

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0180-01,02,03

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Type and date of analysis performed:

RA-QD02-0180-01,02, 03 : TEM analysis (Nov. 5, 2014) by JEM-2800 at JEOL Ltd.

Elements or phases identified: (Mg, Si, olivine, pyroxene, aromatic carbon, etc.)

Carbon material (C, N, O) Si, F, S and NaCl, KCl

Contaminant phases identified: (Al, SUS, carbon particles, etc.)

CuS

Sample handling: (e.g. exposed in atmosphere, embedded in resin, polished, sliced by FIB or UMT)

Stored in N2 purged holder.

Exposed in atmosphere before and after introducing TEM sample chamber (a few minutes).

State of sample pre-analysis: (e.g. N2 hold, atmosphere, resin embedded, polished section, UTS) (please describe treatments and/or modifications for the sample you have done before your analysis)

RA-QD02-0180-01: Fixed on Cu grid, Stored in N2 purged holder. Strongly altered by CuS

RA-QD02-0180-02: Fixed on Cu grid, Stored in N2 purged holder.

RA-QD02-0180-03: Fixed on Cu grid, Stored in N2 purged holder.

State of sample post-analysis:

RA-QD02-0180-01: Fixed on Cu grid, Stored in N2 purged holder. Strongly altered by CuS

RA-QD02-0180-02: Fixed on Cu grid, Stored in N2 purged holder.

RA-QD02-0180-03: Fixed on Cu grid, Stored in N2 purged holder.

Analysis data Notes: (summary of the attached analysis data and/or images)

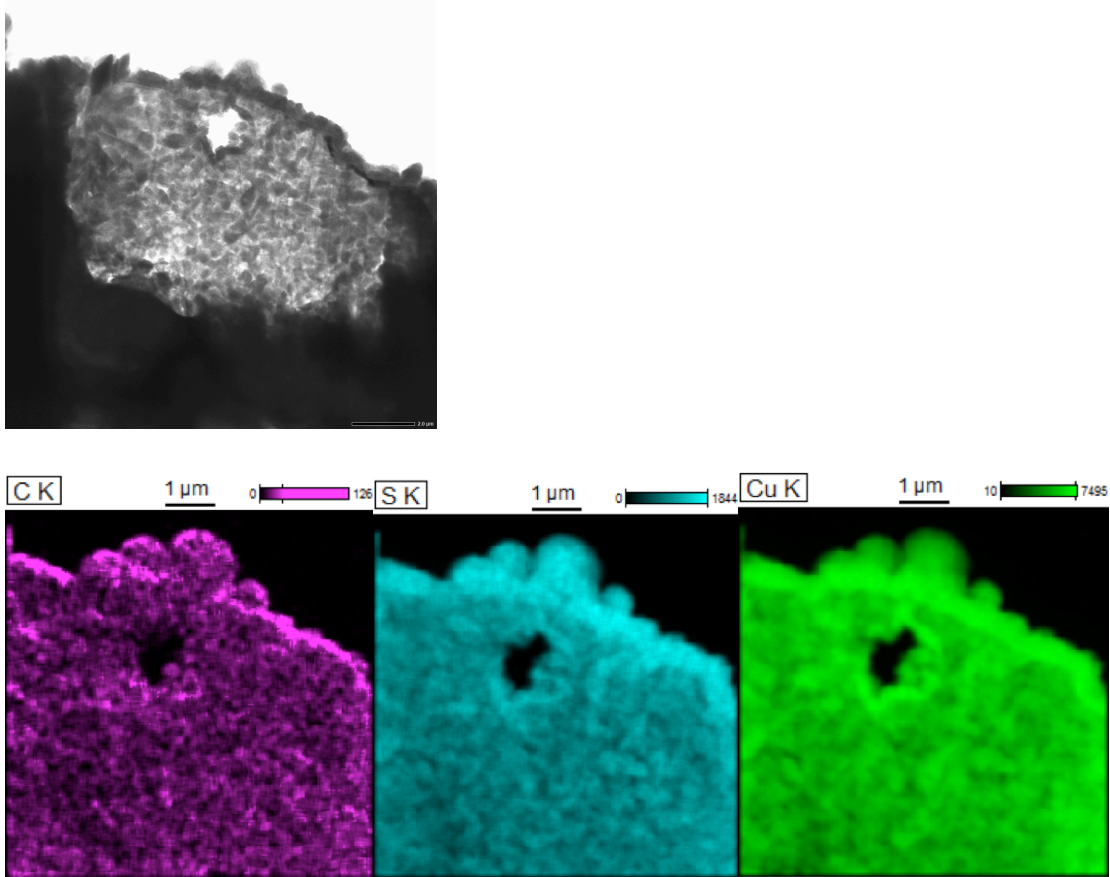


Fig. 1 RA-QD02-0180-01 : A bright Field image and EDS mappings. The section was strongly altered by CuS growth during storage in N₂ purged desiccator after the FIB sectioning.

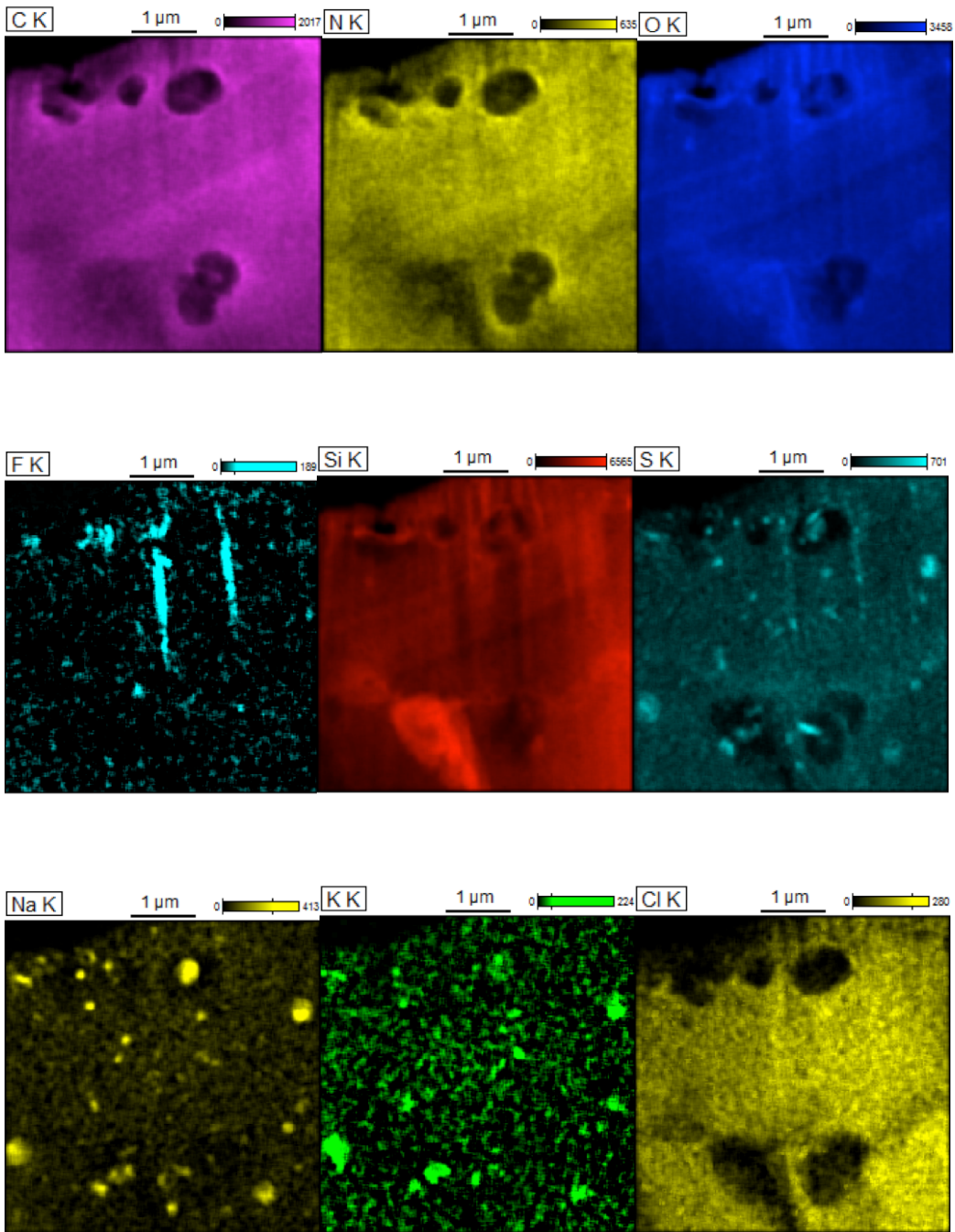


Fig. 2 RA-QD02-0180-02 : EDS mappings. The section contained Na, K and Cl, but their correlation was weak.

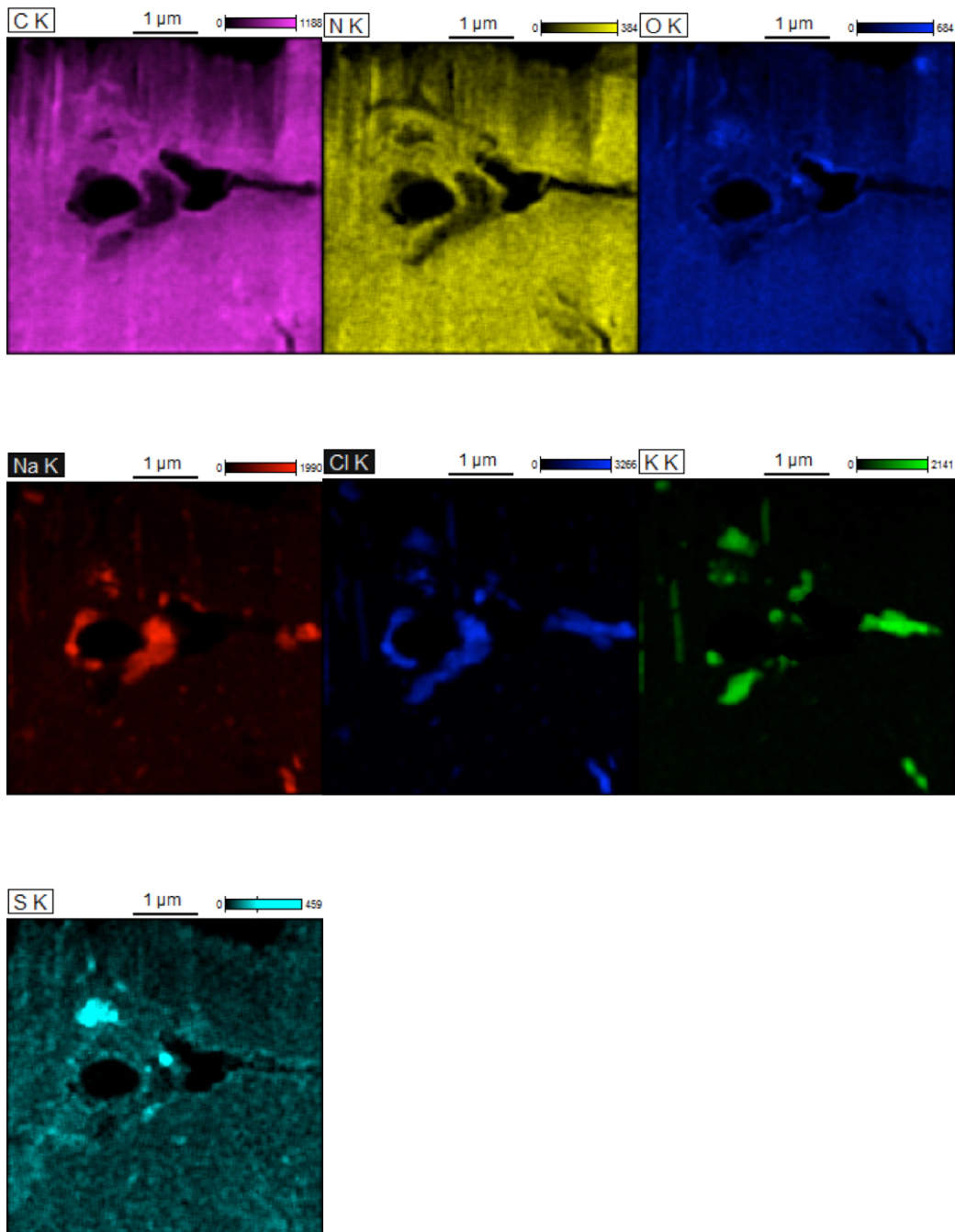


Fig. 3 RA-QD02-0180-03 : EDS mappings. The section contained Na, K and Cl, and they were strongly correlated.

180-3-5A-CL2-HXA1-256x256-15us-WSDD(2)

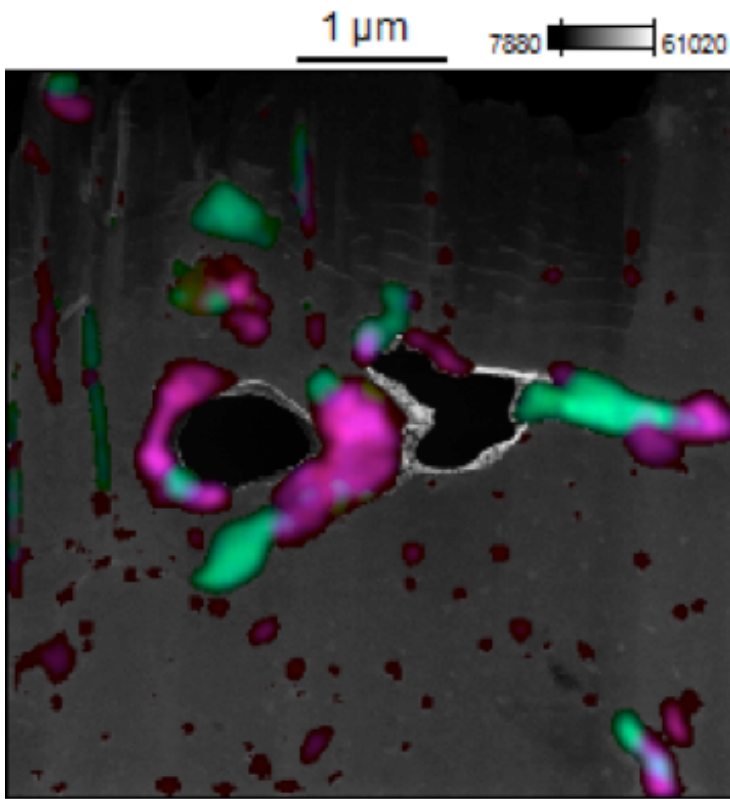


Fig. 4 RA-QD02-0180-03 : Mapping of NaCl (red) and KCl (green).