

14425
Glass Sphere
 0.794 grams



Figure 1: Glass sphere 14425. NASA S72-18776. Diameter of sphere is 0.7 cm.

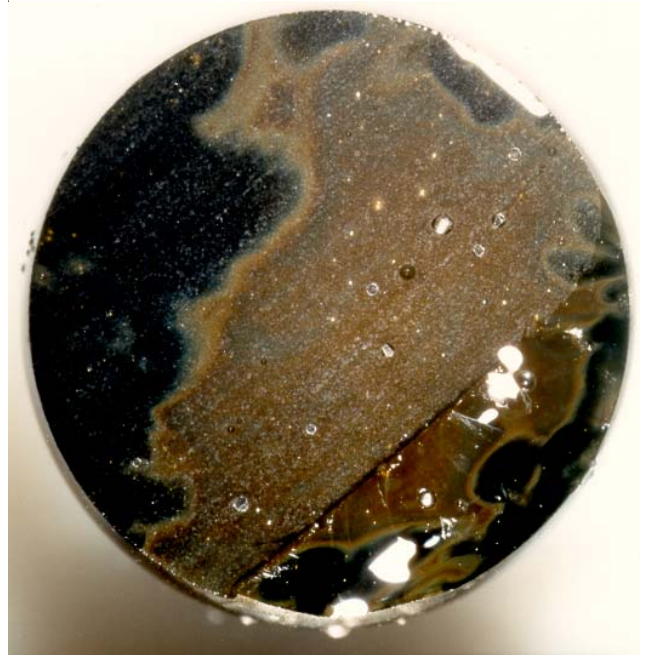


Figure 2: Interior of glass sphere 14425. NASA S85-25498.

Introduction

14425 is a black glass sphere about 0.8 cm diameter. About 5% of the surface is covered with bright gray metallic globules. Micrometeorite craters are also observed on the surface, but have apparently not been studied. The interior glass has partially devitrified (figure 2).

This large glass sphere was sieved from the “bulk soil sample” (14163) collected near LM. It was originally allocated to John O’Keefe, with the provision that it

was not to be carbon coated. This led to an incorrect analysis and interpretation. A thin section now exists, and has been reanalyzed by Glass (1986). The bulk composition (table 1) is similar to the Apollo 14 regolith – it is not volcanic in origin.

Two types of glass are visible in the polished section. One is clear and devoid of metallic spheres. The other area is cloudy with numerous small metallic iron spherules with ~10 % Ni and up to 9% P.

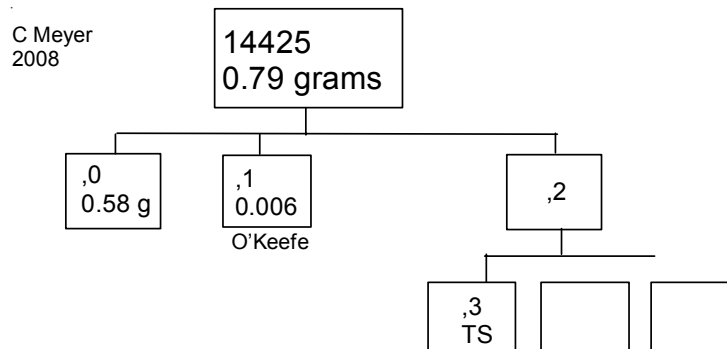


Table 1. Chemical composition of 14425

reference	Glass86	
weight		
SiO ₂ %	47.1	(a)
TiO ₂	1.36	(a)
Al ₂ O ₃	14	(a)
FeO	13.3	(a)
MnO		
MgO	13	(a)
CaO	9.22	(a)
Na ₂ O	0.72	(a)
K ₂ O	0.26	(a)
P ₂ O ₅		
S %		
sum		
Sc ppm		
V		
Cr	2053	(a)
Co		
Ni	tr.	
technique:	(a) e-probe	

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