Sample Results Summary Sheet Please return this form to the Curator for each allocated Sample

Sample ID: RB-QD04-0047-02

PI: Motoo ITO

Type and date of analysis performed:

H, C and N isotope analysis by NanoSIMS ion imaging (2012-2013)

Elements or phases identified: (Mg, Si, olivine, pyroxene, aromatic carbon, etc.) This sample shows terrestrial isotopic ratios of H, C and N within analytical errors.

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

N/A

Sample handling:

Pressed on Au plate (3mm diameter and 0.3mm thick) by Sapphire glass at JAXA curation facility.

State of sample pre-analysis:

On Au plate together with terrestrial organic isotopic standards (BBOT, 1-Hydroxybenzotriazole hydrate)

State of sample post-analysis:

Partially damaged by Cs ion beam during NanoSIMS analysis

Analysis data Notes: (summary of the attached analysis data and/or images) Analytical conditions are described in Ito et al. (2004) *Earth, Planets and Space* 2014, **66**:91. It is noted that we have measured this sample before and after ToF-SIMS analysis.



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Before ToF-SIMS

δD for QD_2	103 +- 14 per mil
δD for QD_3	60 +- 13 per mil
δD for QD_4	4 +- 12 per mil
$\delta^{13}C$	2.8 +- 2.9 per mil
$\delta^{15}N$	-3.8 +- 2.1 per mil
δ^{15} N	-3.8 +- 2.1 per mil

After ToF-SIMS

δD	177 +- 15 per mil
$\delta^{13}C$	14 +- 6 per mil
$\delta^{15}N$	6 +- 2 per mil

¹⁹F (is this material a chip of Viton glove?)



