

Table 1. Ar/Ar Summary Table

Sample: MB06-826a				Lab #: 57475		J: 8.06E-04 ±3.52E-07				IC ¹ : 1.000 ±0.0000									
Material: Sanidine				IGSN:															
	N	Power ⁴⁰ Ar	⁴⁰ Ar	± 1σ	³⁹ Ar	± 1σ	³⁸ Ar	± 1σ	³⁷ Ar	± 1σ	³⁶ Ar	± 1σ	Age	± 1σ	% ⁴⁰ Ar*	⁴⁰ Ar*/ ³⁹ Ar _K	⁴⁰ Ar/ ³⁹ Ar _{Ca} ± 1σ		
		(W)	(10 ³ fA)		(10 ³ fA)						(10 ⁻² fA)		(Ma)						
	01	2.3	0.0	0.00252	0.00201	0.00008	0.00010	0.00121	0.00002	0.00029	0.00002	0.00109	0.00204	87.2	26.97590	38.80	38.7992 48.49 3.86		
	02	2.3	0.0	0.00003	0.00019	2.37E-06	0.00003	0.00007	0.00002	0.00586	0.00008	0.00004	0.00174	71.0	9.65865	13.99	13.9880 0.07 1.37E-03		
	03	2.3	0.0	0.00172	0.00092	0.00005	0.00010	0.00084	0.00003	0.00012	0.00002	0.00094	0.00171	83.9	27.55277	39.62	39.6199 72.21 12.43		
	04	2.3	0.0	0.00003	0.00013	1.74E-06	0.00003	0.00005	0.00001	0.00412	0.00008	0.00005	0.00160	49.2	8.19394	11.87	11.8738 0.07 1.91E-03		
	05	2.3	0.0	0.00003	0.00017	2.52E-06	0.00004	0.00001	0.00001	0.00264	0.00007	0.00003	0.00153	70.5	8.54011	12.37	12.3737 0.16 4.71E-03		
	06	2.3	0.0	0.00001	0.00016	1.40E-06	0.00003	0.00002	0.00002	0.00376	0.00006	0.00002	0.00147	67.7	7.08925	10.28	10.2775 0.06 1.49E-03		
	07	2.3	0.0	0.00005	0.00024	2.39E-06	0.00004	0.00004	0.00002	0.00617	0.00011	0.00010	0.00188	41.1	8.61403	12.48	12.4804 0.07 1.52E-03		
	08	2.3	0.0	0.00003	0.00018	2.56E-06	0.00003	0.00002	0.00001	0.00427	0.00006	0.00004	0.00139	68.0	8.65117	12.53	12.5340 0.10 1.98E-03		
	09	2.3	0.0	0.00005	0.00023	4.50E-06	0.00004	0.00005	0.00002	0.00745	0.00010	0.00004	0.00159	80.7	8.52481	12.35	12.3516 0.10 1.68E-03		
	10	2.3	0.0	0.00101	0.00111	3.83E-06	0.00005	0.00064	0.00003	0.00744	0.00011	0.00328	0.00522	4.2	11.24185	16.27	16.2706 0.09 1.77E-03		
	11	2.3	0.0	0.00002	0.00014	1.66E-06	0.00003	-0.00002	0.00001	0.00342	0.00005	0.00003	0.00134	60.1	6.64358	9.63	9.6331 0.08 1.88E-03		
	12	2.3	0.0	0.00008	0.00025	6.95E-06	0.00006	0.00008	0.00002	0.00455	0.00009	0.00007	0.00158	73.9	8.15055	11.81	11.8111 0.26 5.60E-03		
	13	2.3	0.0	0.00002	0.00014	1.96E-06	0.00003	0.00002	0.00001	0.00481	0.00011	0.00002	0.00143	73.1	7.29814	10.58	10.5795 0.07 1.82E-03		
	14	2.3	0.0	0.00003	0.00016	3.09E-06	0.00003	0.00003	0.00001	0.00619	0.00009	0.00004	0.00128	71.2	7.20357	10.44	10.4428 0.08 1.49E-03		
	15	2.3	0.0	0.00002	0.00016	1.59E-06	0.00003	0.00003	0.00002	0.00437	0.00007	0.00002	0.00157	70.1	9.10219	13.19	13.1851 0.06 1.55E-03		
Weighted Mean Age														38.44397	±0.09465				

Sample: MB06-727				Lab #: 61604		J: 4.89E-03 ±4.89E-03				IC: 1.000 ±0.0000									
Material: Sanidine				IGSN:															
N	Power ⁴⁰ Ar	⁴⁰ Ar	± 1σ	³⁹ Ar	± 1σ	³⁸ Ar	± 1σ	³⁷ Ar	± 1σ	³⁶ Ar	± 1σ	Age	± 1σ	% ⁴⁰ Ar*	⁴⁰ Ar*/ ³⁹ Ar _K	⁴⁰ Ar/ ³⁹ Ar _{Ca} ± 1σ			
	(W)	(10 ³ fA)		(10 ³ fA)						(10 ⁻² fA)		(Ma)							
01	3.0	0.0	0.11497	0.62359	0.07596	0.07986	6.91683	0.02666	1.98674	0.02656	0.04647	0.16483	88.9	1.34536	11.83	11.8302 2.35 0.03			
02	3.0	0.0	0.12733	0.12728	0.09282	0.02035	1.81653	0.02808	0.34231	0.02621	0.00832	0.05526	97.7	1.33912	11.78	11.7755 16.64 1.27			
03	3.0	0.0	0.06021	0.04041	0.04488	0.01474	0.67271	0.02641	0.40382	0.02671	0.00152	0.03012	99.1	1.32858	11.68	11.6831 6.82 0.45			
05	3.0	0.0	0.29619	0.21484	0.21755	0.02830	4.66546	0.02548	1.67911	0.02640	0.01782	0.07930	98.0	1.33382	11.73	11.7291 7.95 0.12			
06	3.0	0.0	0.23417	0.18207	0.16869	0.02423	3.73261	0.02918	1.14079	0.02554	0.02921	0.08512	96.1	1.33294	11.72	11.7213 9.07 0.20			
07	3.0	0.0	0.16234	0.11303	0.11948	0.02082	2.24755	0.03013	0.56809	0.02731	0.00783	0.05798	98.2	1.33385	11.73	11.7293 12.89 0.62			
08	3.0	0.0	0.09407	0.90042	0.05861	0.11622	8.22420	0.02691	0.62728	0.02496	0.05062	0.20962	84.4	1.35445	11.91	11.9099 5.73 0.23			
09	3.0	0.0	0.10276	0.09496	0.07498	0.01759	1.36403	0.02916	0.67768	0.02650	0.00796	0.05383	97.6	1.33634	11.75	11.7511 6.78 0.27			
10	3.0	0.0	0.01949	0.02867	0.01389	0.01283	0.08369	0.02672	0.38651	0.02669	0.00402	0.03089	94.6	1.32795	11.68	11.6776 2.19 0.15			
11	3.5	0.0	0.02940	0.02738	0.02173	0.01314	0.20298	0.03069	0.08088	0.02682	0.00116	0.02835	98.4	1.33037	11.70	11.6988 16.39 5.44			

Sample: MB06-727			Lab #: 61604		J: 4.89E-03 ±4.89E-03				IC: 1.000 ±0.0000										
Material: Sanidine			IGSN:																
N	Power	⁴⁰ Ar	⁴⁰ Ar	± 1σ	³⁹ Ar	± 1σ	³⁸ Ar	± 1σ	³⁷ Ar	± 1σ	³⁶ Ar	± 1σ	Age	± 1σ	% ⁴⁰ Ar*	⁴⁰ Ar*/ ³⁹ Ar _K	⁴⁰ Ar/ ³⁹ Ar _K	± 1σ	
	(W)		(10 ³ fA)		(10 ³ fA)						(10 ⁻² fA)		(Ma)						
12	3.5	0.0	0.05628	0.03000	0.04164	0.01385	0.49895	0.02705	0.33157	0.02803	0.00207	0.02932	98.7	1.33312	11.72	11.7229	7.66	0.65	
13	3.5	0.0	0.02663	0.02643	0.01965	0.01210	0.18180	0.02791	0.33089	0.02583	0.00107	0.02918	99.0	1.34085	11.79	11.7907	3.62	0.28	
14	3.5	0.0	0.01310	0.02909	0.00940	0.01103	0.07166	0.02516	0.09591	0.02591	0.00064	0.02912	98.4	1.37042	12.05	12.0498	5.98	1.61	
15	3.5	0.0	0.07432	0.02928	0.05501	0.01542	0.69603	0.02629	0.28820	0.02514	0.00100	0.03045	99.3	1.34005	11.78	11.7837	11.63	1.01	
16	3.5	0.0	0.00686	0.02643	0.00485	0.01075	0.01244	0.02502	0.04518	0.02474	0.00090	0.02930	96.0	1.35648	11.93	11.9277	6.54	3.58	
17	3.5	0.0	0.07149	0.02737	0.05330	0.01458	0.62407	0.02704	0.54886	0.02554	0.00142	0.02945	99.3	1.33125	11.71	11.7066	5.92	0.28	
18	3.0	0.0	-0.06725	0.02840	0.00366	0.01164	-0.01888	0.02525	-0.01501	0.02622	-0.22938	0.08036	-0.7	0.13491	1.19	1.1899	-14.85	25.93	
19	3.0	0.0	0.04259	0.06999	0.08401	0.01755	1.72514	0.02904	1.37176	0.02521	-0.21901	0.09272	252.6	1.27989	11.26	11.2563	3.73	0.07	
20	3.0	0.0	-0.00862	0.03170	0.04578	0.01347	0.58360	0.02485	0.95542	0.02715	-0.21976	0.08280	-656.4	1.23547	10.87	10.8668	2.92	0.08	
21	3.0	0.0	0.05940	0.03341	0.09713	0.01710	1.18726	0.02557	1.98138	0.02438	-0.22016	0.08151	210.5	1.28627	11.31	11.3122	2.98	0.04	
22	3.0	0.0	0.11895	0.05773	0.08685	0.01587	1.61051	0.02689	1.86861	0.02685	0.01200	0.04971	97.5	1.33464	11.74	11.7362	2.83	0.04	
23	3.0	0.0	0.06029	0.03023	0.04421	0.01406	0.52018	0.02441	0.91325	0.02516	0.00487	0.03392	98.0	1.33616	11.75	11.7496	2.94	0.08	
24	3.0	0.0	0.06984	0.03032	0.05144	0.01484	0.65980	0.02373	0.07532	0.02522	0.00295	0.03357	98.2	1.33275	11.72	11.7197	41.51	13.90	
25	3.0	0.0	0.06061	0.15188	0.04297	0.02170	2.08488	0.02686	0.92596	0.02487	0.01152	0.07006	95.0	1.33880	11.77	11.7727	2.82	0.08	
26	3.0	0.0	0.09355	0.08235	0.06728	0.01504	1.61282	0.02618	2.04770	0.02596	0.01502	0.05770	96.2	1.33689	11.76	11.7560	2.00	0.03	
27	3.0	0.0	0.07480	0.03064	0.05499	0.01412	0.71218	0.02447	0.06299	0.02571	0.00245	0.03310	98.5	1.33884	11.77	11.7730	53.03	21.65	
28	3.0	0.0	0.08126	0.03424	0.05989	0.01491	0.78449	0.02463	0.92740	0.02422	0.00585	0.03368	98.1	1.32952	11.69	11.6913	3.92	0.10	
29	3.0	0.0	0.27368	0.10435	0.20294	0.02056	3.49501	0.02829	0.88594	0.02472	0.00942	0.06133	98.6	1.32895	11.69	11.6864	13.90	0.39	
30	3.0	0.0	0.35247	0.04398	0.26159	0.02275	3.37693	0.02760	0.83895	0.02513	0.00840	0.03706	98.9	1.33105	11.70	11.7048	18.92	0.57	
31	3.0	0.0	0.26940	0.05830	0.19957	0.02140	2.92450	0.02626	0.32646	0.02615	0.00793	0.04891	98.6	1.33027	11.70	11.6979	37.09	2.97	
32	3.0	0.0	0.06264	0.03305	0.04629	0.01295	0.59927	0.02730	1.06627	0.02584	0.00349	0.03190	98.9	1.33776	11.76	11.7636	2.63	0.06	
33	3.0	0.0	0.11443	0.03272	0.08505	0.01629	1.08405	0.02541	0.64626	0.02485	0.00196	0.03066	99.3	1.33483	11.74	11.7379	7.98	0.31	
Weighted Mean Age													11.70455	±0.00252					

Sample: MB06-710				Lab #: 56977		J: 7.49E-04 ±7.49E-04				IC: 1.000 ±0.0000									
Material: Sanidine				IGSN:															
N	Power (W)	⁴⁰ Ar (10 ³ fA)	± 1σ	³⁹ Ar (10 ³ fA)	± 1σ	³⁸ Ar (10 ³ fA)	± 1σ	³⁷ Ar (10 ³ fA)	± 1σ	³⁶ Ar (10 ⁻² fA)	± 1σ	Age (Ma)	± 1σ	% ⁴⁰ Ar*	⁴⁰ Ar*/ ³⁹ Ar _K	Ar/Ca	±		
																	1σ	1σ	
01	2.2	0.0	0.00119	0.00084	0.00014	0.00012	0.00168	0.00002	0.00135	0.00002	0.00003	0.00064	99.2	8.68699	11.70	11.7037	36.09	0.56	
02	2.2	0.0	0.00191	0.00132	0.00022	0.00020	0.00261	0.00003	0.00384	0.00003	0.00007	0.00111	99.0	8.62519	11.62	11.6207	20.41	0.14	
03	2.2	0.0	0.00080	0.00060	0.00009	0.00010	0.00111	0.00002	0.00255	0.00002	0.00002	0.00072	99.3	8.66357	11.67	11.6722	12.89	0.10	
04	2.2	0.0	0.00097	0.00075	0.00011	0.00011	0.00133	0.00002	0.00450	0.00003	0.00006	0.00062	98.2	8.65902	11.67	11.6661	8.75	0.05	

Sample: MB06-710	Lab #: 56977	J: 7.49E-04 ±7.49E-04	IC: 1.000 ±0.0000
Material: Sanidine	IGSN:		

N	Power	⁴⁰ Ar	⁴⁰ Ar	± 1σ	³⁹ Ar	± 1σ	³⁸ Ar	± 1σ	³⁷ Ar	± 1σ	³⁶ Ar	± 1σ	Age	± 1σ	% ⁴⁰ Ar*	⁴⁰ Ar*/ ³⁹ Ar _K	⁴⁰ Ar*/ ³⁷ Ar _K	± 1σ
			(10 ³		(10 ³						(10 ⁻²		(Ma)					
		(W)	fA)		fA)						fA)							
05	2.2	0.0	0.00086	0.00067	0.00010	0.00010	0.00120	0.00002	0.00210	0.00003	0.00005	0.00086	98.5	8.61024	11.60	11.6006	16.70	0.21
06	2.2	0.0	0.00154	0.00102	0.00018	0.00015	0.00216	0.00003	0.00462	0.00003	0.00009	0.00088	98.4	8.59624	11.58	11.5818	13.65	0.09
07	2.2	0.0	0.00065	0.00079	0.00007	0.00011	0.00093	0.00002	0.00079	0.00003	0.00005	0.00094	97.8	8.57861	11.56	11.5581	33.39	1.06
08	2.2	0.0	0.00051	0.00078	0.00006	0.00012	0.00073	0.00002	0.00119	0.00003	0.00006	0.00363	96.6	8.42797	11.36	11.3558	17.34	0.39
09	2.2	0.0	0.00080	0.00085	0.00009	0.00015	0.00111	0.00002	0.00543	0.00005	0.00006	0.00107	98.0	8.60751	11.60	11.5969	5.98	0.05
10	2.2	0.0	0.00055	0.00086	0.00006	0.00011	0.00080	0.00002	0.00143	0.00002	0.00006	0.00103	97.0	8.48891	11.44	11.4376	15.67	0.25
11	2.2	0.0	0.00053	0.00050	0.00006	0.00008	0.00072	0.00001	0.00369	0.00003	0.00009	0.00171	94.9	8.87091	11.95	11.9506	5.41	0.04
12	2.2	0.0	0.00061	0.00050	0.00007	0.00010	0.00087	0.00001	0.00111	0.00002	0.00002	0.00172	99.0	8.75000	11.79	11.7883	22.10	0.33
13	2.2	0.0	0.00091	0.00073	0.00010	0.00010	0.00131	0.00001	0.00106	0.00002	-1.62E-0	0.00186	100.1	8.74076	11.78	11.7759	35.00	0.55
14	2.2	0.0	0.00094	0.00074	0.00011	0.00010	0.00136	0.00001	0.00723	0.00003	0.00006	0.00071	98.2	8.66174	11.67	11.6698	5.22	0.03
15	2.2	0.0	0.00086	0.00063	0.00009	0.00009	0.00118	0.00002	0.00130	0.00002	0.00019	0.00076	93.4	8.66543	11.67	11.6747	25.39	0.36

Weighted Mean Age	11.64440	±0.00930
-------------------	----------	----------

IC Factor : H1/CDD intercalibration ¹		
Constants used		
Atmospheric argon ratios		
(⁴⁰ Ar/ ³⁶ Ar) _A	295.5 ±0.5	Nier (1950)
(⁴⁰ Ar/ ³⁹ Ar) _A	0.188 ±0.5	Nier (1950)
Interferring isotope production ratios		
(⁴⁰ Ar/ ³⁹ Ar) _K	295.5 ±0.5	Nier (1950)
(³⁸ Ar/ ³⁹ Ar) _K	0.188 ±0.5	Nier (1950)
(³⁷ Ar/ ³⁹ Ar) _K	0.188 ±0.5	Nier (1950)
(³⁹ Ar/ ³⁷ Ar) _{Ca}	295.5 ±0.5	Nier (1950)
(³⁸ Ar/ ³⁷ Ar) _{Ca}	0.188 ±0.5	Nier (1950)
(³⁶ Ar/ ³⁷ Ar) _{Ca}	0.188 ±0.5	Nier (1950)
Decay constants		
⁴⁰ K λ _ε	1 ±0 a ⁻¹	Foo (1990)
⁴⁰ K λ _β	1 ±0 a ⁻¹	Foo (1990)
³⁹ Ar	1 ±0 a ⁻¹	Foo (1990)
³⁷ Ar	1 ±0 a ⁻¹	Foo (1990)