

Dear Bob

Herewith photographs, correspondence, and other items bundled up separately for Hamilton and Wynella, plus miscellaneous correspondence and newspaper articles, plus photos from NMVictoria of Ellerslie. There are notebooks for each that give sketches of their shapes, against which the photographs can be located.

I haven't included my illegible petrographic notes on Wynella, but a summary follows.

I could not find my petrographic notes on Hamilton, apart from a catalogue page listing it as "Substantially recrystallised hypersthene chondrite" in my 1967 classification (reference below) which means chondrule relics are distinguishable, but pyroxene has converted to orthopyroxene and inor clinopyroxene, while glass has recrystallised to plagioclase, some grains of which exceed 50 microns in size. Another note says plagioclase has been converted (shocked) to maskelynite in the vicinity of black shock veins. In the Dodd-Van Schmus classification that overtook mine, and knowing the olivine composition (Fa 25.3), those characteristics make it an L6.1 I have enclosed an unpublished bulk chemical analysis (a bit affected by mild weathering of metal-troilite boundaries) as well.

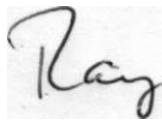
Wynella: was too weathered for a bulk analysis to be meaningful. Chondrules are well-preserved, but all glass has recrystallised to fine grained plagioclase-olivine-pyroxene with trace apatite/merrillite. Plagioclase grains range to 10 microns but most are less than 5 microns: composition from refractive indices is An12. Olivine is Fa 18.7 (Mason EMP) and homogeneous. Orthopyroxene is Fs15 from refractive indices, and contains fine lamellae of diopsidic clinopyroxene..

No veins are present, nor other shock features apart from bent Neuman lamellae in kamacite. Kamacite is accompanied by taenite with Ni-rich margins, and by troilite. Where strongly weathered, taenites may have plessitic cores and troilite is part-converted to pyrite.. Minor opaque phases include chromite and schreibersite.

Classification: Primitive (devitrified) bronzite chondrite; Binns 1967, equates to H4

Enjoy! Drop me an e-mail to say the package has arrived, and again when returning the material

Ray Binns

A handwritten signature in cursive script that reads "Ray". The signature is written in dark ink on a light-colored, slightly textured background.

Binns, R.A. (1967). Structure and evolution of non-carbonaceous chondritic meteorites. *Earth and Planetary Science Letters*, vol. 2, p.23-28.