Reference List

Ksar Ghilane 002 - 538 grams
Enriched Basaltic Shergottite

Figure 1: Discovery photo of Ksar Ghilane 002 (Roszjar et al. 2012).

Mineralogical Mode
(from Roszjar et al. 2012)

Olivine	4.5
Plagioclase	51.7
Pyroxene	36.7
K-spar	-
Silica	2.6
Oxide	0.8
Phosphate	3.4
Sulfide	0.3

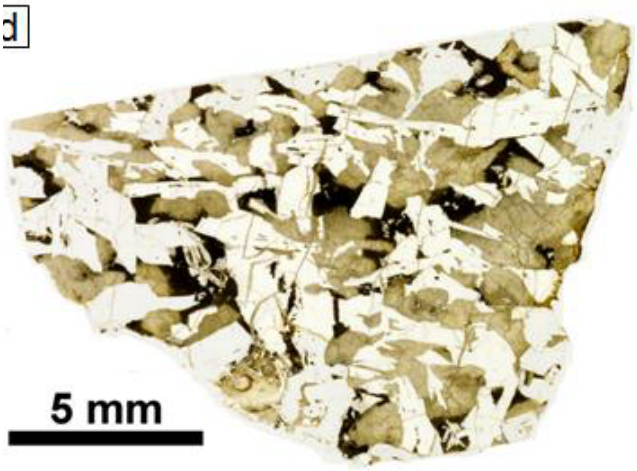

Figure 2: Thin section photo of Ksar Gilane 002 (from Roszjar et al. 2012).

Introduction
Ksar Ghilane 002 is a Martian basaltic rock found in Tunisia at a "watering hole for tourists". It is reported to be similar to Los Angeles.

Petrography
Ksar Ghilane 002 has a basaltic texture (figure 2). It is somewhat weathered, and has lost its fusion crust (figure 1). Roszjar et al. (2012) determined the mineral mode and grain size (4 – 5 mm). The mineralogy is dominated by abundant plagioclase and pyroxene; both highly zoned. It also contains minor Fe-rich olivine, silica, large phosphate, pyrrhotite, magnetite, ilmenite and trace baddeleyite. The outer zones of the pyroxene are intergown with symplectite.

KG002 is heavily shocked; plagioclase is maskelynite and there are "pockets" of shock melt.

Chemistry
Roszjar et al. (2012) reported the REE pattern (figure 3).

Radiogenic age dating
Not yet

Cosmogenic isotopes and exposure ages
Cartwright et al. (2012) studied all the rare gases and also ^{10}Be and ^{26}Al. Everything points to a cosmic ray exposure age of 3 m.y.

Other Studies
Hoffmann et al. (2012) have reported on magnetic studies.

Roszjar et al. (2012) reported that Delta ^{17}O was 0.33 per mil (martian).

Processing
Unknown

References for Ksar Ghilane 002

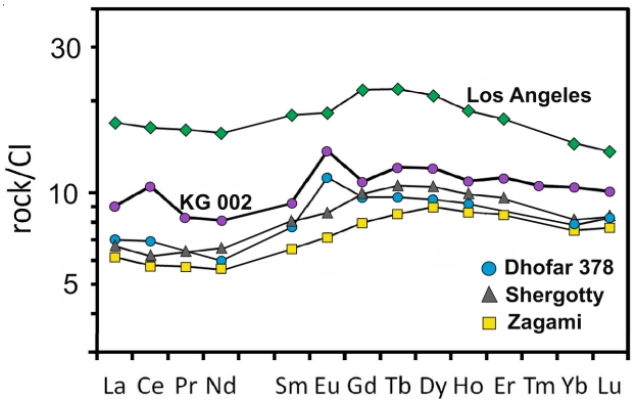

Figure 3: *Composition of Ksar Ghilane 002 compared with other Martian rocks (Roszjar et al. 2012).*

Figure 4: *Location of Ksar Ghilane Oasis (in case you want to go get more).*