

CLASSIFICATION OF ORDINARY CHONDRITES

Meteorite Harrison Township Sample No.: M28.1

PETROGRAPHY

CHONDRULE OUTLINES Very Distinct Discernible Obscure Non-Existent

PRESENCE OF CHONDRULE GLASS Yes No

? 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

METAL Fresh Weathering Rims Islands Replaced

TROILITE Fresh Weathering Rims Islands Replaced

OPAQUE GRAIN SIZE (Max) Metal 0.6 mm μm Troilite 0.6 mm μm

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

SHOCK POCKETS Yes No Size _____

MODES

2.8 Metal 4.1 Troilite 1.5 Weathering Products (all in vol.%)

1037 No. of Points

MICROPROBE ANALYSES

Olivine _____ Fa Avg. _____ σ _____ Number of analyses

Low-Ca Pyroxene _____ Fs Avg. & σ _____ Wo Avg. & σ _____ N

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

CLASSIFICATION OF ORDINARY CHONDRITES

Meteorite Ladder Creek Sample No.: UNM 292

PETROGRAPHY

CHONDRULE OUTLINES Very Distinct Discernible Obscure Non-Existent

PRESENCE OF CHONDRULE GLASS Yes No

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 no fine ones

WEATHERING Pigments Patches Veins

METAL Fresh Weathering Rims Islands Replaced

TROILITE Fresh Weathering Rims Islands Replaced

OPAQUE GRAIN SIZE (Max) Metal 1.5 mm μm Troilite 2.2 mm μm

BRECCIATION Obvious Not Obvious

UNUSUAL FEATURES big barred clast

SHOCK CLASSIFICATION

OLIVINE Sharp few Undulatory Planar Fractures Mosaicism Ringwoodite

PLAGIOCLASE No effects Undulatory Extinction Maskelynite

SHOCK VEINS Yes No

SHOCK POCKETS Yes No Size _____

MODES

0.4 Metal 4.3 Troilite 9.6 Weathering Products (all in vol.%)

1042 No. of Points

MICROPROBE ANALYSES

Olivine _____ Fa Avg. _____ σ _____ Number of analyses

Low-Ca Pyroxene _____ Fs Avg. & σ _____ Wo Avg. & σ _____ N

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

Tro	Met	Sil.	Weath
		53	
		51	
	4	57	
	0.4%	50	
		35	
		59	
		57	
		52	
		48	
		52	
		53	
45		73	
4.3%		87	
		47	
		60	
		59	
		7	
		893	
		85.7%	
			100
			9.6%

Total 1042

100
9.6%