

TONALITE, DIORITE, GABBRO, NORITE, AND ANORTHOSITE

LEUCOCRATIC (0-30% MAFIC)

PHANERITIC

ROCK	FELSICS			MAFICS				NOTES
	Plagioclase	Quartz	K-Spar	Biotite	Hornblende	Ortho-Pyroxene	Clino-Pyroxene	
32 Anorthosite	90% Subh 2.5mm → 10mm laths or equant						10% Anh green/black 2mm → 7mm fibrous	Medium-grained Clino-pyroxene is augite. Plagioclase is anorthite. TRACE MINERAL: euhedral pyrite. Rock has pale bluish hue.
340 Anorthosite	90% Anh-subh white to tan 3mm laths			3% Anh-subh Black 1.5mm			7% Anh-subh Dark green 1.5mm	Medium-grained Clinopyroxene is probably augite. Plagioclase is anorthite. TRACE MINERALS: Biotite & muscovite.

GLY 4310 LAB 6

MESOTYPE (30-60% MAFIC)

PHANERITIC

ROCK	FELSICS			MAFICS				NOTES
	Plagioclase	Quartz	K-Spar	Biotite	Hornblende	Ortho-Pyroxene	Clino-Pyroxene	
24 Tonalite	45% Anh White/gray 3mm Laths or equant	25% Anh Gray 2mm Rounded		8% Anh 2mm → 5mm	17% Subh 4mm → 8mm Columnar		5% Anh Greenish 1.5mm	Medium-Coarse grained. Clinopyroxene is augite. Plagioclase is probably andesine. Some of the plagioclase crystals show twinning in hand specimen.
28 Hornblende Gabbro	32% Subh Clear gray 1.5mm laths	3% Anh Grayish 2mm Rounded			55% Subh Black 1.5mm → 5mm		5% Anh Greenish 0.5mm Equant	Medium-grained. Clinopyroxene is augite. Plagioclase displays some twinning.

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MELANOCRATIC (60-100% MAFIC)

PHANERITIC

ROCK	FELSICS			MAFICS				NOTES
	Plagioclase	Quartz	K-Spar	Biotite	Hornblende	Ortho-Pyroxene	Clino-Pyroxene	
25 Diorite	17% Anh White 1mm, elongated	7% Anh Gray 0.5mm, rounded		12% Anh 2mm	60% Subh Black 2mm, elongated			Medium-coarse grained. Rock is equigranular. SPHENE - 4%, Subh, 1mm, yellow, elongated.
29 Norite	20% Subh Clear gray 2mm Laths to equant	5% Anh Gray 1.5mm				65% Subh Black 1 - 3mm Equant to elongated		Medium-grained. TRACE MINERAL: Biotite MAGNETITE - 7%, Anh, 1.5mm, rock is very slightly magnetic. PYRITE - 3%, Subh-Euh, Yellowish, <1mm
30 Olivine Gabbro	40% Anh-subh white/gray 2mm			5% Anh Black 1mm, clustered	2% Anh Black 2mm			Medium-grained. OLIVINE - 50%, Anh, 3mm, roundish grains SERPENTINE- CHLORITE - splotches of fibrous grains, 3%, 2mm, Anh.
31 Hornblende Gabbro	25% Subh white/gray 2mm Laths to equant	10% Anh Milky to gray 1mm		15% Anh Black to copper 0.75mm, clustered	50% Subh Black 1-5mm Prismatic			Medium-grained. Some of the mica is probably phlogopite.

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