



Project Goal:

Using lichens to trace the legacy of heavy metal dust.

Principal Finding:

Lichens are exposed to heavy metals in the mine and near equipment operations.

What does this mean for your community?

This can be a natural option to monitor heavy metals exposure.

How to cite this research:

Freeman, M., Garcia, C.A., Roros, A., Jojola, G., Shuey, C., Mackey, T., Cerrato, J., El Hayek, E., and Brearley, A.J. Tracing the Legacy Environmental Dust Release from the Jackpile Mine, Jackpile Mine Symposium. April 22, 2025. Pueblo of Laguna, NM

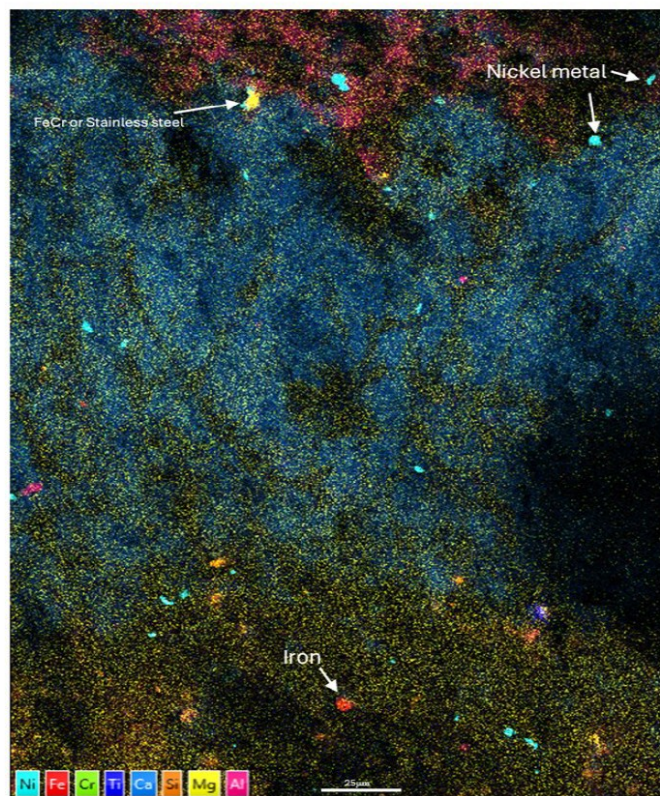


Figure 3. The bright teal specs are nickel metal particles, all are roughly 5 µm or less. There are also particles with high concentrations of iron, chromium, and titanium

Dust