

139-855A-8R-01 (Piece 1, 18–20 cm)

OBSERVER: STA

WHERE SAMPLED:

ROCK NAME: Highly plagioclase-olivine-clinopyroxene phyric basalt.

GRAIN SIZE: Cryptocrystalline.

TEXTURE: Porphyritic.

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
Olivine	10	10	0.5–2.5	An _{75–80}	Euhedral.	Barrel-shaped.
Plagioclase	25	25	1.0–4.0		Euhedral.	Glass inclusions.
Clinopyroxene	5	5	0.2–3.5		Anhedral.	Oikocrysts; xenocrysts
GROUNDMASS						
Plagioclase	2	2	0.1–0.3	An ₆₀	Microlites.	
Glass	57	57	N/A		N/A	
VESICLES/CAVITIES						
Vesicles	2	LOCATION Evenly distributed.	SIZE (mm) 0.3	FILLING Celadonite with some smectite.	SHAPE Spherical.	COMMENTS Most are void.

COMMENTS: This is an extremely fresh basalt with abundant fresh glass.

139-855A-8R-01 (Piece 2, 21–23 cm)

OBSERVER: STA

WHERE SAMPLED:

ROCK NAME: Highly plagioclase-olivine-clinopyroxene phyric basalt.

GRAIN SIZE: Cryptocrystalline.

TEXTURE: Porphyritic/intersertal.

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
Olivine	10	10	0.6–5.0	An _{85–90}	Ovoid.	Very fresh.
Plagioclase	20	20	1.5–3.0		Euhedral.	
Clinopyroxene	3	3	0.35–0.8		Subhedral.	Ellipsoidal xenocryst.
GROUNDMASS						
Plagioclase	9	9	0.1–0.3	An _{70–75}	Laths, skeletal	Lantern shapes
Glass	58	58	N/A		N/A	
VESICLES/CAVITIES						
Vesicles	3	LOCATION Evenly distributed.	SIZE (mm) 0.8	FILLING Celadonite.	SHAPE Spherical.	COMMENTS Most are void.

COMMENTS: Olivine and clinopyroxene glomerocrysts.

139-855A-9R-01 (Piece 3, 24–26 cm)

OBSERVER: STA

WHERE SAMPLED:

ROCK NAME: Moderately plagioclase-olivine-clinopyroxene phyric basalt.

GRAIN SIZE: Fine-grained.

TEXTURE: Intersertal.

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
Olivine	2	3	0.2–1.0	An ₈₀	Ovoid.	
Plagioclase	3	3	0.5–1.5		Tabular.	
Clinopyroxene	3.5	3.5	1.0–2.0		Anhedral.	
GROUNDMASS						
Plagioclase	45	45	0.5		Microlite.	
Clinopyroxene	25	25	0.2–0.5		Anhedral.	
Mesostasis	20	20	N/A		N/A	
SECONDARY MINERALOGY						
	PERCENT	REPLACING/ FILLING				COMMENTS
Smectite	3	Glass.				Yellow-green.
Carbonate	1	Olivine/vesicles.				Interior line with clay.
Talc	<1	Olivine.				

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE
Vesicles	1	Even.	0.6	Calcite and smectite.	Spherical.

COMMENTS: Clinopyroxene oikocrysts with included plagioclase.

139-855B-8R-CC (Piece 4, 17–19 cm)

OBSERVER: STA

WHERE SAMPLED:

ROCK NAME: Highly plagioclase-olivine phyric basalt.

GRAIN SIZE: Cryptocrystalline.

TEXTURE: Porphyritic.

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
Olivine	3	3	0.5–2.0	An ₇₀	Euhedral.	In glomerocrysts with plagioclase.
Plagioclase	14	14	0.5–2.0		Euhedral.	Concentric extinction.
Clinopyroxene	1	1	0.2–1.0		Ovoid.	Possible xenocrysts and oikocrysts.
GROUNDMASS						
Plagioclase	40	40	0.01–0.05	Unknown.	Microlites and skeletal.	
Glass	42	42	N/A	Unknown.	N/A	
VESICLES/ CAVITIES						
	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE	
Vesicles	1	Even	0.05	Void.	Spherical.	

COMMENTS: Poikilitic texture in glomerocrysts with plagioclase included in clinopyroxene. Thin sodic rims on plagioclase phenocrysts.

139-855D-5R-01 (Piece 8, 29–32 cm)

OBSERVER: STA

WHERE SAMPLED:

ROCK NAME: Moderately plagioclase-olivine phyric basalt.

GRAIN SIZE: Cryptocrystalline.

TEXTURE: Intersertal.

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
Olivine	3	3	0.1–0.2		Ovoid.	
Plagioclase	5	5	0.1–0.4	An ₅₀₋₆₀	Subhedral.	Concentric extinction.
GROUNDMASS						
Plagioclase	40	40	0.01–0.1	Unknown.	Dendritic.	Microlites.
Clinopyroxene	40	40	0.04–0.1		Dendritic.	Crystallites.
Magnetite	3	3	0.02		Granular.	
Mesostasis	8	8	N/A		N/A	
VESICLES/CAVITIES						
	SIZE PERCENT	LOCATION	(mm)	FILLING	SHAPE	
Vesicles	1	Even	0.1	Void.	Ovoid.	

COMMENTS: Clinopyroxene is found as spherical aggregates.

139-855D-6R-01 (Piece 1, 8–10 cm)

OBSERVER: STA

WHERE SAMPLED:

ROCK NAME: Highly plagioclase-olivine phyric basalt.

GRAIN SIZE: Cryptocrystalline.

TEXTURE: Porphyritic.

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
Olivine	5	6	0.05–0.1		Rounded.	Some glomerocrysts with plagioclase.
Plagioclase	20	20	0.5–1.5	An ₆₅₋₇₀	Euhedral.	Concentric extinction.
GROUNDMASS						
Plagioclase	12	12	0.01–0.2	Unknown.	Microlites.	
Clinopyroxene	10	10	0.05–0.1		Spherulitic.	
Magnetite	3	3	Unknown.		Granular.	
Mesostasis	50	50	N/A	N/A		
SECONDARY MINERALOGY						
	PERCENT	REPLACING/ FILLING				COMMENTS
Saponite	1	Olivine.				Green
VESICLES/CAVITIES						
	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE	COMMENTS
Vesicles	1	Evenly disturbed.	0.1	Smectite.	Spherical.	Most are void.

COMMENTS: Almost identical to Sample 139-855D-5R-1, Piece 8, except for larger olivine grain size.