

NWA 3137

BASALTIC EUCRITE (Type 6) Morocco



Specimen: 51.8 grams Full Slice 143mm x 87mm x 2mm Rim has 75% fusion crust

A large, broken, very fresh stone (931 g; 145mm x 90mm x 43mm) about half coated with thin black fusion crust was purchased from a Moroccan dealer at the Tucson Gem and Mineral Show by Philip C. Mani in February 2004. Classification and mineralogy (A. Irving and S. Kuehner, *UWS*): Metamorphic texture. Aggregate of exsolved low-Ca pyroxene, some exsolved augite and calcic plagioclase ($An_{89.1-90.7}Or_{0.1-0.2}$) with accessory silica polymorph (enclosing troilite, augite and rare merrillite), chromite, ilmenite and troilite (with rare included baddeleyite). Most pyroxene grains consist of fine lamellae of augite ($FS_{26.4-28.7}Wo_{43.5-44.4}$, $FeO/MnO = 30.7 - 33.7$) within orthopyroxene ($FS_{61.6-2.0}Wo_{1.4-1.7}$, $FeO/MnO = 30.8 - 32.2$), and originally were pigeonite. Although the pyroxene and plagioclase compositions in this specimen are almost identical to those in NWA 3138, the textures are quite different, and these two stones are not paired. Specimens: type specimens, 20.6 g, and two polished thin sections, *UWS*; main mass, *Mani*.

– From the Mani Collection