

Supplementary Material – Table A1. ⁴⁰Ar-³⁹Ar numerical data.

Isotope ratios are corrected for electron multiplier baseline, background, discrimination, interfering isotopes generated during neutron irradiation, and post-irradiation decay of ³⁹Ar and ³⁷Ar. Errors in this table are 1σ. The heating time for all analyses was ~45 seconds, not including the laser ramp-up time. Abbreviations used are: % Rad., % radiogenic argon; Discr., discrimination. The error in the J factor is not included in the tabulated error in the age in Appendix A, but is included in all plateau, age probability, and isochron ages throughout the text. The mass spectrometer gain was calculated based on the analysis of an air pipette (1.634 x 10⁻¹³ moles ⁴⁰Ar) on the Faraday detector (4.257 mV) equipped with a 1 x 10¹¹ Ohms resistor, yielding a Faraday sensitivity of 3.84 x 10⁻⁹ moles/nA. The current multiplier sensitivity measured on a Balzers 217 Electron Multiplier, operated with a gain of ~145,000 is ~4.5 x 10⁻¹⁴ moles/nA. The historical irradiation correction factors for the CLICIT facility, TRIGA reactor, Oregon State University, USA are: (2.64 ± 0.02) x 10⁻⁴ for (³⁶Ar/³⁷Ar)Ca, (7.04 ± 0.06) x 10⁻⁴ for (³⁹Ar/³⁷Ar)Ca, and (8 ± 3) x 10⁻⁴ for (⁴⁰Ar/³⁹Ar)K (values determined at the Berkeley Geochronology Center).

Run ID	Sample	36Ar/39Ar	36/39 Error 1s	37Ar/39Ar	37/39 Error 1s	38Ar/39Ar	38/39 Error 1s	40Ar/39Ar	40/39 Error 1s	40Ar*/39Ar	40*/39 Error 1s	%Ar40* Error 1s	Age Ma	Age Ma Error 1s	Ar39 Moles	Ar40 Moles	J	J Error 1s	Run Date	Run Hour	Ar40 Disc	Disc Error 1s	
9109-01A	IT-4G15	0.0056162	0.0001289	0.0082238	0.0018559	0.0136076	0.0001929	18.46661	0.0432312	16.78977	0.0571125	90.923	0.2287359	104.7899	0.3463012	2.45E-14	4.52E-13	0.003562	6.00E-06	3/6/2016	4.94	1.0044	0.0009
9109-01B	IT-4G15	0.0026482	0.0001816	-0.0042296	0.0025108	0.0127781	0.0002009	17.10946	0.0570179	16.31763	0.0774372	95.37676	0.3335277	101.9249	0.4702861	1.70E-14	2.90E-13	0.003562	6.00E-06	3/6/2016	5.65	1.0044	0.0009
9109-01C	IT-4G15	0.0046245	0.0002703	-0.0105787	0.0041823	0.0131562	0.0002693	17.82759	0.0570714	16.44516	0.0974601	92.25036	0.4762433	102.6992	0.5916338	1.14E-14	2.04E-13	0.003562	6.00E-06	3/6/2016	6.36	1.0044	0.0009
9109-01D	IT-4G15	0.0064092	0.0006159	0.0080075	0.0053926	0.0134888	0.0004704	18.3625	0.0831202	16.44886	0.1990829	89.58195	1.012029	102.7217	1.208523	8.30E-15	1.52E-13	0.003562	6.00E-06	3/6/2016	7.06	1.0044	0.0009
9109-01E	IT-4G15	0.0075988	0.0003877	0.0284417	0.0058684	0.0120617	0.0004205	18.46783	0.0767396	16.20073	0.1350783	87.72614	0.6405578	101.2148	0.8206712	7.14E-15	1.32E-13	0.003562	6.00E-06	3/6/2016	7.80	1.0044	0.0009
9109-01F	IT-4G15	0.0061139	0.0004017	0.0884007	0.0052292	0.0130666	0.0003876	17.90504	0.065732	16.08661	0.1347065	89.8426	0.685195	100.5213	0.8187268	8.76E-15	1.57E-13	0.003562	6.00E-06	3/6/2016	8.47	1.0044	0.0009
9109-01G	IT-4G15	0.0051336	0.0002883	0.0557346	0.0039513	0.012315	0.0003407	17.6423	0.0710742	16.11364	0.1088699	91.33594	0.5117962	100.6856	0.6616358	9.51E-15	1.68E-13	0.003562	6.00E-06	3/6/2016	9.47	1.0044	0.0009
9109-01H	IT-4G15	0.0054539	0.0004212	0.0562753	0.0051657	0.0131269	0.0003999	17.70769	0.077338	16.0835	0.1448466	90.82837	0.7261006	100.5024	0.8803665	7.21E-15	1.28E-13	0.003562	6.00E-06	3/6/2016	10.26	1.0044	0.0009
9109-01I	IT-4G15	0.0068732	0.0011154	0.0505428	0.0074866	0.0130777	0.0005544	17.83797	0.0721544	15.78949	0.3396851	88.51709	1.8791	98.71458	2.066627	5.10E-15	9.10E-14	0.003562	6.00E-06	3/6/2016	11.08	1.0044	0.0009
9109-01J	IT-4G15	0.0073238	0.0051802	0.3592321	0.0678787	0.0139651	0.0050707	18.13673	0.4236965	15.98088	1.591668	88.09539	8.561322	99.87859	9.677382	5.62E-16	1.02E-14	0.003562	6.00E-06	3/6/2016	11.93	1.0044	0.0009
9109-01K	IT-4G15	0.1319111	0.0315237	1.803521	0.4235426	-0.0278251	0.0255337	14.95973	1.615961	-24.32002	8.910624	-162.376	57.52626	-163.4709	62.69161	9.18E-17	1.37E-15	0.003562	6.00E-06	3/6/2016	12.76	1.0044	0.0009
9109-01L	IT-4G15	0.0271149	0.0085418	0.1813422	0.1097195	0.025642	0.0076215	17.47176	0.6216383	9.391085	2.563433	53.7458	14.56827	59.36087	15.93974	3.29E-16	5.75E-15	0.003562	6.00E-06	3/6/2016	13.59	1.0044	0.0009
9109-02A	IT-4G15	0.0810529	0.0041905	0.0321829	0.0489762	0.0408717	0.0036684	60.62049	1.119818	36.42454	1.358094	60.08565	1.944442	220.0817	7.725006	7.54E-16	4.57E-14	0.003562	6.00E-06	3/6/2016	17.57	1.0044	0.0009
9109-02B	IT-4G15	0.0028558	0.000591	0.0471494	0.0083424	0.0132296	0.0006438	21.1239	0.1201126	20.27474	0.2111845	95.98064	0.8555387	125.7983	1.265691	4.72E-15	9.97E-14	0.003562	6.00E-06	3/6/2016	18.41	1.0044	0.0009
9109-02C	IT-4G15	0.0014247	0.0002221	0.0198164	0.0029142	0.0127926	0.000253	18.53422	0.067035	18.10982	0.0935315	97.71305	0.3750077	112.7764	0.5646229	1.21E-14	2.25E-13	0.003562	6.00E-06	3/6/2016	19.17	1.0044	0.0009
9109-02D	IT-4G15	0.0013763	0.0001671	0.0284431	0.0022797	0.0120874	0.0002353	17.93403	0.0495842	17.52481	0.0699544	97.72064	0.2979506	109.2414	0.4231226	1.65E-14	2.97E-13	0.003562	6.00E-06	3/6/2016	19.95	1.0044	0.0009
9109-02E	IT-4G15	0.0011891	0.000236	0.0414116	0.0029936	0.0126042	0.000343	18.57616	0.0678201	18.22403	0.0971865	98.10583	0.4009974	113.4657	0.5864626	1.21E-14	2.25E-13	0.003562	6.00E-06	3/6/2016	20.73	1.0044	0.0009
9109-02F	IT-4G15	0.0021376	0.000276	0.0668542	0.0036036	0.0135496	0.0003318	19.05949	0.0741829	18.42649	0.1096759	96.67842	0.4494695	114.687	0.6613811	9.68E-15	1.84E-13	0.003562	6.00E-06	3/6/2016	21.51	1.0044	0.0009
9109-02G	IT-4G15	0.001173	0.0003499	0.0812329	0.0038007	0.0133704	0.0003711	18.55427	0.0881962	18.21115	0.1358868	98.14944	0.5861114	113.388	0.8200314	9.15E-15	1.70E-13	0.003562	6.00E-06	3/6/2016	22.29	1.0044	0.0009
9109-02H	IT-4G15	0.0021638	0.0003059	0.0933331	0.0033646	0.0136106	0.0003548	18.02098	0.0816492	17.38249	0.1210176	96.45501	0.5307892	108.3803	0.7323309	1.03E-14	1.86E-13	0.003562	6.00E-06	3/6/2016	23.10	1.0044	0.0009
9109-02I	IT-4G15	0.001791	0.0001534	0.217974	0.0032372	0.0127967	0.0001759	17.21583	0.0457002	16.69956	0.0643023	96.9911	0.2839111	104.2429	0.390015	2.09E-14	3.59E-13	0.003562	6.00E-06	3/6/2016	23.87	1.0044	0.0009
9109-02J	IT-4G15	0.0011732	0.0000524	0.3244548	0.002007	0.0115544	0.0001862	16.6163	0.032264	16.29372	0.0359568	98.04141	0.1329383	101.7797	0.2183882	6.07E-14	1.01E-12	0.003562	6.00E-06	3/7/2016	0.71	1.0044	0.0009
9109-02K	IT-4G15	0.0012187	0.0001056	0.9298158	0.0079993	0.01151	0.0001803	16.60668	0.0419198	16.32379	0.0527612	98.23807	0.2201648	101.9623	0.3204193	6.20E-14	4.35E-13	0.003562	6.00E-06	3/7/2016	1.45	1.0044	0.0009
9109-02L	IT-4G15	0.0022191	0.0007351	0.7322801	0.0081706	0.0123202	0.0004263	16.85685	0.0706274	16.25789	0.2302189	96.40252	1.31891	101.562	1.398431	7.35E-15	1.24E-13	0.003562	6.00E-06	3/7/2016	2.16	1.0044	0.0009
9216-01A	IT-4E7	3.935739	0.0457524	0.1753013	0.0248026	0.742572	0.0130911	1217.782	13.97614	42.74441	4.956897	3.5096	0.2061053	268.6096	29.04147	3.51E-15	4.27E-12	0.003771	3.00E-06	6/3/2016	15.11	1.0054	0.0009
9216-01B	IT-4E7	0.0149104	0.0004835	-0.0671256	0.0244055	0.0165875	0.0005249	20.08643	0.0930599	15.62826	0.1631216	77.8118	0.7439327	103.3067	1.047983	5.68E-15	1.14E-13	0.003771	3.00E-06	7/27/2016	8.61	1.0028	0.0007
9216-01C	IT-4E7	0.0048331	0.0001392	-0.0454901	0.0164396	0.0125029	0.0001859	17.27615	0.0503359	15.82832	0.0259237	104.5915	0.404378	116.61E-14	2.78E-13	0.003771	3.00E-06	7/27/2016	9.52	1.0028	0.0007		
9216-01D	IT-4E7	0.0029553	0.0000596	0.0087434	0.0036873	0.0122943	0.00011	16.48248	0.0331562	15.60005	0.0371254	94.65029	0.1553993	103.1254	0.2385381	4.97E-14	8.19E-13	0.003771	3.00E-06	7/27/2016	10.40	1.0028	0.0007
9216-01E	IT-4E7	0.0030995	0.0000518	0.0034713	0.0027514	0.0129865	0.0000999	16.41616	0.0304542	15.49029	0.0336808	94.36436	0.1206734	102.4201	0.2164906	6.08E-14	9.99E-13	0.003771	3.00E-06	7/27/2016	11.30	1.0028	0.0007
9216-01F	IT-4E7	0.0036685	0.0000572	0.0045616	0.0024829	0.0126069	0.0000862	16.60471	0.0321362	15.50899	0.0357211	93.4054	0.1284395	102.5403	0.2295895	6.46E-14	1.07E-12	0.003771	3.00E-06	7/27/2016	12.24	1.0028	0.0007
9216-01G	IT-4E7	0.0038386	0.0000575	0.0178327	0.0024007	0.0127053	0.0000817	16.58179	0.0265667	15.43646	0.03156	93.09622	0.1296914	102.0741	0.2028977	6.40E-14	1.06E-12	0.003771	3.00E-06	7/27/2016	13.25	1.0028	0.0007
9216-01H	IT-4E7	0.0044244	0.000051	0.075395	0.002879	0.0130983	0.0000804	16.71725	0.0294757	15.40208	0.0328546	92.13249	0.1312661	101.853	0.2112464	6.19E-14	1.04E-12	0.003771	3.00E-06	7/27/2016	14.19	1.0028	0.0007
9216-01I	IT-4E7	0.0051259	0.0000627	0.0424669	0.0030405	0.0128121	0.0000984	16.9584	0.031117	15.43087	0.0357162	90.99413	0.1371448	102.0381	0.2296216	5.89E-14	9.99E-13	0.003771	3.00E-06	7/27/2016	15.21	1.0028	0.0007
9216-01J	IT-4E7	0.0062678	0.00008	0.0670345	0.0036447	0.0133002	0.0001101	17.27335	0.0264449	15.40707	0.0366153	89.19558	0.1704532	101.8851	0.235422	4.93E-14	8.52E-13	0.003771	3.00E-06	7/27/2016	16.18	1.0016	0.0008
9216-01K	IT-4E7	0.0068258	0.0000813	0.0782846	0.0038135	0.0130935	0.0001019	17.4202	0.0294811	15.38825	0.038879	88.33497	0.1786427	101.7641	0.2499936	4.53E-14	7.89E-13	0.003771	3.00E-06	7/27/2016	17.17	1.0016	0.0008

Run ID	Sample	36Ar/ 39Ar	36/39 Error 1s	37Ar/ 39Ar	37/39 Error 1s	38Ar/ 39Ar	38/39 Error 1s	40Ar/ 39Ar	40/39 Error 1s	40Ar* 39Ar	40*/39 Error 1s	%Ar40*	%Ar40*	Age Ma	Age Ma Error 1s	Ar39 Moles	Ar40 Moles	J	J Error 1s	Run Date	Run Hour	Ar40 Disc	Disc Error 1s
9216-01L	IT-4E7	0.00802	0.0001003	0.0722164	0.004706	0.0135108	0.001115	17.94507	0.0375712	15.55609	0.0471466	86.68678	0.1868356	102.843	0.3029737	3.69E-14	6.62E-13	0.003771	3.00E-06	7/27/2016	18.12	1.0016	0.0008
9216-01M	IT-4E7	0.0087546	0.0001112	0.0835304	0.0055826	0.0135745	0.0001076	18.16924	0.0377928	15.56193	0.0497206	85.64873	0.2129691	102.8805	0.3195082	3.57E-14	6.48E-13	0.003771	3.00E-06	7/27/2016	19.15	1.0016	0.0008
9216-01N	IT-4E7	0.0089291	0.0001335	0.1074271	0.0072037	0.0136058	0.0001482	18.16182	0.0479453	15.5045	0.0595881	85.36608	0.2352435	102.5114	0.3829953	2.78E-14	5.05E-13	0.003771	3.00E-06	7/27/2016	20.10	1.0016	0.0008
9216-01O	IT-4E7	0.0079837	0.0001138	0.0619724	0.0052079	0.0131188	0.0001344	17.87121	0.035607	15.49214	0.0486391	86.68787	0.20512	102.432	0.312636	3.24E-14	5.79E-13	0.003771	3.00E-06	7/27/2016	21.04	1.0016	0.0008
9216-01P	IT-4E7	0.007829	0.0001204	0.1131118	0.0053184	0.0136493	0.0001424	17.75153	0.0375688	15.42318	0.0517016	86.8808	0.2463608	101.9887	0.3324025	3.05E-14	5.42E-13	0.003771	3.00E-06	7/27/2016	22.02	1.0016	0.0008
9216-01Q	IT-4E7	0.0059097	0.0000793	0.1252197	0.0043254	0.0129443	0.0001213	17.2436	0.0366718	15.48928	0.0428894	89.82268	0.1688505	102.4136	0.2756815	4.31E-14	7.43E-13	0.003771	3.00E-06	7/27/2016	22.97	1.0016	0.0008
9216-01R	IT-4E7	0.009269	0.0002328	0.1224455	0.0070633	0.0141385	0.0001747	18.23284	0.0389942	15.47539	0.0789424	84.87302	0.3881723	102.3243	0.5074454	2.65E-14	4.83E-13	0.003771	3.00E-06	7/27/2016	23.97	1.0016	0.0008
9216-01S	IT-4E7	0.0209365	0.0002747	0.2461584	0.0112799	0.01644	0.0002027	21.59432	0.0348263	15.36425	0.0908106	71.14003	0.3847565	101.6097	0.5839664	1.74E-14	3.76E-13	0.003771	3.00E-06	7/28/2016	0.92	1.0016	0.0008
9216-01T	IT-4E7	0.0320634	0.0002679	0.2553721	0.0095283	0.0174861	0.0002124	25.00794	0.0657086	15.45651	0.0966949	61.79749	0.3148051	102.2029	0.6216012	2.07E-14	5.18E-13	0.003771	3.00E-06	7/28/2016	1.92	1.0016	0.0008
9216-01U	IT-4E7	0.0437111	0.0001651	0.3037213	0.0043283	0.02045	0.0001219	28.42299	0.0551594	15.39834	0.0753656	54.1658	0.1618746	101.8289	0.4845865	7.10E-14	2.02E-12	0.003771	3.00E-06	7/28/2016	2.84	1.0016	0.0008
9217-01A	EX-5	1.210766	0.0103607	0.0356668	0.0356668	0.2515958	0.025451	373.554	12.10061	16.44968	3.238468	0.3099413	80.49956	10.70263	4.88E-15	1.82E-12	0.003771	3.00E-06	7/18/2016	10.20	1.0021	0.0008	
9217-01B	EX-5	0.0105211	0.0002649	0.0694467	0.0275064	0.0151256	0.0003269	19.72323	0.076387	16.58746	0.1038611	84.10053	0.425827	109.4586	0.6649894	9.98E-15	1.97E-13	0.003771	3.00E-06	7/28/2016	7.59	1.0016	0.0008
9217-01C	EX-5	0.0025956	0.0000708	0.0418359	0.000905	0.0132298	0.0001292	17.02756	0.029847	16.25554	0.0366063	95.46784	0.1552041	107.3322	0.2346548	3.57E-14	6.07E-13	0.003771	3.00E-06	7/28/2016	8.50	1.0016	0.0008
9217-01D	EX-5	0.0018907	0.0000284	0.00191728	0.001661	0.0128417	0.0000714	16.57053	0.0278814	16.00693	0.0291889	96.60216	0.0906958	105.7378	0.1872732	1.20E-13	1.98E-12	0.003771	3.00E-06	7/28/2016	9.35	1.0016	0.0008
9217-01E	EX-5	0.0021688	0.0000352	0.0307915	0.0015359	0.0128995	0.0000589	16.63617	0.0278188	15.99057	0.0297959	96.1219	0.0871719	105.6329	0.190942	1.28E-13	2.13E-12	0.003771	3.00E-06	7/28/2016	10.26	1.0016	0.0008
9217-01F	EX-5	0.0026722	0.0000341	0.0332535	0.0020784	0.0131159	0.0000784	16.79327	0.0297491	15.99759	0.0313691	95.26428	0.0935309	105.6779	0.2012679	1.16E-13	1.95E-12	0.003771	3.00E-06	7/28/2016	11.24	1.0016	0.0008
9217-01G	EX-5	0.0031305	0.000041	0.0529771	0.0023307	0.0132977	0.0000915	17.03975	0.0331649	16.10901	0.0350031	94.53883	0.1020078	106.3927	0.2244949	9.92E-14	1.69E-12	0.003771	3.00E-06	7/28/2016	14.21	1.0016	0.0008
9217-01H	EX-5	0.0032384	0.0000773	0.0775999	0.0028423	0.0132248	0.0000971	17.18516	0.0303888	16.22435	0.0381223	94.4084	0.1532927	107.1322	0.2443997	8.42E-14	1.45E-12	0.003771	3.00E-06	7/28/2016	15.20	1.0016	0.0008
9217-01I	EX-5	0.003999	0.0000548	0.1142445	0.0042641	0.0137033	0.0000896	17.49831	0.0389575	16.31368	0.0412788	93.22693	0.11214	107.7048	0.2645521	6.44E-14	1.13E-12	0.003771	3.00E-06	7/28/2016	16.24	1.0016	0.0008
9217-01J	EX-5	0.0044299	0.0000634	0.1267877	0.0041627	0.0138473	0.0001075	17.93163	0.0289396	16.6209	0.0349411	92.6854	0.1321341	109.6727	0.2236904	5.51E-14	9.89E-13	0.003771	3.00E-06	7/28/2016	17.23	1.0016	0.0008
9217-01K	EX-5	0.0049625	0.0000818	0.1426772	0.004544	0.0140853	0.0001117	18.22324	0.0347805	16.76096	0.0422672	91.9654	0.1592399	110.5929	0.2704568	5.24E-14	9.56E-13	0.003771	3.00E-06	7/28/2016	18.20	1.0016	0.0008
9217-01L	EX-5	0.0061398	0.0001133	0.2325035	0.0082809	0.0142759	0.0001541	18.52932	0.05087	16.71604	0.0587013	90.2034	0.1989309	110.2817	0.3756744	3.09E-14	5.72E-13	0.003771	3.00E-06	7/28/2016	19.18	1.0016	0.0008
9217-01M	EX-5	0.0074829	0.0003279	0.2101821	0.0090619	0.0149298	0.0001763	19.01307	0.0528271	16.79685	0.1095925	88.33463	0.5215937	110.7988	0.7011644	2.06E-14	3.92E-13	0.003771	3.00E-06	7/28/2016	20.06	1.0016	0.0008
9217-01N	EX-5	0.0121313	0.00005963	0.2641651	0.0119365	0.0153636	0.0002477	20.38383	0.0673801	16.78451	0.1877555	82.3305	0.8816293	110.7198	1.201298	1.96E-14	3.18E-13	0.003771	3.00E-06	7/28/2016	20.90	1.0016	0.0008
9217-01O	EX-5	0.0140884	0.0002007	0.2925581	0.0142195	0.0153543	0.0002232	20.79451	0.0460263	16.61333	0.0741641	79.87978	0.3000045	109.6242	0.4748057	1.60E-14	3.32E-13	0.003771	3.00E-06	7/28/2016	21.76	1.0016	0.0008
9217-01P	EX-5	0.0241742	0.0003947	0.3280111	0.0229967	0.0173426	0.000417	23.85686	0.1029443	16.6676	0.1423716	69.85153	0.4963494	109.9716	0.9113008	7.71E-15	1.84E-13	0.003771	3.00E-06	7/28/2016	22.70	1.0016	0.0008
9217-01Q	EX-5	0.0450507	0.00016484	0.1738492	0.0656027	0.0226312	0.0007435	30.42906	0.1847431	16.9935	0.501459	55.84105	1.607175	112.0755	3.206601	4.14E-15	1.26E-13	0.003771	3.00E-06	7/28/2016	23.62	1.0016	0.0008
9217-01R	EX-5	0.0293818	0.0003965	0.5538683	0.0304201	0.0186739	0.0003946	25.189	0.1070859	16.46487	0.1400247	65.34238	0.4658886	108.6753	0.8969237	8.32E-15	2.10E-13	0.003771	3.00E-06	7/29/2016	0.53	1.0016	0.0008
9217-01S	EX-5	0.0318808	0.0006229	0.3990891	0.016968	0.01976	0.000259	26.23505	0.085207	16.75132	0.197368	63.83527	0.7115336	110.5075	1.26295	1.60E-14	4.20E-13	0.003771	3.00E-06	7/29/2016	1.51	1.0016	0.0008
9217-01T	EX-5	0.0766064	0.0005977	0.2369312	0.0182939	0.0296766	0.0004302	39.35347	0.1641801	16.50224	0.1896891	41.92738	0.3957132	108.9129	1.214886	1.04E-14	4.09E-13	0.003771	3.00E-06	7/29/2016	2.48	1.0016	0.0008
9217-01U	EX-5	0.1440273	0.0009889	0.2710264	0.0194996	0.0418445	0.0005803	59.82275	0.2254268	16.84536	0.3018955	28.15389	0.4255248	111.1091	1.931173	7.66E-15	4.58E-13	0.003771	3.00E-06	7/29/2016	3.40	1.0016	0.0008
9217-01V	EX-5	0.1578984	0.0010912	0.1641287	0.0216815	0.0431773	0.0005245	63.11033	0.2713417	15.9819	0.3162489	25.3212	0.4160867	105.5773	2.029201	8.71E-15	5.50E-13	0.003771	3.00E-06	7/29/2016	4.31	1.0016	0.0008
9218-01A	EX-30	1.023941	0.005749	0.5183975	0.0188897	0.2167824	0.0016057	314.6858	1.573497	9.021317	1.297435	2.86575	0.2683719	60.35274	8.536278	7.36E-15	2.32E-12	0.003771	3.00E-06	7/18/2016	13.14	1.0021	0.0008
9218-01B	EX-30	0.0259227	0.0005576	0.1191866	0.044191	0.0223487	0.0005714	29.07402	0.1634068	21.34519	0.2057401	73.4127	0.5721089	139.6665	1.295415	5.25E-15	1.53E-13	0.003771	3.00E-06	7/29/2016	9.03	1.0016	0.0008
9218-01C	EX-30	0.0094603	0.0002118	0.1391169	0.0138133	0.0158151	0.0002202	22.73008	0.0653767	19.91759	0.0875001	87.62126	0.2917343	130.6554	0.5536912	1.47E-14	3.34E-13	0.003771	3.00E-06	7/29/2016	9.95	1.0016	0.0008
9218-01D	EX-30	0.0049822	0.000074	0.0490451	0.0065542	0.0141699	0.0001015	18.89042	0.0340766	17.40657	0.0406299	92.14574	0.1507792	114.6955	0.2593865	5.42E-14	1.02E-12	0.003771	3.00E-06	7/29/2016	10.84	1.0016	0.0008
9218-01E	EX-30	0.0036821	0.0000508	0.0429573	0.0025531	0.0137156	0.0000794	17.79944	0.0372352	16.70316	0.0396007	93.84239	0.1211555	110.9193	0.2534467	7.94E-14	1.41E-12	0.003771	3.00E-06	7/29/2016	11.84	1.0016	0.0008
9218-01F	EX-30	0.0034093	0.0000382	0.0436391	0.0019922	0.0137537	0.0000801	17.52884	0.0270565	16.51409	0.0296932	94.21247	0.0897509	108.9888	0.1901653								

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NEW AGE DETERMINATIONS FOR THE BANHADÃO AND ITAPIRAPUÁ COMPLEXES IN THE RIBEIRA VALLEY, SOUTHERN BRAZIL

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Run ID	Sample	36Ar/ 39Ar	36/39 Error 1s	37Ar/ 39Ar	37/39 Error 1s	38Ar/ 39Ar	38/39 Error 1s	40Ar/ 39Ar	40/39 Error 1s	40Ar*/ 39Ar	40*/39 Error 1s	%Ar40*	%Ar40* Error 1s	Age Ma	Age Ma Error 1s	Ar39 Moles	Ar40 Moles	J	J Error 1s	Run Date	Run Hour	Ar40 Disc	Disc Error 1s
9218-01U	EX-30	0.0453203	0.0001654	1.215581	0.0099832	0.0226081	0.0001132	29.43986	0.0648784	16.01514	0.0801201	54.35532	0.1704865	105.7905	0.5140274	8.25E-14	2.43E-12	0.003771	3.00E-06	7/30/2016	3.22	1.0016	0.0008
9218-01V	EX-30	0.1398628	0.0005344	0.9659571	0.0108231	0.0416223	0.0002513	57.92261	0.1107385	16.24967	0.2085038	28.03577	0.2523651	107.2946	1.336585	4.27E-14	2.47E-12	0.003771	3.00E-06	7/30/2016	4.19	1.0016	0.0008