

**72131**  
Soil  
220.5 grams

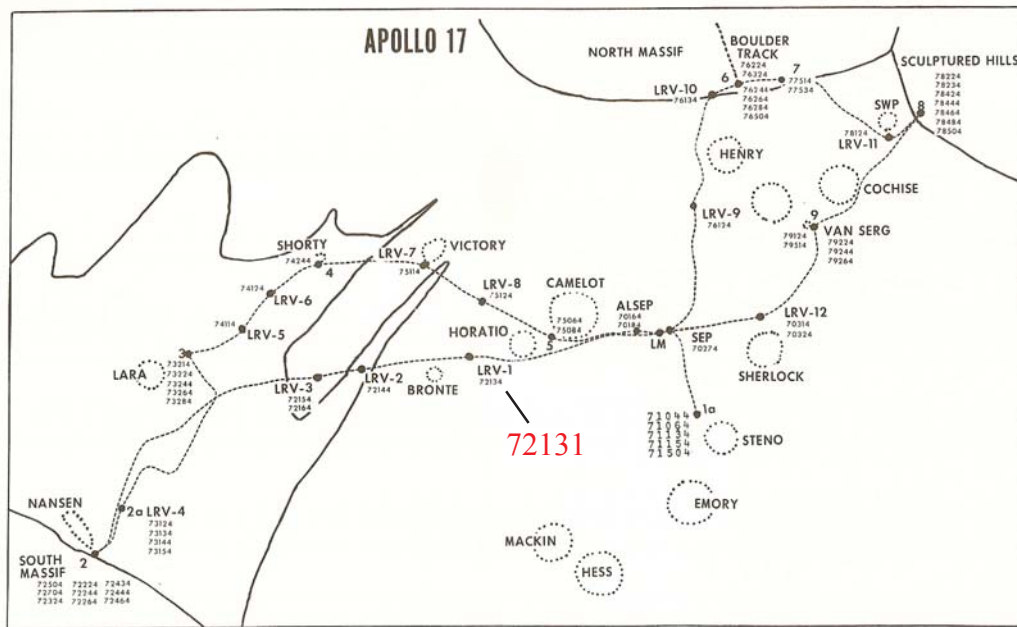


Figure 1: Location of soil sample 72130 at LRV-1 on Apollo 17 map (Meyer 1973). S73-24071

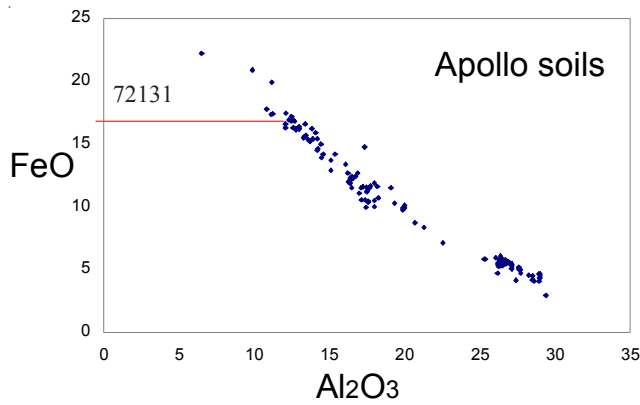


Figure 2: FeO content of 72131 compared with composition of other Apollo soil samples.

**Introduction**

Soil sample 72131 was collected from the mare surface at LRV-1 (figure 1) along with rock sample 72135.

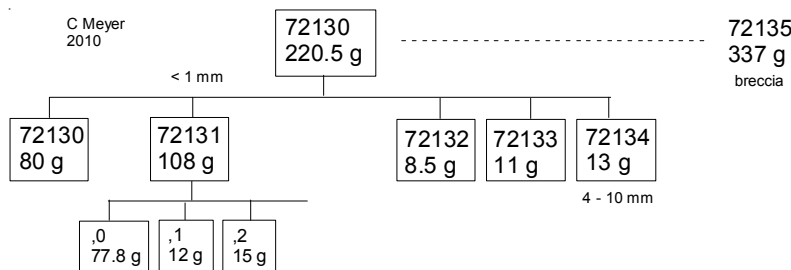
**Petrography**

Morris (1978) determined the maturity index ( $I_s/FeO = 60$ ).

The large sample in the same bag, 72135, is an unusual breccia composed of mare basalt (Neal and Taylor 1992).

**Chemistry**

The chemical composition of 72131 is similar to the ALSEP site.



**Table 1. Chemical composition of 72131.**

reference	Korotev92	
weight		
SiO <sub>2</sub> %		
TiO <sub>2</sub>		
Al <sub>2</sub> O <sub>3</sub>		
FeO	16.5	(a)
MnO		
MgO		
CaO		
Na <sub>2</sub> O	0.396	(a)
K <sub>2</sub> O		
P <sub>2</sub> O <sub>5</sub>		
S %		
sum		
Sc ppm	58.4	(a)
V		
Cr	2960	(a)
Co	33.4	(a)
Ni	180	(a)
Cu		
Zn		
Ga		
Ge ppb		
As		
Se		
Rb		
Sr	150	(a)
Y		
Zr	180	(a)
Nb		
Mo		
Ru		
Rh		
Pd ppb		
Ag ppb		
Cd ppb		
In ppb		
Sn ppb		
Sb ppb		
Te ppb		
Cs ppm		
Ba	96	(a)
La	8.18	(a)
Ce	24.3	(a)
Pr		
Nd	21	(a)
Sm	7.76	(a)
Eu	1.62	(a)
Gd		
Tb	1.85	(a)
Dy		
Ho		
Er		
Tm		
Yb	6.65	(a)
Lu	0.92	(a)
Hf	6.6	(a)
Ta	1.2	(a)
W ppb		
Re ppb		
Os ppb		
Ir ppb	5	(a)
Pt ppb		
Au ppb	6	(a)
Th ppm	0.93	(a)
U ppm	0.36	(a)
technique:	(a) INAA, (b)	

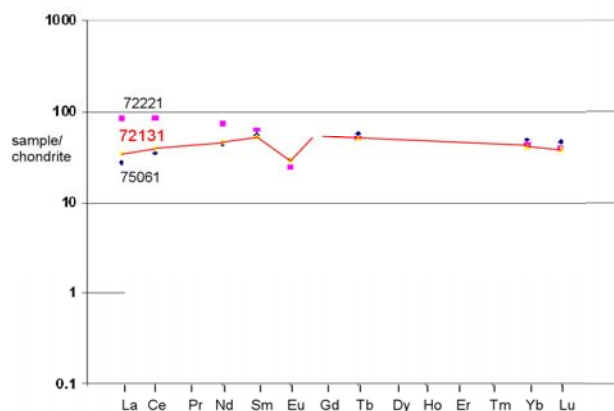


Figure 3: Normalized rare-earth-element content of 72131 - note close similarity to mare soil 75061.

### References for 72131

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