

### CLASSIFICATION OF ORDINARY CHONDRITES

Meteorite CEDAR #4 43 TM-1

#### PETROGRAPHY

CHONDRULE OUTLINES Very Distinct Discernible Obscure<sup>x</sup> Non-Existent

PRESENCE OF CHONDRULE GLASS Yes No

PLAGIOCLASE GRAIN SIZE SMALL  $\mu\text{m}$  (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 SOME PENT

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

BRECCIATION Obvious Not Obvious

UNUSUAL FEATURES \_\_\_\_\_

#### SHOCK CLASSIFICATION

OLIVINE Sharp Undulatory Planar Fractures Mosaicism Ringwoodite

PLAGIOCLASE No effects Undulatory Extinction Maskelynite

SHOCK VEINS Yes No BUT NOT REALLY BLACKENED HEAVILY WEATHERED

#### 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

CLASSIFICATION OF ORDINARY CHONDrites

Sil	Fe, Ni	FeS	FeOON	
29949	12820	58939	46928	
<u>30700</u>	<u>12837</u>	<u>59001</u>	<u>47152</u>	
751	17	62	224	1054
71.3	1.6	5.9	21.3	vol %
<del>7.7</del> 3.3	2.1	4.6	4.3	g/cc
235.3	11.36	27.14	91.6	g 365.39
	3.1	7.4	25.1	WT %

~~751  
 17  
 62  
 224  
 1054~~

152  
 72  
224