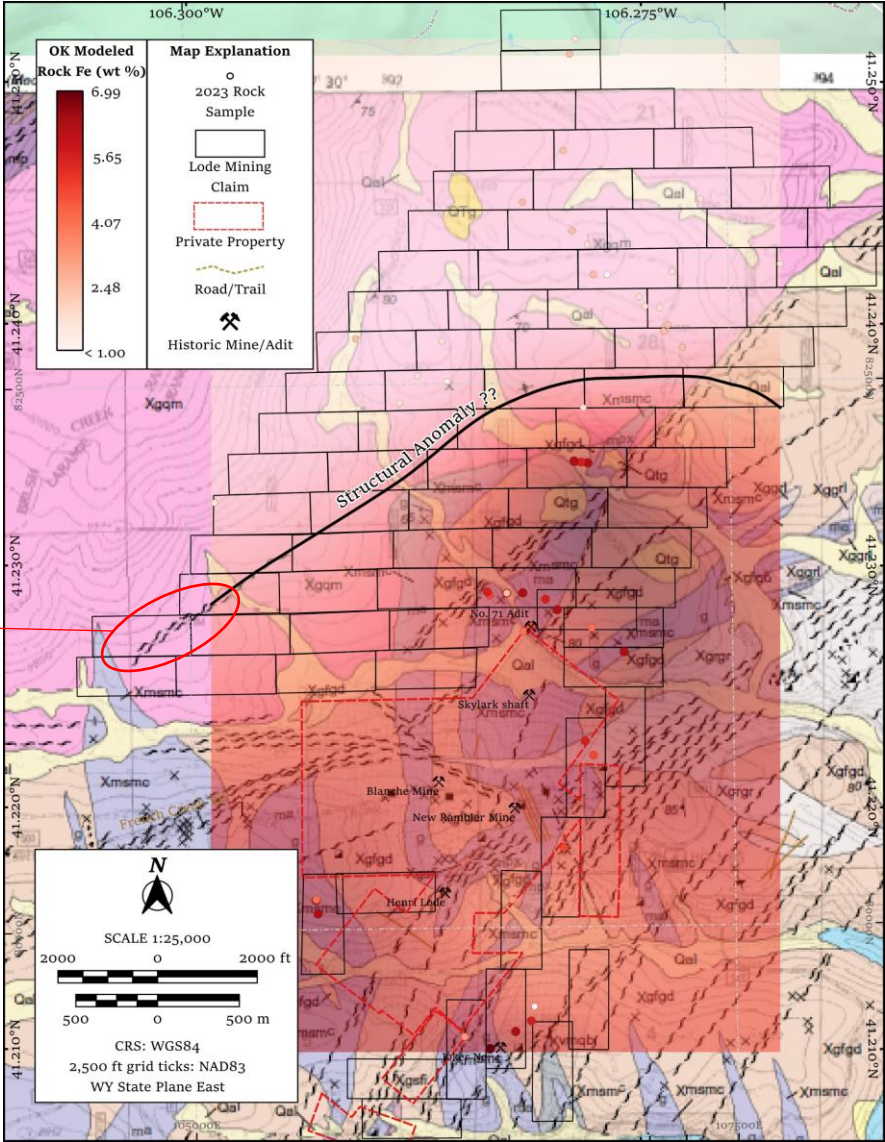
Shambhala Platinum Project – Geochemical Anomaly #2



continuation of a mapped shear zone?

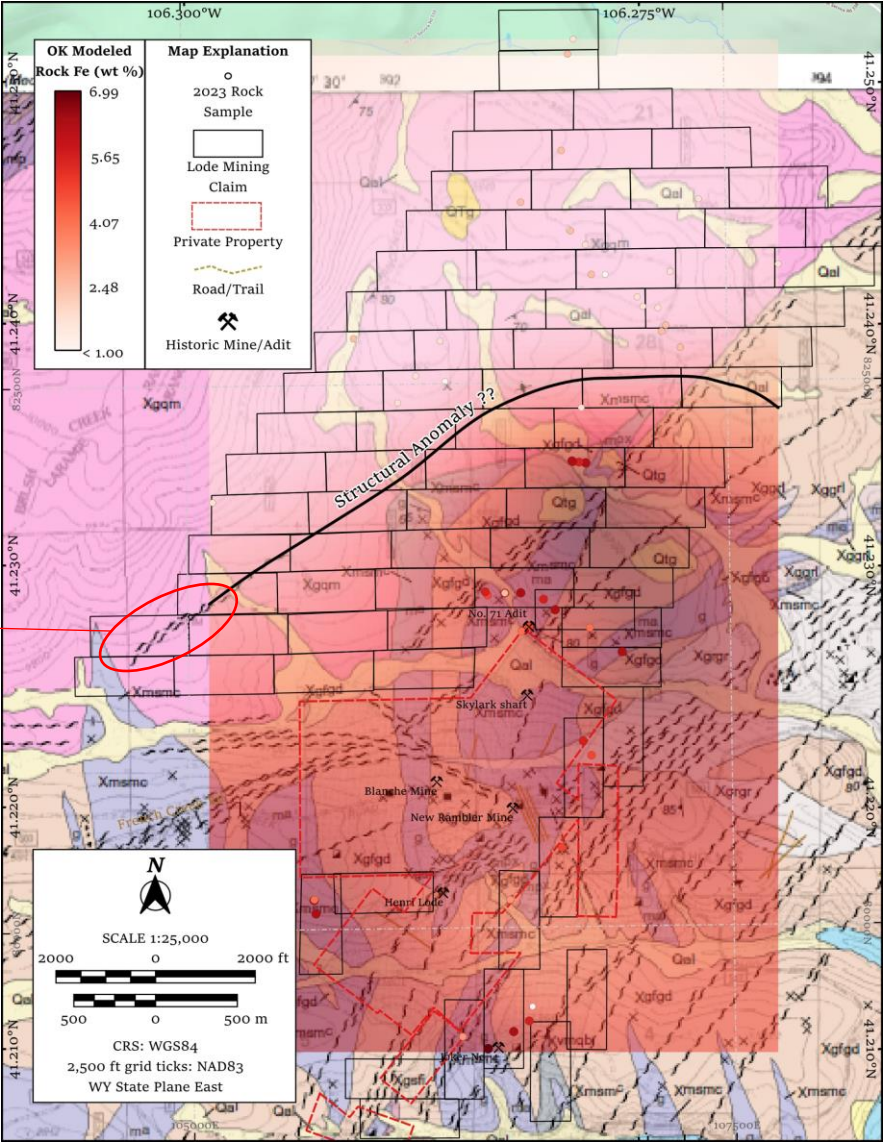
Shambhala Platinum Project – Geochemical Anomaly #2

monzonite – MCMC contact??

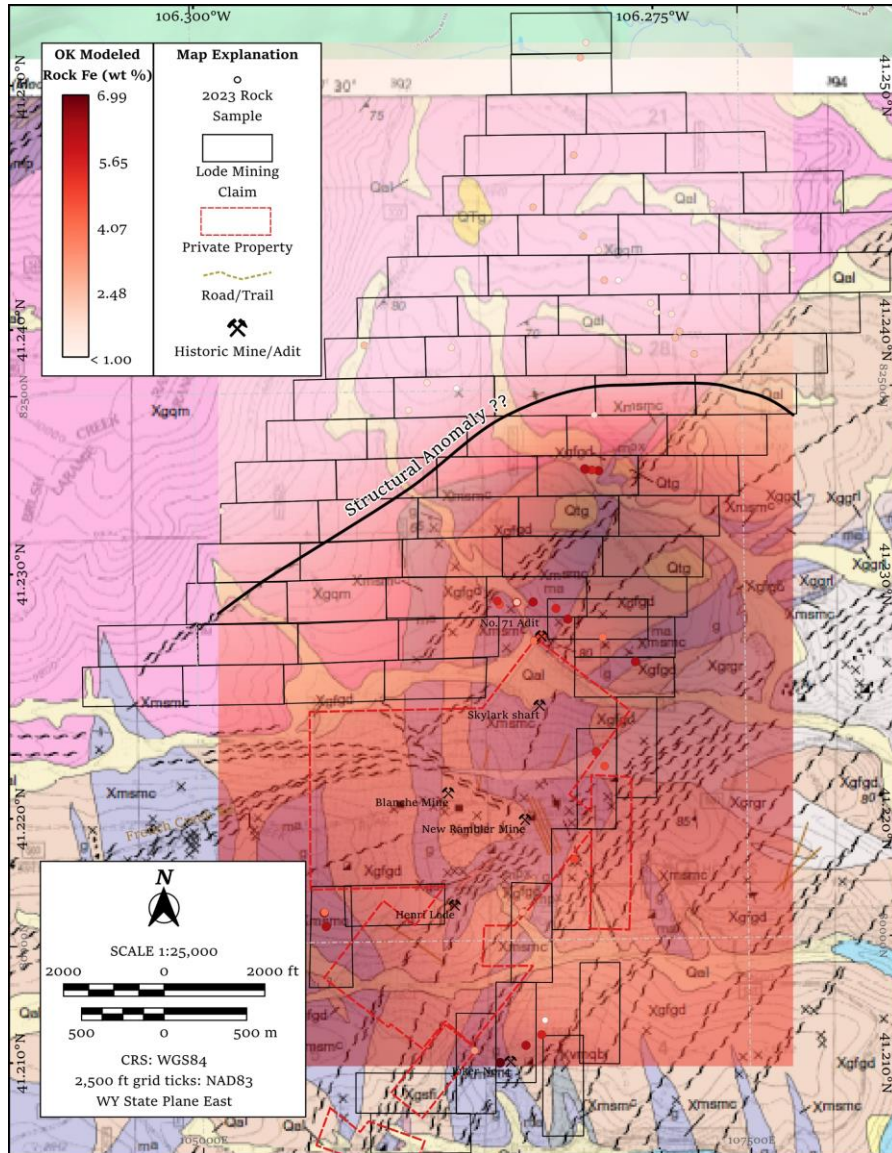


Shambhala Platinum Project – Geochemical Anomaly #2

Both??

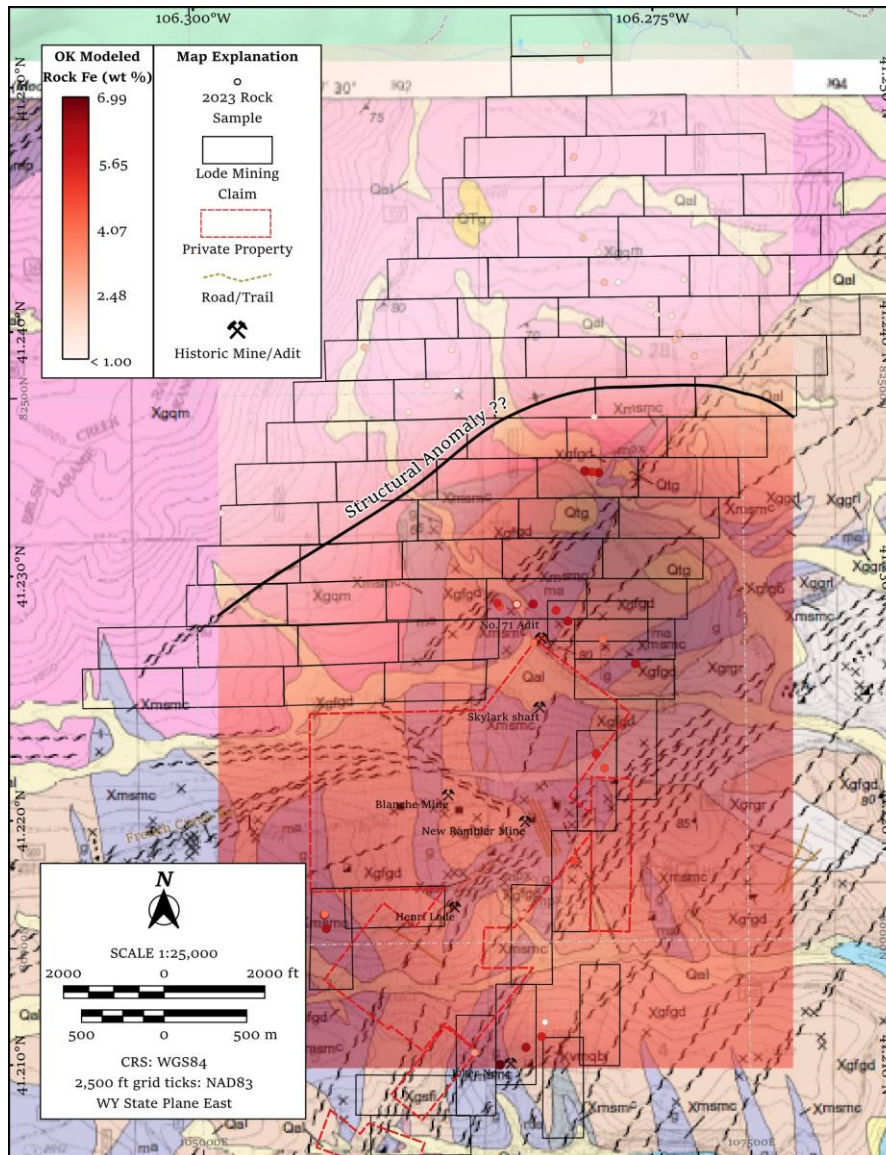


Shambhala Platinum Project – Conclusions/Recommendations



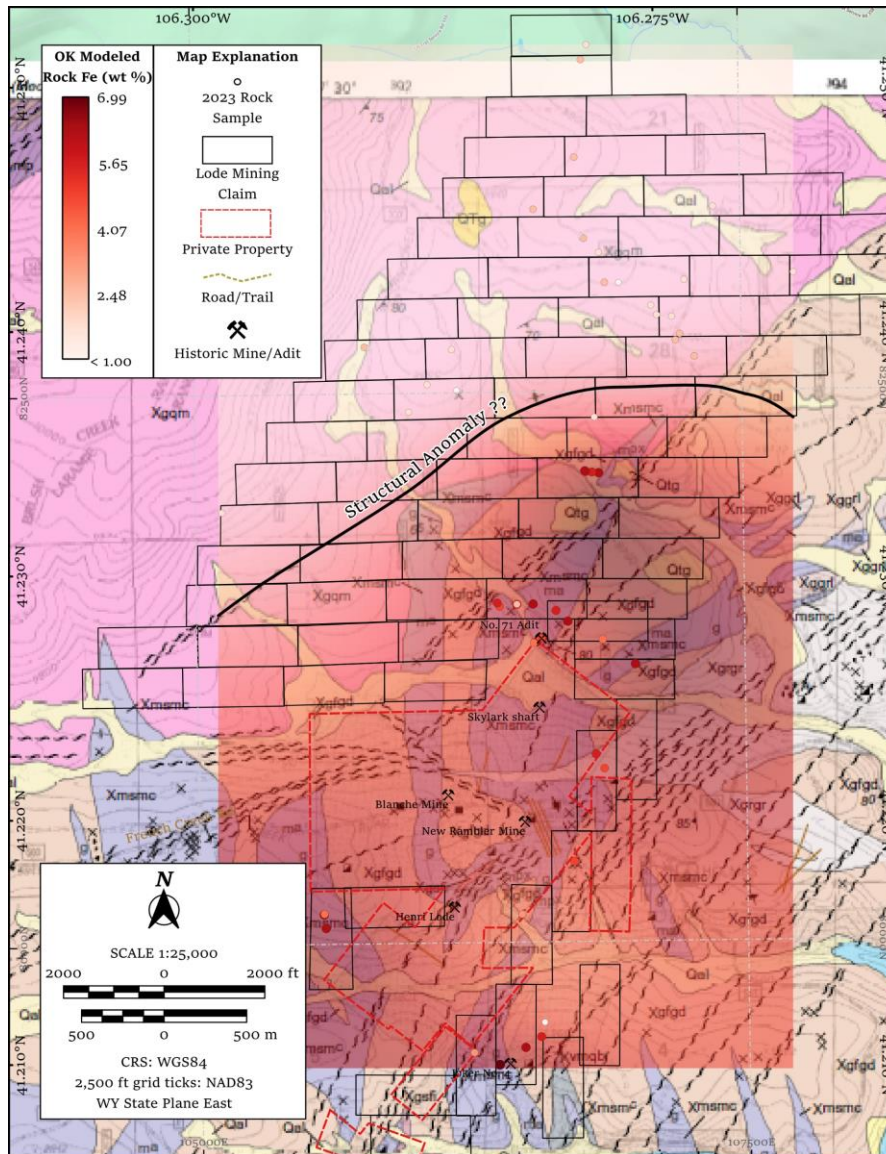
- Complicated geology, **rare host rocks** with intense alteration and **structural control**
- Low assay values but promising correlations

Shambhala Platinum Project – Conclusions/Recommendations



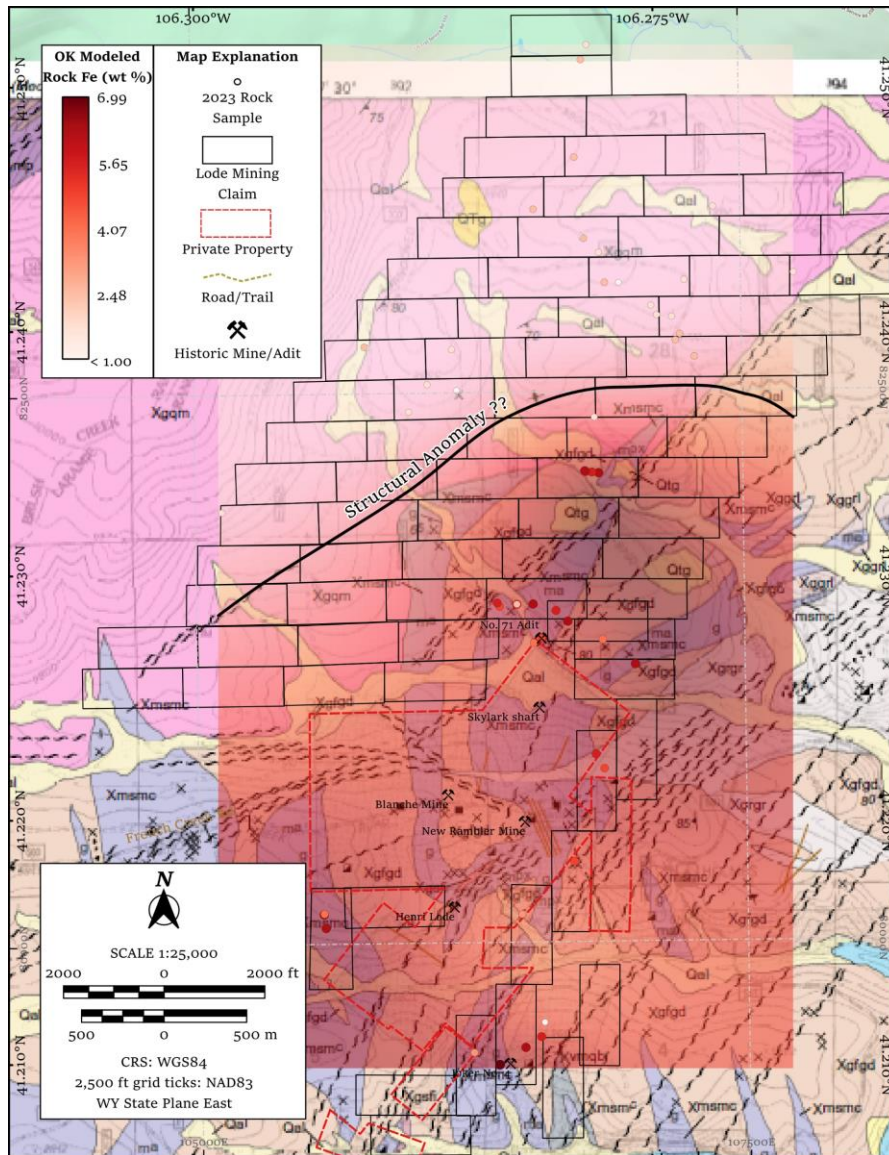
- Complicated geology, **rare host rocks** with intense alteration and **structural control**
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- **Worth more exploration:**
 - **Conservative recommendations:**
 - Soil sample the hot spot at 200 ft spacing
 - Geologic mapping of the adit and the shear zones to confirm/refute structures → no guarantees it's real

Shambhala Platinum Project – Conclusions/Recommendations



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 - Drill several holes near the hot spot
 - Drill near the western shear zone
 - Drill near/in No. 71

Shambhala Platinum Project – Conclusions/Recommendations



Worth more exploration:

- **Conservative recommendations:**
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- **Wait for USGS Aeromagnetic Survey**

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