

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. |

GLY 4310 LAB 6

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. |