

## **Sample Results Summary Sheet**

**Please return this form to the Curator for each allocated Sample**

**Sample ID:** RA-QD02-0017

**PI:** Tomoki Nakamura

**Type and date of analysis performed:**

XRD                                  July/13/2011~ July /15/2011

FE-SEM, FE-EPMA                Now/28/2011 ~ Now/30/2011

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

XRD : OI

FE-SEM : OI

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

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

N/A

**Sample handling:**

XRD

Attached to glass 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 glass fiber with resin. (XRD)

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

**State of sample post-analysis:**

Attached to glass fiber with resin. (XRD)

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

N<sub>2</sub> hold in sample holder.

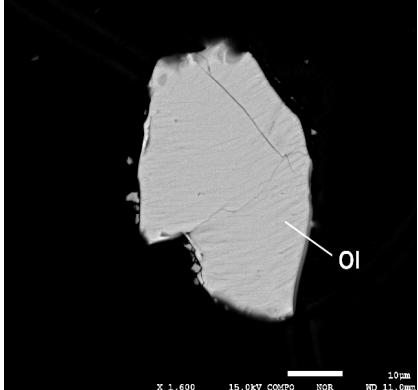
**Analysis data Notes:** (summary of the attached analysis data and/or images)

See attached sheets.

# RA-QD02-0017

Analysis S-XRD (polish) FE-SEM FE-EPMA  
Present status Putted butt

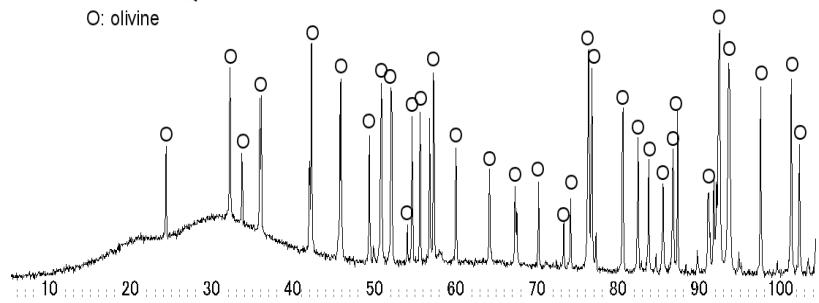
FE-SEM/BSE



S-XRD

## Itokawa RA-QD02-0017

O: olivine



FE-EPMA

wt%	Olivine n=1	Ol 1 sigma	LPx n=1	LPx 1 sign	HPx n=0	HPx 1 sign	Plagio n=0	Pl 1 sigma
SiO <sub>2</sub>	37.31	0.35	51.14					
TiO <sub>2</sub>	0.00	0.01	0.33					
Al <sub>2</sub> O <sub>3</sub>	0.01	0.01	0.33					
FeO	26.59	0.23	5.66					
MnO	0.51	0.02	0.24					
MgO	35.96	0.59	18.66					
CaO	0.00	0.00	20.65					
Na <sub>2</sub> O	0.01	0.02	0.42					
K <sub>2</sub> O	0.01	0.01	0.03					
Cr <sub>2</sub> O <sub>3</sub>	0.01	0.01	0.53					
NiO	0.02	0.02	0.07					
P <sub>2</sub> O <sub>5</sub>	0.05	0.05	0.00					
SO <sub>3</sub>	0.01	0.01	0.00					
Total	100.50	0.86	98.04					
SUM								

Comment

Olivine (Fa#)	29.32	0.36
LPx(Fs#)		
LPx(Wo#)		
LPx(En#)		
HPx(Fs#)		8.65
HPx(Wo#)		40.47
HPx(En#)		50.87
Pl(Or#)		
Pl(Ant#)		
Pl(Ab#)		