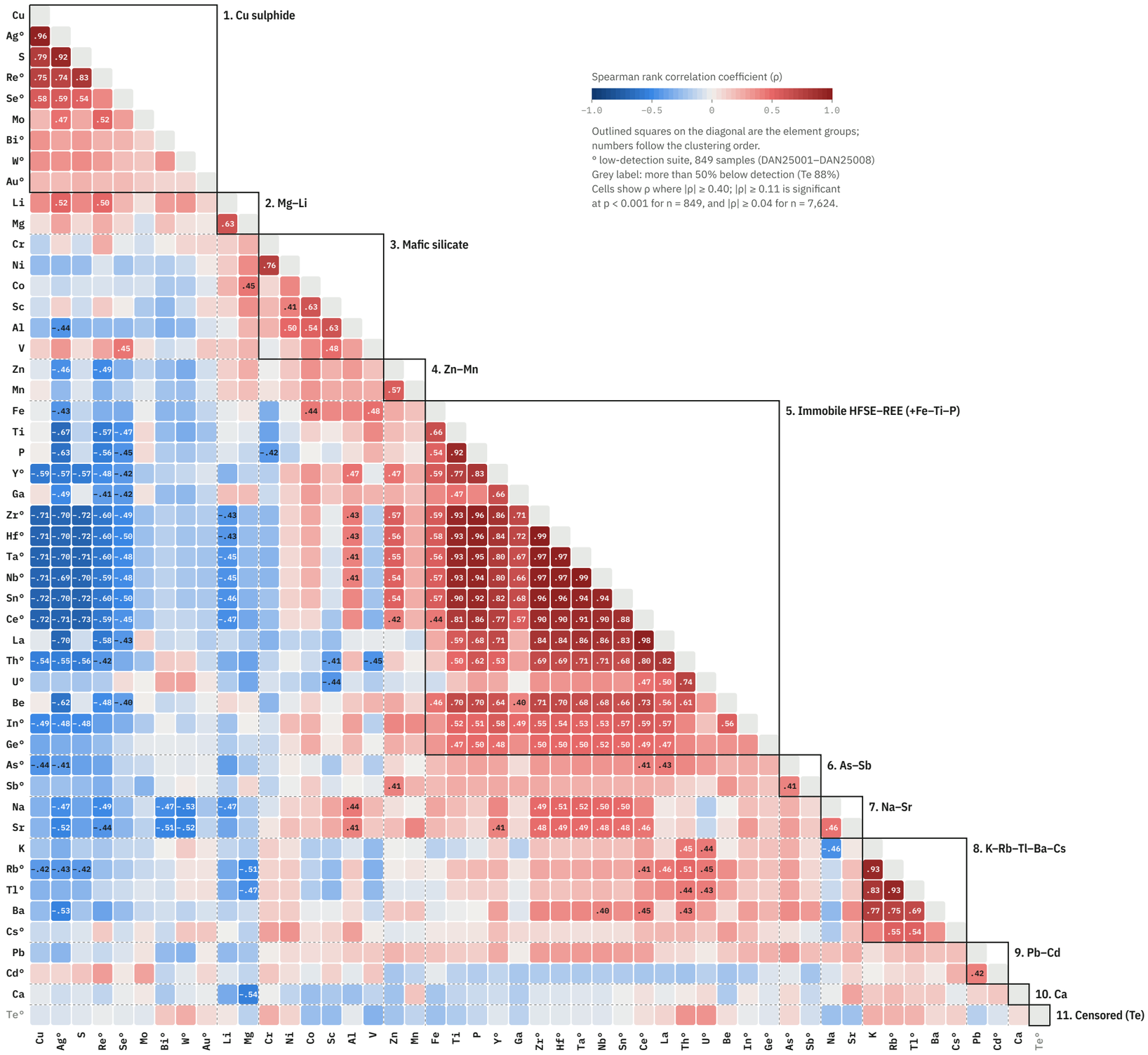
Danvers multi-element Spearman rank correlation matrix, grouped by association

All 7,624 drill samples with multi-element assays (holes drilled 2025–26). Elements ordered by hierarchical clustering on 1 − ρ (average linkage), then grouped. QC samples excluded; below-detection values set to half the detection limit. Elements marked ° are from the low-detection suite on the 849 samples from DAN25001–DAN25008 (main zone); any pair involving them uses those 849 samples. Other pairs use all 7,624. Values shown where |ρ| ≥ 0.40.



Spearman rank correlation coefficient (ρ)

−1.0 −0.5 0 0.5 1.0

Outlined squares on the diagonal are the element groups; numbers follow the clustering order.
° low-detection suite, 849 samples (DAN25001–DAN25008)
Grey label: more than 50% below detection (Te 88%)
Cells show ρ where |ρ| ≥ 0.40; |ρ| ≥ 0.11 is significant at p < 0.001 for n = 849, and |ρ| ≥ 0.04 for n = 7,624.

Element groups

1. Cu sulphide

Cu, Ag, S, Re, Se, Mo; Bi, W and Au loosely attached. **Cu–Ag 0.96**, Ag–S 0.92, Re–S 0.83, Cu–S 0.79. The mineralisation: copper sulphides carrying Ag, with Re and Se. Mo follows Re (0.52) more than Cu (0.21).

2. Mg–Li

Mg–Li 0.63. Li rises with the mineralisation (Li–Ag 0.52), suggesting an Mg–Li alteration mineral such as chlorite.

3. Mafic silicate

Cr–Ni 0.76, Co–Sc 0.63, Al–Sc 0.63. Compatible elements of the basalt host, independent of Cu.

4. Zn–Mn

Zn–Mn 0.57. Zinc sits in silicates or oxides, not sphalerite.

5. Immobile HFSE–REE with Fe–Ti–P

Zr–Hf 0.99, Ta–Nb 0.99, Ce–La 0.98. **Cu is strongly anti-correlated (Cu–Zr −0.71)**: the mineralisation favours the less evolved, low-Zr basalt.

6. As–Sb

As–Sb 0.41. Arsenic is negatively related to Cu (−0.44).

7. Na–Sr

Na–Sr 0.46, the plagioclase signature. Both are depleted where the rock is mineralised (Ag–Na −0.47, Ag–Sr −0.52), a possible alteration vector.

8. K–Rb–Tl–Ba–Cs

K–Rb 0.93, Rb–Tl 0.93. Negatively related to Cu (Cu–Rb −0.42): no potassic association.

9. Pb–Cd

Pb–Cd 0.42, independent of Cu.

Ca and Te

Ca stands alone (Ca–Mg −0.54). Te is 88% below detection and cannot be assessed.

Pairs involving ° elements come from 8 main-zone holes, which are richer in Cu than the drilling overall, so their coefficients run stronger. Correlation shows which elements vary together, not why. Source: Danvers Assay.csv; prepared 1 November 2026.