

CLASSIFICATION OF THE ROCK SAMPLES OF THE APOLLO 14 LANDING SITE  
 ACCORDING TO THE RECOMMENDED NOMENCLATURE OF LUNAR HIGHLAND ROCKS  
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Since the landing of the Apollo 14 crew at the Fra-Mauro Formation of the Moon ten years ago there have been many suggestions for a classification and nomenclature of the rocks sampled at this site (1,2,3,6,5,6,) and for the classification of lunar highland rocks in general (7,8,9,10,11). Because of the confusion in the classification of lunar highland rocks the LAPST established a nomenclature committee in 1979 which published his work in 1980 (12). This paper presents a classification of all rock samples of the Apollo-14 site which have been available in the thin section library of the lunar sample curator. For some breccias additional investigations in the nitrogen cabinet have been performed for a certain assignment of the rocks to one of the rock-classes.

Sample	Subsamples	Station(13)	Class according (12)	Remarks
14006	,6,7,8,21	LM-area	cryst. melt breccia	finely granular
14041	,5,6,10,12	A	regolith breccia	
14042	,7,18	A	regolith breccia	
14045	,7,8	A	regolith breccia	
14047	,4,5,53,106	B	regolith breccia	
14049	,6,7,8,9,40	B <sub>6</sub>	regolith breccia	
14051	,6	C <sup>P</sup>	cryst. melt breccia	
14053	,6,13,14	C2	basalt	
14055	,8,9,11,14	E		
14063	,29		regolith breccia	
	,6,7,8,9	C1	cryst. melt breccia	clast within fragmental breccia
14064	,15,16,22		fragmental breccia	
	,25,59			suevitic
	,17,21,34,36	C1		
14066	,37,47		fragmental breccia	
	,7,8,9,10,34	F	cryst. melt breccia	
14068	,35,48,49,50			finely granular
	,8	C'	glassy melt breccia	partly recrystallized
14069	,4,8	C'	cryst. melt breccia	
14070	,3,6	C'	cryst. melt breccia	
14071	,7	C'	basalt	
14073	,7,10,11	G	basalt	
14074	,4,6	G	basalt	
14075	,4	G	cryst. melt breccia	shocked
14077	,2	G	cryst. melt breccia	ophitic
14078	,4	G	basalt	
14079	,2	G	basalt	
14082	,5,6,7,11,12	C1	fragmental breccia	
	,13,49			
14083	,11,35	C1	cryst. melt breccia	clasts within fragmental breccia
14169	,4,5,8	Comp.Sa.	cryst. melt breccia	
14170	,4,5	Comp.Sa.	cryst. melt breccia	
14171	,7,8,20,21,	Comp.Sa.		
	,22,23	Comp.Sa.	cryst. melt breccia	shocked

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14172	,3,4,5	Comp. Sa.	cryst. melt breccia	
14173	,3,6	Comp. Sa.	cryst. melt breccia	
14175	,3	Comp. Sa.	cryst. melt breccia	
14179	,3,4	Comp. Sa.	granulitic breccia	
14180	,3,4	Comp. Sa.	cryst. melt breccia	
14181	,4,5	Comp. Sa.	basalt	
14187	,2,3	Comp. Sa.	cryst. melt breccia	finely granular
14195	,2	unknown	cryst. melt breccia	finely granular
14197	,2	unknown	cryst. melt breccia	finely granular
14200	,2	unknown	cryst. melt breccia	finely granular
14250	,3,4	Comp. Sa.	regolith breccia	
14253	,3,4	Comp. Sa.	cryst. melt breccia	
14255	,5,6	Comp. Sa.	regolith breccia	
14264	,6	Comp. Sa.	cryst. melt breccia	poikilitic pyroxenes
	,7,8	Comp. Sa.	glassy melt breccia	
	,18	Comp. Sa.	cryst. melt breccia	shocked
14265	,7,8	Comp. Sa.	regolith breccia	
14266	,4	Comp. Sa.	cryst. melt breccia	finely granular
14268	,3	Comp. Sa.	regolith breccia	
14269	,4,5	Comp. Sa.	regolith breccia	
14270	,8	Comp. Sa.	cryst. melt breccia	
14271	,11	Comp. Sa.	cryst. melt breccia	
	,12,13	Comp. Sa.	glassy melt breccia	
	,14	Comp. Sa.	glassy melt breccia	recryst. pyroxenes
14272	,10	Comp. Sa.	glassy melt breccia	
14273	,4,8	Comp. Sa.	regolith breccia	
14274	,4,5	Comp. Sa.	cryst. melt breccia	
14275	,4,5	Comp. Sa.	regolith breccia	
14276	,14,48	Comp. Sa.	basalt	
14277	,4,5	Comp. Sa.	regolith breccia	
14278	,5	Comp. Sa.	regolith breccia	
14279	,4	Comp. Sa.	cryst. melt breccia	
14280	,5	Comp. Sa.	glassy melt breccia	
14281	,3	Comp. Sa.	glassy melt breccia	
14283	,5,6	Comp. Sa.	cryst. melt breccia	
14301	,12,13,15,16	G1	regolith breccia	
14303	,2,3,5,51,89	LM-area	cryst. melt breccia	
14304	,2,7,11	LM-area	cryst. melt breccia	
	,3,6		glassy melt breccia	
14305	,109,110,112	LM-area		
	,269,270		cryst. melt breccia	
14306	,3,4,5,6,7,8	G		
	,65		cryst. melt breccia	
14307	,9,10,11	G	regolith breccia	
14309	,4	unknown	regolith breccia	
14310	,4,5,7,12,13	G		
	,15,17,23,25			
	,34,183		basalt	
14311	,4,5,6,7,8,9	Dg		
	,88,90,98		cryst. melt breccia	
14312	,15,16,19,32	H		
	,35		cryst. melt breccia	
14313	,5,7,44,49,56	G1	regolith breccia	

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14314	,10	H	cryst. melt breccia	
14315	,8,10,11	H	regolith breccia	
14316	,5	H	regolith breccia	
14317	,4	H	glassy melt breccia	
14318	,5,6,10,119	H	regolith breccia	
14319	,2,6,15,25	H		
	,34		cryst. melt breccia	
14320	,5,8,9,10,11	H	cryst. melt breccia	
14321	,22,24,136	C1		clasts within
	,138		cryst. melt breccia	fragmental breccia
14428	,2	Bulk-Sa.	cryst. melt breccia	
14429	,2	Bulk-Sa.	cryst. melt breccia	
14431	,2	Bulk-Sa.	basalt	
14434	,2	Bulk-Sa.	glassy melt breccia	
14435	,1	Bulk-Sa.	glassy melt breccia	partly devetrified
14436	,2	Bulk-Sa.	cryst. melt breccia	
14440	,2	Bulk-Sa.	cryst. melt breccia	
14443	,2	Bulk-Sa.	cryst. melt breccia	
14444	,2	Bulk-Sa.	cryst. melt breccia	
14445	,3	Bulk-Sa.	cryst. melt breccia	
14446	,2	Bulk-Sa.	cryst. melt breccia	
14451	,3	Bulk-Sa.	cryst. melt breccia	subophitic
14453	,4,8	Bulk-Sa.	glassy melt breccia	

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Abbreviations: Comp. Sa. = Comprehensive Sample, Bulk-Sa. = Bulk-Sample.