

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0057

PI: Tomoki Nakamura

Type and date of analysis performed:

XRD	Jan/28/2011~ Feb/3/2011
FE-SEM, FE-EPMA	Feb/19/2011~ Feb/28/2011

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

XRD : LPx

FE-SEM : LPx

FE-EPMA : Si, Ti, Al, Fe, Mn, Mg, Ca, Na, Cr

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

N/A

Sample handling:

XRD

Attached to carbon fiber with resin.

FE-SEM, FE-EPMA

Exposed in atmosphere.

Polished by M cross

C-coated (20 nm)

State of sample pre-analysis:

Attached to carbon fiber with resin. (XRD)

Polished section with resin embedded (FE-SEM, FE-EPMA)

State of sample post-analysis:

Attached to carbon fiber with resin. (XRD)

Polished section with resin embedded, C-coated (FE-SEM, FE-EPMA)

N₂ hold in sample holder.

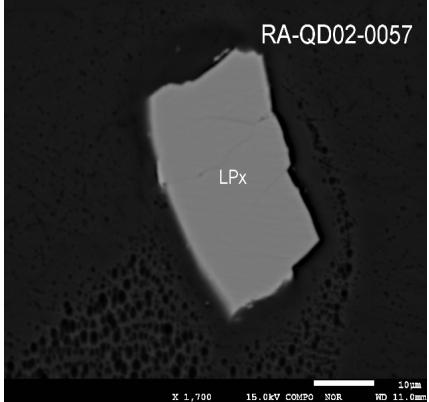
Analysis data Notes: (summary of the attached analysis data and/or images)

See attached sheets.

RA-QD02-0057

Analysis S-XRD (polish) FE-SEM FE-EPMA
Present status Putted butt with some SIMS spots

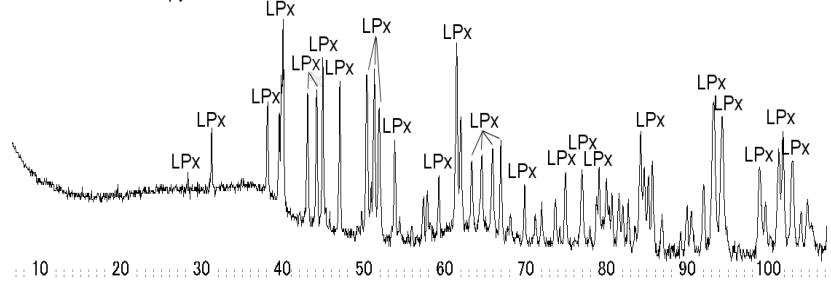
FE-SEM/BSE



S-XRD

Itokawa RA-QD02-0057

LPx: low-Ca pyroxene



FE-EPMA

wt%	Olivine n=0 OI 1 sigma	LPx n=11 .Px 1 sigm:	HPx n=0 +Px 1 sigm:	Plagio n=0 Pl 1 sigma
SiO ₂	54.97	0.28		
TiO ₂	0.20	0.04		
Al ₂ O ₃	0.18	0.03		
FeO	15.99	0.13		
MnO	0.49	0.04		
MgO	27.22	0.15		
CaO	0.94	0.11		
Na ₂ O	0.02	0.02		
K ₂ O	0.01	0.01		
Cr ₂ O ₃	0.11	0.03		
NiO	0.01	0.02		
P ₂ O ₅	0.00	0.01		
SO ₃	0.02	0.02		
Total	100.17	0.45		
SUM				

Comment

Olivine (Fa#)

LPx(Fs#)	24.34	0.15
LPx(Wo#)	1.83	0.21
LPx(En#)	73.83	0.21

HPx(Fs#)

HPx(Wo#)

HPx(En#)

Pl(Or#)

Pl(Ant#)

Pl(Ab#)