

## Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

**Sample ID:** RB-QD04-0001 (RB1, RB2)

**PI:** Fumio Kitajima

**Type and date of analysis performed:**

micro-IR/Raman (19 July 2013) with Perkin Elmer Spectrum One (IR)/JEOL JRS-SYSTEM 2000 (Raman)

**Elements or phases identified:**

O-H ( $3503\text{ cm}^{-1}$ ), C=O ( $1684\text{ cm}^{-1}$ ), Aromatic C=C ( $1509\text{ cm}^{-1}$ )

Raman G- and D-band (maybe artifact)

**Contaminant phases identified:**

n/a

**Sample handling:**

Exposed in atmosphere

**State of sample pre-analysis:**

Pressed on a gold plate at PMSCF/JAXA, Transported in  $\text{N}_2$ , Two regions named RB1 and RB2 were analyzed in atmosphere

**State of sample post-analysis:**

On a gold plate in  $\text{N}_2$

**Analysis data Notes:**

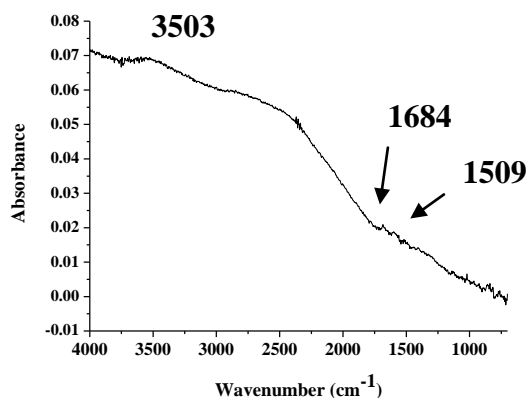
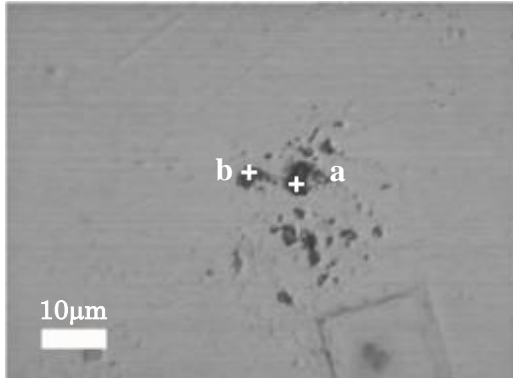


Fig. 1 IR (reflectance) spectrum of RB-QD04-0001 (RB1)

**RB1**



**RB2**

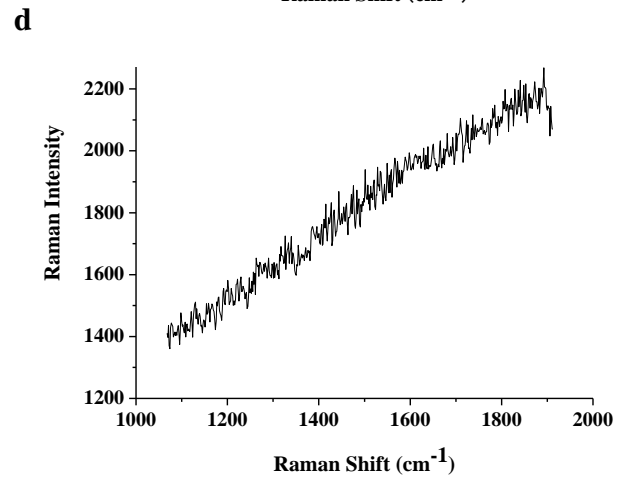
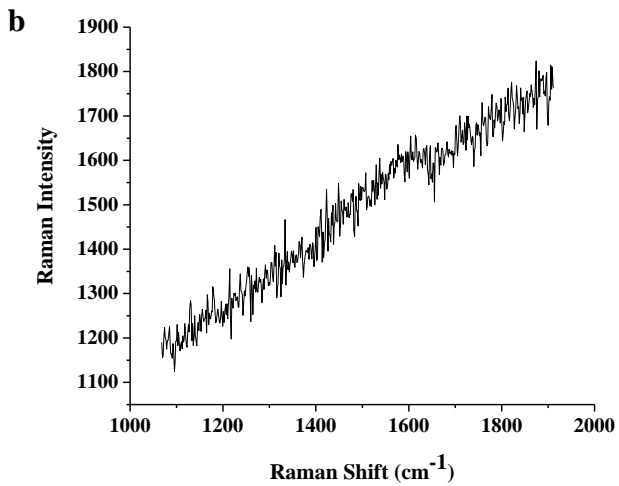
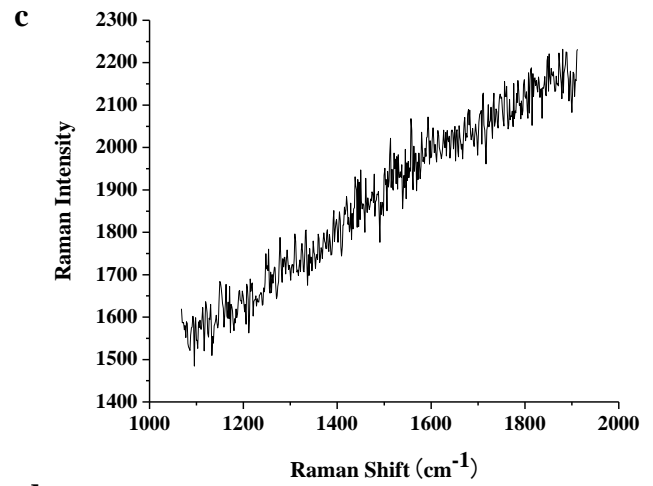
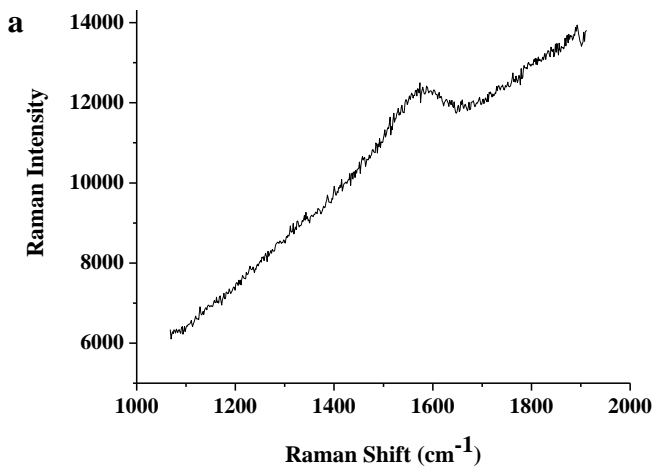
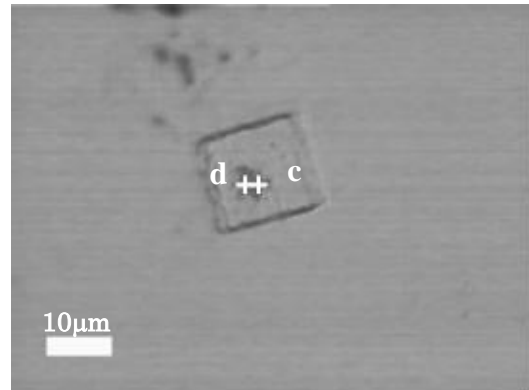


Fig.2 Raman spectra of RB-QD04-0001 (RB1, RB2)

The cross (+) indicates the point at which analysis was performed

Detailed results are described in Kitajima et al. *Earth Planets and Space*