

BASALTS, DIABASES, ANDESITES, DACITES, AND RELATED ROCKS

LEUCOCRATIC (0 - 30% MAFIC)

PORPHYRITIC

ROCK	FELSICS			MAFICS				NOTES
	Plagioclase	Quartz	K-Spar	Biotite	Hornblende	Ortho-Pyroxene	Clino-Pyroxene	
26 DACITE	40-50% 2-4mm anh-sbh white	20%		trace to 3% 1-2 mm	5-10% 1-2 mm black			Medium grained phenocrysts in a finer matrix. Some limonite staining.
27 HORNBLLENDE ANDESITE					5% sbh 6 mm Black			Scattered phenocrysts in a light gray groundmass.
323 ANDESITE PORPHYRY	40% - 7 mm sbh-ehd	15%			5-10% 2-4 mm sbh-ehd			Large phenocrysts of plagioclase, smaller phenocrysts of hornblende, in a gray aphanetic groundmass

GLY 4310

LAB 4

MESOTYPE (30-60% MAFIC)

APHANETIC

ROCK	FELSICS			MAFICS				NOTES
	Plagioclase	Quartz	K-Spar	Biotite	Hornblende	Ortho-Pyroxene	Clino-Pyroxene	
35 AMYGDALOIDAL BASALT								Gray to purplish rock. Vesicles are filled - quartz, calcite, epidote (pistachio green) and chlorite (darker green) are visible as amygdaloidal fillings. Amygdules to 5 mm. 15-45%
36 BASALT								Gray rock - occasional dark phenocrysts (clino-pyroxene). Some have small, dark shiny patches (biotite ? - or alteration product).

MESOTYPE (30-60% MAFIC)

PORPHYRITIC

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	Plagioclase	Quartz	K-Spar	Biotite	Hornblende	Ortho-Pyroxene	Clino-Pyroxene	
37 OLIVINE BASALT PORPHYRY	~ 30% anh < 1 mm			1-2% 1-2 mm anh black			~ 15% 2-4 mm	~ 10% olivine → 4 mm sbh Clino-pyroxene is augite. Some show 90° cleavage. Some limonite staining associated with olivine.
38 DIABASE PORPHYRY	20-40% greenish-gray → 1.5 cm sbh							Glomeroporphyritic. Some twinning striations visible on plagioclase. Large phenocrysts in dark gray matrix.

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LAB 4

MESOTYPE (30-60% MAFIC)

PHANERITIC

ROCK	FELSICS			MAFICS				NOTES
	Plagioclase	Quartz	K-Spar	Biotite	Hornblende	Ortho-Pyroxene	Clino-Pyroxene	
33 DIABASE	40% Gray anh-sbh → 3 mm						60% anh-sbh → 5 mm	Diabassic texture Some twinning visible on plagioclase laths.
325 DIABASE	40% Gray anh-sbh 1-2 mm						60% anh-sbh → 5 mm	Heavy iron oxide staining on weathered surfaces. Rock appears foliated (primary flow foliation).

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January 8, 2020