

151-913A-4H-1 (Piece Dropstone, 33–35 cm)
ROCK NAME: Olivine gabbro
GRAINSIZE: 0.1–2.5 mm.
TEXTURE: Cumulate/ophitic.

OBSERVER: LLD

WHERE SAMPLED: Greenland Sea

MINERALOGY

MINERALS	PRES%	SIZE (mm)	COMP	MORPHOLOGY	COMMENTS
Clinopyroxene	35	0.1–2.0		Anhedral.	Zoned, intercumulus; some alteration.
Plagioclase	40	0.1–2.5	Calcic.	Euhedral to anhedral.	Some sericitization.
Opaque mineral	4	0.1–2.0	Ti-bearing.	Euhedral to anhedral.	Two habits.
Mica	<1	0.05–1.0		Euhedral to anhedral.	Could be secondary; deep green color.
Amphibole	2	0.5–1.5		Anhedral.	
Altered Olivine	1	0.2–2.2		Anhedral.	Chlorite rims, dark green/brown fibrous cores.
Phlogopite	<1	<0.1		Euhedral.	One grain at edge of opaque mineral.
Apatite	<1	<0.1		Euhedral.	

SECONDARY MINERALS

MINERALS	%	REPLACEMENT/FILLING	COMMENTS
Chlorite	6	Amphibole, biotite.	Fibrous.
White Mica	4	Plagioclase and amphibole.	Fibrous.
Brown Mica	7	Clinopyroxene.	Very fine-grained.

ADDITIONAL COMMENTS: Brief description. Other minerals may be present.

151-913A-12X-CC (Piece Dropstone, 17–20 cm)

OBSERVER: LLD

WHERE SAMPLED: Greenland Sea

ROCK NAME: Feldspathic wacke (deformed?). (Brief Description).
GRAINSIZE: to 1.8 mm.
TEXTURE: None.

MINERALS	VOL. %	SIZE (mm)	MORPHOLOGY	COMMENTS
Quartz				Undulatory extinction.
Plagioclase				Twinned.
White Mica				Bent, elongate, and aligned.
K-feldspar		1	Euhedral.	
Opaque Mineral		0.2–1.8	Elongate.	

CEMENT/MATRIX

Carbonate			Sparry	Colorless, splotchy occurrence.
Clay				Brown.

ADDITIONAL COMMENTS: Splotchy coloration. White micas are aligned and define a foliation. Quartz grains have developed subgrains and are distinctly larger than all other grains except K-feldspar pseudomorphs. Percent quartz >> percent feldspar; K-feldspar > plagioclase. Angular to subrounded grains.

151-913B-4R-CC (Piece Dropstone, 10–12 cm)

OBSERVER: LLD

WHERE OBSERVED: Greenland Sea

ROCK NAME: Arkosic sandstone (compacted and slightly deformed).
GRAINSIZE: to 2.0 mm.
WHERE SAMPLED: Greenland Sea.

MINERALS	VOL. %	SIZE (mm)	MORPHOLOGY	COMMENTS
Plagioclase		2	Subhedral, angular.	
White Mica		1	Bladed.	Bent.
Quartz		2	Angular to rounded.	Undulatory extinction, recrystallized.
Titanite		0.2	Rounded.	
K-feldspar			Subrounded.	Mostly altered to clays.

ROCK FRAGMENTS

Myrmekitic intergrowths.
Polycrystalline quartz

ADDITIONAL COMMENTS: Grains are very angular-immature sandstone. Myrmekite and undulatory quartz with subgrains may indicate a plutonic source. Matrix is mostly clayey. Rock could be deformed.