

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0058

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, Tr

FE-EPMA : Si, 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.

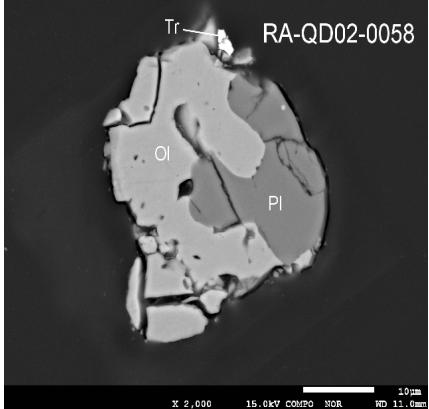
Analysis data Notes: (summary of the attached analysis data and/or images)

See attached sheets.

RA-QD02-0058

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

FE-SEM/BSE

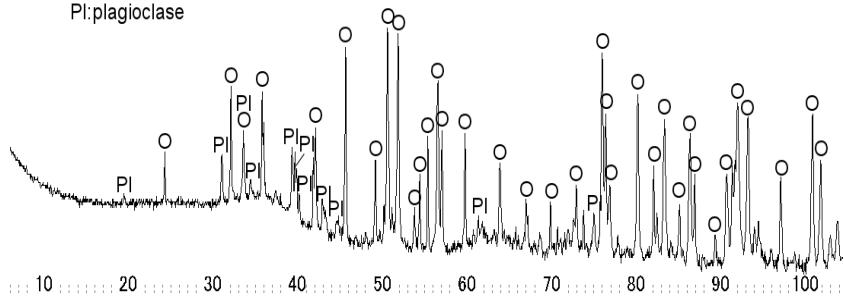


S-XRD

Itokawa RA-QD02-0058

O:olivine

Pl:plagioclase



FE-EPMA

wt%	Olivine n=6	Ol 1 sigma	LPx n=0	.Px 1 sigma	HPx n=0	tPx 1 sigma	Plagio n=7	Pl 1 sigma
SiO ₂	37.57	0.35			63.63	1.86		
TiO ₂	0.00	0.01			0.04	0.03		
Al ₂ O ₃	0.03	0.03			19.78	0.73		
FeO	25.48	0.30			0.62	0.39		
MnO	0.47	0.03			0.01	0.02		
MgO	36.47	0.35			0.60	0.88		
CaO	0.00	0.01			2.11	0.17		
Na ₂ O	0.01	0.02			9.68	0.26		
K ₂ O	0.00	0.01			0.53	0.06		
Cr ₂ O ₃	0.01	0.01			0.03	0.05		
NiO	0.01	0.02			0.06	0.05		
P ₂ O ₅	0.05	0.04			0.06	0.09		
SO ₃	0.03	0.02			0.05	0.06		
Total	100.14	0.34			97.19	1.54		
SUM								

Comment

Olivine (Fa#)	28.15	0.26
LPx(Fs#)		
LPx(Wo#)		
LPx(En#)		
HPx(Fs#)		
HPx(Wo#)		
HPx(En#)		
Pl(Or#)	3.13	0.34
Pl(An#)	10.42	0.88
Pl(Ab#)	86.44	0.91