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

Sample ID: RA-QD02-0033

PI: Hiroshi Naraoka

Type and date of analysis performed:

Amino acid analysis for organic solvent extract by two-dimensional high performance liquid chromatography with highly sensitive fluorescence detection.

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

Not determined

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

Not determined

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

Extracted with dichloromethane/methanol $(1/1, \sim 0.2 \text{ml x3})$ on a clean bench under atmosphere

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)

In a diamond holder after Raman and Infra-Red spectroscopy measurement

State of sample post-analysis:

(N2 hold in sample holder, atmosphere, resin embedded, polished section, UTS) (partially damaged by electron beam, spotted by Ga beam, neutron activation) (consumed by laser ablation)

(unexpected breakup, into # pieces)

(Lost : reason)

Resin embedded and stored under N2 for Syncroton-Radation tomography

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



Fig. 4. Amino acid chromatograms of glycine (Gly), alanine (L,D-Ala), α -aminoisobutyric acid (AIB) and isovaline (L,D-Isoval). a) standard, b) RA-QD02-0049, c) RA-QD02-0033, d) blank, and e) Y-791191. Samples of RA-QD02-0049, RA-QD02-0033, blank and Y-791191 were injected by 40 µl of whole solution (100 µl).



Fig. 4. (continued).