

Lunar Meteorite: Dhofar 026 and 457 through 468

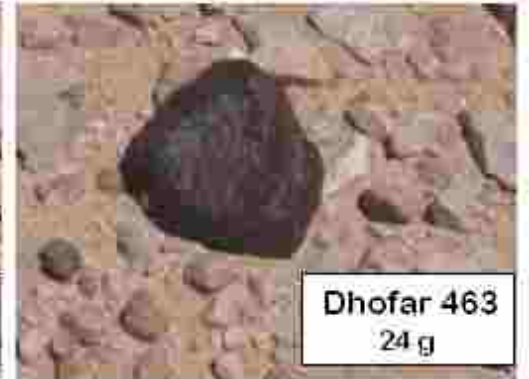
Oman

These stones are all paired.

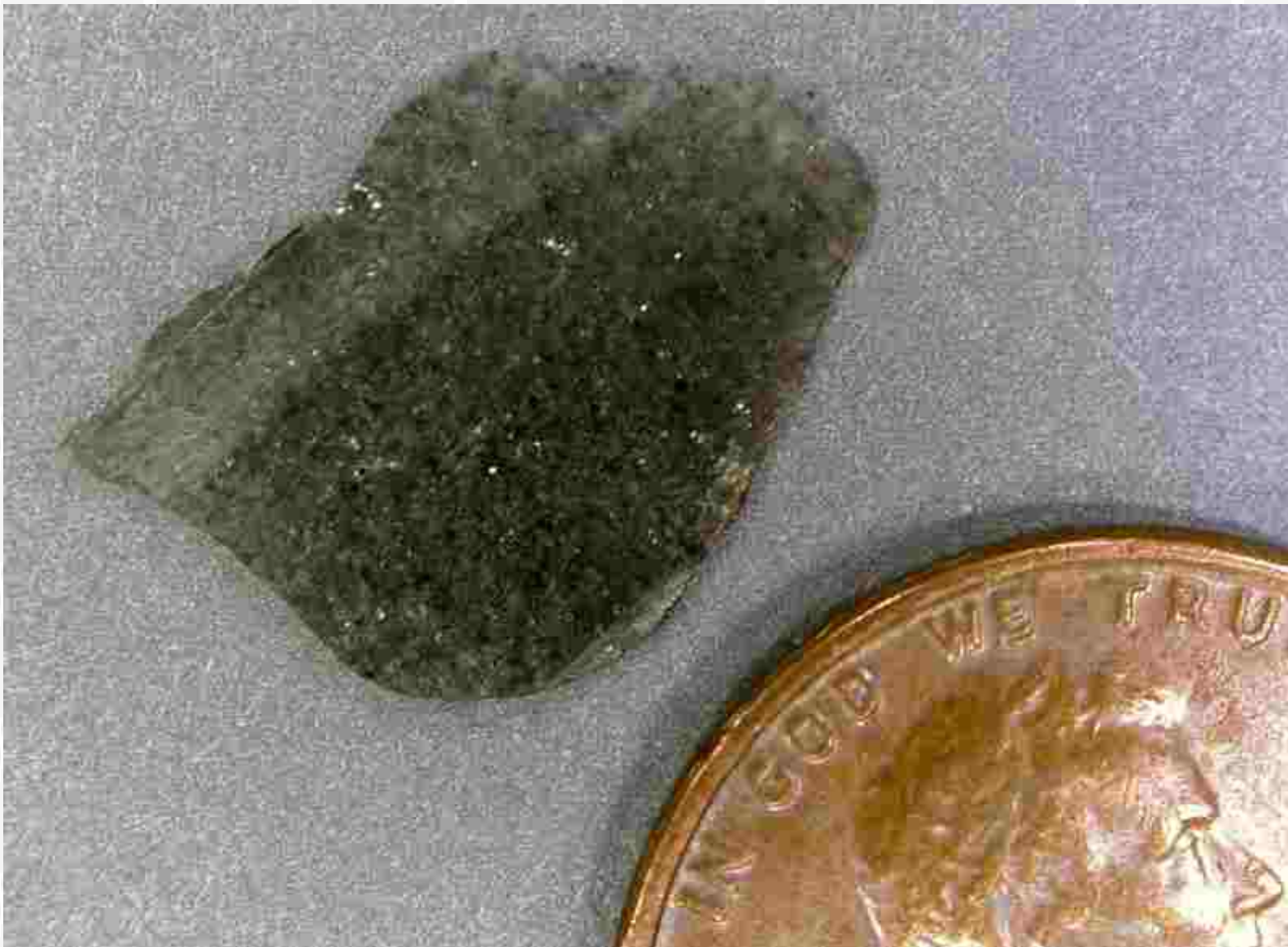
See [Classen](#) slab photos: [026](#) | [460](#) | [461](#) | [464](#) | [466](#) | [467](#)



Dhofar 026. (Original source of photo unknown.)



Photos courtesy of [Luc Labenne](#).



A small slab of Dhofar 461. (Photo by Randy Korotev)

from [The Meteoritical Bulletin No. 84, Meteoritics & Planetary Science 35, A199-A225 \(2000\)](#)

Dhofar 026

18°13.6'N 54°06.7'E

Oman

Found 2000 March 6

Lunar meteorite (anorthositic crystalline melt breccia)

A brownish gray stone weighing 148 g was found in the Dhofar region of Oman. Mineralogy and classification (M. Nazarov and M. Ivanova, Vernad): fusion crust absent; meteorite is a clast-poor, anorthositic, crystalline melt breccia containing rare mineral fragments and clasts of feldspathic rocks embedded in a completely devitrified fine-grained matrix; vesicles are abundant; sphere-shaped, chondrule-like inclusions and rare impact melt veins are present; feldspar, An₉₆₋₉₈; olivine (a dominant mafic phase), Fo₆₁₋₇₉ (Fe/Mn = 80-120 at.); low-Ca pyroxene, En₅₃₋₆₃Wo₈₋₂₀ (with 0.13-0.84 wt% TiO₂, Fe/Mn = 40-60 at.); high-Ca pyroxene, En₄₃₋₅₀Wo₂₇₋₃₃ (with 1.1-3.5 wt% TiO₂, Fe/Mn = 40-50 at.); accessory minerals are silica, ilmenite (MgO = 7 wt%), troilite, and FeNi metal; a prominent positive Eu anomaly (Sm/Eu = 1.04) is present; terrestrial weathering is not significant. The meteorite is completely different in texture and composition from Dhofar 025, but pairing must still be considered due to the proximity of the finds to one another. Specimens: type specimen, 41 g plus two thin sections, Vernad; main mass with anonymous finder.

from [The Meteoritical Bulletin, no. 89, Meteoritics & Planetary Science 40, A201-A263 \(2005\) \(Table 6\)](#)

Dhofar 457-468

name type	date found	latitude (N)	longitude (E)	mass (g)	pieces	comment	(g)
Dho 457	04/03/2001	18°14.901'	54°00.096'	99.5	1	Lunar Paired with Dho 026	1.64
Dho 458	04/03/2001	18°14.917'	54°00.145'	36.7	1	Lunar Paired with Dho 026	1.00
Dho 459	04/03/2001	18°14.914'	54°00.202'	31.5	1	Lunar Paired with Dho 026	1.68
Dho 460	04/10/2001	18°14.965'	54°00.436'	73.1	1	Lunar Paired with Dho 026	9.16
Dho 461	04/22/2001	18°14.682'	53°59.868'	33.7	1	Lunar Paired with Dho 026	3.03
Dho 462	04/22/2001	18°14.800'	54°00.113'	44.7	1	Lunar Paired with Dho 026	1.97
Dho 463	04/22/2001	18°14.808'	54°00.145'	24.3	1	Lunar Paired with Dho 026	2.85
Dho 464	04/23/2001	18°14.976'	53°59.662'	22.3	1	Lunar Paired with Dho 026	1.17
Dho 465	04/23/2001	18°14.833'	54°00.377'	70.7	1	Lunar Paired with Dho 026	2.58
Dho 466	04/26/2001	18°14.814'	53°59.772'	69.2	1	Lunar Paired with Dho 026	2.17
Dho 467	07/11/2001	18°15.226'	54°00.046'	36.2	1	Lunar Paired with Dho 026	1.17
Dho 468	07/12/2001	18°15.390'	53°59.525'	18.9	1	Lunar Paired with Dho 026	0.91

More Information

Meteoritical Bulletin Database

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Map

[Schematic Map of the Find Locations of the Dhofar Lunar Meteorites](#)

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Chemical Classification

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