

144-877A-20R-5 (Piece 1, 14–16 cm)

OBSERVER: JJD

WHERE SAMPLED: Unit 1, area with small clasts.

ROCK NAME: Plagioclase-clinopyroxene basalt breccia

GRAIN SIZE: Fine-grained.

TEXTURE: Hyalopilitic.

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
Plagioclase	7	7	0.2–1		Prisms and broken, rounded grains.	Twinning extinctions are distorted by deformation.
Clinopyroxene	3	3	0.5–1		Rounded.	Pale green, fractured, with skeletal quench growth on the edges.
GROUNDMASS						
Plagioclase	20	?	<0.1		Laths.	Swallow-tailed, untwinned, edges are eroded by brown, speckled clays and some are pseudomorphed.
SECONDARY MINERALOGY						
Brown clay	70					COMMENTS
Brown clay + Calcite	Tr				Replacing plagioclases and mesostasis Matrix between clasts	
VESICLES/CAVITIES						
None	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE	

COMMENTS: Large phenocrysts often occur as glomerocrysts and are likely to be xenocrysts. No opaques or mafic microphenocrysts are visible. Nothing with high reflectivity.

144-877A-20R-5 (Piece 1, 24–27 cm)

OBSERVER: JJD

WHERE SAMPLED: Unit 1, one large clast.

ROCK NAME: Plagioclase-clinopyroxene basalt breccia

GRAIN SIZE: Fine-grained.

TEXTURE: Hyalopilitic.

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
Plagioclase	15	15	0.2–1		Prisms to broken, rounded grains.	Irregular twinned extinctions (deformation?); Skeletal quench growth.
Clinopyroxene	Tr	Tr	0.1–1		Rounded.	Sometimes twinned, pale green, skeletal quench growth.
Olivine	0	Tr	<2		Euhedral.	Pseudomorphed to clays.
GROUNDMASS						
Plagioclase	30	70	<0.2		Laths.	Often swallow-tailed, clay-eroded edges, seldom twinned.
SECONDARY MINERALOGY						
Green-brown clay	15					COMMENTS Patches (<0.5 mm) replacing groundmass. Replacing groundmass. Opaque mesostasis, probably hydrolized, but no clay development.
Light brown clay	30					
Hydrolized glass	10					
VESICLES/CAVITIES						
None	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE	

COMMENTS: Large phenocrysts often occur as glomerocrysts and are likely to be xenocrysts. No visible opaque minerals, mafic microphenocrysts, no high reflectivity.