

Spot name*	U (ppm)	Th (ppm)	Th/U	Pb (ppm)	204Pb (ppb)	204Pb/ 206Pb	±204Pb/ 206Pb	f206	208Pb/ 206Pb	±208Pb/ 206Pb	206Pb/ 238U	±206Pb/ 238U	207Pb/ 235U	±207Pb/ 235U	207Pb/ 206Pb	±207Pb/ 206Pb	206Pb/ 238U	±206Pb/ 238U	207Pb/ 206Pb	±207Pb/ 206Pb	Conc. (%)
VN07-B4.1	132.68	134.05	1.01034	41	0	1.0E-05	1.0E-05	0.0002	0.2977	0.0039	0.2557	0.0034	3.282	0.055	0.0931	0.0008	1467.8	17.3	1489.9	17.1	98.5
VN07-L4.1	218.89	123.38	0.56366	82	2	2.8E-05	1.2E-04	0.0005	0.1643	0.0098	0.3397	0.0096	5.467	0.284	0.1167	0.0047	1885.0	46.5	1906.7	73.9	98.9
VN07-E2.1	341.78	303.96	0.88934	111	1	1.0E-05	1.0E-05	0.0002	0.2689	0.0041	0.2758	0.0043	3.711	0.082	0.0976	0.0014	1570.4	21.8	1578.3	26.2	99.5
VN07-F4.1	121.57	69.11	0.56845	42	0	1.0E-05	1.0E-05	0.0002	0.1631	0.0020	0.3124	0.0079	4.634	0.128	0.1076	0.0009	1752.5	39.1	1758.8	14.5	99.6
VN07-G1.1	282.71	213.92	0.75669	81	0	5.6E-06	1.1E-05	0.0001	0.2333	0.0020	0.2521	0.0033	3.172	0.048	0.0913	0.0006	1449.2	16.9	1452.0	12.3	99.8
VN07-M1.1	133.67	131.37	0.98282	45	1	2.5E-05	3.2E-05	0.0004	0.2935	0.0037	0.2820	0.0035	3.830	0.061	0.0985	0.0009	1601.4	17.5	1596.1	16.3	100.3
VN07-C2.1	628.63	226.45	0.36023	185	2	1.0E-05	1.0E-05	0.0002	0.1086	0.0028	0.2831	0.0044	3.859	0.090	0.0989	0.0015	1607.0	22.2	1602.7	29.4	100.3
VN07-H1.1	161.61	47.49	0.29383	50	1	1.8E-05	8.8E-05	0.0003	0.0901	0.0047	0.3001	0.0163	4.260	0.266	0.1029	0.0026	1692.0	81.1	1677.7	47.1	100.9
VN07-K4.1	183.1	333.97	1.824	72	0	1.0E-05	1.0E-05	0.0002	0.5214	0.0119	0.2817	0.0092	3.803	0.170	0.0979	0.0026	1599.8	46.3	1585.0	50.7	100.9
VN07-F2.1	306.03	173.28	0.56622	110	1	1.0E-05	1.0E-05	0.0002	0.1654	0.0011	0.3280	0.0055	4.960	0.088	0.1097	0.0005	1828.9	26.7	1793.8	7.5	102
VN07-K1.1	992.48	1071.52	1.07964	352	2	7.9E-06	1.8E-05	0.0001	0.3238	0.0045	0.2891	0.0053	3.945	0.094	0.0990	0.0013	1636.9	26.8	1604.9	24.6	102
VN07-C1.1	277.76	129	0.46441	155	1	1.0E-05	1.0E-05	0.0002	0.1314	0.0017	0.4976	0.0107	11.620	0.266	0.1694	0.0010	2603.3	46.0	2551.5	10.0	102
VN07-K3.1	369.48	390.41	1.05666	124	2	2.6E-05	8.8E-05	0.0005	0.3020	0.0124	0.2787	0.0133	3.696	0.240	0.0962	0.0037	1584.9	67.2	1551.1	74.6	102.2
VN07-A2.1	153.66	137.35	0.89386	52	2	6.5E-05	2.7E-04	0.0011	0.2728	0.0235	0.2859	0.0114	3.856	0.360	0.0978	0.0078	1620.7	57.4	1583.3	157.0	102.4
VN07-M4.1	571.98	553.9	0.96839	193	28	2.0E-04	1.8E-04	0.0035	0.2824	0.0082	0.2847	0.0068	3.813	0.160	0.0971	0.0031	1614.8	34.2	1569.8	60.3	102.9
VN07-B1.1	1152.1	340.33	0.29541	417	1	2.7E-06	7.5E-05	0.0001	0.0868	0.0042	0.3518	0.0089	5.329	0.185	0.1099	0.0023	1943.0	42.4	1797.2	38.6	108.1
VN07-F1.1	937.87	1266.52	1.35042	386	6	2.5E-05	5.7E-05	0.0004	0.3850	0.0052	0.3212	0.0075	4.506	0.147	0.1017	0.0020	1795.8	36.8	1656.0	37.6	108.4
Aldridge Formation (DRB-18; K200, O2-, Kipawa)																					
DRB18-H2.1	137.59	81.43	0.5918	74	0	6.9E-06	8.1E-06	0.0001	0.1579	0.0011	0.4710	0.0089	11.220	0.221	0.1728	0.0007	2487.7	39.0	2584.8	6.5	96.2
DRB18-D1.1	37.56	39.99	1.06464	14	1	1.3E-04	8.5E-05	0.0022	0.2932	0.0055	0.3007	0.0074	4.425	0.143	0.1067	0.0020	1694.9	36.6	1743.9	34.1	97.2
DRB18-E1.1	578.6	181.96	0.31448	302	2	9.5E-06	3.5E-06	0.0002	0.0832	0.0005	0.4835	0.0080	11.542	0.197	0.1731	0.0004	2542.7	34.9	2588.1	4.2	98.2
DRB18-D2.1	94.06	107.43	1.14211	60	1	2.3E-05	2.1E-05	0.0004	0.3055	0.0023	0.5006	0.0108	12.436	0.287	0.1802	0.0010	2616.5	46.7	2654.4	9.5	98.6
DRB18-G1.1	159.64	96.28	0.60309	55	0	4.9E-06	2.8E-05	0.0001	0.1748	0.0023	0.3133	0.0057	4.690	0.098	0.1086	0.0009	1756.9	27.9	1775.6	15.5	98.9
DRB18-G2.1	271.7	104.56	0.38485	90	0	2.1E-06	1.6E-05	0.0000	0.1100	0.0013	0.3174	0.0055	4.786	0.093	0.1094	0.0007	1777.2	27.0	1788.6	12.3	99.4
DRB18-C2.1	229.51	133.73	0.58266	129	1	1.4E-05	7.1E-06	0.0002	0.1571	0.0009	0.4925	0.0087	11.789	0.214	0.1736	0.0005	2581.4	37.6	2592.9	4.6	99.6
DRB18-F2.1	207.05	141.73	0.68453	78	2	3.7E-05	2.1E-05	0.0006	0.1922	0.0020	0.3330	0.0065	5.222	0.115	0.1138	0.0009	1852.8	31.5	1860.1	14.9	99.6
DRB18-F1.1	127.75	90.7	0.70998	75	1	2.3E-05	2.5E-05	0.0004	0.1949	0.0020	0.4969	0.0103	11.998	0.274	0.1751	0.0013	2600.5	44.6	2607.2	12.3	99.7
DRB18-B2.1	47.77	44.74	0.93663	21	2	1.1E-04	6.0E-05	0.0019	0.2526	0.0038	0.3704	0.0083	6.415	0.171	0.1256	0.0015	2031.4	38.9	2037.4	21.8	99.7
DRB18-H1.1	240.72	69.5	0.28873	81	0	5.9E-06	1.4E-05	0.0001	0.0822	0.0011	0.3274	0.0060	5.019	0.101	0.1112	0.0007	1825.6	29.3	1819.0	11.0	100.4
DRB18-D1.2	363.05	213.79	0.58886	128	2	1.7E-05	1.1E-05	0.0003	0.1657	0.0011	0.3206	0.0056	4.816	0.088	0.1090	0.0004	1792.4	27.2	1782.1	7.3	100.6
DRB18-A1.1	340.46	166.51	0.48907	154	1	4.9E-06	2.8E-05	0.0001	0.1381	0.0034	0.4112	0.0087	7.832	0.207	0.1381	0.0019	2220.5	39.7	2204.0	23.7	100.7
DRB18-B2.2	191.78	83.51	0.43547	78	2	3.3E-05	1.3E-05	0.0006	0.1224	0.0010	0.3798	0.0066	6.663	0.127	0.1272	0.0007	2075.3	31.1	2060.2	10.3	100.7
DRB18-C1.1	486.01	137.87	0.28367	166	2	1.1E-05	5.7E-06	0.0002	0.0807	0.0005	0.3327	0.0057	5.151	0.092	0.1123	0.0004	1851.6	27.4	1836.6	6.5	100.8
DRB18-E2.1	120.86	62.48	0.51695	42	0	7.4E-06	2.5E-05	0.0001	0.1431	0.0019	0.3209	0.0103	4.815	0.162	0.1088	0.0008	1794.2	50.3	1779.6	13.4	100.8
DRB18-B1.1	303.24	102.21	0.33705	108	0	3.6E-06	6.3E-06	0.0001	0.0946	0.0007	0.3429	0.0060	5.427	0.100	0.1148	0.0004	1900.8	29.1	1876.2	6.0	101.3
DRB18-E3.1	111.3	46.52	0.41795	40	1	3.9E-05	2.4E-05	0.0007	0.1200	0.0017	0.3419	0.0065	5.292	0.113	0.1123	0.0008	1895.8	31.5	1836.1	13.7	103.3

Spot name*	U (ppm)	Th (ppm)	Th/U	Pb (ppm)	204Pb (ppb)	204Pb/ 206Pb	±204Pb/ 206Pb	f206	208Pb/ 206Pb	±208Pb/ 206Pb	206Pb/ 238U	±206Pb/ 238U	207Pb/ 235U	±207Pb/ 235U	207Pb/ 206Pb	±207Pb/ 206Pb	206Pb/ 238U	±206Pb/ 238U	207Pb/ 206Pb	±207Pb/ 206Pb	Conc. (%)
CH3A-H7.1	107.3	100.8	0.93943	30	0	1.0E-05	1.0E-05	0.0002	0.2715	0.0037	0.2408	0.0047	3.020	0.068	0.0910	0.0008	1390.6	24.6	1446.2	16.7	96.2
CH3A-G2.1	66.59	47.64	0.71539	19	0	2.4E-05	4.1E-05	0.0004	0.2011	0.0029	0.2522	0.0049	3.118	0.077	0.0897	0.0012	1449.9	25.4	1418.6	24.8	102.2
Sheppard Formation Cobble #2 (CH3b; K200, O-, Kipawa)																					
CH3B-D2.1	76.08	72.13	0.94805	22	0	1.9E-05	3.0E-05	0.0003	0.2774	0.0029	0.2492	0.0048	3.110	0.071	0.0905	0.0009	1434.4	24.8	1436.5	19.1	99.9
CH3B-E2.1	102.2	95.39	0.93322	31	0	1.0E-05	1.0E-05	0.0002	0.2718	0.0029	0.2546	0.0047	3.162	0.066	0.0901	0.0007	1462.3	24.2	1426.6	14.7	102.5
CH3B-F2.1	154.9	137.05	0.88503	45	0	1.0E-05	1.0E-05	0.0002	0.2581	0.0026	0.2504	0.0049	3.144	0.069	0.0911	0.0007	1440.3	25.1	1448.1	15.4	99.5
CH3B-D5.1	229.1	309.68	1.35174	74	1	2.1E-05	2.3E-05	0.0004	0.4001	0.0040	0.2503	0.0084	3.182	0.116	0.0922	0.0010	1440.1	43.5	1471.4	20.7	97.9
CH3B-C5.1	79.5	57.87	0.72799	22	0	2.1E-05	5.9E-05	0.0004	0.2141	0.0046	0.2419	0.0151	3.121	0.204	0.0936	0.0013	1396.7	78.9	1499.5	25.7	93.1
CH3B-C6.1	59.47	44.39	0.74647	15	0	1.0E-05	1.0E-05	0.0002	0.2203	0.0047	0.2281	0.0107	2.921	0.151	0.0929	0.0016	1324.5	56.1	1485.8	33.3	89.1
CH3B-D8.1	87.62	60.32	0.68846	25	0	2.2E-05	5.4E-05	0.0004	0.2006	0.0043	0.2520	0.0135	3.212	0.186	0.0924	0.0015	1448.7	70.0	1476.4	31.1	98.1

Notes:

Number + letter designation represents zircon grain #, dot + number represents spot number on grain.

Uncertainties reported at one sigma and are calculated by numerical propagation of all known sources of error (Stern, 1997).

f206 refers to mole fraction of total 206Pb that is due to common Pb; data have been common Pb corrected according to procedures outlined in Stern (1997).

Italicized labels represent spots not included in probability frequency distribution plot

K200=200 micron Kohler aperture, K120=120 micron Kohler aperture, K70=70 micron Kohler aperture (see Stern, 1997 for spot size and details)

Kipawa= sample referenced to 993.4 Ma Kipawa zircon standard and data reduction methodologies (Stern, 1997)

BR266= sample referenced to 559 Ma BR266 zircon standard (Stern, 2001) and data reduction methodologies (Stern, ????)

O- = O- primary beam, O2- = O2- primary oxygen beam

TABLE 2. Ar-Ar DATA

Power†	Volume (³⁹ Ar × 10 ⁻¹¹ cc)	³⁶ Ar/ ³⁹ Ar	³⁷ Ar/ ³⁹ Ar	³⁸ Ar/ ³⁹ Ar	⁴⁰ Ar/ ³⁹ Ar	% ⁴⁰ Ar ATM	⁴⁰ Ar/ ³⁹ Ar†	f ₃₉ ^S (%)	Apparent Age (Ma) [#]
VN-98-04 (Z5997) Mt Shields Formation Muscovite; J=.0184271									
Aliquot: 1									
2 ^{1†}	10.3645	0.0010 ± 0.0002	0.004 ± 0.002	0.002 ± 0.011	77.301 ± 0.347	0.4	77.003 ± 0.349	51.5	1593.61 ± 4.79
2.2	4.2523	0.0001 ± 0.0005	0.011 ± 0.008	0.002 ± 0.011	81.938 ± 0.465	0	81.906 ± 0.485	21.2	1659.77 ± 6.43
2.6	4.2411	0.0002 ± 0.0003	0.006 ± 0.004	0.002 ± 0.011	82.884 ± 0.328	0.1	82.823 ± 0.338	21.2	1671.88 ± 4.45
3.0	0.5147	0.0019 ± 0.0031	0.032 ± 0.064	0.003 ± 0.011	82.613 ± 0.580	0.7	82.035 ± 1.017	2.6	1661.48 ± 13.46
12.0	0.7352	0.0030 ± 0.0020	0.088 ± 0.012	0.002 ± 0.011	83.057 ± 1.056	1.1	82.169 ± 1.164	3.5	1663.25 ± 15.39
Aliquot: 2									
1.8 [‡]	0.5881	0.0092 ± 0.0020	0.122 ± 0.022	0.012 ± 0.011	36.144 ± 0.810	7.5	33.423 ± 0.908	3.1	865.75 ± 18.69
2 [‡]	0.3197	0.0018 ± 0.0044	0.072 ± 0.043	0.001 ± 0.012	43.947 ± 0.758	1.2	43.407 ± 1.358	1.8	1060.28 ± 25.08
2.2 [‡]	11.7624	0.0005 ± 0.0001	0.005 ± 0.002	0.003 ± 0.011	67.020 ± 0.197	0.2	66.874 ± 0.199	60.3	1448.74 ± 2.97
2.6	3.4082	0.0005 ± 0.0005	0.021 ± 0.004	0.001 ± 0.011	71.410 ± 0.529	0.2	71.248 ± 0.543	17.4	1512.73 ± 7.81
3.0	1.2638	0.0016 ± 0.0009	0.014 ± 0.004	0.003 ± 0.011	72.512 ± 0.327	0.7	72.039 ± 0.393	6.7	1524.07 ± 5.62
12.0	2.0847	0.0020 ± 0.0004	0.034 ± 0.005	0.002 ± 0.011	72.640 ± 0.520	0.8	72.047 ± 0.519	10.7	1524.18 ± 7.42
Aliquot: 3									
1.8 [‡]	1.4527	0.0030 ± 0.0014	0.037 ± 0.006	0.007 ± 0.011	35.542 ± 0.276	2.5	34.653 ± 0.475	12.0	890.88 ± 9.64
2 [‡]	0.4935	0.0010 ± 0.0035	0.087 ± 0.041	-0.001 ± -0.011	45.963 ± 0.636	0.7	45.648 ± 1.140	4.0	1101.21 ± 20.59
2.2 [‡]	4.0628	0.0017 ± 0.0002	0.019 ± 0.002	0.004 ± 0.011	67.307 ± 0.483	0.7	66.807 ± 0.480	32.8	1447.74 ± 7.15
2.6	4.5004	0.0002 ± 0.0004	0.009 ± 0.003	0.002 ± 0.011	72.713 ± 0.283	0.1	72.661 ± 0.299	36.0	1532.93 ± 4.24
3.0	0.7328	0.0048 ± 0.0012	0.046 ± 0.020	0.000 ± 0.011	74.270 ± 0.478	1.9	72.844 ± 0.516	5.6	1535.53 ± 7.32
12 [‡]	1.1832	0.0010 ± 0.0011	0.001 ± 0.011	0.001 ± 0.011	66.622 ± 0.309	0.5	66.322 ± 0.420	9.6	1440.50 ± 6.28
Aliquot: 4									
1.8 [‡]	0.3889	0.0090 ± 0.0029	0.111 ± 0.069	0.022 ± 0.013	28.128 ± 0.634	9.5	25.467 ± 0.929	2.3	694.16 ± 21.02
2 [‡]	1.2955	0.0017 ± 0.0007	0.052 ± 0.008	0.008 ± 0.011	51.991 ± 0.235	1	51.489 ± 0.265	12.9	1203.71 ± 4.52
2.2 [‡]	3.9341	0.0006 ± 0.0002	0.016 ± 0.007	0.003 ± 0.011	66.884 ± 0.334	0.3	66.697 ± 0.335	38.7	1446.10 ± 5.00
2.6	2.4003	0.0015 ± 0.0004	0.042 ± 0.005	0.002 ± 0.011	73.431 ± 0.507	0.6	72.983 ± 0.510	23.7	1537.50 ± 7.23
12.0	2.049	0.0015 ± 0.0005	0.043 ± 0.003	0.004 ± 0.011	73.491 ± 0.492	0.6	73.038 ± 0.504	20.4	1538.27 ± 7.14
Aliquot: 5									
1.8 [‡]	0.3902	0.0263 ± 0.0030	0.088 ± 0.061	0.071 ± 0.011	62.245 ± 0.611	12.5	54.467 ± 0.952	3.8	1253.81 ± 15.79
2 [‡]	0.1164	0.0271 ± 0.0079	0.761 ± 0.095	0.015 ± 0.017	21.374 ± 2.203	37.6	13.332 ± 2.425	1.3	396.30 ± 64.72
2.2 [‡]	2.9017	0.0009 ± 0.0004	0.023 ± 0.014	0.005 ± 0.011	48.997 ± 0.449	0.6	48.721 ± 0.458	30.4	1155.85 ± 8.02
2.6 [‡]	3.6425	0.0008 ± 0.0003	0.003 ± 0.002	0.004 ± 0.011	49.751 ± 0.421	0.5	49.515 ± 0.427	39.2	1169.71 ± 7.42
3 [‡]	1.8938	0.0011 ± 0.0008	0.026 ± 0.014	0.004 ± 0.011	64.708 ± 0.526	0.5	64.378 ± 0.565	20.3	1411.18 ± 8.58
12 [‡]	0.5073	0.0092 ± 0.0021	0.028 ± 0.044	0.035 ± 0.011	81.846 ± 1.442	3.3	79.123 ± 1.477	5.1	1622.51 ± 19.98
Aliquot: 6									
1.8 [‡]	5.5564	0.0013 ± 0.0002	0.015 ± 0.002	0.003 ± 0.011	72.781 ± 0.274	0.5	72.401 ± 0.279	29.2	1529.23 ± 3.97
2 [‡]	0.168	0.0006 ± 0.0078	0.395 ± 0.037	0.010 ± 0.012	65.767 ± 1.643	-0.1	65.851 ± 2.699	0.7	1433.44 ± 40.54
2.2 [‡]	1.0552	0.0020 ± 0.0010	0.038 ± 0.022	0.003 ± 0.011	72.469 ± 0.334	0.8	71.860 ± 0.414	5.8	1521.51 ± 5.92
2.6 [‡]	8.2567	0.0004 ± 0.0002	0.007 ± 0.003	0.003 ± 0.011	68.622 ± 0.396	0.2	68.498 ± 0.397	43.8	1472.77 ± 5.84
12 [‡]	3.85	0.0009 ± 0.0005	0.012 ± 0.005	0.002 ± 0.011	74.773 ± 0.582	0.3	74.514 ± 0.597	20.4	1559.07 ± 8.36
Aliquot: 7									
1.8 [‡]	0.1047	0.0251 ± 0.0095	0.824 ± 0.173	0.052 ± 0.012	35.014 ± 2.435	21.3	27.561 ± 3.048	2.6	740.93 ± 67.21
2 [‡]	0.194	0.0034 ± 0.0042	0.285 ± 0.026	0.019 ± 0.011	50.993 ± 1.105	2	49.969 ± 1.307	2.6	1177.60 ± 22.62
2.2 [‡]	0.0425	0.0058 ± 0.0189	1.331 ± 0.237	0.091 ± 0.035	66.708 ± 8.014	2.7	64.915 ± 8.409	0.0	1419.33 ± 127.44
2.6	0.1317	0.0098 ± 0.0068	0.319 ± 0.161	0.000 ± -0.022	57.028 ± 2.097	5.1	54.113 ± 2.443	2.6	1247.93 ± 40.66
12.0	5.0564	0.0004 ± 0.0002	0.018 ± 0.002	0.003 ± 0.011	69.989 ± 0.491	0.2	69.875 ± 0.493	92.1	1492.89 ± 7.17
Aliquot: 8									
2.0	1.6463	0.0014 ± 0.0006	0.035 ± 0.014	0.005 ± 0.011	63.563 ± 0.343	0.7	63.149 ± 0.364	41.3	1392.40 ± 5.60
2.2	0.6754	0.0030 ± 0.0011	0.124 ± 0.010	0.004 ± 0.011	64.138 ± 0.433	1.4	63.251 ± 0.449	17.4	1393.97 ± 6.90
2.6 [‡]	1.1164	0.0000 ± 0.0012	0.035 ± 0.016	0.003 ± 0.011	61.605 ± 0.379	0	61.594 ± 0.501	28.3	1368.34 ± 7.79
12.0	0.4857	0.0013 ± 0.0026	0.044 ± 0.035	0.001 ± 0.011	63.684 ± 1.196	0.6	63.290 ± 1.349	13.0	1394.56 ± 20.71
Aliquot: 9									
2 [‡]	0.88	0.0040 ± 0.0011	0.078 ± 0.011	0.012 ± 0.011	32.583 ± 0.385	3.7	31.387 ± 0.443	9.7	823.36 ± 9.33
2.6 [‡]	5.3594	0.0007 ± 0.0003	0.015 ± 0.001	0.003 ± 0.011	55.844 ± 0.300	0.4	55.640 ± 0.313	60.2	1273.16 ± 5.14
12 [‡]	2.7022	0.0012 ± 0.0004	0.036 ± 0.003	0.004 ± 0.011	75.192 ± 0.530	0.5	74.831 ± 0.534	30.1	1563.51 ± 7.46
Aliquot: 10									
2 [‡]	1.3502	0.0018 ± 0.0012	0.015 ± 0.016	0.006 ± 0.011	63.698 ± 0.526	0.9	63.155 ± 0.616	12.5	1392.49 ± 9.47
2.6	7.8308	0.0009 ± 0.0002	0.005 ± 0.002	0.002 ± 0.011	77.435 ± 0.261	0.3	77.173 ± 0.265	70.3	1595.94 ± 3.63
12.0	1.8692	0.0017 ± 0.0006	0.049 ± 0.005	0.002 ± 0.011	78.155 ± 0.297	0.6	77.661 ± 0.330	17.2	1602.63 ± 4.51
Aliquot: 11									
2 [‡]	0.2066	0.0292 ± 0.0053	0.097 ± 0.172	0.029 ± 0.014	45.644 ± 1.525	18.9	37.008 ± 1.818	2.9	938.05 ± 35.94
2.6 [‡]	3.8413	0.0011 ± 0.0005	0.027 ± 0.005	0.004 ± 0.011	80.644 ± 0.533	0.4	80.304 ± 0.545	62.9	1638.42 ± 7.31
12.0	2.1055	0.0021 ± 0.0006	0.064 ± 0.005	0.003 ± 0.011	83.456 ± 0.412	0.7	82.833 ± 0.432	34.3	1672.01 ± 5.68
Aliquot: 12									
2 [‡]	0.6861	0.0094 ± 0.0018	0.112 ± 0.036	0.008 ± 0.011	57.594 ± 0.542	4.8	54.825 ± 0.690	13.3	1259.73 ± 11.41
2.6	4.1373	0.0016 ± 0.0002	0.020 ± 0.007	0.002 ± 0.011	76.656 ± 0.685	0.6	76.193 ± 0.683	80.0	1582.44 ± 9.44
12.0	0.344	0.0067 ± 0.0036	0.159 ± 0.054	0.014 ± 0.012	76.720 ± 0.945	2.6	74.716 ± 1.287	6.7	1561.90 ± 18.00
Aliquot: 13									
2 [‡]	0.083	0.0266 ± 0.0131	0.253 ± 0.624	0.066 ± 0.023	34.197 ± 3.235	23.2	26.278 ± 4.176	1.1	712.42 ± 93.55
2.6 [‡]	5.8702	0.0014 ± 0.0002	0.021 ± 0.002	0.003 ± 0.011	61.786 ± 0.211	0.7	61.368 ± 0.212	74.4	1364.82 ± 3.31
12 [‡]	1.9525	0.0009 ± 0.0006	0.037 ± 0.016	0.004 ± 0.011	70.546 ± 0.667	0.4	70.292 ± 0.677	24.4	1498.93 ± 9.81
Aliquot: 14									
2 [‡]	1.6842	0.0003 ± 0.0006	0.017 ± 0.012	0.002 ± 0.011	77.228 ± 0.758	0.1	77.134 ± 0.771	37.3	1595.41 ± 10.59
2.6	2.1645	0.0012 ± 0.0005	0.014 ± 0.008	0.003 ± 0.011	84.591 ± 0.623	0.4	84.223 ± 0.632	49.0	1690.20 ± 8.23
12.0	0.5768	0.0076 ± 0.0014	0.128 ± 0.024	0.004 ± 0.011	86.156 ± 1.151	2.6	83.914 ± 1.148	13.7	1686.17 ± 14.99

TABLE 2. Ar-Ar DATA (Continued.)

Power [†]	Volume (³⁹ Ar × 10 ⁻¹¹ cc)	³⁶ Ar/ ³⁹ Ar	³⁷ Ar/ ³⁹ Ar	³⁸ Ar/ ³⁹ Ar	⁴⁰ Ar/ ³⁹ Ar	% ⁴⁰ Ar ATM	⁴⁰ Ar/ ³⁹ Ar [†]	f ₃₉ [§] (%)	Apparent Age (Ma) [#]
VN-98-05b (Z5998) Garnet Formation Muscovite; J=.0146764									
Aliquot: 1									
2.4 [‡]	0.0195	0.1003 ± 0.0632	0.441 ± 0.461	0.000 ± -0.045	48.496 ± 3.982	61.1	18.865 ± 19.124	0.4	440.94 ± 396.56
3.9	0.7106	0.0012 ± 0.0015	0.017 ± 0.015	0.004 ± 0.011	75.055 ± 0.757	0.5	74.701 ± 0.829	15.2	1335.37 ± 10.48
12.0	0.0519	0.0161 ± 0.0205	0.102 ± 0.085	0.016 ± 0.030	79.824 ± 5.367	6	75.009 ± 7.008	1.1	1339.26 ± 88.34
Aliquot: 2									
2.4 [‡]	0.0462	0.0427 ± 0.0216	0.398 ± 0.101	0.023 ± 0.024	77.324 ± 5.439	16.4	64.633 ± 6.937	1.2	1203.51 ± 94.28
3.9 [‡]	0.0071	0.1525 ± 0.3239	2.863 ± 1.467	0.552 ± 0.231	75.706 ± 34.129	60.2	30.114 ± 94.875	0.2	660.31 ± 1919.85
12.0	0.5452	0.0083 ± 0.0029	0.041 ± 0.009	0.011 ± 0.011	108.029 ± 1.149	2.3	105.568 ± 1.370	14	1688.34 ± 14.23
Aliquot: 3									
2.4 [‡]	0.0064	0.1079 ± 0.1446	1.576 ± 0.638	0.260 ± 0.136	72.093 ± 14.192	44.2	40.194 ± 45.053	0.2	836.51 ± 750.29
3.9	0.4269	0.0001 ± 0.0025	0.060 ± 0.005	0.001 ± 0.012	86.574 ± 1.149	0	86.533 ± 1.285	12.9	1478.96 ± 14.99
12.0	0.1516	0.0007 ± 0.0065	0.073 ± 0.052	0.012 ± 0.015	86.400 ± 2.955	0.3	86.173 ± 3.269	4.6	1474.75 ± 38.22
Aliquot: 4									
2.4 [‡]	0.0387	0.0417 ± 0.0231	0.330 ± 0.167	0.070 ± 0.045	72.224 ± 9.005	17.2	59.808 ± 9.004	1.4	1136.73 ± 127.12
3.9	0.1503	0.0001 ± 0.0041	0.040 ± 0.047	0.025 ± 0.013	92.995 ± 5.210	0	94.201 ± 5.416	5.5	1566.25 ± 60.22
12.0	0.6293	0.0047 ± 0.0019	0.019 ± 0.015	0.007 ± 0.011	93.920 ± 1.173	1.5	92.518 ± 1.244	23.2	1547.45 ± 13.97
Aliquot: 5									
2.4 [‡]	0.009	0.0219 ± 0.1560	0.996 ± 0.314	0.282 ± 0.150	45.311 ± 8.846	14.3	38.832 ± 46.990	0.5	813.69 ± 792.51
3.9	0.8234	0.0022 ± 0.0014	0.009 ± 0.013	0.003 ± 0.011	103.258 ± 0.953	0.6	102.596 ± 1.005	43.5	1657.22 ± 10.63
12.0	0.3318	0.0011 ± 0.0029	0.042 ± 0.018	0.013 ± 0.011	101.424 ± 3.730	0.3	101.083 ± 3.767	17.5	1641.16 ± 40.18
Aliquot: 6									
2.4 [‡]	0.008	0.0282 ± 0.1169	2.724 ± 1.980	0.356 ± 0.229	54.352 ± 16.280	15.3	46.022 ± 38.209	0.6	931.05 ± 603.83
3.9	0.6308	0.0018 ± 0.0017	0.017 ± 0.010	0.009 ± 0.011	90.055 ± 0.771	0.6	89.525 ± 0.864	49.5	1513.52 ± 9.89
12.0	0.0921	0.0108 ± 0.0126	0.140 ± 0.037	0.027 ± 0.025	92.788 ± 3.425	3.5	89.553 ± 4.528	7.2	1513.84 ± 51.81
Aliquot: 7									
2.4 [‡]	0.0326	0.0561 ± 0.0317	0.244 ± 0.286	0.042 ± 0.029	77.531 ± 3.644	21.4	60.944 ± 10.050	0.8	1152.68 ± 140.46
3.9	0.417	0.0000 ± 0.0019	0.040 ± 0.005	0.012 ± 0.011	104.412 ± 1.334	0	104.515 ± 1.399	10	1677.38 ± 14.63
12.0	0.0935	0.0427 ± 0.0115	0.186 ± 0.019	0.010 ± 0.031	116.007 ± 3.851	10.9	103.358 ± 4.424	2.2	1665.24 ± 46.54
Aliquot: 8									
2.4	0.6239	0.0010 ± 0.0014	0.014 ± 0.009	0.006 ± 0.011	99.970 ± 1.428	0.3	99.656 ± 1.452	14.9	1625.88 ± 15.61
3.9	0.4396	0.0016 ± 0.0026	0.024 ± 0.019	0.010 ± 0.011	100.482 ± 1.484	0.5	100.001 ± 1.602	10.5	1629.59 ± 17.19
12.0	0.0836	0.0073 ± 0.0108	0.133 ± 0.102	0.027 ± 0.017	102.246 ± 3.796	2.1	100.056 ± 4.303	2	1630.17 ± 46.16
Aliquot: 9									
2.4 [‡]	0.2048	0.0004 ± 0.0052	0.067 ± 0.009	0.012 ± 0.012	80.205 ± 1.796	0	80.323 ± 2.251	4.9	1405.02 ± 27.36
3.9	0.6639	0.0010 ± 0.0016	0.024 ± 0.005	0.007 ± 0.011	99.482 ± 1.253	0.3	99.182 ± 1.296	15.8	1620.77 ± 13.98
12.0	0.0492	0.0008 ± 0.0204	0.005 ± 0.241	0.045 ± 0.037	94.463 ± 5.468	0	97.256 ± 8.168	1.2	1599.89 ± 89.10
Aliquot: 10									
2.4 [‡]	0.0061	0.0514 ± 0.0888	0.850 ± 1.149	0.303 ± 0.116	58.440 ± 11.914	26	43.265 ± 28.832	0.2	886.95 ± 466.92
3.9	0.8287	0.0004 ± 0.0012	0.012 ± 0.003	0.005 ± 0.011	93.505 ± 0.827	0.1	93.381 ± 0.865	19.8	1557.12 ± 9.66
12.0	0.0834	0.0151 ± 0.0112	0.196 ± 0.042	0.015 ± 0.017	97.511 ± 3.776	4.6	93.019 ± 4.324	2	1553.06 ± 48.41
Aliquot: 11									
2.4 [‡]	0.0052	0.1819 ± 0.2521	3.439 ± 1.319	0.486 ± 0.199	75.612 ± 21.127	71.1	21.848 ± 77.518	0.1	501.76 ± 1554.16
3.9 [‡]	0.0283	0.0320 ± 0.0338	0.501 ± 0.320	0.073 ± 0.059	80.212 ± 10.931	11.8	70.754 ± 14.822	0.7	1284.83 ± 192.53
12.0	0.2984	0.0060 ± 0.0037	0.067 ± 0.032	0.009 ± 0.012	93.822 ± 1.351	1.9	92.024 ± 1.590	7.1	1541.89 ± 17.91
Aliquot: 12									
2.4 [‡]	0.0075	0.0718 ± 0.0969	0.062 ± 0.901	0.110 ± 0.175	66.975 ± 9.147	31.7	45.761 ± 30.075	0.2	926.92 ± 476.38
3.9	0.2882	0.0041 ± 0.0036	0.050 ± 0.015	0.017 ± 0.011	96.976 ± 1.714	1.3	95.753 ± 1.878	6.9	1583.42 ± 20.67
12.0 [‡]	0.0366	0.0150 ± 0.0280	0.429 ± 0.065	0.055 ± 0.051	94.543 ± 7.452	4.8	90.020 ± 9.577	0.9	1519.17 ± 109.28

Note: All uncertainties quoted at 2s level.

[†]As measured by laser in % of full nominal power (10W).

[‡]Step not included in age determination.

[§]Fraction ³⁹Ar as percent of total run.

[#]Errors are analytical only and do not reflect error in irradiation parameter J.

^{††}d: Nominal J, referenced to FCT-SAN=28.03 Ma (Renne et al., 1994).