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

Sample ID: RA-QD02-0067

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

FE-SEM : Ol, Pl

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)
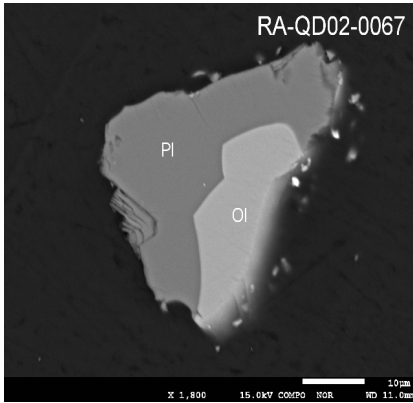
N_2 hold in sample holder.

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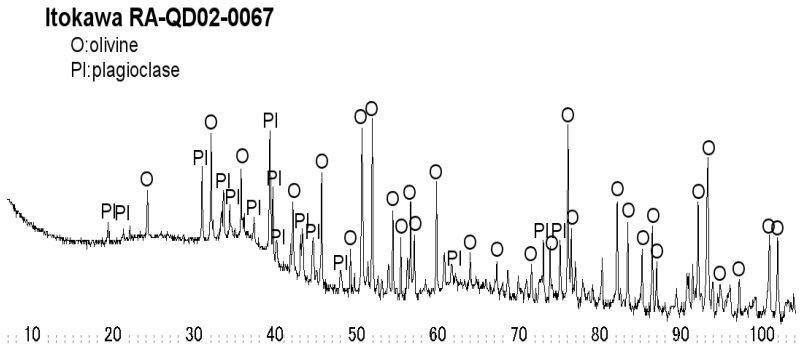
See attached sheets.

RA-QD02-0067

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

FE-SEM/BSE

S-XRD

Itokawa RA-QD02-0067
O:olivine
Pl:plagioclase

FE-EPMA

wt%	Olivine n=8 Ol	1 sigma	LPx n=0	.Px 1 sigma	HPx n=0	tPx 1 sigma	Plagio n=7 Pl	1 sigma
SiO2	38.65	0.22					66.33	0.35
TiO2	0.01	0.02					0.06	0.06
Al2O3	0.01	0.01					20.31	0.42
FeO	26.38	0.23					0.10	0.08
MnO	0.41	0.05					0.07	0.07
MgO	34.95	0.38					0.03	0.04
CaO	0.01	0.02					2.20	0.17
Na2O	0.01	0.01					9.67	0.19
K2O	0.01	0.01					1.13	0.26
Cr2O3	0.01	0.02					0.04	0.05
NiO	0.02	0.03					0.06	0.05
P2O5	0.07	0.08					0.06	0.11
SO3	0.01	0.02					0.06	0.06
Total	100.55	0.61					100.10	0.71

SUM

Comment		
Olivine (Fa#)	29.75	0.30
LPx(Fs#)		
LPx(Wo#)		
LPx(En#)		
HPx(Fs#)		
HPx(Wo#)		
HPx(En#)		
Pl(Or#)	6.36	1.31
Pl(An#)	10.47	0.67
Pl(Ab#)	83.17	1.19