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

Sample ID: RA-QD02-0009

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 : Ol, Pl, LPx

FE-SEM : LPx

FE-EPMA : Si, Ti, Al, Fe, Mn, Mg, Ca, 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)
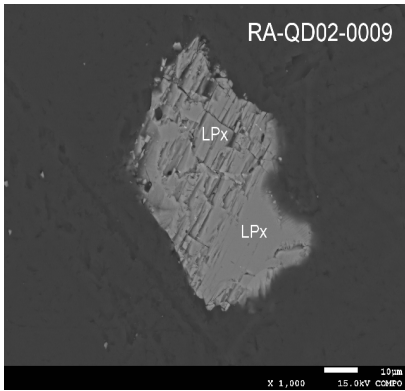
N_2 hold in sample holder.

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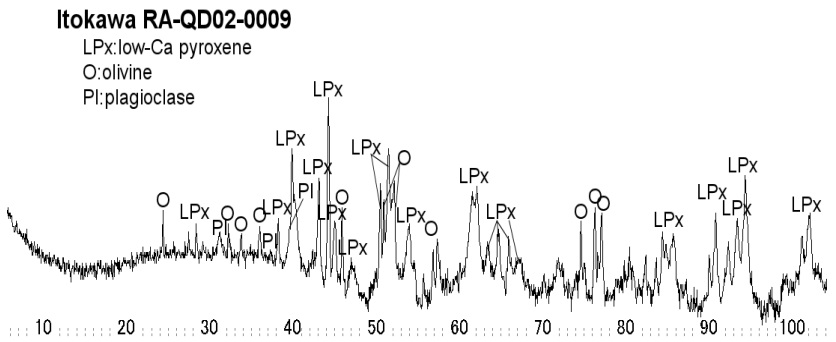
See attached sheets.

RA-QD02-0009

Analysis	S-XRD (polish) FE-SEM FE-EPMA	
Present status	Putted butt with a large hole by FIB sampling	

FE-SEM/BSE

S-XRD

Itokawa RA-QD02-0009
LPx:low-Ca pyroxene
O:olivine
Pl:plagioclase

FE-EPMA

wt%	Olivine n=0	Ol 1 sigma	LPx n=9	LPx 1 sigma	HPx n=0	HPx 1 sigma	Plagio n=0	Pl 1 sigma
SiO2			55.67	0.51				
TiO2			0.12	0.04				
Al2O3			0.10	0.03				
FeO			15.02	0.18				
MnO			0.48	0.06				
MgO			27.87	0.30				
CaO			0.73	0.05				
Na2O			0.02	0.01				
K2O			0.01	0.01				
Cr2O3			0.07	0.03				
NiO			0.02	0.02				
P2O5			0.00	0.01				
SO3			0.01	0.03				
Total			100.11	0.60				

SUM

Comment		
Olivine (Fa#)		
LPx(Fs#)	22.89	0.30
LPx(Wo#)	1.42	0.10
LPx(En#)	75.69	0.32
HPx(Fs#)		
HPx(Wo#)		
HPx(En#)		
Pl(Or#)		
Pl(An#)		
Pl(Ab#)		