

MAJOR ELEMENT	AVERAGE APOLLO 11 SOIL	AVERAGE APOLLO 12 SOIL	AVERAGE APOLLO 14 SOIL	AVERAGE APOLLO 15 SOIL	AVERAGE APOLLO 16 SOIL	AVERAGE APOLLO 17 SOIL	TERRESTRIAL BASALT	TERRESTRIAL HIGH-TI GABBRO	JSC-1 LUNAR REGOLITH SIMULANT
SiO ₂	42.2%	46.3%	48.1%	46.8%	45.0%	43.2%	49.21%	49.21%	47.71%
TiO ₂	7.8%	3.0%	1.7%	1.4%	0.54%	4.2%	1.39%	7.05%	1.59%
Al ₂ O ₃	13.6%	12.9%	17.4%	14.6%	27.3%	17.1%	15.81%	11.94%	15.02%
Cr ₂ O ₃	0.3%	0.34%	0.23%	0.36%	0.33%	0.33%	?	?	0.04%
FeO	15.3%	15.1%	10.4%	14.3%	5.1%	12.2%	8.18%	18.39	7.35%
Fe ₂ O ₃	DEBATABLE	DEBATABLE	DEBATABLE	DEBATABLE	DEBATABLE	DEBATABLE	?	7.05%	3.44%
MnO	0.2%	0.22%	0.14%	0.19%	0.3%	0.17%	0.16%	0.21%	0.18%
MgO	7.8%	9.3%	9.4%	11.5%	5.7%	10.4%	8.53%	6.47%	9.01%
CaO	11.9%	10.7%	10.7%	10.8%	15.7%	11.8%	11.14%	9.88%	10.42%
Na ₂ O	0.47%	0.54%	0.70%	0.39%	0.46%	0.40%	2.71%	2.43%	2.70%
K ₂ O	0.16%	0.31%	0.55%	0.21%	0.17%	0.13%	0.26%	0.10%	0.82%
P ₂ O ₅	0.05%	0.40	0.51	0.18%	0.11%	0.12%	0.15%	0.01%	0.66%
S	0.12%	?	?	0.06%	0.07%	0.09%	?	?	?

Table-3: A comparison of the chemical composition of soil from various Apollo samples and terrestrial igneous rocks.

MAJOR ELEMENT	JSC-1A LUNAR REGOLITH SIMULANT	JSC-1AF LUNAR REGOLITH SIMULANT	KREEP SAMPLE 12013	TEKTITE J-86	TEKTITE J-87	TERRESTRIAL KAERSUTITE	MOORE COUNTY EUCRITE	KAPOETA HOWARDITE	“LUNAR” METEORITE EET-87521
SiO ₂	46.67%	47.1%	61%	64.1%	63.5%	40.36%	48.16%	48.47%	46.5%
TiO ₂	1.71%	1.87%	1.2%	0.8%	0.8%	7.09%	0.32%	0.37%	0.75%
Al ₂ O ₃	15.79%	17.1%	12%	12.2%	12.6%	13.78%	15.57%	9.46%	13.0%
Cr ₂ O ₃	?	?	?	?	?	?	0.44%	0.63%	?
FeO	8.17%	7.57%	10%	9.0%	8.5%	10.97%	15.57%	17.16%	18.1%
Fe ₂ O ₃	12.5%	3.41%	?	?	?	?	?	?	?
MnO	0.19%	0.18%	?	?	?	0.14%	0.31%	0.53%	0.24%
MgO	9.39%	6.9%	6.0%	8.0%	6.8%	11.08%	8.41%	12.00%	7.72%
CaO	9.90%	10.3%	6.3%	3.2%	3.8%	10.82%	11.08%	8.08%	11.20%
Na ₂ O	2.83%	3.3%	0.69%	0.8%	0.7%	2.78%	0.45%	0.46%	0.36%
K ₂ O	0.78%	0.86%	2.0	1.5%	1.5%	1.34%	0.09%	0.05%	0.05%
P ₂ O ₅	0.71%	0.76%	?	?	?	?	?	0.07%	0.07%
S	?	?	?	?	?	?	?	?	?

Table-4: A comparison of the chemical composition of terrestrial igneous rocks and kaersutite (an amphibole mineral), Apollo 12 KREEP rock, tektites, and meteorites.