L4S3

SHOCK- BLACKENED

CLASSIFICATION OF ORDINARY CHONDRITES

Meteorite BLUFF (b)

PETROGRAPHY

CHONDRULE OUTLINES: Very Distinct / (Discernible) / Obscure / Non-Existent

PRESENCE OF CHONDRULE GLASS: (Yes) / No — RARE - 1 BARRED OL

PLAGIOCLASE GRAIN SIZE: _____ µm (For highly metamorphosed Meteorites)

STRIATED PYROXENE: Everywhere / (Abundant) / Rare / None

MATRIX: Opaque / (Recrystallized) (Caution: Beware of Weathering)

CHONDRULE TYPES: (All Present) / Some Missing _____

WEATHERING: (Pigments) / (Patches) / (Veins) — MORE WEATHERED ⇒ EDGE

METAL: Fresh / (Weathering Rims) / Islands / Replaced

TROILITE: Fresh / (Weathering Rims) / Islands / Replaced — RENT

OPAQUE GRAIN SIZE: Metal _____ µm Troilite _____ µm

BRECCIATION: Obvious / Not Obvious

UNUSUAL FEATURES: SHOCK BLACKENED

SHOCK CLASSIFICATION

OLIVINE: Sharp / (Undulatory) / (Planar Fractures) / Mosaicism / Ringwoodite — , No

PLAGIOCLASE: No effects / Undulatory Extinction / Maskelynite

SHOCK VEINS: (Yes) / No — SHOCK BLACKENED FINELY-DISPERSED Fe,Ni-FeS, No "FIZZ" VEINS

MODES

3.3 Metal 6.5 Troilite 6.3 Weathering Products (all in vol.%)

22 No. of Points

MICROPROBE ANALYSES (EHLMANN DATA)

Olivine 22.8 Fa Avg. 0.6 σ _____ Number of analyses

Low-Ca Pyroxene 19.4 Fs Avg. & σ 1.1 Wo Avg. & σ 1.3±0.6 N

High-Ca Pyroxene (optional) _____ Fs _____ Wo _____ N