

Table DR1. Whole-rock chemical analyses

	Sulu felsic gneiss						Kspar-rich dikes granitic dike		
	92XS04	92WQG	94BC13	99SMC499SMC1499WHB799WH2	99LGD3	99HYS6	99HYS2		
SiO ₂ (wt%)	72.6	65.9	68.2	66.0	71.8	74.6	71.8	71.0	73.5
TiO ₂	0.25	0.50	0.50	0.49	0.44	0.16	0.02	0.09	0.02
Al ₂ O ₃	14.1	15.7	14.9	15.7	12.4	12.7	14.9	16.1	14.5
FeO*	1.40	3.70	3.24	2.96	2.91	1.69	0.31	0.76	0.52
MnO	0.04	0.07	0.09	0.44	0.09	0.04	0.01	0.01	0.04
MgO	0.24	1.54	1.01	0.84	0.85	0.16	0.03	0.28	0.02
CaO	0.87	3.91	2.86	3.05	1.49	0.69	0.50	1.74	0.48
Na ₂ O	3.84	4.02	4.22	4.97	3.94	3.33	2.88	3.71	5.18
K ₂ O	5.14	1.78	2.41	3.22	2.82	4.66	7.84	5.15	3.90
P ₂ O ₅	0.06	0.18	0.16	0.16	0.10	0.03	0.01	0.02	0.01
Total	98.5	97.3	97.6	97.8	96.8	98.1	98.3	98.9	98.2
Cr (ppm)	8	21	-	18	15	8	-	-	15
Co	3	11	7	5	8	4	3	4	2
Ni	10	26	5	9	17	9	9	8	11
Zn	25	59	58	658	95	52	-	3	-
Rb	115	63	68	98	111	130	159	110	96
Sr	191	449	419	412	118	108	317	432	192
Y	31	12	24	25	42	26	-	2	14
Zr	188	189	178	203	301	204	16	29	41
Nb	10	5	7	12	13	7	-	1	7
Ba	1410	1081	1376	1316	660	682	2840	1908	425
Pb	8	9	11	12	23	22	26	38	35
Th	4	5	4	9	10	5	-	-	-

-: not detected.

Table DR2a. Summary of SHRIMP U-Pb zircon results for sample 99HSY6.

Grain. spot	U (ppm)	Th (ppm)	Th/U	$^{206}\text{Pb}^*$ (ppm)	$^{204}\text{Pb}/^{206}\text{Pb}$	f_{206} %	Total			Radiogenic		Age (Ma)		
							$^{238}\text{U}/^{206}\text{Pb}$	\pm	$^{207}\text{Pb}/^{206}\text{Pb}$	\pm	$^{206}\text{Pb}/^{238}\text{U}$	\pm	$^{206}\text{Pb}/^{238}\text{U}$	\pm
1.1	834	43	0.05	24.0	0.000123	0.12	29.880	0.326	0.0513	0.0006	0.0334	0.0004	212.0	2.3
2.1	108	51	0.48	2.3	0.000429	0.65	40.735	0.698	0.0543	0.0024	0.0244	0.0004	155.3	2.7
3.1	163	68	0.42	6.1	0.000129	0.84	22.733	0.415	0.0585	0.0011	0.0436	0.0008	275.2	5.0
4.1	612	622	1.02	65.4	0.000029	0.05	8.036	0.086	0.0648	0.0004	0.1244	0.0014	755.7	7.8
5.1	135	49	0.36	6.6	0.005447	8.60	17.541	0.235	0.1221	0.0063	0.0521	0.0010	327.5	6.4
2.2	149	9	0.06	4.5	0.000368	0.72	28.106	0.405	0.0564	0.0018	0.0353	0.0005	223.8	3.2
6.1	440	170	0.39	33.4	0.000180	0.67	11.334	0.148	0.0638	0.0005	0.0876	0.0012	541.6	6.9

- Notes: 1. Uncertainties given at the one σ level.
 2. Error in FC1 Reference zircon calibration was 0.43% for the analytical session
 (not included in above errors but required when comparing data from different mounts).
 3. f_{206} % denotes the percentage of ^{206}Pb that is common Pb.
 4. Correction for common Pb made using the measured $^{238}\text{U}/^{206}\text{Pb}$ and $^{207}\text{Pb}/^{206}\text{Pb}$ ratios
 following Tera and Wasserburg (1972) as outlined in Compston *et al.* (1992).

Table DR2b. Summary of SHRIMP U-Pb zircon results for sample 99WH2.

Grain. spot	U (ppm)	Th (ppm)	Th/U (ppm)	$^{206}\text{Pb}^*$ ^{206}Pb	$^{204}\text{Pb}/^{206}\text{Pb}$	f_{206} %	Total			Radiogenic			Age (Ma)	
							$^{238}\text{U}/^{206}\text{Pb}$	\pm	$^{207}\text{Pb}/^{206}\text{Pb}$	\pm	$^{206}\text{Pb}/^{238}\text{U}$	\pm	$^{206}\text{Pb}/^{238}\text{U}$	\pm
1.1	2396	137	0.06	70.4	0.000062	0.08	29.257	0.304	0.0511	0.0003	0.0342	0.0004	216.5	2.2
2.1	1307	30	0.02	39.0	0.000026	0.01	28.827	0.360	0.0506	0.0004	0.0347	0.0004	219.8	2.7
2.2	270	93	0.35	17.2	0.000227	1.65	13.482	0.162	0.0694	0.0013	0.0729	0.0009	453.9	5.5
3.1	201	241	1.20	19.6	-	0.02	8.819	0.106	0.0627	0.0008	0.1134	0.0014	692.2	8.1
4.1	1277	30	0.02	38.8	0.000010	0.01	28.246	0.336	0.0507	0.0005	0.0354	0.0004	224.3	2.6
5.1	242	164	0.68	16.8	0.000023	0.60	12.382	0.146	0.0621	0.0008	0.0803	0.0010	497.8	5.8
5.2	963	15	0.02	29.4	0.000035	0.12	28.169	0.302	0.0516	0.0005	0.0355	0.0004	224.6	2.4
6.1	1285	123	0.10	38.3	0.000150	0.18	28.790	0.308	0.0520	0.0006	0.0347	0.0004	219.7	2.3
6.2	1898	227	0.12	56.0	0.000036	<0.01	29.101	0.371	0.0502	0.0004	0.0344	0.0004	217.9	2.8
7.1	2051	65	0.03	63.0	0.000004	0.10	27.956	0.291	0.0514	0.0004	0.0357	0.0004	226.3	2.3
8.1	1467	35	0.02	44.2	0.000075	<0.01	28.514	0.327	0.0502	0.0004	0.0351	0.0004	222.3	2.5
8.2	205	145	0.71	18.7	0.000041	0.63	9.400	0.119	0.0664	0.0008	0.1057	0.0014	647.9	8.0
9.1	3573	70	0.02	108.3	0.000016	<0.01	28.336	0.327	0.0504	0.0003	0.0353	0.0004	223.6	2.6
10.1	1196	623	0.52	127.7	0.000009	0.02	8.047	0.085	0.0646	0.0003	0.1242	0.0013	754.9	7.7
11.1	1668	90	0.05	50.1	0.000065	0.01	28.619	0.300	0.0507	0.0004	0.0349	0.0004	221.4	2.3
11.2	430	3	0.01	13.0	-	<0.01	28.399	0.338	0.0505	0.0008	0.0352	0.0004	223.1	2.6
12.1	1955	42	0.02	59.1	-	<0.01	28.393	0.299	0.0501	0.0004	0.0352	0.0004	223.3	2.3
13.1	1578	41	0.03	46.8	0.000099	0.03	28.984	0.307	0.0507	0.0007	0.0345	0.0004	218.6	2.3
14.1	396	7	0.02	11.8	-	0.12	28.938	0.401	0.0515	0.0009	0.0345	0.0005	218.7	3.0
14.2	442	23	0.05	18.0	0.000262	0.54	21.110	0.254	0.0566	0.0009	0.0471	0.0006	296.8	3.5
15.1	1868	276	0.15	54.0	0.000057	0.04	29.700	0.311	0.0507	0.0004	0.0337	0.0004	213.4	2.2

Notes 1. Uncertainties given at the one σ level.

2. Error in FC1 Reference zircon calibration was 0.43% for the analytical session

(not included in above errors but required when comparing data from different mounts).

3. f_{206} % denotes the percentage of ^{206}Pb that is common Pb.

4. Correction for common Pb made using the measured $^{238}\text{U}/^{206}\text{Pb}$ and $^{207}\text{Pb}/^{206}\text{Pb}$ ratios following Tera and Wasserburg (1972) as outlined in Compston *et al.* (1992).

Table DR2c. Summary of SHRIMP U-Pb zircon results for sample 99LGD3.

Grain.	U spot (ppm)	Th (ppm)	Th/U	$^{206}\text{Pb}^*$ (ppm)	$^{204}\text{Pb}/^{206}\text{Pb}$	$f_{^{206}}$ %	Total			Radiogenic			Age (Ma)	
							$^{238}\text{U}/^{206}\text{Pb}$	\pm	$^{207}\text{Pb}/^{206}\text{Pb}$	\pm	$^{206}\text{Pb}/^{238}\text{U}$	\pm	$^{206}\text{Pb}/^{238}\text{U}$	\pm
1.1	9817	91	0.009	316.8	0.000186	0.28	26.622	0.269	0.0532	0.0003	0.0375	0.0004	237.1	2.4
2.1	288	4	0.015	8.2	0.000241	0.27	30.241	0.536	0.0525	0.0010	0.0330	0.0006	209.2	3.7
2.2	4831	52	0.011	141.4	0.000016	0.03	29.341	0.301	0.0507	0.0002	0.0341	0.0004	216.0	2.2
3.1	1459	77	0.053	40.6	-	0.10	30.899	0.333	0.0510	0.0005	0.0323	0.0004	205.1	2.2
4.1	905	32	0.035	25.3	0.000008	0.03	30.731	0.337	0.0505	0.0006	0.0325	0.0004	206.4	2.2
5.1	276	0	0.001	7.7	0.000231	0.32	30.616	0.386	0.0528	0.0010	0.0326	0.0004	206.5	2.6
6.1	1798	4	0.002	53.6	0.000051	0.18	28.804	0.316	0.0519	0.0004	0.0347	0.0004	219.6	2.4
7.1	385	364	0.947	37.9	0.000094	0.19	8.714	0.098	0.0643	0.0006	0.1145	0.0013	699.0	7.6
8.1	5144	29	0.006	159.5	0.000005	<0.01	27.700	0.284	0.0506	0.0003	0.0361	0.0004	228.7	2.3
9.1	329	299	0.911	20.6	-	0.73	13.695	0.162	0.0618	0.0007	0.0725	0.0009	451.1	5.3
10.1	3560	17	0.005	107.3	0.000015	0.01	28.498	0.306	0.0507	0.0003	0.0351	0.0004	222.3	2.4
11.1	4096	41	0.010	123.5	-	<0.01	28.491	0.293	0.0503	0.0003	0.0351	0.0004	222.4	2.3
12.1	1026	6	0.006	28.9	0.000020	0.14	30.475	0.337	0.0514	0.0005	0.0328	0.0004	207.8	2.3
13.1	544	1	0.002	15.4	-	<0.01	30.420	0.356	0.0497	0.0011	0.0329	0.0004	208.7	2.4
14.1	397	1	0.002	10.8	0.000253	0.27	31.541	0.386	0.0523	0.0011	0.0316	0.0004	200.7	2.4
15.1	830	34	0.042	22.9	-	0.00	31.143	0.472	0.0502	0.0009	0.0321	0.0005	203.7	3.1
16.1	869	25	0.028	24.8	0.000022	0.23	30.145	0.361	0.0522	0.0006	0.0331	0.0004	209.9	2.5
17.1	229	202	0.881	15.7	0.000275	0.98	12.568	0.160	0.0649	0.0009	0.0788	0.0010	488.9	6.1
18.1	866	4	0.004	24.1	0.000203	0.42	30.884	0.372	0.0536	0.0008	0.0322	0.0004	204.6	2.4
19.1	275	3	0.011	7.8	-	0.41	30.209	0.382	0.0535	0.0010	0.0330	0.0004	209.1	2.6
20.1	1960	38	0.019	54.6	0.000008	0.07	30.857	0.323	0.0508	0.0004	0.0324	0.0003	205.5	2.1

Notes: 1. Uncertainties given at the one σ level.

2. Error in FC1 Reference zircon calibration was 0.43% for the analytical session

(not included in above errors but required when comparing data from different mounts).

3. $f_{^{206}}$ % denotes the percentage of ^{206}Pb that is common Pb.

4. Correction for common Pb made using the measured $^{238}\text{U}/^{206}\text{Pb}$ and $^{207}\text{Pb}/^{206}\text{Pb}$ ratios

following Tera and Wasserburg (1972) as outlined in Compston et al. (1992).

ADDITIONAL REFERENCES CITED:

Compston, W., Williams, I.S., Kirschvink, J.L., Zichao, Z., and Guogan, M., 1992, Zircon U-Pb ages for the Early Cambrian time-scale: Geological Society London Journal, v. 149, p. 171–184

Tera, F., and Wasserburg, G.J., 1972, U-Th-Pb systematics in three Apollo 14 basalts and the problem of initial Pb in lunar rocks: Earth and Planetary Science Letters, v. 14, p. 281–304.

Table DR3. Rb-Sr isotopic data

Sample	Mineral	Rb(ppm)	Sr(ppm)	$^{87}\text{Rb}/^{86}\text{Sr}$	$^{87}\text{Sr}/^{86}\text{Sr}$ (2σ)
<i>Sulu gneiss</i>					
92XS04	Whole-rock	106.6	206.9	1.493	0.720766 (14)
92WQG	Whole-rock	57.9	463.8	0.361	0.709022 (16)
94BC13	Whole-rock	61.1	430.3	0.411	0.710167 (16)
99SMC4	Whole-rock	93.6	446.1	0.607	0.711669 (16)
99SMC14	Whole-rock	99.3	120.4	2.391	0.730359 (16)
99WHB7	Whole-rock	130.1	113.6	3.327	0.747023 (16)
SL91-7 ^a	Whole-rock	5.0	290.2	0.503	0.70955 (1)
SL91-17 ^a	Whole-rock	2.9	308.2	0.280	0.70995 (1)
WQC ^b	Whole-rock	76.9	345.7	0.643	0.712651 (23)
WQB ^b	Whole-rock	75.7	344.0	0.637	0.713149 (21)
WQA ^b	Whole-rock	98.1	217.9	1.303	0.719868 (21)
WQH ^b	Whole-rock	99.9	186.2	1.556	0.722121 (24)
WQK ^b	Whole-rock	103.9	162.9	1.846	0.724684 (21)
<i>Strongly deformed Kspar-rich dikes</i>					
99LGD3	Whole-rock	102.9	476.1	0.628	0.712310 (14)
99HYS6	Whole-rock	82.2	198.0	1.201	0.711158 (16)
99WH2	Whole-rock	155.4	361.8	1.244	0.716268 (14)
<i>Weakly deformed micaceous granitic dike</i>					
99HYS2	Whole-rock	72.3	679.4	0.308	0.707866 (16)
99HYS2	Plagioclase	39.3	671.2	0.170	0.707613 (16)
99HYS2	K-feldspar	253.5	812.3	0.903	0.708552 (14)
99HYS2	Biotite ^c	394.1	330.6	3.452	0.712376 (13)

Note: ^a Ames et al. (1996); ^b Ishizaka et al. (1994); ^c some impurities present, mainly epidote