

Sample Information Sheet

Sample ID: C2004,1,44,4,5

Sample type: microtome sections

Type of analysis performed: TOF-SIMS

Performed by: Thomas Stephan

State of sample pre-analysis: ok

State of sample post-analysis:
few monolayers consumed, Ar and Ga implanted

Minerals or other phases identified:

- Probably mixture of olivine or pyroxene and feldspar
- Ca, Ti rich hotspot also rich in F and Cl

Contaminant phases identified:

- Particle heavily mixed with aerogel (Si/Mg = 40)

References:

Stephan T. et al. (2008) *Meteorit. Planet. Sci.* **43**, 285–298.

Elemental composition:

Atomic element ratios relative to Mg = 100*

| Element | C2004,1,44,4,5 |
|---------|----------------|
| Li | 0.011(1) |
| Na | 17.25(4) |
| Mg | 100.0(2) |
| Al | 28.8(1) |
| Si | 4046(3) |
| K | 1.85(1) |
| Ca | 14.51(5) |
| Sc | 0.012(2) |
| Ti | 1.01(5) |
| V | 0.030(4) |
| Cr | 1.37(3) |
| Mn | 0.86(3) |
| Fe | 61.5(3) |
| Co | 3.15(7) |
| Ni | 5.6(4) |
| Cu | 5.5(1) |
| Rb | 0.0082(7) |
| Sr | 0.020(2) |
| Ba | 0.116(5) |

*All errors are 1σ, given as last significant digit in parentheses.

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TOF-SIMS secondary ion distribution images (field of view: 19×25 μm²):

