

## **Sample Results Summary Sheet**

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

**Sample ID:** RA-QD02-0025-1

**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 : PI

FE-SEM : PI

FE-EPMA : Si, Ti, Al, Fe, Mn, Mg, Ca, Na, K, Cr, 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<sub>2</sub> hold in sample holder.

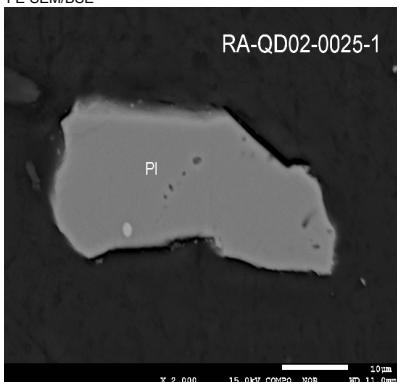
**Analysis data Notes:** (summary of the attached analysis data and/or images)

See attached sheets.

RA-QD02-0025-1

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

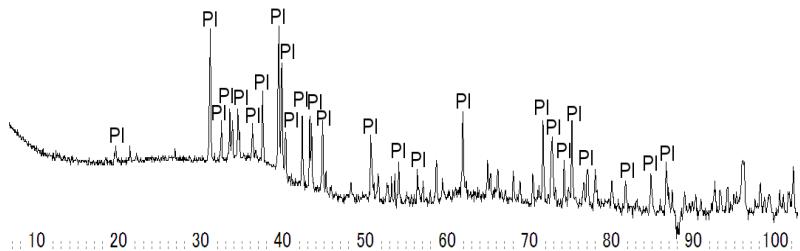
FE-SEM/BSE



S-XRD

Itokawa RA-QD02-0025-1

Pl: plagioclase



FE-EPMA

wt%	Olivine n=COI 1 sigma	LPx n=0 .Px 1 sigm:	HPx n=0 †Px 1 sigm	Plagio n=5PI 1 sigma
SiO <sub>2</sub>			66.59	0.61
TiO <sub>2</sub>			0.06	0.02
Al <sub>2</sub> O <sub>3</sub>			20.21	0.53
FeO			0.03	0.03
MnO			0.03	0.04
MgO			0.02	0.02
CaO			2.08	0.14
Na <sub>2</sub> O			9.95	0.19
K <sub>2</sub> O			0.90	0.13
Cr <sub>2</sub> O <sub>3</sub>			0.06	0.04
NiO			0.03	0.03
P <sub>2</sub> O <sub>5</sub>			0.10	0.14
SO <sub>3</sub>			0.03	0.05
Total			100.10	0.78
SUM				

## Comment

Olivine (Fa#)		
LPx(Fs#)		
LPx(Wo#)		
LPx(En#)		
HPx(Fs#)		
HPx(Wo#)		
HPx(En#)		
PI(Or#)	5.08	0.69
PI(An#)	9.83	0.81
PI(Ab#)	85.09	0.59