

CLASSIFICATION OF ORDINARY CHONDRITES

TYPE 4  
S3

Meteorite CEGAR #3 USNM 240-1

PETROGRAPHY

CHONDRULE OUTLINES Very Distinct Discernible Obscure Non-Existent

PRESENCE OF CHONDRULE GLASS Yes No

PLAGIOCLASE GRAIN SIZE \_\_\_\_\_  $\mu\text{m}$  (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

~~METAL~~ Fresh Weathering Rims Islands Replaced

~~TROILITE~~ Fresh Weathering Rims Islands Replaced

~~OPAQUE GRAIN SIZE~~ Metal \_\_\_\_\_  $\mu\text{m}$  Troilite \_\_\_\_\_  $\mu\text{m}$

BRECCIATION Obvious Not Obvious

UNUSUAL FEATURES CHONDRULE ELONGATION - ALIGNMENT?

SHOCK CLASSIFICATION

OLIVINE Sharp Undulatory Planar Fractures Mosaicism Ringwoodite

PLAGIOCLASE No effects Undulatory Extinction Maskelynite

SHOCK VEINS Yes No MELT POCKETS

MODES

\_\_\_\_\_ Metal \_\_\_\_\_ Troilite \_\_\_\_\_ Weathering Products (all in vol.%)

\_\_\_\_\_ No. of Points

MICROPROBE ANALYSES

Olivine \_\_\_\_\_ Fa Avg. \_\_\_\_\_  $\sigma$  \_\_\_\_\_ Number of analyses

Low-Ca Pyroxene \_\_\_\_\_ Fs Avg. &  $\sigma$  \_\_\_\_\_ Wo Avg. &  $\sigma$  \_\_\_\_\_ N

High-Ca Pyroxene (optional) \_\_\_\_\_ Fs \_\_\_\_\_ Wo \_\_\_\_\_ N