

**Northwest Africa 3138 (NWA 3138)**

M1201.1

**Basaltic Eucrite (Type 5) Morocco**

**Specimen: 7.6 grams Full Slice 47mm x 40mm x 2mm**  
**Rim has 75% fusion crust**

A complete, very fresh stone (132 g; 63mm x 43mm x 40mm) 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*): Ophitic texture. Mainly inverted pigeonite and calcic plagioclase ( $An_{88.7-89.6}Ot_{0.3-0.4}$ ) with accessory ilmenite, silica polymorph, Ti-Al-bearing chromite, orthopyroxene (as inclusions within plagioclase), and sparse troilite (mainly as blebs within silica) and altered Ni-poor iron metal. Pyroxene grains consist of coarse lamellae of augite ( $Fs_{30.6}Wo_{37.2}$ , FeO/MnO = 28.1) within orthopyroxene ( $Fs_{62.7}Wo_{1.3}$ , FeO/MnO = 33.0), and coarse lamellae of orthopyroxene ( $Fs_{62.1}Wo_{1.7}$ , FeO/MnO = 31.1) within augite ( $Fs_{23.5}Wo_{42.1}$ , FeO/MnO = 30.6). Minor secondary calcite laths occur around silica along a crack. Although the pyroxene and plagioclase compositions in this specimen are almost identical to those in NWA 3137, the textures are quite different, and these two stones are not paired. Specimens: type specimens, 20.7 g, and one polished thin section, *UWS*; main mass, *Mani*.

– From the Mani Collection