

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0057

PI: Akira Tsuchiyama

Type and date of analysis performed:

Tomography Jan/23/2011 (7 keV)

 Jan/24/2011 (8 keV)

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

Mode	OI	LPx	HPx	PI	Tr	Tae	Chm	CP	Kam
Vol %	-	100	-	-	-	-	-	-	-

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

N/A

Sample handling:

Exposed in atmosphere.

State of sample pre-analysis:

Attached to carbon fiber with resin.

State of sample post-analysis:

N₂ hold in sample holder.

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

See attached sheets.

RA-QD02-0057

Operation Date Jan/23/2011 (7 keV)
Jan/24/2011 (8 keV)
operated by Y. Ogami (7 keV)
Y. Ogami (8 keV)
analyzed by A. Shimada

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	-	100	-	-	-	-	-	-	-

A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
13.6	18.0	30.4	24527	2.00

Ol: olivine
LPx: low calcium pyroxene
HPx: high calcium pyroxene
Pl: plagioclase
Tr: troilite
Tae: taenite
Chm: chromite
CP: calcium phosphate
Kam: kamacite

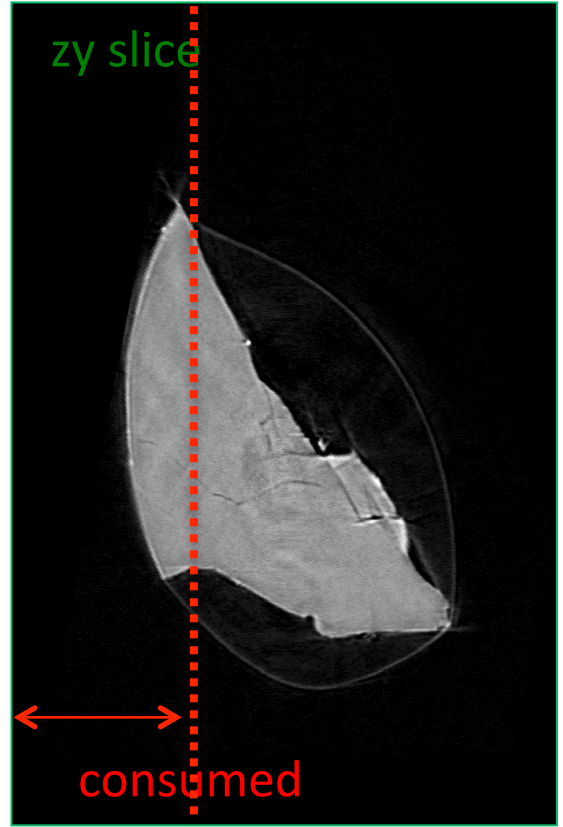
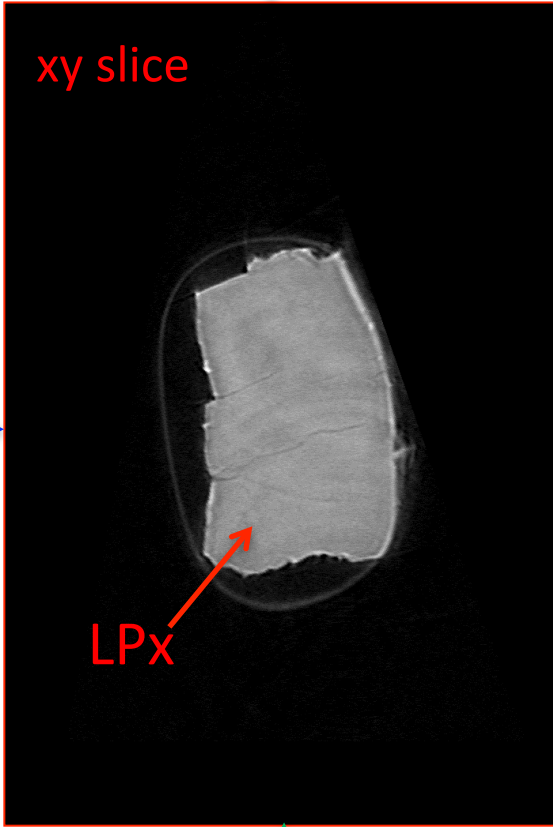
A, B, and C: shortest, middle, and longest axial radii, respectively,
of a best-fit ellipsoid for the particle

V: particle volume without pore
dz: CT image interval
LAC: linear attenuation coefficient of X-ray

RA-QD02-0057 7 keV

59.8 μm

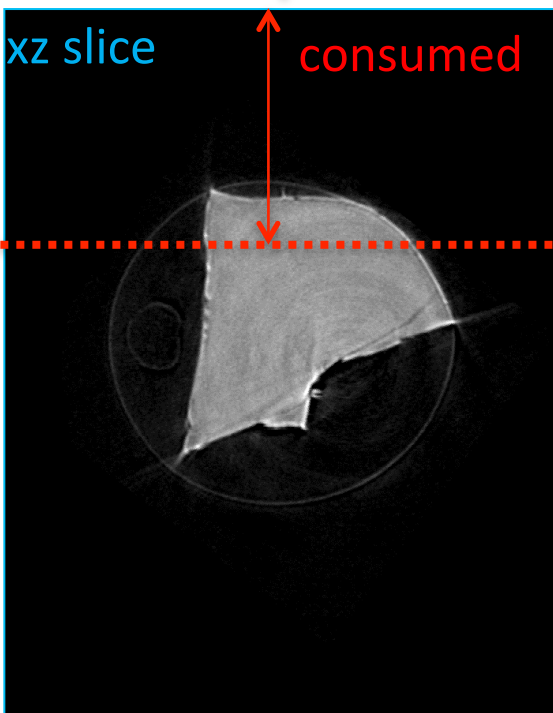
59.2 μm



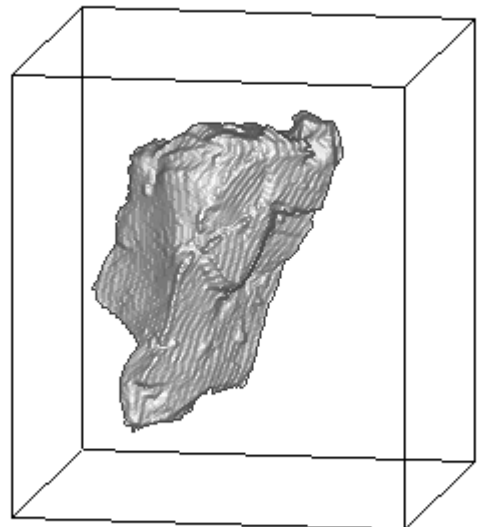
89.2 μm

7keV/xy/271.tif

7keV/zy/349.tif



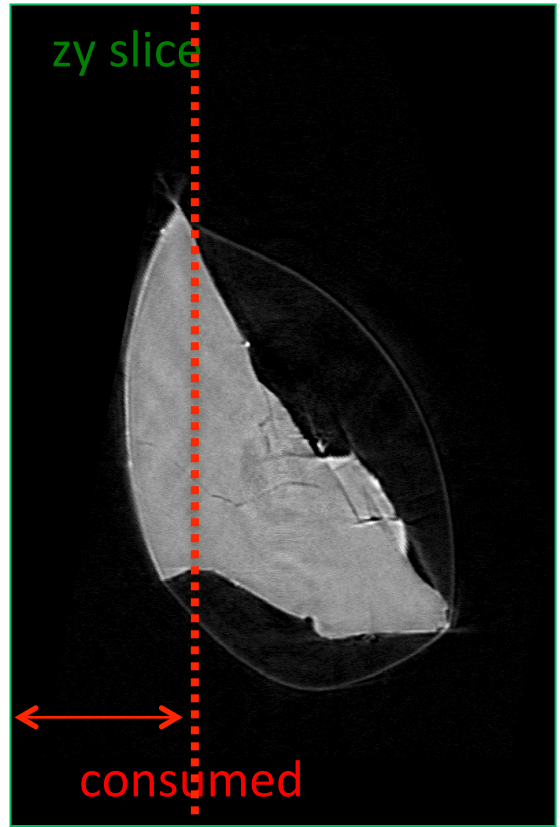
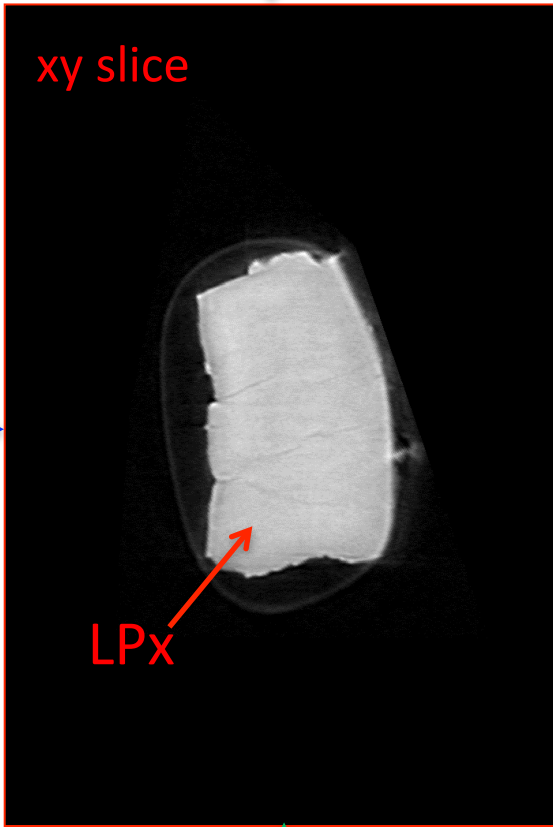
7keV/xz/521.tif



RA-QD02-0057 8 keV

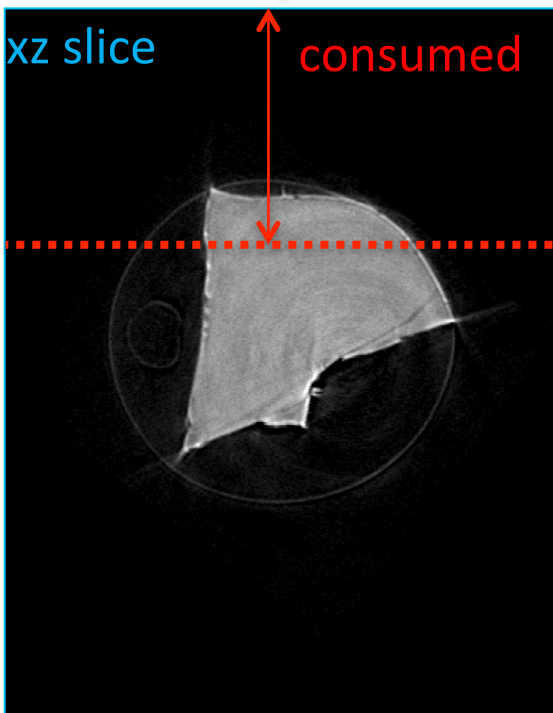
59.8 μm

59.2 μm

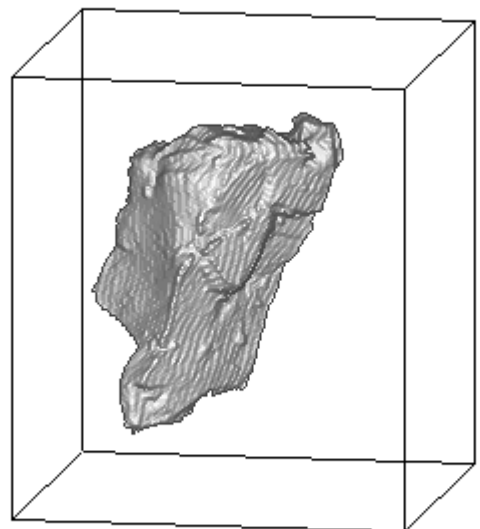


8keV/xy/271.tif

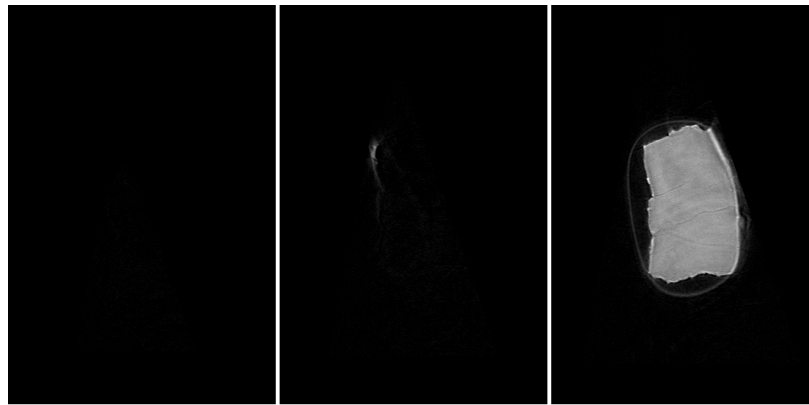
8keV/zy/349.tif



8keV/xz/521.tif



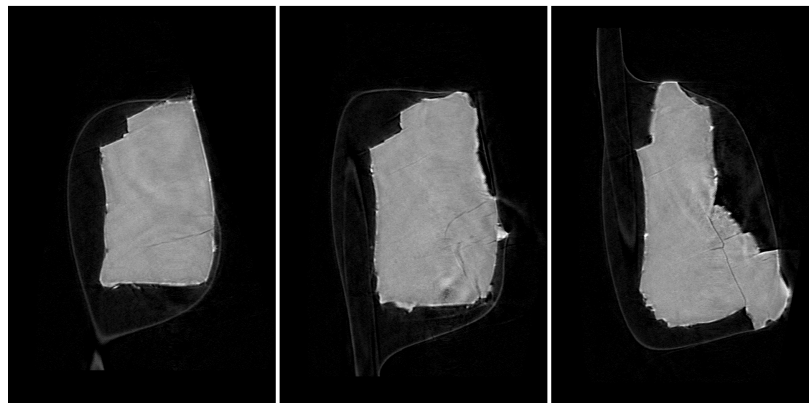
RA-QD02-0057 7 keV catalogue



149.tif

208.tif

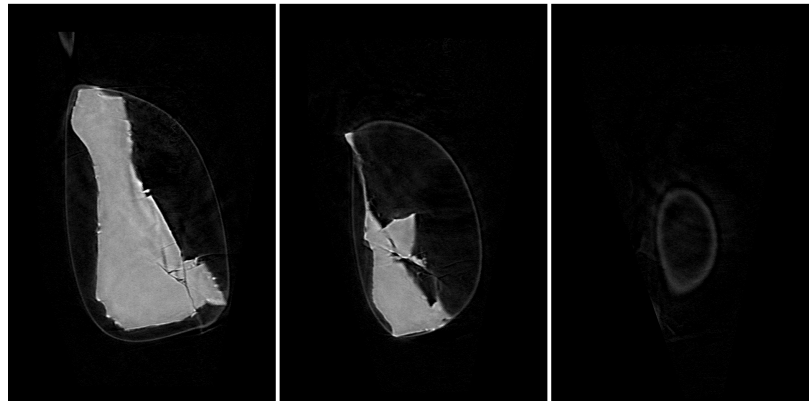
267.tif



326.tif

385.tif

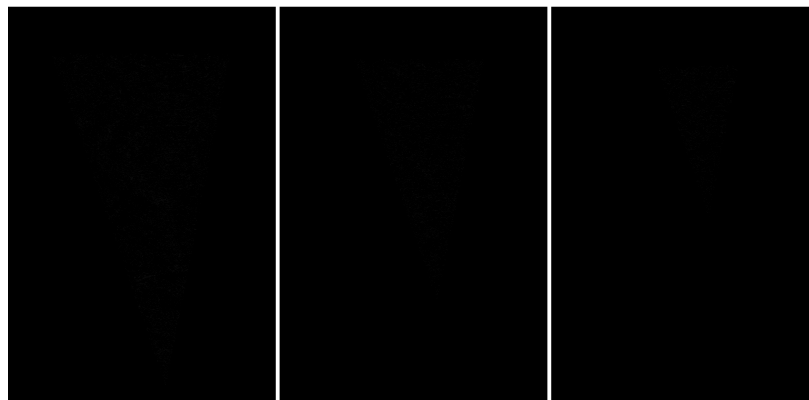
444.tif



503.tif

562.tif

621.tif



680.tif

739.tif

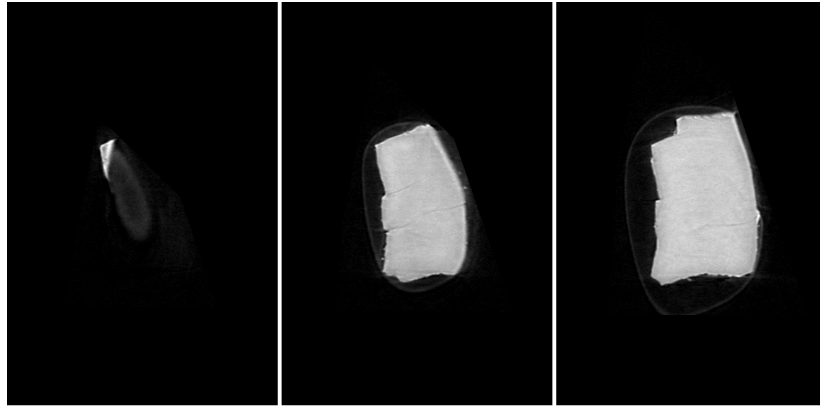
798.tif

dZ = 5.05453 μm



(LAC)

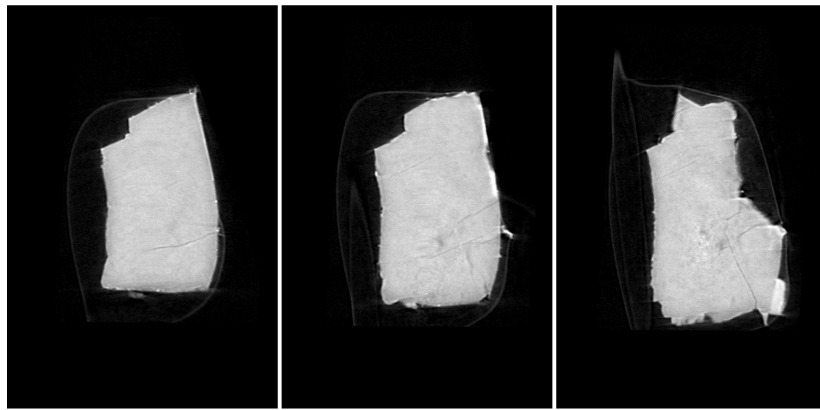
RA-QD02-0057 8 keV catalogue



220.tif

259.tif

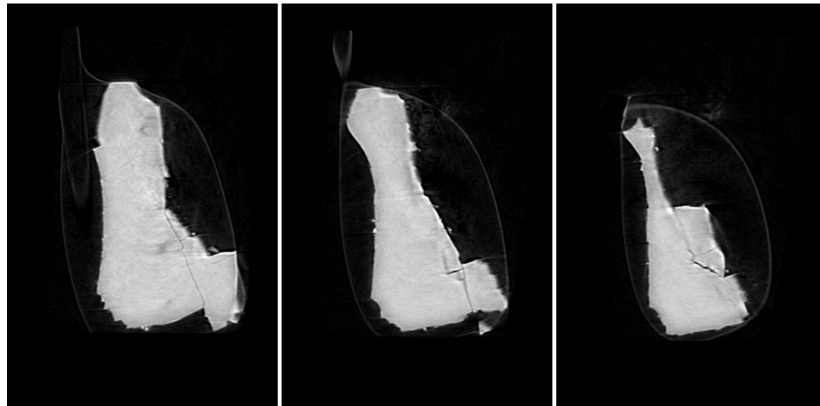
298.tif



337.tif

376.tif

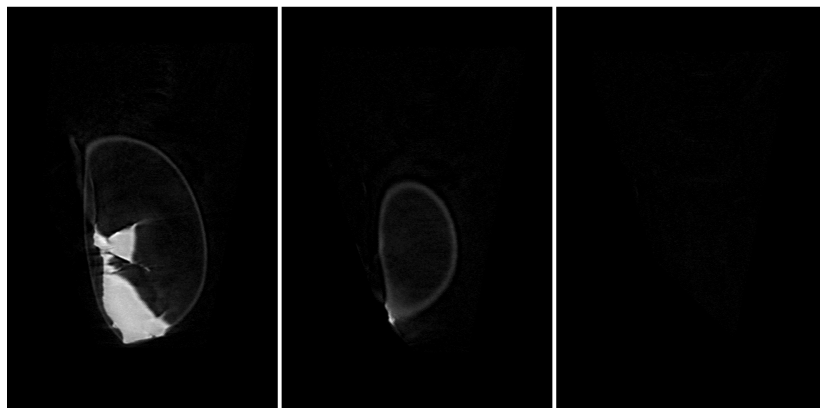
415.tif



454.tif

493.tif

532.tif



571.tif

610.tif

649.tif

dZ = 3.34113 um



(LAC)

RA-QD02-0057 Dual energy histogram

