

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0036

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 : OI, PI

FE-SEM : OI, PI

FE-EPMA : Si, Ti, Al, Fe, Mn, Mg, Ca, Na, K, Cr, Ni, P, S

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.

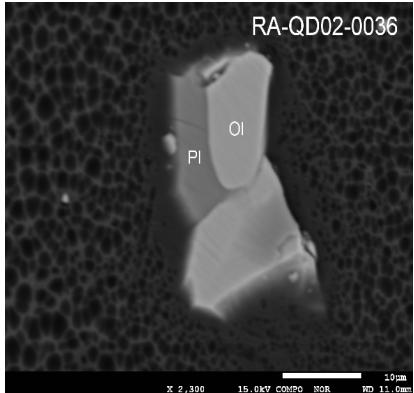
Analysis data Notes: (summary of the attached analysis data and/or images)

See attached sheets.

RA-QD02-0036

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

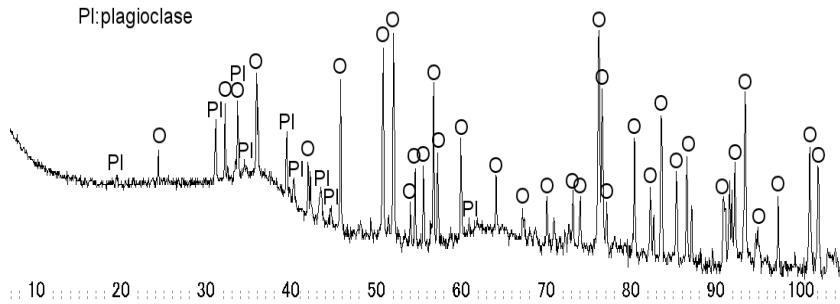
FE-SEM/BSE



S-XRD

Itokawa RA-QD02-0036

O:olivine
Pl:plagioclase



FE-EPMA

wt%	Olivine n=7	Ol 1 sigma	LPx n=0	.Px 1 sigma	HPx n=0	tPx 1 sigma	Plagio n=6	Pl 1 sigma
SiO ₂	38.11	0.41				67.18	1.38	
TiO ₂	0.00	0.01				0.04	0.04	
Al ₂ O ₃	0.03	0.03				20.83	0.47	
FeO	26.35	0.34				0.12	0.08	
MnO	0.47	0.06				0.07	0.04	
MgO	35.77	0.60				0.02	0.02	
CaO	0.01	0.02				2.27	0.11	
Na ₂ O	0.01	0.01				9.66	0.44	
K ₂ O	0.01	0.02				1.37	0.19	
Cr ₂ O ₃	0.02	0.02				0.05	0.07	
NiO	0.01	0.01				0.05	0.06	
P ₂ O ₅	0.09	0.06				0.05	0.06	
SO ₃	0.02	0.02				0.03	0.04	
Total	100.90	0.69				101.74	1.73	
SUM								

Comment

Olivine (Fa#)	29.24	0.52
LPx(Fs#)		
LPx(Wo#)		
LPx(En#)		
HPx(Fs#)		
HPx(Wo#)		
HPx(En#)		
Pl(Or#)	7.65	1.09
Pl(An#)	10.60	0.54
Pl(Ab#)	81.75	1.61