Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RB-QD04-0047-02 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 (3300 cm⁻¹), Imide C=O (1729 cm⁻¹), Amide C=O (1685 cm⁻¹), Aromatic C=C (1506 cm⁻¹) Raman G- and D-band (maybe artifact)

Contaminant phases identified:

n/a

Sample handling: Exposed in atmosphere.

Exposed in atmosphere

State of sample pre-analysis:

Pressed on a gold plate at PMSCF/JAXA, Transported in N₂, Analysis was performed in atmosphere

State of sample post-analysis:

On a gold plate in N₂

Analysis data Notes:

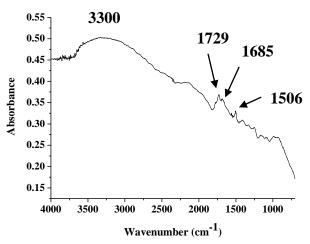
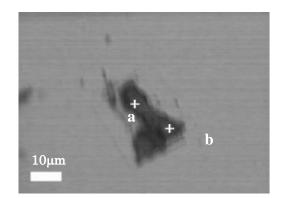


Fig. 1 IR (reflectance) spectrum of RB-QDO4-0047-02



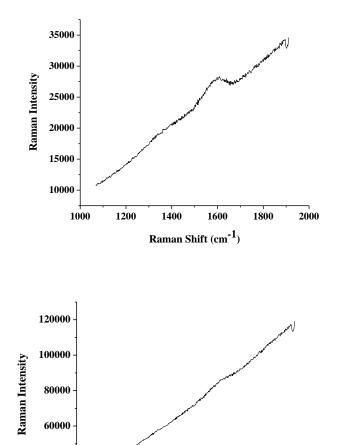


Fig.2 Raman spectra of RB-QD04-0047-02 The cross (+) indicates the point at which analysis was performed

1600

1800

2000

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

1200

1400

Raman Shift (cm⁻¹)

40000

20000

a

b