

Information on Dropstone Descriptions, for ALL sites, represents field notes taken aboard ship. Some of this information has been refined in accord with post-cruise findings, but production schedules prohibit definitive correlation of these forms with subsequent findings. Thus, the reader should be alerted to the occasional ambiguity or discrepancy in this unedited material.

151-907A-2H-3 (Piece Dropstone, 49–50 cm) OBSERVER:LLD WHERE SAMPLED: Iceland Plateau

ROCK NAME: Feldspathic wacke (brief description).

GRAIN SIZE: 0.01–0.20 mm

TEXTURE: None.

COMMENTS: A detailed description, including volume percentages size, and morphology determinations, has not been completed for this sample.

ADDITIONAL COMMENTS: Poorly sorted, angular to rounded grains. Feldspar predominates greatly over quartz. K-feldspar is mostly altered to clay, and plagioclase is being replaced by calcite. K-feldspar >>plagioclase.

151-907A-2H-6 (Piece Dropstone, 126–127 cm) OBSERVER: LLD WHERE SAMPLED: Iceland Plateau

ROCK NAME: Alkali basalt.

GRAIN SIZE: to 2 mm.

TEXTURE: Microporphyritic

PHENOCRYSTS

MINERALS	PRES %	ORIG %	SIZE (mm)	COMP	MORPHOLOGY	COMMENTS
Plagioclase	10		0.2–2.0		Euhedral.	Sieve-textured cores or rims.
Clinopyroxene	<1	<1	0.2–1.0	Ti-rich.	Euhedral.	Zoned, some ragged edges.
Opaque mineral	1	1	0.3		Euhedral.	Contains apatite inclusions.
Apatite	1		0.1–0.3		Anhedral.	Smokey, inclusion rich.

GROUNDMASS

MINERALS	PRES %	ORIG %	SIZE (mm)	COMP	MORPHOLOGY	COMMENTS
Biotite	1–2	?	0.1		Anhedral.	Clear to orange pleochroism.
Opaque minerals	5	2	0.01–0.04		Anhedral to euhedral.	Pseudomorphing
Plagioclase	75?		0.02–0.20			
Clinopyroxene	5	10	0.01–0.30	Ti-rich		Being replaced by magnetite.
Olivine	<1	?	0.05		Equant.	Fresh, with cpx and Fe-oxides.
Apatite	1–2		0.01			

ADDITIONAL COMMENTS: Some feldspar could be anorthoclase; microgrid twinning, and untwinned plagioclase rims. Pyroxene rims are oscillatory zoned. Some have ragged edges. Biotite and opaque minerals are poikilitically intergrown. Iron-oxide minerals are actually replacing biotite. Some grains are completely replaced by tiny Fe-oxide grains. Glomeroporphs of sieve-textured plagioclase with lots of smokey apatite and opaque inclusions. Cores of sieve-textured plagioclase look sodic, while euhedral plagioclase grains looks calcic. Some calcic grains have sodic rims. Coarser material occurs in patches.

151-907A-4H-6, (Piece Dropstone, 96–102 cm) OBSERVER: LLD WHERE SAMPLED: Iceland Plateau

ROCK NAME: Gneissic amphibolite schist

GRAIN SIZE: 0.01–1.5 mm

TEXTURE: Foliated, gneissic.

PORPHYROBLASTS:

MINERALS	VOL. %	SIZE (mm)	MORPHOLOGY	COMMENTS
Amphibole	1–2	3	Nearly idioblastic.	

GROUNDMASS

MINERALS	VOL. %	SIZE (mm)	MORPHOLOGY	COMMENTS
Amphibole	70	0.05–1.5	Prisms with ragged edges.	Green to tan pleochroism (-2V=45).
Titanite	5–8	0.07	Prismatic to idioblastic.	Usually dusty and tend to cluster; orange/amber cores.
Epidote/clinozoisite	3–5	0.05–0.11	Prismatic.	Anomalous blue birefringence; yellow-green cores.
Zircon?	<1	0.06	Oval.	Colorless, high relief, could be titanite.
Feldspar	10	0.05–0.6	Xenoblastic.	Most are dirty (sericitized, some coarse white mica).
Chlorite	≈4	<.01	Very fine-grained mat.	In amphibole fractures, and in radiating fibers.
Iron-oxide minerals	1–2	to 0.1	Wormy.	

ADDITIONAL COMMENTS: Outer rim is rounded and polished. What appear to be feldspar porphyroblasts are present. Felsic "gash" veins are also present. No obvious lineation. Amphibole is partially altered or being replaced along cleavage. Feldspar is twinned (thin twin planes--sodic?). Large amphibole crystalloblasts grow across dominant foliation (2 foliations). Segregation veins are dominantly dirty feldspars with sutured grain boundaries, although epidote, amphibole, "iron-oxide minerals, and titanite are also found within." Some amphibole is curved. Core of one titanite is irregular and orange/amber, which could indicate high REE- or Fe-content. Either 2 feldspars or 1 feldspar and quartz are present.