

# Direct dating of overprinting fluid systems in the Martabe epithermal gold deposit using highly retentive alunite

Jack Muston<sup>1</sup>, Marnie Forster<sup>2</sup>, Davood Vasegh<sup>2</sup>, Conrad Alderton<sup>3</sup>, Shawn Crispin<sup>4</sup>, Gordon Lister<sup>5</sup>

<sup>1</sup> AngloGold Ashanti, Perth, 2601 Australia

5 <sup>2</sup> Argon Geochronology and Structural Geology, Research School of Earth Sciences, Australian National University, Canberra, 2601 Australia

<sup>3</sup> C3 Metals, Toronto, Canada

<sup>4</sup> Eurasian Resources Group, Dubai

10 <sup>5</sup> W.H. Bryan Mining and Geology Research Centre, Sustainable Minerals Institute, The University of Queensland, Brisbane 4068, Australia

Correspondence to: Gordon Lister <[director@thevirtualexplorer.com.au](mailto:director@thevirtualexplorer.com.au)>

**Abstract.** The Martabe gold deposits in Sumatra formed in a shallow crustal epithermal environment associated with intermediate mafic intrusions adjacent to an active right-lateral wrench system.

Gas/fluid temperatures reached 200–350°C. The structural geology suggests episodic switches in stress

15 orientations during a Plio-Pleistocene seismotectonic evolution. Different mineralisation events may have been associated with episodes in the earthquake cycle, so samples containing alunite were collected for  $^{40}\text{Ar}/^{39}\text{Ar}$  geochronology to constrain the timing, and  $^{39}\text{Ar}$  diffusion experiments performed to constrain variation in argon retentivity. The age spectra were produced by incremental step-heating with heating times chosen so similar percentages of  $^{39}\text{Ar}$  gas release occurred during as many steps as possible. This ensured the detail necessary for analysis of the morphology of the complex age spectra that resulted, allowing application of the method of asymptotes and limits. This enabled recognition of the growth of alunite in different overprinting fluid systems, providing estimates as to the frequency of individual events and their duration. The heating schedule also ensured that Arrhenius data populated the inverse temperature axis with sufficient detail to allow modelling. Activation energies 20 were between 370 – 660 kJ/mol. Application of Dodson’s recursion determined closure temperatures that range from 400–560°C for a cooling rate of 100°C/Ma. Such estimates are higher than any temperature to be expected in the natural system, giving confidence that the ages represent the timing of growth during periods of active fluid movement and alteration: a hypothesis confirmed by modelling 25 using the *MacArgon* program. We conclude that gold in the Purnama pit resulted from overprinting fluid rock interactions during very short mineralisation episodes at ~ 2.25 and ~2.00 Ma.

## 1 Introduction

Over the last decade gold production on Sumatra has significantly increased, largely due to the successful development of the Martabe gold mine, which began production in 2012. The ore system was first discovered in 1997 after a positive result from geochemical surveys conducted on stream sediment 35 within an exploration tenement. This was soon followed by field mapping, rock-chip sampling, and aeromagnetic surveying, which led to the discovery of six deposits within a 7 km by 3 km corridor. The

largest of these deposits is Purnama, with a resource estimate of 4.3 million ounces of gold and 53 million ounces of silver (open file report Agincourt Resources, 2018).

40 The Purnama deposit near Martabe (Fig. 1) occurs near the intersection of several major structural features (Muston, 2020). These include: i) the Martabe Lineament; ii) the inferred trajectory of the boundary of the rupture segments between the 2004 and 2005 Great Earthquakes; iii) the inferred trajectory of the now partially subducted Wharton Ridge, which separates the Indian and Australian plates; and iv) the right-lateral Sumatran wrench system, a 1600 km long wrench system that runs the entire length of Sumatra (Levet et al., 2003).

45 Other authors have noted the coincidence with the extrapolation of fracture zones such as the Investigator Ridge (e.g., Garwin et al. 2005, Maryona et al. 2014) but these fracture zones link to former transform faults in the subducted part of the Wharton Ridge, and it is the subducted transforms that are still seismically active. The Wharton Ridge is of particular interest because multiple spreading centres were offset by long transform faults. Continual movement on these structures (in conjunction with 50 active volcanism) would have generated fluid pathways, and thus contributed towards the localisation and enrichment of gold deposits in a host rock characterised by intermediate flow domes (hornblende-bearing andesites) and maar-diatreme breccias.

The Sumatran wrench system formed in response to the oblique subduction of the locked Indian and Australian plates (Barber and Crow, 2005), but it is atypical: i) since it was formed during rollback of

55 an adjacent subduction zone; and ii) it was occasionally overwhelmed by the effects of differential rollback of the slab adjacent to different rupture segments of the attendant megathrust. Such relative movement may have driven the development of offset structures (Fig. 1) that cut the Sumatran Fault, preventing strike-slip motion, locking it, and thus temporarily rendering it inactive. What is most interesting in the context of this paper is that each locking event would have driven episodic switches in 60 stress orientations, and driven pulses of fluid activity related to changes in the movement picture as illustrated in Figure 2. Such events appear to have regularly taken place during the Plio-Pleistocene seismotectonic evolution of the Martabe district.

The cycle appears to begin with differential rollback of the subducting Indian Plate, evidenced by 65 localised curvature of the subduction trench (Fig. 1). Left-lateral motion on a cross-cutting strike-slip fault accommodates this differential rollback, and feeds displacement into the offset structure. The location of the inferred strike-slip cross-fault coincides with the boundary separating the rupture segments of the 2004 and 2005 Great Earthquakes (Fig. 2a). If ductile failure at depth controlled the active structures, a maximum moment yield condition would control the orientation of the plane of failure, requiring a state of stress as illustrated in Figure 2b. Deviatoric stress intensity would then have 70 been expected to rise, since the cross-over structure would have locked the Sumatran Fault.

Such a stress state could not have lasted long because renewed motion on the Sumatran Fault then led to 75 rupture of the cross-over, forming relay faults that ironed out these offsets (Fig. 2c). Since simultaneous rifting across the Sumatran Fault took place in association with these events, this movement picture required a 90° vertical axis rotation of the deviatoric stress axes (Fig. 2d). Yet even this stress state appears to have been transitory, for the final stress state in this sequence must have involved a switch in the orientation of  $\sigma_3$  from horizontal to vertical, forming popup structures and thrusts within the

restraining bends. These last changes in the orientation of the deviatoric stress axes ensured that the orientation of  $\sigma_1$  was that necessary to drive continued right-lateral motion on the Sumatran Fault.

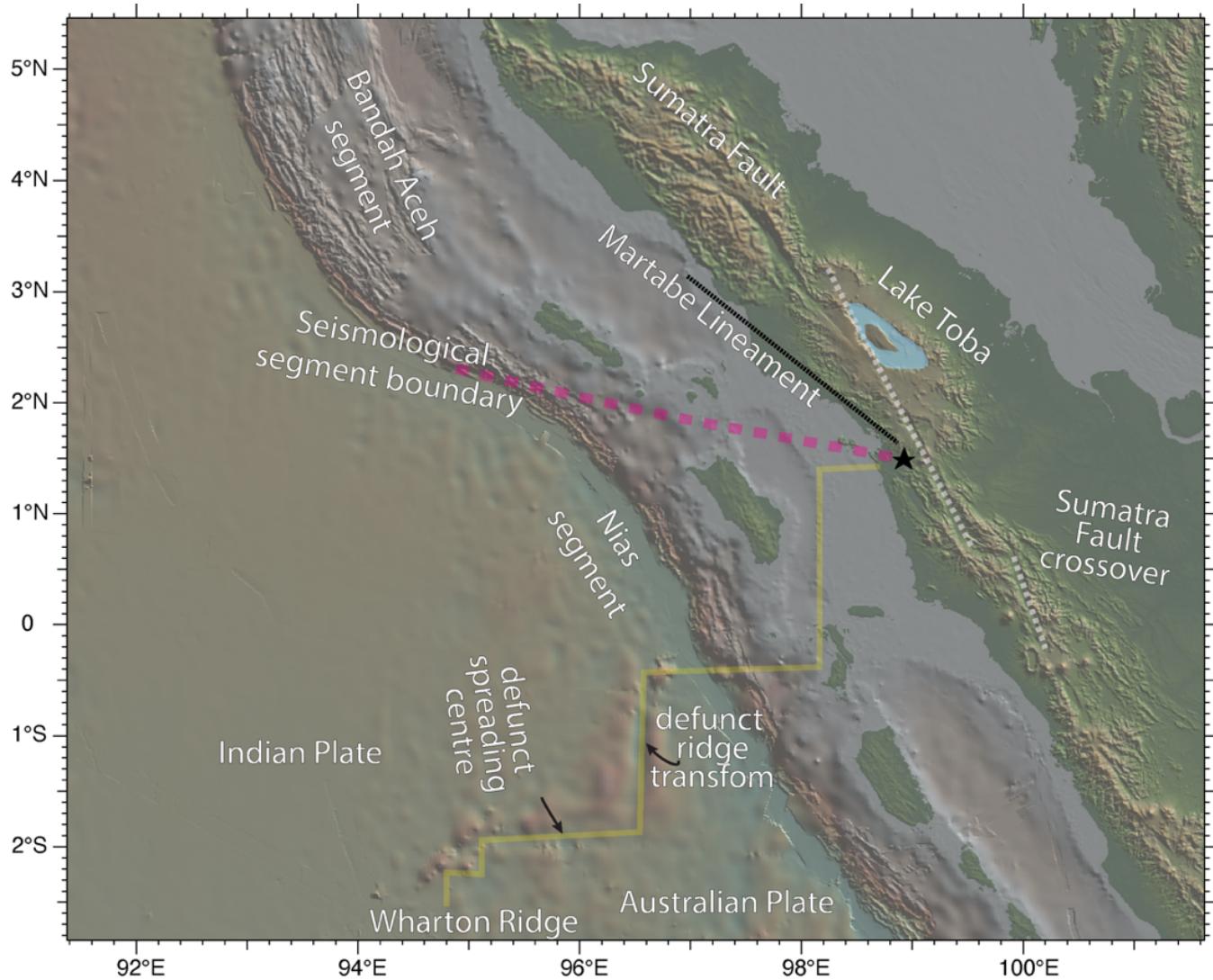
During these earthquake cycles, geometric incompatibilities in the relative motion of intersecting structures would have caused dilation that facilitated fluid pulses. Different episodes of fluid movement might have distinct metallogenetic significance, so we set out to explore the spatial and temporal evolution of fluid systems associated with this deposit, aided by  $^{40}\text{Ar}/^{39}\text{Ar}$  geochronology. The new data should allow inference as to the time involved in each mineralisation pulse and provide estimates as to the frequency with which the seismotectonic cycle repeats. The data should also allow insight into the relation between earthquakes and the formation of large epithermal gold deposits.

A conjugate set of northeast trending extensional faults may structurally control fluid pathways for alteration and mineralisation. Their orientation implies that the axis of least compressive stress ( $\sigma_3$ ) was parallel to the Martabe Lineament, so mineralisation coincided with NW-SE stretching (Fig. 1). The Sumatran Fault System overall has at least twelve such step-overs, each with offsets greater than 1 km (Sieh and Natawidjaja, 2000), so this may be significant for generating new mineral exploration targets. However, it should be noted that the distinction of different fluid systems is essential when using geochemical data to ‘vector’ within the alteration systems, since such methods will fail if samples are from fluid conduits active at different times, and thus with independent variation of their mineralogy.

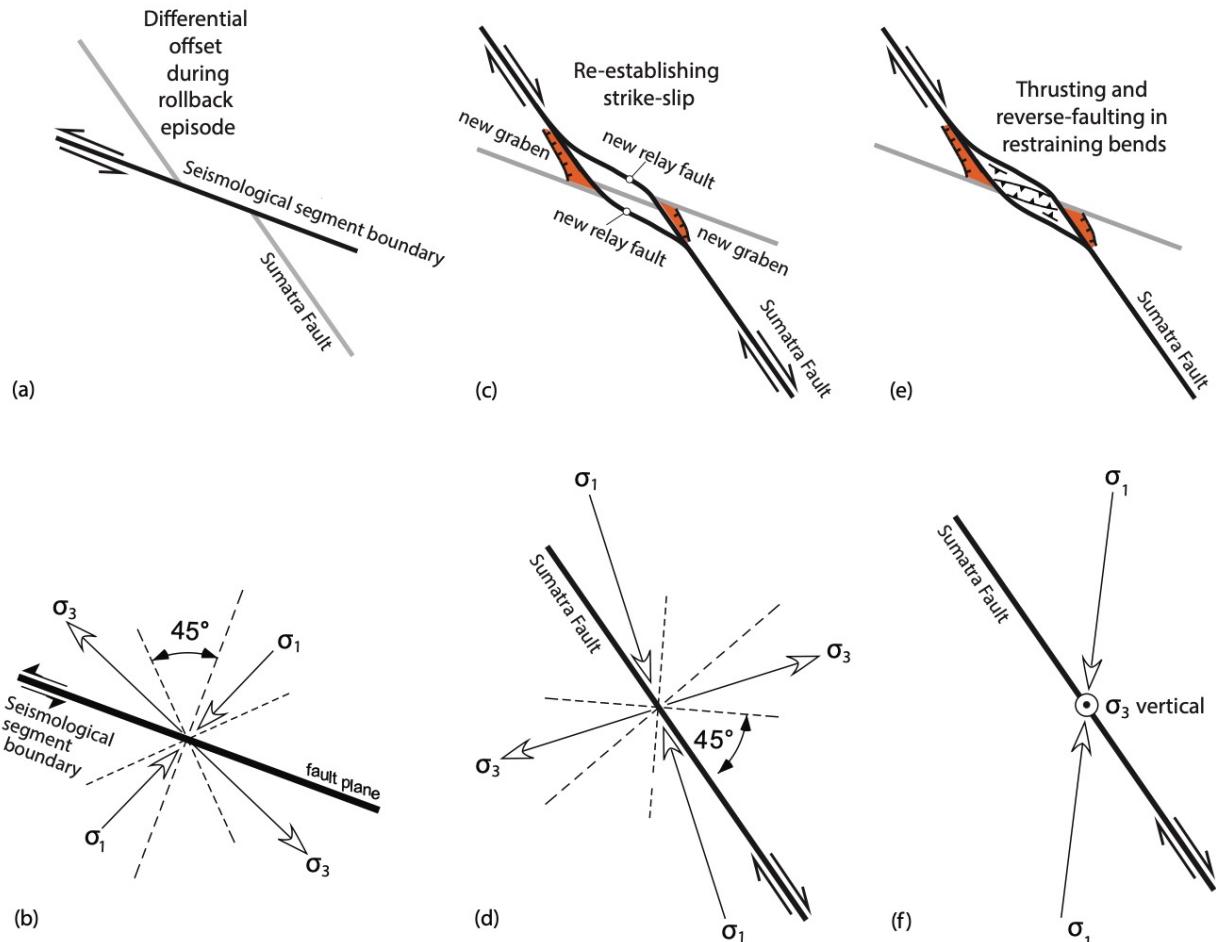
## 2 $^{40}\text{Ar}/^{39}\text{Ar}$ Geochronology

Epithermal gold ± copper ± silver deposits form in shallow crustal environments, at 1-3 km depth (White and Hedenquist 1990, 1995, Simmons et al. 2005). Low-sulphidation deposits form distal to their source magmas, through mixing and transport by deep groundwater fluids. These are characterised by reduced sulphur species and  $\text{H}_2\text{S}$ . In contrast, high-sulphidation deposits form from magmatic fluids, proximal to their source intrusion, and are undiluted by groundwaters. In these low-pH conditions, a suite of alteration minerals is formed (e.g., dickite, alunite, kaolin-dickite, pyrophyllite). The mineral alunite [ $\text{KAl}_2(\text{SO}_4)_2(\text{OH})_6$ ] is of particular interest as it is a potassium bearing mineral that has been shown to be a useful  $^{40}\text{Ar}/^{39}\text{Ar}$  geochronometer for dating alteration systems (e.g., Arribas et al. 1995, 2011). It commonly forms in porphyry and epithermal gold systems when hot, highly acidic fluids interact with and alter potassium-feldspars. During such acid-sulphate alteration, a subset of advanced argillic alteration is distinguished by the formation of alunite (Rye et al., 1992).

Previous work at Martabe has dated four samples of alunite using  $^{40}\text{Ar}/^{39}\text{Ar}$  geochronology and concluded that the alteration system was active over a broad time-period: between  $3.30 \pm 0.2$  Ma and  $2.00 \pm 0.2$  Ma (Sutopo 2013). Our study provides an additional ten samples analysed to provide more detail as to the geometry and timing of the alteration systems. Sample locations are shown in Figure 3, and photographs of the samples in Figure 4. The most pristine alunite zones were cut out from drill core, and these small samples were crushed to 420-240  $\mu\text{m}$  before alunite grains were laboriously hand-picked and separated under an optical microscope. The chosen grains had a white-cream colour, soft texture, and anhedral crystal shape with a high (9-10%) potassium content. The ages were estimated to lie between 3 and 1 Ma, so 100-150 mg of alunite per sample was picked with a purity of 99%, using XRD to verify the purity and mineralogy of the chosen aliquots.



**Figure 1** The Martabe deposits formed near where the seismological segment boundary between the 2004 and 120 2005  $M_w$  9.2 and  $M_w$  8.5 Great Earthquakes intersects the Sumatran Fault System. Other structures also intersect in this region: i) the Martabe lineament which may involve limited vertical block motion; ii) the defunct spreading ridges and linked transform faults associated with the Wharton Ridge. Swarms and clusters of hypocenters allow definition of its trajectory in 3D, even though the ridge has in part already been subducted (Muston, 2020).



125

130

**Figure 2** The movement picture associated with the formation of the Martabe deposits appears to be linked to earthquake cycles, beginning with a period of differential rollback on the Simeulue (or Banda Aceh) segment of the subducting Indian plate (a). The stress state (b) during this time involves NW-SE stretching, with the orientation of faults as predicted by the maximum moment yield criterion. Renewed motion on the Sumatran Fault (c) drives the formation of relay structures, with dilation of the fault strands requiring stress state (d). Finally (e), at the end of this cycle,  $\sigma_3$  switches to vertical (f), causing popup structures in the restraining bends, and inversion.

135 Details of the measurement procedures are provided in the supplementary information, but here we note several aspects of specific interest. First, although one can rid an alunite sample of unwanted inclusions by using (e.g., HNO<sub>3</sub>) acid, such methods can modify the microstructure and thus eliminate useful information. So instead, our samples were cleaned in deionised water, and we relied on the detail in the age spectra to separate the effects of contamination. This was made possible by numerous (32-35) heating steps in the step-heating schedule, thus providing essential detail. Contaminants (probably

140 related to inclusions) overpowered the diminishing alunite signal in the last 5-20% of gas release, however (see later discussion). Second, prior to measurement, samples were dropped into the resistance furnace and heated briefly to 400°C, thus driving off volatile contaminants in fast-diffusion pathways. The temperature was then immediately reduced, and the sample left for a minimum of 12 hours pumping away unwanted gases. Such long periods of cleaning under ultra-high-vacuum (UHV)

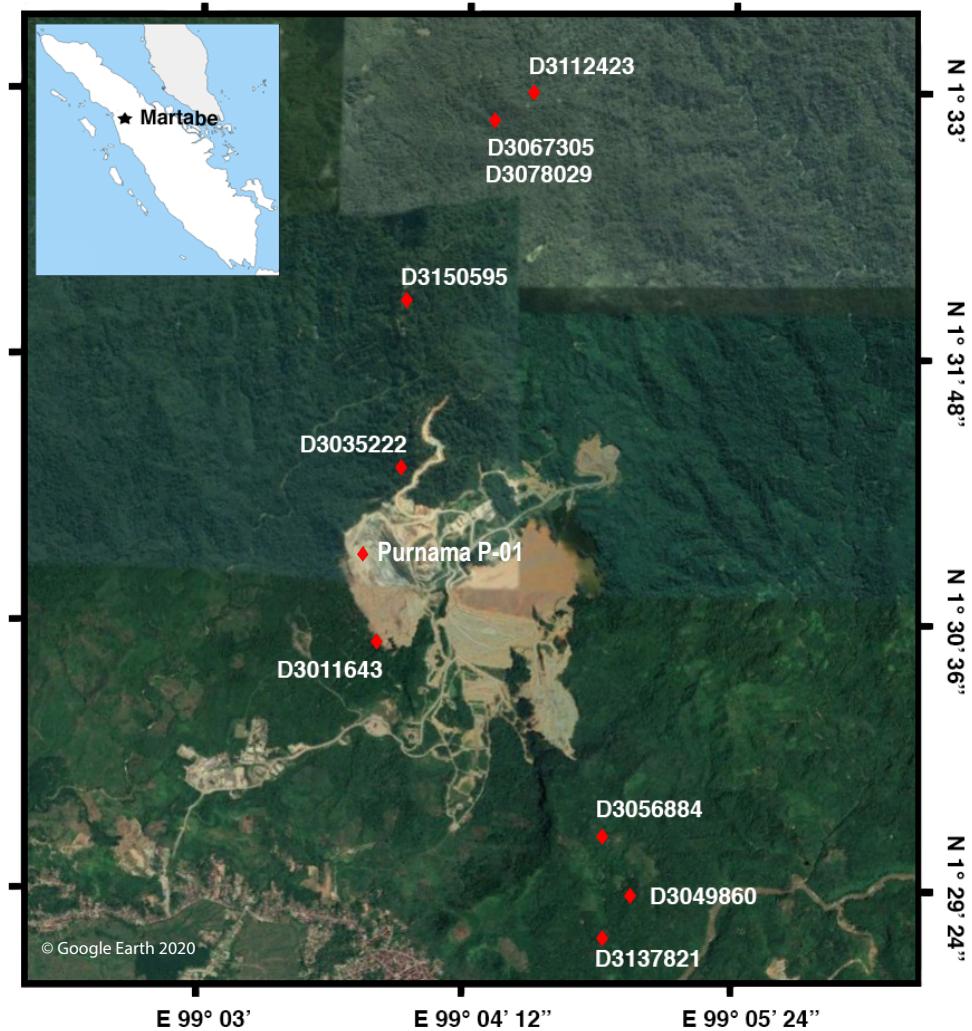
145 conditions minimise the effect of volatiles, especially in the first few steps where low retentivity diffusion domains release their gas. Experience shows that this can reduce any potential sample instability. A third important aspect of the methodology was that the mass of the sample was chosen to be large enough to allow many heating steps, thus ensuring: i) detail in the age spectra and associated Arrhenius plots; ii) for each step allowing more than sufficient release of lattice argon so as to

150 overwhelm any ‘blank’ caused by adsorption/retention in the furnace; and iii) allowing 51 measurement cycles (instead of the historical 7) for each step, thereby significantly improving the precision.

Samples were analysed using a multi-collector *ThermoFisher* Argus VI (see information available at URL: <http://argon.anu.edu.au/> and in the detail of the supplementary information). The samples were step-heated in a resistance furnace, each step commencing under ultra-high-vacuum (UHV) conditions, 155 thus allowing <sup>39</sup>Ar diffusion experiments at the same time as <sup>40</sup>Ar/<sup>39</sup>Ar geochronology. Correction factors were used to eliminate interference from Ca and Cl, since these elements produce argon isotopes during the irradiation process. Cross-contamination was avoided by protracted cleaning of the furnace between samples, so furnace blanks are consistently reduced to low levels with a return to atmospheric isotope ratios prior to commencing work on the next sample (see supplementary information). Only the 160 Faraday cups were utilised for measurement, thus avoiding the drift and uncertainties associated with cross-calibration of different detector types in the Argus VI mass spectrometer.

Data from the mass spectrometer was analysed using a computer program based on the *Noble* program. This code was designed by the late Professor Ian McDougall (using methods and formulae as documented in McDougall and Harrison (1988, 1999). The *Noble* program has now been extensively 165 modified by one of us (Davood Vasegh) to allow it to be used with the Argus VI multicollector mass spectrometer, including the ability to be able to continually access and interactively interrogate data from shared memory in the otherwise inaccessible QTegra operating system.

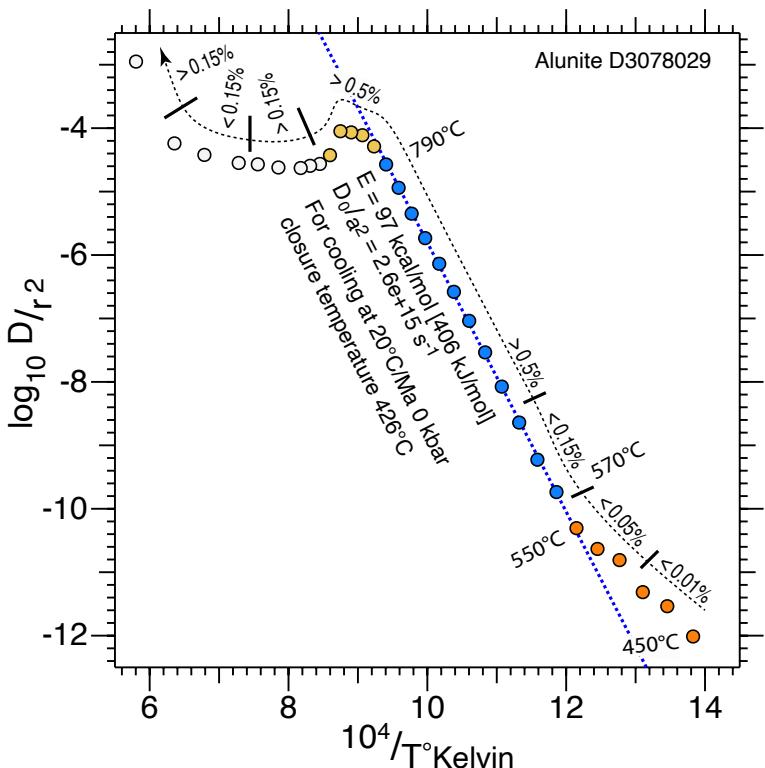
After measurement and data reduction, data tables were produced (see supplementary information) and uploaded into the *eArgon* program, which was used for interactive analysis, facilitating: i) application of 170 the method of asymptotes and limits (Forster and Lister, 2010, Forster et al., 2015) to analyse complex age spectra; ii) production and analysis of Arrhenius data (Fig. 5), applying and methods and formulae as set out by Crank (1975) and based on C++ computer algorithms for the analysis of different domain geometries; and iii) identification and mapping of mixing trends between different (microstructural) gas reservoirs using Turner three component inverse <sup>40</sup>Ar isotope correlation diagrams (e.g., Fig. 6).



**Figure 3** The Martabe mine, Sumatra, Indonesia with location of the ten alunite samples shown by red diamonds. Two samples were from the same location. The sample from within the Purnama pit was not precisely located.



180 **Figure 4** (A) PURNAMA P-01. Fine grained porphyritic volcanic andesite with pervasive alunite-silica alteration and  
180 disseminated haematite. (B) D3011643. Contact between sediment and quartz vein. (C) D3150595. Fine-grained  
181 alunite in clay with reddish-brown banding. (D) D3112423. Phreatomagmatic breccia, altered by alunite-dickite-  
181 silica. (E) D3078029. Phreatomagmatic breccia, altered by alunite-dickite-silica (high grade ore). (F) D3056884.  
182 Crackle sandstone, matrix filled by alunite  $\pm$  dickite. (G) D3067305. Phreatomagmatic breccia, altered by alunite-  
182 dickite-silica. (H) D3137821. Massive sandstone, oxide staining, pervasive alunite-clay alteration. (I) D3035222.  
183 Sandstone with alunite vein. (J) D3049860. Phreatomagmatic breccia, altered by alunite-silica. The purity of alunite  
183 separated from these samples was confirmed using XRD analysis.



190 **Figure 5** An extended Arrhenius Plot, showing the application of the Fundamental Asymmetry Principle (Forster  
 and Lister, 2010) in estimating the activation energy and normalised frequency factor for a single diffusion domain.  
 The Arrhenius plot shows measurements with a low initial slope (as also noted by Ren and Vasconcelos 2019)  
 but in comparison, the change to a higher slope occurs at temperatures 80–100°C higher in our experiments. This  
 implies a difference in material response, either due to intrinsic variation in the physical properties of these alunite  
 separates, or to the effect of extrinsic variables, e.g., the use of acids in sample preparation, thinner cadmium  
 shielding leading to more recoil and lattice damage, and/or the effect of the electron beam during an *in situ*  
 experiment. Nevertheless, the initial change in slope is the result of mixing. An increasing proportion of lattice  
 argon is being released as temperature climbs, while a low-volume non-lattice  $^{39}\text{Ar}$  reservoir is progressively  
 exhausted. Thereafter the same diffusion parameters apply over a considerable temperature range.

195

200

Data tables are included in the supplementary information. Decay constants used are those from Steiger and Jäger (1977). All constants are listed in the supplementary information, consistent with Renne et al. (2009) and Schaen et al. (2021). The sample aliquots measured include multiple alunite grains.

## 2.1 Ultra-high-vacuum (UHV) diffusion experiments

205 Arrhenius diagrams (e.g., Fig. 5) plot the logarithm of the normalised diffusivity against the inverse of the absolute temperature. We note that we were able to use each heating step as a  $^{39}\text{Ar}$  diffusion experiment because the percentage release of  $^{39}\text{Ar}$  overall allows back calculation of the percentage release of  $^{39}\text{Ar}$  in each step. The normalised diffusivity could then be calculated by applying the analytical equations that link the percentage of  $^{39}\text{Ar}$  release to normalised diffusivity, but first assuming  
210 a particular diffusion geometry. The peak temperature attained was accurately determined by using a thermocouple in direct contact with the bottom of the tantalum crucible. Optical calibration of temperature was achieved by using an array of seven metals.

The necessary code for these calculations was documented in their supplementary data by Forster and Lister (2014). The temperature-time curve should approximate a square wave to allow their application,  
215 so the resistance furnace must therefore heat and cool as rapidly as is practically possible. Nevertheless, there are significant deviations from a square wave (see supplementary information). Although errors due to this effect are minimised by ensuring that the step-heating sequence involves monotonic rise in temperature, more  $^{39}\text{Ar}$  will be released in each step than would be the case if the temperature rose and fell more steeply. This means diffusivity is always overestimated.

## 220 2.2 Turner inverse $^{40}\text{Ar}$ isotope correlation plots

Our previous papers referred to Turner inverse  $^{40}\text{Ar}$  isotope correlation plots as York Plots. One reviewer noted that three-isotope correlation diagrams are widely used in isotope geochemistry. Diagrams plotting  $^{40}\text{Ar}/^{36}\text{Ar}$  versus  $^{39}\text{Ar}/^{36}\text{Ar}$  were first used by Merrihue and Turner (1966). Turner (1971) later introduced the  $^{36}\text{Ar}/^{40}\text{Ar}$  versus  $^{39}\text{Ar}/^{40}\text{Ar}$  plot. These later became commonly known as  
225 ‘normal’ and ‘inverse’ isochron plots. York (1969) developed a robust linear regression method that accounts for errors in both axes, and error correlations, commonly used in association with such plots.  
  
Although a major use of such diagrams is the application of the York (1969) regression statistic, and the identification of ‘inverse’ isochrons, their main use in this paper is in revealing the pattern of mixing (e.g., Fig. 6). The step-heating schedule was chosen so that only small amounts of gas are released in  
230 each step, so the progression of the variation in the isotopic ratios from one step to the next allows ready identification of different gas populations, and the mixing trends between them. Mixing trends are particularly evident in the Turner inverse  $^{40}\text{Ar}$  plots because different reservoirs begin to release gas at different stages during the step-heating experiment. The Turner inverse  $^{40}\text{Ar}$  plots also reveal trends as individual reservoirs are overwhelmed, or diminish, or as one reservoir takes over from another.  
  
235 The  $^{36}\text{Ar}/^{40}\text{Ar}$  and  $^{40}\text{Ar}/^{39}\text{Ar}$  ratios that have been plotted have first been adjusted to remove the effects of isotopic interferences.

## 2.3 Age spectra

The age spectrum is produced by correcting the  $^{36}\text{Ar}/^{40}\text{Ar}$  and  $^{40}\text{Ar}/^{39}\text{Ar}$  ratios (including by the removal of the effects of isotopic interferences), and then linking the assumed atmospheric  $^{36}\text{Ar}/^{40}\text{Ar}$  ratio to the corrected  $^{40}\text{Ar}/^{39}\text{Ar}$  ratio. The intersection of this line with the x-axis of a Turner inverse  $^{40}\text{Ar}$  isotope correlation plot defines the percentage of radiogenic argon ( $^{40}\text{Ar}^*$ ), thence allowing the apparent age to be calculated. We note that there are drawbacks in using apparent ages calculated this way: i) if there is a significant fraction of excess argon, *i.e.*,  $^{40}\text{Ar}$  included in the measurement that neither originates from the atmosphere, nor from the release of lattice argon; or ii) if contaminants produce molecules with mass 36 so the corrected  $^{36}\text{Ar}/^{40}\text{Ar}$  ratio is pushed towards (or above) the assumed atmospheric  $^{36}\text{Ar}/^{40}\text{Ar}$  ratio. The calculated apparent age will then drop to zero and the inferred age uncertainty will become untenably large. Once the  $^{36}\text{Ar}/^{40}\text{Ar}$  ratio has risen above atmospheric, no age can be estimated at all. Isochrons on the age plot are computed using a weighted mean, which takes account of the variance in the age of individual steps using equations as in Mahon (1996).

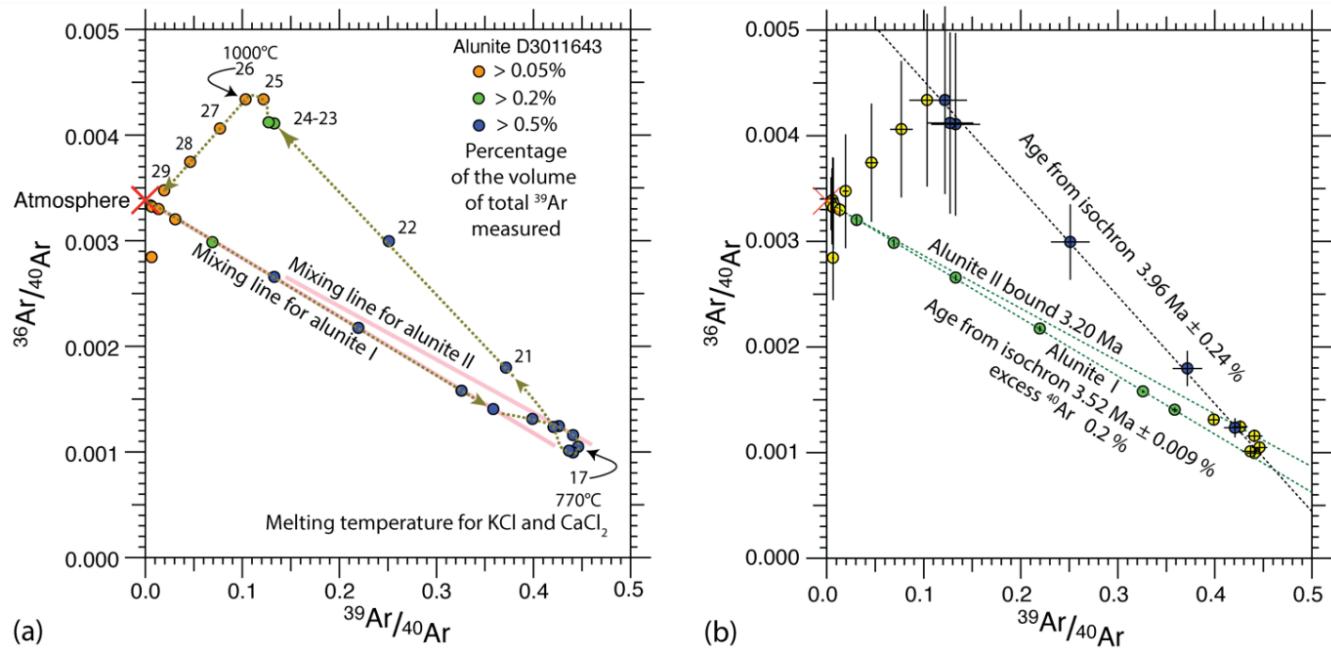
## 2.4 Plots from nine successful step-heating experiments

Figures 7-15 show combined plots from nine successful step-heating experiments, each with several diagrams created using the *eArgon* program.

Diagram (a) shows an age spectrum, with plateau segments if they are present, and other asymptotes and limits recognised according to the method set out by Forster and Lister (2014). Diagram (b) for each sample is an Arrhenius plot. Distinct diffusion domains are identified, with estimated closure temperatures as shown. Diagram (c) is a comparative radius plot, showing the relative volumes of the different domains, but necessarily (in order that this calculation might be performed) assuming a constant activation energy based on the slope of a reference line in the Arrhenius plot.

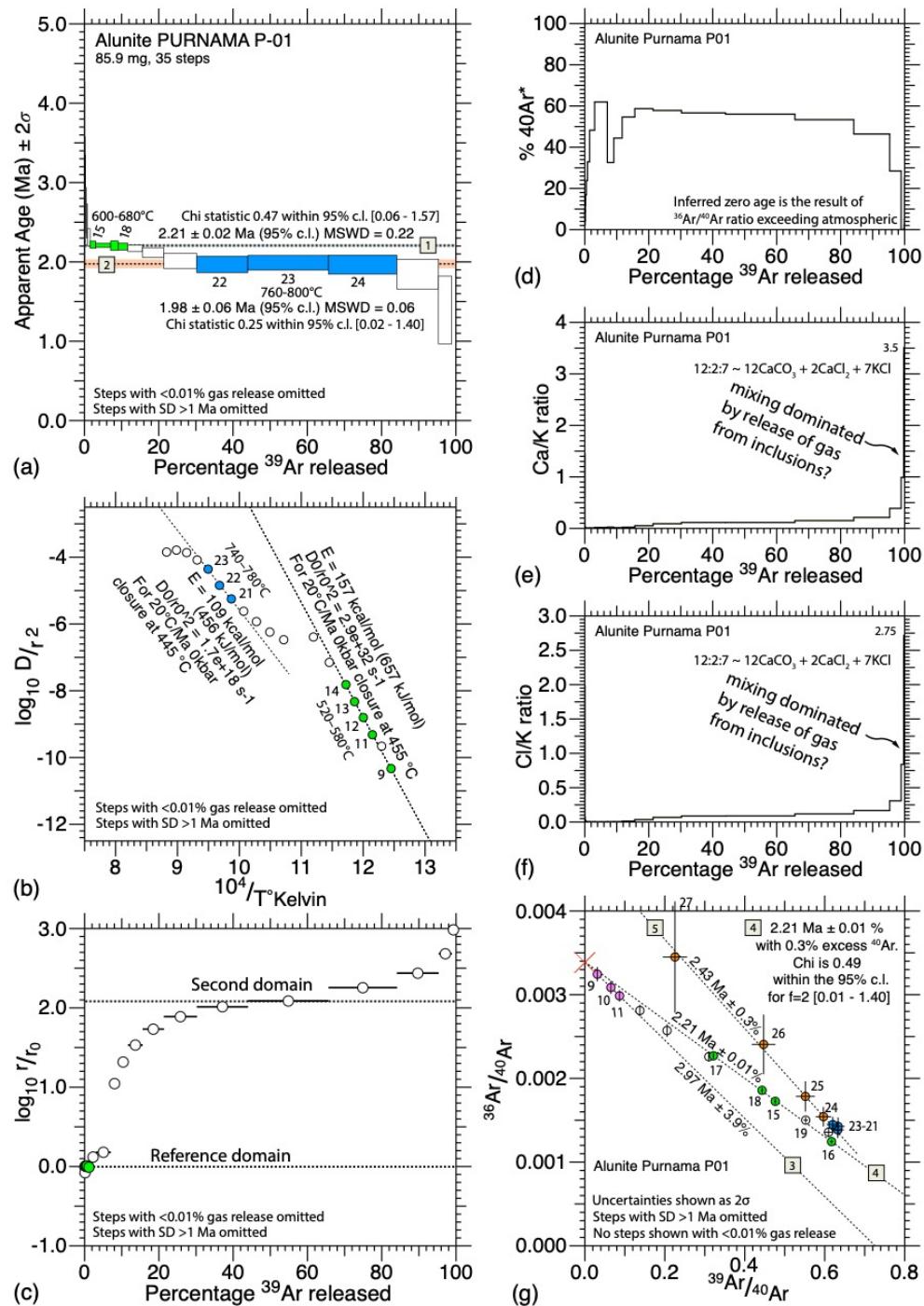
Diagram (d) shows the variation of the percentage of radiogenic argon ( $^{40}\text{Ar}^*/^{40}\text{Ar}$ ), noting the limitation that this is computed by determining the  $^{40}\text{Ar}^*/^{39}\text{Ar}$  ratio based on extrapolation from the assumed atmospheric  $^{40}\text{Ar}/^{36}\text{Ar}$  ratio. The estimated percentage radiogenic argon thus drops rapidly to zero if excess mass 36 is introduced into the mass spectrometer, *e.g.*, as the result of small amounts of Cl from contaminating inclusions bypassing the getters [see discussion].

Diagram (f) for each sample shows the Cl/K ratio inferred using the pattern of  $^{38}\text{Ar}$  release, while diagram (e) shows the Ca/K ratio inferred using  $^{37}\text{Ar}$ . The effect of inclusions is evident in the last steps, where the amount of alunite lattice argon being released is negligible, thus allowing estimates as to impurity composition. Diagram (g) for each sample is a Turner inverse  $^{40}\text{Ar}$  isotope correlation plot.

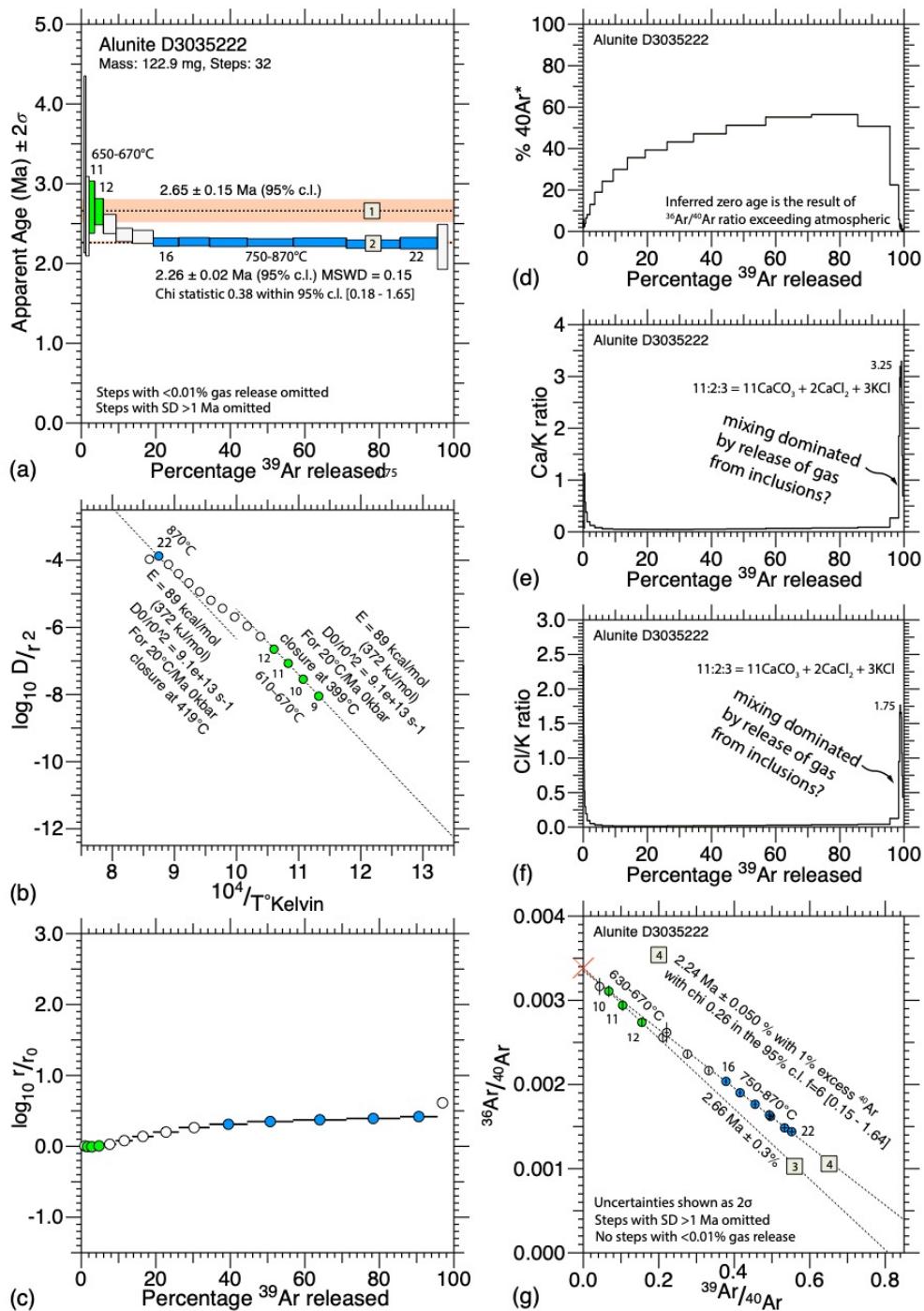


270 **Figure 6** Turner's inverse  $^{40}\text{Ar}$  isotope correlation diagram, showing the mixing trend along a well-defined inverse  
isochron for alunite domain I, followed by mixing with alunite domain II, then a return to the mixing line for domain  
I, before looping off towards the inclusion reservoir. Steps are numbered to show the progression of the step-  
heating experiment along the mixing trends. Each sample shows elements of the trends identified here. In (b) the  
275 inverse isochrons, bounds and  $2\sigma$  uncertainties in the corrected isotope ratios, estimated by recursion using the  
York-Mahon-Trappitsch regression and applying the associated uncertainty statistics. Notably, this sample shows  
how isotope ratios invariably return to atmospheric ratios by the end of each step-heating experiment.

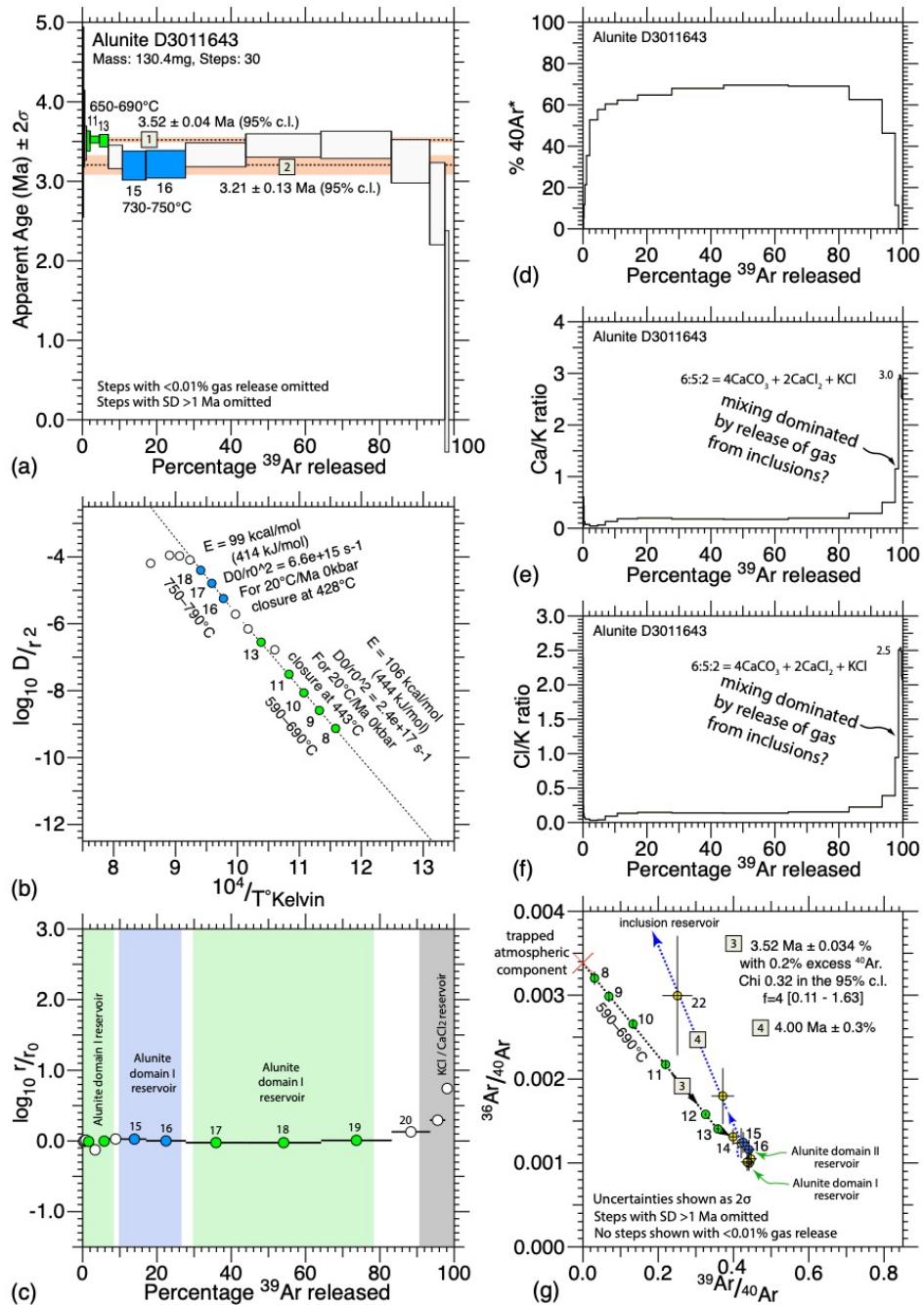
**Figure 7** Data from Purnama-P01, plotted using *eArgon*: (a) age spectrum with two plateau segments; (b) Arrhenius plot with two diffusion domains; (c) comparative radius plot, showing mixing; (d-f) percentage radiogenic argon drops when excess mass 36 enters the mass spectrometer; and (g) Turner's inverse  $^{40}\text{Ar}$  isotope correlation diagram, with three inverse isochrons.



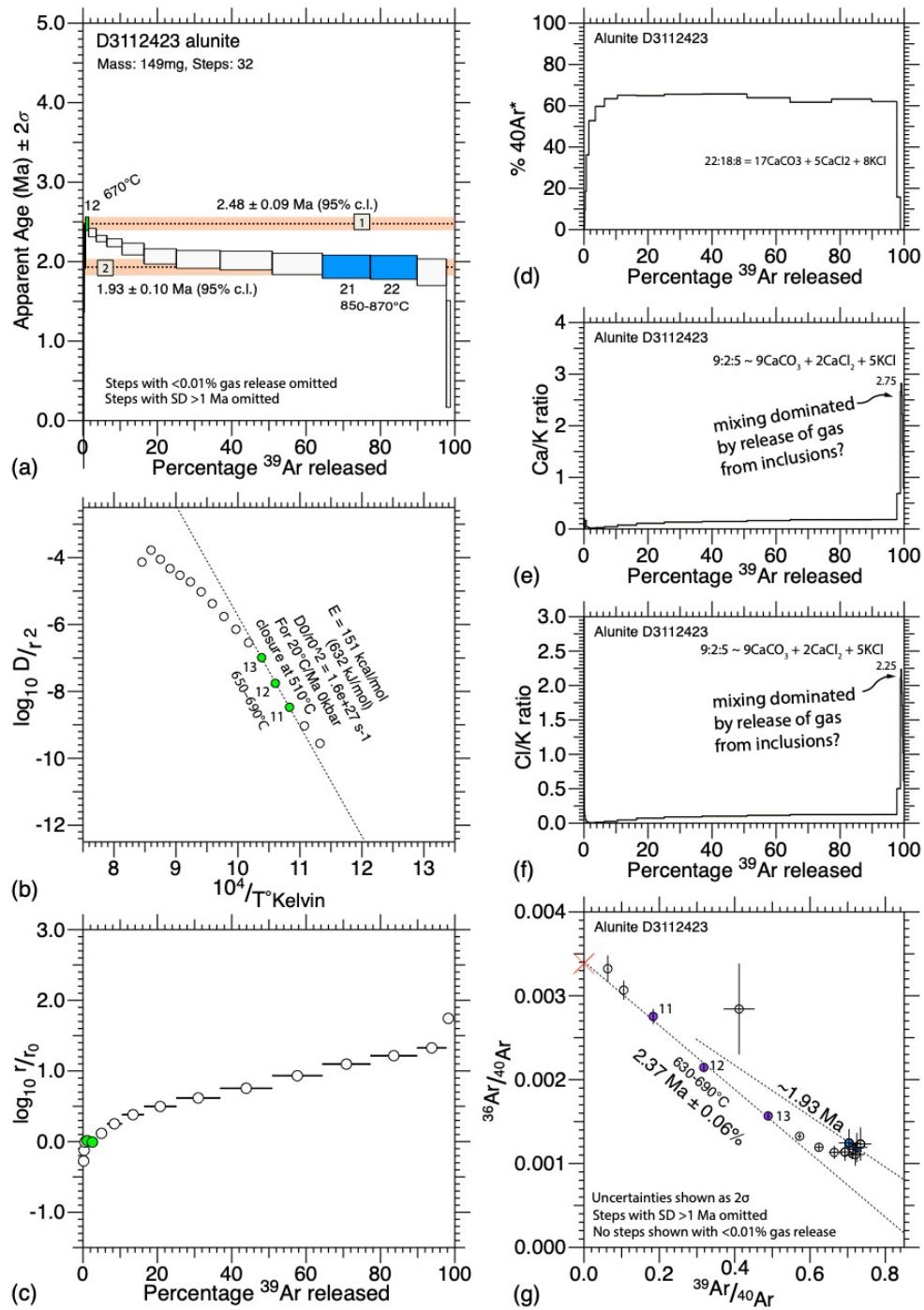
**Figure 8** Data from D3035222: (a) age spectrum with two plateau segments; (b) Arrhenius plot with two diffusion domains; (c) comparative radius plot, showing mixing; (d) percentage radiogenic argon drops at the end because excess mass 36 enters the mass spectrometer; (e-f) Ca/K and Cl/K ratios showing jumps consistent with late-stage release from inclusions; and (g) Turner's inverse  $^{40}\text{Ar}$  isotope correlation diagram, showing two inverse isochrons.



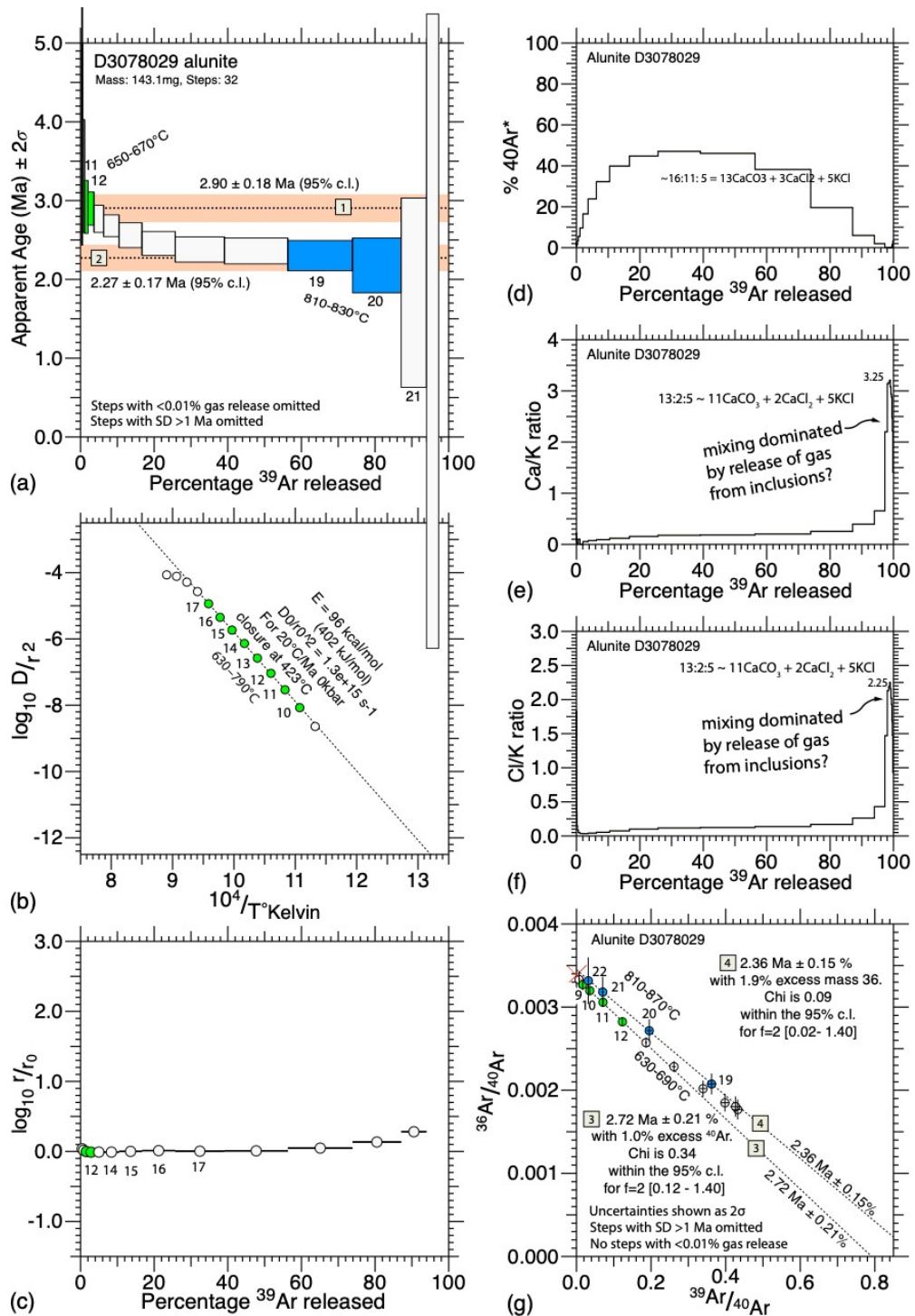
**Figure 9** Data from D3011643: (a) age spectrum starts with a plateau segment (defining domain I), drops to a lower limit (domain II), and then again mixes with domain I; (b) Arrhenius plot shows two diffusion domains, which are similar in retentivity, thus explaining the mixing curve; (c) a comparative radius plot, which shows the relative volumes; (d) radiogenic argon plot; (e-f) Ca/K and Cl/K ratios showing jumps consistent with late stage release from inclusions; and (g) Turner's inverse  $^{40}\text{Ar}$  isotope correlation diagram, showing inverse isochron for domain I, mixing with domain II, a return to the mixing line for domain I, before looping off towards the inclusion reservoir.



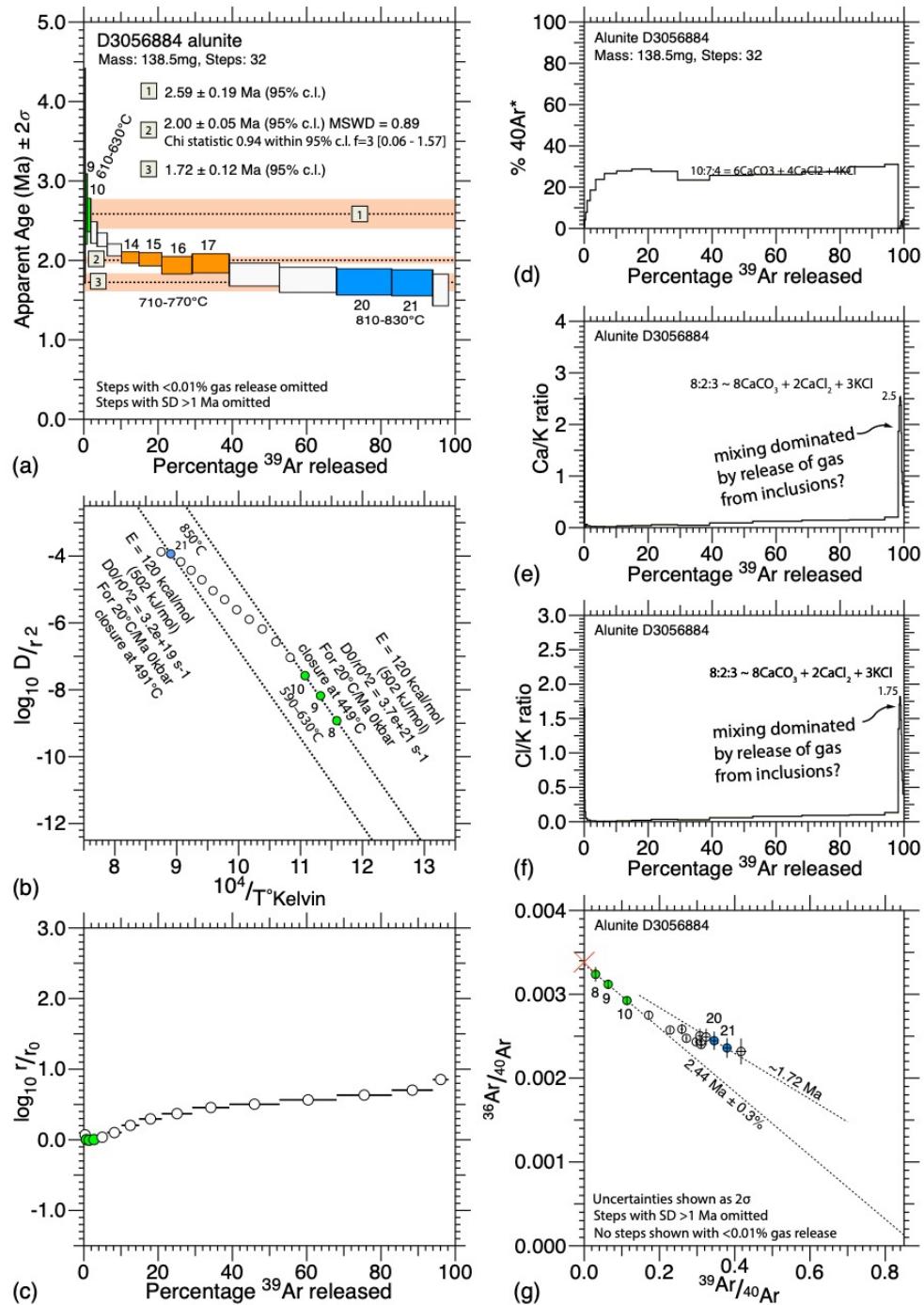
**Figure 10** Data from D3112423: (a) age spectrum with upper and lower limits; (b) Arrhenius plot allows one estimate of diffusion parameters; (c) a comparative radius plot; (d) the radiogenic argon plot; (e-f) Ca/K and Cl/K ratios showing jumps consistent with late-stage release from inclusions; and (g) Turner's inverse  $^{40}\text{Ar}$  isotope correlation diagram, which shows one inverse isochron, for domain I, and the mixing line for domain II.



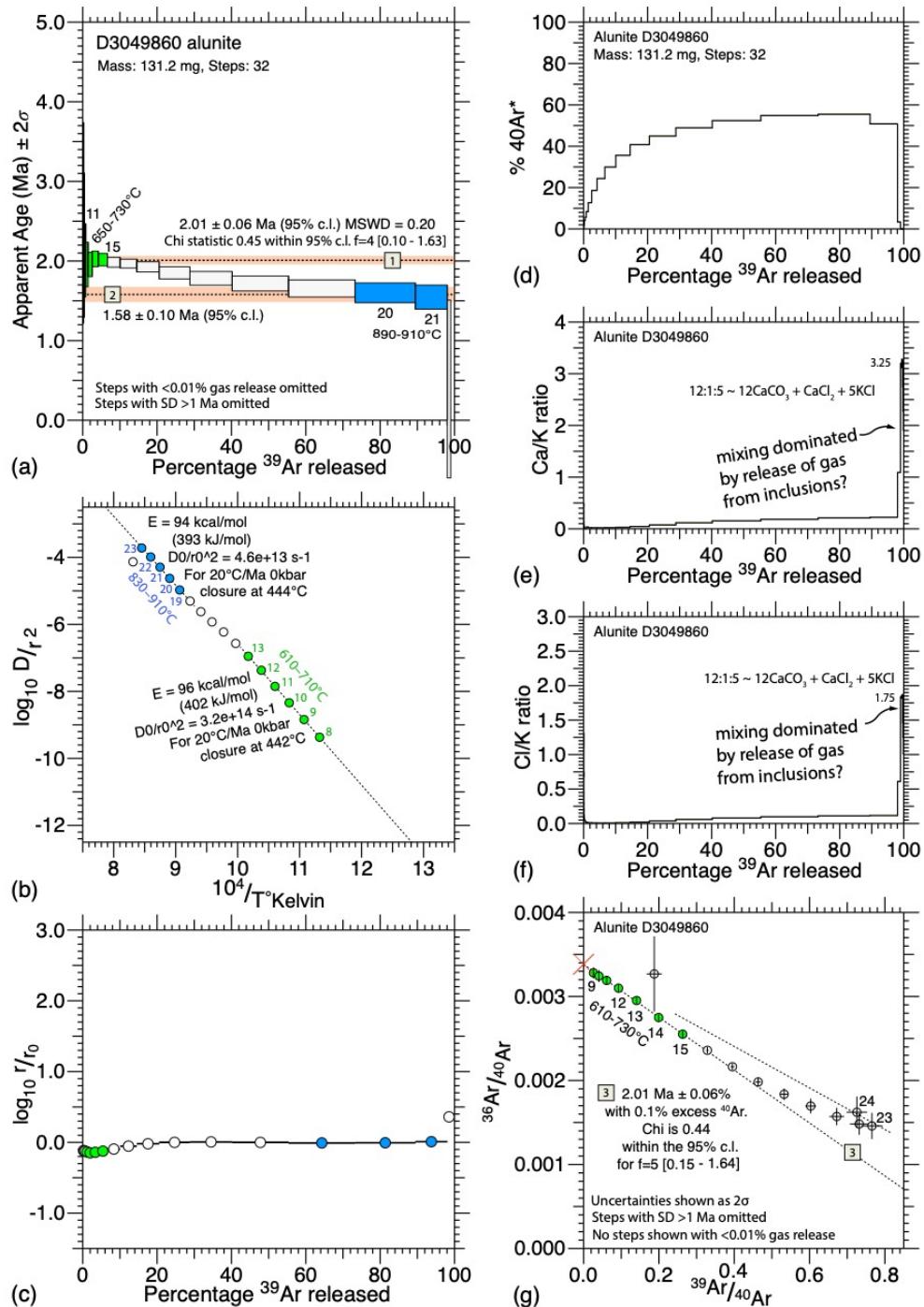
**Figure 11** Data from D3078029: (a) age spectrum with limits; (b) Arrhenius plot with one diffusion domain; (c) comparative radius; (d) radiogenic argon; (e-f) Ca/K and Cl/K ratios showing jumps consistent with late-stage release from inclusions; and (g) Turner's inverse  $^{40}\text{Ar}$  isotope correlation diagram, with two inverse isochrons.



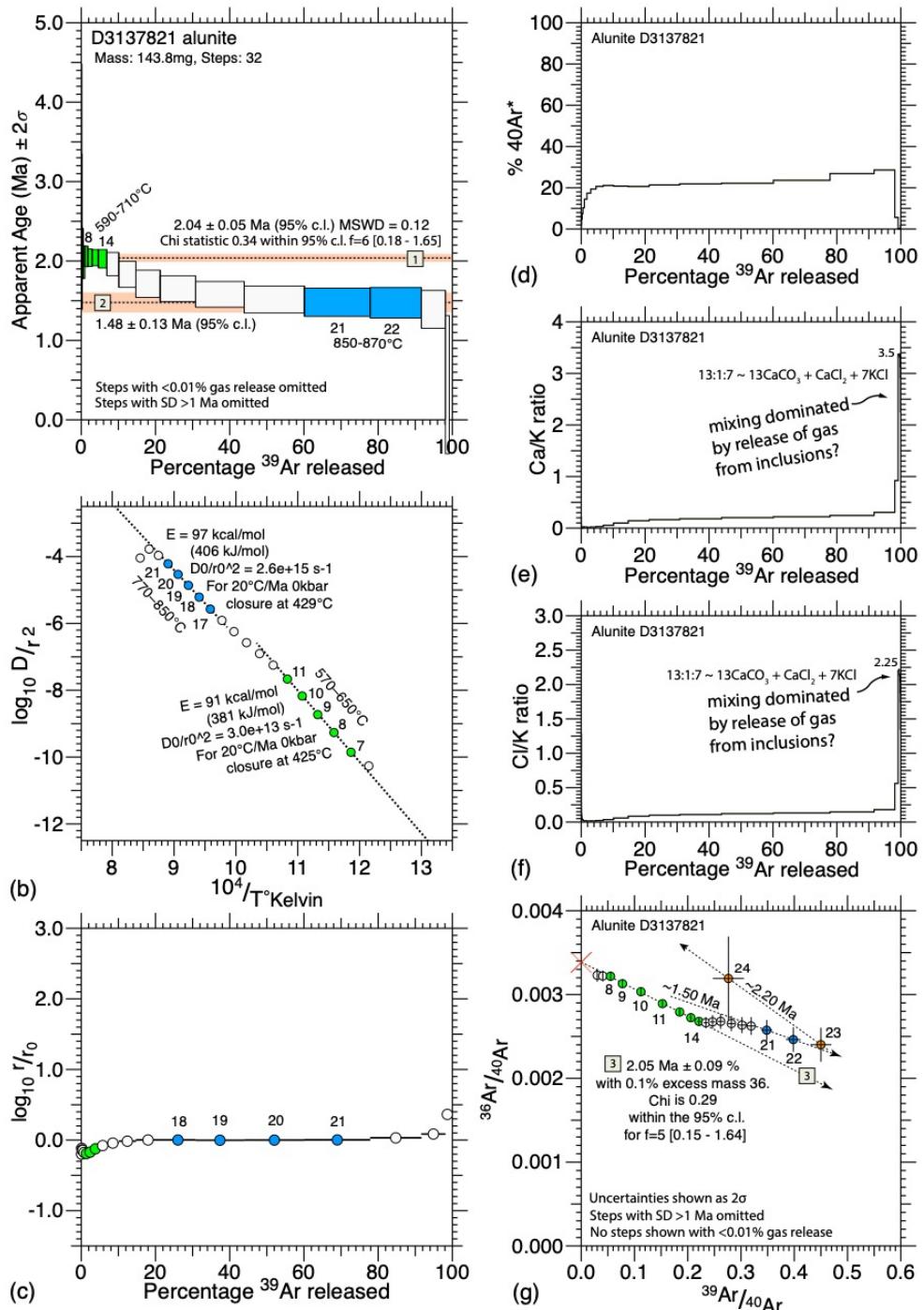
305 **Figure 12** Data from D3056884: (a) age spectrum with limits and a central plateau segment; (b) Arrhenius plot with one distinct diffusion domain, and then mixing over a range; (c) comparative radius plot, which shows the relative volumes; (e-f) Ca/K and Cl/K ratios showing jumps consistent with late-stage release from inclusions; and (g) Turner's inverse  $^{40}\text{Ar}$  isotope correlation diagram, with two inverse isochrons.



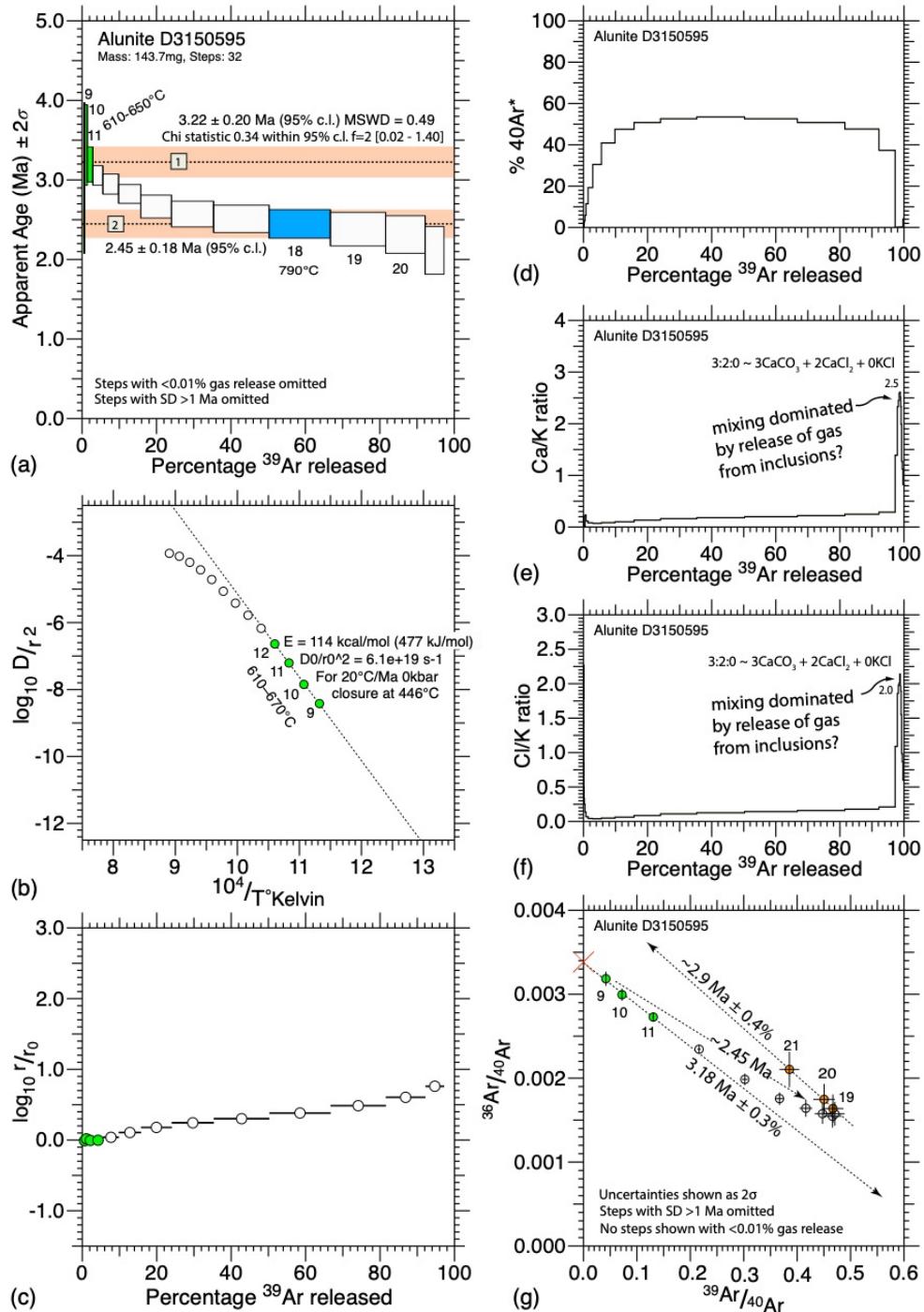
310 **Figure 13** Data from D3049860: (a) age spectrum with plateau segment followed by a lower asymptote; (b) Arrhenius plot, with similar diffusion domains; (c) comparative radius plot, showing relative volumes; (d) radiogenic argon plot; (e-f) Ca/K and Cl/K ratios showing late-stage release from inclusions; and (g) Turner's inverse  $^{40}\text{Ar}$  isotope correlation diagram, with one inverse isochron, and then mixing toward the lower asymptote.



315 **Figure 14** Data from D3137821: (a) age spectrum with minor plateau segment and lower asymptote; (b) Arrhenius plot, with two domains; (c) comparative radius plot; (d) the radiogenic argon plot; (e-f) Ca/K and Cl/K ratios showing jumps consistent with late-stage release from inclusions; and (g) Turner's inverse  $^{40}\text{Ar}$  isotope correlation diagram, which shows two inverse isochrons, one not apparent in the age plot.



320 **Figure 15** Data from D3150595: (a) age spectrum with asymptote and limit; (b) Arrhenius plot, with one diffusion domain; (c) comparative radius plot; (d) radiogenic argon plot; (e-f) Ca/K and Cl/K ratios with late-stage release from inclusions; and (g) Turner's inverse  $^{40}\text{Ar}$  isotope correlation diagram, with one inverse isochron, then mixing toward the limit shown in the age plot, and finally in the last few percent of gas release, the effect of the inclusions.



325 **3 Application of the method of asymptotes and limits**

The method of asymptotes and limits (Forster and Lister 2004) is a methodology developed to allow analysis of the morphology of a collection of apparent age spectra. In essence the method advocates analysis of an age spectrum as though it was a mixture released from multiple gas reservoirs. A collection of ages can thereby be defined: representing asymptotes and limits, as well as plateau segments. Each age thereby determined can be considered as a successful result from a Bernouilli trial, with a method of recording the counting statistic then needing to be developed. The results are shown in Table I, considering only the ages from the plateau segments, asymptotes and limits in Figures 7-15.

One way to recognise Frequently Measured Ages (FMAs) in the collection of age spectra is a counting method that uses a histogram, with individual cells incremented each time an age falls within its

335 purview. Alternatively, as done in *eArgon*, a point may be added to a cumulative probability diagram, with a Gaussian scatter determined by the accuracy of the original measurement, or by some other (arbitrarily determined) value. Each estimate is weighted equally, since the method does not set out to determine the volume fractions that contribute to each estimate. The same uncertainty can be applied to each estimate as was recorded in the age spectrum (Fig. 16a). Alternatively, the individual Gaussian

340 peaks can be summed with a standard deviation for each estimate equal to  $2\sigma$ , i.e., using the values listed in Table I. Another option is that (as in Figs. 16c and 16d) the same standard deviation is forced onto each individual Gaussian peak: in (c) equal to 0.075 Ma; and in (d) 0.1 Ma. For Figure 16c only two estimates had a greater scatter, while the remainder would otherwise scatter considerably less than the value forced upon them. This allows the effect of the precision of individual estimates to be

345 separated from the FMA counting statistic, since in a Bernouilli trial what is important is that we consider only whether an age estimate is defined, or not. Ages defined with considerably better precision than the other ages are otherwise able to obscure the existence of valid estimates in the counting statistic. For Figure 16d the standard deviation applied is equal to 0.1 Ma, which is greater than for all estimates considered, with the result thus blurred. Note that the probability in this diagram is

350 relative to the peak at ~2.0 Ma defined by five estimates.

Another way to consider probability is to use a simple metric as below. Whereas Gaussian statistics assume a mean, and a scatter thereabouts, Poisson statistics asks the question as to whether a particular distribution of values can be attributed to a random process. Thereby one can assess the likelihood that measured values have fallen randomly. We assume local growth at the time in question. With  $n=19$

355 measurements, and each growth event able to occur (randomly) anywhere in a time interval of 3 Ma, we can use a simple Poisson statistic [ $P = (rt)^k \cdot e^{-rt}/k!$ ] to estimate the probability that one or more events occur in the same time range: where  $k = 0, 1, 2, 3, 4, 5$  with  $k!$  the factorial,  $r$  the rate at which  $n$  events occur, and  $t = 0.2$  Ma is the time interval sampled. For this sample set the estimated probabilities are ~[28.2%, 35.7%, 22.6%, 9.5%, 3%, 0.8%]. Clearly, a greater number of samples needs to be measured to take such an analysis further, but for now one can assert that there is a reasonable chance that events inferred at ~2.00, 2.25 and 2.5 Ma are unlikely to have been the result of random coincidence.

## 4 Discussion

### 4.1 Timing episodes of mineralisation in the Martabe district

365 To determine the periods of alunite growth, each age determined by the method of asymptotes and limits was plotted using a Gaussian distribution to smooth the data. Distinct periods of alunite growth could thereby be distinguished across the 10 samples measured in this study (Fig. 16). The oldest events recorded occurred between  $\sim 3.5$ – $2.9$  Ma. The dominant events occurred at  $\sim 2.25$  and  $2.00$  Ma. Younger growth events occurred at  $\sim 1.70$  and  $1.50$  Ma. However, since the data are few, insufficient estimates  
370 exist to allow inference that all inferred events will become frequently measured ages (FMAs). Only the events at  $2.5$ ,  $2.25$  and  $2.00$  Ma had enough data to allow the conclusion that the confluence of ages was unlikely to be the result of random coincidence.

Sample D3011643 produced older events which overlap in timing with the emplacement of the dacite  $3.8 \pm 0.5$  Ma (U-Pb on zircon) and hornblende-bearing andesite  $3.1 \pm 0.4$  to  $2.8 \pm 0.3$  Ma (U-Pb on  
375 zircon) flow dome complexes (Sutopo, 2013). The clustering of ages and the overlap with flow-dome formation gives us confidence that the interpretation of age spectra using the method of asymptotes and limits is not simply an artefact of contamination or excess argon.

Since the alunite measured was retentive, the FMAs recognised must therefore be interpreted to reflect the existence of several distinct and separate very short-lived periods of alunite growth during the  
380 history of alteration and mineralisation. The asymptotes and limits recognised are consistent amongst the sample set because different short-lived episodes of mineral growth have taken place at distinctly different times. Microchemical or microstructural variation might be the reason that different growth episodes produced alunite with different diffusion parameters. The frequency with which these growth events occur appears to lie between 250–300 ka, with individual events taking far less time to complete.

385 A map of the interpreted fluid systems is shown in Figure 17. More geological information is needed to constrain the alunite alteration systems further, but this is difficult due to the area being covered by dense rain forest and restricted zones. Worse, any attempt to ‘vector’ towards an orebody using geochemical methods is potentially doomed to failure, since individual fluid pulses permeated different channels. Geochemical samples needed for vectoring should have been taken from the same channel.  
390 Nevertheless, interestingly, the Purnama pit exhibits the influence of the  $2.00$  Ma fluid system overprinting the  $2.25$  Ma fluid system, potentially explaining the higher grades.

### 4.2 The role of the plateau in age spectra

This above seems a useful and important result, but a previous version of this paper attracted very negative attention during peer review because the age spectra presented are not simple plateaux. For  
395 example, one reviewer wrote that: “*Numerous criteria have been put forth over the last several decades to evaluate age spectra and to calculate a plateau age (e.g., Fleck et al., 1977; Sharp and Renne, 2005; Jourdan et al., 2004). In a recent paper consisting of forty  $^{40}\text{Ar}/^{39}\text{Ar}$  specialists from around the globe, the following criteria were put forth for a plateau.*” It must: “(1) consist of at least five or more consecutive steps that comprise at least  $>50\%$  of the  $^{39}\text{Ar}$  released; (2) not have a slope (i.e., the  
400 majority of consecutive plateau steps do not have ascending or descending ages; Sharp and Renne,

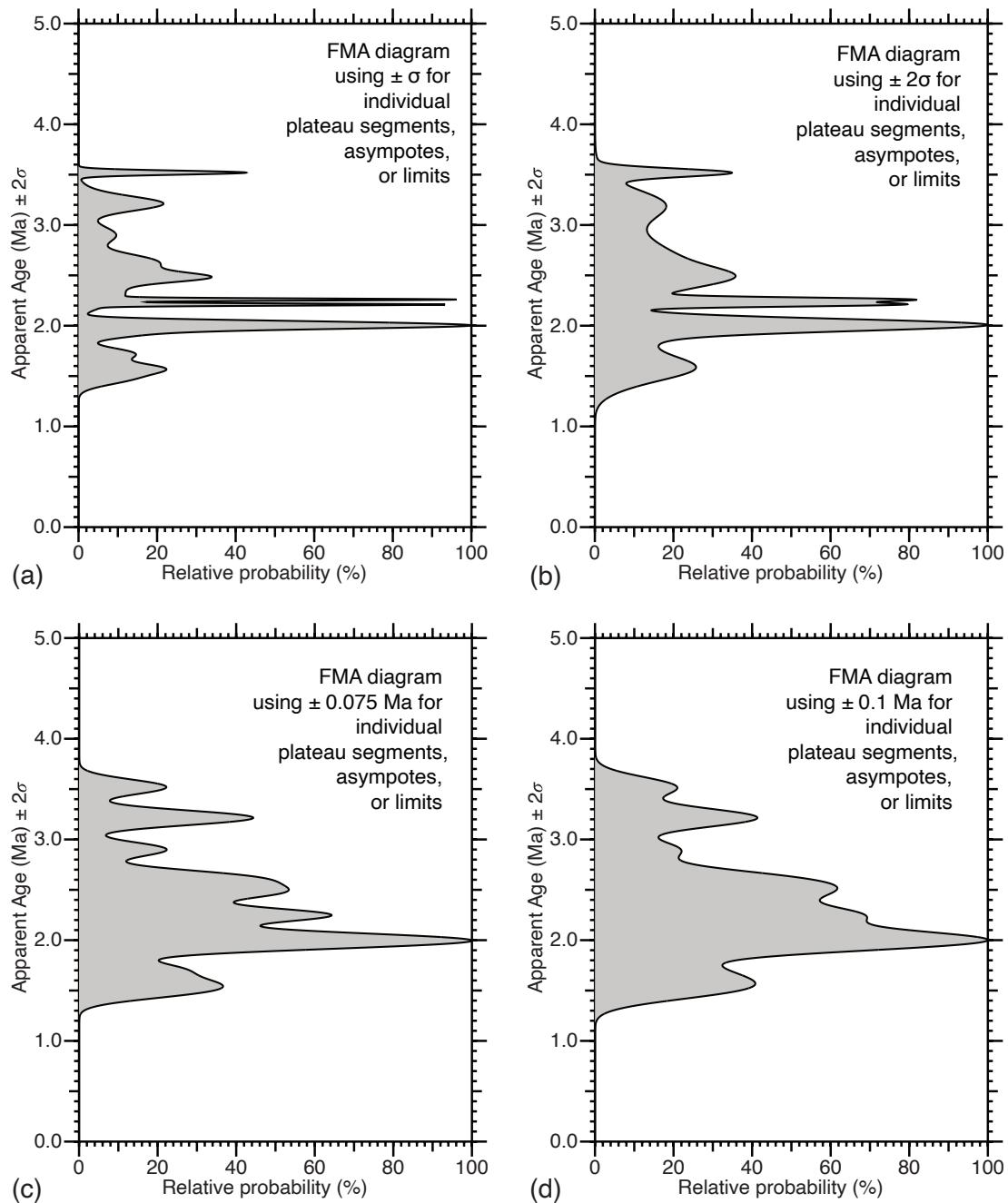
2005); and (3) have an isochron regressed through all of the plateau steps with a ( $^{40}\text{Ar}/^{36}\text{Ar}$ ) intercept that is indistinguishable from the atmospheric value at the 95% confidence level. It was pointed out that very few of the age spectra presented here have a plateau that fits these criteria. The reviewer implied that there is an expectation that the results of  $^{40}\text{Ar}/^{39}\text{Ar}$  geochronology should yield a single age, and  
405 that if the results do not fit this preconception, the data should not be published.

This attitude seems widespread. Schaen et al. (2021) consider a vast range of different studies, but complex age spectra [arguably a common occurrence in argon geochronology] barely rate a mention. Li et al. (2020) argue that an age spectrum is not reliable unless it approximates a plateau. These authors went so far as to provide a list of problems that might cause a plateau to be absent and recommend that  
410 such ‘imperfect’ results be discarded or at least marked as less reliable.

Yet there is nothing in the theory and practice of argon geochronology that requires an age spectrum to be a simple plateau. It is true that there are many circumstances in which a plateau will result in a measured age spectrum. Equally true is that there are many circumstances in which a plateau will not be evident, nor should one have been expected to have been present. There are methodological reasons that  
415 appear to explain why some data approximate a plateau, e.g., the use of laser-rastering or the use of strong acids to remove parts of a microstructure that appear to be altered. There are theoretical scenarios that require age data to approximate a plateau e.g., rapid cooling from temperatures that were sufficiently high as to prevent (or remove) prior accumulation of radiogenic argon, or a single growth event at temperatures that ensured diffusion was insignificant for a particular mineral. However, the  
420 common definition of a plateau (e.g., Schaen et al., 2021) is not compatible with a holistic approach that recognises that plateaux may result from microstructures that represent relatively small fractions of the sample volume. There is thus no reason to set an arbitrary limit on the percentage of gas required to define a plateau segment (Fig. 18). Plateau segments may have far less than 50% of the total gas release.

There are many publications in which small plateau segments have been ignored or passed over,  
425 although they may well be significant. For example, focusing on alunite, one reviewer cited Ren and Vasconcelos (2019) as one of many papers that demonstrate age plateaux without the complexity our data portray. However, an audit of that paper reveals a similar spectrum, although the lack of detail in the published laser results would have obscured the smaller plateau recorded in their figure 4b. Note that the first plateau segment in that age spectrum demonstrates release from a younger-grown alunite  
430 generation that had lesser retentivity, whereas in the results we present here from Martabe, the reverse seems to apply. Nevertheless, with more data and more age steps, Ren and Vasconcelos (2019) might well have applied the method of asymptotes and limits and reached conclusions that mimic our own.

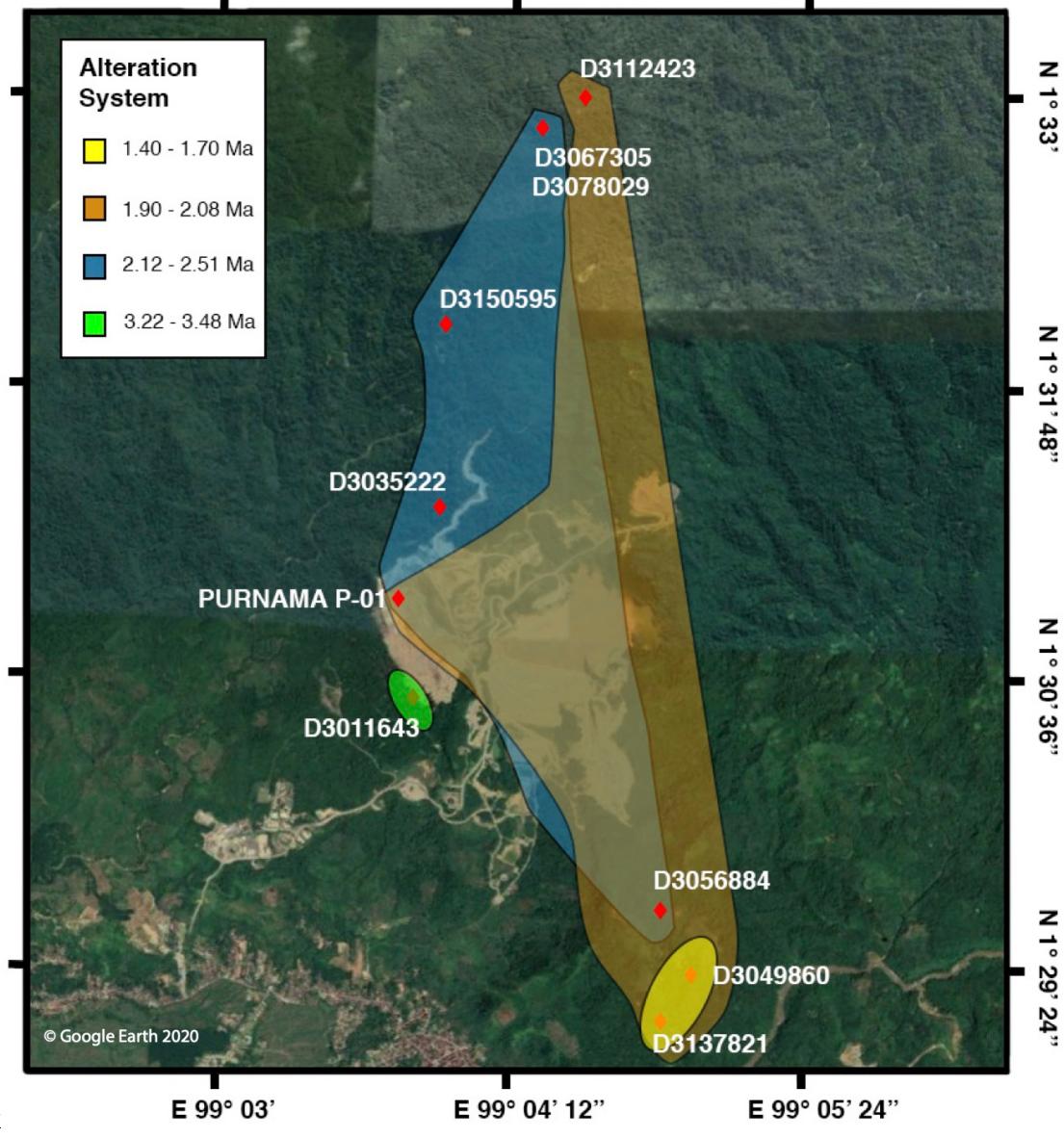
Perhaps the issue is that analysis of an argon spectrum that resembles a plateau is straightforward, but the same is not true for the analysis of an argon spectrum that results from progressive release of gas  
435 from different microstructural reservoirs. Such circumstances require a rethink as to how age spectra are analysed, moving away from the notion that: i) *a priori* a single age is to be expected; and that ii) the scatter of ages should define a normal distribution.



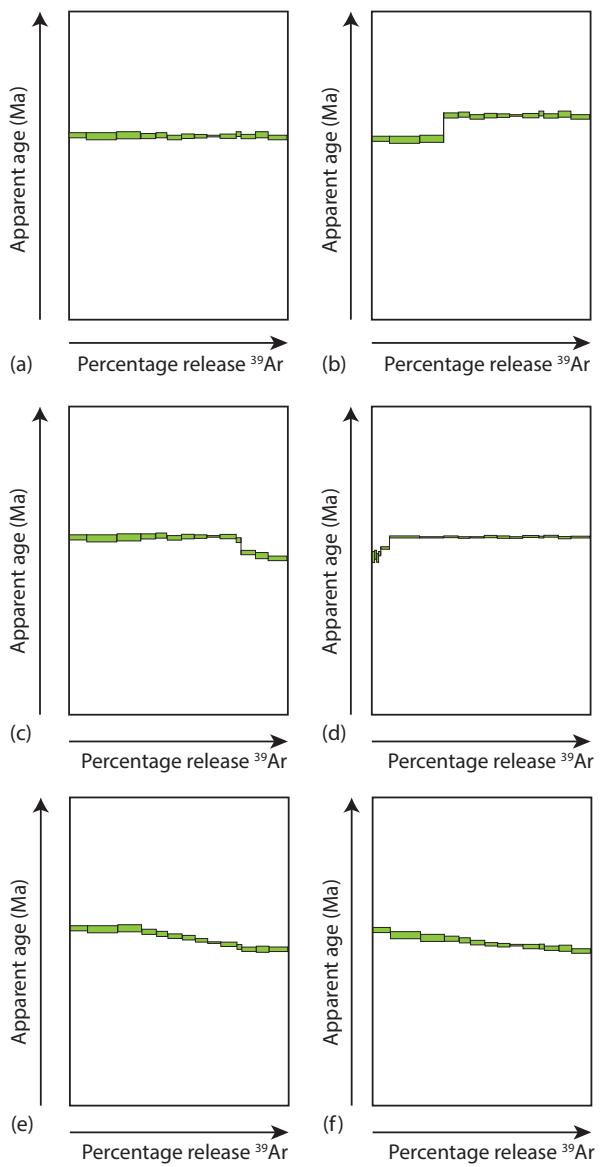
**Figure 16** Gaussian distributions used to develop a relative probability curve showing Frequently Measured Ages (FMAs) based on the application of the method of asymptotes and limits to the measured age spectra. The data utilised is from individual age plots: in (a) with the same uncertainties ( $\sigma$ ) as individually estimated for each plateau segment, limit or asymptote; in (b) doubling these uncertainties, and using  $2\sigma$  to scatter each estimate; while in (c) and (d) imposing a fixed uncertainty on each estimate, with the value as shown

Age (Ma)	Uncertainty ( $2\sigma$ Ma)
3.22	0.20
2.45	0.18
1.48	0.13
2.04	0.05
2.01	0.06
1.58	0.10
2.59	0.19
2.00	0.05
1.72	0.12
2.90	0.18
2.27	0.17
2.48	0.09
1.93	0.10
3.52	0.04
3.21	0.13
2.65	0.15
2.26	0.02
2.21	0.02
1.98	0.06

**Table 1** Gaussian distributions used to develop a probability curve showing Frequently Measured Ages (FMAs) based on the application of the method of asymptotes and limits to the measured age spectra. The data utilised is as shown on individual age plots: Figure 16a utilised uncertainties individually estimated for the scatter of the mean of each plateau segment, limit or asymptote; while Figures 16b-16d imposed a fixed uncertainty on each plateau segment, limit or asymptote.



455 **Figure 17** Map of Martabe gold field with alteration systems mapped. Alteration systems outlined according to the sample location and period of alunite growth. The two older events are grouped together.



460 **Figure 18** An age spectrum has a morphology: In (a) a plateau formed because the mineral has a single “growth age”, or very rapidly cooled from elevated temperatures so it retained all radiogenic argon subsequently produced, yielding a “cooling age”; while in (b) a mineral aliquot has two growth ages, with the second period of growth having produced a microchemistry or a microstructure that was less retentive of argon in the mass spectrometer; compared with (c) when the second period of growth produced a microchemistry or a  
 465 microstructure that was more retentive of argon in the mass spectrometer, but not so different as to prevent mixing between the two domains. In (d) the second period of growth involved only a small volume fraction and more scatter was produced in the apparent age during measurement. Yet, a mini-plateau can be recognised. In (e) while in (f) we highlight issues when an age spectrum involves progressive mixing of gas from different reservoirs. Plateaux segments are still evident in (e) while in (f) the upper and lower limits of a staircase spectrum are all that remains to hint at the existence of distinct microstructural reservoirs formed at different ages.  
 470

### 4.3 How do complex age spectrum result?

Complex age spectra typically result when there are different types of gas reservoirs in the aliquot of mineral grains analysed during a step-heating experiment. Typically, this occurs because: i) there is more than one microstructural domain; and ii) the microstructure/microchemistry of individual domains

475 requires different diffusion parameters, and these govern differing patterns of  $^{39}\text{Ar}$  release during the experiment; or iii) when one domain degasses differently because of microstructural change and/or breakdown as temperatures increase in sequential steps. In this case, because so many heating steps were undertaken, we were able to compare the age spectra with graphs showing the variation of different isotopic ratios: i) the Ca/K and Cl/K ratios, which showed a gradual increase during the  
480 experiment, until a sudden rise during the final steps; ii) the Arrhenius plots and the linked log  $r/r_0$  plots, which allow recognition of distinct diffusion domains, their relative volumes, and estimates of the relevant diffusion parameters; and finally iii) the Turner inverse  $^{40}\text{Ar}$  isotope correlation plot which allows recognition of inverse isochrons, but more importantly, which allows the progression of mixing between different gas reservoirs during the experiment to be monitored and examined.

485 Statistical models that rely on the assertion that a single age should be present are overly simplistic, and do not reflect the observed pattern of age variation in published spectra from very many samples, including those reported in this paper. For these reasons, a theory of how to analyse complex age spectra caused by mixing was developed by Forster and Lister (2004). Application of their method of asymptotes and limits has been shown to allow analysis of even the most complicated of age spectra.

490 Frequently Measured Ages (FMAs) estimated from such analyses consistently allow the recognition of (and the replication of estimates for) the timing of potentially significant events in the history of the rocks studied. Nevertheless, independent arguments for the significance of each FMA need to be given.

Because the experiments were designed to allow many (32-35) steps, we could compare the diffusion parameters, inferred for steps in one part of an age spectrum, with the parameters inferred for other  
495 segments of the same age spectrum. In almost all cases, observed differences in the inferred diffusion parameters explicitly relate to variation in the morphology of the measured age spectra. We hasten to add that this is not to say that the inferred diffusion parameters are necessarily those that applied in the natural environment. Such an assumption would require metastability during the furnace step-heating episodes, while in fact the material being measured may have undergone significant microstructural  
500 modification, phase transformations, metamorphic reactions, or melting and/or breakdown of the crystalline structure. But since domains in the age spectra correlate with domains in the Arrhenius plot, we can be certain that: i) a basic mapping of age and material properties had already been established in the natural environment, and that: ii) this mapping persisted during the UHV diffusion experiment.

In the present case, since the domains in the age spectra appear to reflect growth ages, we can be sure  
505 that we have identified different and distinct periods of hydrothermal mineral growth in the natural environment. Therefore, we suggest that overprinting fluids active in the formation of Martabe Gold deposit produced alunite in several growth generations, with variation in mineral geochemistry or microstructure ensuring slightly different diffusion parameters. These differences enabled discrimination of these various generations during UHV diffusion experiments. Multiple plateau  
510 segments and/or asymptotes are therefore a natural complication which is to be expected.

#### 4.4 Dealing with the natural complexity of an age spectrum

The otherwise hidden detail of an age spectrum can be liberated by carefully choosing the heating steps to allow the maximum number of meaningful episodes of gas release, noting that temperature and time for each heating step must be chosen to ensure as uniform an aliquot (of the  $^{39}\text{Ar}$  released in each heating step) as is possible. Too few steps and the morphology will be utterly obscured.

At the same time, the temperature variation in the sequence of heating steps must ensure that the distribution of points on the  $1/T^\circ\text{K}$  axis of an Arrhenius plot is as uniform as possible. Steps that allow meaningful release of  $^{39}\text{Ar}$  aliquots vary with the applied temperature. Steps that allow a uniform distribution on an Arrhenius plot vary with the inverse of temperature.

520 The age spectra illustrated do have some common aspects: i) they are not simple plateaux; ii) their morphology typically involves an upper limit OR a plateau segment in the first few percent (up to 10%) of  $^{39}\text{Ar}$  release; iii) the spectra display an asymptotic decrease in age towards a lower limit (which is sometimes a plateau segment); iv) the last few percent of  $^{39}\text{Ar}$  release is marked by a reduction towards (or past) zero apparent age. This variation can be readily explained.

525 First, we remark that if two generations of growth had produced microstructures and microchemistries that were identical, their ages would uniformly mix. The two generations would not be evident in the age spectrum. But if there is a difference in retentivity (even if small), a carefully designed step-heating experiment with precise temperature control has the potential to discriminate between the ages of the different growth generations. Progressive mixing: i) might prevent all but a few steps from defining the 530 “end member” ages (Fig. 18e); or worse ii) result in an age gradient with only the upper and low limits of age having the potential to be statistically significant, and then if, and only if, the same result can be obtained again and again in different step-heating experiments (Fig. 18f). The final part of the age spectrum is obscured, potentially because of mixing with a gas reservoir derived from inclusions [Fig. 6 and see later discussion]. Irrespective of whether there was loss of argon from the mineral lattice as the 535 result of diffusion in the natural environment, what is recorded in the mass spectrometer depends critically on the pattern of argon gas release from the different microstructural domains, governed by the difference in their diffusion parameters.

As noted by this previous reviewer “*Almost all of the ... spectra have a significant slope*”. This is because the diffusion parameters are sufficiently similar as to require mixing of gas from typically two 540 (but sometimes three) of the corresponding microstructural domains. In only few cases are separate plateau segments recognizable. The spectra typically display an asymptotic decrease in age towards the age of the most retentive domain, the age of which is therefore readily distinguished by application of the method of asymptotes and limits.

545 Although analysis of mixing using the age spectrum illustrates one of the considerable advantages gained through application of the method of asymptotes and limits, we should also note that the same result can be obtained by analysing the Turner inverse  $^{40}\text{Ar}$  isotope correlation plot in this context. Because the step-heating schedule produces so many well-populated steps, it is possible to use such plots to track the progression of mixing of different gas reservoirs. In Figure 6, we see first the release of air, moving progressively towards the gas reservoir defined by the lattice of domain A. Thereafter

550 there is a short period during which heating steps dominantly release gas from domain B, but thereafter the trend returns to that defined by the mixing line between air and domain A.

Interestingly, in Figure 6, this is followed by a sharp loop and the Turner inverse  $^{40}\text{Ar}$  isotope correlation plot records mixing with gas from a small-volume reservoir that may be defined by KCl and CaCl<sub>2</sub> salts, which begin to melt around 770°C, or more complex stoichiometry including with  
555 carbonate, for which there is no data. Such interferences could possibly be removed by washing samples in acid baths, but we did not undertake such effort, because of the likely damage to existing microstructure. Instead, we relied on the detail provided by heating schedules that produced many steps, thereby enabling recognition of mixing lines, in this case with a low volume reservoir that affects only the last steps in the sequence, reducing their apparent ages. Typically, those steps are associated with  
560 age errors two orders of magnitude or more times the average, and therefore they were not considered (even though we can recalculate the ages of the affected steps using the  $^{39}\text{Ar}/^{40}\text{Ar}^*$  intercept defined by the inverse isochron along the mixing trend for this late-stage low relative volume reservoir).

Rather than using acids to dissolve parts of the microstructure prior to measurement: i) prior to measurement, samples were rid of volatiles by prolonged warming under ultra-high-vacuum (UHV) conditions at temperatures below the point at which any significant percentage of the  $^{39}\text{Ar}$  stored in the mineral lattice begins to be released; ii) by using carefully chosen temperature-time schedules (determined *a posteriori* by dint of experience with any given sample set) to ensure that as uniform as possible a release of  $^{39}\text{Ar}$  in each heating step takes place; iii) while, at the same time, a distribution of temperature is maintained (amongst the steps that allow meaningful release of  $^{39}\text{Ar}$  aliquots) to ensure  
565 570 as uniform as possible a distribution of points on the 1/T°K axis of an Arrhenius plot; iv) taking note of the above, choosing sample size (dependent on age and potassium content) so that the chosen steps for a particular experiment are able to liberate very many different age data points.

In this way we have been able to provide unprecedented detail in measured age spectra. The use of a properly calibrated resistance furnace is essential in that such equipment offers rigorous (and  
575 documented) temperature control, while forced-injection of chilled cooling water through the assembly at the end of a period of heating (in this case 15 minutes) ensures the rapid cooling that is essential in allowing the temperature-time history in each measurement step to better approximate a square wave. Otherwise, it is difficult to justify the use of analytical solutions in inferring diffusivity ( $D/a^2$ ) where ‘a’ is the radius or dimension of the diffusion domain. The production of detailed age spectra is essential in  
580 our view, since without many steps, it is difficult to consider the effects of such variables such as: i) argon recoil during neutron irradiation, during the early steps of the UHV diffusion experiment; or ii) the effect of mixing with impurities such as KCl and CaCl<sub>2</sub> in inclusions (in the case of the present results) during the final steps of the UHV diffusion experiment. Thus, when complex age spectra are obtained, one can be sure they are meaningful by relying on the detail provided by many heating steps.

## 585 4.5 Examining mixing trends in context

It is important to analyse asymptotes and limits in the apparent age spectra in context. For example, we can recognise contamination in the early steps of the step-heating sequence because release of  $^{39}\text{Ar}$  is concordant with the predictions of diffusion modelling, while the release of  $^{40}\text{Ar}$  follows an entirely

different metric. This suggests that excess  $^{40}\text{Ar}$  was present, and that it was released via fast-diffusion pathways during these initial steps. Such degassing from these fast-diffusion pathways is dynamic since the permeability that allows escape of non-lattice  $^{40}\text{Ar}$  appears to have been created during step-heating. At the same time, the concordant release of  $^{39}\text{Ar}$  continues unchanged, implying that the dimensions of diffusion domains in the lattice is also not changing, which in turn requires the diffusion distance to be less than the spacing between fast diffusion pathways being created in the crystalline alunite. Such fast-diffusion pathways are most likely related to cracks and fractures.

We highlight the importance of conjoint analysis when correlating trends between mixing lines on the Turner inverse  $^{40}\text{Ar}$  isotope correlation plot with mixing between individual plateau segments, or with trends towards individual asymptotes and limits in the apparent age plots. In Figures 6 and 9, for example, the intermediate asymptote [2] correlates with the start of significant mixing with the gas from the inclusion reservoir, as inferred using the Turner inverse  $^{40}\text{Ar}$  isotope correlation plot. Similar comments can be made in respect to the correlation of a diffusion domain recognised on an Arrhenius plot with an individual plateau segment in an age spectrum, or in discerning mixing trends towards diffusion domains recognised on an Arrhenius plot and comparing these with trends towards individual asymptotes and limits in the apparent age plot. We note that since the observed correlations reflect variation in apparent age, they cannot result from artefacts introduced during the step-heating diffusion experiments. A similar variation in retentivity must have existed in the natural environment.

The step-heating schedule ensured that only small amounts of gas were released in each step, so the progression of the variation in the isotopic ratios from one step to the next allows ready identification of different gas populations, and the mixing trends between them. Typically, two or three alunite lattice gas reservoirs can be identified, with mixing initially moving away from the atmospheric reservoir towards the alunite I inverse isochron. The mixing trend then moves towards alunite II and sometimes back again to alunite I (e.g., Figs. 6 and 9) before the diminishing yield from the alunite aliquot is overcome by release of gas from inclusions. The subtleties of these mixing trends can be understood if they are examined in the context of the variation in the associated Arrhenius data, since there is often only a small difference between the inferred activation energy and normalised frequency factor.

The different diffusion parameters have quite different effects on the pattern of gas release (Forster and Lister 2014). Frequency factor tends to increase rapidly in conjunction with an increase in activation energy, narrowing the temperature window during which most of the gas would be released from the corresponding domain. Thus, the age can decrease as alunite II degasses, because it formed at a younger time, but then as this reservoir depletes, the age can once again increase as degassing from alunite I once again becomes dominant (e.g., Fig. 9). This means that care needs be taken in estimating relative volumes of alunite I and alunite II. Typically, this pattern is evident in the comparative radius plot (e.g., Fig. 9c) when this plot is examined conjointly with the apparent age spectrum (Fig. 9a), the Arrhenius plot (Fig. 9b) and the Turner inverse  $^{40}\text{Ar}$  correlation plot (Fig. 9g).

We discount the last steps of each of the heating schedules because of what we infer to be significant contamination. This late-stage mixing trend is evident in all Turner inverse  $^{40}\text{Ar}$  isotope correlation plots but is especially evident in Figure 6. Here it can be shown that the inclusion (?) reservoir is likely

not of zero age, but the estimates as to its age using an inverse isochron are discounted because of the uncertainty involved, and not further considered.

- 630 Our analysis (Figs. 7-15) shows this low volume gas reservoir was most likely released from inclusions that contain  $\text{CaCO}_3 + \text{CaCl}_2 + \text{KCl}$ . The key to our reasoning as to the nature of the last reservoir is that:  
i) small volumes are involved (<2% of the total  $^{39}\text{Ar}$  released); ii) the mixing with the unidentified reservoir begins at the  $\text{KCl}$  or  $\text{CaCl}_2$  melting temperature; and iii) the  $\text{Ca}/\text{K}$  ratio in the unidentified reservoir approaches integral values (e.g., 6:5 for  $\text{Ca}/\text{K}$  whereas the  $\text{Cl}/\text{K}$  ratio is 5:1 which can be  
635 achieved by a molal composition of inclusions equivalent to  $4\text{CaCO}_3 + 2\text{CaCl}_2 + \text{KCl}$ ). Alternative contaminants include clays such as kaolinite or dickite, but these compositions do not typically include K, Ca or Cl. Clay breaks down at  $>1000^\circ\text{C}$ , coincidentally at the temperatures at which the inclusion reservoir is most evident. However, if calcite ( $\text{CaCO}_3$ ), sinjarite ( $\text{CaCl}_2$ ), sylvite ( $\text{KCl}$ ) or chlorocalcite ( $\text{KCaCl}_3$ ) mineralogy is present in such material, and cryptocrystalline, it would have escaped notice.  
640 Alternatively, the minerals listed above might also be present in microcracks rather than as cryptocrystalline residues, or in inclusions.

#### 4.6 Inverse isochrons on the Turner inverse $^{40}\text{Ar}$ correlation plots

- The Turner inverse  $^{40}\text{Ar}$  isotope correlation plot in *eArgon* uses the ‘new’ York regression as set out by Mahon (1996). This author corrected formulae as in York (1969). However, Mahon (1996) has minor errors in the published formulae, and additional corrections were necessary in determining the uncertainty statistics, as noted by Trappitsch et al. (2018) and included in his Python code. *eArgon* does not use this code, but we certainly benefitted from its existence in attempting to track down issues when debugging our code. The York-Mahon-Trappitsch regression uses a recursion that allows an estimate as to the uncertainty on the y-axis, expressed by the percentage excess  $^{40}\text{Ar}$  [or in the other direction, excess mass 36]. Similarly, the York-Mahon-Trappitsch regression allows an estimate for the uncertainty on the x-axis, which is translated into percentage age variation based on the implied variation in the  $^{40}\text{Ar}^*/^{39}\text{Ar}$  ratio.

- The Turner inverse  $^{40}\text{Ar}$  isotope correlation plots published here include inverse isochrons (and any associated statistical information) to define the age of the gas reservoir. For isochrons defined by more than three points, Pearson’s chi statistic is shown. This is the square root of the mean square weighted deviation (MSWD) and it is assessed as to whether or not it is within the 95% confidence range calculated for  $n-2$  degrees of freedom. Each Turner inverse  $^{40}\text{Ar}$  isotope correlation plot provides regression data for individual isochrons, but only for isochrons with more than three points. We note that minor plateaux, asymptotes and limits recognised on the age plot can invariably be correlated with isochrons in the Turner plot.

- We note that the inverse isochrons identified on the Turner inverse  $^{40}\text{Ar}$  isotope correlation plots are typically defined by relatively few points, and the degree of freedom ( $n-2$ ) rarely exceeds six. Hence Pearson’s chi statistic (the square root of the MSWD) was utilised (for  $n>3$ ), to assess whether the scatter remains within the 95% confidence limit.

- 665 To do this *eArgon* uses methods and equations as outlined by Wendt and Carl (1991). However, whereas these authors were limited by their use of numerical approximations, *eArgon* computes the

gamma function directly: using the *tgamma()* function in the *<cmath>* C++ library. This enables the Wendt and Carl (1991) statistical analysis to be improved: by determining the maximum likelihood for the chi value (estimated using a golden ratio method) based on the number of degrees of freedom, and then numerically estimating the likely standard deviation to be expected about this value.

Note that the values plotted have been corrected for isotopic interferences occasioned by the presence of calcium and chlorine, utilising the correction factors obtained by including the relevant salts in the canister during neutron irradiation.

Excess  $^{40}\text{Ar}$  could be inherited by contamination or it could be introduced to the system by fluids at the grain boundary (Kelley, 2002). This can be detected from inverse isotope correlation diagrams by determining the initial  $^{40}\text{Ar}/^{36}\text{Ar}$  ratio of the sample (McDougall and Harrison, 1999). However, this method cannot readily be used for samples with multiple growth generations (e.g., Kunk et al., 2005).

#### 4.7 Modelling the effect of different Arrhenius data used to estimate argon retentivity

Our diffusion experiments produced Arrhenius data that required theoretical closure temperatures between 400°C and 560°C for modest cooling rates (Figs. 7-15). With such retentivity, in the natural environment, radiogenic argon would have been fully retained in the alunite lattice, even during later hydrothermal events. Based on alteration assemblages, deposits such as Martabe form at temperatures  $\geq 200^\circ\text{C}$  (White and Hedenquist, 1990, Simmons et al., 2005). This is compatible with estimates based on the trapping temperature for fluid inclusions (Saing et al., 2015) although peak temperatures may be higher, e.g., 300°C based on mineral assemblages (Simmons et al., 2005) or 350°C based on fluid inclusion homogenisation temperatures (Saing et al., 2015). But even with such peak temperatures, if our estimates as to the diffusion parameters are correct, alunite is still highly retentive of argon and thus should reliably allow  $^{40}\text{Ar}/^{39}\text{Ar}$  geochronology to time different periods of ore deposition in the same epithermal system, if peak temperatures are only briefly attained.

In contrast, the same statement cannot be made if alunite is less retentive of radiogenic argon, as would be the case for estimates for the closure temperature in the  $\sim 240$ - $320^\circ\text{C}$  range as reported by Love et al. (1998), Landis et al. (2005), Arribas et al. (2011), Waltenberg (2012), and Ren and Vasconcelos (2019). With such unretentive parameters, if temperatures were as high as we surmise, evidence for older events would have been erased. Even the basic morphology of age spectra as we present here could not exist.

Could this mean that the Martabe alunite is more retentive than alunite found elsewhere? This seems unlikely. We are not alone in recognizing multiple growth events in the same epithermal system (e.g., Deyell et al., 2005). Moreover, age spectra with multiple plateau segments are measured by other authors, e.g., figure 4b in Ren and Vasconcelos (2019). Since the geochronological evidence for different growth ages is preserved, we must conclude that estimates of closure temperature (or the corresponding diffusion parameters) in these earlier works were somehow flawed.

One issue could be the effect of microstructural change (either in the natural environment or in the laboratory) so that the results obtained did not reflect the effects of diffusion alone. In other words, perhaps resetting has taken place as the result of microstructural change, including by grain size reduction, e.g., by buckling and misorientation of crystallites in a polycrystalline nanofilm irradiated by

705 the beam of a transmission electron microscope as reported by Ren and Vasconcelos (2019). In the natural environment, recovery and/or recrystallisation during later thermal events may occur, or solution/dissolution processes that in effect regrow alunite, so that older ages do not survive.

To bring some clarity to this issue, we used the *MacArgon* program (Baldwin and Lister, 1996) to quantitatively forward model the effect of specific temperature-time paths (Fig. 19a). These T-t paths  
710 are bounded by the 200–260°C temperature range suggested by Saing et al. (2015) for the formation of the Purnama deposit. We were thereby able to separate the effect of argon loss during temperature spikes from the effect of argon loss due to ambient conditions, by modelling two scenarios: i) the ambient temperature set at 100°C (Figs. 19b, 19c); and ii) the ambient temperature set at 200°C (Figs.  
715 19d, 19e). We used the same model alunite geometry: i) alunite I approximated by 5 fractal iterations of a spherical geometry, with  $r/r_0 = 2.5$  and  $v/v_0 = 0.9$ ; ii) alunite II was a single more retentive spherical domain. Diffusion parameters are as shown in Figure 19 [and in the supplementary information].

The observed spectra cannot be replicated using the unretentive diffusion parameters published by Ren and Vasconcelos (2019). The modelling shows that there would then be unequivocal evidence for argon loss (Figs. 19b and 19d) and that the morphology of any measured age spectrum would be smoothed. In  
720 contrast, the retentive diffusion domains suggested by our Arrhenius data allowed a good fit to the measured spectrum (Figs. 19c and 19e). Hence, we conclude that the measured spectra reflect the effect of growth events alone, without partial loss of argon taking place in the natural environment.

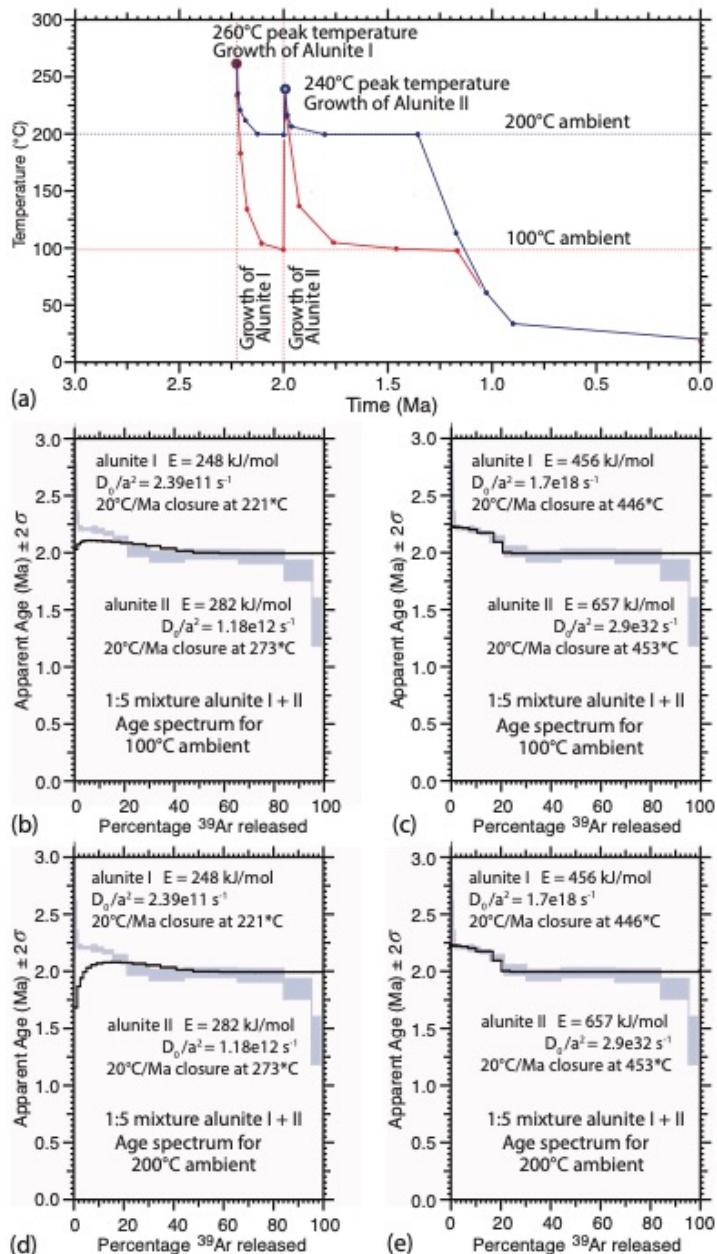
#### 4.8 Comparison of different Arrhenius data used to estimate argon retentivity

Because of the discrepancy above, we need to reflect on possible explanations as to why other authors  
725 might have obtained low retentivity estimates for the diffusion parameters. One reason might be that we analysed the Arrhenius plots from our alunite step-heating experiments using the *eArgon* software to apply the Fundamental Asymmetry Principle (or FAP) recognised by Forster and Lister (2010) while they did not. However, while it is necessary to apply the FAP if a multi-domain diffusion (MDD) model is assumed, this can only be done if the dominant release of  $^{39}\text{Ar}$  comes from diffusion domains with the  
730 same activation energy. Complications ensue if the ‘dominant’ activation energy varies between one part of an Arrhenius plot to another, e.g., see Cassata and Renne, 2009, and the subsequent discussion by Lovera et al. (2015). Such complications can be dealt with by local application of the FAP (noting that the details of how this is done can be found in Forster et al., 2015). Also note that anisotropic diffusion can also cause an upward bend in slope between one part of an Arrhenius plot to another  
735 (Huber et al., 2011) but the FAP can still be applied to estimate the end-member properties.

The analysis of Arrhenius data becomes more difficult if different regions on the Arrhenius plot are dominated by release of  $^{39}\text{Ar}$  from domains with different activation energies. The problem is that, between the different regions on the plot, there will be an intervening zone of mixing. It is an issue therefore that Ren and Vasconcelos (2019) interpreted slopes determined in a potential zone of mixing  
740 as representative of a distinct diffusion domain. These authors may thus have erred in attempting to separate a distinct activation energy when in fact  $^{39}\text{Ar}$  release was transitional between domains with quite different activation energies. Each point on an Arrhenius plot sums contributions from all the diffusion domains that are present, and this sometimes makes it difficult to compare steps with other

plots. It is a mistake to consider that there should be a one-to-one correspondence between ‘slope’ on an  
745 Arrhenius plot at any particular point and any assumed activation energy at that point.

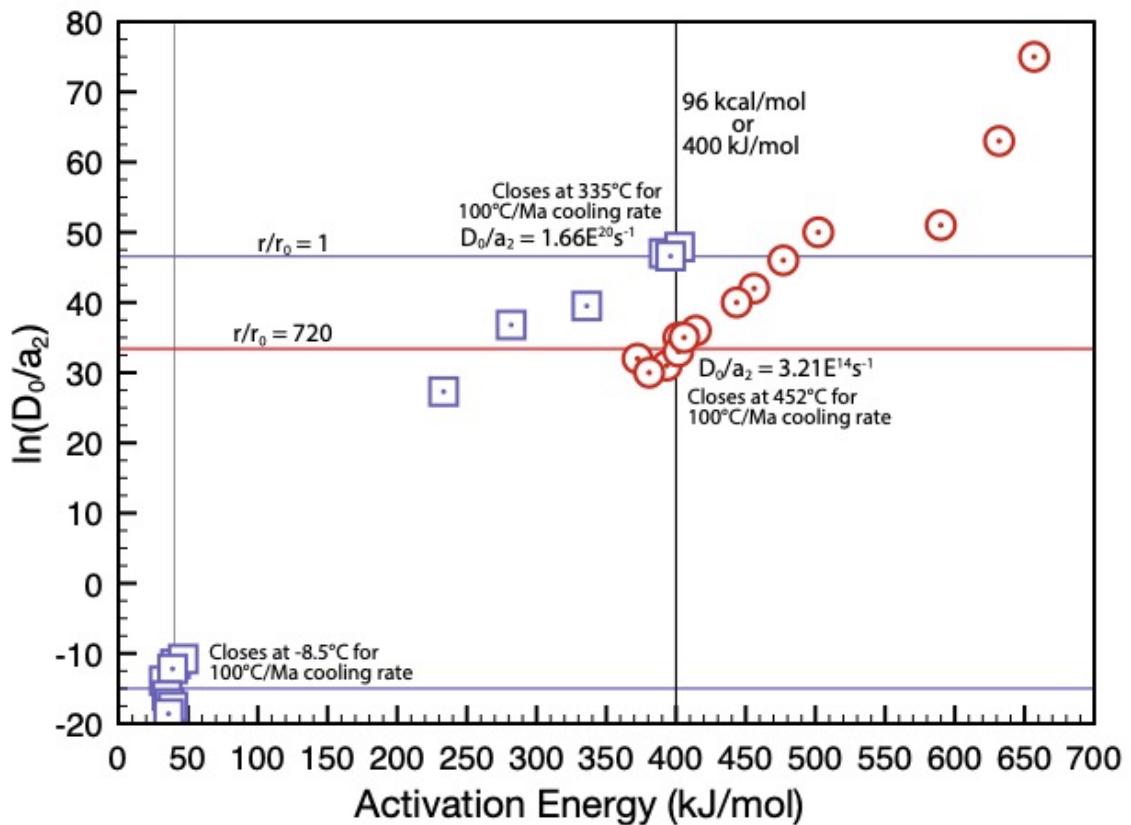
It is not at all certain that intermediate slopes can be equated with varying activation energy. Hence, we  
eliminated dubious estimates and plotted only those values of the diffusion parameters that were FAP  
compliant (Fig. 20). From this diagram, it is evident that the most accurate estimates of activation  
energy from the Ren and Vasconcelos (2019) experiments coincide with our own. However, the  
750 diffusion dimension in our experiments is ~700 times greater than that which applied in the Ren and  
Vasconcelos (2019) experiments. This could be explained by the episodes of grain size reduction that  
these authors observed, noting that these may be artefacts caused by nano-scale thin slices of the alunite  
lattice buckling and kinking in the beam during transmission electron microscopy. Possibly the material  
we used was not subject to such grain size reduction, thus explaining the observed difference in  
755 diffusion dimension. The higher estimates they obtained for normalized frequency factor are thus at  
least in part to be expected.



760

**Figure 19** MacArgon modelling comparing a model based on Ren and Vasconcelos (2019) with our considerably more retentive data for Purnama P-01. Two temperature-time paths are shown in (a): with 260–240°C temperature peaks dropping back to a 100°C ambient temperature, modelled in (b) and (c); and a 200°C ambient temperature, modelled in (d) and (e). The Ren and Vasconcelos (2019) estimates are not sufficiently retentive to prevent argon loss at peak temperatures (b). Argon loss also increases significantly at ambient temperatures >150°C (d). In contrast our data allows the observed age spectra to be accurately modelled (c, e) though we ignore the effect of the inclusion reservoir in the last 20% of gas release. These models (c, e) show no significant argon loss due to diffusion in the natural environment.

765



**Figure 20** A plot of activation energy against the natural logarithm of the normalised frequency factor. This shows all FAP compliant estimates of diffusion parameters made by Ren and Vasconcelos (2019) [blue squares], enabling comparison with estimates made here [red circles]. The activation energy is the same. Normalized frequency factors differ so either the samples used in the Ren and Vasconcelos (2019) suffered a grain size reduction during the experiment, or the diffusion dimension was inherently much smaller.

#### 4.8 The fundamental limitations of UHV $^{39}\text{Ar}$ diffusion experiments

There are questions that must be asked as to the metastability of a mineral grain aliquot during high temperatures as pertain in our experiments, since temperature may cause microstructural change, phase transformations, mineral decomposition and/or melting. Such changes could render our estimates for the diffusion parameters invalid. For example, Ren and Vasconcelos (2019) suggest that a phase transformation occurs at  $\sim 450^\circ\text{C}$  which is the temperature when our experiments started. This is indeed a problem, which we attempt to minimise by ensuring samples have lost volatiles during the extended pre-experiment cleaning-by-warming stage of our procedures. This simple procedure may extend the range of any potential metastability. Nevertheless, the potential for changes of material structure during the experiment remains one of the main drawbacks for the application of UHV diffusion experiments.

In the present case, it might have been better if we had conducted our diffusion experiments at lower temperatures, for longer time periods. However, as shown in the supplemental data very little gas was released below  $450^\circ\text{C}$ , so it is not possible to accurately apply the equations relating diffusivity to the percentage partial loss of  $^{39}\text{Ar}$ . In any case, we doubt the release of gas at those lower temperature was from lattice argon.

Ren and Vasconcelos (2019) carefully documented this initial release of  $^{39}\text{Ar}$ , and one can therefore estimate the diffusion parameters relevant to this early release. When we did this calculation, we discovered that their first gas reservoir has Arrhenius parameters that indicate closure below  $\sim 10^\circ\text{C}$ . Hence, if lattice argon is involved, it would have already been released. Escape of  $^{39}\text{Ar}$  from this low retentivity reservoir must therefore be the result of a dynamic process, occasioned by the conditions of the experiment. The Arrhenius data may be estimating the kinetics for grain boundary release, e.g., as would be the case if  $^{39}\text{Ar}$  produced by recoil during irradiation is progressively expelled as the result of distortions caused by initial heating steps creating fast diffusion pathways enabling release of  $^{39}\text{Ar}$ . Very small volumes of gas are involved, so mixing offers a viable explanation for the steepening of gradient on the Arrhenius plot. Ren and Vasconcelos (2019) show the lattice parameters did not change, so no phase transformation needs to have been involved

The microstructural modification described by Ren and Vasconcelos (2019) would have substantially reduced the diffusion dimension, but this would not explain a change in activation energy. Hence the upward slope on their Arrhenius diagrams must reflect the prior existence of a more retentive diffusion domain. Mathematically there is no coincidence between temperature, diffusivity, and the average slope of a progression of individual points on an Arrhenius plot. All domains contribute in greater or less amounts to the release of  $^{39}\text{Ar}$  used to estimate the bulk diffusivity. An alternative explanation for their data is that estimates made by these authors in the transition zone leading to the first release of lattice  $^{39}\text{Ar}$  were overwhelmed by the effects of mixing of non-lattice  $^{39}\text{Ar}$ . It is therefore possible that the intermediate diffusion parameters preferred by Ren and Vasconcelos (2019) are artefacts.

Many of our estimates for the diffusion parameters are made using data that extend over a considerable range of temperature (e.g., Fig. 5) so it is hard to conclude that material properties changed in that temperature range. In any case, the scattering of orientation and the reduction in grain size observed by Ren and Vasconcelos (2019) was coincident with the beginning of a change of slope on the accompanying Arrhenius plot. Our results similarly demonstrate a change in slope on the Arrhenius plot

(e.g., Fig. 5), but this occurs at temperatures 80-100°C hotter than for the samples examined by Ren and Vasconcelos (2019). If indeed a microstructural change is occurring in our samples, one might therefore surmise that it began to occur at higher temperatures than in the Ren and Vasconcelos (2019) samples. This might reflect the different ways that samples were prepared (e.g., we did not use acid to clean the aliquot). There may also be differences in the way samples were irradiated (e.g., we used 1.0 mm thick cadmium liners that minimized the effect of thermal neutrons, thus ensuring minimal recoil and the least lattice damage during irradiation). Finally, there are also differences in the way samples were examined (e.g., we did not excite our sample in the beam of an electron microscope).

It might also be that there is a systematic variation in material properties, with the more retentive alunite we measured grown at higher temperatures in the natural environment. Unretentive parameters cannot explain the observed age spectra (Fig. 19), so our inferences as to the diffusion parameters for alunite may in fact be correct. It would thus be a mistake to assume that the measurements undertaken using UHV  $^{39}\text{Ar}$  diffusion experiments are *a priori* of no use in estimating diffusion parameters in the natural environment. For an example as to how this debate proceeds for other materials, consider that Cassata et al. (2013) interpreted inflections in the Arrhenius plot to be the result of structural transitions in the mineral due to laboratory heating. They argued that thermal expansion can occur on short timescales, and lattice deformation can be caused by the transition from triclinic to monoclinic that can pose an activation energy barrier and exhibit hysteresis on retrograde heating. But while such effects may well have been taking place in the mass spectrometer, one would not then expect a corresponding variation in the age spectrum, as observed. Age variation can only reflect processes that occurred in the natural environment. Since there are variations in the age spectrum that correspond to the observed changes in the Arrhenius plot, Cassata et al. (2013) cannot be correct [see discussion by Lovera et al., 2015].

#### 4.8 Further work

There is a need to examine the microstructural evolution of the alunite at Martabe in the context of the new age data presented in this paper. The theory and practice of argon geochronology also needs some attention, in particular recognition that current criteria for the definition of a plateau fail when it comes to the analysis of the morphology of a complex age spectrum. The analysis of mixing also needs a focus, with new developments such as that proposed by Carter et al. (2020) ensuring future innovation.

#### 5 Conclusion

Through utilisation of a suitable heating schedule, determined *a posteriori*, we were able to degas alunite samples without losing a large percentage of gas in a single step. This allowed extraction of information from both the age spectra and the Arrhenius plots. The detail allowed recognition of mixing trends, and application of the method of asymptotes and limits. Frequently Measured Ages (or FMAs) could be recognised, and these were shown to have significance using a Poisson statistic.

The recursive formula in Dodson (1973) allows the accurate calculation of closure temperature for any specific cooling rate and/or ambient pressure. Given the parameters listed by Ren and Vasconcelos (2019), hypogene alunite spheres would exhibit closure temperatures in the range 234-287°C. Such retentivity might allow alunite to retain growth ages in hypogene environments, but this lesser

retentivity would result in age spectra that exhibited typical diffusional loss profiles in epithermal  
860 systems. Such spectra are not observed, so their diffusion parameters cannot apply.

With the diffusion parameters determined based on our analysis of our Arrhenius plots, we were able to accurately replicate the morphology of the observed spectra, by forward modelling using the *MacArgon* program. This is to be expected since our data put the closure temperature of alunite ranging between 400°C and 560°C, which is above the ~200-260° range in temperature expected for the formation of the  
865 Martabe deposits. This result, and the heterogeneity in age, gives confidence that the inferred ages from  $^{40}\text{Ar}/^{39}\text{Ar}$  geochronology time the growth of alunite and that these are not cooling ages. Our Arrhenius data suggests that alunite is considerably more retentive of argon than previous estimates would allow.

Since the alunite measured was retentive, the FMAs recognised must reflect distinct and separate very short-lived periods of alunite growth during the history of alteration and mineralisation around the  
870 Martabe deposits. The asymptotes and limits recognised are consistent amongst the sample set because different short-lived episodes of mineral growth have taken place at distinctly different times. We do not know the reason that different growth episodes produced alunite with different diffusion parameters.

Although our map of the extent of the overprinting fluid systems is not complete, and lacks detail, it is evident that mineralisation in the Purnama pit is the result of two specific fluid events, one enriching the  
875 other. These growth events took place at ~2.25 and 2.00 Ma. The separation in timing may reflect long term periodicity in the earthquake cycle. The frequency with which these growth events occur is between 250-300 ka, providing some constraint as to the duration of long-term earthquake cycles.

Samples need to be taken from the same fluid system if future use of ‘vectoring’ using variation in mineral compositions to determine the direction towards the orebody is to be contemplated.

## 880 Data availability

All necessary data is provided in the supplementary information.

## Author contribution

The paper includes modified information from the MPhil thesis by Muston (2020). The software used in this study was written by one of the authors (Lister). These applications are available for download from  
885 the AppStore. All authors contributed to data analysis, discussion and reviewing of the manuscript.

## Disclaimer

This article is based in part of the MPhil Thesis of the first author submitted to the Research School of Earth Sciences (RSES), Australian National University.

## Conflicts of Interest

890 The authors declare that they have no conflicts of interest.

## Funding Statement

Some of this research has been funded by the Australian Research Council Linkage Project LP130100134 "Where to find giant porphyry and epithermal gold and copper deposits" LP130100134 "Where to find giant porphyry and epithermal gold and copper deposits" with additional financial support from PT Agincourt Resources.

## Acknowledgments

Shane Paxton and Sareh Rajabi assisted with mineral separation. The paper benefitted from the efforts of the Associate Editor, Darren Marks, and several anonymous reviewers. PT Agincourt Resources, Martabe Mine, Sumatra, Indonesia, is thanked for their efforts and their support of this project.

## 900 References

Arribas, A., Cunningham, C.G., Rytuba, J.J., Rye, R.O., Kelly, W.C., Podwysocki, M.H., McKee, E.H. and Tosdal, R.M.: Geology, geochronology, fluid inclusions, and isotope geochemistry of the Rodalquilar gold alunite deposit, Spain. Economic Geology 90, 795-822, <https://doi.org/10.2113/gsecongeo.90.4.795>, 1995.

905 Arribas, A., Arribas, I., Draper, G., Hall, C., Kesler S. E., McEwan, C., and Muntean, J.:  $^{40}\text{Ar}/^{39}\text{Ar}$  dating of alunite from the Pueblo Viejo gold-silver district, Dominican Republic. Economic Geology, 106, 1059-1070, <https://doi.org/10.2113/econgeo.106.6.1059>, 2011.

Barber, A. J., and Crow, M. J.: Sumatra: geology, resources and tectonic evolution. Geological Society, London, Memoirs, 31, <https://doi.org/10.1144/GSL.MEM.2005.031>, 2005.

910 Carter, J.N., Tremblay, M.M., and Mark, D.F.: A Bayesian approach to the deconvolution of  $^{40}\text{Ar}/^{39}\text{Ar}$  data from mineral mixtures. Chemical Geology 554, <https://doi.org/10.1016/j.chemgeo.2020.119784>, 2020.

Cassata, W.S. and Renne, P.R.: Systematic variations of argon diffusion in feldspars and implications for thermochronometry. Geochimica et Cosmochimica Acta 112, 251-287, 2013.

Crank, J.: The Mathematics of Diffusion: London, Oxford University Press, 414 pp, 1975.

915 Cunningham W.D. and Mann P.: Tectonics of strike-slip restraining and releasing bends, Geological Society, London, Special Publications, 290, 1-12, 2007.

Deyell, C.L., Rye, R.O., Landis, G.P. and Bissig, T.: Alunite and the role of magmatic fluids in the Tambo high-sulfidation deposit, El Indio-Pascua belt, Chile." Chemical Geology 215(1-4): 185-218, <https://doi.org/10.1016/j.chemgeo.2004.06.038>, 2005.

920 Dodson, M. H.: Closure temperature in cooling geochronological and petrological systems. Contributions to Mineralogy and Petrology, 40, 259-274, <https://doi.org/10.1007/BF00373790>, 1973.

Fleck, R.J., Sutter, J.F., and Elliot, D.H.: Interpretation of discordant  $^{40}\text{Ar}/^{39}\text{Ar}$  age-spectra of Mesozoic tholeiites from Antarctica: Geochimica et Cosmochimica Acta, v. 41, p. 15–32, [https://doi.org/10.1016/0016-7037\(77\)90184-3](https://doi.org/10.1016/0016-7037(77)90184-3), 1977.

Forster, M., Koudashev, O., Nie, R., Yeung, S., and Lister, G.:  $^{40}\text{Ar}/^{39}\text{Ar}$  thermochronology in the Ios basement terrane resolves the tectonic significance of the South Cyclades Shear Zone. Geological Society, London, Special Publications, 487, 291-313, <https://doi.org/10.1144/SP487-2018-169>, 2019.

925 Forster, M. A., and Lister, G. S.: The interpretation of  $^{40}\text{Ar}/^{39}\text{Ar}$  apparent age spectra produced by mixing: application of the method of asymptotes and limits. Journal of Structural Geology, 26, 287-305, <https://doi.org/10.1016/j.jsg.2003.10.004>, 2004.

930 Forster, M. A., and Lister, G. S.: Core-complex-related extension of the Aegean lithosphere initiated at the Eocene-Oligocene transition. Journal of Geophysical Research: Solid Earth, 114, <https://doi.org/10.1029/2007JB005382>, 2009.

Forster, M. A., and Lister, G. S.: Argon enters the retentive zone: reassessment of diffusion parameters for K-feldspar in the South Cyclades Shear Zone, Ios, Greece. Geological Society, London, Special Publications, 332, 17-34, <https://doi.org/10.1144/SP332.2>, 2010.

935 Forster, M.A. and Lister, G.S.:  $^{40}\text{Ar}/^{39}\text{Ar}$  geochronology and the diffusion of  $^{39}\text{Ar}$  in phengite–muscovite intergrowths during step-heating experiments in vacuo. Geological Society, London, Special Publications 378, 117-135, <https://doi.org/10.1144/sp378.16>, 2014.

Forster, M.A. and Lister, G.S. and P. G. Lennox, P.G.: Dating deformation using crushed alkali feldspar:  $^{40}\text{Ar}/^{39}\text{Ar}$  geochronology of shear zones in the Wyangala Batholith, NSW, Australia, Australian Journal of Earth Sciences, 61, 619-629, <https://doi.org/10.1080/08120099.2014.916751>, 2014.

940 Forster, M.A., Armstrong, R., Kohn, B., Lister, G.S., Cottam, M.A., and Suggate, S.: Highly retentive core domains in K-feldspar and their implications for  $^{40}\text{Ar}/^{39}\text{Ar}$  thermochronology illustrated by determining the cooling curve for the Capoas Granite, Palawan, The Philippines. Australian Journal of Earth Sciences 62, 883-902, <https://doi.org/10.1080/08120099.2015.1114524>, 2015.

945 Garwin, S., Hall, R. and Watanabe, Y.: Tectonic Setting, Geology, and Gold and Copper Mineralization in Cenozoic Magmatic Arcs of Southeast Asia and the West Pacific. Economic Geology, 100<sup>th</sup> Anniversary Volume, <https://doi.org/10.5382/AV100.27>, 2005.

Jourdan, F., Féraud, G., Bertrand, H., Kampunzu, A.B., Tshoso, G., Le Gall, B., Tiercelin, J.J., Capiez, P.: The Karoo triple junction questioned: evidence from Jurassic and Proterozoic  $^{40}\text{Ar}/^{39}\text{Ar}$  ages and geochemistry of the giant Okavango dyke swarm (Botswana). Earth and Planetary Science Letters 222, 989-1006, [10.1016/j.epsl.2004.03.017](https://doi.org/10.1016/j.epsl.2004.03.017), 2004.

950 Kelley, S.: Excess argon in K–Ar and Ar–Ar geochronology. Chemical Geology 188, 1-22, [https://doi.org/10.1016/s0009-2541\(02\)00064-5](https://doi.org/10.1016/s0009-2541(02)00064-5), 2002.

Kunk, M.J., Wintsch, R.P., Naeser, C.W., Naeser, N.D., Southworth, C.S., Drake, A.A., Becker, J.L.: Contrasting tectonothermal domains and faulting in the Potomac terrane, Virginia–Maryland—discrimination by  $^{40}\text{Ar}/^{39}\text{Ar}$  and fission-track thermochronology. Geological Society of America Bulletin 117, 1347-1366, <https://doi.org/10.1130/B25599.1>, 2005.

955 Landis, G. P., Snee, W., Juliani, C.: "Evaluation of argon ages and integrity of fluid-inclusion compositions: stepwise noble gas heating experiments on 1.87 Ga alunite from Tapajós Province, Brazil." Chemical Geology 215(1-4): 127-153, (2005). Levet, B. K., Jones, M. L., Sutopo, B.: The Purnama gold deposit in the Martabe District of North Sumatra, Indonesia, SMEDG-AIG Symposium, 2003.

960 Li, J., Poureau, A., Li, Z.-X., Jourdan, F., Nordsvan, A.R., Collins, W.J., Volante, S.: Heterogeneous exhumation of the Mount Isa Orogen in NE Australia after 1.6 Ga Nuna assembly: New high-precision  $^{40}\text{Ar}/^{39}\text{Ar}$  thermochronological constraints, Tectonics, 39, <https://doi.org/10.1029/2020TC006129>, 2020.

Lister, G. S. and S. L. Baldwin . "Modelling the effect of arbitrary P-T-t histories on argon diffusion in minerals using the MacArgon program for the Apple Macintosh." Tectonophysics 253(1-2): 83-109, 1996.

- 965 Love, D., H. Clark, A., J. Hodgson, C., Mortensen, J., A.: Arichibald, D. and Farrar, E.: The timing of adularia-sericite-type mineralization and alunite-kaolinite-type alteration, Mount Skukum epithermal gold deposit, Yukon Territory, Canada:  $^{40}\text{Ar}/^{39}\text{Ar}$  and U-Pb geochronology, 93, 437–462, <https://doi.org/10.2113/gsecongeo.93.4.437>, 1998.
- Lovera, O. M., Harrison, T. M., Boehnke, P.: Comment on “Systematic variations of argon diffusion in feldspars and implications for thermochronometry” by Cassata and Renne.” *Geochimica et Cosmochimica Acta* 151: 168-171, 2015.
- Mahon, K.: The New “York” Regression: Application of an Improved Statistical Method to Geochemistry, International Geology Review, 38:4, 293-303, <https://doi.org/10.1080/00206819709465336>, 1996.
- Maryono, A., Natawidjaja, D.H., van Leeuwen, T.M., Harrison, R.L. and Santoso, B.: Sumatra, an Emerging World-Class Magmatic Gold Belt. Proceedings of Sundaland Resources 2014 MGEI Annual Convention, 17-18 November 2014, Palembang, South Sumatra, Indonesia, 89-101, 2014.
- McDougall, I., and Harrison., M.T.: Geochronology and thermochronology by the  $^{40}\text{Ar}/^{39}\text{Ar}$  method, Oxford University Press, Oxford, UK, 1<sup>st</sup> edition, 1988.
- McDougall, I., and Harrison., M.T.: Geochronology and thermochronology by the  $^{40}\text{Ar}/^{39}\text{Ar}$  method, Oxford University Press, Oxford, UK, 2<sup>nd</sup> edition, 1999.
- Merrihue, C., and Turner, G.: Potassium-Argon Dating by Activation with Fast Neutrons. *Journal of Geophysical Research* 71, 2852-2857, 1966.
- 980 Muston, J.E.: Volcanoes, ore deposits, and the 3d slab geometry along the Andaman-Sumatran subduction system. M.Phil thesis, Australian national University, <https://openresearch-repository.anu.edu.au>, 2020.
- Ren, Z., and Vasconcelos, P. M.: Argon diffusion in hypogene and supergene alunites: Implications to geochronology and thermochronometry on Earth and Mars. *Geochimica et Cosmochimica Acta*, 262, 166-187, <https://doi.org/10.1016/j.gca.2019.07.014>, 2019.
- 985 Renne, P. R., Deino, A.L., Hames, W.E., Heizler, M.T., Hemming, S.R., Hodges, K.V., Koppers, A.P., Mark, D.F., Morgan, L.E., Phillips, D., Singer, B.S., Turrin, B.D., Villa, I.M., Villeneuve, Wijbrans, J.R.: Data reporting norms for  $^{40}\text{Ar}/^{39}\text{Ar}$  geochronology. *Quaternary Geochronology* 4, 346-352, 2009.
- Rye, R., Bethke, P., and Wasserman, M.: The stable isotope geochemistry of acid sulfate alteration. *Economic Geology*, 87, 225-262 <https://doi.org/10.2113/gsecongeo.87.2.225>, 1992.
- 990 Saing, S., Takahashi, R., Imai, A.: "Fluid Inclusion and Stable Isotope Study at the Southeastern Martabe Deposit: Purnama, Barani and Horas Ore Bodies, North Sumatra, Indonesia." *Resource Geology* 66(2): 127-148, 2016
- Schaen, A.J., Jicha, B.R., Hodges, K.V., Vermeesch, P., Stelten, M.E., Mercer, C.M., Phillips, D., Rivera, T.A., Jourdan, F., Matchan, E.L., Hemming, S.R., Morgan, L.E., Kelley, S.P., Cassata, W.S., Heizler, M.T., Vasconcelos, P.M., Benowitz, J.A., Koppers, A.A.P., Mark, D.F., Niespolo, E.M., Sprain, C.J., Hames, W.E., Kuiper, K.F., Turrin, B.D., Renne, P.R., Ross, J., Nomade, S., Guillou, H., Webb, L.E., Cohen, B.A., Calvert, A.T., Joyce, N., Ganerød, M., Wijbrans, J., Ishizuka, O., He, H., Ramirez, A., Pfänder, J.A., Lopez-Martínez, M., Qiu, H., Singer, B.S.: Interpreting and reporting  $^{40}\text{Ar}/^{39}\text{Ar}$  geochronologic data. *GSA Bulletin* 133, 461-487, <https://doi.org/10.1130/b35560.1>, 2021 [online 2020]
- Sharp, W.D. and Renne, P.R.: The  $^{40}\text{Ar}/^{39}\text{Ar}$  dating of core recovered by the Hawaii Scientific Drilling Project (phase 2), Hilo, Hawaii. *Geochemistry, Geophysics, Geosystems* 6, n/a-n/a. <https://doi.org/10.1029/2004GC000846>, 2005.
- 000 Sieh K. and Natawidjaja D.: Neotectonics of the Sumatran fault, Indonesia, *Journal of Geophysical Research: Solid Earth*, 105, B12, 28295-28326, 2000.
- Simmons, S.F., White, N.C. and, D.A.: Geological Characteristics of Epithermal Precious and Base Metal Deposits. *Economic Geology*, One Hundredth Anniversary Volume, 2005.
- 005 Spell, T. L., and McDougall, I.: Characterization and calibration of  $^{40}\text{Ar}/^{39}\text{Ar}$  dating standards. *Chemical Geology*, 198, 189-211, 2003.

Steiger, R. H., and Jager, E.: Subcommission on geochronology: Convention on the use of decay constants in geo- and cosmochronology. *Earth and Planetary Science Letters*, 36, 359-362, [https://doi.org/10.1016/0012-821X\(77\)90060-7](https://doi.org/10.1016/0012-821X(77)90060-7), 1977.

Sutopo, B.: The Martabe Au-Ag high-sulfidation epithermal deposits, Sumatra, Indonesia: implications for ore genesis and exploration, Ph.D. thesis, University of Tasmania, Australia, 2013.

010 Trappitsch, R., Boehnke, P., Stephan, T., Telus, M., Savina, M.R., Pardo, O., Davis, A.M., Dauphas, N., Pellin, M.J. and Huss, G.R.: New Constraints on the Abundance of  $^{60}\text{Fe}$  in the Early Solar System. *The Astrophysical Journal* 857, 2018.

Turner, G.:  $^{40}\text{Ar}^{39}\text{Ar}$  Ages from the Lunar Maria. *Earth and Planetary Science Letters* 11, 169-191.

[https://doi.org/10.1016/0012-821x\(71\)90161-0](https://doi.org/10.1016/0012-821x(71)90161-0), 1971.

015 Waltenberg, K.M.: Mineral physics and crystal chemistry of minerals suitable for weathering geochronology: implications to  $^{40}\text{Ar}/^{39}\text{Ar}$  and (U-Th)/He geochronology. PhD thesis, The University of Queensland, Australia, 2012.

White, N.C., and Hedenquist, J.W.: Epithermal environments and styles of mineralization: Variations and their causes, and guidelines for exploration. *Journal of Geochemical Exploration*, 36, 445-474, [https://doi.org/10.1016/0375-6742\(90\)90063-G](https://doi.org/10.1016/0375-6742(90)90063-G), 1990.

020 White, N.C. and Hedenquist, J.W.: Epithermal Gold Deposits: Styles, Characteristics and Exploration. *SEG Discovery* 23, 1-13, 1995.

York, D.: Least Squares Fitting of a Straight Line with Correlated Errors. *Earth and Planetary Science Letters* 5, 320-324, [https://doi.org/10.1016/s0012-821x\(68\)80059-7](https://doi.org/10.1016/s0012-821x(68)80059-7), 1969.

025 **Supplementary data: Direct dating of overprinting fluid systems in the Martabe epithermal gold deposit using highly retentive alunite**

Jack Muston<sup>1</sup>, Marnie Forster<sup>2</sup>, Davood Vasegh<sup>2</sup>, Conrad Alderton<sup>3</sup>, Shawn Crispin<sup>4</sup>, Gordon Lister<sup>5</sup>

030 **Table of contents**

**§1 Mineral separation and sample characterisation**

**§2 Sample irradiation**

**§3 Sample analysis**

**§4 Mass spectrometer setup and procedures**

035 **§5 Calculation parameters and Correction factors**

**§6 Representative air shot measurements**

**§7 Representative blank measurements**

**§8 Data reduction and software utilised**

**§9 References**

040 **§10 XML format for sample data**

**§11 XML for the fractal crystal used by MacArgon for modelling purposes**

**§12 Checklist for Data Reporting as set out by Schaen et al. 2021**

**Tables**

Table S1: Details of mineral separation

045 Table S2: Detector Calibration Values

Table S3: Air Shots and Mass Discrimination Factor

Table S4: Example of the blank measurements.

Table S5: J-Factor, Mass Discrimination, and Measurement Data.

Table S6: Components involved in the calculation of each uncertainty

050 **Figures**

Figure S1: J-Factor variation with sample position in the irradiation canister.

Figure S2: Temperature-time plotted for a single heating step (600°C for 900s)

Figure S3: Percentage <sup>39</sup>Ar release plotted against temperature, for the first part of the step-heating schedule

Figure S4: Isotope ratios plotted against the blank

## 055 §1 Mineral separation and sample characterisation

Multiple mineral grains of alunite were separated. Thin sections were not made due to the small overall sample size and overall unconsolidated nature and quality of these samples. XRD was done on grains chosen for analysis to verify their mineralogy and purity, which showed samples to be 99% pure. All 060 grains were 250-420 µm in size with sample size ranging between 100 mg and 150 mg.

No acids were used to clean samples, even though this may get rid of contamination, it can cause microstructural changes. It was decided to alternatively analyse each experiment where the step-heating procedures were detailed enough so as to identify contamination.

065

Sample ID	Target Mineral	Mass (mg)	Grain Size (µm)	Comment
Purnama P-01	Alunite	208.7	250-420	MP1: Alunite Vein: set on volcanic rock then as fracture fill
D3011643	Alunite	197.0	250-420	Purnama (MONYET) : Contact between sediment and quartz vein (high gold grade)
D3150595	Alunite	204.6	250-420	TorUluAla (KEJORA)
D3112423	Alunite	209.1	250-420	Ramba Joring (BASKARA HARIMAU): Phreatomagmatic breccia; polymict; trace sediment minor clast; altered by alunite-dickite-silica (high grade)
D3078029	Alunite	204.4	250-420	UluAlaHulu (GERHANA): Phreatomagmatic breccia; polymict; trace sediment - minor clast; altered by alunite-dickite-silica (high grade)
D3056884	Alunite	199.4	250-420	Horas: Crackle sandstone; crack/matrix fill by alunite +/- dickite (low gold grade)
D3067305	Alunite	202.0	250-420	UluAlaHulu (GERHANA): Phreatomagmatic breccia; polymict; altered by alunite-dickite-silica (low grade)
D3137821	Alunite	204.0	250-420	Horas: Massive sandstone; oxide staining; pervasive alunite-clay altered (low grade)
D3035222	Alunite	183.3	250-420	Ramba Joring (BASKARA HARIMAU): Alunite Vein (low gold grade)
D3049860	Alunite	195.9	250-420	Horas: Phreatomagmatic breccia; altered by alunite-silica (low gold grade); alunite matrix partly; clast dominant

**Table S1:** Details of mineral separation.

## §2 Sample irradiation

070

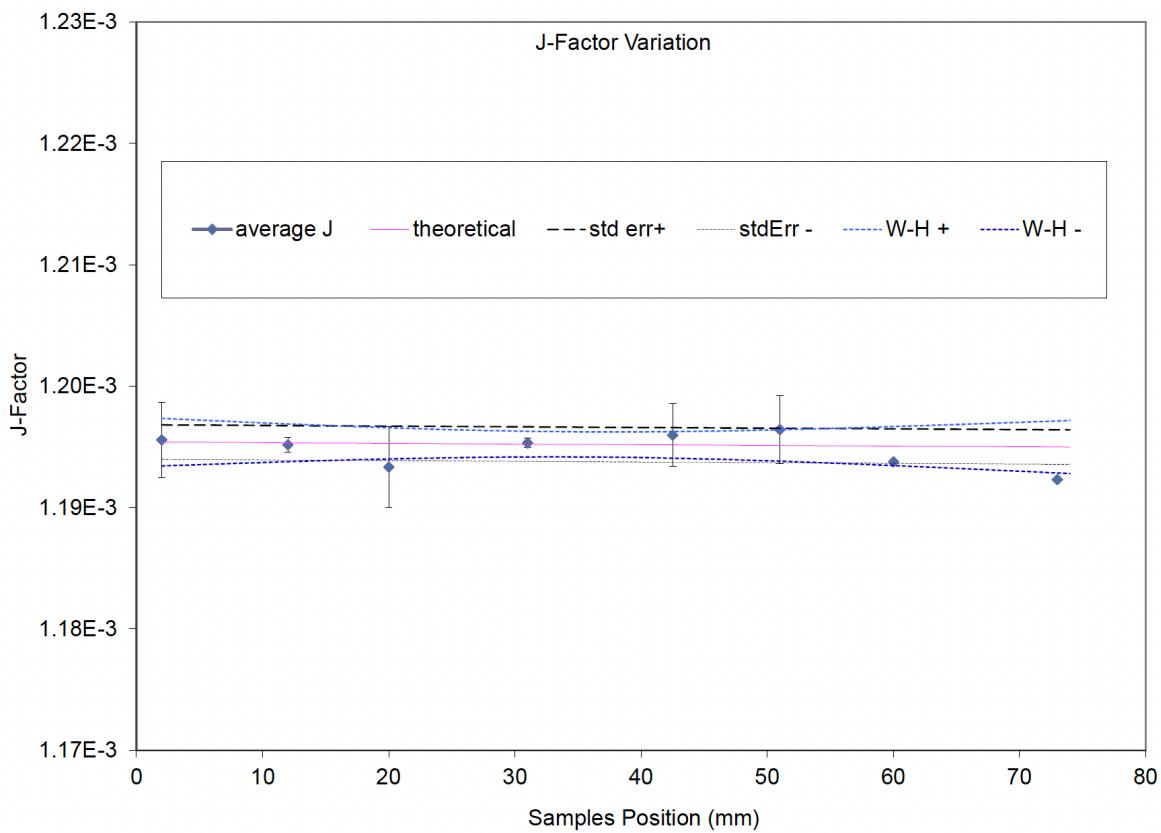
Irradiation of samples for  $^{40}\text{Ar}/^{39}\text{Ar}$  analysis was undertaken at the University of California Davis McClellan Nuclear Research Centre, CA, USA in the Central Facility position of their TRIGA reactor without rotation, with 1.0 mm of cadmium shielding as ANU CAN #30 for 6.0 hours on March 22, 2018.

075 The calculated amounts of the aliquot of mineral grains were weighed and recorded and then wrapped in labelled aluminium packets in preparation for irradiation. The sample filled foils were placed into a quartz irradiation canister together with several aliquots of the flux monitor biotite GA1550. The foil packets of GA1550 standards were dispersed 6-8 mm apart throughout the irradiation canister, between the unknown age samples. In addition, packets containing  $\text{K}_2\text{SO}_4$  and  $\text{CaF}_2$  were placed in the middle of the canister to  
080 monitor argon isotope production from potassium and other interfering elements.

Irradiated samples were unwrapped upon their return to the Australian National University, in an accredited dedicated radiation room, and then rewrapped in tin foils in preparation for analysis under vacuum in the furnace. Tin foil is used because the melting temperature of tin is lower than the experiment  
085 starting point in the furnace and gasses from tin can be pumped away prior to the sample analysis.

### J-Factor Regression

090 ANU CAN#30 was irradiated at the University of California Davis McClellan Nuclear Research Centre, CA, US. The fluence monitor was GA1550 Biotite. The plot below (Figure S1) shows the results for the calculation of the J-Factor regression for this irradiation batch that included these alunite samples.



095

**Figure S1:** J-Factor variation with sample position in the irradiation canister. Each point represents the average of the measured J-Factor for the GA1550 fluence monitor in that particular spot of the canister. The error bar on each individual point represents the average uncertainty of several measurements. The purple line is the best fit regression for the J-Factor. The black dashed line represents the standard deviation of the means. The blue dashed lines represent the weighted deviation including uncertainties.

100

### §3 Sample analysis

Resistance temperature-controlled furnace step-heating experiments were used to extract argon isotopes from the samples, with a temperature sequence rising to sufficiently high values to finally ensure 100% release of  $^{39}\text{Ar}$ . This is essential if the percentage of  $^{39}\text{Ar}$  released in each step is to be calculated.

Initial cleaning of the furnace is vital in this method. The furnace is degassed four times at 1450°C for 15 minutes and the gas pumped away prior to the loading of the sample. Blanks are measured to monitor the success of the cleaning process.

Each sample is dropped in turn into the cleaned furnace and heated to 400°C to melt the tin foil, and then left in the furnace at 350°C for 8-12 hours to allow volatiles to escape and to pump away unwanted gases. This cleaning procedure has proven to be vital in determining the quality of the resultant data.

The experiment then starts at 450°C. Each incremental heating step is heated at a constant temperature for 15 minutes. The heating process involves rapid heating to the designated temperature with no overshoot, an accurately maintained temperature for the duration of the heating time and rapid cooling after the heating event. An example of the shape to the temperature-time curve is provided in Figure S2.

The  $^{39}\text{Ar}$  diffusion experiments are designed to calculate diffusion parameters which can be subsequently used in temperature-time modelling and simulation.

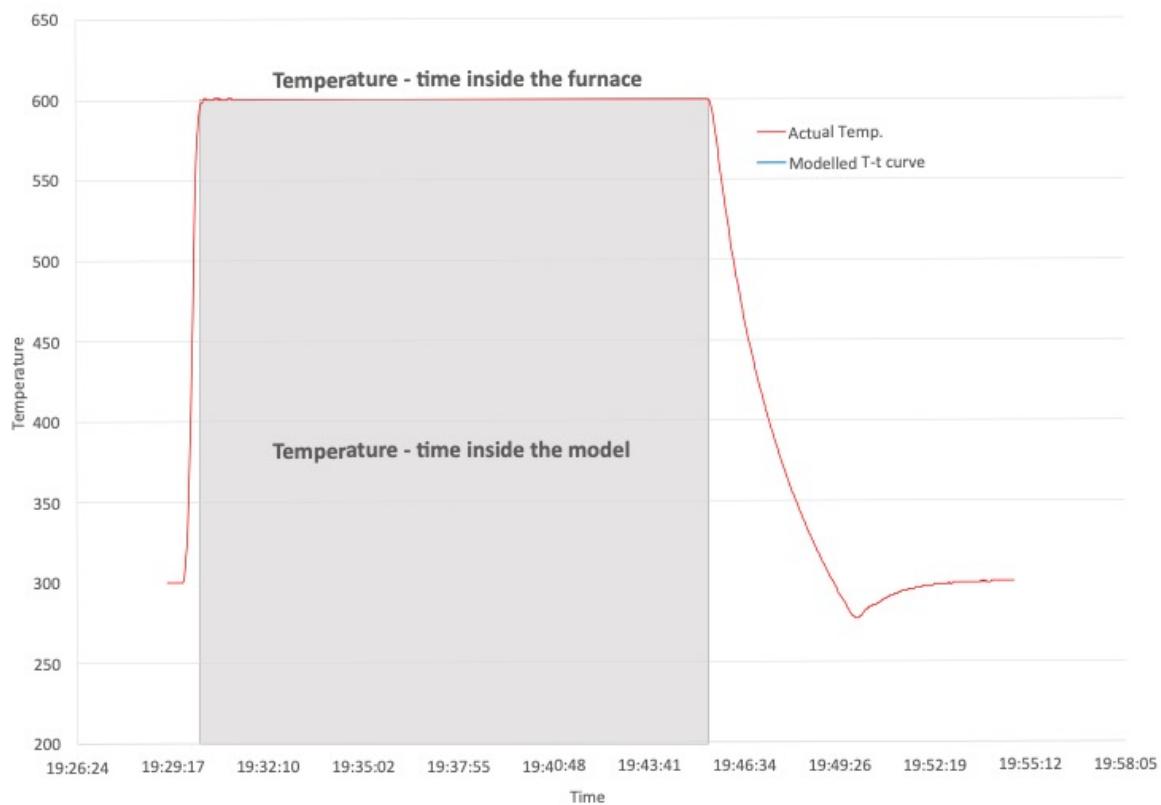
The heating schedules are recorded in the XML sequence provided for each sample. The peak temperature for each heating step rises by 20°C increments (except for the last a few steps) with 30-35 steps per sample. Figure S3 shows that whereas the initial steps are potentially the most suitable for diffusion experiments, the gas volumes released are impractically small,

The flux monitor crystals are fused using a CO<sub>2</sub> continuous-wave laser.

Gas released from the flux monitors or calibration salts in each laser well, or from the furnace after each step of the sample analysis, are exposed to three Zr-Al getters, two AP10 (one cold and one hot) and one CP50, for 10 minutes to remove active gases, the purified extracted gasses are then isotopically analysed in the Argus VI mass spectrometer.

Background levels are measured and subtracted from all analyses, both laser and furnace.

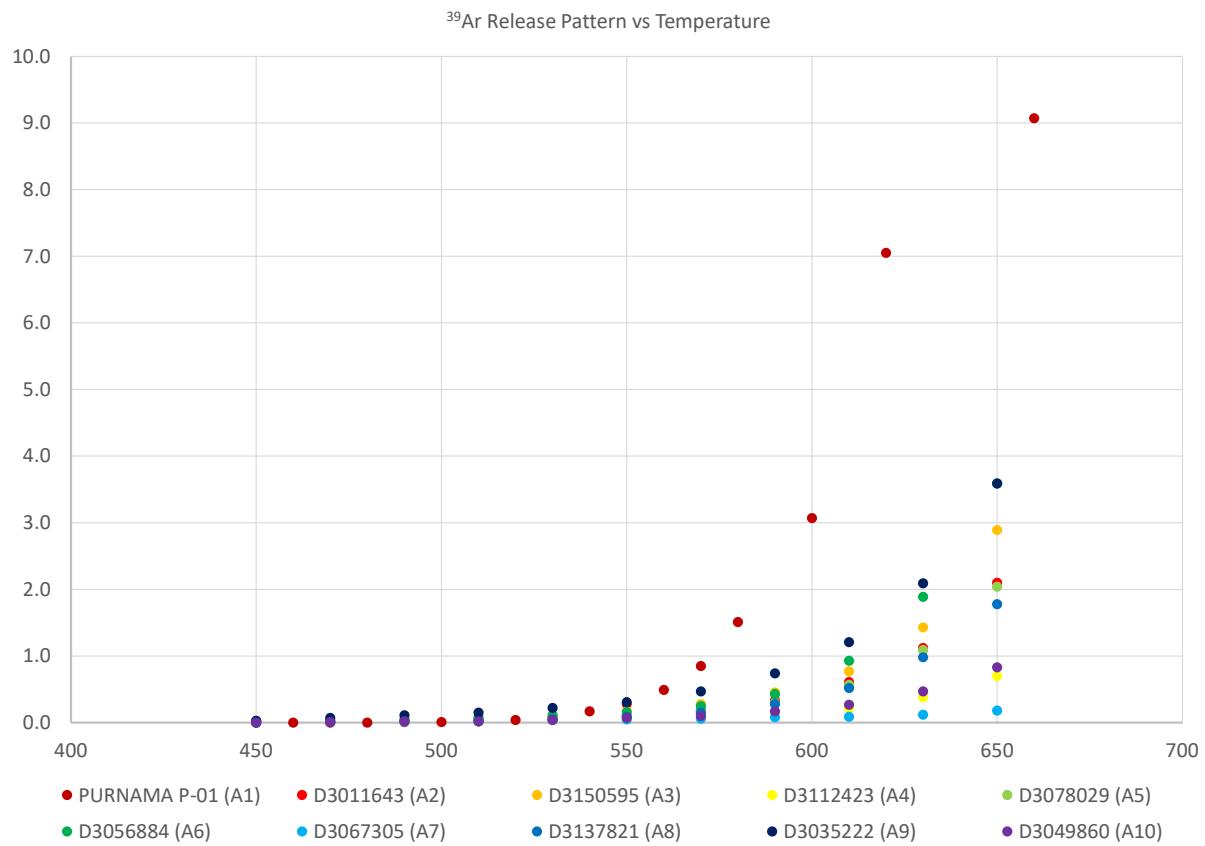
More details as to the  $^{40}\text{Ar}/^{39}\text{Ar}$  dating technique utilised can be found in McDougall and Harrison (1999) and methodologies and procedures described in Forster and Lister (2009).



135

**Figure S2:** Temperature-time plotted for a single heating step ( $600^{\circ}\text{C}$  for 900s) shown shaded. The shape for the curve differs from a Dirac function, so more  $^{39}\text{Ar}$  will be released than expected. This means that diffusivity for each step will be over-estimated because the mathematics involved assumes no loss during heating and cooling in each step. The effect is minimised by using monotonic heating sequences.

140



145

**Figure S3:** Percentage <sup>39</sup>Ar plotted against temperature, for the first 200°C of the step-heating schedule. Plot shows the <sup>39</sup>Ar release during the experiment starting at 450°C to ~650°C, being the first 200°C of the experiment. Each of the samples is colour coded as in the legend. Temperature °C is on the x-axis and the % release of <sup>39</sup>Ar is on the y-axis.

150

## §4 Mass spectrometer setup and procedures

Samples and standards were analysed in the Argon Facility at the Research School of Earth Science, The  
155 Australian National University, Canberra, Australia using a *ThermoFisher* ARGUS-VI multi-collector  
mass spectrometer (Table S2).

Mass Spectrometer: Thermo Fisher Argus VI  
Collector Type: Faraday Cups x5  
160 Calibrations: 3 levels (Zero Offset, Gain and Cross Calibration)  
Peak Centring Once for every measurement @H<sub>2</sub> (<sup>40</sup>Ar)  
Measurement Cycles: 51 cycles on all collectors, for each measurement step  
Extrapolation Method: Exponential extrapolation and uncertainty

165

**Table S2: Detector Calibration Values**

Name	UFC Offset [fA]	Gain	Cross Calibration Factor
H2	-4.9761469	0.9871203	1
H1	-2.2071069	0.9671459	1.007184188
AX	-7.6814703	0.9769602	1.017518151
L1	-2.3979322	0.9706487	1.030604297
L2	-3.1329948	0.9676338	1.047244337

## 170 §5 Calculation parameters and Correction Factors

### The calculation parameters:

	Lambda $^{40}\text{K}$ (Steiger and Jaeger 1977)	5.543E-10
	Lambda $^{39}\text{Ar}$ (Kondev et al 2017)	7.0548E-06
175	Lambda $^{37}\text{Ar}$ (Kondev et al 2017)	1.9798E-02
	Lambda $^{36}\text{Cl}$ (Kondev et al 2017)	6.2985E-09
	Flux Monitor (Spell and McDougall 2003)	GA1550 @ $98.5 \pm 0.8$ Ma
	Total irradiation power	6.0 MW
	Irradiation Date	March 22, 2018
180	Irradiation shielding	Cadmium 1.0 mm

### Interfering isotope production ratios:

	$(^{36}\text{Ar}/^{37}\text{Ar})_{\text{Ca}}$ correction factor	3.2858E-04
	$(^{39}\text{Ar}/^{37}\text{Ar})_{\text{Ca}}$ correction factor	7.9252E-04
185	$(^{40}\text{Ar}/^{39}\text{Ar})_{\text{K}}$ correction factor	3.3453E-02
	$(^{38}\text{Ar}/^{39}\text{Ar})_{\text{K}}$ correction factor	1.1716E-02
	$(^{38}\text{Ar})_{\text{Cl}}/(^{39}\text{Ar})_{\text{K}}$ correction factor	8.1145E-02
	Ca/K conversion factor	1.90

### 190 Atmospheric Argon correction ratio:

$^{40}\text{Ar}/^{36}\text{Ar}$	(Nier 1950)	295.55
$^{40}\text{Ar}/^{38}\text{Ar}$	(Nier 1950)	1580.95

195 The nuclear interfering values for the correction factors for the isotopes are listed below. These are measured for the reactions and uncertainties of  $(^{36}\text{Ar}/^{37}\text{Ar})_{\text{Ca}}$ ,  $(^{39}\text{Ar}/^{37}\text{Ar})_{\text{Ca}}$ ,  $(^{40}\text{Ar}/^{39}\text{Ar})_{\text{K}}$ ,  $(^{38}\text{Ar}/^{39}\text{Ar})_{\text{K}}$  and  $(^{38}\text{Ar})_{\text{Cl}}/(^{39}\text{Ar})_{\text{K}}$ , and these were calculated prior to sample analysis. Note that KCl salts are not included in every canister, as the derived correction factors are representative of a particular reactor, and reactor position. The neutron irradiation of  $^{35}\text{Cl}$  and  $^{37}\text{Cl}$  can convert them into  $^{36}\text{Cl} \Rightarrow ^{36}\text{Ar}$  (with a half-life of 3.01E5 a) and  $^{38}\text{Cl} \Rightarrow ^{38}\text{Ar}$  (with a half-life of 37.2 minutes) respectively. When the ratio of Cl/K is high and analysis is undertaken with a year delay from the time of irradiation, the production of  $^{36}\text{Ar}$  from the decay of  $^{36}\text{Cl}$  can cause a few percent drift in the calculated age from what can be expected. This is not relevant here, therefore. Note that (as recognised by Roddick et al 1983), the production ratio of  $^{38}\text{Ar(Cl)}$  to  $^{39}\text{Ar(K)}$  in KCl salt, is directly related to the ratio of thermal-neutrons to the fast-neutrons in the reactor. Cadmium shielding 0.2 mm thick reduces the flux of the thermal neutrons significantly. With thicker cadmium shielding (1.0 mm) as used here, production of  $^{38}\text{Ar(Cl)}$  would have been virtually eliminated.

Measuring the ratio between  $^{38}\text{Ar(Cl)}$  and  $^{39}\text{Ar(K)}$  is a sensitive method of determining the relative chlorine abundances in the sample and thus rectifying the  $^{36}\text{Ar(Cl)}$  effect in the age calculation.

First, we measure the zero-age potassium salt to determine what proportion of measured  $^{38}\text{Ar}$  comes from irradiation of the potassium. The only stable chlorine isotopes are  $^{35}\text{Cl}$  and  $^{37}\text{Cl}$  and both can absorb slow thermal neutrons and convert to  $^{36}\text{Cl}$  and  $^{38}\text{Cl}$  respectively. The half-life of the  $^{38}\text{Cl}$  is in order of minutes and it will convert into  $^{38}\text{Ar}$ . Hence there are three different sources for  $^{38}\text{Ar}$ : i) from the atmosphere; ii) from fast neutron irradiation of potassium; and iii) slow thermal neutron irradiation of chlorine. Since we have analysed the influence of zero-age potassium on  $^{38}\text{Ar}$  and  $^{40}\text{Ar}$ , the influence of chlorine on  $^{38}\text{Ar}$  and then  $^{36}\text{Ar}$  can be calculated. However, the overall influence of chlorine on  $^{38}\text{Ar}$  was very significantly reduced by blocking thermal neutrons via the use of cadmium shielding. This also ensured minimum recoil of  $^{39}\text{Ar}$  from the lattice during irradiation.

## §6 Representative air shot measurements

220

The discrimination factor was calculated by analysing five air shots analysis on either side of sample analysis and the calculation of the 1amu was used for the discrimination factor. Table S3 shows an example of the analysed air shots.

225

Date	$^{40}\text{Ar} \pm \% \text{err}$		$^{38}\text{Ar} \pm \% \text{err}$		$^{36}\text{Ar} \pm \% \text{err}$		1amu	Reported Value
16-Jul-2018	1,853.764	0.019	1.117	2.365	5.985	0.338	0.98832	0.9876946 ± 0.152%
16-Jul-2018	1,853.070	0.023	1.129	2.249	5.926	0.352	0.98595	
16-Jul-2018	1,852.046	0.019	1.139	2.154	6.001	0.437	0.98919	
16-Jul-2018	1,851.791	0.017	1.151	1.843	5.990	0.371	0.98880	
16-Jul-2018	1,850.720	0.019	1.120	2.171	5.925	0.278	0.98621	

Table S3: Air Shots and Mass Discrimination Factor

230

## §7 Representative blank measurements

The blank measurements are undertaken with different temperatures schedule between 300°C and 1450°C, depending on the degassing behaviour and previous blank measurement results. The degassing and blank measurement procedure continues until the ratios of  $^{40}\text{Ar}$ ,  $^{38}\text{Ar}$  and  $^{36}\text{Ar}$  drop to atmospheric ratios, and  $^{39}\text{Ar}$  and  $^{37}\text{Ar}$  drop below detectable levels. The entire procedure of degassing and blank measurements is repeated at the end of a set of samples. Blanks will be done in-between samples that belong to a set, with reduced steps at 300°C, 1300°C and 1450°C to check isotope levels. In addition, the mass of each sample is calculated so that the volume of gas released from each step overwhelms the volume of gas that may occur in the blank. Table S4 is a representative sequence of measured blank values recorded during a monitoring process.

Temperature	$^{40}\text{Ar}$ (fA)	$^{39}\text{Ar}$ (fA)	$^{38}\text{Ar}$ (fA)	$^{37}\text{Ar}$ (fA)	$^{36}\text{Ar}$ (fA)	$^{40}\text{Ar}/^{36}\text{Ar}$
300	23.003	0.241	0.061	ND	0.459	345.66
500	32.398	0.258	0.121	ND	0.465	365.19
700	28.016	0.249	0.121	ND	0.491	352.54
900	25.910	0.297	0.156	ND	0.529	344.49
1100	40.028	0.559	0.185	ND	0.883	340.86
1300	72.377	1.697	0.692	ND	3.549	315.90
1450	205.860	5.029	1.239	ND	6.070	329.42
300	16.830	0.133	0.023	ND	0.457	332.37
500	13.264	0.149	0.100	ND	0.522	320.93
700	19.596	0.239	0.085	ND	0.538	331.90
900	21.499	0.248	0.150	ND	0.553	334.37
1100	33.199	0.438	0.181	ND	0.903	332.29
1300	165.461	1.303	0.515	ND	2.624	358.57
1450	978.806	5.173	2.124	0.575	10.814	386.02
300	20.280	2.345	0.519	ND	0.690	324.92
500	0.602	2.484	0.717	ND	1.260	295.98
700	3.448	2.501	0.626	ND	0.867	299.48
900	27.434	2.532	0.593	ND	0.663	336.87
1100	38.888	2.552	1.943	ND	7.511	300.68
1300	95.268	2.709	4.624	ND	21.638	299.91
1450	131.870	3.094	5.001	ND	23.673	301.07
1300	145.309	9.587	6.772	1.554	25.921	301.11
1450	50.361	10.719	4.783	1.579	15.109	298.84

**Table S4:** Example of a blank measurement interspersed during measurement of a sequence of samples with isotopes were being monitored prior to sample analysis (\* => Not Detectable). Temperature is °C.

A blank cannot be measured while the sample is still in the furnace, no matter whether a step-heating experiment is conducted using a furnace or with a crucible heated with a laser, so the question of 'inheritance' from heating step to heating step remains an open one. However, since each step is small, inheritance from the previous steps will merely smooth observed variations.

250

By undertaking many steps, we were able to routinely demonstrate that the experiment starts and ends with isotopic ratios typical of air, so we can assume that: i) the furnace has been cleaned by the end of the experiment; ii) inheritance between experiments is not greater than the blank.

Figure S4 has been included to make this point (shown below).

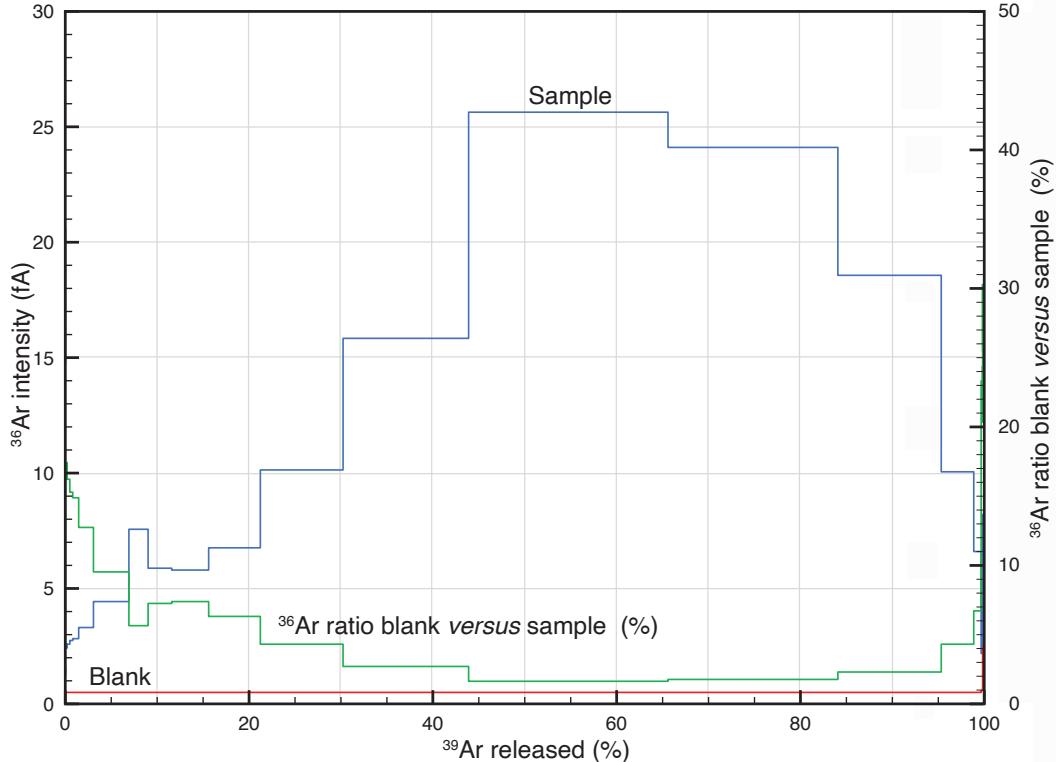
255

Note that small samples as suggested often yield variability and error because of their size.

Larger sample sizes guarantee a high signal to noise ratio once significant release of gas commences, so the furnace blanks become relatively low once significant release from the sample commences.

Such sample sizes also allow sufficient gas in each measurement step so as to be able to use 51 cycles of measurement to improve precision.

260



**Figure S4:** The overall release pattern  $^{36}\text{Ar}$  during the release of the  $^{39}\text{Ar}$  from % 0.0 to % 100.0 in sample A1. LHS Y-Axis shows the intensity of the  $^{36}\text{Ar}$  abundances in each measured step of the sample (blue) and that of the furnace blank (red). The RHS Y-Axis shows the ratio percentage of the  $^{36}\text{Ar}$  in the blank to the  $^{36}\text{Ar}$  in the sample (green).

265

## §8 Data reduction and software utilised:

There are three stages involved, each stage requiring different software. Each measurement step involves 51 cycles of measurement undertaken by 5 individual Faraday cups, one for each isotope as the intensities decline. The measured values in each cycle are extrapolated to time-zero, controlled by the ThermoFisher proprietary software (QTegra). This works exclusively under MS Windows.

Agnes the argon robot comprises a linked system of automated valves in a dual gas extraction line, each with its own resistance furnace and a (45x) sample changer. Its robotic capabilities (designed in house at ANU) allow measurement to proceed for in excess of ninety days uninterrupted. The argon laboratory was thus one of very few laboratories at ANU that was allowed to remain open and to continue

measurement throughout the lockdowns of the pandemic. The controller application ensures collection of the extrapolated values of all isotopes in each step and encapsulates this data together with all other required data as a Raw Data File. Note that some of this information is obtained by first mapping then accessing memory used by the QTegra program to allow runtime information to be seamlessly interrogated. The controller application is the mind of Agnes and operates under MS Windows.

The output Raw Data file is later used as input for the Agnes data reduction modules, with MacOS and MS Windows versions available. Agnes includes data about irradiation and age of the flux monitor to produce XML data tables that can be read by the *eArgon*, available for MacOS from the AppStore.

The Agnes data reduction modules are based on an adapted version of the *Noble* software (2016 version developed and adapted by Davood Vasegh). The data reduction was based on optimising MSWD (the mean square of weighted deviates) of isotope intensities with an exponential best fit methodology. The discrimination factor was calculated by analysing five air shots analysis on either side of sample analysis based on the assumed atmospheric  $^{40}\text{Ar}/^{36}\text{Ar}$  ratio. The calculation of 1 amu was used for the discrimination factor. Isotopic data for the sample is supplied in the XML tables, including details of the heating schedule, isotope abundances and uncertainties for %Ar\*,  $^{40}\text{Ar}*/^{39}\text{Ar}(K)$ , cumulative  $^{39}\text{Ar}\%$ , age and uncertainty, Ca/K, Cl/K, J-factor and J-factor uncertainty, noting that the fractional uncertainties are shown as stated in the XML output included below. Uncertainty levels of the calculated ages are reported at one sigma, though in *eArgon* plots a two sigma value is shown.

The new applications benefit from modern programming strategies while minor ambiguities in the legacy code (e.g., date/time calculations) have been remedied. The new code also provides more flexibility while working with the revised age calculation parameters. The output of the applications are XML tables that are compatible with the *eArgon* program used in our laboratory and with the capability of being altered for other applications as well. *Noble* itself is documented in McDougall and Harrison (1999), with the manual is available on the argon lab website <https://argon.anu.edu.au/>

Note that the *eArgon* program is a graphic analysis program with minimal mathematical additions to allow age recalculation, and regression and uncertainty calculations based on the data for selected steps in any of a number of different plots, for example as shown in the accompanying paper.

The reported data have been corrected for system backgrounds, mass discrimination, fluence gradients and atmospheric contamination. GA1550 standards were analysed, and an exponential best fit was then used for the calculation of the J-factor and J-factor uncertainty (Table S5).

Sample Name	J-Factor ± %uncertainty		Mass Discrimination Factor ± %uncertainty		Measurement Date
Purnama P-01	1.19537E-03	0.2420	0.9876946	0.152	16-Jul-2018
D3011643	1.19536E-03	0.2420	0.9876946	0.152	19-Jul-2018
D3150595	1.19534E-03	0.2420	0.9876946	0.152	21-Jul-2018
D3112423	1.19532E-03	0.2420	0.9876946	0.152	23-Jul-2018
D3078029	1.19531E-03	0.2420	0.9876946	0.152	25-Jul-2018
D3056884	1.19530E-03	0.2420	0.9876946	0.152	27-Jul-2018
D3067305	1.19528E-03	0.2420	0.9882968	0.098	29-Jul-2018
D3137821	1.19526E-03	0.2420	0.9882968	0.098	01-Aug-2018
D3035222	1.19525E-03	0.2420	0.9882968	0.098	03-Aug-2018
D3049860	1.19524E-03	0.2420	0.9882968	0.098	06-Aug-2018

**Table S5: Sample J-Factor, Mass Discrimination, and Measurement Data.** Samples in this study were irradiated on March 22, 2018

$^{40}\text{Ar}/^{39}\text{Ar}$  isotopic data of the samples are supplied in the Excel Data Tables, which include details on the heating schedule, Argon isotopes abundances and their uncertainty levels, %Ar\*,  $^{40}\text{Ar}^*/^{39}\text{Ar}(K)$ , Cumulative  $^{39}\text{Ar}\%$ , calculated age and its uncertainty, Ca/K, Cl/K, J-Factor and its uncertainty. Noting that all the reported uncertainties are at one sigma level and the fractional uncertainties are shown as % in the headings of the appropriate columns of data tables. The components involved in the calculation of the uncertainties have listed in Table S6.

315

Uncertainty of:	Components involved in the calculation
Isotope Abundances	Uncertainty of isotope measurement Uncertainty of Mass Discrimination Factor (except for $^{39}\text{Ar}$ )
J-Factor	Uncertainty of $^{40}\text{K}$ Decay Constant Uncertainty of Age of the Flux monitor Uncertainty of Flux monitor isotopes abundances
Calculated Age	Uncertainty of Isotope Abundances J-Factor value and uncertainty of J-Factor $^{40}\text{K}$ Decay Constant value and uncertainty of $^{40}\text{K}$ Decay Constant

**Table S6: Components involved in the calculation of each uncertainty**

## §9 References:

320

- Forster, M.A. and Lister, G.S. 2009. Core-complex-related extension of the Aegean lithosphere initiated at the Eocene-Oligocene transition. *Journal Geophysical Research*, **114**, B02401.
- Kondev, F.G. and Naimi, S. 2017. The NUBASE2016 evaluation of nuclear properties. *Chinese physics C*, **41**(3), p.030001.
- 325 McDougall, I., & Harrison, T.M. (Eds.). 1999. Geochronology and Thermochronology by the  $^{40}\text{Ar}/^{39}\text{Ar}$  Method, 2nd ed., 269 pp. Oxford Univ. Press, New York.
- Nier, A.O., 1950. A redetermination of the relative abundances of the isotopes of carbon, nitrogen, oxygen, argon, and potassium. *Physical Review*, **77**(6), p.789.
- Spell, T. L., & I. McDougall. 2003. Characterization and calibration of  $^{40}\text{Ar}/^{39}\text{Ar}$  dating standards. 330 *Chemical Geology*, **198**, 189–211.
- Steiger, R. H., & E. Jager. 1977. Subcommission on geochronology: Convention on the use of decay constants in geo- and cosmochronology. *Earth Planetary Science Letters*, **36**, 359–362.
- Tetley, N., McDougall, I. & Heydegger, H. R. 1980. Thermal neutron interferences in the  $^{40}\text{Ar}/^{39}\text{Ar}$  dating technique. *Journal Geophysical Research*, **85**, 7201–7205.

335

## §10 XML data output from *eArgon*

```
<?xml version="1.0" encoding="UTF-8"?>
<eArgon>
 340   <eArgonDataObject>
    <ArgonData>
      <SampleDescription>ANU CAN #30, PURNAMA P-01, Foil: A1, Alunite, 85.9mg, Steps: 35</SampleDescription>
      <StepData>
        <StepNumber>0</StepNumber>
        <FurnaceTemperature_DegreesCelsius>450.000</FurnaceTemperature_DegreesCelsius>
        <Duration_minutes>15.000</Duration_minutes>
        <Isotope id="Ar36" value="8.50889e-17" error="3.31e0"></Isotope>
        <Isotope id="Ar37" value="1.8353e-17" error="5.006e1"></Isotope>
        <Isotope id="Ar38" value="1.8872e-17" error="1.82e1"></Isotope>
        <Isotope id="Ar39" value="5.77889e-17" error="2.47e0"></Isotope>
        <Isotope id="Ar40" value="2.67834e-14" error="2.47e0"></Isotope>
        <Isotope id="Ar36_correctedForIsotopeInterference" value="8.50889e-17" error="3.31e0"></Isotope>
        <Isotope id="Ar39_correctedForIsotopeInterference" value="5.77889e-17" error="2.47e0"></Isotope>
        <Isotope id="Ar40_correctedForIsotopeInterference" value="2.67834e-14" error="2.47e0"></Isotope>
        <percentage_radiogenic_argon>6.110</percentage_radiogenic_argon>
        <IsotopeRatio id="Ar40_Ar39" value="4.6346962825e2" error="0.0e0"></IsotopeRatio>
        <IsotopeRatio id="radiogenicAr40_Ar39" value="2.83e1" error="0.0e0"></IsotopeRatio>
        <cumulated_percentage_Ar39_released>0.000</cumulated_percentage_Ar39_released>
        <MeasuredAge value="60.019" stddev="38.374"></MeasuredAge>
        <RecalculatedAge>60.019</RecalculatedAge>
        <IsotopeRatio id="Ca_K" value="6.03e-1" error="0.0e0"></IsotopeRatio>
        <IsotopeRatio id="Cl_K" value="4.0e-1" error="0.0e0"></IsotopeRatio>
        <IsotopeRatio id="Ar36_Ar40" value="3.17692675314e-3" error="1.83626366331e-4"></IsotopeRatio>
        <IsotopeRatio id="Ar39_Ar40" value="2.15763868665e-3" error="1.0658735112e-4"></IsotopeRatio>
      </StepData>
      <StepData>
        <StepNumber>1</StepNumber>
        <FurnaceTemperature_DegreesCelsius>460.000</FurnaceTemperature_DegreesCelsius>
        <Duration_minutes>15.000</Duration_minutes>
        <Isotope id="Ar36" value="5.13895e-17" error="5.54e0"></Isotope>
        <Isotope id="Ar37" value="1.8363e-17" error="5.025e1"></Isotope>
        <Isotope id="Ar38" value="6.2275e-18" error="2.922e1"></Isotope>
        <Isotope id="Ar39" value="2.41248e-17" error="4.99e0"></Isotope>
        <Isotope id="Ar40" value="1.68965e-14" error="4.99e0"></Isotope>
        <Isotope id="Ar36_correctedForIsotopeInterference" value="5.13895e-17" error="5.54e0"></Isotope>
        <Isotope id="Ar39_correctedForIsotopeInterference" value="2.41248e-17" error="4.99e0"></Isotope>
        <Isotope id="Ar40_correctedForIsotopeInterference" value="1.68965e-14" error="4.99e0"></Isotope>
        <percentage_radiogenic_argon>10.110</percentage_radiogenic_argon>
        <IsotopeRatio id="Ar40_Ar39" value="7.00378863244e2" error="0.0e0"></IsotopeRatio>
        <IsotopeRatio id="radiogenicAr40_Ar39" value="7.081e1" error="0.0e0"></IsotopeRatio>
        <cumulated_percentage_Ar39_released>0.000</cumulated_percentage_Ar39_released>
        <MeasuredAge value="146.585" stddev="98.112"></MeasuredAge>
        <RecalculatedAge>146.585</RecalculatedAge>
        <IsotopeRatio id="Ca_K" value="1.45e0" error="0.0e0"></IsotopeRatio>
        <IsotopeRatio id="Cl_K" value="1.99e0" error="0.0e0"></IsotopeRatio>
        <IsotopeRatio id="Ar36_Ar40" value="3.04142869825e-3" error="3.20262441926e-4"></IsotopeRatio>
        <IsotopeRatio id="Ar39_Ar40" value="1.42779865653e-3" error="1.42494305921e-4"></IsotopeRatio>
      </StepData>
      <StepData>
        <StepNumber>2</StepNumber>
        <FurnaceTemperature_DegreesCelsius>470.000</FurnaceTemperature_DegreesCelsius>
        <Duration_minutes>15.000</Duration_minutes>
        <Isotope id="Ar36" value="5.15853e-17" error="5.7e0"></Isotope>
        <Isotope id="Ar37" value="1.8373e-17" error="5.016e1"></Isotope>
        <Isotope id="Ar38" value="6.8941e-18" error="3.487e1"></Isotope>
        <Isotope id="Ar39" value="3.00797e-17" error="3.97e0"></Isotope>
        <Isotope id="Ar40" value="1.70018e-14" error="3.97e0"></Isotope>
```

```

400 <Isotope id="Ar36_correctedForIsotopeInterference" value="5.15853e-17" error="5.7e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="3.00797e-17" error="3.97e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="1.70018e-14" error="3.97e0"></Isotope>
<percentage_radiogenic_argon>10.330</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="5.65225052112e2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="5.837e1" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.000</cumulated_percentage_Ar39_released>
<MeasuredAge value="121.684" stddev="73.692"></MeasuredAge>
<RecalculatedAge>121.684</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.16e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.36e0" error="0.0e0"></IsotopeRatio>
405 <IsotopeRatio id="Ar36_Ar40" value="3.03410815325e-3" error="2.9339825842e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.76920678987e-3" error="1.40475019116e-4"></IsotopeRatio>
</StepData>
<StepData>
410 <StepNumber>3</StepNumber>
<FurnaceTemperature_DegreesCelsius>480.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="7.90858e-17" error="3.17e0"></Isotope>
<Isotope id="Ar37" value="1.8383e-17" error="5.005e1"></Isotope>
<Isotope id="Ar38" value="1.259e-17" error="2.16e1"></Isotope>
<Isotope id="Ar39" value="6.32035e-17" error="2.3e0"></Isotope>
415 <Isotope id="Ar40" value="2.4737e-14" error="2.3e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="7.90858e-17" error="3.17e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="6.32035e-17" error="2.3e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="2.4737e-14" error="2.3e0"></Isotope>
<percentage_radiogenic_argon>5.510</percentage_radiogenic_argon>
420 <IsotopeRatio id="Ar40_Ar39" value="3.9138655296e2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="2.157e1" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.000</cumulated_percentage_Ar39_released>
<MeasuredAge value="45.923" stddev="31.029"></MeasuredAge>
<RecalculatedAge>45.923</RecalculatedAge>
425 <IsotopeRatio id="Ca_K" value="5.53e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="6.41e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.19706512512e-3" error="1.74879462344e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="2.55501879775e-3" error="1.17530864697e-4"></IsotopeRatio>
</StepData>
<StepData>
430 <StepNumber>4</StepNumber>
<FurnaceTemperature_DegreesCelsius>490.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="8.44465e-17" error="2.64e0"></Isotope>
<Isotope id="Ar37" value="1.8393e-17" error="5.005e1"></Isotope>
435 <Isotope id="Ar38" value="1.2922e-17" error="1.169e1"></Isotope>
<Isotope id="Ar39" value="1.00732e-16" error="2.12e0"></Isotope>
<Isotope id="Ar40" value="2.76315e-14" error="2.12e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="8.44465e-17" error="2.64e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="1.00732e-16" error="2.12e0"></Isotope>
440 <Isotope id="Ar40_correctedForIsotopeInterference" value="2.76315e-14" error="2.12e0"></Isotope>
<percentage_radiogenic_argon>9.670</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="2.74307072231e2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="2.654e1" error="0.0e0"></IsotopeRatio>
445 <cumulated_percentage_Ar39_released>0.010</cumulated_percentage_Ar39_released>
<MeasuredAge value="56.343" stddev="18.288"></MeasuredAge>
<RecalculatedAge>56.343</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="3.47e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="5.39e-1" error="0.0e0"></IsotopeRatio>
450 <IsotopeRatio id="Ar36_Ar40" value="3.05616777953e-3" error="1.45473586305e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="3.64554946347e-3" error="1.54571297251e-4"></IsotopeRatio>
</StepData>
<StepData>
455 <StepNumber>5</StepNumber>
<FurnaceTemperature_DegreesCelsius>500.000</FurnaceTemperature_DegreesCelsius>

```

<Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.09416e-16" error="1.75e0"></Isotope>  
 <Isotope id="Ar37" value="1.8403e-17" error="5.001e1"></Isotope>  
 <Isotope id="Ar38" value="2.3788e-17" error="1.188e1"></Isotope>  
 465 <Isotope id="Ar39" value="2.16481e-16" error="8.0e-1"></Isotope>  
 <Isotope id="Ar40" value="3.39775e-14" error="8.0e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.09416e-16" error="1.75e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.16481e-16" error="8.0e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.39775e-14" error="8.0e-1"></Isotope>  
 470 <percentage\_radiogenic\_argon>4.820</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="1.56953728041e2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="7.573e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.010</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="16.259" stddev="6.205"></MeasuredAge>  
 475 <RecalculatedAge>16.259</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.62e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.91e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.22024869399e-3" error="8.21163416967e-5"></IsotopeRatio>  
 480 <IsotopeRatio id="Ar39\_Ar40" value="6.37130453977e-3" error="1.01940872636e-4"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 <StepNumber>6</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>510.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 485 <Isotope id="Ar36" value="3.24843e-16" error="1.25e0"></Isotope>  
 <Isotope id="Ar37" value="1.8445e-17" error="5.001e1"></Isotope>  
 <Isotope id="Ar38" value="6.413e-17" error="3.58e0"></Isotope>  
 <Isotope id="Ar39" value="3.36127e-16" error="9.4e-1"></Isotope>  
 490 <Isotope id="Ar40" value="9.80441e-14" error="9.4e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="3.24843e-16" error="1.25e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.36127e-16" error="9.4e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="9.80441e-14" error="9.4e-1"></Isotope>  
 <percentage\_radiogenic\_argon>2.080</percentage\_radiogenic\_argon>  
 495 <IsotopeRatio id="Ar40\_Ar39" value="2.91687665674e2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="6.059e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.020</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="13.020" stddev="9.641"></MeasuredAge>  
 <RecalculatedAge>13.020</RecalculatedAge>  
 500 <IsotopeRatio id="Ca\_K" value="1.04e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="7.37e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.31323353471e-3" error="7.255981441e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="3.42832460087e-3" error="6.44525024963e-5"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 <StepNumber>7</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>520.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 505 <Isotope id="Ar36" value="1.40504e-16" error="1.67e0"></Isotope>  
 <Isotope id="Ar37" value="1.8455e-17" error="5.0e1"></Isotope>  
 <Isotope id="Ar38" value="3.5701e-17" error="4.43e0"></Isotope>  
 <Isotope id="Ar39" value="7.17044e-16" error="3.3e-1"></Isotope>  
 <Isotope id="Ar40" value="4.3933e-14" error="3.3e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.40504e-16" error="1.67e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="7.17044e-16" error="3.3e-1"></Isotope>  
 510 <Isotope id="Ar40\_correctedForIsotopeInterference" value="4.3933e-14" error="3.3e-1"></Isotope>  
 <percentage\_radiogenic\_argon>5.480</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="6.12696013076e1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="3.357e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.040</cumulated\_percentage\_Ar39\_released>  
 515 <MeasuredAge value="7.225" stddev="2.124"></MeasuredAge>  
 <RecalculatedAge>7.225</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="4.89e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.06e-2" error="0.0e0"></IsotopeRatio>

```

525   <IsotopeRatio id="Ar36_Ar40" value="3.19814262627e-3" error="6.39628525254e-5"></IsotopeRatio>
      <IsotopeRatio id="Ar39_Ar40" value="1.63213074454e-2" error="1.0772062914e-4"></IsotopeRatio>
    </StepData>
<StepData>
  <StepNumber>8</StepNumber>
  <FurnaceTemperature_DegreesCelsius>530.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="1.43855e-16" error="1.06e0"></Isotope>
  <Isotope id="Ar37" value="1.8466e-17" error="5.0e1"></Isotope>
  <Isotope id="Ar38" value="4.1327e-17" error="2.91e0"></Isotope>
  <Isotope id="Ar39" value="1.38701e-15" error="2.7e-1"></Isotope>
  <Isotope id="Ar40" value="4.43345e-14" error="2.7e-1"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="1.43855e-16" error="1.06e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="1.38701e-15" error="2.7e-1"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="4.43345e-14" error="2.7e-1"></Isotope>
  <percentage_radiogenic_argon>4.100</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="3.19640810088e1" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.311e0" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>0.080</cumulated_percentage_Ar39_released>
  <MeasuredAge value="2.825" stddev="0.721"></MeasuredAge>
  <RecalculatedAge>2.825</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="2.53e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="1.75e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="3.24476423553e-3" error="4.31553643325e-5"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="3.12851165571e-2" error="1.68939629408e-4"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>9</StepNumber>
  <FurnaceTemperature_DegreesCelsius>540.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="1.51556e-16" error="1.1e0"></Isotope>
  <Isotope id="Ar37" value="1.8476e-17" error="5.0e1"></Isotope>
  <Isotope id="Ar38" value="5.6813e-17" error="2.35e0"></Isotope>
  <Isotope id="Ar39" value="3.20079e-15" error="1.8e-1"></Isotope>
  <Isotope id="Ar40" value="4.91056e-14" error="1.8e-1"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="1.51556e-16" error="1.1e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="3.20079e-15" error="1.8e-1"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="4.91056e-14" error="1.8e-1"></Isotope>
  <percentage_radiogenic_argon>8.760</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="1.53417125147e1" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.348e0" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>0.170</cumulated_percentage_Ar39_released>
  <MeasuredAge value="2.904" stddev="0.336"></MeasuredAge>
  <RecalculatedAge>2.904</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="1.1e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="3.26e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="3.08632823955e-3" error="3.95050014662e-5"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="6.51817715291e-2" error="2.34654377505e-4"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>10</StepNumber>
  <FurnaceTemperature_DegreesCelsius>550.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="1.41056e-16" error="9.6e-1"></Isotope>
  <Isotope id="Ar37" value="1.8486e-17" error="5.0e1"></Isotope>
  <Isotope id="Ar38" value="7.3021e-17" error="2.47e0"></Isotope>
  <Isotope id="Ar39" value="4.09419e-15" error="1.8e-1"></Isotope>
  <Isotope id="Ar40" value="4.72383e-14" error="1.8e-1"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="1.41056e-16" error="9.6e-1"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="4.09419e-15" error="1.8e-1"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="4.72383e-14" error="1.8e-1"></Isotope>
  <percentage_radiogenic_argon>11.710</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="1.15378866149e1" error="0.0e0"></IsotopeRatio>

```

590 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.355e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.280</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.920" stddev="0.214"></MeasuredAge>  
 <RecalculatedAge>2.920</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="8.58e-3" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.19e-3" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.98605157256e-3" error="3.40409879272e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="8.66709851963e-2" error="3.12015546707e-4"></IsotopeRatio>  
 595 </StepData>  
 <StepData>  
 <StepNumber>11</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>560.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 600 <Isotope id="Ar36" value="1.55159e-16" error="1.08e0"></Isotope>  
 <Isotope id="Ar37" value="1.8496e-17" error="5.0e1"></Isotope>  
 <Isotope id="Ar38" value="1.2047e-16" error="1.37e0"></Isotope>  
 <Isotope id="Ar39" value="7.60048e-15" error="1.6e-1"></Isotope>  
 <Isotope id="Ar40" value="5.52027e-14" error="1.6e-1"></Isotope>  
 605 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.55159e-16" error="1.08e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="7.60048e-15" error="1.6e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="5.52027e-14" error="1.6e-1"></Isotope>  
 <percentage\_radiogenic\_argon>16.850</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="7.26305443867e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.23e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.490</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.650" stddev="0.143"></MeasuredAge>  
 <RecalculatedAge>2.650</RecalculatedAge>  
 610 <IsotopeRatio id="Ca\_K" value="4.62e-3" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="7.51e-3" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.8107139687e-3" error="3.48528532119e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.37683120572e-1" error="4.4058598583e-4"></IsotopeRatio>  
 615 </StepData>  
 <StepData>  
 <StepNumber>12</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>570.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.66754e-16" error="1.31e0"></Isotope>  
 <Isotope id="Ar37" value="1.8506e-17" error="5.0e1"></Isotope>  
 620 <Isotope id="Ar38" value="1.8692e-16" error="6.4e-1"></Isotope>  
 <Isotope id="Ar39" value="1.33287e-14" error="1.6e-1"></Isotope>  
 <Isotope id="Ar40" value="6.48475e-14" error="1.6e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.66754e-16" error="1.31e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.33287e-14" error="1.6e-1"></Isotope>  
 625 <Isotope id="Ar40\_correctedForIsotopeInterference" value="6.48475e-14" error="1.6e-1"></Isotope>  
 <percentage\_radiogenic\_argon>23.840</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="4.86525317548e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.168e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.850</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.516" stddev="0.106"></MeasuredAge>  
 <RecalculatedAge>2.516</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.64e-3" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="3.71e-3" error="0.0e0"></IsotopeRatio>  
 630 <IsotopeRatio id="Ar36\_Ar40" value="2.57147923975e-3" error="3.78007448244e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="2.05539149543e-1" error="6.57725278538e-4"></IsotopeRatio>  
 635 </StepData>  
 <StepData>  
 <StepNumber>13</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>580.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.7308e-16" error="1.15e0"></Isotope>  
 <Isotope id="Ar37" value="1.0094e-16" error="2.863e1"></Isotope>  
 <Isotope id="Ar38" value="3.097e-16" error="7.4e-1"></Isotope>  
 <Isotope id="Ar39" value="2.37511e-14" error="1.5e-1"></Isotope>  
 640 </StepData>  
 645 <StepData>

650

```

<Isotope id="Ar40" value="7.66043e-14" error="1.6e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.7308e-16" error="1.15e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="2.37511e-14" error="1.5e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="7.66043e-14" error="1.6e-1"></Isotope>
<percentage_radiogenic_argon>32.880</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="3.22529482845e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.072e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>1.510</cumulated_percentage_Ar39_released>
<MeasuredAge value="2.309" stddev="0.055"></MeasuredAge>
<RecalculatedAge>2.309</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="8.07e-3" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="3.93e-3" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="2.25940319277e-3" error="2.95981818253e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="3.10049174785e-1" error="9.61152441834e-4"></IsotopeRatio>

```

660

```
</StepData>
```

665

```

<StepData>
  <StepNumber>14</StepNumber>
  <FurnaceTemperature_DegreesCelsius>600.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>

```

670

```

  <Isotope id="Ar36" value="2.07107e-16" error="8.6e-1"></Isotope>
  <Isotope id="Ar37" value="2.8456e-16" error="6.83e0"></Isotope>
  <Isotope id="Ar38" value="7.0343e-16" error="3.1e-1"></Isotope>
  <Isotope id="Ar39" value="5.71597e-14" error="1.5e-1"></Isotope>
  <Isotope id="Ar40" value="1.20008e-13" error="1.5e-1"></Isotope>

```

675

```

  <Isotope id="Ar36_correctedForIsotopeInterference" value="2.07107e-16" error="8.6e-1"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="5.71597e-14" error="1.5e-1"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="1.20008e-13" error="1.5e-1"></Isotope>
  <percentage_radiogenic_argon>48.230</percentage_radiogenic_argon>

```

680

```

  <IsotopeRatio id="Ar40_Ar39" value="2.09952116614e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.029e0" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>3.070</cumulated_percentage_Ar39_released>
  <MeasuredAge value="2.217" stddev="0.022"></MeasuredAge>

```

```

  <RecalculatedAge>2.217</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="9.46e-3" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="3.57e-3" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="1.72577661489e-3" error="1.74303438104e-5"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="4.76299080061e-1" error="1.42889724018e-3"></IsotopeRatio>

```

```
</StepData>
```

```
<StepData>
```

690

```

  <StepNumber>15</StepNumber>
  <FurnaceTemperature_DegreesCelsius>620.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>

```

695

```

  <Isotope id="Ar36" value="2.92037e-16" error="7.8e-1"></Isotope>
  <Isotope id="Ar37" value="1.4561e-15" error="1.14e0"></Isotope>
  <Isotope id="Ar38" value="1.7305e-15" error="1.9e-1"></Isotope>

```

700

```

  <Isotope id="Ar39" value="1.44835e-13" error="1.5e-1"></Isotope>
  <Isotope id="Ar40" value="2.34711e-13" error="1.6e-1"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="2.92037e-16" error="7.8e-1"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="1.44835e-13" error="1.5e-1"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="2.34711e-13" error="1.6e-1"></Isotope>

```

705

```

  <percentage_radiogenic_argon>61.950</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="1.62054061518e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.025e0" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>7.050</cumulated_percentage_Ar39_released>
  <MeasuredAge value="2.208" stddev="0.013"></MeasuredAge>

```

```

  <RecalculatedAge>2.208</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="1.91e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="2.96e-3" error="0.0e0"></IsotopeRatio>

```

710

```

  <IsotopeRatio id="Ar36_Ar40" value="1.24424078974e-3" error="1.16958634235e-5"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="6.17078023612e-1" error="1.9129418732e-3"></IsotopeRatio>

```

```
</StepData>
```

```
<StepData>
```

```

  <StepNumber>16</StepNumber>

```

<FurnaceTemperature\_DegreesCelsius>660.000</FurnaceTemperature\_DegreesCelsius>  
 715 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="5.21547e-16" error="6.1e-1"></Isotope>  
 <Isotope id="Ar37" value="9.6969e-16" error="2.39e0"></Isotope>  
 <Isotope id="Ar38" value="9.5974e-16" error="3.7e-1"></Isotope>  
 <Isotope id="Ar39" value="7.39105e-14" error="1.5e-1"></Isotope>  
 <Isotope id="Ar40" value="2.29724e-13" error="1.6e-1"></Isotope>  
 720 <Isotope id="Ar36\_correctedForIsotopeInterference" value="5.21547e-16" error="6.1e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="7.39105e-14" error="1.5e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.29724e-13" error="1.6e-1"></Isotope>  
 <percentage\_radiogenic\_argon>32.550</percentage\_radiogenic\_argon>  
 725 <IsotopeRatio id="Ar40\_Ar39" value="3.10813754473e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.023e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>9.070</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.204" stddev="0.030"></MeasuredAge>  
 <RecalculatedAge>2.204</RecalculatedAge>  
 730 <IsotopeRatio id="Ca\_K" value="2.49e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="3.81e-3" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.27032003622e-3" error="1.74814642789e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="3.217360833e-1" error="9.9738185823e-4"></IsotopeRatio>  
 </StepData>  
 735 <StepData>  
 <StepNumber>17</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>680.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="3.98354e-16" error="6.9e-1"></Isotope>  
 <Isotope id="Ar37" value="6.8756e-16" error="4.82e0"></Isotope>  
 740 <Isotope id="Ar38" value="1.1893e-15" error="4.6e-1"></Isotope>  
 <Isotope id="Ar39" value="9.50324e-14" error="1.7e-1"></Isotope>  
 <Isotope id="Ar40" value="2.14412e-13" error="1.7e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="3.98354e-16" error="6.9e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="9.50324e-14" error="1.7e-1"></Isotope>  
 745 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.14412e-13" error="1.7e-1"></Isotope>  
 <percentage\_radiogenic\_argon>44.430</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="2.25619893847e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.017e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>11.680</cumulated\_percentage\_Ar39\_released>  
 750 <MeasuredAge value="2.193" stddev="0.021"></MeasuredAge>  
 <RecalculatedAge>2.193</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.37e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="4.78e-3" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="1.85789041658e-3" error="1.59778575826e-5"></IsotopeRatio>  
 755 <IsotopeRatio id="Ar39\_Ar40" value="4.43223327053e-1" error="1.50695931198e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 <StepNumber>18</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>700.000</FurnaceTemperature\_DegreesCelsius>  
 760 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="3.92268e-16" error="9.6e-1"></Isotope>  
 <Isotope id="Ar37" value="1.7277e-15" error="8.52e0"></Isotope>  
 <Isotope id="Ar38" value="1.8698e-15" error="1.16e0"></Isotope>  
 <Isotope id="Ar39" value="1.44395e-13" error="2.5e-1"></Isotope>  
 <Isotope id="Ar40" value="2.61338e-13" error="2.5e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="3.92268e-16" error="9.6e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.44395e-13" error="2.5e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.61338e-13" error="2.5e-1"></Isotope>  
 <percentage\_radiogenic\_argon>54.630</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="1.80988261366e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.007e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>15.640</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.170" stddev="0.020"></MeasuredAge>  
 <RecalculatedAge>2.170</RecalculatedAge>  
 775 <IsotopeRatio id="Ca\_K" value="2.27e-2" error="0.0e0"></IsotopeRatio>

```

<IsotopeRatio id="Cl_K" value="1.36e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="1.50099870666e-3" error="1.81620843505e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="5.5252202129e-1" error="2.76261010645e-3"></IsotopeRatio>
780 </StepData>
<StepData>
    <StepNumber>19</StepNumber>
    <FurnaceTemperature_DegreesCelsius>720.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="4.63429e-16" error="1.75e0"></Isotope>
    <Isotope id="Ar37" value="5.6197e-15" error="1.069e1"></Isotope>
    <Isotope id="Ar38" value="3.0498e-15" error="2.8e0"></Isotope>
    <Isotope id="Ar39" value="2.08162e-13" error="4.7e-1"></Isotope>
    <Isotope id="Ar40" value="3.41439e-13" error="4.7e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="4.63429e-16" error="1.75e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="2.08162e-13" error="4.7e-1"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="3.41439e-13" error="4.7e-1"></Isotope>
    <percentage_radiogenic_argon>58.690</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="1.64025614666e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="9.823e-1" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>21.350</cumulated_percentage_Ar39_released>
    <MeasuredAge value="2.117" stddev="0.031"></MeasuredAge>
    <RecalculatedAge>2.117</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="5.13e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="3.56e-2" error="0.0e0"></IsotopeRatio>
800    <IsotopeRatio id="Ar36_Ar40" value="1.35728197423e-3" error="3.0131659828e-5"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="6.09660876467e-1" error="5.73081223879e-3"></IsotopeRatio>
</StepData>
<StepData>
    <StepNumber>20</StepNumber>
    <FurnaceTemperature_DegreesCelsius>740.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="7.08694e-16" error="2.95e0"></Isotope>
    <Isotope id="Ar37" value="1.5454e-14" error="1.191e1"></Isotope>
    <Isotope id="Ar38" value="5.5803e-15" error="4.43e0"></Isotope>
    <Isotope id="Ar39" value="3.23618e-13" error="5.6e-1"></Isotope>
    <Isotope id="Ar40" value="5.11531e-13" error="6.3e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="7.08694e-16" error="2.95e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="3.23618e-13" error="5.6e-1"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="5.11531e-13" error="6.3e-1"></Isotope>
    <percentage_radiogenic_argon>57.830</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="1.58066300391e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="9.334e-1" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>30.230</cumulated_percentage_Ar39_released>
    <MeasuredAge value="2.012" stddev="0.047"></MeasuredAge>
    <RecalculatedAge>2.012</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="9.07e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="6.75e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="1.38543705074e-3" error="4.95986464163e-5"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="6.32645919798e-1" error="7.52848644559e-3"></IsotopeRatio>
825 </StepData>
<StepData>
    <StepNumber>21</StepNumber>
    <FurnaceTemperature_DegreesCelsius>760.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.12994e-15" error="3.03e0"></Isotope>
    <Isotope id="Ar37" value="3.0349e-14" error="1.127e1"></Isotope>
    <Isotope id="Ar38" value="9.512e-15" error="4.99e0"></Isotope>
    <Isotope id="Ar39" value="5.01839e-13" error="5.5e-1"></Isotope>
    <Isotope id="Ar40" value="7.92207e-13" error="7.3e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.12994e-15" error="3.03e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="5.01839e-13" error="5.5e-1"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="7.92207e-13" error="7.3e-1"></Isotope>
    <percentage_radiogenic_argon>56.640</percentage_radiogenic_argon>

```

```

840 <IsotopeRatio id="Ar40_Ar39" value="1.57860788022e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="9.131e-1" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>44.000</cumulated_percentage_Ar39_released>
<MeasuredAge value="1.968" stddev="0.051"></MeasuredAge>
<RecalculatedAge>1.968</RecalculatedAge>
845 <IsotopeRatio id="Ca_K" value="1.15e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="8.83e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="1.42631913124e-3" error="5.36295993345e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="6.33469535109e-1" error="8.10841004939e-3"></IsotopeRatio>
</StepData>
850 <StepData>
  <StepNumber>22</StepNumber>
  <FurnaceTemperature_DegreesCelsius>780.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="1.84784e-15" error="2.45e0"></Isotope>
  <Isotope id="Ar37" value="4.7952e-14" error="1.029e1"></Isotope>
  <Isotope id="Ar38" value="1.5063e-14" error="4.78e0"></Isotope>
  <Isotope id="Ar39" value="7.91203e-13" error="4.9e-1"></Isotope>
  <Isotope id="Ar40" value="1.27577e-12" error="7.5e-1"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="1.84784e-15" error="2.45e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="7.91203e-13" error="4.9e-1"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="1.27577e-12" error="7.5e-1"></Isotope>
  <percentage_radiogenic_argon>56.030</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="1.61244332997e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="9.222e-1" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>65.700</cumulated_percentage_Ar39_released>
  <MeasuredAge value="1.988" stddev="0.046"></MeasuredAge>
  <RecalculatedAge>1.988</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="1.15e-1" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="8.91e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="1.44841154754e-3" error="4.63491695212e-5"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="6.20176834382e-1" error="7.69019274634e-3"></IsotopeRatio>
</StepData>
865 <StepData>
  <StepNumber>23</StepNumber>
  <FurnaceTemperature_DegreesCelsius>800.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="1.73385e-15" error="2.78e0"></Isotope>
  <Isotope id="Ar37" value="5.3253e-14" error="1.07e1"></Isotope>
  <Isotope id="Ar38" value="1.4416e-14" error="5.84e0"></Isotope>
  <Isotope id="Ar39" value="6.70815e-13" error="5.9e-1"></Isotope>
  <Isotope id="Ar40" value="1.12405e-12" error="1.03e0"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="1.73385e-15" error="2.78e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="6.70815e-13" error="5.9e-1"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="1.12405e-12" error="1.03e0"></Isotope>
  <percentage_radiogenic_argon>53.350</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="1.67564827859e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="9.117e-1" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>84.100</cumulated_percentage_Ar39_released>
  <MeasuredAge value="1.965" stddev="0.060"></MeasuredAge>
  <RecalculatedAge>1.965</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="1.51e-1" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="1.19e-1" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="1.54250255772e-3" error="5.8769347449e-5"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="5.96783950892e-1" error="9.66790000445e-3"></IsotopeRatio>
</StepData>
890 <StepData>
  <StepNumber>24</StepNumber>
  <FurnaceTemperature_DegreesCelsius>820.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="1.32361e-15" error="3.76e0"></Isotope>
  <Isotope id="Ar37" value="4.5829e-14" error="1.189e1"></Isotope>
  <Isotope id="Ar38" value="1.0468e-14" error="7.53e0"></Isotope>

```

```

<Isotope id="Ar39" value="4.09096e-13" error="8.3e-1"></Isotope>
<Isotope id="Ar40" value="7.41613e-13" error="1.32e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.32361e-15" error="3.76e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="4.09096e-13" error="8.3e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="7.41613e-13" error="1.32e0"></Isotope>
<percentage_radiogenic_argon>46.390</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="1.81280921837e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="8.566e-1" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>95.320</cumulated_percentage_Ar39_released>
<MeasuredAge value="1.846" stddev="0.094"></MeasuredAge>
<RecalculatedAge>1.846</RecalculatedAge>
905 <IsotopeRatio id="Ca_K" value="2.13e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.67e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="1.78477184192e-3" error="9.06664095694e-5"></IsotopeRatio>
910 <IsotopeRatio id="Ar39_Ar40" value="5.5163002806e-1" error="1.18600456033e-2"></IsotopeRatio>
</StepData>
<StepData>
915 <StepNumber>25</StepNumber>
<FurnaceTemperature_DegreesCelsius>840.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="7.00772e-16" error="5.52e0"></Isotope>
<Isotope id="Ar37" value="2.6691e-14" error="1.334e1"></Isotope>
<Isotope id="Ar38" value="4.8949e-15" error="1.019e1"></Isotope>
920 <Isotope id="Ar39" value="1.30243e-13" error="1.42e0"></Isotope>
<Isotope id="Ar40" value="2.9127e-13" error="1.89e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="7.00772e-16" error="5.52e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="1.30243e-13" error="1.42e0"></Isotope>
925 <Isotope id="Ar40_correctedForIsotopeInterference" value="2.9127e-13" error="1.89e0"></Isotope>
<percentage_radiogenic_argon>28.470</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="2.23635819199e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="6.462e-1" error="0.0e0"></IsotopeRatio>
930 <cumulated_percentage_Ar39_released>98.900</cumulated_percentage_Ar39_released>
<MeasuredAge value="1.393" stddev="0.213"></MeasuredAge>
<RecalculatedAge>1.393</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="3.89e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="3.09e-1" error="0.0e0"></IsotopeRatio>
935 <IsotopeRatio id="Ar36_Ar40" value="2.40591890686e-3" error="1.78278590998e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="4.47155560133e-1" error="1.48008490404e-2"></IsotopeRatio>
940 </StepData>
<StepData>
945 <StepNumber>26</StepNumber>
<FurnaceTemperature_DegreesCelsius>860.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="4.43545e-16" error="6.13e0"></Isotope>
<Isotope id="Ar37" value="1.51e-14" error="1.446e1"></Isotope>
<Isotope id="Ar38" value="2.3965e-15" error="1.307e1"></Isotope>
950 <Isotope id="Ar39" value="2.89753e-14" error="3.23e0"></Isotope>
<Isotope id="Ar40" value="1.28558e-13" error="3.51e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="4.43545e-16" error="6.13e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="2.89753e-14" error="3.23e0"></Isotope>
955 <Isotope id="Ar40_correctedForIsotopeInterference" value="1.28558e-13" error="3.51e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="4.43681342385e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>99.690</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="0.694"></MeasuredAge>
960 <RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="9.9e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="8.39e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.45015479395e-3" error="3.32594922136e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="2.25386984863e-1" error="1.51910827798e-2"></IsotopeRatio>
</StepData>
<StepData>

```

965

```

<StepNumber>27</StepNumber>
<FurnaceTemperature_DegreesCelsius>880.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.32858e-16" error="8.01e0"></Isotope>
<Isotope id="Ar37" value="2.5559e-15" error="1.435e1"></Isotope>
<Isotope id="Ar38" value="3.6695e-16" error="1.459e1"></Isotope>
<Isotope id="Ar39" value="1.60622e-15" error="7.46e0"></Isotope>
<Isotope id="Ar40" value="3.72175e-14" error="7.48e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.32858e-16" error="8.01e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="1.60622e-15" error="7.46e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="3.72175e-14" error="7.48e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="2.31708607787e1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>99.740</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="5.658"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="3.02e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.47e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.56977228454e-3" error="5.52957726876e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="4.31576543293e-2" error="6.44775355679e-3"></IsotopeRatio>

```

970

```

<Isotope id="Ar40_correctedForIsotopeInterference" value="3.72175e-14" error="7.48e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="2.31708607787e1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>99.740</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="5.658"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="3.02e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.47e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.56977228454e-3" error="5.52957726876e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="4.31576543293e-2" error="6.44775355679e-3"></IsotopeRatio>

```

975

```

</StepData>
<StepData>

```

980

```

<StepNumber>28</StepNumber>
<FurnaceTemperature_DegreesCelsius>900.000</FurnaceTemperature_DegreesCelsius>

```

990

```

<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.29799e-16" error="9.27e0"></Isotope>
<Isotope id="Ar37" value="2.4647e-15" error="1.553e1"></Isotope>
<Isotope id="Ar38" value="3.4373e-16" error="1.582e1"></Isotope>
<Isotope id="Ar39" value="1.38462e-15" error="8.69e0"></Isotope>
<Isotope id="Ar40" value="3.59883e-14" error="8.71e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.29799e-16" error="9.27e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="1.38462e-15" error="8.69e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="3.59883e-14" error="8.71e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>

```

995

```

<IsotopeRatio id="Ar40_Ar39" value="2.59914633618e1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>99.780</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="7.405"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="3.38e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.68e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.60669995526e-3" error="6.48484651956e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="3.84741707722e-2" error="6.69450571436e-3"></IsotopeRatio>

```

000

```

</StepData>
<StepData>

```

005

```

<StepNumber>29</StepNumber>
<FurnaceTemperature_DegreesCelsius>950.000</FurnaceTemperature_DegreesCelsius>

```

010

```

<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.15579e-16" error="9.17e0"></Isotope>
<Isotope id="Ar37" value="2.3566e-15" error="1.476e1"></Isotope>
<Isotope id="Ar38" value="3.3183e-16" error="1.521e1"></Isotope>
<Isotope id="Ar39" value="1.36435e-15" error="8.35e0"></Isotope>
<Isotope id="Ar40" value="3.21794e-14" error="8.38e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.15579e-16" error="9.17e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="1.36435e-15" error="8.35e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="3.21794e-14" error="8.38e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="2.35858833877e1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>99.810</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="6.556"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>

```

015

020

025

```

030   <IsotopeRatio id="Ca_K" value="3.28e0" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="Cl_K" value="2.64e0" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="Ar36_Ar40" value="3.59170773849e-3" error="6.30344708105e-4"></IsotopeRatio>
      <IsotopeRatio id="Ar39_Ar40" value="4.23982423538e-2" error="7.09322594579e-3"></IsotopeRatio>
</StepData>
<StepData>
035   <StepNumber>30</StepNumber>
      <FurnaceTemperature_DegreesCelsius>1000.000</FurnaceTemperature_DegreesCelsius>
      <Duration_minutes>15.000</Duration_minutes>
      <Isotope id="Ar36" value="1.23892e-16" error="9.09e0"></Isotope>
      <Isotope id="Ar37" value="2.3119e-15" error="1.539e1"></Isotope>
      <Isotope id="Ar38" value="3.1578e-16" error="1.508e1"></Isotope>
      <Isotope id="Ar39" value="1.25196e-15" error="8.67e0"></Isotope>
      <Isotope id="Ar40" value="3.41097e-14" error="8.69e0"></Isotope>
      <Isotope id="Ar36_correctedForIsotopeInterference" value="1.23892e-16" error="9.09e0"></Isotope>
      <Isotope id="Ar39_correctedForIsotopeInterference" value="1.25196e-15" error="8.67e0"></Isotope>
      <Isotope id="Ar40_correctedForIsotopeInterference" value="3.41097e-14" error="8.69e0"></Isotope>
      <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
      <IsotopeRatio id="Ar40_Ar39" value="2.72450397776e1" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
      <cumulated_percentage_Ar39_released>99.850</cumulated_percentage_Ar39_released>
      <MeasuredAge value="0.002" stddev="7.698"></MeasuredAge>
050   <RecalculatedAge>0.002</RecalculatedAge>
      <IsotopeRatio id="Ca_K" value="3.51e0" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="Cl_K" value="2.72e0" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="Ar36_Ar40" value="3.63216328493e-3" error="6.45798632061e-4"></IsotopeRatio>
      <IsotopeRatio id="Ar39_Ar40" value="3.67039287944e-2" error="6.37180203872e-3"></IsotopeRatio>
</StepData>
<StepData>
055   <StepNumber>31</StepNumber>
      <FurnaceTemperature_DegreesCelsius>1100.000</FurnaceTemperature_DegreesCelsius>
      <Duration_minutes>15.000</Duration_minutes>
      <Isotope id="Ar36" value="1.96736e-16" error="8.24e0"></Isotope>
      <Isotope id="Ar37" value="1.9666e-15" error="1.578e1"></Isotope>
      <Isotope id="Ar38" value="2.994e-16" error="1.404e1"></Isotope>
      <Isotope id="Ar39" value="1.20073e-15" error="8.1e0"></Isotope>
      <Isotope id="Ar40" value="5.85415e-14" error="8.1e0"></Isotope>
      <Isotope id="Ar36_correctedForIsotopeInterference" value="1.96736e-16" error="8.24e0"></Isotope>
      <Isotope id="Ar39_correctedForIsotopeInterference" value="1.20073e-15" error="8.1e0"></Isotope>
      <Isotope id="Ar40_correctedForIsotopeInterference" value="5.85415e-14" error="8.1e0"></Isotope>
      <percentage_radiogenic_argon>0.680</percentage_radiogenic_argon>
      <IsotopeRatio id="Ar40_Ar39" value="4.87549240878e1" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="radiogenicAr40_Ar39" value="3.301e-1" error="0.0e0"></IsotopeRatio>
      <cumulated_percentage_Ar39_released>99.880</cumulated_percentage_Ar39_released>
      <MeasuredAge value="0.712" stddev="12.113"></MeasuredAge>
      <RecalculatedAge>0.712</RecalculatedAge>
      <IsotopeRatio id="Ca_K" value="3.11e0" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="Cl_K" value="2.53e0" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="Ar36_Ar40" value="3.36062451423e-3" error="5.49126045626e-4"></IsotopeRatio>
      <IsotopeRatio id="Ar39_Ar40" value="2.0510748785e-2" error="3.32274130318e-3"></IsotopeRatio>
</StepData>
<StepData>
080   <StepNumber>32</StepNumber>
      <FurnaceTemperature_DegreesCelsius>1200.000</FurnaceTemperature_DegreesCelsius>
      <Duration_minutes>15.000</Duration_minutes>
      <Isotope id="Ar36" value="2.17455e-16" error="7.67e0"></Isotope>
      <Isotope id="Ar37" value="1.8634e-15" error="1.395e1"></Isotope>
      <Isotope id="Ar38" value="2.7319e-16" error="1.325e1"></Isotope>
      <Isotope id="Ar39" value="1.15584e-15" error="7.53e0"></Isotope>
      <Isotope id="Ar40" value="6.57212e-14" error="7.53e0"></Isotope>
      <Isotope id="Ar36_correctedForIsotopeInterference" value="2.17455e-16" error="7.67e0"></Isotope>
      <Isotope id="Ar39_correctedForIsotopeInterference" value="1.15584e-15" error="7.53e0"></Isotope>
      <Isotope id="Ar40_correctedForIsotopeInterference" value="6.57212e-14" error="7.53e0"></Isotope>

```

```

<percentage_radiogenic_argon>2.210</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="5.68601190476e1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.257e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>99.910</cumulated_percentage_Ar39_released>
095 <MeasuredAge value="2.708" stddev="13.022"></MeasuredAge>
<RecalculatedAge>2.708</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="3.06e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.31e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.30874968808e-3" error="5.02929952588e-4"></IsotopeRatio>
100 <IsotopeRatio id="Ar39_Ar40" value="1.75870191049e-2" error="2.6486050772e-3"></IsotopeRatio>
</StepData>
<StepData>
105 <StepNumber>33</StepNumber>
<FurnaceTemperature_DegreesCelsius>1300.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="4.22865e-16" error="6.99e0"></Isotope>
<Isotope id="Ar37" value="1.8174e-15" error="1.359e1"></Isotope>
<Isotope id="Ar38" value="3.0356e-16" error="1.148e1"></Isotope>
110 <Isotope id="Ar39" value="1.24887e-15" error="6.93e0"></Isotope>
<Isotope id="Ar40" value="1.3151e-13" error="6.93e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="4.22865e-16" error="6.99e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="1.24887e-15" error="6.93e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="1.3151e-13" error="6.93e0"></Isotope>
115 <percentage_radiogenic_argon>4.970</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="1.05303194087e2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="5.231e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>99.950</cumulated_percentage_Ar39_released>
<MeasuredAge value="11.246" stddev="21.663"></MeasuredAge>
120 <RecalculatedAge>11.246</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="2.76e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.04e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.21545890046e-3" error="4.47591878945e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="9.49638810737e-3" error="1.31619939168e-3"></IsotopeRatio>
</StepData>
125 <StepData>
<StepNumber>34</StepNumber>
<FurnaceTemperature_DegreesCelsius>1450.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.33131e-15" error="3.96e0"></Isotope>
130 <Isotope id="Ar37" value="2.1916e-15" error="8.43e0"></Isotope>
<Isotope id="Ar38" value="4.6776e-16" error="6.25e0"></Isotope>
<Isotope id="Ar39" value="1.95443e-15" error="3.92e0"></Isotope>
<Isotope id="Ar40" value="5.26837e-13" error="3.92e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.33131e-15" error="3.96e0"></Isotope>
135 <Isotope id="Ar39_correctedForIsotopeInterference" value="1.95443e-15" error="3.92e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="5.26837e-13" error="3.92e0"></Isotope>
<percentage_radiogenic_argon>25.310</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="2.695604345e2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="6.824e1" error="0.0e0"></IsotopeRatio>
140 <cumulated_percentage_Ar39_released>100.000</cumulated_percentage_Ar39_released>
<MeasuredAge value="141.467" stddev="26.387"></MeasuredAge>
<RecalculatedAge>141.467</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="2.13e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.19e0" error="0.0e0"></IsotopeRatio>
145 <IsotopeRatio id="Ar36_Ar40" value="2.52698652524e-3" error="1.99126538189e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="3.70974324127e-3" error="2.90843870115e-4"></IsotopeRatio>
</StepData>
<CalculationParameters>
150 <Parameter id="J_Factor" value="1.1954e-3" uncertainty="2.4e-1"></Parameter>
<Parameter id="FluxMonitorAge" value="98.50" uncertainty="0.80" />
<Parameter id="MassDiscrimination" value="0.98769" uncertainty="0.15" />
<Parameter id="Atmospheric_40_36_ratio" value="2.9555e2"></Parameter>
<Parameter id="DecayConstantK" value="5.543e-10" uncertainty="0.192"></Parameter>

```

```

155      </CalculationParameters>
</ArgonData>
</eArgonDataObject>
<eArgonDataObject>
  <ArgonData>
    <SampleDescription>ANU CAN #30, D3011643, Foil: A2, Alunite, 130.4mg, Steps: 30</SampleDescription>
160    <StepData>
      <StepNumber>0</StepNumber>
      <FurnaceTemperature_DegreesCelsius>450.000</FurnaceTemperature_DegreesCelsius>
      <Duration_minutes>15.000</Duration_minutes>
      <Isotope id="Ar36" value="1.13394e-16" error="6.09e0"></Isotope>
165      <Isotope id="Ar37" value="1.923e-17" error="5.035e1"></Isotope>
      <Isotope id="Ar38" value="6.3693e-17" error="1.027e1"></Isotope>
      <Isotope id="Ar39" value="2.03194e-16" error="5.9e0"></Isotope>
      <Isotope id="Ar40" value="3.34502e-14" error="5.9e0"></Isotope>
      <Isotope id="Ar36_correctedForIsotopeInterference" value="1.13394e-16" error="6.09e0"></Isotope>
      <Isotope id="Ar39_correctedForIsotopeInterference" value="2.03194e-16" error="5.9e0"></Isotope>
170      <Isotope id="Ar40_correctedForIsotopeInterference" value="3.34502e-14" error="5.9e0"></Isotope>
      <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
      <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
175      <cumulated_percentage_Ar39_released>0.010</cumulated_percentage_Ar39_released>
      <MeasuredAge value="0.002" stddev="30.126"></MeasuredAge>
      <RecalculatedAge>0.002</RecalculatedAge>
      <IsotopeRatio id="Ca_K" value="1.8e-1" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="Cl_K" value="2.39e0" error="0.0e0"></IsotopeRatio>
180      <IsotopeRatio id="Ar36_Ar40" value="3.38993488828e-3" error="4.06453193105e-4"></IsotopeRatio>
      <IsotopeRatio id="Ar39_Ar40" value="6.07452272333e-3" error="7.16793681353e-4"></IsotopeRatio>
    </StepData>
    <StepData>
      <StepNumber>1</StepNumber>
      <FurnaceTemperature_DegreesCelsius>470.000</FurnaceTemperature_DegreesCelsius>
      <Duration_minutes>15.000</Duration_minutes>
      <Isotope id="Ar36" value="9.56931e-17" error="6.49e0"></Isotope>
      <Isotope id="Ar37" value="1.924e-17" error="5.04e1"></Isotope>
      <Isotope id="Ar38" value="5.4477e-17" error="1.351e1"></Isotope>
      <Isotope id="Ar39" value="1.95052e-16" error="6.34e0"></Isotope>
      <Isotope id="Ar40" value="2.84718e-14" error="6.34e0"></Isotope>
      <Isotope id="Ar36_correctedForIsotopeInterference" value="9.56931e-17" error="6.49e0"></Isotope>
      <Isotope id="Ar39_correctedForIsotopeInterference" value="1.95052e-16" error="6.34e0"></Isotope>
185      <Isotope id="Ar40_correctedForIsotopeInterference" value="2.84718e-14" error="6.34e0"></Isotope>
      <percentage_radiogenic_argon>0.670</percentage_radiogenic_argon>
      <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="radiogenicAr40_Ar39" value="9.725e-1" error="0.0e0"></IsotopeRatio>
      <cumulated_percentage_Ar39_released>0.010</cumulated_percentage_Ar39_released>
      <MeasuredAge value="2.096" stddev="28.432"></MeasuredAge>
      <RecalculatedAge>2.096</RecalculatedAge>
      <IsotopeRatio id="Ca_K" value="1.87e-1" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="Cl_K" value="2.13e0" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="Ar36_Ar40" value="3.36097823109e-3" error="4.31213507049e-4"></IsotopeRatio>
      <IsotopeRatio id="Ar39_Ar40" value="6.85070842026e-3" error="8.68669827689e-4"></IsotopeRatio>
190    </StepData>
    <StepData>
      <StepNumber>2</StepNumber>
      <FurnaceTemperature_DegreesCelsius>490.000</FurnaceTemperature_DegreesCelsius>
      <Duration_minutes>15.000</Duration_minutes>
      <Isotope id="Ar36" value="1.71618e-16" error="5.5e0"></Isotope>
      <Isotope id="Ar37" value="1.9251e-17" error="5.028e1"></Isotope>
      <Isotope id="Ar38" value="7.6667e-17" error="8.3e0"></Isotope>
      <Isotope id="Ar39" value="2.74578e-16" error="5.33e0"></Isotope>
      <Isotope id="Ar40" value="5.14899e-14" error="5.33e0"></Isotope>
      <Isotope id="Ar36_correctedForIsotopeInterference" value="1.71618e-16" error="5.5e0"></Isotope>
      <Isotope id="Ar39_correctedForIsotopeInterference" value="2.74578e-16" error="5.33e0"></Isotope>
195    </StepData>
  <StepData>
    <StepNumber>3</StepNumber>
    <FurnaceTemperature_DegreesCelsius>510.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="2.4932e-16" error="5.5e0"></Isotope>
    <Isotope id="Ar37" value="2.7942e-17" error="5.028e1"></Isotope>
    <Isotope id="Ar38" value="8.3337e-17" error="8.3e0"></Isotope>
    <Isotope id="Ar39" value="2.5000e-16" error="5.33e0"></Isotope>
    <Isotope id="Ar40" value="5.14899e-14" error="5.33e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="2.4932e-16" error="5.5e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="2.5000e-16" error="5.33e0"></Isotope>
200  </StepData>
  <StepData>
    <StepNumber>4</StepNumber>
    <FurnaceTemperature_DegreesCelsius>530.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="3.2702e-16" error="5.5e0"></Isotope>
    <Isotope id="Ar37" value="3.5952e-17" error="5.028e1"></Isotope>
    <Isotope id="Ar38" value="9.9997e-17" error="8.3e0"></Isotope>
    <Isotope id="Ar39" value="2.5000e-16" error="5.33e0"></Isotope>
    <Isotope id="Ar40" value="5.14899e-14" error="5.33e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="3.2702e-16" error="5.5e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="2.5000e-16" error="5.33e0"></Isotope>
205  </StepData>
  <StepData>
    <StepNumber>5</StepNumber>
    <FurnaceTemperature_DegreesCelsius>550.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="4.0472e-16" error="5.5e0"></Isotope>
    <Isotope id="Ar37" value="4.3962e-17" error="5.028e1"></Isotope>
    <Isotope id="Ar38" value="1.1667e-16" error="8.3e0"></Isotope>
    <Isotope id="Ar39" value="2.5000e-16" error="5.33e0"></Isotope>
    <Isotope id="Ar40" value="5.14899e-14" error="5.33e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="4.0472e-16" error="5.5e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="2.5000e-16" error="5.33e0"></Isotope>
210  </StepData>
  <StepData>
    <StepNumber>6</StepNumber>
    <FurnaceTemperature_DegreesCelsius>570.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="4.8242e-16" error="5.5e0"></Isotope>
    <Isotope id="Ar37" value="5.1972e-17" error="5.028e1"></Isotope>
    <Isotope id="Ar38" value="1.3333e-16" error="8.3e0"></Isotope>
    <Isotope id="Ar39" value="2.5000e-16" error="5.33e0"></Isotope>
    <Isotope id="Ar40" value="5.14899e-14" error="5.33e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="4.8242e-16" error="5.5e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="2.5000e-16" error="5.33e0"></Isotope>
215  </StepData>

```

```

<Isotope id="Ar40_correctedForIsotopeInterference" value="5.14899e-14" error="5.33e0"></Isotope>
<percentage_radiogenic_argon>1.490</percentage_radiogenic_argon>
220 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="2.797e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.020</cumulated_percentage_Ar39_released>
<MeasuredAge value="6.022" stddev="30.638"></MeasuredAge>
<RecalculatedAge>6.022</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.33e-1" error="0.0e0"></IsotopeRatio>
225 <IsotopeRatio id="Cl_K" value="1.81e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.33304201406e-3" error="3.60968450123e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="5.33265747263e-3" error="5.68461286582e-4"></IsotopeRatio>
</StepData>
<StepData>
230 <StepNumber>3</StepNumber>
<FurnaceTemperature_DegreesCelsius>510.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="3.14538e-16" error="3.75e0"></Isotope>
<Isotope id="Ar37" value="1.9261e-17" error="5.014e1"></Isotope>
235 <Isotope id="Ar38" value="1.0451e-16" error="6.36e0"></Isotope>
<Isotope id="Ar39" value="4.16248e-16" error="3.69e0"></Isotope>
<Isotope id="Ar40" value="9.36636e-14" error="3.69e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="3.14538e-16" error="3.75e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="4.16248e-16" error="3.69e0"></Isotope>
240 <Isotope id="Ar40_correctedForIsotopeInterference" value="9.36636e-14" error="3.69e0"></Isotope>
<percentage_radiogenic_argon>0.750</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.686e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.040</cumulated_percentage_Ar39_released>
245 <MeasuredAge value="3.633" stddev="25.375"></MeasuredAge>
<RecalculatedAge>3.633</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="8.79e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.16e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.3581668866e-3" error="2.49847616363e-4"></IsotopeRatio>
250 <IsotopeRatio id="Ar39_Ar40" value="4.44407432557e-3" error="3.27972685227e-4"></IsotopeRatio>
</StepData>
<StepData>
255 <StepNumber>4</StepNumber>
<FurnaceTemperature_DegreesCelsius>530.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="4.94019e-16" error="2.51e0"></Isotope>
<Isotope id="Ar37" value="1.9272e-17" error="5.006e1"></Isotope>
<Isotope id="Ar38" value="1.4189e-16" error="4.9e0"></Isotope>
<Isotope id="Ar39" value="6.72425e-16" error="2.43e0"></Isotope>
260 <Isotope id="Ar40" value="1.47269e-13" error="2.43e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="4.94019e-16" error="2.51e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="6.72425e-16" error="2.43e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="1.47269e-13" error="2.43e0"></Isotope>
265 <percentage_radiogenic_argon>0.860</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.877e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.060</cumulated_percentage_Ar39_released>
<MeasuredAge value="4.043" stddev="16.385"></MeasuredAge>
<RecalculatedAge>4.043</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="5.45e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="7.2e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.35453489872e-3" error="1.65714023997e-4"></IsotopeRatio>
270 <IsotopeRatio id="Ar39_Ar40" value="4.56596432379e-3" error="2.21905866136e-4"></IsotopeRatio>
</StepData>
<StepData>
275 <StepNumber>5</StepNumber>
<FurnaceTemperature_DegreesCelsius>550.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="5.54739e-16" error="1.53e0"></Isotope>

```

280

```

<Isotope id="Ar37" value="1.9282e-17" error="5.002e1"></Isotope>
<Isotope id="Ar38" value="1.6155e-16" error="3.84e0"></Isotope>
<Isotope id="Ar39" value="1.14345e-15" error="1.45e0"></Isotope>
<Isotope id="Ar40" value="1.67036e-13" error="1.45e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="5.54739e-16" error="1.53e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="1.14345e-15" error="1.45e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="1.67036e-13" error="1.45e0"></Isotope>
<percentage_radiogenic_argon>1.840</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="2.696e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.110</cumulated_percentage_Ar39_released>
<MeasuredAge value="5.804" stddev="6.556"></MeasuredAge>
<RecalculatedAge>5.804</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="3.2e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="4.52e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.32107449891e-3" error="9.89680200675e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="6.84553030484e-3" error="1.9852037884e-4"></IsotopeRatio>
</StepData>
<StepData>
    <StepNumber>6</StepNumber>
    <FurnaceTemperature_DegreesCelsius>570.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="5.12336e-16" error="1.08e0"></Isotope>
    <Isotope id="Ar37" value="6.7264e-16" error="3.642e1"></Isotope>
    <Isotope id="Ar38" value="1.629e-16" error="3.4e0"></Isotope>
    <Isotope id="Ar39" value="2.11542e-15" error="9.0e-1"></Isotope>
    <Isotope id="Ar40" value="1.55299e-13" error="9.0e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="5.12336e-16" error="1.08e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="2.11542e-15" error="9.0e-1"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="1.55299e-13" error="9.0e-1"></Isotope>
    <percentage_radiogenic_argon>2.500</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.833e0" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>0.180</cumulated_percentage_Ar39_released>
    <MeasuredAge value="3.949" stddev="2.185"></MeasuredAge>
    <RecalculatedAge>3.949</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="6.04e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="2.35e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.29902961384e-3" error="6.53207863541e-5"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="1.36215944726e-2" error="2.45188700507e-4"></IsotopeRatio>
</StepData>
<StepData>
    <StepNumber>7</StepNumber>
    <FurnaceTemperature_DegreesCelsius>590.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="4.25352e-16" error="7.2e-1"></Isotope>
    <Isotope id="Ar37" value="9.2975e-16" error="5.467e1"></Isotope>
    <Isotope id="Ar38" value="1.7231e-16" error="3.64e0"></Isotope>
    <Isotope id="Ar39" value="4.1035e-15" error="5.2e-1"></Isotope>
    <Isotope id="Ar40" value="1.32846e-13" error="5.2e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="4.25352e-16" error="7.2e-1"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="4.1035e-15" error="5.2e-1"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="1.32846e-13" error="5.2e-1"></Isotope>
    <percentage_radiogenic_argon>5.360</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.738e0" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>0.330</cumulated_percentage_Ar39_released>
    <MeasuredAge value="3.745" stddev="0.599"></MeasuredAge>
    <RecalculatedAge>3.745</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="4.3e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="1.32e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.2018427352e-3" error="3.97028499164e-5"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="3.08891498427e-2" error="3.21247158364e-4"></IsotopeRatio>

```

```

345 </StepData>
<StepData>
  <StepNumber>8</StepNumber>
  <FurnaceTemperature_DegreesCelsius>610.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="3.21875e-16" error="7.9e-1"></Isotope>
  <Isotope id="Ar37" value="4.9983e-16" error="2.617e1"></Isotope>
  <Isotope id="Ar38" value="1.9462e-16" error="3.0e0"></Isotope>
  <Isotope id="Ar39" value="7.45297e-15" error="3.4e-1"></Isotope>
  <Isotope id="Ar40" value="1.07809e-13" error="3.4e-1"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="3.21875e-16" error="7.9e-1"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="7.45297e-15" error="3.4e-1"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="1.07809e-13" error="3.4e-1"></Isotope>
  <percentage_radiogenic_argon>11.730</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.701e0" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>0.610</cumulated_percentage_Ar39_released>
350  <MeasuredAge value="3.665" stddev="0.242"></MeasuredAge>
  <RecalculatedAge>3.665</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="1.27e-1" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="7.98e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="2.98560417034e-3" error="3.37373271248e-5"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="6.9131241362e-2" error="4.70092441262e-4"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>9</StepNumber>
  <FurnaceTemperature_DegreesCelsius>630.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="2.79671e-16" error="7.6e-1"></Isotope>
  <Isotope id="Ar37" value="5.3492e-16" error="2.195e1"></Isotope>
  <Isotope id="Ar38" value="2.7081e-16" error="2.98e0"></Isotope>
  <Isotope id="Ar39" value="1.3993e-14" error="2.7e-1"></Isotope>
  <Isotope id="Ar40" value="1.05271e-13" error="2.8e-1"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="2.79671e-16" error="7.6e-1"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="1.3993e-14" error="2.7e-1"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="1.05271e-13" error="2.8e-1"></Isotope>
  <percentage_radiogenic_argon>21.390</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.616e0" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>1.120</cumulated_percentage_Ar39_released>
  <MeasuredAge value="3.482" stddev="0.107"></MeasuredAge>
  <RecalculatedAge>3.482</RecalculatedAge>
355  <IsotopeRatio id="Ca_K" value="7.26e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="5.15e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="2.65667657759e-3" error="2.7629436407e-5"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="1.32923597192e-1" error="7.31079784556e-4"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>10</StepNumber>
  <FurnaceTemperature_DegreesCelsius>650.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="2.65228e-16" error="8.8e-1"></Isotope>
  <Isotope id="Ar37" value="1.0547e-15" error="1.292e1"></Isotope>
  <Isotope id="Ar38" value="4.6246e-16" error="2.83e0"></Isotope>
  <Isotope id="Ar39" value="2.67831e-14" error="3.0e-1"></Isotope>
  <Isotope id="Ar40" value="1.21983e-13" error="3.0e-1"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="2.65228e-16" error="8.8e-1"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="2.67831e-14" error="3.0e-1"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="1.21983e-13" error="3.0e-1"></Isotope>
  <percentage_radiogenic_argon>35.480</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.628e0" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>2.100</cumulated_percentage_Ar39_released>

```

```

<MeasuredAge value="3.507" stddev="0.064"></MeasuredAge>
<RecalculatedAge>3.507</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="7.48e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="4.96e-2" error="0.0e0"></IsotopeRatio>
410 <IsotopeRatio id="Ar36_Ar40" value="2.17430297664e-3" error="2.56567751244e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="2.19564201569e-1" error="1.31738520941e-3"></IsotopeRatio>
</StepData>
<StepData>
415   <StepNumber>11</StepNumber>
   <FurnaceTemperature_DegreesCelsius>670.000</FurnaceTemperature_DegreesCelsius>
   <Duration_minutes>15.000</Duration_minutes>
   <Isotope id="Ar36" value="3.30194e-16" error="4.9e-1"></Isotope>
   <Isotope id="Ar37" value="1.5304e-15" error="7.53e0"></Isotope>
   <Isotope id="Ar38" value="1.0131e-15" error="7.8e-1"></Isotope>
420   <Isotope id="Ar39" value="6.81081e-14" error="1.8e-1"></Isotope>
   <Isotope id="Ar40" value="2.09031e-13" error="1.9e-1"></Isotope>
   <Isotope id="Ar36_correctedForIsotopeInterference" value="3.30194e-16" error="4.9e-1"></Isotope>
   <Isotope id="Ar39_correctedForIsotopeInterference" value="6.81081e-14" error="1.8e-1"></Isotope>
   <Isotope id="Ar40_correctedForIsotopeInterference" value="2.09031e-13" error="1.9e-1"></Isotope>
425   <percentage_radiogenic_argon>52.740</percentage_radiogenic_argon>
   <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
   <IsotopeRatio id="radiogenicAr40_Ar39" value="1.636e0" error="0.0e0"></IsotopeRatio>
   <cumulated_percentage_Ar39_released>4.600</cumulated_percentage_Ar39_released>
   <MeasuredAge value="3.525" stddev="0.022"></MeasuredAge>
430   <RecalculatedAge>3.525</RecalculatedAge>
   <IsotopeRatio id="Ca_K" value="4.27e-2" error="0.0e0"></IsotopeRatio>
   <IsotopeRatio id="Cl_K" value="3.22e-2" error="0.0e0"></IsotopeRatio>
   <IsotopeRatio id="Ar36_Ar40" value="1.57964129722e-3" error="1.07415608211e-5"></IsotopeRatio>
   <IsotopeRatio id="Ar39_Ar40" value="3.25827748037e-1" error="1.20556266774e-3"></IsotopeRatio>
435 </StepData>
<StepData>
  <StepNumber>12</StepNumber>
  <FurnaceTemperature_DegreesCelsius>690.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
440  <Isotope id="Ar36" value="2.55104e-16" error="1.23e0"></Isotope>
  <Isotope id="Ar37" value="2.1532e-15" error="1.059e1"></Isotope>
  <Isotope id="Ar38" value="9.9419e-16" error="2.88e0"></Isotope>
  <Isotope id="Ar39" value="6.50755e-14" error="3.6e-1"></Isotope>
  <Isotope id="Ar40" value="1.81487e-13" error="3.7e-1"></Isotope>
445  <Isotope id="Ar36_correctedForIsotopeInterference" value="2.55104e-16" error="1.23e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="6.50755e-14" error="3.6e-1"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="1.81487e-13" error="3.7e-1"></Isotope>
  <percentage_radiogenic_argon>57.760</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
450  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.636e0" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>6.990</cumulated_percentage_Ar39_released>
  <MeasuredAge value="3.512" stddev="0.039"></MeasuredAge>
  <RecalculatedAge>3.512</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="6.29e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="3.93e-2" error="0.0e0"></IsotopeRatio>
455  <IsotopeRatio id="Ar36_Ar40" value="1.40563235934e-3" error="2.24901177495e-5"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="3.58568382308e-1" error="2.61754919085e-3"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>13</StepNumber>
  <FurnaceTemperature_DegreesCelsius>710.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="3.38741e-16" error="2.92e0"></Isotope>
  <Isotope id="Ar37" value="7.1196e-15" error="1.334e1"></Isotope>
  <Isotope id="Ar38" value="2.0108e-15" error="5.55e0"></Isotope>
  <Isotope id="Ar39" value="1.02974e-13" error="6.8e-1"></Isotope>
  <Isotope id="Ar40" value="2.5817e-13" error="7.2e-1"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="3.38741e-16" error="2.92e0"></Isotope>

```

470 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.02974e-13" error="6.8e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.5817e-13" error="7.2e-1"></Isotope>  
 <percentage\_radiogenic\_argon>60.420</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.535e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>10.770</cumulated\_percentage\_Ar39\_released>  
 475 <MeasuredAge value="3.307" stddev="0.074"></MeasuredAge>  
 <RecalculatedAge>3.307</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.31e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="9.29e-2" error="0.0e0"></IsotopeRatio>  
 480 <IsotopeRatio id="Ar36\_Ar40" value="1.31208506023e-3" error="4.77598961924e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="3.98861215478e-1" error="5.58405701669e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 <StepNumber>14</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>730.000</FurnaceTemperature\_DegreesCelsius>  
 485 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="5.03864e-16" error="4.05e0"></Isotope>  
 <Isotope id="Ar37" value="1.6818e-14" error="1.342e1"></Isotope>  
 <Isotope id="Ar38" value="3.938e-15" error="6.87e0"></Isotope>  
 490 <Isotope id="Ar39" value="1.72507e-13" error="8.0e-1"></Isotope>  
 <Isotope id="Ar40" value="4.04845e-13" error="9.5e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="5.03864e-16" error="4.05e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.72507e-13" error="8.0e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="4.04845e-13" error="9.5e-1"></Isotope>  
 495 <percentage\_radiogenic\_argon>62.330</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.484e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>17.100</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="3.197" stddev="0.091"></MeasuredAge>  
 <RecalculatedAge>3.197</RecalculatedAge>  
 500 <IsotopeRatio id="Ca\_K" value="1.85e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.34e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="1.24458496462e-3" error="6.22292482308e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="4.26106287592e-1" error="7.45686003285e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 <StepNumber>15</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>750.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 505 <Isotope id="Ar36" value="7.64422e-16" error="4.08e0"></Isotope>  
 <Isotope id="Ar37" value="3.0092e-14" error="1.273e1"></Isotope>  
 <Isotope id="Ar38" value="6.9315e-15" error="6.95e0"></Isotope>  
 <Isotope id="Ar39" value="2.90749e-13" error="7.9e-1"></Isotope>  
 <Isotope id="Ar40" value="6.59658e-13" error="1.05e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="7.64422e-16" error="4.08e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.90749e-13" error="7.9e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="6.59658e-13" error="1.05e0"></Isotope>  
 <percentage\_radiogenic\_argon>64.800</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.492e0" error="0.0e0"></IsotopeRatio>  
 510 <cumulated\_percentage\_Ar39\_released>27.770</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="3.214" stddev="0.087"></MeasuredAge>  
 <RecalculatedAge>3.214</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.97e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.47e-1" error="0.0e0"></IsotopeRatio>  
 515 <IsotopeRatio id="Ar36\_Ar40" value="1.1588156287e-3" error="5.94472417525e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="4.40757180236e-1" error="8.10993211634e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 <StepNumber>16</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>770.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>

```

<Isotope id="Ar36" value="1.04061e-15" error="3.63e0"></Isotope>
<Isotope id="Ar37" value="4.1801e-14" error="1.216e1"></Isotope>
<Isotope id="Ar38" value="1.0219e-14" error="6.53e0"></Isotope>
<Isotope id="Ar39" value="4.42388e-13" error="7.0e-1"></Isotope>
<Isotope id="Ar40" value="9.91863e-13" error="1.04e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.04061e-15" error="3.63e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="4.42388e-13" error="7.0e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="9.91863e-13" error="1.04e0"></Isotope>
535 <percentage_radiogenic_argon>67.980</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.547e0" error="0.0e0"></IsotopeRatio>
540 <cumulated_percentage_Ar39_released>44.000</cumulated_percentage_Ar39_released>
<MeasuredAge value="3.333" stddev="0.075"></MeasuredAge>
545 <RecalculatedAge>3.333</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.8e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.39e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="1.04914690839e-3" error="4.8995160622e-5"></IsotopeRatio>
550 <IsotopeRatio id="Ar39_Ar40" value="4.46017242301e-1" error="7.76070001603e-3"></IsotopeRatio>
</StepData>
<StepData>
555 <StepNumber>17</StepNumber>
<FurnaceTemperature_DegreesCelsius>790.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.24189e-15" error="3.4e0"></Isotope>
<Isotope id="Ar37" value="5.0107e-14" error="1.211e1"></Isotope>
<Isotope id="Ar38" value="1.2608e-14" error="6.4e0"></Isotope>
<Isotope id="Ar39" value="5.50114e-13" error="6.5e-1"></Isotope>
560 <Isotope id="Ar40" value="1.24809e-12" error="1.06e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.24189e-15" error="3.4e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="5.50114e-13" error="6.5e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="1.24809e-12" error="1.06e0"></Isotope>
<percentage_radiogenic_argon>69.570</percentage_radiogenic_argon>
565 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.602e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>64.190</cumulated_percentage_Ar39_released>
<MeasuredAge value="3.451" stddev="0.073"></MeasuredAge>
<RecalculatedAge>3.451</RecalculatedAge>
570 <IsotopeRatio id="Ca_K" value="1.73e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.37e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="9.95032409522e-4" error="4.43784454647e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="4.40764688444e-1" error="7.53707617239e-3"></IsotopeRatio>
</StepData>
<StepData>
575 <StepNumber>18</StepNumber>
<FurnaceTemperature_DegreesCelsius>810.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.19947e-15" error="4.11e0"></Isotope>
580 <Isotope id="Ar37" value="5.3142e-14" error="1.3e1"></Isotope>
<Isotope id="Ar38" value="1.2604e-14" error="7.2e0"></Isotope>
<Isotope id="Ar39" value="5.17569e-13" error="7.5e-1"></Isotope>
<Isotope id="Ar40" value="1.18535e-12" error="1.19e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.19947e-15" error="4.11e0"></Isotope>
585 <Isotope id="Ar39_correctedForIsotopeInterference" value="5.17569e-13" error="7.5e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="1.18535e-12" error="1.19e0"></Isotope>
<percentage_radiogenic_argon>69.080</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.605e0" error="0.0e0"></IsotopeRatio>
590 <cumulated_percentage_Ar39_released>83.180</cumulated_percentage_Ar39_released>
<MeasuredAge value="3.459" stddev="0.086"></MeasuredAge>
<RecalculatedAge>3.459</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.95e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.54e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="1.01191209347e-3" error="5.36313409541e-5"></IsotopeRatio>

```

595           <IsotopeRatio id="Ar39\_Ar40" value="4.36638123761e-1" error="8.47077960096e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
     <StepNumber>19</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>830.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
     <Isotope id="Ar36" value="8.26257e-16" error="5.71e0"></Isotope>  
     <Isotope id="Ar37" value="4.2652e-14" error="1.4e1"></Isotope>  
     <Isotope id="Ar38" value="8.4787e-15" error="9.03e0"></Isotope>  
     <Isotope id="Ar39" value="2.81213e-13" error="1.08e0"></Isotope>  
     <Isotope id="Ar40" value="6.68526e-13" error="1.57e0"></Isotope>  
     <Isotope id="Ar36\_correctedForIsotopeInterference" value="8.26257e-16" error="5.71e0"></Isotope>  
     <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.81213e-13" error="1.08e0"></Isotope>  
     <Isotope id="Ar40\_correctedForIsotopeInterference" value="6.68526e-13" error="1.57e0"></Isotope>  
     <percentage\_radiogenic\_argon>62.590</percentage\_radiogenic\_argon>  
     <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.509e0" error="0.0e0"></IsotopeRatio>  
     <cumulated\_percentage\_Ar39\_released>93.500</cumulated\_percentage\_Ar39\_released>  
     <MeasuredAge value="3.251" stddev="0.136"></MeasuredAge>  
     <RecalculatedAge>3.251</RecalculatedAge>  
     <IsotopeRatio id="Ca\_K" value="2.88e-1" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="Cl\_K" value="2.24e-1" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="Ar36\_Ar40" value="1.23593846761e-3" error="8.99763204423e-5"></IsotopeRatio>  
     <IsotopeRatio id="Ar39\_Ar40" value="4.20646317421e-1" error="1.11471274116e-2"></IsotopeRatio>  
 </StepData>  
 <StepData>  
     <StepNumber>20</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>850.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
     <Isotope id="Ar36" value="5.38006e-16" error="6.97e0"></Isotope>  
     <Isotope id="Ar37" value="2.9319e-14" error="1.461e1"></Isotope>  
     <Isotope id="Ar38" value="4.8967e-15" error="1.125e1"></Isotope>  
     <Isotope id="Ar39" value="1.11217e-13" error="1.75e0"></Isotope>  
     <Isotope id="Ar40" value="2.99278e-13" error="2.32e0"></Isotope>  
     <Isotope id="Ar36\_correctedForIsotopeInterference" value="5.38006e-16" error="6.97e0"></Isotope>  
     <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.11217e-13" error="1.75e0"></Isotope>  
     <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.99278e-13" error="2.32e0"></Isotope>  
     <percentage\_radiogenic\_argon>46.290</percentage\_radiogenic\_argon>  
     <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.261e0" error="0.0e0"></IsotopeRatio>  
     <cumulated\_percentage\_Ar39\_released>97.580</cumulated\_percentage\_Ar39\_released>  
     <MeasuredAge value="2.718" stddev="0.258"></MeasuredAge>  
     <RecalculatedAge>2.718</RecalculatedAge>  
     <IsotopeRatio id="Ca\_K" value="5.01e-1" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="Cl\_K" value="3.9e-1" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="Ar36\_Ar40" value="1.79767974926e-3" error="1.67004448707e-4"></IsotopeRatio>  
     <IsotopeRatio id="Ar39\_Ar40" value="3.71617693248e-1" error="1.51248401152e-2"></IsotopeRatio>  
 </StepData>  
 <StepData>  
     <StepNumber>21</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>890.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
     <Isotope id="Ar36" value="3.39801e-16" error="7.62e0"></Isotope>  
     <Isotope id="Ar37" value="1.7292e-14" error="1.506e1"></Isotope>  
     <Isotope id="Ar38" value="2.5809e-15" error="1.375e1"></Isotope>  
     <Isotope id="Ar39" value="2.84752e-14" error="3.69e0"></Isotope>  
     <Isotope id="Ar40" value="1.13467e-13" error="4.27e0"></Isotope>  
     <Isotope id="Ar36\_correctedForIsotopeInterference" value="3.39801e-16" error="7.62e0"></Isotope>  
     <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.84752e-14" error="3.69e0"></Isotope>  
     <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.13467e-13" error="4.27e0"></Isotope>  
     <percentage\_radiogenic\_argon>11.400</percentage\_radiogenic\_argon>  
     <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="radiogenicAr40\_Ar39" value="4.579e-1" error="0.0e0"></IsotopeRatio>

```

<cumulated_percentage_Ar39_released>98.630</cumulated_percentage_Ar39_released>
660 <MeasuredAge value="0.987" stddev="0.696"></MeasuredAge>
<RecalculatedAge>0.987</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.15e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="9.44e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="2.99471211894e-3" error="3.56071270942e-4"></IsotopeRatio>
665 <IsotopeRatio id="Ar39_Ar40" value="2.50955784501e-1" error="1.99760804463e-2"></IsotopeRatio>
</StepData>
<StepData>
<StepNumber>22</StepNumber>
<FurnaceTemperature_DegreesCelsius>910.000</FurnaceTemperature_DegreesCelsius>
670 <Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="2.73945e-16" error="1.134e1"></Isotope>
<Isotope id="Ar37" value="1.3472e-14" error="1.712e1"></Isotope>
<Isotope id="Ar38" value="1.966e-15" error="1.709e1"></Isotope>
<Isotope id="Ar39" value="8.85583e-15" error="9.3e0"></Isotope>
<Isotope id="Ar40" value="6.66605e-14" error="9.69e0"></Isotope>
675 <Isotope id="Ar36_correctedForIsotopeInterference" value="2.73945e-16" error="1.134e1"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="8.85583e-15" error="9.3e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="6.66605e-14" error="9.69e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
680 <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>98.950</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="2.768"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
685 <IsotopeRatio id="Ca_K" value="2.89e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.51e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="4.10955513385e-3" error="8.64239444649e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.32849738601e-1" error="2.52281653603e-2"></IsotopeRatio>
</StepData>
<StepData>
690 <StepNumber>23</StepNumber>
<FurnaceTemperature_DegreesCelsius>930.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="2.10345e-16" error="1.119e1"></Isotope>
<Isotope id="Ar37" value="1.0126e-14" error="1.658e1"></Isotope>
695 <Isotope id="Ar38" value="1.4455e-15" error="1.679e1"></Isotope>
<Isotope id="Ar39" value="6.48713e-15" error="9.27e0"></Isotope>
<Isotope id="Ar40" value="5.10462e-14" error="9.6e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="2.10345e-16" error="1.119e1"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="6.48713e-15" error="9.27e0"></Isotope>
700 <Isotope id="Ar40_correctedForIsotopeInterference" value="5.10462e-14" error="9.6e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
705 <cumulated_percentage_Ar39_released>99.190</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="2.863"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="2.97e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.51e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="4.1206789144e-3" error="8.56689146303e-4"></IsotopeRatio>
710 <IsotopeRatio id="Ar39_Ar40" value="1.27083504747e-1" error="2.39806573457e-2"></IsotopeRatio>
</StepData>
<StepData>
<StepNumber>24</StepNumber>
<FurnaceTemperature_DegreesCelsius>950.000</FurnaceTemperature_DegreesCelsius>
715 <Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.77246e-16" error="1.104e1"></Isotope>
<Isotope id="Ar37" value="7.7074e-15" error="1.649e1"></Isotope>
<Isotope id="Ar38" value="1.1231e-15" error="1.651e1"></Isotope>
<Isotope id="Ar39" value="4.97815e-15" error="9.15e0"></Isotope>
720 <Isotope id="Ar40" value="4.08637e-14" error="9.42e0"></Isotope>

```

```

<Isotope id="Ar36_correctedForIsotopeInterference" value="1.77246e-16" error="1.104e1"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="4.97815e-15" error="9.15e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="4.08637e-14" error="9.42e0"></Isotope>
725 <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>99.370</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="3.042"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
730 <IsotopeRatio id="Ca_K" value="2.94e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.54e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="4.33749268911e-3" error="8.87451004192e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.21823280809e-1" error="2.26225832463e-2"></IsotopeRatio>
</StepData>
735 <StepData>
<StepNumber>25</StepNumber>
<FurnaceTemperature_DegreesCelsius>1000.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.73304e-16" error="9.91e0"></Isotope>
740 <Isotope id="Ar37" value="6.273e-15" error="1.642e1"></Isotope>
<Isotope id="Ar38" value="9.1895e-16" error="1.602e1"></Isotope>
<Isotope id="Ar39" value="4.13014e-15" error="8.75e0"></Isotope>
<Isotope id="Ar40" value="3.9953e-14" error="8.92e0"></Isotope>
745 <Isotope id="Ar36_correctedForIsotopeInterference" value="1.73304e-16" error="9.91e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="4.13014e-15" error="8.75e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="3.9953e-14" error="8.92e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
750 <cumulated_percentage_Ar39_released>99.530</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="3.266"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="2.89e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.49e0" error="0.0e0"></IsotopeRatio>
755 <IsotopeRatio id="Ar36_Ar40" value="4.33769679373e-3" error="8.1678830626e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.03374965585e-1" error="1.82663564188e-2"></IsotopeRatio>
</StepData>
<StepData>
760 <StepNumber>26</StepNumber>
<FurnaceTemperature_DegreesCelsius>1100.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="2.06888e-16" error="8.23e0"></Isotope>
<Isotope id="Ar37" value="5.2379e-15" error="1.541e1"></Isotope>
<Isotope id="Ar38" value="7.6603e-16" error="1.532e1"></Isotope>
765 <Isotope id="Ar39" value="3.92061e-15" error="7.58e0"></Isotope>
<Isotope id="Ar40" value="5.0931e-14" error="7.66e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="2.06888e-16" error="8.23e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="3.92061e-15" error="7.58e0"></Isotope>
770 <Isotope id="Ar40_correctedForIsotopeInterference" value="5.0931e-14" error="7.66e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>99.670</cumulated_percentage_Ar39_released>
775 <MeasuredAge value="0.002" stddev="3.522"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="2.54e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.13e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="4.06212326481e-3" error="6.45471386778e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="7.69788537433e-2" error="1.17315773105e-2"></IsotopeRatio>
780 </StepData>
<StepData>
<StepNumber>27</StepNumber>
<FurnaceTemperature_DegreesCelsius>1200.000</FurnaceTemperature_DegreesCelsius>

```

785 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="2.78933e-16" error="7.63e0"></Isotope>  
 <Isotope id="Ar37" value="4.552e-15" error="1.489e1"></Isotope>  
 <Isotope id="Ar38" value="6.7635e-16" error="1.418e1"></Isotope>  
 <Isotope id="Ar39" value="3.44378e-15" error="7.28e0"></Isotope>  
 <Isotope id="Ar40" value="7.4475e-14" error="7.3e0"></Isotope>  
 790 <Isotope id="Ar36\_correctedForIsotopeInterference" value="2.78933e-16" error="7.63e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.44378e-15" error="7.28e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="7.4475e-14" error="7.3e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 795 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.800</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.002" stddev="5.221"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 800 <IsotopeRatio id="Ca\_K" value="2.51e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="2.08e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.74532393421e-3" error="5.59176863377e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="4.62407519302e-2" error="6.74190163142e-3"></IsotopeRatio>  
 </StepData>  
 805 <StepData>  
 <StepNumber>28</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1300.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="5.08021e-16" error="7.8e0"></Isotope>  
 <Isotope id="Ar37" value="3.8756e-15" error="1.587e1"></Isotope>  
 810 <Isotope id="Ar38" value="6.2035e-16" error="1.359e1"></Isotope>  
 <Isotope id="Ar39" value="2.84421e-15" error="7.69e0"></Isotope>  
 <Isotope id="Ar40" value="1.46149e-13" error="7.69e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="5.08021e-16" error="7.8e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.84421e-15" error="7.69e0"></Isotope>  
 815 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.46149e-13" error="7.69e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.900</cumulated\_percentage\_Ar39\_released>  
 820 <MeasuredAge value="0.002" stddev="12.312"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.59e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="2.11e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.47604841634e-3" error="5.38439899691e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.94610294973e-2" error="2.99310633668e-3"></IsotopeRatio>  
 </StepData>  
 825 <StepData>  
 <StepNumber>29</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1450.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.17846e-15" error="7.02e0"></Isotope>  
 <Isotope id="Ar37" value="3.6077e-15" error="1.402e1"></Isotope>  
 <Isotope id="Ar38" value="6.6159e-16" error="1.106e1"></Isotope>  
 <Isotope id="Ar39" value="2.68892e-15" error="7.0e0"></Isotope>  
 <Isotope id="Ar40" value="4.14348e-13" error="7.0e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.17846e-15" error="7.02e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.68892e-15" error="7.0e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="4.14348e-13" error="7.0e0"></Isotope>  
 830 <percentage\_radiogenic\_argon>15.940</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="2.456e1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>100.000</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="52.211" stddev="29.536"></MeasuredAge>  
 <RecalculatedAge>52.211</RecalculatedAge>  
 835 <IsotopeRatio id="Ca\_K" value="2.55e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.85e0" error="0.0e0"></IsotopeRatio>

```

<IsotopeRatio id="Ar36_Ar40" value="2.8441310203e-3" error="3.98747169046e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="6.48952088583e-3" error="9.08532924016e-4"></IsotopeRatio>
850 </StepData>
<CalculationParameters>
    <Parameter id="J_Factor" value="1.1954e-3" uncertainty="2.4e-1"></Parameter>
    <Parameter id="FluxMonitorAge" value="98.50" uncertainty="0.80" />
    <Parameter id="MassDiscrimination" value="0.98769" uncertainty="0.15" />
    <Parameter id="Atmospheric_40_36_ratio" value="2.9555e2"></Parameter>
    <Parameter id="DecayConstantK" value="5.543e-10" uncertainty="0.192"></Parameter>
855 </CalculationParameters>
</ArgonData>
</eArgonDataObject>
<eArgonDataObject>
860 <ArgonData>
    <SampleDescription>ANU CAN #30, D3150595, Foil: A3, Alunite, 143.7mg, Steps: 32</SampleDescription>
    <StepData>
        <StepNumber>0</StepNumber>
        <FurnaceTemperature_DegreesCelsius>450.000</FurnaceTemperature_DegreesCelsius>
865 <Duration_minutes>15.000</Duration_minutes>
        <Isotope id="Ar36" value="1.45274e-16" error="5.09e0"></Isotope>
        <Isotope id="Ar37" value="2.027e-17" error="5.025e1"></Isotope>
        <Isotope id="Ar38" value="5.7631e-17" error="9.38e0"></Isotope>
        <Isotope id="Ar39" value="1.88854e-16" error="5.01e0"></Isotope>
870 <Isotope id="Ar40" value="4.28891e-14" error="5.01e0"></Isotope>
        <Isotope id="Ar36_correctedForIsotopeInterference" value="1.45274e-16" error="5.09e0"></Isotope>
        <Isotope id="Ar39_correctedForIsotopeInterference" value="1.88854e-16" error="5.01e0"></Isotope>
        <Isotope id="Ar40_correctedForIsotopeInterference" value="4.28891e-14" error="5.01e0"></Isotope>
        <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
875 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
        <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
        <cumulated_percentage_Ar39_released>0.010</cumulated_percentage_Ar39_released>
        <MeasuredAge value="0.002" stddev="34.980"></MeasuredAge>
        <RecalculatedAge>0.002</RecalculatedAge>
880 <IsotopeRatio id="Ca_K" value="2.04e-1" error="0.0e0"></IsotopeRatio>
        <IsotopeRatio id="Cl_K" value="1.79e0" error="0.0e0"></IsotopeRatio>
        <IsotopeRatio id="Ar36_Ar40" value="3.38720094383e-3" error="3.42107295327e-4"></IsotopeRatio>
        <IsotopeRatio id="Ar39_Ar40" value="4.40330993189e-3" error="4.41211655176e-4"></IsotopeRatio>
885 </StepData>
<StepData>
    <StepNumber>1</StepNumber>
    <FurnaceTemperature_DegreesCelsius>470.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="9.94689e-17" error="6.5e0"></Isotope>
890 <Isotope id="Ar37" value="2.0281e-17" error="5.038e1"></Isotope>
    <Isotope id="Ar38" value="5.5181e-17" error="1.229e1"></Isotope>
    <Isotope id="Ar39" value="1.83919e-16" error="6.17e0"></Isotope>
    <Isotope id="Ar40" value="2.87688e-14" error="6.17e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="9.94689e-17" error="6.5e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="1.83919e-16" error="6.17e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="2.87688e-14" error="6.17e0"></Isotope>
    <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
895 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
        <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
        <cumulated_percentage_Ar39_released>0.030</cumulated_percentage_Ar39_released>
        <MeasuredAge value="0.002" stddev="30.600"></MeasuredAge>
        <RecalculatedAge>0.002</RecalculatedAge>
        <IsotopeRatio id="Ca_K" value="2.1e-1" error="0.0e0"></IsotopeRatio>
        <IsotopeRatio id="Cl_K" value="2.27e0" error="0.0e0"></IsotopeRatio>
900 <IsotopeRatio id="Ar36_Ar40" value="3.45752690415e-3" error="4.38068658755e-4"></IsotopeRatio>
        <IsotopeRatio id="Ar39_Ar40" value="6.39300214121e-3" error="7.88896464225e-4"></IsotopeRatio>
        </StepData>
        <StepData>
            <StepNumber>2</StepNumber>

```

910

```

<FurnaceTemperature_DegreesCelsius>490.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.21268e-16" error="6.32e0"></Isotope>
<Isotope id="Ar37" value="2.0292e-17" error="5.037e1"></Isotope>
<Isotope id="Ar38" value="5.7888e-17" error="1.11e1"></Isotope>
915 <Isotope id="Ar39" value="2.19988e-16" error="6.08e0"></Isotope>
<Isotope id="Ar40" value="3.52973e-14" error="6.08e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.21268e-16" error="6.32e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="2.19988e-16" error="6.08e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="3.52973e-14" error="6.08e0"></Isotope>
920 <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.040</cumulated_percentage_Ar39_released>
925 <MeasuredAge value="0.002" stddev="30.600"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.75e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.79e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.43561688854e-3" error="4.26016494179e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="6.23243137577e-3" error="7.57863655294e-4"></IsotopeRatio>
930 </StepData>
<StepData>
  <StepNumber>3</StepNumber>
  <FurnaceTemperature_DegreesCelsius>510.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="1.43643e-16" error="4.95e0"></Isotope>
  <Isotope id="Ar37" value="2.0303e-17" error="5.023e1"></Isotope>
  <Isotope id="Ar38" value="6.4456e-17" error="1.122e1"></Isotope>
  <Isotope id="Ar39" value="2.85821e-16" error="4.81e0"></Isotope>
  <Isotope id="Ar40" value="4.25432e-14" error="4.81e0"></Isotope>
935 <Isotope id="Ar36_correctedForIsotopeInterference" value="1.43643e-16" error="4.95e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="2.85821e-16" error="4.81e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="4.25432e-14" error="4.81e0"></Isotope>
<percentage_radiogenic_argon>0.210</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="3.135e-1" error="0.0e0"></IsotopeRatio>
940 <cumulated_percentage_Ar39_released>0.060</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.676" stddev="22.111"></MeasuredAge>
<RecalculatedAge>0.676</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.35e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.44e0" error="0.0e0"></IsotopeRatio>
945 <IsotopeRatio id="Ar36_Ar40" value="3.37640327949e-3" error="3.29536960078e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="6.7183709735e-3" error="6.46307287651e-4"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>4</StepNumber>
  <FurnaceTemperature_DegreesCelsius>530.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="1.99694e-16" error="3.18e0"></Isotope>
  <Isotope id="Ar37" value="2.0314e-17" error="5.009e1"></Isotope>
  <Isotope id="Ar38" value="7.6557e-17" error="8.93e0"></Isotope>
  <Isotope id="Ar39" value="4.78862e-16" error="2.99e0"></Isotope>
  <Isotope id="Ar40" value="5.96843e-14" error="2.99e0"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="1.99694e-16" error="3.18e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="4.78862e-16" error="2.99e0"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="5.96843e-14" error="2.99e0"></Isotope>
950 <percentage_radiogenic_argon>1.110</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.388e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.100</cumulated_percentage_Ar39_released>
<MeasuredAge value="2.991" stddev="11.650"></MeasuredAge>
955 <RecalculatedAge>2.991</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="8.06e-2" error="0.0e0"></IsotopeRatio>
```

```

<IsotopeRatio id="Cl_K" value="8.4e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.3458380177e-3" error="2.06438205692e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="8.02324899513e-3" error="4.79790289909e-4"></IsotopeRatio>
975 </StepData>
<StepData>
  <StepNumber>5</StepNumber>
  <FurnaceTemperature_DegreesCelsius>550.000</FurnaceTemperature_DegreesCelsius>
980  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="2.9729e-16" error="1.86e0"></Isotope>
  <Isotope id="Ar37" value="2.0326e-17" error="5.003e1"></Isotope>
  <Isotope id="Ar38" value="1.0678e-16" error="5.28e0"></Isotope>
  <Isotope id="Ar39" value="9.56928e-16" error="1.74e0"></Isotope>
985  <Isotope id="Ar40" value="8.87094e-14" error="1.74e0"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="2.9729e-16" error="1.86e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="9.56928e-16" error="1.74e0"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="8.87094e-14" error="1.74e0"></Isotope>
  <percentage_radiogenic_argon>0.950</percentage_radiogenic_argon>
990  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="8.834e-1" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>0.170</cumulated_percentage_Ar39_released>
  <MeasuredAge value="1.904" stddev="5.067"></MeasuredAge>
  <RecalculatedAge>1.904</RecalculatedAge>
995  <IsotopeRatio id="Ca_K" value="4.04e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="4.98e-1" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="3.35127957127e-3" error="1.20646064566e-4"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="1.07872220982e-2" error="3.75395329018e-4"></IsotopeRatio>
000 </StepData>
<StepData>
  <StepNumber>6</StepNumber>
  <FurnaceTemperature_DegreesCelsius>570.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="2.99141e-16" error="1.44e0"></Isotope>
005  <Isotope id="Ar37" value="2.0337e-17" error="5.002e1"></Isotope>
  <Isotope id="Ar38" value="1.1254e-16" error="4.17e0"></Isotope>
  <Isotope id="Ar39" value="1.41523e-15" error="1.22e0"></Isotope>
  <Isotope id="Ar40" value="9.03542e-14" error="1.22e0"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="2.99141e-16" error="1.44e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="1.41523e-15" error="1.22e0"></Isotope>
010  <Isotope id="Ar40_correctedForIsotopeInterference" value="9.03542e-14" error="1.22e0"></Isotope>
  <percentage_radiogenic_argon>2.150</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.373e0" error="0.0e0"></IsotopeRatio>
015  <cumulated_percentage_Ar39_released>0.280</cumulated_percentage_Ar39_released>
  <MeasuredAge value="2.959" stddev="2.557"></MeasuredAge>
  <RecalculatedAge>2.959</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="2.73e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="3.39e-1" error="0.0e0"></IsotopeRatio>
020  <IsotopeRatio id="Ar36_Ar40" value="3.31075921208e-3" error="8.80661950413e-5"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="1.56631346412e-2" error="3.82180485246e-4"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>7</StepNumber>
  <FurnaceTemperature_DegreesCelsius>590.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="3.02618e-16" error="1.22e0"></Isotope>
  <Isotope id="Ar37" value="2.0348e-17" error="5.001e1"></Isotope>
  <Isotope id="Ar38" value="1.3187e-16" error="4.54e0"></Isotope>
  <Isotope id="Ar39" value="2.3221e-15" error="7.7e-1"></Isotope>
  <Isotope id="Ar40" value="9.25004e-14" error="7.7e-1"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="3.02618e-16" error="1.22e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="2.3221e-15" error="7.7e-1"></Isotope>
030  <Isotope id="Ar40_correctedForIsotopeInterference" value="9.25004e-14" error="7.7e-1"></Isotope>
  <percentage_radiogenic_argon>3.310</percentage_radiogenic_argon>
035

```

```

<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.318e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.450</cumulated_percentage_Ar39_released>
<MeasuredAge value="2.841" stddev="1.205"></MeasuredAge>
<RecalculatedAge>2.841</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.66e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.51e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.27153179878e-3" error="6.51034827958e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="2.51036752274e-2" error="3.86596598501e-4"></IsotopeRatio>
040 </StepData>
045 <StepData>
<StepNumber>8</StepNumber>
<FurnaceTemperature_DegreesCelsius>610.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
050 <Isotope id="Ar36" value="3.27989e-16" error="8.2e-1"></Isotope>
<Isotope id="Ar37" value="5.2586e-16" error="2.808e1"></Isotope>
<Isotope id="Ar38" value="1.5989e-16" error="3.38e0"></Isotope>
<Isotope id="Ar39" value="4.31854e-15" error="5.1e-1"></Isotope>
<Isotope id="Ar40" value="1.02999e-13" error="5.1e-1"></Isotope>
055 <Isotope id="Ar36_correctedForIsotopeInterference" value="3.27989e-16" error="8.2e-1"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="4.31854e-15" error="5.1e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="1.02999e-13" error="5.1e-1"></Isotope>
<percentage_radiogenic_argon>5.880</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
060 <IsotopeRatio id="radiogenicAr40_Ar39" value="1.404e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.770</cumulated_percentage_Ar39_released>
<MeasuredAge value="3.024" stddev="0.473"></MeasuredAge>
<RecalculatedAge>3.024</RecalculatedAge>
065 <IsotopeRatio id="Ca_K" value="2.31e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.36e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.18439013971e-3" error="4.23523888581e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="4.19279798833e-2" error="4.2766539481e-4"></IsotopeRatio>
</StepData>
070 <StepData>
<StepNumber>9</StepNumber>
<FurnaceTemperature_DegreesCelsius>630.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
075 <Isotope id="Ar36" value="3.73933e-16" error="8.7e-1"></Isotope>
<Isotope id="Ar37" value="5.4324e-16" error="1.574e1"></Isotope>
<Isotope id="Ar38" value="2.2395e-16" error="3.39e0"></Isotope>
<Isotope id="Ar39" value="9.00037e-15" error="3.4e-1"></Isotope>
<Isotope id="Ar40" value="1.24887e-13" error="3.4e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="3.73933e-16" error="8.7e-1"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="9.00037e-15" error="3.4e-1"></Isotope>
080 <Isotope id="Ar40_correctedForIsotopeInterference" value="1.24887e-13" error="3.4e-1"></Isotope>
<percentage_radiogenic_argon>11.480</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.597e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>1.430</cumulated_percentage_Ar39_released>
085 <MeasuredAge value="3.440" stddev="0.253"></MeasuredAge>
<RecalculatedAge>3.440</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.15e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="6.85e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="2.99417073034e-3" error="3.62294658371e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="7.20681095711e-2" error="4.90063145083e-4"></IsotopeRatio>
090 </StepData>
095 <StepData>
<StepNumber>10</StepNumber>
<FurnaceTemperature_DegreesCelsius>650.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="4.11827e-16" error="7.3e-1"></Isotope>
<Isotope id="Ar37" value="8.4243e-16" error="1.617e1"></Isotope>
<Isotope id="Ar38" value="3.7129e-16" error="2.82e0"></Isotope>

```

```

100 <Isotope id="Ar39" value="1.97206e-14" error="3.0e-1"></Isotope>
    <Isotope id="Ar40" value="1.50958e-13" error="3.0e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="4.11827e-16" error="7.3e-1"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="1.97206e-14" error="3.0e-1"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="1.50958e-13" error="3.0e-1"></Isotope>
    <percentage_radiogenic_argon>19.290</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.483e0" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>2.890</cumulated_percentage_Ar39_released>
    <MeasuredAge value="3.195" stddev="0.110"></MeasuredAge>
    <RecalculatedAge>3.195</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="8.12e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="4.29e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="2.7280899323e-3" error="2.80993263027e-5"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="1.30636335934e-1" error="7.83818015607e-4"></IsotopeRatio>
</StepData>
115 <StepData>
    <StepNumber>11</StepNumber>
    <FurnaceTemperature_DegreesCelsius>670.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="3.95658e-16" error="7.2e-1"></Isotope>
    <Isotope id="Ar37" value="1.3816e-15" error="1.319e1"></Isotope>
    <Isotope id="Ar38" value="6.0576e-16" error="3.05e0"></Isotope>
    <Isotope id="Ar39" value="3.65178e-14" error="3.4e-1"></Isotope>
    <Isotope id="Ar40" value="1.68756e-13" error="3.4e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="3.95658e-16" error="7.2e-1"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="3.65178e-14" error="3.4e-1"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="1.68756e-13" error="3.4e-1"></Isotope>
    <percentage_radiogenic_argon>30.490</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.419e0" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>5.590</cumulated_percentage_Ar39_released>
    <MeasuredAge value="3.057" stddev="0.061"></MeasuredAge>
    <RecalculatedAge>3.057</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="7.19e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="3.91e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="2.34455663799e-3" error="2.48523003627e-5"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="2.16394083766e-1" error="1.47147976961e-3"></IsotopeRatio>
</StepData>
130 <StepData>
    <StepNumber>12</StepNumber>
    <FurnaceTemperature_DegreesCelsius>690.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="3.75303e-16" error="1.26e0"></Isotope>
    <Isotope id="Ar37" value="2.5478e-15" error="1.241e1"></Isotope>
    <Isotope id="Ar38" value="9.4436e-16" error="3.78e0"></Isotope>
    <Isotope id="Ar39" value="5.70994e-14" error="4.5e-1"></Isotope>
    <Isotope id="Ar40" value="1.89037e-13" error="4.6e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="3.75303e-16" error="1.26e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="5.70994e-14" error="4.5e-1"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="1.89037e-13" error="4.6e-1"></Isotope>
    <percentage_radiogenic_argon>40.910</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.368e0" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>9.810</cumulated_percentage_Ar39_released>
    <MeasuredAge value="2.948" stddev="0.063"></MeasuredAge>
    <RecalculatedAge>2.948</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="8.48e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="4.85e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="1.98534149399e-3" error="3.41478736967e-5"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="3.0205409523e-1" error="2.74869226659e-3"></IsotopeRatio>
</StepData>
155 <StepData>

```

```

<StepNumber>13</StepNumber>
<FurnaceTemperature_DegreesCelsius>710.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="3.85659e-16" error="1.55e0"></Isotope>
<Isotope id="Ar37" value="4.2854e-15" error="1.205e1"></Isotope>
<Isotope id="Ar38" value="1.3949e-15" error="4.35e0"></Isotope>
<Isotope id="Ar39" value="8.06118e-14" error="5.4e-1"></Isotope>
<Isotope id="Ar40" value="2.19645e-13" error="5.7e-1"></Isotope>
165 <Isotope id="Ar36_correctedForIsotopeInterference" value="3.85659e-16" error="1.55e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="8.06118e-14" error="5.4e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="2.19645e-13" error="5.7e-1"></Isotope>
<percentage_radiogenic_argon>47.520</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
170 <IsotopeRatio id="radiogenicAr40_Ar39" value="1.311e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>15.780</cumulated_percentage_Ar39_released>
<MeasuredAge value="2.824" stddev="0.059"></MeasuredAge>
<RecalculatedAge>2.824</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.01e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="6.21e-2" error="0.0e0"></IsotopeRatio>
175 <IsotopeRatio id="Ar36_Ar40" value="1.75582872362e-3" error="3.72235689408e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="3.6700949259e-1" error="4.07380536775e-3"></IsotopeRatio>
</StepData>
<StepData>
180 <StepNumber>14</StepNumber>
<FurnaceTemperature_DegreesCelsius>730.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="4.40087e-16" error="2.36e0"></Isotope>
<Isotope id="Ar37" value="7.8521e-15" error="1.326e1"></Isotope>
185 <Isotope id="Ar38" value="2.1318e-15" error="5.69e0"></Isotope>
<Isotope id="Ar39" value="1.11595e-13" error="6.7e-1"></Isotope>
<Isotope id="Ar40" value="2.68112e-13" error="7.6e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="4.40087e-16" error="2.36e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="1.11595e-13" error="6.7e-1"></Isotope>
190 <Isotope id="Ar40_correctedForIsotopeInterference" value="2.68112e-13" error="7.6e-1"></Isotope>
<percentage_radiogenic_argon>50.780</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.237e0" error="0.0e0"></IsotopeRatio>
195 <cumulated_percentage_Ar39_released>24.030</cumulated_percentage_Ar39_released>
<MeasuredAge value="2.666" stddev="0.072"></MeasuredAge>
<RecalculatedAge>2.666</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.34e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="8.62e-2" error="0.0e0"></IsotopeRatio>
200 <IsotopeRatio id="Ar36_Ar40" value="1.64142970102e-3" error="5.12126066718e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="4.16225308826e-1" error="5.95202191621e-3"></IsotopeRatio>
</StepData>
<StepData>
205 <StepNumber>15</StepNumber>
<FurnaceTemperature_DegreesCelsius>750.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="5.39074e-16" error="2.95e0"></Isotope>
<Isotope id="Ar37" value="1.3084e-14" error="1.364e1"></Isotope>
<Isotope id="Ar38" value="3.207e-15" error="6.42e0"></Isotope>
210 <Isotope id="Ar39" value="1.52995e-13" error="7.3e-1"></Isotope>
<Isotope id="Ar40" value="3.41862e-13" error="9.2e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="5.39074e-16" error="2.95e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="1.52995e-13" error="7.3e-1"></Isotope>
215 <Isotope id="Ar40_correctedForIsotopeInterference" value="3.41862e-13" error="9.2e-1"></Isotope>
<percentage_radiogenic_argon>52.610</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.193e0" error="0.0e0"></IsotopeRatio>
220 <cumulated_percentage_Ar39_released>35.340</cumulated_percentage_Ar39_released>
<MeasuredAge value="2.571" stddev="0.081"></MeasuredAge>
<RecalculatedAge>2.571</RecalculatedAge>

```



290 <percentage\_radiogenic\_argon>50.790</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.105e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>81.560</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.381" stddev="0.105"></MeasuredAge>  
 <RecalculatedAge>2.381</RecalculatedAge>  
 295 <IsotopeRatio id="Ca\_K" value="2.21e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.59e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="1.6382239535e-3" error="8.38770664191e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="4.66937062091e-1" error="9.85237201012e-3"></IsotopeRatio>  
 </StepData>  
 300 <StepData>  
     <StepNumber>19</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>830.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
     <Isotope id="Ar36" value="5.57131e-16" error="3.98e0"></Isotope>  
     <Isotope id="Ar37" value="1.8769e-14" error="1.409e1"></Isotope>  
     <Isotope id="Ar38" value="3.8136e-15" error="8.13e0"></Isotope>  
     <Isotope id="Ar39" value="1.43619e-13" error="9.6e-1"></Isotope>  
     <Isotope id="Ar40" value="3.18858e-13" error="1.29e0"></Isotope>  
     <Isotope id="Ar36\_correctedForIsotopeInterference" value="5.57131e-16" error="3.98e0"></Isotope>  
     <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.43619e-13" error="9.6e-1"></Isotope>  
     <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.18858e-13" error="1.29e0"></Isotope>  
     <percentage\_radiogenic\_argon>47.640</percentage\_radiogenic\_argon>  
     <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.074e0" error="0.0e0"></IsotopeRatio>  
     <cumulated\_percentage\_Ar39\_released>92.180</cumulated\_percentage\_Ar39\_released>  
     <MeasuredAge value="2.314" stddev="0.118"></MeasuredAge>  
     <RecalculatedAge>2.314</RecalculatedAge>  
     <IsotopeRatio id="Ca\_K" value="2.48e-1" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="Cl\_K" value="1.78e-1" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="Ar36\_Ar40" value="1.74726994461e-3" error="9.20811260812e-5"></IsotopeRatio>  
     <IsotopeRatio id="Ar39\_Ar40" value="4.50416799955e-1" error="1.0134377999e-2"></IsotopeRatio>  
 </StepData>  
 315 <StepData>  
     <StepNumber>20</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>850.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
     <Isotope id="Ar36" value="3.72859e-16" error="3.7e0"></Isotope>  
     <Isotope id="Ar37" value="1.0342e-14" error="1.406e1"></Isotope>  
     <Isotope id="Ar38" value="2.017e-15" error="8.49e0"></Isotope>  
     <Isotope id="Ar39" value="6.83135e-14" error="1.08e0"></Isotope>  
     <Isotope id="Ar40" value="1.77213e-13" error="1.33e0"></Isotope>  
     <Isotope id="Ar36\_correctedForIsotopeInterference" value="3.72859e-16" error="3.7e0"></Isotope>  
     <Isotope id="Ar39\_correctedForIsotopeInterference" value="6.83135e-14" error="1.08e0"></Isotope>  
     <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.77213e-13" error="1.33e0"></Isotope>  
     <percentage\_radiogenic\_argon>37.330</percentage\_radiogenic\_argon>  
     <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="radiogenicAr40\_Ar39" value="9.81e-1" error="0.0e0"></IsotopeRatio>  
     <cumulated\_percentage\_Ar39\_released>97.240</cumulated\_percentage\_Ar39\_released>  
     <MeasuredAge value="2.114" stddev="0.150"></MeasuredAge>  
     <RecalculatedAge>2.114</RecalculatedAge>  
     <IsotopeRatio id="Ca\_K" value="2.88e-1" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="Cl\_K" value="2.1e-1" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="Ar36\_Ar40" value="2.10401607106e-3" error="1.05832008374e-4"></IsotopeRatio>  
     <IsotopeRatio id="Ar39\_Ar40" value="3.8548808496e-1" error="9.29026284753e-3"></IsotopeRatio>  
 </StepData>  
 340 <StepData>  
     <StepNumber>21</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>870.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
     <Isotope id="Ar36" value="2.69517e-16" error="5.16e0"></Isotope>  
     <Isotope id="Ar37" value="6.8805e-15" error="1.432e1"></Isotope>

```

<Isotope id="Ar38" value="9.9548e-16" error="1.284e1"></Isotope>
<Isotope id="Ar39" value="9.41999e-15" error="4.05e0"></Isotope>
<Isotope id="Ar40" value="7.73591e-14" error="4.21e0"></Isotope>
355 <Isotope id="Ar36_correctedForIsotopeInterference" value="2.69517e-16" error="5.16e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="9.41999e-15" error="4.05e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="7.73591e-14" error="4.21e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
360 <cumulated_percentage_Ar39_released>97.930</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="1.209"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.39e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.09e0" error="0.0e0"></IsotopeRatio>
365 <IsotopeRatio id="Ar36_Ar40" value="3.48397279699e-3" error="3.26448251078e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.21769643132e-1" error="1.00581725227e-2"></IsotopeRatio>
</StepData>
<StepData>
370 <StepNumber>22</StepNumber>
<FurnaceTemperature_DegreesCelsius>890.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.8865e-16" error="7.47e0"></Isotope>
<Isotope id="Ar37" value="5.0945e-15" error="1.541e1"></Isotope>
<Isotope id="Ar38" value="7.1565e-16" error="1.444e1"></Isotope>
375 <Isotope id="Ar39" value="4.16065e-15" error="6.55e0"></Isotope>
<Isotope id="Ar40" value="5.10108e-14" error="6.67e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.8865e-16" error="7.47e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="4.16065e-15" error="6.55e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="5.10108e-14" error="6.67e0"></Isotope>
380 <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>98.240</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="2.804"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
385 <IsotopeRatio id="Ca_K" value="2.33e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.86e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.69823645189e-3" error="5.22930634297e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="8.15641001513e-2" error="1.078277404e-2"></IsotopeRatio>
390 </StepData>
<StepData>
395 <StepNumber>23</StepNumber>
<FurnaceTemperature_DegreesCelsius>910.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.55686e-16" error="7.86e0"></Isotope>
<Isotope id="Ar37" value="4.0826e-15" error="1.56e1"></Isotope>
<Isotope id="Ar38" value="5.7667e-16" error="1.468e1"></Isotope>
<Isotope id="Ar39" value="3.16595e-15" error="6.82e0"></Isotope>
<Isotope id="Ar40" value="4.17964e-14" error="6.93e0"></Isotope>
400 <Isotope id="Ar36_correctedForIsotopeInterference" value="1.55686e-16" error="7.86e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="3.16595e-15" error="6.82e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="4.17964e-14" error="6.93e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
405 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>98.480</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="3.175"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
410 <IsotopeRatio id="Ca_K" value="2.45e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.98e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.72486625642e-3" error="5.50907719325e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="7.57469542831e-2" error="1.04152062139e-2"></IsotopeRatio>
</StepData>

```

```

415 <StepData>
    <StepNumber>24</StepNumber>
    <FurnaceTemperature_DegreesCelsius>930.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.38203e-16" error="7.8e0"></Isotope>
    <Isotope id="Ar37" value="3.4658e-15" error="1.517e1"></Isotope>
420    <Isotope id="Ar38" value="4.7379e-16" error="1.494e1"></Isotope>
    <Isotope id="Ar39" value="2.54514e-15" error="6.93e0"></Isotope>
    <Isotope id="Ar40" value="3.51513e-14" error="7.03e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.38203e-16" error="7.8e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="2.54514e-15" error="6.93e0"></Isotope>
425    <Isotope id="Ar40_correctedForIsotopeInterference" value="3.51513e-14" error="7.03e0"></Isotope>
    <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>98.660</cumulated_percentage_Ar39_released>
430    <MeasuredAge value="0.002" stddev="3.436"></MeasuredAge>
    <RecalculatedAge>0.002</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="2.59e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="2.01e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.93166113344e-3" error="5.8306534609e-4"></IsotopeRatio>
435    <IsotopeRatio id="Ar39_Ar40" value="7.24052879979e-2" error="1.01077782045e-2"></IsotopeRatio>
</StepData>
<StepData>
    <StepNumber>25</StepNumber>
    <FurnaceTemperature_DegreesCelsius>950.000</FurnaceTemperature_DegreesCelsius>
440    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.24551e-16" error="7.72e0"></Isotope>
    <Isotope id="Ar37" value="2.905e-15" error="1.535e1"></Isotope>
    <Isotope id="Ar38" value="4.1718e-16" error="1.456e1"></Isotope>
    <Isotope id="Ar39" value="2.11758e-15" error="7.06e0"></Isotope>
445    <Isotope id="Ar40" value="2.97267e-14" error="7.14e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.24551e-16" error="7.72e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="2.11758e-15" error="7.06e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="2.97267e-14" error="7.14e0"></Isotope>
    <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
450    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>98.820</cumulated_percentage_Ar39_released>
    <MeasuredAge value="0.002" stddev="3.632"></MeasuredAge>
    <RecalculatedAge>0.002</RecalculatedAge>
455    <IsotopeRatio id="Ca_K" value="2.61e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="2.14e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="4.18986971309e-3" error="6.22614639365e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="7.12349503981e-2" error="1.01153629565e-2"></IsotopeRatio>
</StepData>
<StepData>
    <StepNumber>26</StepNumber>
    <FurnaceTemperature_DegreesCelsius>1000.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.34996e-16" error="6.98e0"></Isotope>
465    <Isotope id="Ar37" value="2.6347e-15" error="1.453e1"></Isotope>
    <Isotope id="Ar38" value="3.6669e-16" error="1.364e1"></Isotope>
    <Isotope id="Ar39" value="1.984e-15" error="6.56e0"></Isotope>
    <Isotope id="Ar40" value="3.31481e-14" error="6.61e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.34996e-16" error="6.98e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="1.984e-15" error="6.56e0"></Isotope>
470    <Isotope id="Ar40_correctedForIsotopeInterference" value="3.31481e-14" error="6.61e0"></Isotope>
    <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
475    <cumulated_percentage_Ar39_released>98.970</cumulated_percentage_Ar39_released>
    <MeasuredAge value="0.002" stddev="3.866"></MeasuredAge>

```

```

<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="2.52e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.97e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="4.07251094331e-3" error="5.53454237196e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="5.98526009032e-2" error="7.88258753895e-3"></IsotopeRatio>
480 </StepData>
<StepData>
    <StepNumber>27</StepNumber>
    <FurnaceTemperature_DegreesCelsius>1050.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.26221e-16" error="6.59e0"></Isotope>
    <Isotope id="Ar37" value="2.2621e-15" error="1.472e1"></Isotope>
    <Isotope id="Ar38" value="3.2897e-16" error="1.327e1"></Isotope>
    <Isotope id="Ar39" value="1.84414e-15" error="6.16e0"></Isotope>
    <Isotope id="Ar40" value="2.97455e-14" error="6.2e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.26221e-16" error="6.59e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="1.84414e-15" error="6.16e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="2.97455e-14" error="6.2e0"></Isotope>
485 <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>99.100</cumulated_percentage_Ar39_released>
    <MeasuredAge value="0.002" stddev="3.608"></MeasuredAge>
490 <RecalculatedAge>0.002</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="2.33e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="1.89e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="4.24336454254e-3" error="5.4272632499e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="6.1997276899e-2" error="7.66286342472e-3"></IsotopeRatio>
495 </StepData>
<StepData>
    <StepNumber>28</StepNumber>
    <FurnaceTemperature_DegreesCelsius>1100.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.26818e-16" error="6.05e0"></Isotope>
    <Isotope id="Ar37" value="2.0032e-15" error="1.483e1"></Isotope>
    <Isotope id="Ar38" value="2.8881e-16" error="1.394e1"></Isotope>
    <Isotope id="Ar39" value="1.91415e-15" error="5.29e0"></Isotope>
    <Isotope id="Ar40" value="3.13095e-14" error="5.34e0"></Isotope>
500 <Isotope id="Ar36_correctedForIsotopeInterference" value="1.26818e-16" error="6.05e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="1.91415e-15" error="5.29e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="3.13095e-14" error="5.34e0"></Isotope>
505 <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>99.250</cumulated_percentage_Ar39_released>
    <MeasuredAge value="0.002" stddev="3.184"></MeasuredAge>
510 <RecalculatedAge>0.002</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="1.99e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="1.55e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="4.0504639167e-3" error="4.61347840112e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="6.11363963014e-2" error="6.49879892684e-3"></IsotopeRatio>
515 </StepData>
<StepData>
    <StepNumber>29</StepNumber>
    <FurnaceTemperature_DegreesCelsius>1200.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.90675e-16" error="3.63e0"></Isotope>
    <Isotope id="Ar37" value="1.9245e-15" error="1.327e1"></Isotope>
    <Isotope id="Ar38" value="2.9959e-16" error="1.054e1"></Isotope>
    <Isotope id="Ar39" value="2.87056e-15" error="3.23e0"></Isotope>
    <Isotope id="Ar40" value="4.73131e-14" error="3.25e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.90675e-16" error="3.63e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="2.87056e-15" error="3.23e0"></Isotope>
520 </StepData>
<StepData>
    <StepNumber>30</StepNumber>
    <FurnaceTemperature_DegreesCelsius>1300.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.95215e-16" error="3.63e0"></Isotope>
    <Isotope id="Ar37" value="1.95215e-15" error="1.327e1"></Isotope>
    <Isotope id="Ar38" value="2.9959e-16" error="1.054e1"></Isotope>
    <Isotope id="Ar39" value="2.87056e-15" error="3.23e0"></Isotope>
    <Isotope id="Ar40" value="4.73131e-14" error="3.25e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.95215e-16" error="3.63e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="2.87056e-15" error="3.23e0"></Isotope>
525 </StepData>
<StepData>
    <StepNumber>31</StepNumber>
    <FurnaceTemperature_DegreesCelsius>1400.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.99855e-16" error="3.63e0"></Isotope>
    <Isotope id="Ar37" value="1.99855e-15" error="1.327e1"></Isotope>
    <Isotope id="Ar38" value="2.9959e-16" error="1.054e1"></Isotope>
    <Isotope id="Ar39" value="2.87056e-15" error="3.23e0"></Isotope>
    <Isotope id="Ar40" value="4.73131e-14" error="3.25e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.99855e-16" error="3.63e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="2.87056e-15" error="3.23e0"></Isotope>
530 </StepData>
<StepData>
    <StepNumber>32</StepNumber>
    <FurnaceTemperature_DegreesCelsius>1500.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="2.04495e-16" error="3.63e0"></Isotope>
    <Isotope id="Ar37" value="2.04495e-15" error="1.327e1"></Isotope>
    <Isotope id="Ar38" value="2.9959e-16" error="1.054e1"></Isotope>
    <Isotope id="Ar39" value="2.87056e-15" error="3.23e0"></Isotope>
    <Isotope id="Ar40" value="4.73131e-14" error="3.25e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="2.04495e-16" error="3.63e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="2.87056e-15" error="3.23e0"></Isotope>
535 </StepData>
<StepData>
    <StepNumber>33</StepNumber>
    <FurnaceTemperature_DegreesCelsius>1600.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="2.09135e-16" error="3.63e0"></Isotope>
    <Isotope id="Ar37" value="2.09135e-15" error="1.327e1"></Isotope>
    <Isotope id="Ar38" value="2.9959e-16" error="1.054e1"></Isotope>
    <Isotope id="Ar39" value="2.87056e-15" error="3.23e0"></Isotope>
    <Isotope id="Ar40" value="4.73131e-14" error="3.25e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="2.09135e-16" error="3.63e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="2.87056e-15" error="3.23e0"></Isotope>

```

540

```

<Isotope id="Ar40_correctedForIsotopeInterference" value="4.73131e-14" error="3.25e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>99.460</cumulated_percentage_Ar39_released>
545 <MeasuredAge value="0.002" stddev="1.926"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.27e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="9.84e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="4.0300677825e-3" error="2.77268663436e-4"></IsotopeRatio>
550 <IsotopeRatio id="Ar39_Ar40" value="6.06715687621e-2" error="3.93151765579e-3"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>30</StepNumber>
  <FurnaceTemperature_DegreesCelsius>1300.000</FurnaceTemperature_DegreesCelsius>
555  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="4.51744e-16" error="2.9e0"></Isotope>
  <Isotope id="Ar37" value="1.8012e-15" error="1.271e1"></Isotope>
  <Isotope id="Ar38" value="3.3685e-16" error="8.29e0"></Isotope>
  <Isotope id="Ar39" value="3.04907e-15" error="2.77e0"></Isotope>
560  <Isotope id="Ar40" value="1.22203e-13" error="2.77e0"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="4.51744e-16" error="2.9e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="3.04907e-15" error="2.77e0"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="1.22203e-13" error="2.77e0"></Isotope>
  <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
565  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>99.680</cumulated_percentage_Ar39_released>
  <MeasuredAge value="0.002" stddev="3.642"></MeasuredAge>
  <RecalculatedAge>0.002</RecalculatedAge>
570  <IsotopeRatio id="Ca_K" value="1.12e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="8.67e-1" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="3.69666865789e-3" error="2.09601112902e-4"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="2.49508604535e-2" error="1.38227766912e-3"></IsotopeRatio>
</StepData>
575 <StepData>
  <StepNumber>31</StepNumber>
  <FurnaceTemperature_DegreesCelsius>1450.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="9.96424e-16" error="1.89e0"></Isotope>
580  <Isotope id="Ar37" value="1.8494e-15" error="9.74e0"></Isotope>
  <Isotope id="Ar38" value="4.4945e-16" error="5.47e0"></Isotope>
  <Isotope id="Ar39" value="4.27285e-15" error="1.82e0"></Isotope>
  <Isotope id="Ar40" value="3.06997e-13" error="1.82e0"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="9.96424e-16" error="1.89e0"></Isotope>
585  <Isotope id="Ar39_correctedForIsotopeInterference" value="4.27285e-15" error="1.82e0"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="3.06997e-13" error="1.82e0"></Isotope>
  <percentage_radiogenic_argon>4.070</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="2.926e0" error="0.0e0"></IsotopeRatio>
590  <cumulated_percentage_Ar39_released>100.000</cumulated_percentage_Ar39_released>
  <MeasuredAge value="6.300" stddev="3.973"></MeasuredAge>
  <RecalculatedAge>6.300</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="8.22e-1" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="6.02e-1" error="0.0e0"></IsotopeRatio>
595  <IsotopeRatio id="Ar36_Ar40" value="3.24571249882e-3" error="1.20415933706e-4"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="1.39182141845e-2" error="5.06622996316e-4"></IsotopeRatio>
</StepData>
<CalculationParameters>
  <Parameter id="J_Factor" value="1.1953e-3" uncertainty="2.4e-1"></Parameter>
  <Parameter id="FluxMonitorAge" value="98.50" uncertainty="0.80" />
  <Parameter id="MassDiscrimination" value="0.98769" uncertainty="0.15" />
  <Parameter id="Atmospheric_40_36_ratio" value="2.9555e2"></Parameter>

```

```

    <Parameter id="DecayConstantK" value="5.543e-10" uncertainty="0.192"></Parameter>
</CalculationParameters>
605 </ArgonData>
</eArgonDataObject>
<eArgonDataObject>
    <ArgonData>
        <SampleDescription>ANU CAN #30, D3112423, Foil: A4, Alunite, 149mg, Steps: 32</SampleDescription>
610    <StepData>
        <StepNumber>0</StepNumber>
        <FurnaceTemperature_DegreesCelsius>450.000</FurnaceTemperature_DegreesCelsius>
        <Duration_minutes>15.000</Duration_minutes>
615        <Isotope id="Ar36" value="4.26441e-17" error="8.03e0"></Isotope>
        <Isotope id="Ar37" value="2.0948e-17" error="5.04e1"></Isotope>
        <Isotope id="Ar38" value="6.2675e-17" error="1.567e1"></Isotope>
        <Isotope id="Ar39" value="1.92526e-16" error="6.33e0"></Isotope>
        <Isotope id="Ar40" value="1.25704e-14" error="6.34e0"></Isotope>
620        <Isotope id="Ar36_correctedForIsotopeInterference" value="4.26441e-17" error="8.03e0"></Isotope>
        <Isotope id="Ar39_correctedForIsotopeInterference" value="1.92526e-16" error="6.33e0"></Isotope>
        <Isotope id="Ar40_correctedForIsotopeInterference" value="1.25704e-14" error="6.34e0"></Isotope>
        <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
        <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
625        <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
        <cumulated_percentage_Ar39_released>0.010</cumulated_percentage_Ar39_released>
        <MeasuredAge value="0.002" stddev="14.436"></MeasuredAge>
        <RecalculatedAge>0.002</RecalculatedAge>
        <IsotopeRatio id="Ca_K" value="2.07e-1" error="0.0e0"></IsotopeRatio>
        <IsotopeRatio id="Cl_K" value="3.33e0" error="0.0e0"></IsotopeRatio>
630        <IsotopeRatio id="Ar36_Ar40" value="3.39242187997e-3" error="4.87462574541e-4"></IsotopeRatio>
        <IsotopeRatio id="Ar39_Ar40" value="1.53158212945e-2" error="1.93963727439e-3"></IsotopeRatio>
    </StepData>
    <StepData>
        <StepNumber>1</StepNumber>
        <FurnaceTemperature_DegreesCelsius>470.000</FurnaceTemperature_DegreesCelsius>
        <Duration_minutes>15.000</Duration_minutes>
635        <Isotope id="Ar36" value="4.47951e-17" error="8.47e0"></Isotope>
        <Isotope id="Ar37" value="2.0959e-17" error="5.045e1"></Isotope>
        <Isotope id="Ar38" value="5.0241e-17" error="2.048e1"></Isotope>
        <Isotope id="Ar39" value="1.96263e-16" error="6.72e0"></Isotope>
640        <Isotope id="Ar40" value="1.26936e-14" error="6.73e0"></Isotope>
        <Isotope id="Ar36_correctedForIsotopeInterference" value="4.47951e-17" error="8.47e0"></Isotope>
        <Isotope id="Ar39_correctedForIsotopeInterference" value="1.96263e-16" error="6.72e0"></Isotope>
        <Isotope id="Ar40_correctedForIsotopeInterference" value="1.26936e-14" error="6.73e0"></Isotope>
        <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
        <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
645        <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
        <cumulated_percentage_Ar39_released>0.010</cumulated_percentage_Ar39_released>
        <MeasuredAge value="0.002" stddev="15.494"></MeasuredAge>
        <RecalculatedAge>0.002</RecalculatedAge>
        <IsotopeRatio id="Ca_K" value="2.03e-1" error="0.0e0"></IsotopeRatio>
        <IsotopeRatio id="Cl_K" value="2.46e0" error="0.0e0"></IsotopeRatio>
650        <IsotopeRatio id="Ar36_Ar40" value="3.52895159766e-3" error="5.36332598425e-4"></IsotopeRatio>
        <IsotopeRatio id="Ar39_Ar40" value="1.54615711855e-2" error="2.07871338583e-3"></IsotopeRatio>
    </StepData>
    <StepData>
        <StepNumber>2</StepNumber>
        <FurnaceTemperature_DegreesCelsius>490.000</FurnaceTemperature_DegreesCelsius>
        <Duration_minutes>15.000</Duration_minutes>
660        <Isotope id="Ar36" value="4.79253e-17" error="7.12e0"></Isotope>
        <Isotope id="Ar37" value="2.0971e-17" error="5.035e1"></Isotope>
        <Isotope id="Ar38" value="5.6833e-17" error="1.657e1"></Isotope>
        <Isotope id="Ar39" value="2.30167e-16" error="5.9e0"></Isotope>
        <Isotope id="Ar40" value="1.39476e-14" error="5.91e0"></Isotope>
665        <Isotope id="Ar36_correctedForIsotopeInterference" value="4.79253e-17" error="7.12e0"></Isotope>

```

```

<Isotope id="Ar39_correctedForIsotopeInterference" value="2.30167e-16" error="5.9e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="1.39476e-14" error="5.91e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
670 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.020</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="12.204"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.73e-1" error="0.0e0"></IsotopeRatio>
675 <IsotopeRatio id="Cl_K" value="2.4e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.43609653274e-3" error="4.4765122895e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.65022656228e-2" error="1.94799412397e-3"></IsotopeRatio>
</StepData>
<StepData>
680 <StepNumber>3</StepNumber>
<FurnaceTemperature_DegreesCelsius>510.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="5.19141e-17" error="5.68e0"></Isotope>
<Isotope id="Ar37" value="2.0982e-17" error="5.023e1"></Isotope>
685 <Isotope id="Ar38" value="5.8155e-17" error="1.246e1"></Isotope>
<Isotope id="Ar39" value="2.83535e-16" error="4.81e0"></Isotope>
<Isotope id="Ar40" value="1.5203e-14" error="4.81e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="5.19141e-17" error="5.68e0"></Isotope>
690 <Isotope id="Ar39_correctedForIsotopeInterference" value="2.83535e-16" error="4.81e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="1.5203e-14" error="4.81e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
695 <cumulated_percentage_Ar39_released>0.030</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="8.662"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.41e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.95e0" error="0.0e0"></IsotopeRatio>
700 <IsotopeRatio id="Ar36_Ar40" value="3.41472735644e-3" error="3.58116408099e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.86499375123e-2" error="1.79315737576e-3"></IsotopeRatio>
</StepData>
<StepData>
705 <StepNumber>4</StepNumber>
<FurnaceTemperature_DegreesCelsius>530.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="5.97928e-17" error="5.43e0"></Isotope>
<Isotope id="Ar37" value="2.0994e-17" error="5.018e1"></Isotope>
<Isotope id="Ar38" value="5.4677e-17" error="1.093e1"></Isotope>
710 <Isotope id="Ar39" value="3.63268e-16" error="4.29e0"></Isotope>
<Isotope id="Ar40" value="1.72557e-14" error="4.29e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="5.97928e-17" error="5.43e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="3.63268e-16" error="4.29e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="1.72557e-14" error="4.29e0"></Isotope>
715 <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.050</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="7.201"></MeasuredAge>
720 <RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.1e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.32e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.46510428438e-3" error="3.36659416261e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="2.10520581605e-2" error="1.80503961084e-3"></IsotopeRatio>
725 </StepData>
<StepData>
<StepNumber>5</StepNumber>
<FurnaceTemperature_DegreesCelsius>550.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>

```

730 <Isotope id="Ar36" value="6.6656e-17" error="3.97e0"></Isotope>  
 <Isotope id="Ar37" value="2.1005e-17" error="5.01e1"></Isotope>  
 <Isotope id="Ar38" value="5.866e-17" error="1.21e1"></Isotope>  
 <Isotope id="Ar39" value="4.74176e-16" error="3.16e0"></Isotope>  
 <Isotope id="Ar40" value="1.95804e-14" error="3.16e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="6.6656e-17" error="3.97e0"></Isotope>  
 735 <Isotope id="Ar39\_correctedForIsotopeInterference" value="4.74176e-16" error="3.16e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.95804e-14" error="3.16e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 740 <cumulated\_percentage\_Ar39\_released>0.070</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.002" stddev="4.539"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="8.42e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.05e0" error="0.0e0"></IsotopeRatio>  
 745 <IsotopeRatio id="Ar36\_Ar40" value="3.40422054708e-3" error="2.42589553991e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="2.42168699312e-2" error="1.52933292509e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>
 <StepNumber>6</StepNumber>
 <FurnaceTemperature\_DegreesCelsius>570.000</FurnaceTemperature\_DegreesCelsius>
 <Duration\_minutes>15.000</Duration\_minutes>
 <Isotope id="Ar36" value="7.83676e-17" error="3.01e0"></Isotope>
 <Isotope id="Ar37" value="2.1017e-17" error="5.005e1"></Isotope>
 <Isotope id="Ar38" value="6.5382e-17" error="8.52e0"></Isotope>
 <Isotope id="Ar39" value="7.03668e-16" error="2.21e0"></Isotope>
 <Isotope id="Ar40" value="2.32537e-14" error="2.22e0"></Isotope>
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="7.83676e-17" error="3.01e0"></Isotope>
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="7.03668e-16" error="2.21e0"></Isotope>
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.32537e-14" error="2.22e0"></Isotope>
 <percentage\_radiogenic\_argon>0.400</percentage\_radiogenic\_argon>
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.309e-1" error="0.0e0"></IsotopeRatio>
 <cumulated\_percentage\_Ar39\_released>0.090</cumulated\_percentage\_Ar39\_released>
 <MeasuredAge value="0.282" stddev="2.657"></MeasuredAge>
 <RecalculatedAge>0.282</RecalculatedAge>
 <IsotopeRatio id="Ca\_K" value="5.67e-2" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="Cl\_K" value="7.39e-1" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="Ar36\_Ar40" value="3.37011314328e-3" error="1.76119581561e-4"></IsotopeRatio>
 <IsotopeRatio id="Ar39\_Ar40" value="3.02604746771e-2" error="1.33922000258e-3"></IsotopeRatio>

750 </StepData>  
 <StepData>
 <StepNumber>6</StepNumber>
 <FurnaceTemperature\_DegreesCelsius>570.000</FurnaceTemperature\_DegreesCelsius>
 <Duration\_minutes>15.000</Duration\_minutes>
 <Isotope id="Ar36" value="7.83676e-17" error="3.01e0"></Isotope>
 <Isotope id="Ar37" value="2.1017e-17" error="5.005e1"></Isotope>
 <Isotope id="Ar38" value="6.5382e-17" error="8.52e0"></Isotope>
 <Isotope id="Ar39" value="7.03668e-16" error="2.21e0"></Isotope>
 <Isotope id="Ar40" value="2.32537e-14" error="2.22e0"></Isotope>
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="7.83676e-17" error="3.01e0"></Isotope>
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="7.03668e-16" error="2.21e0"></Isotope>
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.32537e-14" error="2.22e0"></Isotope>
 <percentage\_radiogenic\_argon>0.400</percentage\_radiogenic\_argon>
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.309e-1" error="0.0e0"></IsotopeRatio>
 <cumulated\_percentage\_Ar39\_released>0.090</cumulated\_percentage\_Ar39\_released>
 <MeasuredAge value="0.282" stddev="2.657"></MeasuredAge>
 <RecalculatedAge>0.282</RecalculatedAge>
 <IsotopeRatio id="Ca\_K" value="5.67e-2" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="Cl\_K" value="7.39e-1" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="Ar36\_Ar40" value="3.37011314328e-3" error="1.76119581561e-4"></IsotopeRatio>
 <IsotopeRatio id="Ar39\_Ar40" value="3.02604746771e-2" error="1.33922000258e-3"></IsotopeRatio>

755 </StepData>  
 <StepData>
 <StepNumber>7</StepNumber>
 <FurnaceTemperature\_DegreesCelsius>590.000</FurnaceTemperature\_DegreesCelsius>
 <Duration\_minutes>15.000</Duration\_minutes>
 <Isotope id="Ar36" value="9.40524e-17" error="2.52e0"></Isotope>
 <Isotope id="Ar37" value="2.1028e-17" error="5.002e1"></Isotope>
 <Isotope id="Ar38" value="6.7547e-17" error="8.85e0"></Isotope>
 <Isotope id="Ar39" value="1.15691e-15" error="1.32e0"></Isotope>
 <Isotope id="Ar40" value="2.74204e-14" error="1.33e0"></Isotope>
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="9.40524e-17" error="2.52e0"></Isotope>
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.15691e-15" error="1.32e0"></Isotope>
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.74204e-14" error="1.33e0"></Isotope>
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
 <cumulated\_percentage\_Ar39\_released>0.140</cumulated\_percentage\_Ar39\_released>
 <MeasuredAge value="0.002" stddev="1.472"></MeasuredAge>
 <RecalculatedAge>0.002</RecalculatedAge>
 <IsotopeRatio id="Ca\_K" value="3.45e-2" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="Cl\_K" value="3.86e-1" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="Ar36\_Ar40" value="3.43001560882e-3" error="1.31891838741e-4"></IsotopeRatio>

```

    <IsotopeRatio id="Ar39_Ar40" value="4.21915799915e-2" error="1.11649550239e-3"></IsotopeRatio>
</StepData>
795 <StepData>
    <StepNumber>8</StepNumber>
    <FurnaceTemperature_DegreesCelsius>610.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.10699e-16" error="1.63e0"></Isotope>
    <Isotope id="Ar37" value="2.104e-17" error="5.001e1"></Isotope>
    <Isotope id="Ar38" value="7.6231e-17" error="6.44e0"></Isotope>
    <Isotope id="Ar39" value="2.10491e-15" error="7.8e-1"></Isotope>
    <Isotope id="Ar40" value="3.3316e-14" error="7.8e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.10699e-16" error="1.63e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="2.10491e-15" error="7.8e-1"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="3.3316e-14" error="7.8e-1"></Isotope>
    <percentage_radiogenic_argon>1.790</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="2.845e-1" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>0.220</cumulated_percentage_Ar39_released>
    <MeasuredAge value="0.613" stddev="0.608"></MeasuredAge>
    <RecalculatedAge>0.613</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="1.9e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="1.82e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.32269780286e-3" error="8.00770170489e-5"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="6.31801536799e-2" error="9.85610397407e-4"></IsotopeRatio>
</StepData>
<StepData>
    <StepNumber>9</StepNumber>
    <FurnaceTemperature_DegreesCelsius>630.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.17743e-16" error="1.41e0"></Isotope>
    <Isotope id="Ar37" value="2.1051e-17" error="5.0e1"></Isotope>
    <Isotope id="Ar38" value="1.0432e-16" error="4.25e0"></Isotope>
    <Isotope id="Ar39" value="4.04775e-15" error="4.4e-1"></Isotope>
    <Isotope id="Ar40" value="3.83929e-14" error="4.5e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.17743e-16" error="1.41e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="4.04775e-15" error="4.4e-1"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="3.83929e-14" error="4.5e-1"></Isotope>
    <percentage_radiogenic_argon>9.330</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="8.879e-1" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>0.380</cumulated_percentage_Ar39_released>
    <MeasuredAge value="1.914" stddev="0.276"></MeasuredAge>
    <RecalculatedAge>1.914</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="9.88e-3" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="1.09e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.06679099521e-3" error="5.70423125109e-5"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="1.05429649753e-1" error="9.38323882801e-4"></IsotopeRatio>
</StepData>
<StepData>
    <StepNumber>10</StepNumber>
    <FurnaceTemperature_DegreesCelsius>650.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.26066e-16" error="1.37e0"></Isotope>
    <Isotope id="Ar37" value="7.4477e-16" error="4.52e1"></Isotope>
    <Isotope id="Ar38" value="1.5534e-16" error="3.02e0"></Isotope>
    <Isotope id="Ar39" value="8.4188e-15" error="2.7e-1"></Isotope>
    <Isotope id="Ar40" value="4.57926e-14" error="2.8e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.26066e-16" error="1.37e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="8.4188e-15" error="2.7e-1"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="4.57926e-14" error="2.8e-1"></Isotope>
    <percentage_radiogenic_argon>18.520</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.014e0" error="0.0e0"></IsotopeRatio>

```

855           <cumulated\_percentage\_Ar39\_released>0.700</cumulated\_percentage\_Ar39\_released>  
           <MeasuredAge value="2.185" stddev="0.135"></MeasuredAge>  
           <RecalculatedAge>2.185</RecalculatedAge>  
           <IsotopeRatio id="Ca\_K" value="1.68e-1" error="0.0e0"></IsotopeRatio>  
           <IsotopeRatio id="Cl\_K" value="5.22e-2" error="0.0e0"></IsotopeRatio>  
 860            <IsotopeRatio id="Ar36\_Ar40" value="2.75297755533e-3" error="4.54241296629e-5"></IsotopeRatio>  
           <IsotopeRatio id="Ar39\_Ar40" value="1.8384629831e-1" error="1.01115464071e-3"></IsotopeRatio>  
       </StepData>  
       <StepData>  
         <StepNumber>11</StepNumber>  
         <FurnaceTemperature\_DegreesCelsius>670.000</FurnaceTemperature\_DegreesCelsius>  
         <Duration\_minutes>15.000</Duration\_minutes>  
         <Isotope id="Ar36" value="1.41184e-16" error="9.3e-1"></Isotope>  
         <Isotope id="Ar37" value="4.2898e-16" error="2.807e1"></Isotope>  
         <Isotope id="Ar38" value="2.9569e-16" error="1.54e0"></Isotope>  
 870          <Isotope id="Ar39" value="2.09401e-14" error="2.0e-1"></Isotope>  
         <Isotope id="Ar40" value="6.57971e-14" error="2.0e-1"></Isotope>  
         <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.41184e-16" error="9.3e-1"></Isotope>  
         <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.09401e-14" error="2.0e-1"></Isotope>  
         <Isotope id="Ar40\_correctedForIsotopeInterference" value="6.57971e-14" error="2.0e-1"></Isotope>  
         <percentage\_radiogenic\_argon>36.200</percentage\_radiogenic\_argon>  
         <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
         <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.149e0" error="0.0e0"></IsotopeRatio>  
         <cumulated\_percentage\_Ar39\_released>1.510</cumulated\_percentage\_Ar39\_released>  
 880          <MeasuredAge value="2.477" stddev="0.043"></MeasuredAge>  
         <RecalculatedAge>2.477</RecalculatedAge>  
         <IsotopeRatio id="Ca\_K" value="3.89e-2" error="0.0e0"></IsotopeRatio>  
         <IsotopeRatio id="Cl\_K" value="1.85e-2" error="0.0e0"></IsotopeRatio>  
         <IsotopeRatio id="Ar36\_Ar40" value="2.14574806488e-3" error="2.42469531332e-5"></IsotopeRatio>  
         <IsotopeRatio id="Ar39\_Ar40" value="3.18252628155e-1" error="1.27301051262e-3"></IsotopeRatio>  
       </StepData>  
       <StepData>  
         <StepNumber>12</StepNumber>  
         <FurnaceTemperature\_DegreesCelsius>690.000</FurnaceTemperature\_DegreesCelsius>  
         <Duration\_minutes>15.000</Duration\_minutes>  
         <Isotope id="Ar36" value="1.70434e-16" error="1.22e0"></Isotope>  
         <Isotope id="Ar37" value="4.9958e-16" error="1.709e1"></Isotope>  
         <Isotope id="Ar38" value="6.6597e-16" error="9.8e-1"></Isotope>  
         <Isotope id="Ar39" value="5.31424e-14" error="1.9e-1"></Isotope>  
         <Isotope id="Ar40" value="1.087e-13" error="1.9e-1"></Isotope>  
         <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.70434e-16" error="1.22e0"></Isotope>  
         <Isotope id="Ar39\_correctedForIsotopeInterference" value="5.31424e-14" error="1.9e-1"></Isotope>  
         <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.087e-13" error="1.9e-1"></Isotope>  
         <percentage\_radiogenic\_argon>52.800</percentage\_radiogenic\_argon>  
         <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 890          <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.098e0" error="0.0e0"></IsotopeRatio>  
         <cumulated\_percentage\_Ar39\_released>3.550</cumulated\_percentage\_Ar39\_released>  
         <MeasuredAge value="2.365" stddev="0.027"></MeasuredAge>  
         <RecalculatedAge>2.365</RecalculatedAge>  
         <IsotopeRatio id="Ca\_K" value="1.79e-2" error="0.0e0"></IsotopeRatio>  
         <IsotopeRatio id="Cl\_K" value="7.31e-3" error="0.0e0"></IsotopeRatio>  
         <IsotopeRatio id="Ar36\_Ar40" value="1.5679300828e-3" error="2.21078141674e-5"></IsotopeRatio>  
         <IsotopeRatio id="Ar39\_Ar40" value="4.88890524379e-1" error="1.85778399264e-3"></IsotopeRatio>  
       </StepData>  
       <StepData>  
         <StepNumber>13</StepNumber>  
         <FurnaceTemperature\_DegreesCelsius>710.000</FurnaceTemperature\_DegreesCelsius>  
         <Duration\_minutes>15.000</Duration\_minutes>  
         <Isotope id="Ar36" value="1.71259e-16" error="1.14e0"></Isotope>  
         <Isotope id="Ar37" value="1.0258e-15" error="1.173e1"></Isotope>  
         <Isotope id="Ar38" value="9.47e-16" error="1.47e0"></Isotope>  
         <Isotope id="Ar39" value="7.40077e-14" error="2.5e-1"></Isotope>  
         <Isotope id="Ar40" value="1.29254e-13" error="2.5e-1"></Isotope>

```

920 <Isotope id="Ar36_correctedForIsotopeInterference" value="1.71259e-16" error="1.14e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="7.40077e-14" error="2.5e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="1.29254e-13" error="2.5e-1"></Isotope>
<percentage_radiogenic_argon>59.700</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.063e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>6.400</cumulated_percentage_Ar39_released>
925 <MeasuredAge value="2.290" stddev="0.020"></MeasuredAge>
<RecalculatedAge>2.290</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="2.63e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.27e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="1.3249802714e-3" error="1.84172257725e-5"></IsotopeRatio>
930 <IsotopeRatio id="Ar39_Ar40" value="5.72575703653e-1" error="2.86287851827e-3"></IsotopeRatio>
</StepData>
<StepData>
935 <StepNumber>14</StepNumber>
<FurnaceTemperature_DegreesCelsius>730.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="2.02591e-16" error="1.62e0"></Isotope>
<Isotope id="Ar37" value="2.4583e-15" error="1.319e1"></Isotope>
<Isotope id="Ar38" value="1.4572e-15" error="2.46e0"></Isotope>
940 <Isotope id="Ar39" value="1.05874e-13" error="3.8e-1"></Isotope>
<Isotope id="Ar40" value="1.6977e-13" error="4.1e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="2.02591e-16" error="1.62e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="1.05874e-13" error="3.8e-1"></Isotope>
945 <Isotope id="Ar40_correctedForIsotopeInterference" value="1.6977e-13" error="4.1e-1"></Isotope>
<percentage_radiogenic_argon>63.410</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.038e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>10.480</cumulated_percentage_Ar39_released>
<MeasuredAge value="2.237" stddev="0.025"></MeasuredAge>
950 <RecalculatedAge>2.237</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="4.41e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.55e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="1.19332626495e-3" error="2.42245231784e-5"></IsotopeRatio>
955 <IsotopeRatio id="Ar39_Ar40" value="6.23631972669e-1" error="4.92669258408e-3"></IsotopeRatio>
</StepData>
<StepData>
960 <StepNumber>15</StepNumber>
<FurnaceTemperature_DegreesCelsius>750.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="2.62905e-16" error="2.85e0"></Isotope>
<Isotope id="Ar37" value="6.0311e-15" error="1.34e1"></Isotope>
<Isotope id="Ar38" value="2.3817e-15" error="3.78e0"></Isotope>
965 <Isotope id="Ar39" value="1.54251e-13" error="5.2e-1"></Isotope>
<Isotope id="Ar40" value="2.32128e-13" error="6.1e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="2.62905e-16" error="2.85e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="1.54251e-13" error="5.2e-1"></Isotope>
970 <Isotope id="Ar40_correctedForIsotopeInterference" value="2.32128e-13" error="6.1e-1"></Isotope>
<percentage_radiogenic_argon>65.080</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.001e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>16.420</cumulated_percentage_Ar39_released>
<MeasuredAge value="2.158" stddev="0.037"></MeasuredAge>
975 <RecalculatedAge>2.158</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="7.43e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="4.65e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="1.13258633168e-3" error="3.91874870761e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="6.6450837469e-1" error="7.508944634e-3"></IsotopeRatio>
</StepData>
<StepData>
980 <StepNumber>16</StepNumber>
<FurnaceTemperature_DegreesCelsius>770.000</FurnaceTemperature_DegreesCelsius>

```

<Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="3.70354e-16" error="3.83e0"></Isotope>  
 <Isotope id="Ar37" value="1.2908e-14" error="1.41e1"></Isotope>  
 <Isotope id="Ar38" value="3.9505e-15" error="4.95e0"></Isotope>  
 <Isotope id="Ar39" value="2.2566e-13" error="5.9e-1"></Isotope>  
 <Isotope id="Ar40" value="3.2563e-13" error="8.2e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="3.70354e-16" error="3.83e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.2566e-13" error="5.9e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.2563e-13" error="8.2e-1"></Isotope>  
 <percentage\_radiogenic\_argon>64.880</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="9.58e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>25.110</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.065" stddev="0.048"></MeasuredAge>  
 <RecalculatedAge>2.065</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.09e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="7.2e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="1.13734606762e-3" error="5.28865921445e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="6.92995117158e-1" error="9.77123115192e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
     <StepNumber>17</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>790.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
     <Isotope id="Ar36" value="4.75951e-16" error="4.6e0"></Isotope>  
     <Isotope id="Ar37" value="2.1331e-14" error="1.382e1"></Isotope>  
     <Isotope id="Ar38" value="5.7907e-15" error="5.55e0"></Isotope>  
     <Isotope id="Ar39" value="3.055e-13" error="6.1e-1"></Isotope>  
     <Isotope id="Ar40" value="4.28114e-13" error="9.7e-1"></Isotope>  
     <Isotope id="Ar36\_correctedForIsotopeInterference" value="4.75951e-16" error="4.6e0"></Isotope>  
     <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.055e-13" error="6.1e-1"></Isotope>  
     <Isotope id="Ar40\_correctedForIsotopeInterference" value="4.28114e-13" error="9.7e-1"></Isotope>  
     <percentage\_radiogenic\_argon>65.580</percentage\_radiogenic\_argon>  
     <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="radiogenicAr40\_Ar39" value="9.409e-1" error="0.0e0"></IsotopeRatio>  
     <cumulated\_percentage\_Ar39\_released>36.880</cumulated\_percentage\_Ar39\_released>  
     <MeasuredAge value="2.028" stddev="0.056"></MeasuredAge>  
     <RecalculatedAge>2.028</RecalculatedAge>  
     <IsotopeRatio id="Ca\_K" value="1.33e-1" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="Cl\_K" value="9.0e-2" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="Ar36\_Ar40" value="1.1173892935e-3" error="6.19238583648e-5"></IsotopeRatio>  
     <IsotopeRatio id="Ar39\_Ar40" value="7.13594977039e-1" error="1.12748006372e-2"></IsotopeRatio>  
 </StepData>  
 <StepData>  
     <StepNumber>18</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>810.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
     <Isotope id="Ar36" value="5.59293e-16" error="4.93e0"></Isotope>  
     <Isotope id="Ar37" value="2.7841e-14" error="1.358e1"></Isotope>  
     <Isotope id="Ar38" value="7.2174e-15" error="5.86e0"></Isotope>  
     <Isotope id="Ar39" value="3.64084e-13" error="6.2e-1"></Isotope>  
     <Isotope id="Ar40" value="5.05463e-13" error="1.07e0"></Isotope>  
     <Isotope id="Ar36\_correctedForIsotopeInterference" value="5.59293e-16" error="4.93e0"></Isotope>  
     <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.64084e-13" error="6.2e-1"></Isotope>  
     <Isotope id="Ar40\_correctedForIsotopeInterference" value="5.05463e-13" error="1.07e0"></Isotope>  
     <percentage\_radiogenic\_argon>65.710</percentage\_radiogenic\_argon>  
     <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="radiogenicAr40\_Ar39" value="9.343e-1" error="0.0e0"></IsotopeRatio>  
     <cumulated\_percentage\_Ar39\_released>50.900</cumulated\_percentage\_Ar39\_released>  
     <MeasuredAge value="2.014" stddev="0.059"></MeasuredAge>  
     <RecalculatedAge>2.014</RecalculatedAge>  
     <IsotopeRatio id="Ca\_K" value="1.45e-1" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="Cl\_K" value="1.01e-1" error="0.0e0"></IsotopeRatio>

```

045   <IsotopeRatio id="Ar36_Ar40" value="1.10649642011e-3" error="6.63897852068e-5"></IsotopeRatio>
      <IsotopeRatio id="Ar39_Ar40" value="7.20298023792e-1" error="1.21730366021e-2"></IsotopeRatio>
    </StepData>
    <StepData>
      <StepNumber>19</StepNumber>
      <FurnaceTemperature_DegreesCelsius>830.000</FurnaceTemperature_DegreesCelsius>
      <Duration_minutes>15.000</Duration_minutes>
      <Isotope id="Ar36" value="5.72166e-16" error="5.26e0"></Isotope>
      <Isotope id="Ar37" value="2.9829e-14" error="1.407e1"></Isotope>
      <Isotope id="Ar38" value="7.2867e-15" error="6.38e0"></Isotope>
      <Isotope id="Ar39" value="3.49605e-13" error="6.7e-1"></Isotope>
      <Isotope id="Ar40" value="4.88837e-13" error="1.17e0"></Isotope>
      <Isotope id="Ar36_correctedForIsotopeInterference" value="5.72166e-16" error="5.26e0"></Isotope>
      <Isotope id="Ar39_correctedForIsotopeInterference" value="3.49605e-13" error="6.7e-1"></Isotope>
      <Isotope id="Ar40_correctedForIsotopeInterference" value="4.88837e-13" error="1.17e0"></Isotope>
      <percentage_radiogenic_argon>63.880</percentage_radiogenic_argon>
      <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="radiogenicAr40_Ar39" value="9.146e-1" error="0.0e0"></IsotopeRatio>
      <cumulated_percentage_Ar39_released>64.370</cumulated_percentage_Ar39_released>
      <MeasuredAge value="1.971" stddev="0.067"></MeasuredAge>
      <RecalculatedAge>1.971</RecalculatedAge>
      <IsotopeRatio id="Ca_K" value="1.62e-1" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="Cl_K" value="1.13e-1" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="Ar36_Ar40" value="1.17046377422e-3" error="7.52608206826e-5"></IsotopeRatio>
      <IsotopeRatio id="Ar39_Ar40" value="7.15177042654e-1" error="1.31592575848e-2"></IsotopeRatio>
    </StepData>
    <StepData>
      <StepNumber>20</StepNumber>
      <FurnaceTemperature_DegreesCelsius>850.000</FurnaceTemperature_DegreesCelsius>
      <Duration_minutes>15.000</Duration_minutes>
      <Isotope id="Ar36" value="5.95147e-16" error="5.4e0"></Isotope>
      <Isotope id="Ar37" value="3.1535e-14" error="1.411e1"></Isotope>
      <Isotope id="Ar38" value="7.3224e-15" error="6.77e0"></Isotope>
      <Isotope id="Ar39" value="3.36115e-13" error="7.2e-1"></Isotope>
      <Isotope id="Ar40" value="4.77726e-13" error="1.24e0"></Isotope>
      <Isotope id="Ar36_correctedForIsotopeInterference" value="5.95147e-16" error="5.4e0"></Isotope>
      <Isotope id="Ar39_correctedForIsotopeInterference" value="3.36115e-13" error="7.2e-1"></Isotope>
      <Isotope id="Ar40_correctedForIsotopeInterference" value="4.77726e-13" error="1.24e0"></Isotope>
      <percentage_radiogenic_argon>61.730</percentage_radiogenic_argon>
      <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="radiogenicAr40_Ar39" value="8.98e-1" error="0.0e0"></IsotopeRatio>
      <cumulated_percentage_Ar39_released>77.310</cumulated_percentage_Ar39_released>
      <MeasuredAge value="1.935" stddev="0.073"></MeasuredAge>
      <RecalculatedAge>1.935</RecalculatedAge>
      <IsotopeRatio id="Ca_K" value="1.78e-1" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="Cl_K" value="1.24e-1" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="Ar36_Ar40" value="1.24579152066e-3" error="8.2720556972e-5"></IsotopeRatio>
      <IsotopeRatio id="Ar39_Ar40" value="7.0357275928e-1" error="1.37900260819e-2"></IsotopeRatio>
    </StepData>
    <StepData>
      <StepNumber>21</StepNumber>
      <FurnaceTemperature_DegreesCelsius>870.000</FurnaceTemperature_DegreesCelsius>
      <Duration_minutes>15.000</Duration_minutes>
      <Isotope id="Ar36" value="5.35611e-16" error="6.09e0"></Isotope>
      <Isotope id="Ar37" value="3.0496e-14" error="1.433e1"></Isotope>
      <Isotope id="Ar38" value="7.0864e-15" error="6.78e0"></Isotope>
      <Isotope id="Ar39" value="3.25517e-13" error="7.1e-1"></Isotope>
      <Isotope id="Ar40" value="4.4934e-13" error="1.24e0"></Isotope>
      <Isotope id="Ar36_correctedForIsotopeInterference" value="5.35611e-16" error="6.09e0"></Isotope>
      <Isotope id="Ar39_correctedForIsotopeInterference" value="3.25517e-13" error="7.1e-1"></Isotope>
      <Isotope id="Ar40_correctedForIsotopeInterference" value="4.4934e-13" error="1.24e0"></Isotope>
      <percentage_radiogenic_argon>63.240</percentage_radiogenic_argon>
      <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>

```

```

<IsotopeRatio id="radiogenicAr40_Ar39" value="8.941e-1" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>89.850</cumulated_percentage_Ar39_released>
<MeasuredAge value="1.927" stddev="0.075"></MeasuredAge>
<RecalculatedAge>1.927</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.78e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.24e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="1.19199492589e-3" error="8.73732280678e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="7.24433613745e-1" error="1.4126455468e-2"></IsotopeRatio>
110 </StepData>
<StepData>
<StepNumber>22</StepNumber>
<FurnaceTemperature_DegreesCelsius>890.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
115 <Isotope id="Ar36" value="3.42469e-16" error="6.89e0"></Isotope>
<Isotope id="Ar37" value="1.9416e-14" error="1.49e1"></Isotope>
<Isotope id="Ar38" value="4.4635e-15" error="6.97e0"></Isotope>
<Isotope id="Ar39" value="2.04102e-13" error="7.5e-1"></Isotope>
120 <Isotope id="Ar40" value="2.77961e-13" error="1.21e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="3.42469e-16" error="6.89e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="2.04102e-13" error="7.5e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="2.77961e-13" error="1.21e0"></Isotope>
<percentage_radiogenic_argon>62.060</percentage_radiogenic_argon>
125 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="8.66e-1" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>97.710</cumulated_percentage_Ar39_released>
<MeasuredAge value="1.866" stddev="0.084"></MeasuredAge>
<RecalculatedAge>1.866</RecalculatedAge>
130 <IsotopeRatio id="Ca_K" value="1.81e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.25e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="1.23207572285e-3" error="9.97981335511e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="7.34282867021e-1" error="1.43919441936e-2"></IsotopeRatio>
135 </StepData>
<StepData>
<StepNumber>23</StepNumber>
<FurnaceTemperature_DegreesCelsius>910.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.96049e-16" error="6.66e0"></Isotope>
140 <Isotope id="Ar37" value="1.0282e-14" error="1.463e1"></Isotope>
<Isotope id="Ar38" value="1.5218e-15" error="1.165e1"></Isotope>
<Isotope id="Ar39" value="2.84078e-14" error="2.12e0"></Isotope>
<Isotope id="Ar40" value="6.89796e-14" error="2.9e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.96049e-16" error="6.66e0"></Isotope>
145 <Isotope id="Ar39_correctedForIsotopeInterference" value="2.84078e-14" error="2.12e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="6.89796e-14" error="2.9e0"></Isotope>
<percentage_radiogenic_argon>15.780</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="3.885e-1" error="0.0e0"></IsotopeRatio>
150 <cumulated_percentage_Ar39_released>98.810</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.838" stddev="0.336"></MeasuredAge>
<RecalculatedAge>0.838</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="6.88e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="5.02e-1" error="0.0e0"></IsotopeRatio>
155 <IsotopeRatio id="Ar36_Ar40" value="2.84213013703e-3" error="2.717076411e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="4.11829004517e-1" error="2.06738160268e-2"></IsotopeRatio>
160 </StepData>
<StepData>
<StepNumber>24</StepNumber>
<FurnaceTemperature_DegreesCelsius>930.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.48091e-16" error="9.96e0"></Isotope>
165 <Isotope id="Ar37" value="7.256e-15" error="1.647e1"></Isotope>
<Isotope id="Ar38" value="9.7982e-16" error="1.552e1"></Isotope>
<Isotope id="Ar39" value="5.18109e-15" error="7.6e0"></Isotope>

```

170 <Isotope id="Ar40" value="3.57244e-14" error="8.01e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.48091e-16" error="9.96e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="5.18109e-15" error="7.6e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.57244e-14" error="8.01e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 175 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.010</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.002" stddev="2.198"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 180 <IsotopeRatio id="Ca\_K" value="2.66e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="2.11e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="4.14537403007e-3" error="7.54381581147e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.4502944766e-1" error="2.2554445373e-2"></IsotopeRatio>  
 </StepData>  
 185 <StepData>  
 <StepNumber>25</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>950.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.2063e-16" error="9.25e0"></Isotope>  
 190 <Isotope id="Ar37" value="5.2476e-15" error="1.509e1"></Isotope>  
 <Isotope id="Ar38" value="7.0902e-16" error="1.44e1"></Isotope>  
 <Isotope id="Ar39" value="3.53311e-15" error="7.27e0"></Isotope>  
 <Isotope id="Ar40" value="2.77415e-14" error="7.6e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.2063e-16" error="9.25e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.53311e-15" error="7.27e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.77415e-14" error="7.6e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 195 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.140</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.002" stddev="2.416"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.82e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="2.24e0" error="0.0e0"></IsotopeRatio>  
 200 <IsotopeRatio id="Ar36\_Ar40" value="4.3483589568e-3" error="7.41012921752e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.27358289927e-1" error="1.88799895908e-2"></IsotopeRatio>  
 </StepData>  
 205 <StepData>  
 <StepNumber>26</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1000.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.26976e-16" error="8.49e0"></Isotope>  
 <Isotope id="Ar37" value="4.7857e-15" error="1.512e1"></Isotope>  
 <Isotope id="Ar38" value="6.1098e-16" error="1.525e1"></Isotope>  
 210 <Isotope id="Ar39" value="3.24787e-15" error="7.25e0"></Isotope>  
 <Isotope id="Ar40" value="2.88035e-14" error="7.46e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.26976e-16" error="8.49e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.24787e-15" error="7.25e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.88035e-14" error="7.46e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.270</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.002" stddev="2.576"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.8e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="2.07e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="4.40835315153e-3" error="7.09949328998e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.1275956047e-1" error="1.65441709325e-2"></IsotopeRatio>  
 220 </StepData>  
 <StepData>  
 <StepNumber>27</StepNumber>

235 <FurnaceTemperature\_DegreesCelsius>1050.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.18342e-16" error="7.75e0"></Isotope>  
 <Isotope id="Ar37" value="4.0709e-15" error="1.499e1"></Isotope>  
 <Isotope id="Ar38" value="5.1831e-16" error="1.452e1"></Isotope>  
 <Isotope id="Ar39" value="2.99128e-15" error="6.41e0"></Isotope>  
 <Isotope id="Ar40" value="2.60591e-14" error="6.59e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.18342e-16" error="7.75e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.99128e-15" error="6.41e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.60591e-14" error="6.59e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.380</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.002" stddev="2.334"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.59e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.89e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="4.54129267703e-3" error="6.56726939103e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.14788308115e-1" error="1.48814939409e-2"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 255 <StepNumber>28</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1100.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.37945e-16" error="6.34e0"></Isotope>  
 <Isotope id="Ar37" value="3.312e-15" error="1.486e1"></Isotope>  
 <Isotope id="Ar38" value="4.5376e-16" error="1.414e1"></Isotope>  
 <Isotope id="Ar39" value="2.83187e-15" error="5.84e0"></Isotope>  
 <Isotope id="Ar40" value="3.3124e-14" error="5.94e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.37945e-16" error="6.34e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.83187e-15" error="5.84e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.3124e-14" error="5.94e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.490</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.002" stddev="2.489"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.22e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.71e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="4.16450307934e-3" error="5.14319034288e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="8.5492996015e-2" error="1.0051599988e-2"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 260 <StepNumber>29</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1200.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="2.46812e-16" error="4.67e0"></Isotope>  
 <Isotope id="Ar37" value="2.9632e-15" error="1.428e1"></Isotope>  
 <Isotope id="Ar38" value="4.3178e-16" error="1.149e1"></Isotope>  
 <Isotope id="Ar39" value="3.37057e-15" error="4.29e0"></Isotope>  
 <Isotope id="Ar40" value="6.25412e-14" error="4.31e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="2.46812e-16" error="4.67e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.37057e-15" error="4.29e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="6.25412e-14" error="4.31e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.620</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.002" stddev="2.787"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.67e0" error="0.0e0"></IsotopeRatio>

```

<IsotopeRatio id="Cl_K" value="1.26e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.94639053936e-3" error="3.55264244901e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="5.38935933433e-2" error="4.62970281227e-3"></IsotopeRatio>
300 </StepData>
<StepData>
    <StepNumber>30</StepNumber>
    <FurnaceTemperature_DegreesCelsius>1300.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="6.36841e-16" error="3.6e0"></Isotope>
    <Isotope id="Ar37" value="2.6925e-15" error="1.359e1"></Isotope>
    <Isotope id="Ar38" value="4.6511e-16" error="3.84e0"></Isotope>
    <Isotope id="Ar39" value="3.61412e-15" error="3.53e0"></Isotope>
    <Isotope id="Ar40" value="1.74598e-13" error="3.53e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="6.36841e-16" error="3.6e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="3.61412e-15" error="3.53e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="1.74598e-13" error="3.53e0"></Isotope>
    <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>99.760</cumulated_percentage_Ar39_released>
310 <MeasuredAge value="0.002" stddev="5.468"></MeasuredAge>
    <RecalculatedAge>0.002</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="1.42e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="1.02e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.64747018866e-3" error="2.60274381868e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="2.06996643719e-2" error="1.46125675366e-3"></IsotopeRatio>
</StepData>
<StepData>
    <StepNumber>31</StepNumber>
    <FurnaceTemperature_DegreesCelsius>1450.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.01994e-15" error="2.0e0"></Isotope>
    <Isotope id="Ar37" value="2.5644e-15" error="1.198e1"></Isotope>
    <Isotope id="Ar38" value="5.7783e-16" error="6.04e0"></Isotope>
    <Isotope id="Ar39" value="6.17971e-15" error="1.92e0"></Isotope>
    <Isotope id="Ar40" value="2.99834e-13" error="1.92e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.01994e-15" error="2.0e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="6.17971e-15" error="1.92e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="2.99834e-13" error="1.92e0"></Isotope>
    <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>100.000</cumulated_percentage_Ar39_released>
    <MeasuredAge value="0.002" stddev="2.913"></MeasuredAge>
    <RecalculatedAge>0.002</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="7.88e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="6.19e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.40168226419e-3" error="1.33379816025e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="2.06104377756e-2" error="7.91152113052e-4"></IsotopeRatio>
320 </StepData>
<CalculationParameters>
    <Parameter id="J_Factor" value="1.1953e-3" uncertainty="2.4e-1"></Parameter>
    <Parameter id="FluxMonitorAge" value="98.50" uncertainty="0.80" />
    <Parameter id="MassDiscrimination" value="0.98769" uncertainty="0.15" />
    <Parameter id="Atmospheric_40_36_ratio" value="2.9555e2"></Parameter>
    <Parameter id="DecayConstantK" value="5.543e-10" uncertainty="0.192"></Parameter>
</CalculationParameters>
<ArgonData>
</eArgonDataObject>
<eArgonDataObject>
    <ArgonData>
        <SampleDescription>ANU CAN #30, D3078029, Foil: A5, Alunite, 143.1mg, Steps: 32</SampleDescription>
        <StepData>

```

360 <StepNumber>0</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>450.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="3.7459e-16" error="5.05e0"></Isotope>  
 <Isotope id="Ar37" value="2.1749e-17" error="5.025e1"></Isotope>  
 <Isotope id="Ar38" value="9.6494e-17" error="6.42e0"></Isotope>  
 365 <Isotope id="Ar39" value="1.87618e-16" error="5.01e0"></Isotope>  
 <Isotope id="Ar40" value="1.12205e-13" error="5.01e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="3.7459e-16" error="5.05e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.87618e-16" error="5.01e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.12205e-13" error="5.01e0"></Isotope>  
 370 <percentage\_radiogenic\_argon>1.330</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="7.966e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.010</cumulated\_percentage\_Ar39\_released>  
 375 <MeasuredAge value="17.097" stddev="90.258"></MeasuredAge>  
 <RecalculatedAge>17.097</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.2e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.47e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.33844302839e-3" error="3.35841368862e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.67210017379e-3" error="1.67556617057e-4"></IsotopeRatio>  
 380 </StepData>  
 <StepData>  
     <StepNumber>1</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>470.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
 385 <Isotope id="Ar36" value="2.60817e-16" error="5.12e0"></Isotope>  
 <Isotope id="Ar37" value="2.1761e-17" error="5.025e1"></Isotope>  
 <Isotope id="Ar38" value="8.0985e-17" error="7.45e0"></Isotope>  
 <Isotope id="Ar39" value="1.92554e-16" error="5.04e0"></Isotope>  
 <Isotope id="Ar40" value="7.91554e-14" error="5.04e0"></Isotope>  
 390 <Isotope id="Ar36\_correctedForIsotopeInterference" value="2.60817e-16" error="5.12e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.92554e-16" error="5.04e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="7.91554e-14" error="5.04e0"></Isotope>  
 <percentage\_radiogenic\_argon>2.620</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.075e1" error="0.0e0"></IsotopeRatio>  
 395 <cumulated\_percentage\_Ar39\_released>0.020</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="23.044" stddev="62.088"></MeasuredAge>  
 <RecalculatedAge>23.044</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.15e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.83e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.29499945676e-3" error="3.34760718527e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="2.43260725105e-3" error="2.45206740608e-4"></IsotopeRatio>  
 </StepData>  
 <StepData>  
     <StepNumber>2</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>490.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
     <Isotope id="Ar36" value="5.35273e-16" error="4.63e0"></Isotope>  
 400 <Isotope id="Ar37" value="2.1773e-17" error="5.021e1"></Isotope>  
     <Isotope id="Ar38" value="1.3237e-16" error="5.8e0"></Isotope>  
     <Isotope id="Ar39" value="2.31652e-16" error="4.59e0"></Isotope>  
     <Isotope id="Ar40" value="1.60664e-13" error="4.59e0"></Isotope>  
     <Isotope id="Ar36\_correctedForIsotopeInterference" value="5.35273e-16" error="4.63e0"></Isotope>  
     <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.31652e-16" error="4.59e0"></Isotope>  
 405 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.60664e-13" error="4.59e0"></Isotope>  
     <percentage\_radiogenic\_argon>1.530</percentage\_radiogenic\_argon>  
     <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.064e1" error="0.0e0"></IsotopeRatio>  
     <cumulated\_percentage\_Ar39\_released>0.030</cumulated\_percentage\_Ar39\_released>  
     <MeasuredAge value="22.790" stddev="95.451"></MeasuredAge>  
     <RecalculatedAge>22.790</RecalculatedAge>

```

<IsotopeRatio id="Ca_K" value="1.79e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.43e0" error="0.0e0"></IsotopeRatio>
425 <IsotopeRatio id="Ar36_Ar40" value="3.33162998556e-3" error="3.07174568992e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.44184135836e-3" error="1.32366378291e-4"></IsotopeRatio>
</StepData>
<StepData>
430 <StepNumber>3</StepNumber>
<FurnaceTemperature_DegreesCelsius>510.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="8.56192e-16" error="3.87e0"></Isotope>
<Isotope id="Ar37" value="2.1785e-17" error="5.015e1"></Isotope>
<Isotope id="Ar38" value="1.9817e-16" error="4.87e0"></Isotope>
435 <Isotope id="Ar39" value="2.92713e-16" error="3.84e0"></Isotope>
<Isotope id="Ar40" value="2.56304e-13" error="3.84e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="8.56192e-16" error="3.87e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="2.92713e-16" error="3.84e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="2.56304e-13" error="3.84e0"></Isotope>
<percentage_radiogenic_argon>1.270</percentage_radiogenic_argon>
440 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.112e1" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.050</cumulated_percentage_Ar39_released>
<MeasuredAge value="23.832" stddev="101.054"></MeasuredAge>
<RecalculatedAge>23.832</RecalculatedAge>
445 <IsotopeRatio id="Ca_K" value="1.41e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.28e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.34053311692e-3" error="2.57554488705e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.14205396716e-3" error="8.77127852991e-5"></IsotopeRatio>
</StepData>
450 <StepData>
<StepNumber>4</StepNumber>
<FurnaceTemperature_DegreesCelsius>530.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.23815e-15" error="2.89e0"></Isotope>
455 <Isotope id="Ar37" value="2.1797e-17" error="5.008e1"></Isotope>
<Isotope id="Ar38" value="2.7245e-16" error="3.23e0"></Isotope>
<Isotope id="Ar39" value="4.03226e-16" error="2.85e0"></Isotope>
<Isotope id="Ar40" value="3.69214e-13" error="2.85e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.23815e-15" error="2.89e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="4.03226e-16" error="2.85e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="3.69214e-13" error="2.85e0"></Isotope>
<percentage_radiogenic_argon>0.890</percentage_radiogenic_argon>
460 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="8.132e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.070</cumulated_percentage_Ar39_released>
<MeasuredAge value="17.451" stddev="79.018"></MeasuredAge>
<RecalculatedAge>17.451</RecalculatedAge>
465 <IsotopeRatio id="Ca_K" value="1.03e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="9.2e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.35347522033e-3" error="1.92488909352e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.09212001712e-3" error="6.22503046881e-5"></IsotopeRatio>
</StepData>
<StepData>
470 <StepNumber>5</StepNumber>
<FurnaceTemperature_DegreesCelsius>550.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.26949e-15" error="2.38e0"></Isotope>
<Isotope id="Ar37" value="2.1808e-17" error="5.006e1"></Isotope>
475 <Isotope id="Ar38" value="2.8214e-16" error="2.93e0"></Isotope>
<Isotope id="Ar39" value="5.99979e-16" error="2.34e0"></Isotope>
<Isotope id="Ar40" value="3.79668e-13" error="2.34e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.26949e-15" error="2.38e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="5.99979e-16" error="2.34e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="3.79668e-13" error="2.34e0"></Isotope>

```

485

```

<percentage_radiogenic_argon>1.180</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="7.449e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.100</cumulated_percentage_Ar39_released>
<MeasuredAge value="15.993" stddev="44.829"></MeasuredAge>
<RecalculatedAge>15.993</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="6.91e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="6.48e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.34368448223e-3" error="1.57814006163e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.58027276463e-3" error="7.39550686086e-5"></IsotopeRatio>

```

490

```
</StepData>
<StepData>
```

495

```

<StepNumber>6</StepNumber>
<FurnaceTemperature_DegreesCelsius>570.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>

```

500

```

<Isotope id="Ar36" value="1.25027e-15" error="1.38e0"></Isotope>
<Isotope id="Ar37" value="2.182e-17" error="5.002e1"></Isotope>
<Isotope id="Ar38" value="2.8506e-16" error="1.98e0"></Isotope>
<Isotope id="Ar39" value="1.11728e-15" error="1.3e0"></Isotope>
<Isotope id="Ar40" value="3.746e-13" error="1.3e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.25027e-15" error="1.38e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="1.11728e-15" error="1.3e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="3.746e-13" error="1.3e0"></Isotope>

```

505

```

<percentage_radiogenic_argon>1.360</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="4.548e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.170</cumulated_percentage_Ar39_released>
<MeasuredAge value="9.782" stddev="13.529"></MeasuredAge>
<RecalculatedAge>9.782</RecalculatedAge>

```

510

```

<IsotopeRatio id="Ca_K" value="3.71e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="3.56e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.33761345435e-3" error="8.94406363442e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="2.98259476775e-3" error="7.75405722827e-5"></IsotopeRatio>

```

515

```
</StepData>
```

520

```

<StepNumber>7</StepNumber>
<FurnaceTemperature_DegreesCelsius>590.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>

```

525

```

<Isotope id="Ar36" value="1.15081e-15" error="8.1e-1"></Isotope>
<Isotope id="Ar37" value="2.1832e-17" error="5.001e1"></Isotope>
<Isotope id="Ar38" value="2.7753e-16" error="1.86e0"></Isotope>
<Isotope id="Ar39" value="2.42546e-15" error="6.6e-1"></Isotope>
<Isotope id="Ar40" value="3.45444e-13" error="6.6e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.15081e-15" error="8.1e-1"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="2.42546e-15" error="6.6e-1"></Isotope>

```

530

```

<Isotope id="Ar40_correctedForIsotopeInterference" value="3.45444e-13" error="6.6e-1"></Isotope>
<percentage_radiogenic_argon>1.540</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="2.195e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.300</cumulated_percentage_Ar39_released>

```

535

```

<MeasuredAge value="4.727" stddev="3.165"></MeasuredAge>
<RecalculatedAge>4.727</RecalculatedAge>

```

```
<IsotopeRatio id="Ca_K" value="1.71e-2" error="0.0e0"></IsotopeRatio>

```

```
<IsotopeRatio id="Cl_K" value="1.48e-1" error="0.0e0"></IsotopeRatio>

```

540

```

<IsotopeRatio id="Ar36_Ar40" value="3.33139380044e-3" error="4.89714888665e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="7.02128275495e-3" error="9.26809323653e-5"></IsotopeRatio>

```

```
</StepData>
```

```
<StepData>
```

```

<StepNumber>8</StepNumber>
<FurnaceTemperature_DegreesCelsius>610.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>

```

545

```

<Isotope id="Ar36" value="9.47941e-16" error="6.2e-1"></Isotope>
<Isotope id="Ar37" value="2.1844e-17" error="5.0e1"></Isotope>

```

550 <Isotope id="Ar38" value="2.7163e-16" error="1.68e0"></Isotope>  
<Isotope id="Ar39" value="4.897e-15" error="4.0e-1"></Isotope>  
<Isotope id="Ar40" value="2.89862e-13" error="4.0e-1"></Isotope>  
<Isotope id="Ar36\_correctedForIsotopeInterference" value="9.47941e-16" error="6.2e-1"></Isotope>  
<Isotope id="Ar39\_correctedForIsotopeInterference" value="4.897e-15" error="4.0e-1"></Isotope>  
<Isotope id="Ar40\_correctedForIsotopeInterference" value="2.89862e-13" error="4.0e-1"></Isotope>  
555 <percentage\_radiogenic\_argon>3.340</percentage\_radiogenic\_argon>  
<IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
<IsotopeRatio id="radiogenicAr40\_Ar39" value="1.98e0" error="0.0e0"></IsotopeRatio>  
<cumulated\_percentage\_Ar39\_released>0.570</cumulated\_percentage\_Ar39\_released>  
<MeasuredAge value="4.265" stddev="0.915"></MeasuredAge>  
560 <RecalculatedAge>4.265</RecalculatedAge>  
<IsotopeRatio id="Ca\_K" value="8.48e-3" error="0.0e0"></IsotopeRatio>  
<IsotopeRatio id="Cl\_K" value="8.58e-2" error="0.0e0"></IsotopeRatio>  
<IsotopeRatio id="Ar36\_Ar40" value="3.27031828939e-3" error="3.33572465518e-5"></IsotopeRatio>  
<IsotopeRatio id="Ar39\_Ar40" value="1.68942462275e-2" error="1.3515396982e-4"></IsotopeRatio>  
565 </StepData>  
<StepData>  
570 <StepNumber>9</StepNumber>  
<FurnaceTemperature\_DegreesCelsius>630.000</FurnaceTemperature\_DegreesCelsius>  
<Duration\_minutes>15.000</Duration\_minutes>  
<Isotope id="Ar36" value="8.43596e-16" error="5.5e-1"></Isotope>  
<Isotope id="Ar37" value="4.9938e-16" error="3.818e1"></Isotope>  
<Isotope id="Ar38" value="3.072e-16" error="1.78e0"></Isotope>  
<Isotope id="Ar39" value="9.44071e-15" error="2.8e-1"></Isotope>  
<Isotope id="Ar40" value="2.6384e-13" error="2.9e-1"></Isotope>  
575 <Isotope id="Ar36\_correctedForIsotopeInterference" value="8.43596e-16" error="5.5e-1"></Isotope>  
<Isotope id="Ar39\_correctedForIsotopeInterference" value="9.44071e-15" error="2.8e-1"></Isotope>  
<Isotope id="Ar40\_correctedForIsotopeInterference" value="2.6384e-13" error="2.9e-1"></Isotope>  
<percentage\_radiogenic\_argon>5.500</percentage\_radiogenic\_argon>  
<IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
<IsotopeRatio id="radiogenicAr40\_Ar39" value="1.538e0" error="0.0e0"></IsotopeRatio>  
580 <cumulated\_percentage\_Ar39\_released>1.090</cumulated\_percentage\_Ar39\_released>  
<MeasuredAge value="3.313" stddev="0.358"></MeasuredAge>  
<RecalculatedAge>3.313</RecalculatedAge>  
<IsotopeRatio id="Ca\_K" value="1.01e-1" error="0.0e0"></IsotopeRatio>  
<IsotopeRatio id="Cl\_K" value="4.99e-2" error="0.0e0"></IsotopeRatio>  
<IsotopeRatio id="Ar36\_Ar40" value="3.1973771983e-3" error="2.68579684657e-5"></IsotopeRatio>  
<IsotopeRatio id="Ar39\_Ar40" value="3.57819511825e-2" error="2.0395712174e-4"></IsotopeRatio>  
585 </StepData>  
<StepData>  
590 <StepNumber>10</StepNumber>  
<FurnaceTemperature\_DegreesCelsius>650.000</FurnaceTemperature\_DegreesCelsius>  
<Duration\_minutes>15.000</Duration\_minutes>  
<Isotope id="Ar36" value="7.4692e-16" error="5.4e-1"></Isotope>  
<Isotope id="Ar37" value="2.1868e-17" error="5.0e1"></Isotope>  
<Isotope id="Ar38" value="3.9103e-16" error="1.75e0"></Isotope>  
<Isotope id="Ar39" value="1.73482e-14" error="2.5e-1"></Isotope>  
<Isotope id="Ar40" value="2.44263e-13" error="2.6e-1"></Isotope>  
595 <Isotope id="Ar36\_correctedForIsotopeInterference" value="7.4692e-16" error="5.4e-1"></Isotope>  
<Isotope id="Ar39\_correctedForIsotopeInterference" value="1.73482e-14" error="2.5e-1"></Isotope>  
<Isotope id="Ar40\_correctedForIsotopeInterference" value="2.44263e-13" error="2.6e-1"></Isotope>  
<percentage\_radiogenic\_argon>9.600</percentage\_radiogenic\_argon>  
<IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
<IsotopeRatio id="radiogenicAr40\_Ar39" value="1.355e0" error="0.0e0"></IsotopeRatio>  
600 <cumulated\_percentage\_Ar39\_released>2.040</cumulated\_percentage\_Ar39\_released>  
<MeasuredAge value="2.920" stddev="0.168"></MeasuredAge>  
<RecalculatedAge>2.920</RecalculatedAge>  
<IsotopeRatio id="Ca\_K" value="2.4e-3" error="0.0e0"></IsotopeRatio>  
<IsotopeRatio id="Cl\_K" value="3.63e-2" error="0.0e0"></IsotopeRatio>  
<IsotopeRatio id="Ar36\_Ar40" value="3.05785157801e-3" error="2.44628126241e-5"></IsotopeRatio>  
605 <IsotopeRatio id="Ar39\_Ar40" value="7.10226272501e-2" error="3.62215398976e-4"></IsotopeRatio>  
610 </StepData>

```

<StepData>
  <StepNumber>11</StepNumber>
  <FurnaceTemperature_DegreesCelsius>670.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="6.74864e-16" error="6.3e-1"></Isotope>
  <Isotope id="Ar37" value="8.5601e-16" error="1.926e1"></Isotope>
  <Isotope id="Ar38" value="5.453e-16" error="2.25e0"></Isotope>
  <Isotope id="Ar39" value="2.94434e-14" error="2.9e-1"></Isotope>
  <Isotope id="Ar40" value="2.39069e-13" error="3.0e-1"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="6.74864e-16" error="6.3e-1"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="2.94434e-14" error="2.9e-1"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="2.39069e-13" error="3.0e-1"></Isotope>
  <percentage_radiogenic_argon>16.500</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.345e0" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>3.660</cumulated_percentage_Ar39_released>
  <MeasuredAge value="2.899" stddev="0.105"></MeasuredAge>
  <RecalculatedAge>2.899</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="5.52e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="3.44e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="2.82288376996e-3" error="2.62528190606e-5"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="1.23158586015e-1" error="7.26635657488e-4"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>12</StepNumber>
  <FurnaceTemperature_DegreesCelsius>690.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="6.59316e-16" error="8.4e-1"></Isotope>
  <Isotope id="Ar37" value="1.8736e-15" error="1.38e1"></Isotope>
  <Isotope id="Ar38" value="8.2955e-16" error="2.77e0"></Isotope>
  <Isotope id="Ar39" value="4.78018e-14" error="3.8e-1"></Isotope>
  <Isotope id="Ar40" value="2.56298e-13" error="3.8e-1"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="6.59316e-16" error="8.4e-1"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="4.78018e-14" error="3.8e-1"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="2.56298e-13" error="3.8e-1"></Isotope>
  <percentage_radiogenic_argon>23.820</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.285e0" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>6.280</cumulated_percentage_Ar39_released>
  <MeasuredAge value="2.769" stddev="0.086"></MeasuredAge>
  <RecalculatedAge>2.769</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="7.45e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="4.15e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="2.57245862238e-3" error="3.13839951931e-5"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="1.86508673497e-1" error="1.41746591858e-3"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>13</StepNumber>
  <FurnaceTemperature_DegreesCelsius>710.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="6.63765e-16" error="9.7e-1"></Isotope>
  <Isotope id="Ar37" value="3.667e-15" error="1.351e1"></Isotope>
  <Isotope id="Ar38" value="1.3217e-15" error="3.73e0"></Isotope>
  <Isotope id="Ar39" value="7.60023e-14" error="5.0e-1"></Isotope>
  <Isotope id="Ar40" value="2.90752e-13" error="5.1e-1"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="6.63765e-16" error="9.7e-1"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="7.60023e-14" error="5.0e-1"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="2.90752e-13" error="5.1e-1"></Isotope>
  <percentage_radiogenic_argon>32.250</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.244e0" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>10.460</cumulated_percentage_Ar39_released>
  <MeasuredAge value="2.681" stddev="0.069"></MeasuredAge>

```

675 <RecalculatedAge>2.681</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="9.17e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="5.39e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.28292496698e-3" error="3.37872895113e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="2.61399061743e-1" error="2.64013052361e-3"></IsotopeRatio>  
 </StepData>  
 680 <StepData>  
     <StepNumber>14</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>730.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
     <Isotope id="Ar36" value="6.75139e-16" error="1.75e0"></Isotope>  
     <Isotope id="Ar37" value="7.1307e-15" error="1.396e1"></Isotope>  
     <Isotope id="Ar38" value="2.1019e-15" error="4.89e0"></Isotope>  
     <Isotope id="Ar39" value="1.13544e-13" error="6.2e-1"></Isotope>  
     <Isotope id="Ar40" value="3.34471e-13" error="6.5e-1"></Isotope>  
     <Isotope id="Ar36\_correctedForIsotopeInterference" value="6.75139e-16" error="1.75e0"></Isotope>  
     <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.13544e-13" error="6.2e-1"></Isotope>  
     <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.34471e-13" error="6.5e-1"></Isotope>  
     <percentage\_radiogenic\_argon>39.890</percentage\_radiogenic\_argon>  
     <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.188e0" error="0.0e0"></IsotopeRatio>  
     <cumulated\_percentage\_Ar39\_released>16.700</cumulated\_percentage\_Ar39\_released>  
     <MeasuredAge value="2.561" stddev="0.079"></MeasuredAge>  
     <RecalculatedAge>2.561</RecalculatedAge>  
     <IsotopeRatio id="Ca\_K" value="1.19e-1" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="Cl\_K" value="7.42e-2" error="0.0e0"></IsotopeRatio>  
 685 <IsotopeRatio id="Ar36\_Ar40" value="2.01852776474e-3" error="4.84446663537e-5"></IsotopeRatio>  
     <IsotopeRatio id="Ar39\_Ar40" value="3.39473377363e-1" error="4.31131189251e-3"></IsotopeRatio>  
 </StepData>  
 690 <StepData>  
     <StepNumber>15</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>750.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
     <Isotope id="Ar36" value="7.62889e-16" error="2.07e0"></Isotope>  
     <Isotope id="Ar37" value="1.3429e-14" error="1.452e1"></Isotope>  
     <Isotope id="Ar38" value="3.3509e-15" error="5.92e0"></Isotope>  
     <Isotope id="Ar39" value="1.6431e-13" error="6.9e-1"></Isotope>  
     <Isotope id="Ar40" value="4.12699e-13" error="8.1e-1"></Isotope>  
     <Isotope id="Ar36\_correctedForIsotopeInterference" value="7.62889e-16" error="2.07e0"></Isotope>  
     <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.6431e-13" error="6.9e-1"></Isotope>  
     <Isotope id="Ar40\_correctedForIsotopeInterference" value="4.12699e-13" error="8.1e-1"></Isotope>  
     <percentage\_radiogenic\_argon>44.770</percentage\_radiogenic\_argon>  
     <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.139e0" error="0.0e0"></IsotopeRatio>  
     <cumulated\_percentage\_Ar39\_released>25.720</cumulated\_percentage\_Ar39\_released>  
     <MeasuredAge value="2.456" stddev="0.076"></MeasuredAge>  
     <RecalculatedAge>2.456</RecalculatedAge>  
     <IsotopeRatio id="Ca\_K" value="1.55e-1" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="Cl\_K" value="1.0e-1" error="0.0e0"></IsotopeRatio>  
 700 <IsotopeRatio id="Ar36\_Ar40" value="1.84853610016e-3" error="5.32378396846e-5"></IsotopeRatio>  
     <IsotopeRatio id="Ar39\_Ar40" value="3.98135202654e-1" error="5.97202803981e-3"></IsotopeRatio>  
 </StepData>  
 705 <StepData>  
     <StepNumber>15</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>750.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
     <Isotope id="Ar36" value="7.62889e-16" error="2.07e0"></Isotope>  
     <Isotope id="Ar37" value="1.3429e-14" error="1.452e1"></Isotope>  
     <Isotope id="Ar38" value="3.3509e-15" error="5.92e0"></Isotope>  
     <Isotope id="Ar39" value="1.6431e-13" error="6.9e-1"></Isotope>  
     <Isotope id="Ar40" value="4.12699e-13" error="8.1e-1"></Isotope>  
     <Isotope id="Ar36\_correctedForIsotopeInterference" value="7.62889e-16" error="2.07e0"></Isotope>  
     <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.6431e-13" error="6.9e-1"></Isotope>  
     <Isotope id="Ar40\_correctedForIsotopeInterference" value="4.12699e-13" error="8.1e-1"></Isotope>  
     <percentage\_radiogenic\_argon>44.770</percentage\_radiogenic\_argon>  
     <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.139e0" error="0.0e0"></IsotopeRatio>  
     <cumulated\_percentage\_Ar39\_released>25.720</cumulated\_percentage\_Ar39\_released>  
     <MeasuredAge value="2.456" stddev="0.076"></MeasuredAge>  
     <RecalculatedAge>2.456</RecalculatedAge>  
     <IsotopeRatio id="Ca\_K" value="1.55e-1" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="Cl\_K" value="1.0e-1" error="0.0e0"></IsotopeRatio>  
 710 <IsotopeRatio id="Ar36\_Ar40" value="1.84853610016e-3" error="5.32378396846e-5"></IsotopeRatio>  
     <IsotopeRatio id="Ar39\_Ar40" value="3.98135202654e-1" error="5.97202803981e-3"></IsotopeRatio>  
 </StepData>  
 715 <StepData>  
     <StepNumber>16</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>770.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
     <Isotope id="Ar36" value="9.94477e-16" error="2.48e0"></Isotope>  
     <Isotope id="Ar37" value="2.2865e-14" error="1.389e1"></Isotope>  
     <Isotope id="Ar38" value="5.2674e-15" error="6.39e0"></Isotope>  
     <Isotope id="Ar39" value="2.43393e-13" error="7.1e-1"></Isotope>  
     <Isotope id="Ar40" value="5.62674e-13" error="9.2e-1"></Isotope>  
     <Isotope id="Ar36\_correctedForIsotopeInterference" value="9.94477e-16" error="2.48e0"></Isotope>  
     <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.43393e-13" error="7.1e-1"></Isotope>  
 720 </StepData>  
 725 <StepData>  
     <StepNumber>16</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>770.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
     <Isotope id="Ar36" value="9.94477e-16" error="2.48e0"></Isotope>  
     <Isotope id="Ar37" value="2.2865e-14" error="1.389e1"></Isotope>  
     <Isotope id="Ar38" value="5.2674e-15" error="6.39e0"></Isotope>  
     <Isotope id="Ar39" value="2.43393e-13" error="7.1e-1"></Isotope>  
     <Isotope id="Ar40" value="5.62674e-13" error="9.2e-1"></Isotope>  
     <Isotope id="Ar36\_correctedForIsotopeInterference" value="9.94477e-16" error="2.48e0"></Isotope>  
     <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.43393e-13" error="7.1e-1"></Isotope>

```

<Isotope id="Ar40_correctedForIsotopeInterference" value="5.62674e-13" error="9.2e-1"></Isotope>
<percentage_radiogenic_argon>47.080</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.104e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>39.090</cumulated_percentage_Ar39_released>
<MeasuredAge value="2.380" stddev="0.080"></MeasuredAge>
<RecalculatedAge>2.380</RecalculatedAge>
740 <IsotopeRatio id="Ca_K" value="1.78e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.17e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="1.76741239154e-3" error="6.00920213125e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="4.32564859937e-1" error="7.05080721697e-3"></IsotopeRatio>
</StepData>
745 <StepData>
<StepNumber>17</StepNumber>
<FurnaceTemperature_DegreesCelsius>790.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.32479e-15" error="2.46e0"></Isotope>
<Isotope id="Ar37" value="3.0377e-14" error="1.407e1"></Isotope>
750 <Isotope id="Ar38" value="6.9798e-15" error="6.53e0"></Isotope>
<Isotope id="Ar39" value="3.13538e-13" error="7.1e-1"></Isotope>
<Isotope id="Ar40" value="7.35077e-13" error="9.4e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.32479e-15" error="2.46e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="3.13538e-13" error="7.1e-1"></Isotope>
755 <Isotope id="Ar40_correctedForIsotopeInterference" value="7.35077e-13" error="9.4e-1"></Isotope>
<percentage_radiogenic_argon>46.080</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.096e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>56.320</cumulated_percentage_Ar39_released>
760 <MeasuredAge value="2.361" stddev="0.082"></MeasuredAge>
<RecalculatedAge>2.361</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.84e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.24e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="1.80224656737e-3" error="6.12763832905e-5"></IsotopeRatio>
765 <IsotopeRatio id="Ar39_Ar40" value="4.26537628031e-1" error="7.03787086251e-3"></IsotopeRatio>
</StepData>
<StepData>
<StepNumber>18</StepNumber>
<FurnaceTemperature_DegreesCelsius>810.000</FurnaceTemperature_DegreesCelsius>
770 <Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.83143e-15" error="2.1e0"></Isotope>
<Isotope id="Ar37" value="3.4237e-14" error="1.411e1"></Isotope>
<Isotope id="Ar38" value="7.5608e-15" error="6.88e0"></Isotope>
<Isotope id="Ar39" value="3.19821e-13" error="7.6e-1"></Isotope>
775 <Isotope id="Ar40" value="8.8271e-13" error="9.5e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.83143e-15" error="2.1e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="3.19821e-13" error="7.6e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="8.8271e-13" error="9.5e-1"></Isotope>
<percentage_radiogenic_argon>38.220</percentage_radiogenic_argon>
780 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.068e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>73.890</cumulated_percentage_Ar39_released>
<MeasuredAge value="2.301" stddev="0.096"></MeasuredAge>
785 <RecalculatedAge>2.301</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="2.03e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.38e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="2.07478107193e-3" error="6.32808226937e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="3.62317182314e-1" error="6.19562381756e-3"></IsotopeRatio>
790 </StepData>
<StepData>
<StepNumber>19</StepNumber>
<FurnaceTemperature_DegreesCelsius>830.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
795 <Isotope id="Ar36" value="3.35068e-15" error="1.55e0"></Isotope>

```

800 <Isotope id="Ar37" value="3.2184e-14" error="1.433e1"></Isotope>  
 <Isotope id="Ar38" value="6.7027e-15" error="7.41e0"></Isotope>  
 <Isotope id="Ar39" value="2.40745e-13" error="9.1e-1"></Isotope>  
 <Isotope id="Ar40" value="1.23361e-12" error="9.6e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="3.35068e-15" error="1.55e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.40745e-13" error="9.1e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.23361e-12" error="9.6e-1"></Isotope>  
 <percentage\_radiogenic\_argon>19.600</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.011e0" error="0.0e0"></IsotopeRatio>  
 810 <cumulated\_percentage\_Ar39\_released>87.110</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.178" stddev="0.174"></MeasuredAge>  
 <RecalculatedAge>2.178</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.54e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.7e-1" error="0.0e0"></IsotopeRatio>  
 815 <IsotopeRatio id="Ar36\_Ar40" value="2.7161582672e-3" error="6.81755725067e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.95154870664e-1" error="3.64939608142e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 820 <StepNumber>20</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>850.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="5.63889e-15" error="1.55e0"></Isotope>  
 <Isotope id="Ar37" value="2.5984e-14" error="1.48e1"></Isotope>  
 <Isotope id="Ar38" value="5.1711e-15" error="7.86e0"></Isotope>  
 825 <Isotope id="Ar39" value="1.25032e-13" error="1.31e0"></Isotope>  
 <Isotope id="Ar40" value="1.77278e-12" error="1.32e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="5.63889e-15" error="1.55e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.25032e-13" error="1.31e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.77278e-12" error="1.32e0"></Isotope>  
 <percentage\_radiogenic\_argon>5.980</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="8.494e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>93.980</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="1.831" stddev="0.601"></MeasuredAge>  
 <RecalculatedAge>1.831</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="3.95e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="2.62e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.18081769876e-3" error="9.12894679543e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="7.0528774016e-2" error="1.85490675662e-3"></IsotopeRatio>  
 830 </StepData>  
 <StepData>  
 835 <StepNumber>21</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>870.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="6.27206e-15" error="2.18e0"></Isotope>  
 <Isotope id="Ar37" value="2.0684e-14" error="1.493e1"></Isotope>  
 <Isotope id="Ar38" value="3.9851e-15" error="8.29e0"></Isotope>  
 <Isotope id="Ar39" value="5.9997e-14" error="2.05e0"></Isotope>  
 <Isotope id="Ar40" value="1.89105e-12" error="2.05e0"></Isotope>  
 840 <Isotope id="Ar36\_correctedForIsotopeInterference" value="6.27206e-15" error="2.18e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="5.9997e-14" error="2.05e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.89105e-12" error="2.05e0"></Isotope>  
 <percentage\_radiogenic\_argon>1.970</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="6.225e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>97.280</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="1.342" stddev="2.013"></MeasuredAge>  
 <RecalculatedAge>1.342</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="6.55e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="4.3e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.31670764919e-3" error="1.40296733561e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="3.17268184342e-2" error="1.3007995558e-3"></IsotopeRatio>

```

865 </StepData>
<StepData>
  <StepNumber>22</StepNumber>
  <FurnaceTemperature_DegreesCelsius>890.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="4.72203e-15" error="6.66e0"></Isotope>
  <Isotope id="Ar37" value="1.6304e-14" error="1.647e1"></Isotope>
  <Isotope id="Ar38" value="2.7501e-15" error="1.15e1"></Isotope>
  <Isotope id="Ar39" value="1.40505e-14" error="6.61e0"></Isotope>
  <Isotope id="Ar40" value="1.39046e-12" error="6.61e0"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="4.72203e-15" error="6.66e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="1.40505e-14" error="6.61e0"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="1.39046e-12" error="6.61e0"></Isotope>
  <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>98.050</cumulated_percentage_Ar39_released>
870  <MeasuredAge value="0.002" stddev="20.051"></MeasuredAge>
  <RecalculatedAge>0.002</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="2.2e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="1.47e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="3.39602002215e-3" error="4.51059788626e-4"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="1.0104929304e-2" error="1.33663714142e-3"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>23</StepNumber>
  <FurnaceTemperature_DegreesCelsius>910.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="2.44594e-15" error="9.44e0"></Isotope>
  <Isotope id="Ar37" value="1.2604e-14" error="1.777e1"></Isotope>
  <Isotope id="Ar38" value="1.8812e-15" error="1.452e1"></Isotope>
  <Isotope id="Ar39" value="7.62842e-15" error="9.39e0"></Isotope>
  <Isotope id="Ar40" value="7.19026e-13" error="9.39e0"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="2.44594e-15" error="9.44e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="7.62842e-15" error="9.39e0"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="7.19026e-13" error="9.39e0"></Isotope>
  <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>98.470</cumulated_percentage_Ar39_released>
875  <MeasuredAge value="0.002" stddev="27.125"></MeasuredAge>
  <RecalculatedAge>0.002</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="3.14e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="2.13e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="3.4017406881e-3" error="6.41489155822e-4"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="1.06093799112e-2" error="1.99434367701e-3"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>24</StepNumber>
  <FurnaceTemperature_DegreesCelsius>930.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="1.31688e-15" error="9.26e0"></Isotope>
  <Isotope id="Ar37" value="9.3416e-15" error="1.726e1"></Isotope>
  <Isotope id="Ar38" value="1.316e-15" error="1.482e1"></Isotope>
  <Isotope id="Ar39" value="5.59611e-15" error="9.19e0"></Isotope>
  <Isotope id="Ar40" value="3.85942e-13" error="9.19e0"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="1.31688e-15" error="9.26e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="5.59611e-15" error="9.19e0"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="3.85942e-13" error="9.19e0"></Isotope>
  <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
880  <cumulated_percentage_Ar39_released>98.780</cumulated_percentage_Ar39_released>
885

```

```

<MeasuredAge value="0.002" stddev="19.486"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="3.17e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.19e0" error="0.0e0"></IsotopeRatio>
930 <IsotopeRatio id="Ar36_Ar40" value="3.41211891942e-3" error="6.30815787429e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.44998730379e-2" error="2.66729676534e-3"></IsotopeRatio>
</StepData>
<StepData>
935   <StepNumber>25</StepNumber>
   <FurnaceTemperature_DegreesCelsius>950.000</FurnaceTemperature_DegreesCelsius>
   <Duration_minutes>15.000</Duration_minutes>
   <Isotope id="Ar36" value="7.31922e-16" error="9.21e0"></Isotope>
   <Isotope id="Ar37" value="7.1131e-15" error="1.682e1"></Isotope>
   <Isotope id="Ar38" value="9.6343e-16" error="1.532e1"></Isotope>
940   <Isotope id="Ar39" value="4.21224e-15" error="9.1e0"></Isotope>
   <Isotope id="Ar40" value="2.13359e-13" error="9.11e0"></Isotope>
   <Isotope id="Ar36_correctedForIsotopeInterference" value="7.31922e-16" error="9.21e0"></Isotope>
   <Isotope id="Ar39_correctedForIsotopeInterference" value="4.21224e-15" error="9.1e0"></Isotope>
   <Isotope id="Ar40_correctedForIsotopeInterference" value="2.13359e-13" error="9.11e0"></Isotope>
945   <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
   <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
   <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
   <cumulated_percentage_Ar39_released>99.010</cumulated_percentage_Ar39_released>
   <MeasuredAge value="0.002" stddev="14.258"></MeasuredAge>
950   <RecalculatedAge>0.002</RecalculatedAge>
   <IsotopeRatio id="Ca_K" value="3.21e0" error="0.0e0"></IsotopeRatio>
   <IsotopeRatio id="Cl_K" value="2.25e0" error="0.0e0"></IsotopeRatio>
   <IsotopeRatio id="Ar36_Ar40" value="3.43047164638e-3" error="6.30225161593e-4"></IsotopeRatio>
   <IsotopeRatio id="Ar39_Ar40" value="1.97424997305e-2" error="3.59756248244e-3"></IsotopeRatio>
955   </StepData>
   <StepData>
     <StepNumber>26</StepNumber>
     <FurnaceTemperature_DegreesCelsius>1000.000</FurnaceTemperature_DegreesCelsius>
     <Duration_minutes>15.000</Duration_minutes>
     <Isotope id="Ar36" value="7.23402e-16" error="8.65e0"></Isotope>
     <Isotope id="Ar37" value="5.5959e-15" error="1.685e1"></Isotope>
     <Isotope id="Ar38" value="7.8742e-16" error="1.423e1"></Isotope>
     <Isotope id="Ar39" value="3.45012e-15" error="8.57e0"></Isotope>
     <Isotope id="Ar40" value="2.11366e-13" error="8.57e0"></Isotope>
     <Isotope id="Ar36_correctedForIsotopeInterference" value="7.23402e-16" error="8.65e0"></Isotope>
     <Isotope id="Ar39_correctedForIsotopeInterference" value="3.45012e-15" error="8.57e0"></Isotope>
     <Isotope id="Ar40_correctedForIsotopeInterference" value="2.11366e-13" error="8.57e0"></Isotope>
     <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
     <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
960     <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
     <cumulated_percentage_Ar39_released>99.200</cumulated_percentage_Ar39_released>
     <MeasuredAge value="0.002" stddev="16.189"></MeasuredAge>
965     <RecalculatedAge>0.002</RecalculatedAge>
     <IsotopeRatio id="Ca_K" value="3.08e0" error="0.0e0"></IsotopeRatio>
     <IsotopeRatio id="Cl_K" value="2.16e0" error="0.0e0"></IsotopeRatio>
     <IsotopeRatio id="Ar36_Ar40" value="3.42250882356e-3" error="5.90657073955e-4"></IsotopeRatio>
     <IsotopeRatio id="Ar39_Ar40" value="1.63229658507e-2" error="2.79987913751e-3"></IsotopeRatio>
970   </StepData>
   <StepData>
     <StepNumber>27</StepNumber>
     <FurnaceTemperature_DegreesCelsius>1050.000</FurnaceTemperature_DegreesCelsius>
     <Duration_minutes>15.000</Duration_minutes>
     <Isotope id="Ar36" value="7.65122e-16" error="7.96e0"></Isotope>
     <Isotope id="Ar37" value="4.6516e-15" error="1.583e1"></Isotope>
     <Isotope id="Ar38" value="6.7802e-16" error="1.341e1"></Isotope>
     <Isotope id="Ar39" value="3.01746e-15" error="7.91e0"></Isotope>
     <Isotope id="Ar40" value="2.24933e-13" error="7.91e0"></Isotope>
     <Isotope id="Ar36_correctedForIsotopeInterference" value="7.65122e-16" error="7.96e0"></Isotope>
975
980
985

```

990 <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.01746e-15" error="7.91e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.24933e-13" error="7.91e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.370</cumulated\_percentage\_Ar39\_released>  
 995 <MeasuredAge value="0.002" stddev="18.090"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.93e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="2.02e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.40155512975e-3" error="5.40763391548e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.34149280008e-2" error="2.12388579301e-3"></IsotopeRatio>  
 000 </StepData>  
 <StepData>  
 <StepNumber>28</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1100.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 005 <Isotope id="Ar36" value="5.62338e-16" error="7.62e0"></Isotope>  
 <Isotope id="Ar37" value="4.0271e-15" error="1.529e1"></Isotope>  
 <Isotope id="Ar38" value="5.5662e-16" error="1.358e1"></Isotope>  
 <Isotope id="Ar39" value="2.65587e-15" error="7.53e0"></Isotope>  
 010 <Isotope id="Ar40" value="1.65984e-13" error="7.53e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="5.62338e-16" error="7.62e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.65587e-15" error="7.53e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.65984e-13" error="7.53e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 015 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.510</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.002" stddev="14.448"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 020 <IsotopeRatio id="Ca\_K" value="2.88e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.93e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.3879048583e-3" error="5.14308153188e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.60007591093e-2" error="2.41139555609e-3"></IsotopeRatio>  
 025 </StepData>  
 <StepData>  
 <StepNumber>29</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1200.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 030 <Isotope id="Ar36" value="8.78966e-16" error="6.39e0"></Isotope>  
 <Isotope id="Ar37" value="3.3409e-15" error="1.508e1"></Isotope>  
 <Isotope id="Ar38" value="5.493e-16" error="1.082e1"></Isotope>  
 <Isotope id="Ar39" value="2.56702e-15" error="6.35e0"></Isotope>  
 <Isotope id="Ar40" value="2.63684e-13" error="6.35e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="8.78966e-16" error="6.39e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.56702e-15" error="6.35e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.63684e-13" error="6.35e0"></Isotope>  
 <percentage\_radiogenic\_argon>1.480</percentage\_radiogenic\_argon>  
 035 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.521e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.650</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="3.278" stddev="19.758"></MeasuredAge>  
 <RecalculatedAge>3.278</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.47e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.68e0" error="0.0e0"></IsotopeRatio>  
 040 <IsotopeRatio id="Ar36\_Ar40" value="3.33340665342e-3" error="4.25109413504e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="9.73521336145e-3" error="1.23725935474e-3"></IsotopeRatio>  
 045 </StepData>  
 <StepData>  
 <StepNumber>30</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1300.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>

```

<Isotope id="Ar36" value="1.36846e-15" error="5.79e0"></Isotope>
<Isotope id="Ar37" value="2.9924e-15" error="1.601e1"></Isotope>
<Isotope id="Ar38" value="5.9981e-16" error="9.08e0"></Isotope>
<Isotope id="Ar39" value="2.55659e-15" error="5.77e0"></Isotope>
<Isotope id="Ar40" value="4.05297e-13" error="5.77e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.36846e-15" error="5.79e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="2.55659e-15" error="5.77e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="4.05297e-13" error="5.77e0"></Isotope>
055 <percentage_radiogenic_argon>0.210</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="3.323e-1" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>99.790</cumulated_percentage_Ar39_released>
060 <MeasuredAge value="0.717" stddev="27.889"></MeasuredAge>
<RecalculatedAge>0.717</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="2.22e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.48e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.37643752606e-3" error="3.90532833391e-4"></IsotopeRatio>
065 <IsotopeRatio id="Ar39_Ar40" value="6.30794207704e-3" error="7.28473531008e-4"></IsotopeRatio>
</StepData>
070 <StepData>
<StepNumber>31</StepNumber>
<FurnaceTemperature_DegreesCelsius>1450.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
075 <Isotope id="Ar36" value="3.03472e-15" error="3.5e0"></Isotope>
<Isotope id="Ar37" value="2.7922e-15" error="1.255e1"></Isotope>
<Isotope id="Ar38" value="9.1027e-16" error="5.26e0"></Isotope>
<Isotope id="Ar39" value="3.7517e-15" error="3.46e0"></Isotope>
080 <Isotope id="Ar40" value="9.26296e-13" error="3.47e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="3.03472e-15" error="3.5e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="3.7517e-15" error="3.46e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="9.26296e-13" error="3.47e0"></Isotope>
<percentage_radiogenic_argon>3.170</percentage_radiogenic_argon>
085 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="7.833e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>100.000</cumulated_percentage_Ar39_released>
<MeasuredAge value="16.812" stddev="25.546"></MeasuredAge>
<RecalculatedAge>16.812</RecalculatedAge>
090 <IsotopeRatio id="Ca_K" value="1.41e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="9.32e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.27618817311e-3" error="2.28393482438e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="4.05021720919e-3" error="2.80807052957e-4"></IsotopeRatio>
</StepData>
095 <CalculationParameters>
<Parameter id="J_Factor" value="1.1953e-3" uncertainty="2.4e-1"></Parameter>
<Parameter id="FluxMonitorAge" value="98.50" uncertainty="0.80" />
<Parameter id="MassDiscrimination" value="0.98769" uncertainty="0.15" />
<Parameter id="Atmospheric_40_36_ratio" value="2.9555e2"></Parameter>
<Parameter id="DecayConstantK" value="5.543e-10" uncertainty="0.192"></Parameter>
100 </CalculationParameters>
</ArgonData>
</eArgonDataObject>
<eArgonDataObject>
<ArgonData>
105 <SampleDescription>ANU CAN #30, D3056884, Foil: A6, Alunite, 138.5mg, Steps: 32</SampleDescription>
<StepData>
<StepNumber>0</StepNumber>
<FurnaceTemperature_DegreesCelsius>450.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
110 <Isotope id="Ar36" value="1.22467e-16" error="5.1e0"></Isotope>
<Isotope id="Ar37" value="2.2631e-17" error="5.024e1"></Isotope>
<Isotope id="Ar38" value="6.1431e-17" error="1.081e1"></Isotope>
<Isotope id="Ar39" value="2.7949e-16" error="4.87e0"></Isotope>
<Isotope id="Ar40" value="3.70826e-14" error="4.88e0"></Isotope>

```

115

```

<Isotope id="Ar36_correctedForIsotopeInterference" value="1.22467e-16" error="5.1e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="2.7949e-16" error="4.87e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="3.70826e-14" error="4.88e0"></Isotope>
<percentage_radiogenic_argon>2.390</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="3.175e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.020</cumulated_percentage_Ar39_released>
<MeasuredAge value="6.834" stddev="19.859"></MeasuredAge>
<RecalculatedAge>6.834</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.54e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.53e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.30254620766e-3" error="3.29545562385e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="7.53695803423e-3" error="7.3471975089e-4"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>1</StepNumber>
  <FurnaceTemperature_DegreesCelsius>470.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="9.92447e-17" error="6.02e0"></Isotope>
  <Isotope id="Ar37" value="2.2644e-17" error="5.032e1"></Isotope>
  <Isotope id="Ar38" value="5.7523e-17" error="1.081e1"></Isotope>
  <Isotope id="Ar39" value="2.63758e-16" error="5.65e0"></Isotope>
  <Isotope id="Ar40" value="3.07107e-14" error="5.65e0"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="9.92447e-17" error="6.02e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="2.63758e-16" error="5.65e0"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="3.07107e-14" error="5.65e0"></Isotope>
  <percentage_radiogenic_argon>4.490</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="5.228e0" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>0.030</cumulated_percentage_Ar39_released>
  <MeasuredAge value="11.239" stddev="20.119"></MeasuredAge>
  <RecalculatedAge>11.239</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="1.63e-1" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="1.65e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="3.23160006122e-3" error="3.77075478516e-4"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="8.58847242166e-3" error="9.70284505208e-4"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>2</StepNumber>
  <FurnaceTemperature_DegreesCelsius>490.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="1.28143e-16" error="4.66e0"></Isotope>
  <Isotope id="Ar37" value="4.3345e-16" error="3.575e1"></Isotope>
  <Isotope id="Ar38" value="6.8338e-17" error="8.51e0"></Isotope>
  <Isotope id="Ar39" value="3.23593e-16" error="4.42e0"></Isotope>
  <Isotope id="Ar40" value="3.87685e-14" error="4.42e0"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="1.28143e-16" error="4.66e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="3.23593e-16" error="4.42e0"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="3.87685e-14" error="4.42e0"></Isotope>
  <percentage_radiogenic_argon>2.310</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="2.769e0" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>0.050</cumulated_percentage_Ar39_released>
  <MeasuredAge value="5.961" stddev="16.334"></MeasuredAge>
  <RecalculatedAge>5.961</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="2.55e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="1.52e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="3.30533809665e-3" error="3.00411047216e-4"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="8.34680217187e-3" error="7.38448541737e-4"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>3</StepNumber>
  <FurnaceTemperature_DegreesCelsius>510.000</FurnaceTemperature_DegreesCelsius>

```

180 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.57931e-16" error="3.68e0"></Isotope>  
 <Isotope id="Ar37" value="2.2669e-17" error="5.013e1"></Isotope>  
 <Isotope id="Ar38" value="7.2506e-17" error="7.35e0"></Isotope>  
 <Isotope id="Ar39" value="4.12392e-16" error="3.56e0"></Isotope>  
 <Isotope id="Ar40" value="4.79681e-14" error="3.56e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.57931e-16" error="3.68e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="4.12392e-16" error="3.56e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="4.79681e-14" error="3.56e0"></Isotope>  
 <percentage\_radiogenic\_argon>2.690</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="3.132e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.080</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="6.741" stddev="12.608"></MeasuredAge>  
 <RecalculatedAge>6.741</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.04e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.12e0" error="0.0e0"></IsotopeRatio>  
 190 <IsotopeRatio id="Ar36\_Ar40" value="3.2924172523e-3" error="2.38330623984e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="8.59721356485e-3" error="6.11970989121e-4"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 200 <StepNumber>4</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>530.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.9861e-16" error="2.77e0"></Isotope>  
 <Isotope id="Ar37" value="4.0035e-16" error="4.036e1"></Isotope>  
 <Isotope id="Ar38" value="8.0823e-17" error="7.43e0"></Isotope>  
 <Isotope id="Ar39" value="5.59187e-16" error="2.64e0"></Isotope>  
 <Isotope id="Ar40" value="5.91275e-14" error="2.64e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.9861e-16" error="2.77e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="5.59187e-16" error="2.64e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="5.91275e-14" error="2.64e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.720</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="7.662e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.110</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="1.652" stddev="8.677"></MeasuredAge>  
 210 <RecalculatedAge>1.652</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.36e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="7.97e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.35901230392e-3" error="1.8179378149e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="9.45730835905e-3" error="4.99469110337e-4"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 220 <StepNumber>5</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>550.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="2.34313e-16" error="2.03e0"></Isotope>  
 <Isotope id="Ar37" value="2.2693e-17" error="5.003e1"></Isotope>  
 <Isotope id="Ar38" value="8.985e-17" error="5.68e0"></Isotope>  
 <Isotope id="Ar39" value="8.26303e-16" error="1.83e0"></Isotope>  
 <Isotope id="Ar40" value="7.05757e-14" error="1.83e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="2.34313e-16" error="2.03e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="8.26303e-16" error="1.83e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="7.05757e-14" error="1.83e0"></Isotope>  
 <percentage\_radiogenic\_argon>1.880</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.603e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.160</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="3.453" stddev="4.976"></MeasuredAge>  
 <RecalculatedAge>3.453</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="5.22e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="5.27e-1" error="0.0e0"></IsotopeRatio>

```

<IsotopeRatio id="Ar36_Ar40" value="3.32002374755e-3" error="1.28112658102e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.17080383191e-2" error="4.28357321927e-4"></IsotopeRatio>
</StepData>
245 <StepData>
    <StepNumber>6</StepNumber>
    <FurnaceTemperature_DegreesCelsius>570.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="2.72584e-16" error="1.32e0"></Isotope>
    <Isotope id="Ar37" value="2.2706e-17" error="5.001e1"></Isotope>
    <Isotope id="Ar38" value="1.0522e-16" error="4.73e0"></Isotope>
    <Isotope id="Ar39" value="1.42923e-15" error="1.1e0"></Isotope>
    <Isotope id="Ar40" value="8.36784e-14" error="1.11e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="2.72584e-16" error="1.32e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="1.42923e-15" error="1.1e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="8.36784e-14" error="1.11e0"></Isotope>
    <percentage_radiogenic_argon>3.720</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="2.18e0" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>0.250</cumulated_percentage_Ar39_released>
250 <MeasuredAge value="4.696" stddev="2.118"></MeasuredAge>
    <RecalculatedAge>4.696</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="3.02e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="3.15e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.25751926423e-3" error="7.91173590044e-5"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="1.70800349911e-2" error="3.77272651267e-4"></IsotopeRatio>
</StepData>
255 <StepData>
    <StepNumber>7</StepNumber>
    <FurnaceTemperature_DegreesCelsius>590.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="3.29337e-16" error="8.2e-1"></Isotope>
    <Isotope id="Ar37" value="2.2718e-17" error="5.0e1"></Isotope>
    <Isotope id="Ar38" value="1.3391e-16" error="3.06e0"></Isotope>
    <Isotope id="Ar39" value="3.06985e-15" error="5.3e-1"></Isotope>
    <Isotope id="Ar40" value="1.01704e-13" error="5.3e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="3.29337e-16" error="8.2e-1"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="3.06985e-15" error="5.3e-1"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="1.01704e-13" error="5.3e-1"></Isotope>
    <percentage_radiogenic_argon>4.290</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.423e0" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>0.430</cumulated_percentage_Ar39_released>
    <MeasuredAge value="3.066" stddev="0.677"></MeasuredAge>
    <RecalculatedAge>3.066</RecalculatedAge>
260 <IsotopeRatio id="Ca_K" value="1.41e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="1.44e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.23819122158e-3" error="4.37155814914e-5"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="3.01841618815e-2" error="3.19952115944e-4"></IsotopeRatio>
</StepData>
265 <StepData>
    <StepNumber>8</StepNumber>
    <FurnaceTemperature_DegreesCelsius>610.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="3.9997e-16" error="6.5e-1"></Isotope>
    <Isotope id="Ar37" value="2.7707e-16" error="2.841e1"></Isotope>
    <Isotope id="Ar38" value="2.0276e-16" error="2.32e0"></Isotope>
    <Isotope id="Ar39" value="8.16706e-15" error="2.7e-1"></Isotope>
    <Isotope id="Ar40" value="1.28249e-13" error="2.7e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="3.9997e-16" error="6.5e-1"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="8.16706e-15" error="2.7e-1"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="1.28249e-13" error="2.7e-1"></Isotope>
    <percentage_radiogenic_argon>7.810</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>

```

305 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.229e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.930</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.648" stddev="0.222"></MeasuredAge>  
 <RecalculatedAge>2.648</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="6.45e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="5.04e-2" error="0.0e0"></IsotopeRatio>  
 310 <IsotopeRatio id="Ar36\_Ar40" value="3.11869878128e-3" error="2.86920287877e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="6.36812762673e-2" error="3.43878891843e-4"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 315 <StepNumber>9</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>630.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="4.09167e-16" error="5.9e-1"></Isotope>  
 <Isotope id="Ar37" value="2.9868e-16" error="3.049e1"></Isotope>  
 <Isotope id="Ar38" value="2.906e-16" error="1.67e0"></Isotope>  
 <Isotope id="Ar39" value="1.58849e-14" error="2.0e-1"></Isotope>  
 320 <Isotope id="Ar40" value="1.39884e-13" error="2.0e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="4.09167e-16" error="5.9e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.58849e-14" error="2.0e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.39884e-13" error="2.0e-1"></Isotope>  
 325 <percentage\_radiogenic\_argon>13.500</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.193e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>1.890</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.571" stddev="0.105"></MeasuredAge>  
 330 <RecalculatedAge>2.571</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="3.57e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="2.49e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.92504503732e-3" error="2.31078557948e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.13557662063e-1" error="4.54230648251e-4"></IsotopeRatio>  
 335 </StepData>  
 <StepData>  
 <StepNumber>10</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>650.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 340 <Isotope id="Ar36" value="4.47837e-16" error="6.2e-1"></Isotope>  
 <Isotope id="Ar37" value="3.3403e-16" error="2.227e1"></Isotope>  
 <Isotope id="Ar38" value="4.2838e-16" error="1.22e0"></Isotope>  
 <Isotope id="Ar39" value="2.78761e-14" error="1.9e-1"></Isotope>  
 <Isotope id="Ar40" value="1.62787e-13" error="1.9e-1"></Isotope>  
 345 <Isotope id="Ar36\_correctedForIsotopeInterference" value="4.47837e-16" error="6.2e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.78761e-14" error="1.9e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.62787e-13" error="1.9e-1"></Isotope>  
 <percentage\_radiogenic\_argon>18.590</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 350 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.092e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>3.590</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.352" stddev="0.068"></MeasuredAge>  
 <RecalculatedAge>2.352</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.28e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.18e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.75106120268e-3" error="2.22835957417e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.71242789658e-1" error="6.50722600699e-4"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 360 <StepNumber>11</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>670.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="5.07117e-16" error="5.4e-1"></Isotope>  
 <Isotope id="Ar37" value="5.0917e-16" error="1.974e1"></Isotope>  
 <Isotope id="Ar38" value="6.3074e-16" error="1.09e0"></Isotope>  
 365 <Isotope id="Ar39" value="4.49551e-14" error="1.9e-1"></Isotope>

370 <Isotope id="Ar40" value="1.97053e-13" error="1.9e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="5.07117e-16" error="5.4e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="4.49551e-14" error="1.9e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.97053e-13" error="1.9e-1"></Isotope>  
 <percentage\_radiogenic\_argon>23.760</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.049e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>6.310</cumulated\_percentage\_Ar39\_released>  
 375 <MeasuredAge value="2.261" stddev="0.043"></MeasuredAge>  
 <RecalculatedAge>2.261</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.15e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="6.69e-3" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.57350560509e-3" error="1.87865909172e-5"></IsotopeRatio>  
 380 <IsotopeRatio id="Ar39\_Ar40" value="2.28137100171e-1" error="8.6692098065e-4"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 385 <StepNumber>12</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>690.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="5.77125e-16" error="5.7e-1"></Isotope>  
 <Isotope id="Ar37" value="6.1088e-16" error="2.078e1"></Isotope>  
 <Isotope id="Ar38" value="8.6249e-16" error="1.01e0"></Isotope>  
 <Isotope id="Ar39" value="6.33234e-14" error="2.2e-1"></Isotope>  
 390 <Isotope id="Ar40" value="2.33206e-13" error="2.2e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="5.77125e-16" error="5.7e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="6.33234e-14" error="2.2e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.33206e-13" error="2.2e-1"></Isotope>  
 <percentage\_radiogenic\_argon>26.620</percentage\_radiogenic\_argon>  
 395 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="9.892e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>10.150</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.132" stddev="0.038"></MeasuredAge>  
 <RecalculatedAge>2.132</RecalculatedAge>  
 400 <IsotopeRatio id="Ca\_K" value="1.83e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="6.76e-3" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.47474335995e-3" error="1.95504725436e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="2.71534180081e-1" error="1.19475039236e-3"></IsotopeRatio>  
 </StepData>  
 405 <StepData>  
 <StepNumber>13</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>710.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="6.36473e-16" error="5.6e-1"></Isotope>  
 <Isotope id="Ar37" value="1.3952e-15" error="9.78e0"></Isotope>  
 <Isotope id="Ar38" value="1.0805e-15" error="1.46e0"></Isotope>  
 <Isotope id="Ar39" value="7.78285e-14" error="2.7e-1"></Isotope>  
 <Isotope id="Ar40" value="2.61642e-13" error="2.7e-1"></Isotope>  
 410 <Isotope id="Ar36\_correctedForIsotopeInterference" value="6.36473e-16" error="5.6e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="7.78285e-14" error="2.7e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.61642e-13" error="2.7e-1"></Isotope>  
 <percentage\_radiogenic\_argon>27.830</percentage\_radiogenic\_argon>  
 415 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="9.448e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>14.880</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.036" stddev="0.036"></MeasuredAge>  
 <RecalculatedAge>2.036</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="3.41e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.22e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.43261020784e-3" error="2.01906647251e-5"></IsotopeRatio>  
 420 <IsotopeRatio id="Ar39\_Ar40" value="2.97461798947e-1" error="1.60629371431e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 425 <StepNumber>14</StepNumber>

430 <FurnaceTemperature\_DegreesCelsius>730.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="7.78066e-16" error="6.9e-1"></Isotope>  
 <Isotope id="Ar37" value="2.1247e-15" error="1.245e1"></Isotope>  
 <Isotope id="Ar38" value="1.4578e-15" error="1.96e0"></Isotope>  
 435 <Isotope id="Ar39" value="1.00757e-13" error="3.4e-1"></Isotope>  
 <Isotope id="Ar40" value="3.24161e-13" error="3.5e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="7.78066e-16" error="6.9e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.00757e-13" error="3.4e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.24161e-13" error="3.5e-1"></Isotope>  
 440 <percentage\_radiogenic\_argon>28.760</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="9.35e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>20.990</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.015" stddev="0.042"></MeasuredAge>  
 445 <RecalculatedAge>2.015</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="4.01e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="2.04e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.40024555699e-3" error="2.49625537927e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="3.10823942424e-1" error="2.14468520272e-3"></IsotopeRatio>  
 450 </StepData>  
 <StepData>  
 <StepNumber>15</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>750.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 455 <Isotope id="Ar36" value="1.05992e-15" error="9.1e-1"></Isotope>  
 <Isotope id="Ar37" value="4.0236e-15" error="1.543e1"></Isotope>  
 <Isotope id="Ar38" value="2.1119e-15" error="2.8e0"></Isotope>  
 <Isotope id="Ar39" value="1.35185e-13" error="4.5e-1"></Isotope>  
 <Isotope id="Ar40" value="4.34954e-13" error="4.5e-1"></Isotope>  
 460 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.05992e-15" error="9.1e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.35185e-13" error="4.5e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="4.34954e-13" error="4.5e-1"></Isotope>  
 <percentage\_radiogenic\_argon>27.690</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 465 <IsotopeRatio id="radiogenicAr40\_Ar39" value="9.002e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>29.190</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="1.940" stddev="0.055"></MeasuredAge>  
 <RecalculatedAge>1.940</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="5.66e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="3.43e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.4368553916e-3" error="3.31412333258e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="3.10802981465e-1" error="2.79722683318e-3"></IsotopeRatio>  
 </StepData>  
 470 <StepData>  
 <StepNumber>16</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>770.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.63903e-15" error="7.7e-1"></Isotope>  
 <Isotope id="Ar37" value="3.9322e-15" error="1.346e1"></Isotope>  
 <Isotope id="Ar38" value="2.5544e-15" error="2.17e0"></Isotope>  
 <Isotope id="Ar39" value="1.64634e-13" error="4.0e-1"></Isotope>  
 <Isotope id="Ar40" value="6.34339e-13" error="4.1e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.63903e-15" error="7.7e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.64634e-13" error="4.0e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="6.34339e-13" error="4.1e-1"></Isotope>  
 480 <percentage\_radiogenic\_argon>23.430</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="9.106e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>39.180</cumulated\_percentage\_Ar39\_released>  
 485 <MeasuredAge value="1.963" stddev="0.060"></MeasuredAge>  
 <RecalculatedAge>1.963</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="4.54e-2" error="0.0e0"></IsotopeRatio>

```

<IsotopeRatio id="Cl_K" value="2.8e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="2.58383924053e-3" error="3.04893030383e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="2.5953630472e-1" error="2.10224406823e-3"></IsotopeRatio>
495 </StepData>
<StepData>
<StepNumber>17</StepNumber>
500 <FurnaceTemperature_DegreesCelsius>790.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.81354e-15" error="1.18e0"></Isotope>
<Isotope id="Ar37" value="1.0806e-14" error="1.474e1"></Isotope>
<Isotope id="Ar38" value="3.9281e-15" error="3.89e0"></Isotope>
505 <Isotope id="Ar39" value="2.22551e-13" error="5.2e-1"></Isotope>
<Isotope id="Ar40" value="7.24065e-13" error="5.3e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.81354e-15" error="1.18e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="2.22551e-13" error="5.2e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="7.24065e-13" error="5.3e-1"></Isotope>
510 <percentage_radiogenic_argon>25.710</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="8.451e-1" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>52.680</cumulated_percentage_Ar39_released>
<MeasuredAge value="1.821" stddev="0.072"></MeasuredAge>
515 <RecalculatedAge>1.821</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="9.23e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="5.84e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="2.50466463646e-3" error="4.28297652835e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="3.07363289207e-1" error="3.22731453668e-3"></IsotopeRatio>
520 </StepData>
<StepData>
<StepNumber>18</StepNumber>
<FurnaceTemperature_DegreesCelsius>810.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.94893e-15" error="1.38e0"></Isotope>
525 <Isotope id="Ar37" value="1.6719e-14" error="1.403e1"></Isotope>
<Isotope id="Ar38" value="4.8667e-15" error="4.75e0"></Isotope>
<Isotope id="Ar39" value="2.53426e-13" error="5.7e-1"></Isotope>
<Isotope id="Ar40" value="7.82416e-13" error="6.0e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.94893e-15" error="1.38e0"></Isotope>
530 <Isotope id="Ar39_correctedForIsotopeInterference" value="2.53426e-13" error="5.7e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="7.82416e-13" error="6.0e-1"></Isotope>
<percentage_radiogenic_argon>26.100</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="8.145e-1" error="0.0e0"></IsotopeRatio>
535 <cumulated_percentage_Ar39_released>68.060</cumulated_percentage_Ar39_released>
<MeasuredAge value="1.755" stddev="0.079"></MeasuredAge>
<RecalculatedAge>1.755</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.25e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="7.86e-2" error="0.0e0"></IsotopeRatio>
540 <IsotopeRatio id="Ar36_Ar40" value="2.49091276252e-3" error="4.93200726979e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="3.23901862948e-1" error="3.78965179649e-3"></IsotopeRatio>
</StepData>
<StepData>
<StepNumber>19</StepNumber>
<FurnaceTemperature_DegreesCelsius>830.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.73279e-15" error="1.58e0"></Isotope>
545 <Isotope id="Ar37" value="1.8708e-14" error="1.425e1"></Isotope>
<Isotope id="Ar38" value="4.9426e-15" error="5.31e0"></Isotope>
<Isotope id="Ar39" value="2.44691e-13" error="6.2e-1"></Isotope>
<Isotope id="Ar40" value="7.08421e-13" error="6.7e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.73279e-15" error="1.58e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="2.44691e-13" error="6.2e-1"></Isotope>
550 <Isotope id="Ar40_correctedForIsotopeInterference" value="7.08421e-13" error="6.7e-1"></Isotope>
<percentage_radiogenic_argon>27.390</percentage_radiogenic_argon>
555

```

```

<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="8.022e-1" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>82.900</cumulated_percentage_Ar39_released>
<MeasuredAge value="1.729" stddev="0.083"></MeasuredAge>
560 <RecalculatedAge>1.729</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.45e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="9.22e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="2.44598903759e-3" error="5.50347533458e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="3.45403368901e-1" error="4.45570345882e-3"></IsotopeRatio>
565 </StepData>
<StepData>
    <StepNumber>20</StepNumber>
    <FurnaceTemperature_DegreesCelsius>850.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
570 <Isotope id="Ar36" value="1.13223e-15" error="1.78e0"></Isotope>
<Isotope id="Ar37" value="1.4611e-14" error="1.469e1"></Isotope>
<Isotope id="Ar38" value="3.7336e-15" error="5.59e0"></Isotope>
<Isotope id="Ar39" value="1.82042e-13" error="6.6e-1"></Isotope>
575 <Isotope id="Ar40" value="4.79786e-13" error="7.2e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.13223e-15" error="1.78e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="1.82042e-13" error="6.6e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="4.79786e-13" error="7.2e-1"></Isotope>
<percentage_radiogenic_argon>29.880</percentage_radiogenic_argon>
580 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="7.974e-1" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>93.950</cumulated_percentage_Ar39_released>
<MeasuredAge value="1.719" stddev="0.082"></MeasuredAge>
<RecalculatedAge>1.719</RecalculatedAge>
585 <IsotopeRatio id="Ca_K" value="1.52e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="9.81e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="2.3598646063e-3" error="5.89966151576e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="3.79423326233e-1" error="5.23604190201e-3"></IsotopeRatio>
</StepData>
<StepData>
590    <StepNumber>21</StepNumber>
    <FurnaceTemperature_DegreesCelsius>870.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="3.86748e-16" error="2.43e0"></Isotope>
    <Isotope id="Ar37" value="7.4285e-15" error="1.453e1"></Isotope>
595    <Isotope id="Ar38" value="1.6179e-15" error="6.48e0"></Isotope>
    <Isotope id="Ar39" value="6.95389e-14" error="7.8e-1"></Isotope>
    <Isotope id="Ar40" value="1.66842e-13" error="9.3e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="3.86748e-16" error="2.43e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="6.95389e-14" error="7.8e-1"></Isotope>
600    <Isotope id="Ar40_correctedForIsotopeInterference" value="1.66842e-13" error="9.3e-1"></Isotope>
    <percentage_radiogenic_argon>31.060</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="7.555e-1" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>98.160</cumulated_percentage_Ar39_released>
605    <MeasuredAge value="1.628" stddev="0.100"></MeasuredAge>
    <RecalculatedAge>1.628</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="2.03e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="1.33e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="2.31804941202e-3" error="7.78864602438e-5"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="4.16794931732e-1" error="7.12719333261e-3"></IsotopeRatio>
610 </StepData>
<StepData>
    <StepNumber>22</StepNumber>
    <FurnaceTemperature_DegreesCelsius>890.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.52367e-16" error="6.39e0"></Isotope>
    <Isotope id="Ar37" value="5.0621e-15" error="1.551e1"></Isotope>
    <Isotope id="Ar38" value="6.5494e-16" error="1.335e1"></Isotope>
615

```

620 <Isotope id="Ar39" value="5.13429e-15" error="4.92e0"></Isotope>  
 <Isotope id="Ar40" value="4.4883e-14" error="5.17e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.52367e-16" error="6.39e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="5.13429e-15" error="4.92e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="4.4883e-14" error="5.17e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 625 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>98.480</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.002" stddev="1.566"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 630 <IsotopeRatio id="Ca\_K" value="1.87e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.35e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.39475970858e-3" error="3.95587792698e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.14392754495e-1" error="1.15071461547e-2"></IsotopeRatio>  
 </StepData>  
 635 <StepData>  
 <StepNumber>23</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>910.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.20242e-16" error="7.07e0"></Isotope>  
 640 <Isotope id="Ar37" value="3.7861e-15" error="1.52e1"></Isotope>  
 <Isotope id="Ar38" value="4.8196e-16" error="1.404e1"></Isotope>  
 <Isotope id="Ar39" value="3.03531e-15" error="6.1e0"></Isotope>  
 <Isotope id="Ar40" value="3.55334e-14" error="6.29e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.20242e-16" error="7.07e0"></Isotope>  
 645 <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.03531e-15" error="6.1e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.55334e-14" error="6.29e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 650 <cumulated\_percentage\_Ar39\_released>98.660</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.002" stddev="2.404"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.37e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.71e0" error="0.0e0"></IsotopeRatio>  
 655 <IsotopeRatio id="Ar36\_Ar40" value="3.38391485194e-3" error="4.55893363266e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="8.54213219112e-2" error="1.05639222674e-2"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 <StepNumber>24</StepNumber>  
 660 <FurnaceTemperature\_DegreesCelsius>930.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.11171e-16" error="7.02e0"></Isotope>  
 <Isotope id="Ar37" value="3.0241e-15" error="1.603e1"></Isotope>  
 <Isotope id="Ar38" value="3.8699e-16" error="1.461e1"></Isotope>  
 <Isotope id="Ar39" value="2.28595e-15" error="6.37e0"></Isotope>  
 <Isotope id="Ar40" value="3.22645e-14" error="6.51e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.11171e-16" error="7.02e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.28595e-15" error="6.37e0"></Isotope>  
 665 <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.22645e-14" error="6.51e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>98.800</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.002" stddev="2.959"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.51e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.82e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.44561360009e-3" error="4.69602826134e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="7.08503153621e-2" error="9.11329396123e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>

<StepNumber>25</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>950.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="9.70936e-17" error="6.78e0"></Isotope>  
 <Isotope id="Ar37" value="2.4606e-15" error="1.535e1"></Isotope>  
 <Isotope id="Ar38" value="3.0777e-16" error="1.386e1"></Isotope>  
 <Isotope id="Ar39" value="1.84076e-15" error="6.0e0"></Isotope>  
 <Isotope id="Ar40" value="2.90651e-14" error="6.13e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="9.70936e-17" error="6.78e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.84076e-15" error="6.0e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.90651e-14" error="6.13e0"></Isotope>  
 <percentage\_radiogenic\_argon>1.270</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="2.005e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>98.910</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.432" stddev="3.105"></MeasuredAge>  
 <RecalculatedAge>0.432</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.54e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.79e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.3405561997e-3" error="4.34238201669e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="6.33323126361e-2" error="7.67396264634e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 <StepNumber>26</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1000.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.08683e-16" error="6.33e0"></Isotope>  
 <Isotope id="Ar37" value="2.3155e-15" error="1.504e1"></Isotope>  
 <Isotope id="Ar38" value="2.8948e-16" error="1.319e1"></Isotope>  
 <Isotope id="Ar39" value="1.7955e-15" error="5.78e0"></Isotope>  
 <Isotope id="Ar40" value="3.25729e-14" error="5.87e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.08683e-16" error="6.33e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.7955e-15" error="5.78e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.25729e-14" error="5.87e0"></Isotope>  
 <percentage\_radiogenic\_argon>1.380</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="2.515e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.020</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.542" stddev="3.365"></MeasuredAge>  
 <RecalculatedAge>0.542</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.45e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.69e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.3366080392e-3" error="4.09408267704e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="5.51225098164e-2" error="6.41637146447e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 <StepNumber>27</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1050.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.41248e-16" error="5.42e0"></Isotope>  
 <Isotope id="Ar37" value="2.2122e-15" error="1.288e1"></Isotope>  
 <Isotope id="Ar38" value="2.6157e-16" error="1.255e1"></Isotope>  
 <Isotope id="Ar39" value="1.77405e-15" error="5.07e0"></Isotope>  
 <Isotope id="Ar40" value="4.33302e-14" error="5.11e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.41248e-16" error="5.42e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.77405e-15" error="5.07e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="4.33302e-14" error="5.11e0"></Isotope>  
 <percentage\_radiogenic\_argon>3.650</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="8.931e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.130</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="1.925" stddev="3.854"></MeasuredAge>  
 <RecalculatedAge>1.925</RecalculatedAge>

745 <IsotopeRatio id="Ca\_K" value="2.37e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.48e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.25980493974e-3" error="3.44682161788e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="4.09425758478e-2" error="4.16631574095e-3"></IsotopeRatio>  
 750 </StepData>  
 <StepData>  
 <StepNumber>28</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1100.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.58343e-16" error="4.55e0"></Isotope>  
 755 <Isotope id="Ar37" value="1.8441e-15" error="1.59e1"></Isotope>  
 <Isotope id="Ar38" value="2.5032e-16" error="1.145e1"></Isotope>  
 <Isotope id="Ar39" value="1.91087e-15" error="4.21e0"></Isotope>  
 <Isotope id="Ar40" value="4.83198e-14" error="4.24e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.58343e-16" error="4.55e0"></Isotope>  
 760 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.91087e-15" error="4.21e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="4.83198e-14" error="4.24e0"></Isotope>  
 <percentage\_radiogenic\_argon>3.140</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 765 <IsotopeRatio id="radiogenicAr40\_Ar39" value="7.963e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.240</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="1.716" stddev="3.340"></MeasuredAge>  
 <RecalculatedAge>1.716</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.83e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.27e0" error="0.0e0"></IsotopeRatio>  
 770 <IsotopeRatio id="Ar36\_Ar40" value="3.27697962326e-3" error="2.88857886905e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="3.95463143473e-2" error="3.33972697586e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 <StepNumber>29</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1200.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="4.53033e-16" error="2.65e0"></Isotope>  
 <Isotope id="Ar37" value="1.6953e-15" error="1.244e1"></Isotope>  
 <Isotope id="Ar38" value="2.9923e-16" error="7.5e0"></Isotope>  
 780 <Isotope id="Ar39" value="2.97304e-15" error="2.5e0"></Isotope>  
 <Isotope id="Ar40" value="1.37079e-13" error="2.5e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="4.53033e-16" error="2.65e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.97304e-15" error="2.5e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.37079e-13" error="2.5e0"></Isotope>  
 <percentage\_radiogenic\_argon>2.320</percentage\_radiogenic\_argon>  
 785 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.071e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.420</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.309" stddev="3.578"></MeasuredAge>  
 <RecalculatedAge>2.309</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.08e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="7.36e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.30490447114e-3" error="1.70305146523e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="2.16885153816e-2" error="1.08412305001e-3"></IsotopeRatio>  
 790 </StepData>  
 <StepData>  
 <StepNumber>30</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1300.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.00234e-15" error="2.02e0"></Isotope>  
 <Isotope id="Ar37" value="1.5472e-15" error="1.484e1"></Isotope>  
 <Isotope id="Ar38" value="4.02e-16" error="5.06e0"></Isotope>  
 <Isotope id="Ar39" value="3.48048e-15" error="1.95e0"></Isotope>  
 800 <Isotope id="Ar40" value="2.98223e-13" error="1.95e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.00234e-15" error="2.02e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.48048e-15" error="1.95e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.98223e-13" error="1.95e0"></Isotope>

```

<percentage_radiogenic_argon>0.660</percentage_radiogenic_argon>
810 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="5.69e-1" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>99.640</cumulated_percentage_Ar39_released>
<MeasuredAge value="1.227" stddev="5.168"></MeasuredAge>
<RecalculatedAge>1.227</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="8.45e-1" error="0.0e0"></IsotopeRatio>
815 <IsotopeRatio id="Cl_K" value="6.0e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.36104190488e-3" error="1.33455554066e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.16707296218e-2" error="4.55139438225e-4"></IsotopeRatio>
</StepData>
820 <StepData>
    <StepNumber>31</StepNumber>
    <FurnaceTemperature_DegreesCelsius>1450.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.86987e-15" error="1.2e0"></Isotope>
825 <Isotope id="Ar37" value="1.3546e-15" error="1.411e1"></Isotope>
    <Isotope id="Ar38" value="6.2495e-16" error="3.04e0"></Isotope>
    <Isotope id="Ar39" value="6.00689e-15" error="1.11e0"></Isotope>
    <Isotope id="Ar40" value="5.78222e-13" error="1.12e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.86987e-15" error="1.2e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="6.00689e-15" error="1.11e0"></Isotope>
830 <Isotope id="Ar40_correctedForIsotopeInterference" value="5.78222e-13" error="1.12e0"></Isotope>
    <percentage_radiogenic_argon>4.420</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="4.259e0" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>100.000</cumulated_percentage_Ar39_released>
    <MeasuredAge value="9.160" stddev="3.306"></MeasuredAge>
835 <RecalculatedAge>9.160</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="4.28e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="4.04e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.23382714598e-3" error="7.50203658241e-5"></IsotopeRatio>
840 <IsotopeRatio id="Ar39_Ar40" value="1.03885531855e-2" error="2.31628228623e-4"></IsotopeRatio>
</StepData>
<CalculationParameters>
    <Parameter id="J_Factor" value="1.1953e-3" uncertainty="2.4e-1"></Parameter>
    <Parameter id="FluxMonitorAge" value="98.50" uncertainty="0.80" />
845 <Parameter id="MassDiscrimination" value="0.98769" uncertainty="0.15" />
    <Parameter id="Atmospheric_40_36_ratio" value="2.9555e2"></Parameter>
    <Parameter id="DecayConstantK" value="5.543e-10" uncertainty="0.192"></Parameter>
</CalculationParameters>
</ArgonData>
850 </eArgonDataObject>
<eArgonDataObject>
    <ArgonData>
        <SampleDescription>ANU CAN #30, D3067305, Foil: A7, Alunite, 124.7mg, Steps: 32</SampleDescription>
        <StepData>
            <StepNumber>0</StepNumber>
            <FurnaceTemperature_DegreesCelsius>450.000</FurnaceTemperature_DegreesCelsius>
            <Duration_minutes>15.000</Duration_minutes>
            <Isotope id="Ar36" value="6.56054e-17" error="6.08e0"></Isotope>
855 <Isotope id="Ar37" value="2.3917e-17" error="5.028e1"></Isotope>
            <Isotope id="Ar38" value="2.4947e-17" error="1.423e1"></Isotope>
            <Isotope id="Ar39" value="8.64613e-18" error="5.31e0"></Isotope>
            <Isotope id="Ar40" value="1.82085e-14" error="5.31e0"></Isotope>
            <Isotope id="Ar36_correctedForIsotopeInterference" value="6.56054e-17" error="6.08e0"></Isotope>
            <Isotope id="Ar39_correctedForIsotopeInterference" value="8.64613e-18" error="5.31e0"></Isotope>
860 <Isotope id="Ar40_correctedForIsotopeInterference" value="1.82085e-14" error="5.31e0"></Isotope>
            <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
            <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
            <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
865 <cumulated_percentage_Ar39_released>0.000</cumulated_percentage_Ar39_released>
            <MeasuredAge value="0.002" stddev="379.457"></MeasuredAge>

```

875 <RecalculatedAge>0.002</RecalculatedAge>  
<IsotopeRatio id="Ca\_K" value="5.26e0" error="0.0e0"></IsotopeRatio>  
<IsotopeRatio id="Cl\_K" value="1.73e1" error="0.0e0"></IsotopeRatio>  
<IsotopeRatio id="Ar36\_Ar40" value="3.60300958344e-3" error="4.10437827448e-4"></IsotopeRatio>  
<IsotopeRatio id="Ar39\_Ar40" value="4.74840321828e-4" error="5.05372958427e-5"></IsotopeRatio>  
</StepData>  
880 <StepData>  
    <StepNumber>1</StepNumber>  
    <FurnaceTemperature\_DegreesCelsius>470.000</FurnaceTemperature\_DegreesCelsius>  
    <Duration\_minutes>15.000</Duration\_minutes>  
    <Isotope id="Ar36" value="5.29215e-17" error="6.37e0"></Isotope>  
    <Isotope id="Ar37" value="2.393e-17" error="5.025e1"></Isotope>  
    <Isotope id="Ar38" value="2.4017e-17" error="1.451e1"></Isotope>  
    <Isotope id="Ar39" value="4.34579e-17" error="4.99e0"></Isotope>  
    <Isotope id="Ar40" value="1.44705e-14" error="5.0e0"></Isotope>  
    <Isotope id="Ar36\_correctedForIsotopeInterference" value="5.29215e-17" error="6.37e0"></Isotope>  
    <Isotope id="Ar39\_correctedForIsotopeInterference" value="4.34579e-17" error="4.99e0"></Isotope>  
    <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.44705e-14" error="5.0e0"></Isotope>  
    <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
    <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
    <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
    <cumulated\_percentage\_Ar39\_released>0.010</cumulated\_percentage\_Ar39\_released>  
    <MeasuredAge value="0.002" stddev="61.096"></MeasuredAge>  
    <RecalculatedAge>0.002</RecalculatedAge>  
    <IsotopeRatio id="Ca\_K" value="1.05e0" error="0.0e0"></IsotopeRatio>  
    <IsotopeRatio id="Cl\_K" value="3.77e0" error="0.0e0"></IsotopeRatio>  
    <IsotopeRatio id="Ar36\_Ar40" value="3.65719912926e-3" error="4.15870791874e-4"></IsotopeRatio>  
    <IsotopeRatio id="Ar39\_Ar40" value="3.00320652362e-3" error="3.0012108209e-4"></IsotopeRatio>  
</StepData>  
885 <StepData>  
    <StepNumber>2</StepNumber>  
    <FurnaceTemperature\_DegreesCelsius>490.000</FurnaceTemperature\_DegreesCelsius>  
    <Duration\_minutes>15.000</Duration\_minutes>  
    <Isotope id="Ar36" value="5.76841e-17" error="6.04e0"></Isotope>  
    <Isotope id="Ar37" value="2.3943e-17" error="5.03e1"></Isotope>  
    <Isotope id="Ar38" value="2.5407e-17" error="9.97e0"></Isotope>  
    <Isotope id="Ar39" value="5.02961e-17" error="5.43e0"></Isotope>  
    <Isotope id="Ar40" value="1.71427e-14" error="5.44e0"></Isotope>  
    <Isotope id="Ar36\_correctedForIsotopeInterference" value="5.76841e-17" error="6.04e0"></Isotope>  
    <Isotope id="Ar39\_correctedForIsotopeInterference" value="5.02961e-17" error="5.43e0"></Isotope>  
    <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.71427e-14" error="5.44e0"></Isotope>  
    <percentage\_radiogenic\_argon>0.550</percentage\_radiogenic\_argon>  
    <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
    <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.872e0" error="0.0e0"></IsotopeRatio>  
    <cumulated\_percentage\_Ar39\_released>0.020</cumulated\_percentage\_Ar39\_released>  
    <MeasuredAge value="4.033" stddev="59.383"></MeasuredAge>  
    <RecalculatedAge>4.033</RecalculatedAge>  
    <IsotopeRatio id="Ca\_K" value="9.04e-1" error="0.0e0"></IsotopeRatio>  
    <IsotopeRatio id="Cl\_K" value="3.36e0" error="0.0e0"></IsotopeRatio>  
    <IsotopeRatio id="Ar36\_Ar40" value="3.36493667859e-3" error="3.86345123658e-4"></IsotopeRatio>  
    <IsotopeRatio id="Ar39\_Ar40" value="2.93396606136e-3" error="3.19017761316e-4"></IsotopeRatio>  
</StepData>  
900 <StepData>  
    <StepNumber>3</StepNumber>  
    <FurnaceTemperature\_DegreesCelsius>510.000</FurnaceTemperature\_DegreesCelsius>  
    <Duration\_minutes>15.000</Duration\_minutes>  
    <Isotope id="Ar36" value="7.06124e-17" error="5.45e0"></Isotope>  
    <Isotope id="Ar37" value="2.3957e-17" error="5.023e1"></Isotope>  
    <Isotope id="Ar38" value="3.1974e-17" error="1.148e1"></Isotope>  
    <Isotope id="Ar39" value="6.23384e-17" error="4.75e0"></Isotope>  
    <Isotope id="Ar40" value="2.1229e-14" error="4.76e0"></Isotope>  
    <Isotope id="Ar36\_correctedForIsotopeInterference" value="7.06124e-17" error="5.45e0"></Isotope>  
    <Isotope id="Ar39\_correctedForIsotopeInterference" value="6.23384e-17" error="4.75e0"></Isotope>

935 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.1229e-14" error="4.76e0"></Isotope>  
 <percentage\_radiogenic\_argon>1.690</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="5.768e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.020</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="12.395" stddev="52.252"></MeasuredAge>  
 940 <RecalculatedAge>12.395</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="7.3e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="3.48e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.32622356211e-3" error="3.39636027507e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="2.93647369165e-3" error="2.79315656352e-4"></IsotopeRatio>  
 945 </StepData>  
 <StepData>  
 <StepNumber>4</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>530.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 950 <Isotope id="Ar36" value="1.04558e-16" error="4.61e0"></Isotope>  
 <Isotope id="Ar37" value="2.397e-17" error="5.019e1"></Isotope>  
 <Isotope id="Ar38" value="3.722e-17" error="8.88e0"></Isotope>  
 <Isotope id="Ar39" value="7.87815e-17" error="4.38e0"></Isotope>  
 <Isotope id="Ar40" value="3.08332e-14" error="4.38e0"></Isotope>  
 955 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.04558e-16" error="4.61e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="7.87815e-17" error="4.38e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.08332e-14" error="4.38e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 960 <cumulated\_percentage\_Ar39\_released>0.040</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.002" stddev="53.710"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="5.78e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="2.53e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.39108493442e-3" error="3.0486583863e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="2.5550867247e-3" error="2.23857828512e-4"></IsotopeRatio>  
 965 </StepData>  
 <StepData>  
 <StepNumber>5</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>550.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.30678e-16" error="4.24e0"></Isotope>  
 <Isotope id="Ar37" value="2.3983e-17" error="5.017e1"></Isotope>  
 <Isotope id="Ar38" value="3.904e-17" error="5.78e0"></Isotope>  
 <Isotope id="Ar39" value="8.83397e-17" error="4.15e0"></Isotope>  
 <Isotope id="Ar40" value="3.88944e-14" error="4.15e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.30678e-16" error="4.24e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="8.83397e-17" error="4.15e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.88944e-14" error="4.15e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.700</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="3.085e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.050</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="6.640" stddev="55.905"></MeasuredAge>  
 <RecalculatedAge>6.640</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="5.16e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.8e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.35981529475e-3" error="2.81895544644e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="2.27127041425e-3" error="1.88544026532e-4"></IsotopeRatio>  
 970 </StepData>  
 <StepData>  
 <StepNumber>6</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>570.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.46607e-16" error="4.56e0"></Isotope>

```

<Isotope id="Ar37" value="2.3996e-17" error="5.019e1"></Isotope>
<Isotope id="Ar38" value="4.4057e-17" error="8.77e0"></Isotope>
<Isotope id="Ar39" value="8.86364e-17" error="4.36e0"></Isotope>
<Isotope id="Ar40" value="4.32551e-14" error="4.36e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.46607e-16" error="4.56e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="8.86364e-17" error="4.36e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="4.32551e-14" error="4.36e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.060</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="66.442"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="5.14e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.06e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.38935755553e-3" error="3.02337232419e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="2.04915489734e-3" error="1.78711822091e-4"></IsotopeRatio>
</StepData>
<StepData>
    <StepNumber>7</StepNumber>
    <FurnaceTemperature_DegreesCelsius>590.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.55751e-16" error="3.2e0"></Isotope>
    <Isotope id="Ar37" value="2.4009e-17" error="5.009e1"></Isotope>
    <Isotope id="Ar38" value="4.5412e-17" error="6.96e0"></Isotope>
    <Isotope id="Ar39" value="9.23154e-17" error="2.95e0"></Isotope>
    <Isotope id="Ar40" value="4.66863e-14" error="2.95e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.55751e-16" error="3.2e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="9.23154e-17" error="2.95e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="4.66863e-14" error="2.95e0"></Isotope>
    <percentage_radiogenic_argon>1.400</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="7.086e0" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>0.080</cumulated_percentage_Ar39_released>
    <MeasuredAge value="15.215" stddev="46.655"></MeasuredAge>
    <RecalculatedAge>15.215</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="4.94e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="1.92e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.33611787612e-3" error="2.05171239478e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="1.97735524126e-3" error="1.16680717085e-4"></IsotopeRatio>
</StepData>
<StepData>
    <StepNumber>8</StepNumber>
    <FurnaceTemperature_DegreesCelsius>610.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.54311e-16" error="2.87e0"></Isotope>
    <Isotope id="Ar37" value="2.4022e-17" error="5.007e1"></Isotope>
    <Isotope id="Ar38" value="4.8997e-17" error="5.58e0"></Isotope>
    <Isotope id="Ar39" value="9.74734e-17" error="2.63e0"></Isotope>
    <Isotope id="Ar40" value="4.66468e-14" error="2.63e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.54311e-16" error="2.87e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="9.74734e-17" error="2.63e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="4.66468e-14" error="2.63e0"></Isotope>
    <percentage_radiogenic_argon>2.230</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.067e1" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>0.090</cumulated_percentage_Ar39_released>
    <MeasuredAge value="22.866" stddev="39.180"></MeasuredAge>
    <RecalculatedAge>22.866</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="4.68e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="2.3e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.30807257947e-3" error="1.81942122186e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="2.08960528911e-3" error="1.09926670954e-4"></IsotopeRatio>

```

```

060 </StepData>
061 <StepData>
062   <StepNumber>9</StepNumber>
063   <FurnaceTemperature_DegreesCelsius>630.000</FurnaceTemperature_DegreesCelsius>
064   <Duration_minutes>15.000</Duration_minutes>
065   <Isotope id="Ar36" value="1.55159e-16" error="2.12e0"></Isotope>
066   <Isotope id="Ar37" value="2.4035e-17" error="5.003e1"></Isotope>
067   <Isotope id="Ar38" value="4.8781e-17" error="7.36e0"></Isotope>
068   <Isotope id="Ar39" value="1.79707e-16" error="1.75e0"></Isotope>
069   <Isotope id="Ar40" value="4.73163e-14" error="1.75e0"></Isotope>
070   <Isotope id="Ar36_correctedForIsotopeInterference" value="1.55159e-16" error="2.12e0"></Isotope>
071   <Isotope id="Ar39_correctedForIsotopeInterference" value="1.79707e-16" error="1.75e0"></Isotope>
072   <Isotope id="Ar40_correctedForIsotopeInterference" value="4.73163e-14" error="1.75e0"></Isotope>
073   <percentage_radiogenic_argon>3.080</percentage_radiogenic_argon>
074   <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
075   <IsotopeRatio id="radiogenicAr40_Ar39" value="8.12e0" error="0.0e0"></IsotopeRatio>
076   <cumulated_percentage_Ar39_released>0.120</cumulated_percentage_Ar39_released>
077   <MeasuredAge value="17.424" stddev="15.172"></MeasuredAge>
078   <RecalculatedAge>17.424</RecalculatedAge>
079   <IsotopeRatio id="Ca_K" value="2.54e-1" error="0.0e0"></IsotopeRatio>
080   <IsotopeRatio id="Cl_K" value="1.16e0" error="0.0e0"></IsotopeRatio>
081   <IsotopeRatio id="Ar36_Ar40" value="3.27918708775e-3" error="1.26898250285e-4"></IsotopeRatio>
082   <IsotopeRatio id="Ar39_Ar40" value="3.7979935033e-3" error="1.32930772157e-4"></IsotopeRatio>
083 </StepData>
084 <StepData>
085   <StepNumber>10</StepNumber>
086   <FurnaceTemperature_DegreesCelsius>650.000</FurnaceTemperature_DegreesCelsius>
087   <Duration_minutes>15.000</Duration_minutes>
088   <Isotope id="Ar36" value="1.6457e-16" error="1.72e0"></Isotope>
089   <Isotope id="Ar37" value="2.4048e-17" error="5.001e1"></Isotope>
090   <Isotope id="Ar38" value="5.7357e-17" error="5.76e0"></Isotope>
091   <Isotope id="Ar39" value="4.17949e-16" error="1.19e0"></Isotope>
092   <Isotope id="Ar40" value="5.01098e-14" error="1.19e0"></Isotope>
093   <Isotope id="Ar36_correctedForIsotopeInterference" value="1.6457e-16" error="1.72e0"></Isotope>
094   <Isotope id="Ar39_correctedForIsotopeInterference" value="4.17949e-16" error="1.19e0"></Isotope>
095   <Isotope id="Ar40_correctedForIsotopeInterference" value="5.01098e-14" error="1.19e0"></Isotope>
096   <percentage_radiogenic_argon>2.930</percentage_radiogenic_argon>
097   <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
098   <IsotopeRatio id="radiogenicAr40_Ar39" value="3.52e0" error="0.0e0"></IsotopeRatio>
099   <cumulated_percentage_Ar39_released>0.180</cumulated_percentage_Ar39_released>
100   <MeasuredAge value="7.574" stddev="5.280"></MeasuredAge>
101   <RecalculatedAge>7.574</RecalculatedAge>
102   <IsotopeRatio id="Ca_K" value="1.09e-1" error="0.0e0"></IsotopeRatio>
103   <IsotopeRatio id="Cl_K" value="6.17e-1" error="0.0e0"></IsotopeRatio>
104   <IsotopeRatio id="Ar36_Ar40" value="3.28418792332e-3" error="9.55485994733e-5"></IsotopeRatio>
105   <IsotopeRatio id="Ar39_Ar40" value="8.34066390207e-3" error="1.98461535392e-4"></IsotopeRatio>
106 </StepData>
107 <StepData>
108   <StepNumber>11</StepNumber>
109   <FurnaceTemperature_DegreesCelsius>670.000</FurnaceTemperature_DegreesCelsius>
110   <Duration_minutes>15.000</Duration_minutes>
111   <Isotope id="Ar36" value="1.52347e-16" error="1.36e0"></Isotope>
112   <Isotope id="Ar37" value="2.4061e-17" error="5.001e1"></Isotope>
113   <Isotope id="Ar38" value="6.289e-17" error="5.18e0"></Isotope>
114   <Isotope id="Ar39" value="8.41343e-16" error="8.5e-1"></Isotope>
115   <Isotope id="Ar40" value="4.69609e-14" error="8.6e-1"></Isotope>
116   <Isotope id="Ar36_correctedForIsotopeInterference" value="1.52347e-16" error="1.36e0"></Isotope>
117   <Isotope id="Ar39_correctedForIsotopeInterference" value="8.41343e-16" error="8.5e-1"></Isotope>
118   <Isotope id="Ar40_correctedForIsotopeInterference" value="4.69609e-14" error="8.6e-1"></Isotope>
119   <percentage_radiogenic_argon>4.120</percentage_radiogenic_argon>
120   <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
121   <IsotopeRatio id="radiogenicAr40_Ar39" value="2.3e0" error="0.0e0"></IsotopeRatio>
122   <cumulated_percentage_Ar39_released>0.310</cumulated_percentage_Ar39_released>

```

```

125 <MeasuredAge value="4.952" stddev="1.874"></MeasuredAge>
<RecalculatedAge>4.952</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="5.43e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="3.52e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.24412436729e-3" error="7.19826342335e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.79158193305e-2" error="3.06183489753e-4"></IsotopeRatio>
</StepData>
130 <StepData>
<StepNumber>12</StepNumber>
<FurnaceTemperature_DegreesCelsius>690.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
135 <Isotope id="Ar36" value="1.53485e-16" error="1.36e0"></Isotope>
<Isotope id="Ar37" value="3.836e-16" error="3.114e1"></Isotope>
<Isotope id="Ar38" value="7.8335e-17" error="5.82e0"></Isotope>
<Isotope id="Ar39" value="1.44214e-15" error="7.9e-1"></Isotope>
<Isotope id="Ar40" value="4.81311e-14" error="8.1e-1"></Isotope>
140 <Isotope id="Ar36_correctedForIsotopeInterference" value="1.53485e-16" error="1.36e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="1.44214e-15" error="7.9e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="4.81311e-14" error="8.1e-1"></Isotope>
<percentage_radiogenic_argon>5.750</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
145 <IsotopeRatio id="radiogenicAr40_Ar39" value="1.92e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.530</cumulated_percentage_Ar39_released>
<MeasuredAge value="4.135" stddev="1.092"></MeasuredAge>
<RecalculatedAge>4.135</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="5.05e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.77e-1" error="0.0e0"></IsotopeRatio>
150 <IsotopeRatio id="Ar36_Ar40" value="3.18889449857e-3" error="6.91910168331e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="2.9962747579e-2" error="4.79013678159e-4"></IsotopeRatio>
</StepData>
<StepData>
<StepNumber>13</StepNumber>
155 <FurnaceTemperature_DegreesCelsius>710.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.48028e-16" error="1.86e0"></Isotope>
<Isotope id="Ar37" value="2.4088e-17" error="5.001e1"></Isotope>
<Isotope id="Ar38" value="1.0964e-16" error="6.49e0"></Isotope>
160 <Isotope id="Ar39" value="2.24638e-15" error="8.3e-1"></Isotope>
<Isotope id="Ar40" value="4.84185e-14" error="8.7e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.48028e-16" error="1.86e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="2.24638e-15" error="8.3e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="4.84185e-14" error="8.7e-1"></Isotope>
<percentage_radiogenic_argon>9.630</percentage_radiogenic_argon>
165 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="2.078e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>0.870</cumulated_percentage_Ar39_released>
<MeasuredAge value="4.476" stddev="0.879"></MeasuredAge>
170 <RecalculatedAge>4.476</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="2.04e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="3.05e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.05726117083e-3" error="8.34632299638e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="4.63950762622e-2" error="7.88716296457e-4"></IsotopeRatio>
175 </StepData>
<StepData>
<StepNumber>14</StepNumber>
<FurnaceTemperature_DegreesCelsius>730.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
180 <Isotope id="Ar36" value="1.45752e-16" error="1.64e0"></Isotope>
<Isotope id="Ar37" value="1.1474e-15" error="1.812e1"></Isotope>
<Isotope id="Ar38" value="1.4238e-16" error="7.51e0"></Isotope>
<Isotope id="Ar39" value="3.18653e-15" error="9.7e-1"></Isotope>
<Isotope id="Ar40" value="4.85865e-14" error="1.05e0"></Isotope>
185 <Isotope id="Ar36_correctedForIsotopeInterference" value="1.45752e-16" error="1.64e0"></Isotope>

```

```

<Isotope id="Ar39_correctedForIsotopeInterference" value="3.18653e-15" error="9.7e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="4.85865e-14" error="1.05e0"></Isotope>
<percentage_radiogenic_argon>11.310</percentage_radiogenic_argon>
190 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.729e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>1.350</cumulated_percentage_Ar39_released>
<MeasuredAge value="3.724" stddev="0.590"></MeasuredAge>
<RecalculatedAge>3.724</RecalculatedAge>
195 <IsotopeRatio id="Ca_K" value="6.84e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="3.01e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="2.99984563613e-3" error="8.0695847612e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="6.55846788717e-2" error="1.32481051321e-3"></IsotopeRatio>
</StepData>
<StepData>
200 <StepNumber>15</StepNumber>
<FurnaceTemperature_DegreesCelsius>750.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.54245e-16" error="1.85e0"></Isotope>
<Isotope id="Ar37" value="1.3254e-15" error="2.137e1"></Isotope>
205 <Isotope id="Ar38" value="2.0575e-16" error="8.83e0"></Isotope>
<Isotope id="Ar39" value="4.87016e-15" error="1.11e0"></Isotope>
<Isotope id="Ar40" value="5.33011e-14" error="1.23e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.54245e-16" error="1.85e0"></Isotope>
210 <Isotope id="Ar39_correctedForIsotopeInterference" value="4.87016e-15" error="1.11e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="5.33011e-14" error="1.23e0"></Isotope>
<percentage_radiogenic_argon>14.430</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.584e0" error="0.0e0"></IsotopeRatio>
215 <cumulated_percentage_Ar39_released>2.090</cumulated_percentage_Ar39_released>
<MeasuredAge value="3.412" stddev="0.473"></MeasuredAge>
<RecalculatedAge>3.412</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="5.17e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="3.05e-1" error="0.0e0"></IsotopeRatio>
220 <IsotopeRatio id="Ar36_Ar40" value="2.89384271619e-3" error="8.91303556587e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="9.13707221802e-2" error="2.13807489902e-3"></IsotopeRatio>
</StepData>
<StepData>
225 <StepNumber>16</StepNumber>
<FurnaceTemperature_DegreesCelsius>770.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.69627e-16" error="1.79e0"></Isotope>
<Isotope id="Ar37" value="2.358e-15" error="1.227e1"></Isotope>
<Isotope id="Ar38" value="3.1535e-16" error="9.13e0"></Isotope>
<Isotope id="Ar39" value="7.9807e-15" error="1.25e0"></Isotope>
230 <Isotope id="Ar40" value="6.13168e-14" error="1.42e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.69627e-16" error="1.79e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="7.9807e-15" error="1.25e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="6.13168e-14" error="1.42e0"></Isotope>
235 <percentage_radiogenic_argon>18.160</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.401e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>3.300</cumulated_percentage_Ar39_released>
<MeasuredAge value="3.019" stddev="0.339"></MeasuredAge>
240 <RecalculatedAge>3.019</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="5.61e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.96e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="2.76640333481e-3" error="8.88015470475e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.30155194009e-1" error="3.47514368004e-3"></IsotopeRatio>
245 </StepData>
<StepData>
<StepNumber>17</StepNumber>
<FurnaceTemperature_DegreesCelsius>790.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>

```

250 <Isotope id="Ar36" value="1.96403e-16" error="2.44e0"></Isotope>  
 <Isotope id="Ar37" value="3.5345e-15" error="1.469e1"></Isotope>  
 <Isotope id="Ar38" value="5.1254e-16" error="9.66e0"></Isotope>  
 <Isotope id="Ar39" value="1.32557e-14" error="1.37e0"></Isotope>  
 <Isotope id="Ar40" value="7.33078e-14" error="1.62e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.96403e-16" error="2.44e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.32557e-14" error="1.37e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="7.33078e-14" error="1.62e0"></Isotope>  
 <percentage\_radiogenic\_argon>20.690</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.151e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>5.310</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.481" stddev="0.302"></MeasuredAge>  
 <RecalculatedAge>2.481</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="5.07e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="3.0e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.67915556053e-3" error="1.08773715757e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.80822504563e-1" error="5.40659288643e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>
 <StepNumber>18</StepNumber>
 <FurnaceTemperature\_DegreesCelsius>810.000</FurnaceTemperature\_DegreesCelsius>
 <Duration\_minutes>15.000</Duration\_minutes>
 <Isotope id="Ar36" value="2.42291e-16" error="3.1e0"></Isotope>
 <Isotope id="Ar37" value="6.3827e-15" error="1.477e1"></Isotope>
 <Isotope id="Ar38" value="8.9589e-16" error="1.022e1"></Isotope>
 <Isotope id="Ar39" value="2.39569e-14" error="1.45e0"></Isotope>
 <Isotope id="Ar40" value="9.7334e-14" error="1.78e0"></Isotope>
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="2.42291e-16" error="3.1e0"></Isotope>
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.39569e-14" error="1.45e0"></Isotope>
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="9.7334e-14" error="1.78e0"></Isotope>
 <percentage\_radiogenic\_argon>26.210</percentage\_radiogenic\_argon>
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.074e0" error="0.0e0"></IsotopeRatio>
 <cumulated\_percentage\_Ar39\_released>8.940</cumulated\_percentage\_Ar39\_released>
 <MeasuredAge value="2.314" stddev="0.255"></MeasuredAge>
 <RecalculatedAge>2.314</RecalculatedAge>
 <IsotopeRatio id="Ca\_K" value="5.06e-1" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="Cl\_K" value="2.96e-1" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="Ar36\_Ar40" value="2.48927404607e-3" error="1.21476573448e-4"></IsotopeRatio>
 <IsotopeRatio id="Ar39\_Ar40" value="2.46130848419e-1" error="7.95002640393e-3"></IsotopeRatio>
 </StepData>  
 <StepData>
 <StepNumber>19</StepNumber>
 <FurnaceTemperature\_DegreesCelsius>830.000</FurnaceTemperature\_DegreesCelsius>
 <Duration\_minutes>15.000</Duration\_minutes>
 <Isotope id="Ar36" value="3.11006e-16" error="3.77e0"></Isotope>
 <Isotope id="Ar37" value="1.053e-14" error="1.492e1"></Isotope>
 <Isotope id="Ar38" value="1.5219e-15" error="9.78e0"></Isotope>
 <Isotope id="Ar39" value="4.44087e-14" error="1.36e0"></Isotope>
 <Isotope id="Ar40" value="1.37271e-13" error="1.75e0"></Isotope>
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="3.11006e-16" error="3.77e0"></Isotope>
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="4.44087e-14" error="1.36e0"></Isotope>
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.37271e-13" error="1.75e0"></Isotope>
 <percentage\_radiogenic\_argon>32.690</percentage\_radiogenic\_argon>
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.021e0" error="0.0e0"></IsotopeRatio>
 <cumulated\_percentage\_Ar39\_released>15.680</cumulated\_percentage\_Ar39\_released>
 <MeasuredAge value="2.201" stddev="0.207"></MeasuredAge>
 <RecalculatedAge>2.201</RecalculatedAge>
 <IsotopeRatio id="Ca\_K" value="4.51e-1" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="Cl\_K" value="2.65e-1" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="Ar36\_Ar40" value="2.26563513051e-3" error="1.25063059204e-4"></IsotopeRatio>

```

<IsotopeRatio id="Ar39_Ar40" value="3.23511156763e-1" error="1.00611969753e-2"></IsotopeRatio>
</StepData>
315 <StepData>
    <StepNumber>20</StepNumber>
    <FurnaceTemperature_DegreesCelsius>850.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="3.75286e-16" error="4.4e0"></Isotope>
    <Isotope id="Ar37" value="1.6564e-14" error="1.45e1"></Isotope>
    <Isotope id="Ar38" value="2.4925e-15" error="9.37e0"></Isotope>
    <Isotope id="Ar39" value="7.83798e-14" error="1.25e0"></Isotope>
    <Isotope id="Ar40" value="1.90631e-13" error="1.74e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="3.75286e-16" error="4.4e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="7.83798e-14" error="1.25e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="1.90631e-13" error="1.74e0"></Isotope>
    <percentage_radiogenic_argon>41.250</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.017e0" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>27.560</cumulated_percentage_Ar39_released>
    <MeasuredAge value="2.192" stddev="0.165"></MeasuredAge>
    <RecalculatedAge>2.192</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="4.02e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="2.4e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="1.96865147851e-3" error="1.20875200781e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="4.11159779889e-1" error="1.22936774187e-2"></IsotopeRatio>
</StepData>
<StepData>
    <StepNumber>21</StepNumber>
    <FurnaceTemperature_DegreesCelsius>870.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="4.37338e-16" error="4.96e0"></Isotope>
    <Isotope id="Ar37" value="2.2837e-14" error="1.442e1"></Isotope>
    <Isotope id="Ar38" value="3.5187e-15" error="9.15e0"></Isotope>
    <Isotope id="Ar39" value="1.15292e-13" error="1.18e0"></Isotope>
    <Isotope id="Ar40" value="2.46219e-13" error="1.74e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="4.37338e-16" error="4.96e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="1.15292e-13" error="1.18e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="2.46219e-13" error="1.74e0"></Isotope>
    <percentage_radiogenic_argon>46.770</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.015e0" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>45.040</cumulated_percentage_Ar39_released>
    <MeasuredAge value="2.186" stddev="0.147"></MeasuredAge>
    <RecalculatedAge>2.186</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="3.76e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="2.26e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="1.77621548296e-3" error="1.19006437359e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="4.68249810128e-1" error="1.36728944557e-2"></IsotopeRatio>
</StepData>
<StepData>
    <StepNumber>22</StepNumber>
    <FurnaceTemperature_DegreesCelsius>890.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="4.92292e-16" error="5.38e0"></Isotope>
    <Isotope id="Ar37" value="2.7689e-14" error="1.47e1"></Isotope>
    <Isotope id="Ar38" value="4.1285e-15" error="9.72e0"></Isotope>
    <Isotope id="Ar39" value="1.25135e-13" error="1.31e0"></Isotope>
    <Isotope id="Ar40" value="2.67897e-13" error="1.91e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="4.92292e-16" error="5.38e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="1.25135e-13" error="1.31e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="2.67897e-13" error="1.91e0"></Isotope>
    <percentage_radiogenic_argon>44.990</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="9.782e-1" error="0.0e0"></IsotopeRatio>

```

375

```

<cumulated_percentage_Ar39_released>64.010</cumulated_percentage_Ar39_released>
<MeasuredAge value="2.108" stddev="0.164"></MeasuredAge>
<RecalculatedAge>2.108</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="4.2e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.56e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="1.83761669597e-3" error="1.33962257136e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="4.67101162014e-1" error="1.50406574168e-2"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>23</StepNumber>
  <FurnaceTemperature_DegreesCelsius>910.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="5.33147e-16" error="5.46e0"></Isotope>
  <Isotope id="Ar37" value="3.0052e-14" error="1.438e1"></Isotope>
  <Isotope id="Ar38" value="4.106e-15" error="1.085e1"></Isotope>
  <Isotope id="Ar39" value="9.87235e-14" error="1.7e0"></Isotope>
  <Isotope id="Ar40" value="2.4363e-13" error="2.37e0"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="5.33147e-16" error="5.46e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="9.87235e-14" error="1.7e0"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="2.4363e-13" error="2.37e0"></Isotope>
  <percentage_radiogenic_argon>34.850</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="8.717e-1" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>78.970</cumulated_percentage_Ar39_released>
  <MeasuredAge value="1.879" stddev="0.230"></MeasuredAge>
  <RecalculatedAge>1.879</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="5.78e-1" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="3.58e-1" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="2.18834708369e-3" error="1.71347576653e-4"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="4.052189796e-1" error="1.64924124697e-2"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>24</StepNumber>
  <FurnaceTemperature_DegreesCelsius>930.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="5.17774e-16" error="6.45e0"></Isotope>
  <Isotope id="Ar37" value="3.0811e-14" error="1.508e1"></Isotope>
  <Isotope id="Ar38" value="3.8238e-15" error="1.337e1"></Isotope>
  <Isotope id="Ar39" value="5.14035e-14" error="3.27e0"></Isotope>
  <Isotope id="Ar40" value="1.80118e-13" error="3.96e0"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="5.17774e-16" error="6.45e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="5.14035e-14" error="3.27e0"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="1.80118e-13" error="3.96e0"></Isotope>
  <percentage_radiogenic_argon>14.900</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="5.27e-1" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>86.770</cumulated_percentage_Ar39_released>
  <MeasuredAge value="1.136" stddev="0.519"></MeasuredAge>
  <RecalculatedAge>1.136</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="1.14e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="7.49e-1" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="2.87463773748e-3" error="2.99249788472e-4"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="2.85387912369e-1" error="2.06335460642e-2"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>25</StepNumber>
  <FurnaceTemperature_DegreesCelsius>950.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="5.2263e-16" error="9.32e0"></Isotope>
  <Isotope id="Ar37" value="3.1484e-14" error="1.649e1"></Isotope>
  <Isotope id="Ar38" value="3.7806e-15" error="1.618e1"></Isotope>
  <Isotope id="Ar39" value="2.43369e-14" error="7.18e0"></Isotope>
  <Isotope id="Ar40" value="1.45529e-13" error="7.68e0"></Isotope>

```

```

440 <Isotope id="Ar36_correctedForIsotopeInterference" value="5.2263e-16" error="9.32e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="2.43369e-14" error="7.18e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="1.45529e-13" error="7.68e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>90.460</cumulated_percentage_Ar39_released>
445 <MeasuredAge value="0.002" stddev="1.639"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="2.46e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.71e0" error="0.0e0"></IsotopeRatio>
450 <IsotopeRatio id="Ar36_Ar40" value="3.5912429825e-3" error="6.20185185185e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.67230586344e-1" error="2.4738234249e-2"></IsotopeRatio>
</StepData>
<StepData>
455 <StepNumber>26</StepNumber>
<FurnaceTemperature_DegreesCelsius>1000.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="7.20804e-16" error="1.068e1"></Isotope>
<Isotope id="Ar37" value="3.9267e-14" error="1.727e1"></Isotope>
<Isotope id="Ar38" value="4.7587e-15" error="1.722e1"></Isotope>
<Isotope id="Ar39" value="2.41691e-14" error="9.43e0"></Isotope>
460 <Isotope id="Ar40" value="1.91679e-13" error="9.78e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="7.20804e-16" error="1.068e1"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="2.41691e-14" error="9.43e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="1.91679e-13" error="9.78e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
465 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>94.130</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="2.662"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
470 <IsotopeRatio id="Ca_K" value="3.09e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.2e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.76047454338e-3" error="7.81081147073e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.26091538458e-1" error="2.41509688815e-2"></IsotopeRatio>
</StepData>
475 <StepData>
<StepNumber>27</StepNumber>
<FurnaceTemperature_DegreesCelsius>1050.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="7.33952e-16" error="1.072e1"></Isotope>
<Isotope id="Ar37" value="3.2766e-14" error="1.764e1"></Isotope>
480 <Isotope id="Ar38" value="3.925e-15" error="1.75e1"></Isotope>
<Isotope id="Ar39" value="1.90359e-14" error="9.78e0"></Isotope>
<Isotope id="Ar40" value="1.90738e-13" error="9.99e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="7.33952e-16" error="1.072e1"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="1.90359e-14" error="9.78e0"></Isotope>
485 <Isotope id="Ar40_correctedForIsotopeInterference" value="1.90738e-13" error="9.99e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
490 <cumulated_percentage_Ar39_released>97.020</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="3.440"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="3.27e0" error="0.0e0"></IsotopeRatio>
495 <IsotopeRatio id="Cl_K" value="2.3e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.84795898038e-3" error="8.06908694743e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="9.98012981157e-2" error="1.96914902289e-2"></IsotopeRatio>
</StepData>
<StepData>
500 <StepNumber>28</StepNumber>
<FurnaceTemperature_DegreesCelsius>1100.000</FurnaceTemperature_DegreesCelsius>

```

```

<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="4.6342e-16" error="1.021e1"></Isotope>
<Isotope id="Ar37" value="1.4323e-14" error="1.747e1"></Isotope>
<Isotope id="Ar38" value="1.7102e-15" error="1.689e1"></Isotope>
505 <Isotope id="Ar39" value="7.84238e-15" error="9.52e0"></Isotope>
<Isotope id="Ar40" value="1.14911e-13" error="9.61e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="4.6342e-16" error="1.021e1"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="7.84238e-15" error="9.52e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="1.14911e-13" error="9.61e0"></Isotope>
510 <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>98.210</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="4.929"></MeasuredAge>
515 <RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="3.47e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.39e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="4.03286021356e-3" error="8.06309334028e-4"></IsotopeRatio>
520 <IsotopeRatio id="Ar39_Ar40" value="6.8247426269e-2" error="1.30451750456e-2"></IsotopeRatio>
</StepData>
<StepData>
525 <StepNumber>29</StepNumber>
<FurnaceTemperature_DegreesCelsius>1200.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.1963e-15" error="9.2e0"></Isotope>
<Isotope id="Ar37" value="9.3894e-15" error="1.689e1"></Isotope>
<Isotope id="Ar38" value="1.2197e-15" error="1.459e1"></Isotope>
<Isotope id="Ar39" value="5.05783e-15" error="9.12e0"></Isotope>
530 <Isotope id="Ar40" value="3.28325e-13" error="9.12e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.1963e-15" error="9.2e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="5.05783e-15" error="9.12e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="3.28325e-13" error="9.12e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
535 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>98.980</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="18.854"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
540 <IsotopeRatio id="Ca_K" value="3.53e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.26e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.64364577781e-3" error="6.69021035648e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.54049493642e-2" error="2.81259922676e-3"></IsotopeRatio>
</StepData>
<StepData>
545 <StepNumber>30</StepNumber>
<FurnaceTemperature_DegreesCelsius>1300.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.6557e-15" error="8.69e0"></Isotope>
<Isotope id="Ar37" value="7.0836e-15" error="1.615e1"></Isotope>
550 <Isotope id="Ar38" value="1.0238e-15" error="1.267e1"></Isotope>
<Isotope id="Ar39" value="3.74637e-15" error="8.66e0"></Isotope>
<Isotope id="Ar40" value="4.58764e-13" error="8.66e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.6557e-15" error="8.69e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="3.74637e-15" error="8.66e0"></Isotope>
555 <Isotope id="Ar40_correctedForIsotopeInterference" value="4.58764e-13" error="8.66e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>99.540</cumulated_percentage_Ar39_released>
560 <MeasuredAge value="0.002" stddev="33.475"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="3.59e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="2.17e0" error="0.0e0"></IsotopeRatio>

```

```

565   <IsotopeRatio id="Ar36_Ar40" value="3.60904517355e-3" error="6.26942622415e-4"></IsotopeRatio>
      <IsotopeRatio id="Ar39_Ar40" value="8.16622489995e-3" error="1.41612674061e-3"></IsotopeRatio>
    </StepData>
<StepData>
  <StepNumber>31</StepNumber>
  <FurnaceTemperature_DegreesCelsius>1450.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="2.50713e-15" error="8.14e0"></Isotope>
  <Isotope id="Ar37" value="5.5458e-15" error="1.584e1"></Isotope>
  <Isotope id="Ar38" value="1.0296e-15" error="1.075e1"></Isotope>
  <Isotope id="Ar39" value="2.99748e-15" error="8.12e0"></Isotope>
  <Isotope id="Ar40" value="7.05507e-13" error="8.12e0"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="2.50713e-15" error="8.14e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="2.99748e-15" error="8.12e0"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="7.05507e-13" error="8.12e0"></Isotope>
  <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>100.000</cumulated_percentage_Ar39_released>
  <MeasuredAge value="0.002" stddev="59.800"></MeasuredAge>
  <RecalculatedAge>0.002</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="3.52e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="2.1e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="3.55365715719e-3" error="5.78194271623e-4"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="4.2486892405e-3" error="6.90903700344e-4"></IsotopeRatio>
</StepData>
590 <CalculationParameters>
  <Parameter id="J_Factor" value="1.1953e-3" uncertainty="2.4e-1"></Parameter>
  <Parameter id="FluxMonitorAge" value="98.50" uncertainty="0.80" />
  <Parameter id="MassDiscrimination" value="0.98769" uncertainty="0.15" />
  <Parameter id="Atmospheric_40_36_ratio" value="2.9555e2"></Parameter>
  <Parameter id="DecayConstantK" value="5.543e-10" uncertainty="0.192"></Parameter>
</CalculationParameters>
</ArgonData>
</eArgonDataObject>
595 <eArgonDataObject>
  <ArgonData>
    <SampleDescription>ANU CAN #30, D3137821, Foil: A8, Alunite, 143.8mg, Steps: 32</SampleDescription>
    <StepData>
      <StepNumber>0</StepNumber>
      <FurnaceTemperature_DegreesCelsius>450.000</FurnaceTemperature_DegreesCelsius>
      <Duration_minutes>15.000</Duration_minutes>
      <Isotope id="Ar36" value="7.56809e-17" error="2.74e0"></Isotope>
      <Isotope id="Ar37" value="2.5296e-17" error="5.003e1"></Isotope>
      <Isotope id="Ar38" value="3.3771e-17" error="9.66e0"></Isotope>
      <Isotope id="Ar39" value="2.53579e-16" error="1.67e0"></Isotope>
      <Isotope id="Ar40" value="2.39543e-14" error="1.68e0"></Isotope>
      <Isotope id="Ar36_correctedForIsotopeInterference" value="7.56809e-17" error="2.74e0"></Isotope>
      <Isotope id="Ar39_correctedForIsotopeInterference" value="2.53579e-16" error="1.67e0"></Isotope>
      <Isotope id="Ar40_correctedForIsotopeInterference" value="2.39543e-14" error="1.68e0"></Isotope>
      <percentage_radiogenic_argon>6.620</percentage_radiogenic_argon>
      <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="radiogenicAr40_Ar39" value="6.258e0" error="0.0e0"></IsotopeRatio>
      <cumulated_percentage_Ar39_released>0.000</cumulated_percentage_Ar39_released>
      <MeasuredAge value="13.443" stddev="6.192"></MeasuredAge>
      <RecalculatedAge>13.443</RecalculatedAge>
      <IsotopeRatio id="Ca_K" value="1.9e-1" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="Cl_K" value="7.92e-1" error="0.0e0"></IsotopeRatio>
      <IsotopeRatio id="Ar36_Ar40" value="3.15938683243e-3" error="1.39616517131e-4"></IsotopeRatio>
      <IsotopeRatio id="Ar39_Ar40" value="1.0585949078e-2" error="3.54529900263e-4"></IsotopeRatio>
    </StepData>
    <StepData>
      <StepNumber>1</StepNumber>

```

<FurnaceTemperature\_DegreesCelsius>470.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="6.68271e-17" error="4.39e0"></Isotope>  
 <Isotope id="Ar37" value="2.5309e-17" error="5.007e1"></Isotope>  
 <Isotope id="Ar38" value="3.8139e-17" error="9.41e0"></Isotope>  
 <Isotope id="Ar39" value="2.17677e-16" error="2.62e0"></Isotope>  
 <Isotope id="Ar40" value="2.10693e-14" error="2.62e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="6.68271e-17" error="4.39e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.17677e-16" error="2.62e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.10693e-14" error="2.62e0"></Isotope>  
 <percentage\_radiogenic\_argon>6.260</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="6.057e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.010</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="13.015" stddev="10.112"></MeasuredAge>  
 <RecalculatedAge>13.015</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.21e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.29e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.17177599635e-3" error="2.22306499976e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.03314775526e-2" error="5.41228827632e-4"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 <StepNumber>2</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>490.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="9.5164e-17" error="2.68e0"></Isotope>  
 <Isotope id="Ar37" value="2.5323e-17" error="5.003e1"></Isotope>  
 <Isotope id="Ar38" value="3.9201e-17" error="9.3e0"></Isotope>  
 <Isotope id="Ar39" value="3.96535e-16" error="1.67e0"></Isotope>  
 <Isotope id="Ar40" value="2.83722e-14" error="1.67e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="9.5164e-17" error="2.68e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.96535e-16" error="1.67e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.83722e-14" error="1.67e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.870</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="6.215e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.020</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="1.340" stddev="4.843"></MeasuredAge>  
 <RecalculatedAge>1.340</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.21e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="5.09e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.35412833689e-3" error="1.45858710587e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.39761809095e-2" error="4.66611590629e-4"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 <StepNumber>3</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>510.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.28786e-16" error="1.72e0"></Isotope>  
 <Isotope id="Ar37" value="2.5337e-17" error="5.001e1"></Isotope>  
 <Isotope id="Ar38" value="4.8579e-17" error="7.11e0"></Isotope>  
 <Isotope id="Ar39" value="6.95433e-16" error="9.7e-1"></Isotope>  
 <Isotope id="Ar40" value="3.89308e-14" error="9.7e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.28786e-16" error="1.72e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="6.95433e-16" error="9.7e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.89308e-14" error="9.7e-1"></Isotope>  
 <percentage\_radiogenic\_argon>2.230</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.248e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.030</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.690" stddev="2.339"></MeasuredAge>  
 <RecalculatedAge>2.690</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="6.92e-2" error="0.0e0"></IsotopeRatio>

690           <IsotopeRatio id="Cl\_K" value="2.82e-1" error="0.0e0"></IsotopeRatio>  
           <IsotopeRatio id="Ar36\_Ar40" value="3.30807484049e-3" error="8.89438825281e-5"></IsotopeRatio>  
           <IsotopeRatio id="Ar39\_Ar40" value="1.78633113114e-2" error="3.46350310623e-4"></IsotopeRatio>  
 </StepData>

695           <StepData>  
           <StepNumber>4</StepNumber>  
           <FurnaceTemperature\_DegreesCelsius>530.000</FurnaceTemperature\_DegreesCelsius>  
           <Duration\_minutes>15.000</Duration\_minutes>  
           <Isotope id="Ar36" value="1.67401e-16" error="1.35e0"></Isotope>  
           <Isotope id="Ar37" value="2.5351e-17" error="5.0e1"></Isotope>  
 700           <Isotope id="Ar38" value="6.2272e-17" error="5.62e0"></Isotope>  
           <Isotope id="Ar39" value="1.15826e-15" error="6.5e-1"></Isotope>  
           <Isotope id="Ar40" value="5.08256e-14" error="6.5e-1"></Isotope>  
           <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.67401e-16" error="1.35e0"></Isotope>  
           <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.15826e-15" error="6.5e-1"></Isotope>  
 705           <Isotope id="Ar40\_correctedForIsotopeInterference" value="5.08256e-14" error="6.5e-1"></Isotope>  
           <percentage\_radiogenic\_argon>2.650</percentage\_radiogenic\_argon>  
           <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
           <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.166e0" error="0.0e0"></IsotopeRatio>  
           <cumulated\_percentage\_Ar39\_released>0.050</cumulated\_percentage\_Ar39\_released>  
 710           <MeasuredAge value="2.512" stddev="1.386"></MeasuredAge>  
           <RecalculatedAge>2.512</RecalculatedAge>  
           <IsotopeRatio id="Ca\_K" value="4.16e-2" error="0.0e0"></IsotopeRatio>  
           <IsotopeRatio id="Cl\_K" value="1.8e-1" error="0.0e0"></IsotopeRatio>  
           <IsotopeRatio id="Ar36\_Ar40" value="3.29363549078e-3" error="6.58265177729e-5"></IsotopeRatio>  
           <IsotopeRatio id="Ar39\_Ar40" value="2.27889095259e-2" error="2.96042387543e-4"></IsotopeRatio>  
 </StepData>

715           <StepData>  
           <StepNumber>5</StepNumber>  
           <FurnaceTemperature\_DegreesCelsius>550.000</FurnaceTemperature\_DegreesCelsius>  
           <Duration\_minutes>15.000</Duration\_minutes>  
           <Isotope id="Ar36" value="2.08972e-16" error="7.6e-1"></Isotope>  
           <Isotope id="Ar37" value="2.5365e-17" error="5.0e1"></Isotope>  
           <Isotope id="Ar38" value="8.1224e-17" error="3.74e0"></Isotope>  
           <Isotope id="Ar39" value="1.94182e-15" error="4.5e-1"></Isotope>  
           <Isotope id="Ar40" value="6.47001e-14" error="4.5e-1"></Isotope>  
           <Isotope id="Ar36\_correctedForIsotopeInterference" value="2.08972e-16" error="7.6e-1"></Isotope>  
           <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.94182e-15" error="4.5e-1"></Isotope>  
           <Isotope id="Ar40\_correctedForIsotopeInterference" value="6.47001e-14" error="4.5e-1"></Isotope>  
           <percentage\_radiogenic\_argon>4.540</percentage\_radiogenic\_argon>  
           <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
           <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.513e0" error="0.0e0"></IsotopeRatio>  
           <cumulated\_percentage\_Ar39\_released>0.090</cumulated\_percentage\_Ar39\_released>  
           <MeasuredAge value="3.260" stddev="0.610"></MeasuredAge>  
           <RecalculatedAge>3.260</RecalculatedAge>  
           <IsotopeRatio id="Ca\_K" value="2.48e-2" error="0.0e0"></IsotopeRatio>  
           <IsotopeRatio id="Cl\_K" value="1.21e-1" error="0.0e0"></IsotopeRatio>  
           <IsotopeRatio id="Ar36\_Ar40" value="3.2298559044e-3" error="3.90812564432e-5"></IsotopeRatio>  
           <IsotopeRatio id="Ar39\_Ar40" value="3.00126274921e-2" error="2.70113647429e-4"></IsotopeRatio>

730           </StepData>

735           <StepData>  
           <StepNumber>6</StepNumber>  
           <FurnaceTemperature\_DegreesCelsius>570.000</FurnaceTemperature\_DegreesCelsius>  
           <Duration\_minutes>15.000</Duration\_minutes>  
           <Isotope id="Ar36" value="2.81276e-16" error="7.2e-1"></Isotope>  
           <Isotope id="Ar37" value="2.5379e-17" error="5.0e1"></Isotope>  
           <Isotope id="Ar38" value="1.1945e-16" error="3.03e0"></Isotope>  
           <Isotope id="Ar39" value="3.52918e-15" error="2.9e-1"></Isotope>  
           <Isotope id="Ar40" value="8.73127e-14" error="2.9e-1"></Isotope>  
           <Isotope id="Ar36\_correctedForIsotopeInterference" value="2.81276e-16" error="7.2e-1"></Isotope>  
           <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.52918e-15" error="2.9e-1"></Isotope>  
           <Isotope id="Ar40\_correctedForIsotopeInterference" value="8.73127e-14" error="2.9e-1"></Isotope>  
           <percentage\_radiogenic\_argon>4.780</percentage\_radiogenic\_argon>

755 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"/></IsotopeRatio>  
<IsotopeRatio id="radiogenicAr40\_Ar39" value="1.185e0" error="0.0e0"/></IsotopeRatio>  
<cumulated\_percentage\_Ar39\_released>0.150</cumulated\_percentage\_Ar39\_released>  
<MeasuredAge value="2.553" stddev="0.398"/></MeasuredAge>  
<RecalculatedAge>2.553</RecalculatedAge>  
<IsotopeRatio id="Ca\_K" value="1.37e-2" error="0.0e0"/></IsotopeRatio>  
<IsotopeRatio id="Cl\_K" value="8.87e-2" error="0.0e0"/></IsotopeRatio>  
<IsotopeRatio id="Ar36\_Ar40" value="3.22147866233e-3" error="3.25369344895e-5"/></IsotopeRatio>  
<IsotopeRatio id="Ar39\_Ar40" value="4.04200076278e-2" error="2.34436044241e-4"/></IsotopeRatio>  
</StepData>  
<StepData>  
    <StepNumber>7</StepNumber>  
    <FurnaceTemperature\_DegreesCelsius>590.000</FurnaceTemperature\_DegreesCelsius>  
    <Duration\_minutes>15.000</Duration\_minutes>  
    <Isotope id="Ar36" value="3.92531e-16" error="6.7e-1"/></Isotope>  
    <Isotope id="Ar37" value="2.5393e-17" error="5.0e1"/></Isotope>  
    <Isotope id="Ar38" value="1.8082e-16" error="2.02e0"/></Isotope>  
    <Isotope id="Ar39" value="6.70949e-15" error="2.2e-1"/></Isotope>  
    <Isotope id="Ar40" value="1.21976e-13" error="2.2e-1"/></Isotope>  
    <Isotope id="Ar36\_correctedForIsotopelInterference" value="3.92531e-16" error="6.7e-1"/></Isotope>  
    <Isotope id="Ar39\_correctedForIsotopelInterference" value="6.70949e-15" error="2.2e-1"/></Isotope>  
    <Isotope id="Ar40\_correctedForIsotopelInterference" value="1.21976e-13" error="2.2e-1"/></Isotope>  
    <percentage\_radiogenic\_argon>4.880</percentage\_radiogenic\_argon>  
    <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"/></IsotopeRatio>  
    <IsotopeRatio id="radiogenicAr40\_Ar39" value="8.889e-1" error="0.0e0"/></IsotopeRatio>  
    <cumulated\_percentage\_Ar39\_released>0.280</cumulated\_percentage\_Ar39\_released>  
    <MeasuredAge value="1.916" stddev="0.262"/></MeasuredAge>  
    <RecalculatedAge>1.916</RecalculatedAge>  
    <IsotopeRatio id="Ca\_K" value="7.19e-3" error="0.0e0"/></IsotopeRatio>  
    <IsotopeRatio id="Cl\_K" value="5.4e-2" error="0.0e0"/></IsotopeRatio>  
    <IsotopeRatio id="Ar36\_Ar40" value="3.21810028202e-3" error="2.864109251e-5"/></IsotopeRatio>  
    <IsotopeRatio id="Ar39\_Ar40" value="5.50066406506e-2" error="2.42029218863e-4"/></IsotopeRatio>  
</StepData>  
<StepData>  
    <StepNumber>8</StepNumber>  
    <FurnaceTemperature\_DegreesCelsius>610.000</FurnaceTemperature\_DegreesCelsius>  
    <Duration\_minutes>15.000</Duration\_minutes>  
    <Isotope id="Ar36" value="5.12679e-16" error="5.8e-1"/></Isotope>  
    <Isotope id="Ar37" value="2.5406e-17" error="5.0e1"/></Isotope>  
    <Isotope id="Ar38" value="2.7904e-16" error="1.18e0"/></Isotope>  
    <Isotope id="Ar39" value="1.26869e-14" error="1.9e-1"/></Isotope>  
    <Isotope id="Ar40" value="1.63843e-13" error="1.9e-1"/></Isotope>  
    <Isotope id="Ar36\_correctedForIsotopelInterference" value="5.12679e-16" error="5.8e-1"/></Isotope>  
    <Isotope id="Ar39\_correctedForIsotopelInterference" value="1.26869e-14" error="1.9e-1"/></Isotope>  
    <Isotope id="Ar40\_correctedForIsotopelInterference" value="1.63843e-13" error="1.9e-1"/></Isotope>  
    <percentage\_radiogenic\_argon>7.500</percentage\_radiogenic\_argon>  
    <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"/></IsotopeRatio>  
    <IsotopeRatio id="radiogenicAr40\_Ar39" value="9.711e-1" error="0.0e0"/></IsotopeRatio>  
    <cumulated\_percentage\_Ar39\_released>0.520</cumulated\_percentage\_Ar39\_released>  
    <MeasuredAge value="2.093" stddev="0.158"/></MeasuredAge>  
    <RecalculatedAge>2.093</RecalculatedAge>  
    <IsotopeRatio id="Ca\_K" value="3.8e-3" error="0.0e0"/></IsotopeRatio>  
    <IsotopeRatio id="Cl\_K" value="3.58e-2" error="0.0e0"/></IsotopeRatio>  
    <IsotopeRatio id="Ar36\_Ar40" value="3.12908699182e-3" error="2.4093969837e-5"/></IsotopeRatio>  
    <IsotopeRatio id="Ar39\_Ar40" value="7.74332745372e-2" error="2.94246443241e-4"/></IsotopeRatio>  
</StepData>  
<StepData>  
    <StepNumber>9</StepNumber>  
    <FurnaceTemperature\_DegreesCelsius>630.000</FurnaceTemperature\_DegreesCelsius>  
    <Duration\_minutes>15.000</Duration\_minutes>  
    <Isotope id="Ar36" value="6.78583e-16" error="5.6e-1"/></Isotope>  
    <Isotope id="Ar37" value="2.9306e-16" error="2.604e1"/></Isotope>  
    <Isotope id="Ar38" value="4.5614e-16" error="8.0e-1"/></Isotope>

820 <Isotope id="Ar39" value="2.50617e-14" error="1.8e-1"></Isotope>  
 <Isotope id="Ar40" value="2.23666e-13" error="1.8e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="6.78583e-16" error="5.6e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.50617e-14" error="1.8e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.23666e-13" error="1.8e-1"></Isotope>  
 <percentage\_radiogenic\_argon>10.290</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="9.222e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.980</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="1.987" stddev="0.103"></MeasuredAge>  
 <RecalculatedAge>1.987</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.22e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="2.07e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.03391217261e-3" error="2.24509500773e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.12049663337e-1" error="4.03378788014e-4"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 <StepNumber>10</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>650.000</FurnaceTemperature\_DegreesCelsius>  
 835 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="8.12681e-16" error="4.9e-1"></Isotope>  
 <Isotope id="Ar37" value="4.4529e-16" error="2.088e1"></Isotope>  
 <Isotope id="Ar38" value="7.0206e-16" error="6.9e-1"></Isotope>  
 840 <Isotope id="Ar39" value="4.28524e-14" error="1.8e-1"></Isotope>  
 <Isotope id="Ar40" value="2.81084e-13" error="1.9e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="8.12681e-16" error="4.9e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="4.28524e-14" error="1.8e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.81084e-13" error="1.9e-1"></Isotope>  
 <percentage\_radiogenic\_argon>14.480</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="9.543e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>1.780</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.057" stddev="0.065"></MeasuredAge>  
 <RecalculatedAge>2.057</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.97e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.75e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.8912389179e-3" error="1.96604246417e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.52454070669e-1" error="5.64080061476e-4"></IsotopeRatio>  
 </StepData>  
 855 <StepData>  
 <StepNumber>11</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>670.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="9.65075e-16" error="5.1e-1"></Isotope>  
 <Isotope id="Ar37" value="5.3207e-16" error="1.487e1"></Isotope>  
 <Isotope id="Ar38" value="9.8802e-16" error="7.1e-1"></Isotope>  
 <Isotope id="Ar39" value="6.38762e-14" error="2.0e-1"></Isotope>  
 <Isotope id="Ar40" value="3.45688e-13" error="2.1e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="9.65075e-16" error="5.1e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="6.38762e-14" error="2.0e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.45688e-13" error="2.1e-1"></Isotope>  
 <percentage\_radiogenic\_argon>17.380</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="9.465e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>2.980</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.040" stddev="0.055"></MeasuredAge>  
 <RecalculatedAge>2.040</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.58e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.53e-2" error="0.0e0"></IsotopeRatio>  
 870 <IsotopeRatio id="Ar36\_Ar40" value="2.7917515216e-3" error="2.01006109555e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.84779917151e-1" error="7.57597660318e-4"></IsotopeRatio>  
 </StepData>  
 <StepData>

880 <StepNumber>12</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>690.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.16331e-15" error="5.1e-1"></Isotope>  
 <Isotope id="Ar37" value="9.2056e-16" error="1.352e1"></Isotope>  
 <Isotope id="Ar38" value="1.3383e-15" error="8.0e-1"></Isotope>  
 <Isotope id="Ar39" value="8.78847e-14" error="2.4e-1"></Isotope>  
 <Isotope id="Ar40" value="4.27106e-13" error="2.5e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.16331e-15" error="5.1e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="8.78847e-14" error="2.4e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="4.27106e-13" error="2.5e-1"></Isotope>  
 885 <percentage\_radiogenic\_argon>19.370</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="9.477e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>4.620</cumulated\_percentage\_Ar39\_released>  
 890 <MeasuredAge value="2.042" stddev="0.051"></MeasuredAge>  
 <RecalculatedAge>2.042</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.99e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.68e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.72370324931e-3" error="2.07001446948e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="2.05767889002e-1" error="1.00826265611e-3"></IsotopeRatio>  
 895 </StepData>  
 <StepData>  
 <StepNumber>13</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>710.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 900 <Isotope id="Ar36" value="1.4704e-15" error="6.1e-1"></Isotope>  
 <Isotope id="Ar37" value="1.9293e-15" error="1.309e1"></Isotope>  
 <Isotope id="Ar38" value="1.873e-15" error="1.36e0"></Isotope>  
 <Isotope id="Ar39" value="1.21361e-13" error="3.2e-1"></Isotope>  
 <Isotope id="Ar40" value="5.48805e-13" error="3.4e-1"></Isotope>  
 905 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.4704e-15" error="6.1e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.21361e-13" error="3.2e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="5.48805e-13" error="3.4e-1"></Isotope>  
 <percentage\_radiogenic\_argon>20.660</percentage\_radiogenic\_argon>  
 910 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="9.412e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>6.890</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.028" stddev="0.058"></MeasuredAge>  
 <RecalculatedAge>2.028</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="3.02e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="2.19e-2" error="0.0e0"></IsotopeRatio>  
 915 <IsotopeRatio id="Ar36\_Ar40" value="2.67927588123e-3" error="2.54531208717e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="2.21136833666e-1" error="1.45950310219e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 <StepNumber>14</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>730.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.96611e-15" error="8.4e-1"></Isotope>  
 <Isotope id="Ar37" value="4.8945e-15" error="1.386e1"></Isotope>  
 <Isotope id="Ar38" value="2.8167e-15" error="2.32e0"></Isotope>  
 <Isotope id="Ar39" value="1.72633e-13" error="4.3e-1"></Isotope>  
 <Isotope id="Ar40" value="7.38165e-13" error="4.3e-1"></Isotope>  
 920 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.96611e-15" error="8.4e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.72633e-13" error="4.3e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="7.38165e-13" error="4.3e-1"></Isotope>  
 <percentage\_radiogenic\_argon>21.110</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="9.099e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>10.110</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="1.961" stddev="0.073"></MeasuredAge>  
 <RecalculatedAge>1.961</RecalculatedAge>

```

<IsotopeRatio id="Ca_K" value="5.39e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="3.45e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="2.66351019081e-3" error="3.38265794233e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="2.33867766692e-1" error="2.01126279355e-3"></IsotopeRatio>
945 </StepData>
<StepData>
<StepNumber>15</StepNumber>
<FurnaceTemperature_DegreesCelsius>750.000</FurnaceTemperature_DegreesCelsius>
950 <Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="2.66831e-15" error="1.0e0"></Isotope>
<Isotope id="Ar37" value="1.2693e-14" error="1.409e1"></Isotope>
<Isotope id="Ar38" value="4.4711e-15" error="3.56e0"></Isotope>
955 <Isotope id="Ar39" value="2.46133e-13" error="4.9e-1"></Isotope>
<Isotope id="Ar40" value="9.97851e-13" error="5.0e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="2.66831e-15" error="1.0e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="2.46133e-13" error="4.9e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="9.97851e-13" error="5.0e-1"></Isotope>
960 <percentage_radiogenic_argon>20.800</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="8.501e-1" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>14.710</cumulated_percentage_Ar39_released>
<MeasuredAge value="1.832" stddev="0.082"></MeasuredAge>
965 <RecalculatedAge>1.832</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="9.8e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="5.84e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="2.67405654752e-3" error="4.01108482128e-5"></IsotopeRatio>
970 <IsotopeRatio id="Ar39_Ar40" value="2.46663078957e-1" error="2.44196448167e-3"></IsotopeRatio>
</StepData>
<StepData>
<StepNumber>16</StepNumber>
<FurnaceTemperature_DegreesCelsius>770.000</FurnaceTemperature_DegreesCelsius>
975 <Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="3.59535e-15" error="1.1e0"></Isotope>
<Isotope id="Ar37" value="2.6437e-14" error="1.373e1"></Isotope>
<Isotope id="Ar38" value="7.0936e-15" error="4.61e0"></Isotope>
<Isotope id="Ar39" value="3.51357e-13" error="5.4e-1"></Isotope>
980 <Isotope id="Ar40" value="1.34183e-12" error="5.7e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="3.59535e-15" error="1.1e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="3.51357e-13" error="5.4e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="1.34183e-12" error="5.7e-1"></Isotope>
985 <percentage_radiogenic_argon>20.630</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="7.947e-1" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>21.270</cumulated_percentage_Ar39_released>
<MeasuredAge value="1.713" stddev="0.086"></MeasuredAge>
990 <RecalculatedAge>1.713</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.43e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="8.47e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="2.67943778273e-3" error="4.47466109716e-5"></IsotopeRatio>
995 <IsotopeRatio id="Ar39_Ar40" value="2.61849116505e-1" error="2.90652519321e-3"></IsotopeRatio>
</StepData>
<StepData>
<StepNumber>17</StepNumber>
<FurnaceTemperature_DegreesCelsius>790.000</FurnaceTemperature_DegreesCelsius>
000 <Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="4.80567e-15" error="1.07e0"></Isotope>
<Isotope id="Ar37" value="4.413e-14" error="1.334e1"></Isotope>
<Isotope id="Ar38" value="1.0834e-14" error="5.11e0"></Isotope>
<Isotope id="Ar39" value="5.10359e-13" error="5.7e-1"></Isotope>
<Isotope id="Ar40" value="1.81091e-12" error="6.4e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="4.80567e-15" error="1.07e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="5.10359e-13" error="5.7e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="1.81091e-12" error="6.4e-1"></Isotope>

```

005 <percentage\_radiogenic\_argon>21.370</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="7.653e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>30.810</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="1.650" stddev="0.081"></MeasuredAge>  
 010 <RecalculatedAge>1.650</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.64e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="9.94e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.65373210154e-3" error="4.53788189363e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="2.81824607518e-1" error="3.41007775096e-3"></IsotopeRatio>  
 015 </StepData>  
 <StepData>  
     <StepNumber>18</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>810.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
 020 <Isotope id="Ar36" value="6.12659e-15" error="1.15e0"></Isotope>  
 <Isotope id="Ar37" value="6.6861e-14" error="1.319e1"></Isotope>  
 <Isotope id="Ar38" value="1.5362e-14" error="5.46e0"></Isotope>  
 <Isotope id="Ar39" value="7.01308e-13" error="5.8e-1"></Isotope>  
 <Isotope id="Ar40" value="2.32467e-12" error="6.8e-1"></Isotope>  
 025 <Isotope id="Ar36\_correctedForIsotopeInterference" value="6.12659e-15" error="1.15e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="7.01308e-13" error="5.8e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.32467e-12" error="6.8e-1"></Isotope>  
 <percentage\_radiogenic\_argon>21.890</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="7.329e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>43.910</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="1.580" stddev="0.081"></MeasuredAge>  
 <RecalculatedAge>1.580</RecalculatedAge>  
 030 <IsotopeRatio id="Ca\_K" value="1.81e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.09e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.63546653934e-3" error="4.82290376699e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="3.01680668654e-1" error="3.80117642504e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 035 <StepNumber>19</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>830.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
     <Isotope id="Ar36" value="7.14892e-15" error="1.29e0"></Isotope>  
     <Isotope id="Ar37" value="9.2708e-14" error="1.365e1"></Isotope>  
     <Isotope id="Ar38" value="1.9845e-14" error="6.06e0"></Isotope>  
     <Isotope id="Ar39" value="8.68695e-13" error="6.0e-1"></Isotope>  
     <Isotope id="Ar40" value="2.7236e-12" error="7.5e-1"></Isotope>  
     <Isotope id="Ar36\_correctedForIsotopeInterference" value="7.14892e-15" error="1.29e0"></Isotope>  
     <Isotope id="Ar39\_correctedForIsotopeInterference" value="8.68695e-13" error="6.0e-1"></Isotope>  
 040 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.7236e-12" error="7.5e-1"></Isotope>  
 <percentage\_radiogenic\_argon>22.190</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="7.031e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>60.140</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="1.515" stddev="0.085"></MeasuredAge>  
 <RecalculatedAge>1.515</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.03e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.22e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.62480540461e-3" error="5.35460302541e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="3.18951020708e-1" error="4.30583877956e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
     <StepNumber>20</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>850.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
     <Isotope id="Ar36" value="7.00381e-15" error="1.53e0"></Isotope>  
     <Isotope id="Ar37" value="1.0972e-13" error="1.427e1"></Isotope>

070 <Isotope id="Ar38" value="2.2238e-14" error="6.59e0"></Isotope>  
 <Isotope id="Ar39" value="9.47361e-13" error="6.4e-1"></Isotope>  
 <Isotope id="Ar40" value="2.72041e-12" error="8.4e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="7.00381e-15" error="1.53e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="9.47361e-13" error="6.4e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.72041e-12" error="8.4e-1"></Isotope>  
 <percentage\_radiogenic\_argon>23.630</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="6.866e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>77.840</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="1.480" stddev="0.089"></MeasuredAge>  
 <RecalculatedAge>1.480</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.2e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.32e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.5745420727e-3" error="6.1016647123e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="3.48241992935e-1" error="5.15398149544e-3"></IsotopeRatio>  
 </StepData>  
 085 <StepData>  
 <StepNumber>21</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>870.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="4.56628e-15" error="1.99e0"></Isotope>  
 <Isotope id="Ar37" value="9.5375e-14" error="1.431e1"></Isotope>  
 <Isotope id="Ar38" value="1.8062e-14" error="7.17e0"></Isotope>  
 <Isotope id="Ar39" value="7.3845e-13" error="7.4e-1"></Isotope>  
 <Isotope id="Ar40" value="1.85445e-12" error="9.9e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="4.56628e-15" error="1.99e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="7.3845e-13" error="7.4e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.85445e-12" error="9.9e-1"></Isotope>  
 <percentage\_radiogenic\_argon>26.870</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="6.837e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>91.640</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="1.474" stddev="0.096"></MeasuredAge>  
 <RecalculatedAge>1.474</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.45e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.47e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.46233654183e-3" error="7.33776289466e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="3.9820431934e-1" error="6.88893472458e-3"></IsotopeRatio>  
 </StepData>  
 110 <StepData>  
 <StepNumber>22</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>890.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.85092e-15" error="2.99e0"></Isotope>  
 <Isotope id="Ar37" value="5.5699e-14" error="1.444e1"></Isotope>  
 <Isotope id="Ar38" value="9.3667e-15" error="8.09e0"></Isotope>  
 <Isotope id="Ar39" value="3.46913e-13" error="9.4e-1"></Isotope>  
 <Isotope id="Ar40" value="7.70887e-13" error="1.25e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.85092e-15" error="2.99e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.46913e-13" error="9.4e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="7.70887e-13" error="1.25e0"></Isotope>  
 <percentage\_radiogenic\_argon>28.610</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="6.453e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>98.120</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="1.391" stddev="0.119"></MeasuredAge>  
 <RecalculatedAge>1.391</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="3.05e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.8e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.40102635017e-3" error="1.01803517247e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="4.50017966317e-1" error="9.85539346234e-3"></IsotopeRatio>  
 </StepData>

```

<StepData>
  <StepNumber>23</StepNumber>
  <FurnaceTemperature_DegreesCelsius>910.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="6.43332e-16" error="4.99e0"></Isotope>
  <Isotope id="Ar37" value="2.7029e-14" error="1.456e1"></Isotope>
  <Isotope id="Ar38" value="3.309e-15" error="1.195e1"></Isotope>
  <Isotope id="Ar39" value="5.57054e-14" error="2.45e0"></Isotope>
  <Isotope id="Ar40" value="2.0157e-13" error="2.84e0"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="6.43332e-16" error="4.99e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="5.57054e-14" error="2.45e0"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="2.0157e-13" error="2.84e0"></Isotope>
  <percentage_radiogenic_argon>5.620</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="2.052e-1" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>99.160</cumulated_percentage_Ar39_released>
  <MeasuredAge value="0.443" stddev="0.435"></MeasuredAge>
  <RecalculatedAge>0.443</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="9.22e-1" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="5.62e-1" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="3.19160589373e-3" error="2.49902741479e-4"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="2.76357592896e-1" error="1.46193166642e-2"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>24</StepNumber>
  <FurnaceTemperature_DegreesCelsius>930.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="4.05858e-16" error="9.93e0"></Isotope>
  <Isotope id="Ar37" value="1.8017e-14" error="1.665e1"></Isotope>
  <Isotope id="Ar38" value="2.0176e-15" error="1.626e1"></Isotope>
  <Isotope id="Ar39" value="1.01599e-14" error="8.83e0"></Isotope>
  <Isotope id="Ar40" value="1.02037e-13" error="9.03e0"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="4.05858e-16" error="9.93e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="1.01599e-14" error="8.83e0"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="1.02037e-13" error="9.03e0"></Isotope>
  <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>99.350</cumulated_percentage_Ar39_released>
  <MeasuredAge value="0.002" stddev="3.229"></MeasuredAge>
  <RecalculatedAge>0.002</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="3.37e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="2.2e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="3.97755716064e-3" error="7.63492791561e-4"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="9.95707439458e-2" error="1.7748353194e-2"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>25</StepNumber>
  <FurnaceTemperature_DegreesCelsius>950.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="2.74926e-16" error="9.95e0"></Isotope>
  <Isotope id="Ar37" value="1.3045e-14" error="1.677e1"></Isotope>
  <Isotope id="Ar38" value="1.4781e-15" error="1.612e1"></Isotope>
  <Isotope id="Ar39" value="7.39787e-15" error="8.76e0"></Isotope>
  <Isotope id="Ar40" value="6.83377e-14" error="9.01e0"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="2.74926e-16" error="9.95e0"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="7.39787e-15" error="8.76e0"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="6.83377e-14" error="9.01e0"></Isotope>
  <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>99.490</cumulated_percentage_Ar39_released>
  <MeasuredAge value="0.002" stddev="2.994"></MeasuredAge>

```

```

195 <RecalculatedAge>0.002</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="3.35e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="2.22e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="4.02305023435e-3" error="7.72858088503e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="1.08254594463e-1" error="1.91942427645e-2"></IsotopeRatio>
</StepData>
200 <StepData>
    <StepNumber>26</StepNumber>
    <FurnaceTemperature_DegreesCelsius>1000.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="2.83858e-16" error="9.3e0"></Isotope>
    <Isotope id="Ar37" value="1.0631e-14" error="1.592e1"></Isotope>
    <Isotope id="Ar38" value="1.1697e-15" error="1.567e1"></Isotope>
    <Isotope id="Ar39" value="5.97132e-15" error="8.45e0"></Isotope>
    <Isotope id="Ar40" value="7.26235e-14" error="8.6e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="2.83858e-16" error="9.3e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="5.97132e-15" error="8.45e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="7.26235e-14" error="8.6e0"></Isotope>
    <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>99.600</cumulated_percentage_Ar39_released>
    <MeasuredAge value="0.002" stddev="3.636"></MeasuredAge>
    <RecalculatedAge>0.002</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="3.38e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="2.15e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.90862461875e-3" error="7.06989042074e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="8.2222971903e-2" error="1.40000391354e-2"></IsotopeRatio>
</StepData>
205 <StepData>
    <StepNumber>27</StepNumber>
    <FurnaceTemperature_DegreesCelsius>1050.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="3.135e-16" error="8.6e0"></Isotope>
    <Isotope id="Ar37" value="8.6474e-15" error="1.576e1"></Isotope>
    <Isotope id="Ar38" value="9.7748e-16" error="1.497e1"></Isotope>
    <Isotope id="Ar39" value="4.95829e-15" error="8.17e0"></Isotope>
    <Isotope id="Ar40" value="8.37891e-14" error="8.25e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="3.135e-16" error="8.6e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="4.95829e-15" error="8.17e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="8.37891e-14" error="8.25e0"></Isotope>
    <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>99.700</cumulated_percentage_Ar39_released>
    <MeasuredAge value="0.002" stddev="4.611"></MeasuredAge>
    <RecalculatedAge>0.002</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="3.31e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="2.13e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.741536787e-3" error="6.35364719195e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="5.91758355204e-2" error="9.71079054255e-3"></IsotopeRatio>
</StepData>
210 <StepData>
    <StepNumber>28</StepNumber>
    <FurnaceTemperature_DegreesCelsius>1100.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="4.25558e-16" error="8.2e0"></Isotope>
    <Isotope id="Ar37" value="7.5773e-15" error="1.522e1"></Isotope>
    <Isotope id="Ar38" value="8.5264e-16" error="1.459e1"></Isotope>
    <Isotope id="Ar39" value="4.30666e-15" error="7.98e0"></Isotope>
    <Isotope id="Ar40" value="1.1904e-13" error="8.0e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="4.25558e-16" error="8.2e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="4.30666e-15" error="7.98e0"></Isotope>

```

```

<Isotope id="Ar40_correctedForIsotopeInterference" value="1.1904e-13" error="8.0e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
260 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>99.780</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="7.049"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="3.34e0" error="0.0e0"></IsotopeRatio>
265 <IsotopeRatio id="Cl_K" value="2.05e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.57491599462e-3" error="5.82101694915e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="3.61782594086e-2" error="5.78259322034e-3"></IsotopeRatio>
</StepData>
<StepData>
270 <StepNumber>29</StepNumber>
<FurnaceTemperature_DegreesCelsius>1200.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="9.73365e-16" error="7.52e0"></Isotope>
<Isotope id="Ar37" value="6.5024e-15" error="1.536e1"></Isotope>
275 <Isotope id="Ar38" value="8.4023e-16" error="1.242e1"></Isotope>
<Isotope id="Ar39" value="3.94603e-15" error="7.46e0"></Isotope>
<Isotope id="Ar40" value="2.83622e-13" error="7.46e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="9.73365e-16" error="7.52e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="3.94603e-15" error="7.46e0"></Isotope>
280 <Isotope id="Ar40_correctedForIsotopeInterference" value="2.83622e-13" error="7.46e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>99.850</cumulated_percentage_Ar39_released>
285 <MeasuredAge value="0.002" stddev="16.545"></MeasuredAge>
<RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="3.13e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.89e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.43190937233e-3" error="5.15079711013e-4"></IsotopeRatio>
290 <IsotopeRatio id="Ar39_Ar40" value="1.39129898245e-2" error="2.07760014097e-3"></IsotopeRatio>
</StepData>
<StepData>
295 <StepNumber>30</StepNumber>
<FurnaceTemperature_DegreesCelsius>1300.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.58404e-15" error="6.94e0"></Isotope>
<Isotope id="Ar37" value="5.6342e-15" error="1.489e1"></Isotope>
<Isotope id="Ar38" value="8.6695e-16" error="1.063e1"></Isotope>
<Isotope id="Ar39" value="3.65871e-15" error="6.91e0"></Isotope>
300 <Isotope id="Ar40" value="4.64222e-13" error="6.91e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.58404e-15" error="6.94e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="3.65871e-15" error="6.91e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="4.64222e-13" error="6.91e0"></Isotope>
<percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>99.920</cumulated_percentage_Ar39_released>
<MeasuredAge value="0.002" stddev="26.906"></MeasuredAge>
305 <RecalculatedAge>0.002</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="2.93e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.75e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.41224672678e-3" error="4.73060688289e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="7.88138002938e-3" error="1.09026627041e-3"></IsotopeRatio>
</StepData>
<StepData>
310 <StepNumber>31</StepNumber>
<FurnaceTemperature_DegreesCelsius>1450.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="1.73536e-15" error="5.24e0"></Isotope>

```

320

```

<Isotope id="Ar37" value="5.1033e-15" error="1.368e1"></Isotope>
<Isotope id="Ar38" value="8.548e-16" error="8.74e0"></Isotope>
<Isotope id="Ar39" value="4.30133e-15" error="5.21e0"></Isotope>
<Isotope id="Ar40" value="5.22019e-13" error="5.21e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="1.73536e-15" error="5.24e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="4.30133e-15" error="5.21e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="5.22019e-13" error="5.21e0"></Isotope>
<percentage_radiogenic_argon>1.750</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="2.123e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>100.000</cumulated_percentage_Ar39_released>
<MeasuredAge value="4.573" stddev="19.112"></MeasuredAge>
<RecalculatedAge>4.573</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="2.25e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.35e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.32432344417e-3" error="3.47666232572e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="8.2397958695e-3" error="8.59167075226e-4"></IsotopeRatio>
</StepData>
<CalculationParameters>
    <Parameter id="J_Factor" value="1.1953e-3" uncertainty="2.4e-1"></Parameter>
    <Parameter id="FluxMonitorAge" value="98.50" uncertainty="0.80" />
    <Parameter id="MassDiscrimination" value="0.98769" uncertainty="0.15" />
    <Parameter id="Atmospheric_40_36_ratio" value="2.9555e2"></Parameter>
    <Parameter id="DecayConstantK" value="5.543e-10" uncertainty="0.192"></Parameter>
</CalculationParameters>
</ArgonData>
</eArgonDataObject>
<eArgonDataObject>
    <ArgonData>
        <SampleDescription>ANU CAN #30, D3035222, Foil: A9, Alunite, 122.9mg, Steps: 32</SampleDescription>
        <StepData>
            <StepNumber>0</StepNumber>
            <FurnaceTemperature_DegreesCelsius>450.000</FurnaceTemperature_DegreesCelsius>
            <Duration_minutes>15.000</Duration_minutes>
            <Isotope id="Ar36" value="5.50453e-17" error="5.97e0"></Isotope>
            <Isotope id="Ar37" value="2.6367e-17" error="5.025e1"></Isotope>
            <Isotope id="Ar38" value="5.3899e-17" error="1.034e1"></Isotope>
            <Isotope id="Ar39" value="2.33135e-16" error="4.99e0"></Isotope>
            <Isotope id="Ar40" value="1.70395e-14" error="5.01e0"></Isotope>
            <Isotope id="Ar36_correctedForIsotopeInterference" value="5.50453e-17" error="5.97e0"></Isotope>
            <Isotope id="Ar39_correctedForIsotopeInterference" value="2.33135e-16" error="4.99e0"></Isotope>
            <Isotope id="Ar40_correctedForIsotopeInterference" value="1.70395e-14" error="5.01e0"></Isotope>
            <percentage_radiogenic_argon>4.520</percentage_radiogenic_argon>
            <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
            <IsotopeRatio id="radiogenicAr40_Ar39" value="3.307e0" error="0.0e0"></IsotopeRatio>
            <cumulated_percentage_Ar39_released>0.030</cumulated_percentage_Ar39_released>
            <MeasuredAge value="7.116" stddev="11.920"></MeasuredAge>
            <RecalculatedAge>7.116</RecalculatedAge>
            <IsotopeRatio id="Ca_K" value="2.15e-1" error="0.0e0"></IsotopeRatio>
            <IsotopeRatio id="Cl_K" value="2.14e0" error="0.0e0"></IsotopeRatio>
            <IsotopeRatio id="Ar36_Ar40" value="3.2304527715e-3" error="3.54674546841e-4"></IsotopeRatio>
            <IsotopeRatio id="Ar39_Ar40" value="1.36820329235e-2" error="1.36774799085e-3"></IsotopeRatio>
        </StepData>
        <StepData>
            <StepNumber>1</StepNumber>
            <FurnaceTemperature_DegreesCelsius>470.000</FurnaceTemperature_DegreesCelsius>
            <Duration_minutes>15.000</Duration_minutes>
            <Isotope id="Ar36" value="5.23282e-17" error="6.7e0"></Isotope>
            <Isotope id="Ar37" value="2.6381e-17" error="5.031e1"></Isotope>
            <Isotope id="Ar38" value="6.001e-17" error="1.012e1"></Isotope>
            <Isotope id="Ar39" value="2.47683e-16" error="5.58e0"></Isotope>
            <Isotope id="Ar40" value="1.57399e-14" error="5.6e0"></Isotope>
            <Isotope id="Ar36_correctedForIsotopeInterference" value="5.23282e-17" error="6.7e0"></Isotope>

```

325

330

335

340

345

350

355

360

365

370

375

380

385 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.47683e-16" error="5.58e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.57399e-14" error="5.6e0"></Isotope>  
 <percentage\_radiogenic\_argon>1.740</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.107e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.070</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.387" stddev="11.829"></MeasuredAge>  
 390 <RecalculatedAge>2.387</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.02e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="2.34e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.32455733518e-3" error="4.08880492761e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.57359957814e-2" error="1.758500127e-3"></IsotopeRatio>  
 395 </StepData>  
 <StepData>  
 <StepNumber>2</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>490.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 400 <Isotope id="Ar36" value="5.8208e-17" error="5.73e0"></Isotope>  
 <Isotope id="Ar37" value="2.6396e-17" error="5.026e1"></Isotope>  
 <Isotope id="Ar38" value="5.2251e-17" error="1.18e1"></Isotope>  
 <Isotope id="Ar39" value="2.80748e-16" error="5.13e0"></Isotope>  
 <Isotope id="Ar40" value="1.80876e-14" error="5.15e0"></Isotope>  
 405 <Isotope id="Ar36\_correctedForIsotopeInterference" value="5.8208e-17" error="5.73e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.80748e-16" error="5.13e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.80876e-14" error="5.15e0"></Isotope>  
 <percentage\_radiogenic\_argon>4.890</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 410 <IsotopeRatio id="radiogenicAr40\_Ar39" value="3.149e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.110</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="6.778" stddev="10.373"></MeasuredAge>  
 <RecalculatedAge>6.778</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.79e-1" error="0.0e0"></IsotopeRatio>  
 415 <IsotopeRatio id="Cl\_K" value="1.66e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.21811627856e-3" error="3.50063413825e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.55215727902e-2" error="1.59491385312e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 <StepNumber>3</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>510.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="7.07497e-17" error="5.4e0"></Isotope>  
 <Isotope id="Ar37" value="2.641e-17" error="5.023e1"></Isotope>  
 <Isotope id="Ar38" value="6.1877e-17" error="1.096e1"></Isotope>  
 <Isotope id="Ar39" value="3.43971e-16" error="4.82e0"></Isotope>  
 <Isotope id="Ar40" value="2.15981e-14" error="4.83e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="7.07497e-17" error="5.4e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.43971e-16" error="4.82e0"></Isotope>  
 420 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.15981e-14" error="4.83e0"></Isotope>  
 <percentage\_radiogenic\_argon>3.180</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="2.0e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.150</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="4.308" stddev="9.618"></MeasuredAge>  
 <RecalculatedAge>4.308</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.46e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.58e0" error="0.0e0"></IsotopeRatio>  
 425 <IsotopeRatio id="Ar36\_Ar40" value="3.27573721763e-3" error="3.35019481721e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.59259842301e-2" error="1.53609602036e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 <StepNumber>4</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>530.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>

```

<Isotope id="Ar36" value="9.2922e-17" error="4.16e0"></Isotope>
<Isotope id="Ar37" value="2.6425e-17" error="5.015e1"></Isotope>
<Isotope id="Ar38" value="7.3098e-17" error="1.053e1"></Isotope>
<Isotope id="Ar39" value="4.60573e-16" error="3.92e0"></Isotope>
<Isotope id="Ar40" value="2.91407e-14" error="3.92e0"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="9.2922e-17" error="4.16e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="4.60573e-16" error="3.92e0"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="2.91407e-14" error="3.92e0"></Isotope>
450 <percentage_radiogenic_argon>5.750</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="3.643e0" error="0.0e0"></IsotopeRatio>
455 <cumulated_percentage_Ar39_released>0.220</cumulated_percentage_Ar39_released>
<MeasuredAge value="7.837" stddev="7.540"></MeasuredAge>
<RecalculatedAge>7.837</RecalculatedAge>
460 <IsotopeRatio id="Ca_K" value="1.09e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.33e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.18873602899e-3" error="2.57575634518e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.58051453809e-2" error="1.23851886404e-3"></IsotopeRatio>
</StepData>
465 <StepData>
    <StepNumber>5</StepNumber>
    <FurnaceTemperature_DegreesCelsius>550.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.26274e-16" error="3.35e0"></Isotope>
470 <Isotope id="Ar37" value="2.6439e-17" error="5.007e1"></Isotope>
    <Isotope id="Ar38" value="7.8723e-17" error="8.24e0"></Isotope>
    <Isotope id="Ar39" value="6.9827e-16" error="2.69e0"></Isotope>
    <Isotope id="Ar40" value="3.83918e-14" error="2.7e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.26274e-16" error="3.35e0"></Isotope>
475 <Isotope id="Ar39_correctedForIsotopeInterference" value="6.9827e-16" error="2.69e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="3.83918e-14" error="2.7e0"></Isotope>
    <percentage_radiogenic_argon>2.790</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.534e0" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>0.310</cumulated_percentage_Ar39_released>
480 <MeasuredAge value="3.306" stddev="5.001"></MeasuredAge>
    <RecalculatedAge>3.306</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="7.19e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="8.18e-1" error="0.0e0"></IsotopeRatio>
485 <IsotopeRatio id="Ar36_Ar40" value="3.28908777395e-3" error="1.98910581804e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="1.81879984788e-2" error="9.79769126643e-4"></IsotopeRatio>
</StepData>
<StepData>
    <StepNumber>6</StepNumber>
    <FurnaceTemperature_DegreesCelsius>570.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.69627e-16" error="2.16e0"></Isotope>
490 <Isotope id="Ar37" value="6.7344e-16" error="2.483e1"></Isotope>
    <Isotope id="Ar38" value="9.3079e-17" error="6.25e0"></Isotope>
    <Isotope id="Ar39" value="1.12984e-15" error="1.69e0"></Isotope>
    <Isotope id="Ar40" value="5.13499e-14" error="1.69e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.69627e-16" error="2.16e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="1.12984e-15" error="1.69e0"></Isotope>
495 <Isotope id="Ar40_correctedForIsotopeInterference" value="5.13499e-14" error="1.69e0"></Isotope>
    <percentage_radiogenic_argon>2.370</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.077e0" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>0.470</cumulated_percentage_Ar39_released>
500 <MeasuredAge value="2.320" stddev="2.646"></MeasuredAge>
    <RecalculatedAge>2.320</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="1.13e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="5.18e-1" error="0.0e0"></IsotopeRatio>
505 <IsotopeRatio id="Ar36_Ar40" value="3.30335599485e-3" error="1.27259476921e-4"></IsotopeRatio>

```

510 <IsotopeRatio id="Ar39\_Ar40" value="2.20027692362e-2" error="7.43510547209e-4"></IsotopeRatio></StepData>

515 <StepData>

520 <StepNumber>7</StepNumber>

525 <FurnaceTemperature\_DegreesCelsius>590.000</FurnaceTemperature\_DegreesCelsius>

530 <Duration\_minutes>15.000</Duration\_minutes>

535 <Isotope id="Ar36" value="2.15697e-16" error="1.33e0"></Isotope>

540 <Isotope id="Ar37" value="5.8635e-16" error="2.816e1"></Isotope>

545 <Isotope id="Ar38" value="1.1096e-16" error="5.78e0"></Isotope>

550 <Isotope id="Ar39" value="1.9463e-15" error="1.12e0"></Isotope>

555 <Isotope id="Ar40" value="6.62423e-14" error="1.12e0"></Isotope>

560 <Isotope id="Ar36\_correctedForIsotopelInterference" value="2.15697e-16" error="1.33e0"></Isotope>

565 <Isotope id="Ar39\_correctedForIsotopelInterference" value="1.9463e-15" error="1.12e0"></Isotope>

570 <Isotope id="Ar40\_correctedForIsotopelInterference" value="6.62423e-14" error="1.12e0"></Isotope>

<Isotope id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>

<IsotopeRatio id="radiogenicAr40\_Ar39" value="1.281e0" error="0.0e0"></IsotopeRatio>

<cumulated\_percentage\_Ar39\_released>0.740</cumulated\_percentage\_Ar39\_released>

<MeasuredAge value="2.760" stddev="1.247"></MeasuredAge>

<RecalculatedAge>2.760</RecalculatedAge>

<IsotopeRatio id="Ca\_K" value="5.72e-1" error="0.0e0"></IsotopeRatio>

<IsotopeRatio id="Cl\_K" value="2.99e-1" error="0.0e0"></IsotopeRatio>

<IsotopeRatio id="Ar36\_Ar40" value="3.25618222797e-3" error="7.9773628727e-5"></IsotopeRatio>

<IsotopeRatio id="Ar39\_Ar40" value="2.93815281172e-2" error="6.57672945541e-4"></IsotopeRatio>

</StepData>

<StepData>

<StepNumber>8</StepNumber>

<FurnaceTemperature\_DegreesCelsius>610.000</FurnaceTemperature\_DegreesCelsius>

<Duration\_minutes>15.000</Duration\_minutes>

<Isotope id="Ar36" value="2.53178e-16" error="9.7e-1"></Isotope>

<Isotope id="Ar37" value="6.9599e-16" error="1.361e1"></Isotope>

<Isotope id="Ar38" value="1.4249e-16" error="4.16e0"></Isotope>

<Isotope id="Ar39" value="3.4546e-15" error="6.4e-1"></Isotope>

<Isotope id="Ar40" value="8.00263e-14" error="6.4e-1"></Isotope>

<Isotope id="Ar36\_correctedForIsotopelInterference" value="2.53178e-16" error="9.7e-1"></Isotope>

<Isotope id="Ar39\_correctedForIsotopelInterference" value="3.4546e-15" error="6.4e-1"></Isotope>

<Isotope id="Ar40\_correctedForIsotopelInterference" value="8.00263e-14" error="6.4e-1"></Isotope>

<percentage\_radiogenic\_argon>6.490</percentage\_radiogenic\_argon>

<IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>

<IsotopeRatio id="radiogenicAr40\_Ar39" value="1.505e0" error="0.0e0"></IsotopeRatio>

<cumulated\_percentage\_Ar39\_released>1.210</cumulated\_percentage\_Ar39\_released>

<MeasuredAge value="3.243" stddev="0.555"></MeasuredAge>

<RecalculatedAge>3.243</RecalculatedAge>

<IsotopeRatio id="Ca\_K" value="3.83e-1" error="0.0e0"></IsotopeRatio>

<IsotopeRatio id="Cl\_K" value="1.94e-1" error="0.0e0"></IsotopeRatio>

<IsotopeRatio id="Ar36\_Ar40" value="3.16368493858e-3" error="5.09353275111e-5"></IsotopeRatio>

<IsotopeRatio id="Ar39\_Ar40" value="4.31683084186e-2" error="5.52554347758e-4"></IsotopeRatio>

</StepData>

<StepData>

<StepNumber>9</StepNumber>

<FurnaceTemperature\_DegreesCelsius>630.000</FurnaceTemperature\_DegreesCelsius>

<Duration\_minutes>15.000</Duration\_minutes>

<Isotope id="Ar36" value="2.90482e-16" error="7.4e-1"></Isotope>

<Isotope id="Ar37" value="6.4854e-16" error="1.645e1"></Isotope>

<Isotope id="Ar38" value="1.7581e-16" error="2.6e0"></Isotope>

<Isotope id="Ar39" value="6.3264e-15" error="3.8e-1"></Isotope>

<Isotope id="Ar40" value="9.34653e-14" error="3.8e-1"></Isotope>

<Isotope id="Ar36\_correctedForIsotopelInterference" value="2.90482e-16" error="7.4e-1"></Isotope>

<Isotope id="Ar39\_correctedForIsotopelInterference" value="6.3264e-15" error="3.8e-1"></Isotope>

<Isotope id="Ar40\_correctedForIsotopelInterference" value="9.34653e-14" error="3.8e-1"></Isotope>

<percentage\_radiogenic\_argon>8.130</percentage\_radiogenic\_argon>

<IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>

<IsotopeRatio id="radiogenicAr40\_Ar39" value="1.203e0" error="0.0e0"></IsotopeRatio>

<cumulated\_percentage\_Ar39\_released>2.090</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.593" stddev="0.249"></MeasuredAge>  
 <RecalculatedAge>2.593</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.95e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="9.39e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.10791277619e-3" error="3.48086230933e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="6.76871523442e-2" error="5.14422357816e-4"></IsotopeRatio>  
 </StepData>  
 575 <StepData>  
 <StepNumber>10</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>650.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="3.06538e-16" error="8.4e-1"></Isotope>  
 580 <Isotope id="Ar37" value="7.1341e-16" error="1.577e1"></Isotope>  
 <Isotope id="Ar38" value="2.2658e-16" error="2.71e0"></Isotope>  
 <Isotope id="Ar39" value="1.08661e-14" error="2.9e-1"></Isotope>  
 <Isotope id="Ar40" value="1.04241e-13" error="2.9e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="3.06538e-16" error="8.4e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.08661e-14" error="2.9e-1"></Isotope>  
 585 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.04241e-13" error="2.9e-1"></Isotope>  
 <percentage\_radiogenic\_argon>13.040</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.256e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>3.590</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.706" stddev="0.164"></MeasuredAge>  
 <RecalculatedAge>2.706</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.25e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="5.05e-2" error="0.0e0"></IsotopeRatio>  
 590 <IsotopeRatio id="Ar36\_Ar40" value="2.9406663405e-3" error="3.32295296476e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.04240174212e-1" error="6.04593010428e-4"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 595 <StepNumber>11</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>670.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="2.97918e-16" error="6.6e-1"></Isotope>  
 <Isotope id="Ar37" value="7.2544e-16" error="1.306e1"></Isotope>  
 <Isotope id="Ar38" value="2.9142e-16" error="1.94e0"></Isotope>  
 <Isotope id="Ar39" value="1.68912e-14" error="2.4e-1"></Isotope>  
 <Isotope id="Ar40" value="1.08814e-13" error="2.4e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="2.97918e-16" error="6.6e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.68912e-14" error="2.4e-1"></Isotope>  
 600 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.08814e-13" error="2.4e-1"></Isotope>  
 <percentage\_radiogenic\_argon>18.980</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.229e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>5.920</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.649" stddev="0.082"></MeasuredAge>  
 <RecalculatedAge>2.649</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="8.16e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="3.12e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.73786461301e-3" error="2.46407815171e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.55230025548e-1" error="7.45104122631e-4"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 605 <StepNumber>12</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>690.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="3.00727e-16" error="7.2e-1"></Isotope>  
 <Isotope id="Ar37" value="7.7872e-16" error="1.005e1"></Isotope>  
 <Isotope id="Ar38" value="3.7555e-16" error="1.73e0"></Isotope>  
 <Isotope id="Ar39" value="2.47695e-14" error="2.1e-1"></Isotope>  
 <Isotope id="Ar40" value="1.17557e-13" error="2.1e-1"></Isotope>

635 <Isotope id="Ar36\_correctedForIsotopeInterference" value="3.00727e-16" error="7.2e-1"></Isotope>  
<Isotope id="Ar39\_correctedForIsotopeInterference" value="2.47695e-14" error="2.1e-1"></Isotope>  
<Isotope id="Ar40\_correctedForIsotopeInterference" value="1.17557e-13" error="2.1e-1"></Isotope>  
<percentage\_radiogenic\_argon>24.220</percentage\_radiogenic\_argon>  
<IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
640 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.158e0" error="0.0e0"></IsotopeRatio>  
<cumulated\_percentage\_Ar39\_released>9.330</cumulated\_percentage\_Ar39\_released>  
<MeasuredAge value="2.495" stddev="0.060"></MeasuredAge>  
<RecalculatedAge>2.495</RecalculatedAge>  
<IsotopeRatio id="Ca\_K" value="5.97e-2" error="0.0e0"></IsotopeRatio>  
645 <IsotopeRatio id="Cl\_K" value="1.85e-2" error="0.0e0"></IsotopeRatio>  
<IsotopeRatio id="Ar36\_Ar40" value="2.55813775445e-3" error="2.37906811164e-5"></IsotopeRatio>  
<IsotopeRatio id="Ar39\_Ar40" value="2.10702042413e-1" error="8.84948578137e-4"></IsotopeRatio>  
</StepData>  
<StepData>  
650 <StepNumber>13</StepNumber>  
<FurnaceTemperature\_DegreesCelsius>710.000</FurnaceTemperature\_DegreesCelsius>  
<Duration\_minutes>15.000</Duration\_minutes>  
<Isotope id="Ar36" value="2.73915e-16" error="7.0e-1"></Isotope>  
<Isotope id="Ar37" value="8.6061e-16" error="8.96e0"></Isotope>  
655 <Isotope id="Ar38" value="4.5366e-16" error="1.58e0"></Isotope>  
<Isotope id="Ar39" value="3.20097e-14" error="2.1e-1"></Isotope>  
<Isotope id="Ar40" value="1.15997e-13" error="2.1e-1"></Isotope>  
<Isotope id="Ar36\_correctedForIsotopeInterference" value="2.73915e-16" error="7.0e-1"></Isotope>  
<Isotope id="Ar39\_correctedForIsotopeInterference" value="3.20097e-14" error="2.1e-1"></Isotope>  
660 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.15997e-13" error="2.1e-1"></Isotope>  
<percentage\_radiogenic\_argon>29.930</percentage\_radiogenic\_argon>  
<IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
<IsotopeRatio id="radiogenicAr40\_Ar39" value="1.095e0" error="0.0e0"></IsotopeRatio>  
<cumulated\_percentage\_Ar39\_released>13.750</cumulated\_percentage\_Ar39\_released>  
<MeasuredAge value="2.359" stddev="0.042"></MeasuredAge>  
<RecalculatedAge>2.359</RecalculatedAge>  
<IsotopeRatio id="Ca\_K" value="5.11e-2" error="0.0e0"></IsotopeRatio>  
<IsotopeRatio id="Cl\_K" value="1.48e-2" error="0.0e0"></IsotopeRatio>  
665 <IsotopeRatio id="Ar36\_Ar40" value="2.36139727752e-3" error="2.14887152254e-5"></IsotopeRatio>  
<IsotopeRatio id="Ar39\_Ar40" value="2.75952826366e-1" error="1.15900187074e-3"></IsotopeRatio>  
</StepData>  
<StepData>  
670 <StepNumber>14</StepNumber>  
<FurnaceTemperature\_DegreesCelsius>730.000</FurnaceTemperature\_DegreesCelsius>  
<Duration\_minutes>15.000</Duration\_minutes>  
<Isotope id="Ar36" value="2.62628e-16" error="9.2e-1"></Isotope>  
<Isotope id="Ar37" value="1.0464e-15" error="8.4e0"></Isotope>  
<Isotope id="Ar38" value="5.549e-16" error="1.39e0"></Isotope>  
675 <Isotope id="Ar39" value="4.03293e-14" error="2.1e-1"></Isotope>  
<Isotope id="Ar40" value="1.21296e-13" error="2.1e-1"></Isotope>  
<Isotope id="Ar36\_correctedForIsotopeInterference" value="2.62628e-16" error="9.2e-1"></Isotope>  
<Isotope id="Ar39\_correctedForIsotopeInterference" value="4.03293e-14" error="2.1e-1"></Isotope>  
<Isotope id="Ar40\_correctedForIsotopeInterference" value="1.21296e-13" error="2.1e-1"></Isotope>  
<percentage\_radiogenic\_argon>35.610</percentage\_radiogenic\_argon>  
680 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
<IsotopeRatio id="radiogenicAr40\_Ar39" value="1.083e0" error="0.0e0"></IsotopeRatio>  
<cumulated\_percentage\_Ar39\_released>19.310</cumulated\_percentage\_Ar39\_released>  
<MeasuredAge value="2.334" stddev="0.041"></MeasuredAge>  
<RecalculatedAge>2.334</RecalculatedAge>  
685 <IsotopeRatio id="Ca\_K" value="4.93e-2" error="0.0e0"></IsotopeRatio>  
<IsotopeRatio id="Cl\_K" value="1.46e-2" error="0.0e0"></IsotopeRatio>  
<IsotopeRatio id="Ar36\_Ar40" value="2.16518269358e-3" error="2.44665644374e-5"></IsotopeRatio>  
<IsotopeRatio id="Ar39\_Ar40" value="3.32486644242e-1" error="1.39644390582e-3"></IsotopeRatio>  
</StepData>  
<StepData>  
690 <StepNumber>15</StepNumber>  
<FurnaceTemperature\_DegreesCelsius>750.000</FurnaceTemperature\_DegreesCelsius>

<Duration\_minutes>15.000</Duration\_minutes>  
 700 <Isotope id="Ar36" value="2.67299e-16" error="6.6e-1"></Isotope>  
 <Isotope id="Ar37" value="1.2551e-15" error="6.76e0"></Isotope>  
 <Isotope id="Ar38" value="6.7056e-16" error="1.39e0"></Isotope>  
 <Isotope id="Ar39" value="4.96265e-14" error="2.2e-1"></Isotope>  
 <Isotope id="Ar40" value="1.31243e-13" error="2.2e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="2.67299e-16" error="6.6e-1"></Isotope>  
 705 <Isotope id="Ar39\_correctedForIsotopeInterference" value="4.96265e-14" error="2.2e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.31243e-13" error="2.2e-1"></Isotope>  
 <percentage\_radiogenic\_argon>39.310</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 710 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.053e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>26.160</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.269" stddev="0.026"></MeasuredAge>  
 <RecalculatedAge>2.269</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="4.81e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.42e-2" error="0.0e0"></IsotopeRatio>  
 715 <IsotopeRatio id="Ar36\_Ar40" value="2.03667243205e-3" error="1.79227174021e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="3.78126833431e-1" error="1.6637580671e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 720 <StepNumber>16</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>770.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="2.73301e-16" error="7.5e-1"></Isotope>  
 <Isotope id="Ar37" value="1.4836e-15" error="7.76e0"></Isotope>  
 <Isotope id="Ar38" value="8.1053e-16" error="1.36e0"></Isotope>  
 725 <Isotope id="Ar39" value="5.96953e-14" error="2.3e-1"></Isotope>  
 <Isotope id="Ar40" value="1.43739e-13" error="2.4e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="2.73301e-16" error="7.5e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="5.96953e-14" error="2.3e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.43739e-13" error="2.4e-1"></Isotope>  
 730 <percentage\_radiogenic\_argon>43.200</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.055e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>34.390</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.273" stddev="0.026"></MeasuredAge>  
 735 <RecalculatedAge>2.273</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="4.72e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.69e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="1.90136984395e-3" error="1.88235614551e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="4.15303431915e-1" error="1.95192613e-3"></IsotopeRatio>  
 740 </StepData>  
 <StepData>  
 745 <StepNumber>17</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>790.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="2.86053e-16" error="9.2e-1"></Isotope>  
 <Isotope id="Ar37" value="2.0357e-15" error="7.24e0"></Isotope>  
 <Isotope id="Ar38" value="1.0082e-15" error="1.32e0"></Isotope>  
 <Isotope id="Ar39" value="7.38039e-14" error="2.7e-1"></Isotope>  
 <Isotope id="Ar40" value="1.62112e-13" error="2.7e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="2.86053e-16" error="9.2e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="7.38039e-14" error="2.7e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.62112e-13" error="2.7e-1"></Isotope>  
 750 <percentage\_radiogenic\_argon>47.130</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.051e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>44.570</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.265" stddev="0.027"></MeasuredAge>  
 755 <RecalculatedAge>2.265</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="5.24e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.96e-2" error="0.0e0"></IsotopeRatio>

```

<IsotopeRatio id="Ar36_Ar40" value="1.76453933083e-3" error="2.09980180369e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="4.55264878602e-1" error="2.45843034445e-3"></IsotopeRatio>
</StepData>
765 <StepData>
    <StepNumber>18</StepNumber>
    <FurnaceTemperature_DegreesCelsius>810.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="2.91417e-16" error="8.6e-1"></Isotope>
    <Isotope id="Ar37" value="2.6893e-15" error="7.98e0"></Isotope>
    <Isotope id="Ar38" value="1.2349e-15" error="1.83e0"></Isotope>
    <Isotope id="Ar39" value="8.91708e-14" error="3.2e-1"></Isotope>
    <Isotope id="Ar40" value="1.7978e-13" error="3.3e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="2.91417e-16" error="8.6e-1"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="8.91708e-14" error="3.2e-1"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="1.7978e-13" error="3.3e-1"></Isotope>
    <percentage_radiogenic_argon>51.240</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.05e0" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>56.870</cumulated_percentage_Ar39_released>
770 <MeasuredAge value="2.263" stddev="0.024"></MeasuredAge>
    <RecalculatedAge>2.263</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="5.73e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="2.33e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="1.62096451218e-3" error="1.9289477695e-5"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="4.95999555012e-1" error="3.22399710758e-3"></IsotopeRatio>
</StepData>
775 <StepData>
    <StepNumber>19</StepNumber>
    <FurnaceTemperature_DegreesCelsius>830.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="2.88042e-16" error="1.17e0"></Isotope>
    <Isotope id="Ar37" value="3.6449e-15" error="8.71e0"></Isotope>
    <Isotope id="Ar38" value="1.465e-15" error="2.2e0"></Isotope>
    <Isotope id="Ar39" value="1.03514e-13" error="3.6e-1"></Isotope>
    <Isotope id="Ar40" value="1.94043e-13" error="3.9e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="2.88042e-16" error="1.17e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="1.03514e-13" error="3.6e-1"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="1.94043e-13" error="3.9e-1"></Isotope>
    <percentage_radiogenic_argon>55.140</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.052e0" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>71.150</cumulated_percentage_Ar39_released>
    <MeasuredAge value="2.267" stddev="0.027"></MeasuredAge>
    <RecalculatedAge>2.267</RecalculatedAge>
780 <IsotopeRatio id="Ca_K" value="6.69e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="2.82e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="1.4844235556e-3" error="2.31570074674e-5"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="5.33459078658e-1" error="4.00094308993e-3"></IsotopeRatio>
</StepData>
785 <StepData>
    <StepNumber>20</StepNumber>
    <FurnaceTemperature_DegreesCelsius>850.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="2.7248e-16" error="1.14e0"></Isotope>
    <Isotope id="Ar37" value="4.1385e-15" error="8.99e0"></Isotope>
    <Isotope id="Ar38" value="1.5228e-15" error="2.55e0"></Isotope>
    <Isotope id="Ar39" value="1.04537e-13" error="3.9e-1"></Isotope>
    <Isotope id="Ar40" value="1.89321e-13" error="4.3e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="2.7248e-16" error="1.14e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="1.04537e-13" error="3.9e-1"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="1.89321e-13" error="4.3e-1"></Isotope>
    <percentage_radiogenic_argon>56.420</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>

```

825 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.041e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>85.570</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.243" stddev="0.026"></MeasuredAge>  
 <RecalculatedAge>2.243</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="7.52e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="3.37e-2" error="0.0e0"></IsotopeRatio>  
 830 <IsotopeRatio id="Ar36\_Ar40" value="1.43924868345e-3" error="2.25962043302e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="5.52168010944e-1" error="4.52777768974e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 835 <StepNumber>21</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>870.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="2.41452e-16" error="1.4e0"></Isotope>  
 <Isotope id="Ar37" value="3.4642e-15" error="9.5e0"></Isotope>  
 <Isotope id="Ar38" value="1.1149e-15" error="2.95e0"></Isotope>  
 840 <Isotope id="Ar39" value="7.2712e-14" error="4.0e-1"></Isotope>  
 <Isotope id="Ar40" value="1.47457e-13" error="4.5e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="2.41452e-16" error="1.4e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="7.2712e-14" error="4.0e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.47457e-13" error="4.5e-1"></Isotope>  
 845 <percentage\_radiogenic\_argon>50.770</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.047e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>95.600</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.255" stddev="0.036"></MeasuredAge>  
 <RecalculatedAge>2.255</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="9.05e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="4.14e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="1.63744006727e-3" error="3.02926412446e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="4.93106464936e-1" error="4.19140495195e-3"></IsotopeRatio>  
 850 </StepData>  
 <StepData>  
 855 <StepNumber>22</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>890.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="2.31575e-16" error="1.6e0"></Isotope>  
 <Isotope id="Ar37" value="2.7435e-15" error="9.78e0"></Isotope>  
 <Isotope id="Ar38" value="4.6575e-16" error="5.74e0"></Isotope>  
 <Isotope id="Ar39" value="1.95525e-14" error="6.5e-1"></Isotope>  
 <Isotope id="Ar40" value="8.848e-14" error="7.3e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="2.31575e-16" error="1.6e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.95525e-14" error="6.5e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="8.848e-14" error="7.3e-1"></Isotope>  
 <percentage\_radiogenic\_argon>22.480</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.025e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>98.300</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.209" stddev="0.141"></MeasuredAge>  
 <RecalculatedAge>2.209</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.67e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.25e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.61725813743e-3" error="6.09821146022e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="2.20982142857e-1" error="3.04955357143e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 880 <StepNumber>23</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>910.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.47769e-16" error="3.7e0"></Isotope>  
 <Isotope id="Ar37" value="2.1835e-15" error="1.016e1"></Isotope>  
 <Isotope id="Ar38" value="2.2728e-16" error="1.104e1"></Isotope>  
 885 <Isotope id="Ar39" value="2.24202e-15" error="3.3e0"></Isotope>

```

890 <Isotope id="Ar40" value="4.63629e-14" error="3.37e0"></Isotope>
     <Isotope id="Ar36_correctedForIsotopeInterference" value="1.47769e-16" error="3.7e0"></Isotope>
     <Isotope id="Ar39_correctedForIsotopeInterference" value="2.24202e-15" error="3.3e0"></Isotope>
     <Isotope id="Ar40_correctedForIsotopeInterference" value="4.63629e-14" error="3.37e0"></Isotope>
     <percentage_radiogenic_argon>5.790</percentage_radiogenic_argon>
     <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
     <IsotopeRatio id="radiogenicAr40_Ar39" value="1.2e0" error="0.0e0"></IsotopeRatio>
     <cumulated_percentage_Ar39_released>98.610</cumulated_percentage_Ar39_released>
895 <MeasuredAge value="2.585" stddev="2.163"></MeasuredAge>
     <RecalculatedAge>2.585</RecalculatedAge>
     <IsotopeRatio id="Ca_K" value="1.85e0" error="0.0e0"></IsotopeRatio>
     <IsotopeRatio id="Cl_K" value="9.49e-1" error="0.0e0"></IsotopeRatio>
     <IsotopeRatio id="Ar36_Ar40" value="3.18722513044e-3" error="2.2613099186e-4"></IsotopeRatio>
900 <IsotopeRatio id="Ar39_Ar40" value="4.83580621575e-2" error="3.22267948663e-3"></IsotopeRatio>
</StepData>
<StepData>
905   <StepNumber>24</StepNumber>
     <FurnaceTemperature_DegreesCelsius>930.000</FurnaceTemperature_DegreesCelsius>
     <Duration_minutes>15.000</Duration_minutes>
     <Isotope id="Ar36" value="1.11512e-16" error="5.78e0"></Isotope>
     <Isotope id="Ar37" value="1.7902e-15" error="1.316e1"></Isotope>
     <Isotope id="Ar38" value="1.8847e-16" error="1.285e1"></Isotope>
     <Isotope id="Ar39" value="1.14055e-15" error="5.39e0"></Isotope>
910   <Isotope id="Ar40" value="3.37971e-14" error="5.45e0"></Isotope>
     <Isotope id="Ar36_correctedForIsotopeInterference" value="1.11512e-16" error="5.78e0"></Isotope>
     <Isotope id="Ar39_correctedForIsotopeInterference" value="1.14055e-15" error="5.39e0"></Isotope>
     <Isotope id="Ar40_correctedForIsotopeInterference" value="3.37971e-14" error="5.45e0"></Isotope>
     <percentage_radiogenic_argon>2.480</percentage_radiogenic_argon>
     <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
     <IsotopeRatio id="radiogenicAr40_Ar39" value="7.362e-1" error="0.0e0"></IsotopeRatio>
     <cumulated_percentage_Ar39_released>98.770</cumulated_percentage_Ar39_released>
     <MeasuredAge value="1.587" stddev="5.021"></MeasuredAge>
     <RecalculatedAge>1.587</RecalculatedAge>
920   <IsotopeRatio id="Ca_K" value="2.98e0" error="0.0e0"></IsotopeRatio>
     <IsotopeRatio id="Cl_K" value="1.66e0" error="0.0e0"></IsotopeRatio>
     <IsotopeRatio id="Ar36_Ar40" value="3.29945468694e-3" error="3.72198078912e-4"></IsotopeRatio>
     <IsotopeRatio id="Ar39_Ar40" value="3.3746978291e-2" error="3.65872026009e-3"></IsotopeRatio>
</StepData>
925   <StepNumber>25</StepNumber>
     <FurnaceTemperature_DegreesCelsius>950.000</FurnaceTemperature_DegreesCelsius>
     <Duration_minutes>15.000</Duration_minutes>
     <Isotope id="Ar36" value="1.02187e-16" error="6.22e0"></Isotope>
     <Isotope id="Ar37" value="1.572e-15" error="1.212e1"></Isotope>
     <Isotope id="Ar38" value="1.6508e-16" error="1.359e1"></Isotope>
     <Isotope id="Ar39" value="9.33437e-16" error="5.72e0"></Isotope>
     <Isotope id="Ar40" value="3.0626e-14" error="5.78e0"></Isotope>
     <Isotope id="Ar36_correctedForIsotopeInterference" value="1.02187e-16" error="6.22e0"></Isotope>
     <Isotope id="Ar39_correctedForIsotopeInterference" value="9.33437e-16" error="5.72e0"></Isotope>
     <Isotope id="Ar40_correctedForIsotopeInterference" value="3.0626e-14" error="5.78e0"></Isotope>
     <percentage_radiogenic_argon>1.390</percentage_radiogenic_argon>
     <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
     <IsotopeRatio id="radiogenicAr40_Ar39" value="4.549e-1" error="0.0e0"></IsotopeRatio>
930   <cumulated_percentage_Ar39_released>98.900</cumulated_percentage_Ar39_released>
     <MeasuredAge value="0.981" stddev="5.967"></MeasuredAge>
     <RecalculatedAge>0.981</RecalculatedAge>
     <IsotopeRatio id="Ca_K" value="3.2e0" error="0.0e0"></IsotopeRatio>
     <IsotopeRatio id="Cl_K" value="1.77e0" error="0.0e0"></IsotopeRatio>
     <IsotopeRatio id="Ar36_Ar40" value="3.33660941684e-3" error="4.0215285253e-4"></IsotopeRatio>
940   <IsotopeRatio id="Ar39_Ar40" value="3.04785802913e-2" error="3.5061552011e-3"></IsotopeRatio>
</StepData>
945   <StepNumber>26</StepNumber>

```

950 <FurnaceTemperature\_DegreesCelsius>1000.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.11269e-16" error="5.75e0"></Isotope>  
 <Isotope id="Ar37" value="1.4206e-15" error="1.394e1"></Isotope>  
 <Isotope id="Ar38" value="1.4952e-16" error="1.233e1"></Isotope>  
 955 <Isotope id="Ar39" value="8.83128e-16" error="5.46e0"></Isotope>  
 <Isotope id="Ar40" value="3.41227e-14" error="5.49e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.11269e-16" error="5.75e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="8.83128e-16" error="5.46e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.41227e-14" error="5.49e0"></Isotope>  
 960 <percentage\_radiogenic\_argon>3.620</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.401e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.020</cumulated\_percentage\_Ar39\_released>  
 965 <MeasuredAge value="3.018" stddev="6.501"></MeasuredAge>  
 <RecalculatedAge>3.018</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="3.06e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.64e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.26084981552e-3" error="3.6785394706e-4"></IsotopeRatio>  
 970 <IsotopeRatio id="Ar39\_Ar40" value="2.58809531485e-2" error="2.83513044624e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 <StepNumber>27</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1050.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 975 <Isotope id="Ar36" value="1.33311e-16" error="5.51e0"></Isotope>  
 <Isotope id="Ar37" value="1.1997e-15" error="1.665e1"></Isotope>  
 <Isotope id="Ar38" value="1.4484e-16" error="1.177e1"></Isotope>  
 <Isotope id="Ar39" value="8.13915e-16" error="5.31e0"></Isotope>  
 980 <Isotope id="Ar40" value="3.98274e-14" error="5.33e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.33311e-16" error="5.51e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="8.13915e-16" error="5.31e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.98274e-14" error="5.33e0"></Isotope>  
 <percentage\_radiogenic\_argon>1.070</percentage\_radiogenic\_argon>  
 985 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="5.251e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.130</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="1.132" stddev="8.051"></MeasuredAge>  
 <RecalculatedAge>1.132</RecalculatedAge>  
 990 <IsotopeRatio id="Ca\_K" value="2.8e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.66e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.34721824673e-3" error="3.6375400828e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="2.04360565842e-2" error="2.17544017062e-3"></IsotopeRatio>  
 </StepData>  
 995 <StepData>  
 <StepNumber>28</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1100.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="2.09405e-16" error="5.19e0"></Isotope>  
 <Isotope id="Ar37" value="1.3414e-15" error="1.468e1"></Isotope>  
 <Isotope id="Ar38" value="1.4956e-16" error="1.028e1"></Isotope>  
 <Isotope id="Ar39" value="7.73034e-16" error="5.08e0"></Isotope>  
 <Isotope id="Ar40" value="6.38011e-14" error="5.09e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="2.09405e-16" error="5.19e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="7.73034e-16" error="5.08e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="6.38011e-14" error="5.09e0"></Isotope>  
 000 <percentage\_radiogenic\_argon>2.990</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="2.473e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.240</cumulated\_percentage\_Ar39\_released>  
 005 <MeasuredAge value="5.324" stddev="12.698"></MeasuredAge>  
 <RecalculatedAge>5.324</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="3.3e0" error="0.0e0"></IsotopeRatio>

```

<IsotopeRatio id="Cl_K" value="1.59e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.2821534425e-3" error="3.38017390759e-4"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.21163114743e-2" error="1.23342738966e-3"></IsotopeRatio>
</StepData>
<StepData>
    <StepNumber>29</StepNumber>
    <FurnaceTemperature_DegreesCelsius>1200.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="5.28767e-16" error="3.56e0"></Isotope>
    <Isotope id="Ar37" value="1.375e-15" error="1.043e1"></Isotope>
    <Isotope id="Ar38" value="2.0633e-16" error="6.43e0"></Isotope>
    <Isotope id="Ar39" value="1.06053e-15" error="3.51e0"></Isotope>
    <Isotope id="Ar40" value="1.57278e-13" error="3.51e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="5.28767e-16" error="3.56e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="1.06053e-15" error="3.51e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="1.57278e-13" error="3.51e0"></Isotope>
    <percentage_radiogenic_argon>0.640</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="9.444e-1" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>99.380</cumulated_percentage_Ar39_released>
    <MeasuredAge value="2.035" stddev="15.911"></MeasuredAge>
    <RecalculatedAge>2.035</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="2.46e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="1.07e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.36198959804e-3" error="2.37856894031e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="6.74302826842e-3" error="4.73741783739e-4"></IsotopeRatio>
</StepData>
<StepData>
    <StepNumber>30</StepNumber>
    <FurnaceTemperature_DegreesCelsius>1300.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.37124e-15" error="2.42e0"></Isotope>
    <Isotope id="Ar37" value="1.1734e-15" error="1.143e1"></Isotope>
    <Isotope id="Ar38" value="3.7214e-16" error="3.67e0"></Isotope>
    <Isotope id="Ar39" value="1.51895e-15" error="2.37e0"></Isotope>
    <Isotope id="Ar40" value="4.00488e-13" error="2.37e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.37124e-15" error="2.42e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="1.51895e-15" error="2.37e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="4.00488e-13" error="2.37e0"></Isotope>
    <percentage_radiogenic_argon>0.010</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>99.590</cumulated_percentage_Ar39_released>
    <MeasuredAge value="0.002" stddev="19.382"></MeasuredAge>
    <RecalculatedAge>0.002</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="1.47e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="7.4e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.42392281417e-3" error="1.64027662655e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="3.79274784763e-3" error="1.79865331802e-4"></IsotopeRatio>
</StepData>
<StepData>
    <StepNumber>31</StepNumber>
    <FurnaceTemperature_DegreesCelsius>1450.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.34461e-15" error="1.35e0"></Isotope>
    <Isotope id="Ar37" value="1.0806e-15" error="1.135e1"></Isotope>
    <Isotope id="Ar38" value="3.9618e-16" error="2.75e0"></Isotope>
    <Isotope id="Ar39" value="2.94886e-15" error="1.26e0"></Isotope>
    <Isotope id="Ar40" value="4.02358e-13" error="1.26e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.34461e-15" error="1.35e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="2.94886e-15" error="1.26e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="4.02358e-13" error="1.26e0"></Isotope>
    <percentage_radiogenic_argon>1.230</percentage_radiogenic_argon>

```

```

<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="1.682e0" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>100.000</cumulated_percentage_Ar39_released>
<MeasuredAge value="3.622" stddev="5.381"></MeasuredAge>
080 <RecalculatedAge>3.622</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="6.96e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="4.35e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="3.34182494197e-3" error="8.72248173732e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="7.32894586413e-3" error="1.8469522437e-4"></IsotopeRatio>
085 </StepData>
<CalculationParameters>
    <Parameter id="J_Factor" value="1.1953e-3" uncertainty="2.4e-1"></Parameter>
    <Parameter id="FluxMonitorAge" value="98.50" uncertainty="0.80" />
    <Parameter id="MassDiscrimination" value="0.98769" uncertainty="0.15" />
090    <Parameter id="Atmospheric_40_36_ratio" value="2.9555e2"></Parameter>
    <Parameter id="DecayConstantK" value="5.543e-10" uncertainty="0.192"></Parameter>
</CalculationParameters>
</ArgonData>
</eArgonDataObject>
095 <eArgonDataObject>
    <ArgonData>
        <SampleDescription>ANU CAN #30, D3049860, Foil: A10, Alunite, 131.2mg, Steps: 32</SampleDescription>
        <StepData>
            <StepNumber>0</StepNumber>
            <FurnaceTemperature_DegreesCelsius>450.000</FurnaceTemperature_DegreesCelsius>
            <Duration_minutes>15.000</Duration_minutes>
            <Isotope id="Ar36" value="1.04758e-16" error="2.33e0"></Isotope>
            <Isotope id="Ar37" value="2.8008e-17" error="5.004e1"></Isotope>
            <Isotope id="Ar38" value="3.2685e-17" error="8.03e0"></Isotope>
            <Isotope id="Ar39" value="1.2406e-16" error="1.91e0"></Isotope>
            <Isotope id="Ar40" value="3.2131e-14" error="1.91e0"></Isotope>
            <Isotope id="Ar36_correctedForIsotopeInterference" value="1.04758e-16" error="2.33e0"></Isotope>
            <Isotope id="Ar39_correctedForIsotopeInterference" value="1.2406e-16" error="1.91e0"></Isotope>
            <Isotope id="Ar40_correctedForIsotopeInterference" value="3.2131e-14" error="1.91e0"></Isotope>
100 <percentage_radiogenic_argon>3.640</percentage_radiogenic_argon>
            <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
            <IsotopeRatio id="radiogenicAr40_Ar39" value="9.428e0" error="0.0e0"></IsotopeRatio>
            <cumulated_percentage_Ar39_released>0.000</cumulated_percentage_Ar39_released>
            <MeasuredAge value="20.216" stddev="16.287"></MeasuredAge>
            <RecalculatedAge>20.216</RecalculatedAge>
            <IsotopeRatio id="Ca_K" value="4.29e-1" error="0.0e0"></IsotopeRatio>
            <IsotopeRatio id="Cl_K" value="1.1e0" error="0.0e0"></IsotopeRatio>
            <IsotopeRatio id="Ar36_Ar40" value="3.26034048116e-3" error="1.38237062393e-4"></IsotopeRatio>
            <IsotopeRatio id="Ar39_Ar40" value="3.86106874981e-3" error="1.47498241792e-4"></IsotopeRatio>
105 </StepData>
<StepData>
            <StepNumber>1</StepNumber>
            <FurnaceTemperature_DegreesCelsius>470.000</FurnaceTemperature_DegreesCelsius>
            <Duration_minutes>15.000</Duration_minutes>
            <Isotope id="Ar36" value="7.21123e-17" error="3.59e0"></Isotope>
            <Isotope id="Ar37" value="2.8024e-17" error="5.009e1"></Isotope>
            <Isotope id="Ar38" value="2.6718e-17" error="8.22e0"></Isotope>
            <Isotope id="Ar39" value="1.09198e-16" error="2.96e0"></Isotope>
            <Isotope id="Ar40" value="2.20646e-14" error="2.97e0"></Isotope>
            <Isotope id="Ar36_correctedForIsotopeInterference" value="7.21123e-17" error="3.59e0"></Isotope>
            <Isotope id="Ar39_correctedForIsotopeInterference" value="1.09198e-16" error="2.96e0"></Isotope>
            <Isotope id="Ar40_correctedForIsotopeInterference" value="2.20646e-14" error="2.97e0"></Isotope>
            <percentage_radiogenic_argon>3.410</percentage_radiogenic_argon>
            <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
            <IsotopeRatio id="radiogenicAr40_Ar39" value="6.885e0" error="0.0e0"></IsotopeRatio>
            <cumulated_percentage_Ar39_released>0.010</cumulated_percentage_Ar39_released>
            <MeasuredAge value="14.785" stddev="19.711"></MeasuredAge>
            <RecalculatedAge>14.785</RecalculatedAge>
110 </StepData>
<StepData>
            <StepNumber>2</StepNumber>
            <FurnaceTemperature_DegreesCelsius>490.000</FurnaceTemperature_DegreesCelsius>
            <Duration_minutes>15.000</Duration_minutes>
            <Isotope id="Ar36" value="4.55615e-17" error="2.27e0"></Isotope>
            <Isotope id="Ar37" value="1.82246e-17" error="4.58e1"></Isotope>
            <Isotope id="Ar38" value="1.70592e-17" error="8.54e0"></Isotope>
            <Isotope id="Ar39" value="1.05375e-16" error="2.53e0"></Isotope>
            <Isotope id="Ar40" value="2.10234e-14" error="2.53e0"></Isotope>
            <Isotope id="Ar36_correctedForIsotopeInterference" value="4.55615e-17" error="2.27e0"></Isotope>
            <Isotope id="Ar39_correctedForIsotopeInterference" value="1.05375e-16" error="2.53e0"></Isotope>
            <Isotope id="Ar40_correctedForIsotopeInterference" value="2.10234e-14" error="2.53e0"></Isotope>
            <percentage_radiogenic_argon>3.410</percentage_radiogenic_argon>
            <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
            <IsotopeRatio id="radiogenicAr40_Ar39" value="6.885e0" error="0.0e0"></IsotopeRatio>
            <cumulated_percentage_Ar39_released>0.020</cumulated_percentage_Ar39_released>
            <MeasuredAge value="14.785" stddev="19.711"></MeasuredAge>
            <RecalculatedAge>14.785</RecalculatedAge>
115 </StepData>
<StepData>
            <StepNumber>3</StepNumber>
            <FurnaceTemperature_DegreesCelsius>510.000</FurnaceTemperature_DegreesCelsius>
            <Duration_minutes>15.000</Duration_minutes>
            <Isotope id="Ar36" value="2.87807e-17" error="1.34e0"></Isotope>
            <Isotope id="Ar37" value="1.03123e-17" error="3.37e1"></Isotope>
            <Isotope id="Ar38" value="9.7355e-18" error="7.74e0"></Isotope>
            <Isotope id="Ar39" value="6.26725e-17" error="1.74e0"></Isotope>
            <Isotope id="Ar40" value="1.35345e-15" error="1.74e0"></Isotope>
            <Isotope id="Ar36_correctedForIsotopeInterference" value="2.87807e-17" error="1.34e0"></Isotope>
            <Isotope id="Ar39_correctedForIsotopeInterference" value="6.26725e-17" error="1.74e0"></Isotope>
            <Isotope id="Ar40_correctedForIsotopeInterference" value="1.35345e-15" error="1.74e0"></Isotope>
            <percentage_radiogenic_argon>3.410</percentage_radiogenic_argon>
            <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
            <IsotopeRatio id="radiogenicAr40_Ar39" value="6.885e0" error="0.0e0"></IsotopeRatio>
            <cumulated_percentage_Ar39_released>0.030</cumulated_percentage_Ar39_released>
            <MeasuredAge value="14.785" stddev="19.711"></MeasuredAge>
            <RecalculatedAge>14.785</RecalculatedAge>
120 </StepData>
<StepData>
            <StepNumber>4</StepNumber>
            <FurnaceTemperature_DegreesCelsius>530.000</FurnaceTemperature_DegreesCelsius>
            <Duration_minutes>15.000</Duration_minutes>
            <Isotope id="Ar36" value="1.43903e-17" error="6.70e0"></Isotope>
            <Isotope id="Ar37" value="5.15611e-18" error="1.70e1"></Isotope>
            <Isotope id="Ar38" value="4.64752e-18" error="4.30e0"></Isotope>
            <Isotope id="Ar39" value="3.09475e-17" error="7.74e0"></Isotope>
            <Isotope id="Ar40" value="6.18950e-16" error="7.74e0"></Isotope>
            <Isotope id="Ar36_correctedForIsotopeInterference" value="1.43903e-17" error="6.70e0"></Isotope>
            <Isotope id="Ar39_correctedForIsotopeInterference" value="3.09475e-17" error="7.74e0"></Isotope>
            <Isotope id="Ar40_correctedForIsotopeInterference" value="6.18950e-16" error="7.74e0"></Isotope>
            <percentage_radiogenic_argon>3.410</percentage_radiogenic_argon>
            <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
            <IsotopeRatio id="radiogenicAr40_Ar39" value="6.885e0" error="0.0e0"></IsotopeRatio>
            <cumulated_percentage_Ar39_released>0.040</cumulated_percentage_Ar39_released>
            <MeasuredAge value="14.785" stddev="19.711"></MeasuredAge>
            <RecalculatedAge>14.785</RecalculatedAge>
125 </StepData>
<StepData>
            <StepNumber>5</StepNumber>
            <FurnaceTemperature_DegreesCelsius>550.000</FurnaceTemperature_DegreesCelsius>
            <Duration_minutes>15.000</Duration_minutes>
            <Isotope id="Ar36" value="7.19401e-18" error="3.35e0"></Isotope>
            <Isotope id="Ar37" value="2.39803e-18" error="8.50e0"></Isotope>
            <Isotope id="Ar38" value="2.07917e-18" error="4.15e0"></Isotope>
            <Isotope id="Ar39" value="1.35947e-17" error="3.35e0"></Isotope>
            <Isotope id="Ar40" value="3.39893e-16" error="3.35e0"></Isotope>
            <Isotope id="Ar36_correctedForIsotopeInterference" value="7.19401e-18" error="3.35e0"></Isotope>
            <Isotope id="Ar39_correctedForIsotopeInterference" value="1.35947e-17" error="3.35e0"></Isotope>
            <Isotope id="Ar40_correctedForIsotopeInterference" value="3.39893e-16" error="3.35e0"></Isotope>
            <percentage_radiogenic_argon>3.410</percentage_radiogenic_argon>
            <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
            <IsotopeRatio id="radiogenicAr40_Ar39" value="6.885e0" error="0.0e0"></IsotopeRatio>
            <cumulated_percentage_Ar39_released>0.050</cumulated_percentage_Ar39_released>
            <MeasuredAge value="14.785" stddev="19.711"></MeasuredAge>
            <RecalculatedAge>14.785</RecalculatedAge>
130 </StepData>
<StepData>
            <StepNumber>6</StepNumber>
            <FurnaceTemperature_DegreesCelsius>570.000</FurnaceTemperature_DegreesCelsius>
            <Duration_minutes>15.000</Duration_minutes>
            <Isotope id="Ar36" value="3.59701e-18" error="1.69e0"></Isotope>
            <Isotope id="Ar37" value="9.00000e-19" error="4.00e0"></Isotope>
            <Isotope id="Ar38" value="7.50000e-19" error="2.00e0"></Isotope>
            <Isotope id="Ar39" value="4.99999e-18" error="1.69e0"></Isotope>
            <Isotope id="Ar40" value="1.19999e-16" error="1.69e0"></Isotope>
            <Isotope id="Ar36_correctedForIsotopeInterference" value="3.59701e-18" error="1.69e0"></Isotope>
            <Isotope id="Ar39_correctedForIsotopeInterference" value="4.99999e-18" error="1.69e0"></Isotope>
            <Isotope id="Ar40_correctedForIsotopeInterference" value="1.19999e-16" error="1.69e0"></Isotope>
            <percentage_radiogenic_argon>3.410</percentage_radiogenic_argon>
            <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
            <IsotopeRatio id="radiogenicAr40_Ar39" value="6.885e0" error="0.0e0"></IsotopeRatio>
            <cumulated_percentage_Ar39_released>0.060</cumulated_percentage_Ar39_released>
            <MeasuredAge value="14.785" stddev="19.711"></MeasuredAge>
            <RecalculatedAge>14.785</RecalculatedAge>
135 </StepData>
<StepData>
            <StepNumber>7</StepNumber>
            <FurnaceTemperature_DegreesCelsius>590.000</FurnaceTemperature_DegreesCelsius>
            <Duration_minutes>15.000</Duration_minutes>
            <Isotope id="Ar36" value="1.39899e-18" error="5.00e0"></Isotope>
            <Isotope id="Ar37" value="3.33333e-19" error="1.67e0"></Isotope>
            <Isotope id="Ar38" value="2.66667e-19" error="8.33e0"></Isotope>
            <Isotope id="Ar39" value="1.79999e-18" error="5.00e0"></Isotope>
            <Isotope id="Ar40" value="4.19999e-17" error="5.00e0"></Isotope>
            <Isotope id="Ar36_correctedForIsotopeInterference" value="1.39899e-18" error="5.00e0"></Isotope>
            <Isotope id="Ar39_correctedForIsotopeInterference" value="1.79999e-18" error="5.00e0"></Isotope>
            <Isotope id="Ar40_correctedForIsotopeInterference" value="4.19999e-17" error="5.00e0"></Isotope>
            <percentage_radiogenic_argon>3.410</percentage_radiogenic_argon>
            <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
            <IsotopeRatio id="radiogenicAr40_Ar39" value="6.885e0" error="0.0e0"></IsotopeRatio>
            <cumulated_percentage_Ar39_released>0.070</cumulated_percentage_Ar39_released>
            <MeasuredAge value="14.785" stddev="19.711"></MeasuredAge>
            <RecalculatedAge>14.785</RecalculatedAge>

```

```

140 <IsotopeRatio id="Ca_K" value="4.88e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="1.31e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.2682350915e-3" error="2.14400942541e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="4.9490133517e-3" error="2.9349039333e-4"></IsotopeRatio>
</StepData>
145 <StepData>
    <StepNumber>2</StepNumber>
    <FurnaceTemperature_DegreesCelsius>490.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.36956e-16" error="2.68e0"></Isotope>
    <Isotope id="Ar37" value="2.8039e-17" error="5.005e1"></Isotope>
    <Isotope id="Ar38" value="3.7317e-17" error="7.57e0"></Isotope>
    <Isotope id="Ar39" value="1.6508e-16" error="2.2e0"></Isotope>
    <Isotope id="Ar40" value="4.0522e-14" error="2.2e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.36956e-16" error="2.68e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="1.6508e-16" error="2.2e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="4.0522e-14" error="2.2e0"></Isotope>
    <percentage_radiogenic_argon>0.110</percentage_radiogenic_argon>
    <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="2.712e-1" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>0.020</cumulated_percentage_Ar39_released>
150 <MeasuredAge value="0.585" stddev="18.336"></MeasuredAge>
    <RecalculatedAge>0.585</RecalculatedAge>
    <IsotopeRatio id="Ca_K" value="3.23e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="6.81e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.37979369232e-3" error="1.64926371891e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="4.07383643453e-3" error="1.79243979471e-4"></IsotopeRatio>
</StepData>
155 <StepData>
    <StepNumber>3</StepNumber>
    <FurnaceTemperature_DegreesCelsius>510.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="1.7575e-16" error="2.0e0"></Isotope>
    <Isotope id="Ar37" value="2.8054e-17" error="5.003e1"></Isotope>
    <Isotope id="Ar38" value="5.1872e-17" error="4.07e0"></Isotope>
    <Isotope id="Ar39" value="2.50377e-16" error="1.72e0"></Isotope>
    <Isotope id="Ar40" value="5.28371e-14" error="1.72e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="1.7575e-16" error="2.0e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="2.50377e-16" error="1.72e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="5.28371e-14" error="1.72e0"></Isotope>
    <percentage_radiogenic_argon>1.690</percentage_radiogenic_argon>
160 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="3.572e0" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>0.020</cumulated_percentage_Ar39_released>
    <MeasuredAge value="7.685" stddev="11.821"></MeasuredAge>
    <RecalculatedAge>7.685</RecalculatedAge>
165 <IsotopeRatio id="Ca_K" value="2.13e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="7.5e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.32626128232e-3" error="1.23725461255e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="4.73865901043e-3" error="1.63000473082e-4"></IsotopeRatio>
</StepData>
170 <StepData>
    <StepNumber>4</StepNumber>
    <FurnaceTemperature_DegreesCelsius>530.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="2.29549e-16" error="1.42e0"></Isotope>
    <Isotope id="Ar37" value="2.807e-17" error="5.001e1"></Isotope>
    <Isotope id="Ar38" value="6.3575e-17" error="4.88e0"></Isotope>
    <Isotope id="Ar39" value="4.06123e-16" error="1.0e0"></Isotope>
    <Isotope id="Ar40" value="6.96967e-14" error="1.0e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="2.29549e-16" error="1.42e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="4.06123e-16" error="1.0e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="6.96967e-14" error="1.0e0"></Isotope>
175 <MeasuredAge value="7.685" stddev="11.821"></MeasuredAge>
    <RecalculatedAge>7.685</RecalculatedAge>
180 <IsotopeRatio id="Ca_K" value="2.13e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="7.5e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.32626128232e-3" error="1.23725461255e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="4.73865901043e-3" error="1.63000473082e-4"></IsotopeRatio>
</StepData>
185 <StepData>
    <StepNumber>4</StepNumber>
    <FurnaceTemperature_DegreesCelsius>530.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="2.29549e-16" error="1.42e0"></Isotope>
    <Isotope id="Ar37" value="2.807e-17" error="5.001e1"></Isotope>
    <Isotope id="Ar38" value="6.3575e-17" error="4.88e0"></Isotope>
    <Isotope id="Ar39" value="4.06123e-16" error="1.0e0"></Isotope>
    <Isotope id="Ar40" value="6.96967e-14" error="1.0e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="2.29549e-16" error="1.42e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="4.06123e-16" error="1.0e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="6.96967e-14" error="1.0e0"></Isotope>
190 <MeasuredAge value="7.685" stddev="11.821"></MeasuredAge>
    <RecalculatedAge>7.685</RecalculatedAge>
195 <IsotopeRatio id="Ca_K" value="2.13e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="7.5e-1" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="3.32626128232e-3" error="1.23725461255e-4"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="4.73865901043e-3" error="1.63000473082e-4"></IsotopeRatio>
</StepData>
200 <StepData>
    <StepNumber>4</StepNumber>
    <FurnaceTemperature_DegreesCelsius>530.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="2.29549e-16" error="1.42e0"></Isotope>
    <Isotope id="Ar37" value="2.807e-17" error="5.001e1"></Isotope>
    <Isotope id="Ar38" value="6.3575e-17" error="4.88e0"></Isotope>
    <Isotope id="Ar39" value="4.06123e-16" error="1.0e0"></Isotope>
    <Isotope id="Ar40" value="6.96967e-14" error="1.0e0"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="2.29549e-16" error="1.42e0"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="4.06123e-16" error="1.0e0"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="6.96967e-14" error="1.0e0"></Isotope>

```

205 <percentage\_radiogenic\_argon>2.660</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="4.564e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.040</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="9.814" stddev="6.274"></MeasuredAge>  
 <RecalculatedAge>9.814</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.31e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="4.51e-1" error="0.0e0"></IsotopeRatio>  
 210 <IsotopeRatio id="Ar36\_Ar40" value="3.29354187501e-3" error="7.96923253479e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="5.82700472189e-3" error="1.16522737054e-4"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 215 <StepNumber>5</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>550.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="2.83121e-16" error="1.08e0"></Isotope>  
 <Isotope id="Ar37" value="2.8085e-17" error="5.001e1"></Isotope>  
 <Isotope id="Ar38" value="7.7413e-17" error="3.36e0"></Isotope>  
 220 <Isotope id="Ar39" value="6.51439e-16" error="7.2e-1"></Isotope>  
 <Isotope id="Ar40" value="8.51785e-14" error="7.2e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="2.83121e-16" error="1.08e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="6.51439e-16" error="7.2e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="8.51785e-14" error="7.2e-1"></Isotope>  
 225 <percentage\_radiogenic\_argon>1.760</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="2.306e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.070</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="4.965" stddev="3.601"></MeasuredAge>  
 230 <RecalculatedAge>4.965</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="8.19e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="2.96e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.3238551982e-3" error="5.98161971831e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="7.64792758736e-3" error="1.10105915493e-4"></IsotopeRatio>  
 235 </StepData>  
 <StepData>  
 <StepNumber>6</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>570.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 240 <Isotope id="Ar36" value="3.06552e-16" error="9.7e-1"></Isotope>  
 <Isotope id="Ar37" value="2.81e-17" error="5.001e1"></Isotope>  
 <Isotope id="Ar38" value="8.6727e-17" error="2.94e0"></Isotope>  
 <Isotope id="Ar39" value="9.98501e-16" error="7.2e-1"></Isotope>  
 <Isotope id="Ar40" value="9.23534e-14" error="7.2e-1"></Isotope>  
 245 <Isotope id="Ar36\_correctedForIsotopeInterference" value="3.06552e-16" error="9.7e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="9.98501e-16" error="7.2e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="9.23534e-14" error="7.2e-1"></Isotope>  
 <percentage\_radiogenic\_argon>1.900</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.754e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.100</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="3.779" stddev="2.372"></MeasuredAge>  
 <RecalculatedAge>3.779</RecalculatedAge>  
 250 <IsotopeRatio id="Ca\_K" value="5.35e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="2.04e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.31933637527e-3" error="5.6079675712e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.08117405531e-2" error="1.55635403249e-4"></IsotopeRatio>  
 255 </StepData>  
 <StepData>  
 <StepNumber>7</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>590.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="3.2748e-16" error="6.9e-1"></Isotope>  
 <Isotope id="Ar37" value="2.8116e-17" error="5.0e1"></Isotope>

265 <Isotope id="Ar38" value="9.768e-17" error="3.06e0"></Isotope>  
 <Isotope id="Ar39" value="1.63849e-15" error="3.8e-1"></Isotope>  
 <Isotope id="Ar40" value="9.92623e-14" error="3.8e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="3.2748e-16" error="6.9e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.63849e-15" error="3.8e-1"></Isotope>  
 270 <Isotope id="Ar40\_correctedForIsotopeInterference" value="9.92623e-14" error="3.8e-1"></Isotope>  
 <percentage\_radiogenic\_argon>2.490</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.511e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.170</cumulated\_percentage\_Ar39\_released>  
 275 <MeasuredAge value="3.255" stddev="1.008"></MeasuredAge>  
 <RecalculatedAge>3.255</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="3.26e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.22e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.2991377391e-3" error="3.52824088525e-5"></IsotopeRatio>  
 280 <IsotopeRatio id="Ar39\_Ar40" value="1.65066697024e-2" error="1.25382361529e-4"></IsotopeRatio>  
 </StepData>  
 <StepData>  
 <StepNumber>8</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>610.000</FurnaceTemperature\_DegreesCelsius>  
 285 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="3.48516e-16" error="7.3e-1"></Isotope>  
 <Isotope id="Ar37" value="2.8131e-17" error="5.0e1"></Isotope>  
 <Isotope id="Ar38" value="1.1919e-16" error="2.32e0"></Isotope>  
 <Isotope id="Ar39" value="2.78864e-15" error="2.9e-1"></Isotope>  
 290 <Isotope id="Ar40" value="1.06212e-13" error="2.9e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="3.48516e-16" error="7.3e-1"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.78864e-15" error="2.9e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.06212e-13" error="2.9e-1"></Isotope>  
 <percentage\_radiogenic\_argon>3.020</percentage\_radiogenic\_argon>  
 295 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.15e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.270</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="2.479" stddev="0.630"></MeasuredAge>  
 <RecalculatedAge>2.479</RecalculatedAge>  
 300 <IsotopeRatio id="Ca\_K" value="1.92e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="9.12e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.28132414416e-3" error="3.34695062705e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="2.62554137009e-2" error="1.52281399465e-4"></IsotopeRatio>  
 </StepData>  
 305 <StepData>  
 <StepNumber>9</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>630.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="4.1574e-16" error="8.6e-1"></Isotope>  
 <Isotope id="Ar37" value="2.8146e-17" error="5.0e1"></Isotope>  
 <Isotope id="Ar38" value="1.5961e-16" error="1.48e0"></Isotope>  
 <Isotope id="Ar39" value="5.21665e-15" error="2.2e-1"></Isotope>  
 <Isotope id="Ar40" value="1.28195e-13" error="2.2e-1"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="4.1574e-16" error="8.6e-1"></Isotope>  
 310 <Isotope id="Ar39\_correctedForIsotopeInterference" value="5.21665e-15" error="2.2e-1"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.28195e-13" error="2.2e-1"></Isotope>  
 <percentage\_radiogenic\_argon>4.150</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.02e0" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>0.470</cumulated\_percentage\_Ar39\_released>  
 315 <MeasuredAge value="2.199" stddev="0.453"></MeasuredAge>  
 <RecalculatedAge>2.199</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.03e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="4.88e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.24302819923e-3" error="3.50247045517e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="4.06930847537e-2" error="1.79049572916e-4"></IsotopeRatio>  
 </StepData>

```

<StepData>
  <StepNumber>10</StepNumber>
  <FurnaceTemperature_DegreesCelsius>650.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="4.89531e-16" error="6.6e-1"></Isotope>
  <Isotope id="Ar37" value="2.8162e-17" error="5.0e1"></Isotope>
  <Isotope id="Ar38" value="2.1966e-16" error="1.07e0"></Isotope>
  <Isotope id="Ar39" value="9.40169e-15" error="1.9e-1"></Isotope>
  <Isotope id="Ar40" value="1.53439e-13" error="1.9e-1"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="4.89531e-16" error="6.6e-1"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="9.40169e-15" error="1.9e-1"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="1.53439e-13" error="1.9e-1"></Isotope>
  <percentage_radiogenic_argon>5.700</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="9.316e-1" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>0.830</cumulated_percentage_Ar39_released>
  <MeasuredAge value="2.008" stddev="0.230"></MeasuredAge>
  <RecalculatedAge>2.008</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="5.69e-3" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="2.51e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="3.19039488005e-3" error="2.71183564804e-5"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="6.12731443766e-2" error="2.32837948631e-4"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>11</StepNumber>
  <FurnaceTemperature_DegreesCelsius>670.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="5.57287e-16" error="6.3e-1"></Isotope>
  <Isotope id="Ar37" value="3.1206e-16" error="3.18e1"></Isotope>
  <Isotope id="Ar38" value="3.1657e-16" error="1.09e0"></Isotope>
  <Isotope id="Ar39" value="1.66687e-14" error="1.7e-1"></Isotope>
  <Isotope id="Ar40" value="1.79836e-13" error="1.7e-1"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="5.57287e-16" error="6.3e-1"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="1.66687e-14" error="1.7e-1"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="1.79836e-13" error="1.7e-1"></Isotope>
  <percentage_radiogenic_argon>8.390</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="9.077e-1" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>1.460</cumulated_percentage_Ar39_released>
  <MeasuredAge value="1.956" stddev="0.140"></MeasuredAge>
  <RecalculatedAge>1.956</RecalculatedAge>
  <IsotopeRatio id="Ca_K" value="3.56e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Cl_K" value="1.54e-2" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="Ar36_Ar40" value="3.09886229676e-3" error="2.47908983741e-5"></IsotopeRatio>
  <IsotopeRatio id="Ar39_Ar40" value="9.26883382638e-2" error="3.15140350097e-4"></IsotopeRatio>
</StepData>
<StepData>
  <StepNumber>12</StepNumber>
  <FurnaceTemperature_DegreesCelsius>690.000</FurnaceTemperature_DegreesCelsius>
  <Duration_minutes>15.000</Duration_minutes>
  <Isotope id="Ar36" value="5.91292e-16" error="5.3e-1"></Isotope>
  <Isotope id="Ar37" value="3.3071e-16" error="1.201e1"></Isotope>
  <Isotope id="Ar38" value="4.5685e-16" error="5.0e-1"></Isotope>
  <Isotope id="Ar39" value="2.81808e-14" error="1.8e-1"></Isotope>
  <Isotope id="Ar40" value="2.0033e-13" error="1.8e-1"></Isotope>
  <Isotope id="Ar36_correctedForIsotopeInterference" value="5.91292e-16" error="5.3e-1"></Isotope>
  <Isotope id="Ar39_correctedForIsotopeInterference" value="2.81808e-14" error="1.8e-1"></Isotope>
  <Isotope id="Ar40_correctedForIsotopeInterference" value="2.0033e-13" error="1.8e-1"></Isotope>
  <percentage_radiogenic_argon>12.710</percentage_radiogenic_argon>
  <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
  <IsotopeRatio id="radiogenicAr40_Ar39" value="9.075e-1" error="0.0e0"></IsotopeRatio>
  <cumulated_percentage_Ar39_released>2.540</cumulated_percentage_Ar39_released>
  <MeasuredAge value="1.956" stddev="0.076"></MeasuredAge>

```

```

<RecalculatedAge>1.956</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="2.23e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="1.06e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="2.9515898767e-3" error="2.09562881246e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="1.40671891379e-1" error="5.06418808965e-4"></IsotopeRatio>
395 </StepData>
<StepData>
    <StepNumber>13</StepNumber>
    <FurnaceTemperature_DegreesCelsius>710.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="6.00992e-16" error="5.1e-1"></Isotope>
    <Isotope id="Ar37" value="4.6865e-16" error="1.109e1"></Isotope>
    <Isotope id="Ar38" value="6.3692e-16" error="5.4e-1"></Isotope>
    <Isotope id="Ar39" value="4.35667e-14" error="1.7e-1"></Isotope>
    <Isotope id="Ar40" value="2.18599e-13" error="1.8e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="6.00992e-16" error="5.1e-1"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="4.35667e-14" error="1.7e-1"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="2.18599e-13" error="1.8e-1"></Isotope>
    <percentage_radiogenic_argon>18.620</percentage_radiogenic_argon>
400 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="9.405e-1" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>4.200</cumulated_percentage_Ar39_released>
    <MeasuredAge value="2.027" stddev="0.049"></MeasuredAge>
    <RecalculatedAge>2.027</RecalculatedAge>
405 <IsotopeRatio id="Ca_K" value="2.04e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="7.99e-3" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="2.74928979547e-3" error="1.89700995887e-5"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="1.99299630831e-1" error="6.97548707908e-4"></IsotopeRatio>
</StepData>
410 <StepData>
    <StepNumber>14</StepNumber>
    <FurnaceTemperature_DegreesCelsius>730.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="6.25081e-16" error="5.7e-1"></Isotope>
    <Isotope id="Ar37" value="6.8532e-16" error="7.47e0"></Isotope>
    <Isotope id="Ar38" value="8.8504e-16" error="5.2e-1"></Isotope>
    <Isotope id="Ar39" value="6.44406e-14" error="1.9e-1"></Isotope>
    <Isotope id="Ar40" value="2.4503e-13" error="1.9e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="6.25081e-16" error="5.7e-1"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="6.44406e-14" error="1.9e-1"></Isotope>
    <Isotope id="Ar40_correctedForIsotopeInterference" value="2.4503e-13" error="1.9e-1"></Isotope>
    <percentage_radiogenic_argon>24.390</percentage_radiogenic_argon>
415 <IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="radiogenicAr40_Ar39" value="9.356e-1" error="0.0e0"></IsotopeRatio>
    <cumulated_percentage_Ar39_released>6.650</cumulated_percentage_Ar39_released>
    <MeasuredAge value="2.016" stddev="0.039"></MeasuredAge>
    <RecalculatedAge>2.016</RecalculatedAge>
420 <IsotopeRatio id="Ca_K" value="2.02e-2" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Cl_K" value="6.78e-3" error="0.0e0"></IsotopeRatio>
    <IsotopeRatio id="Ar36_Ar40" value="2.55103864833e-3" error="1.93878937273e-5"></IsotopeRatio>
    <IsotopeRatio id="Ar39_Ar40" value="2.62990654206e-1" error="9.99364485981e-4"></IsotopeRatio>
</StepData>
425 <StepData>
    <StepNumber>15</StepNumber>
    <FurnaceTemperature_DegreesCelsius>750.000</FurnaceTemperature_DegreesCelsius>
    <Duration_minutes>15.000</Duration_minutes>
    <Isotope id="Ar36" value="6.41205e-16" error="5.7e-1"></Isotope>
    <Isotope id="Ar37" value="1.0791e-15" error="8.74e0"></Isotope>
    <Isotope id="Ar38" value="1.1893e-15" error="6.9e-1"></Isotope>
    <Isotope id="Ar39" value="8.93471e-14" error="2.2e-1"></Isotope>
    <Isotope id="Ar40" value="2.71779e-13" error="2.3e-1"></Isotope>
    <Isotope id="Ar36_correctedForIsotopeInterference" value="6.41205e-16" error="5.7e-1"></Isotope>
    <Isotope id="Ar39_correctedForIsotopeInterference" value="8.93471e-14" error="2.2e-1"></Isotope>
430
435
440
445
450

```

455 <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.71779e-13" error="2.3e-1"></Isotope>  
 <percentage\_radiogenic\_argon>29.940</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="9.208e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>10.060</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="1.984" stddev="0.031"></MeasuredAge>  
 460 <RecalculatedAge>1.984</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.29e-2" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="7.53e-3" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="2.35928824523e-3" error="1.88743059618e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="3.28749093933e-1" error="1.4793709227e-3"></IsotopeRatio>  
 465 </StepData>  
 <StepData>  
     <StepNumber>16</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>770.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
 470 <Isotope id="Ar36" value="6.43497e-16" error="6.3e-1"></Isotope>  
     <Isotope id="Ar37" value="1.7827e-15" error="1.004e1"></Isotope>  
     <Isotope id="Ar38" value="1.565e-15" error="1.09e0"></Isotope>  
     <Isotope id="Ar39" value="1.17563e-13" error="2.9e-1"></Isotope>  
 475 <Isotope id="Ar40" value="2.97473e-13" error="3.0e-1"></Isotope>  
     <Isotope id="Ar36\_correctedForIsotopeInterference" value="6.43497e-16" error="6.3e-1"></Isotope>  
     <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.17563e-13" error="2.9e-1"></Isotope>  
     <Isotope id="Ar40\_correctedForIsotopeInterference" value="2.97473e-13" error="3.0e-1"></Isotope>  
     <percentage\_radiogenic\_argon>35.600</percentage\_radiogenic\_argon>  
     <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 480 <IsotopeRatio id="radiogenicAr40\_Ar39" value="9.126e-1" error="0.0e0"></IsotopeRatio>  
     <cumulated\_percentage\_Ar39\_released>14.540</cumulated\_percentage\_Ar39\_released>  
     <MeasuredAge value="1.967" stddev="0.028"></MeasuredAge>  
     <RecalculatedAge>1.967</RecalculatedAge>  
     <IsotopeRatio id="Ca\_K" value="2.88e-2" error="0.0e0"></IsotopeRatio>  
 485 <IsotopeRatio id="Cl\_K" value="1.15e-2" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="Ar36\_Ar40" value="2.16321145112e-3" error="2.01178664954e-5"></IsotopeRatio>  
     <IsotopeRatio id="Ar39\_Ar40" value="3.952056153e-1" error="2.33171313027e-3"></IsotopeRatio>  
 </StepData>  
 490 <StepData>  
     <StepNumber>17</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>790.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
     <Isotope id="Ar36" value="6.7615e-16" error="9.3e-1"></Isotope>  
     <Isotope id="Ar37" value="3.7705e-15" error="1.14e1"></Isotope>  
     <Isotope id="Ar38" value="2.179e-15" error="1.93e0"></Isotope>  
     <Isotope id="Ar39" value="1.581e-13" error="3.9e-1"></Isotope>  
     <Isotope id="Ar40" value="3.41105e-13" error="4.0e-1"></Isotope>  
     <Isotope id="Ar36\_correctedForIsotopeInterference" value="6.7615e-16" error="9.3e-1"></Isotope>  
     <Isotope id="Ar39\_correctedForIsotopeInterference" value="1.581e-13" error="3.9e-1"></Isotope>  
 495 <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.41105e-13" error="4.0e-1"></Isotope>  
     <percentage\_radiogenic\_argon>40.780</percentage\_radiogenic\_argon>  
     <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="radiogenicAr40\_Ar39" value="8.935e-1" error="0.0e0"></IsotopeRatio>  
     <cumulated\_percentage\_Ar39\_released>20.560</cumulated\_percentage\_Ar39\_released>  
     <MeasuredAge value="1.926" stddev="0.032"></MeasuredAge>  
     <RecalculatedAge>1.926</RecalculatedAge>  
     <IsotopeRatio id="Ca\_K" value="4.53e-2" error="0.0e0"></IsotopeRatio>  
     <IsotopeRatio id="Cl\_K" value="2.01e-2" error="0.0e0"></IsotopeRatio>  
 500 <IsotopeRatio id="Ar36\_Ar40" value="1.98223420941e-3" error="2.63637149851e-5"></IsotopeRatio>  
     <IsotopeRatio id="Ar39\_Ar40" value="4.63493645652e-1" error="3.66159980065e-3"></IsotopeRatio>  
 </StepData>  
 505 <StepData>  
     <StepNumber>18</StepNumber>  
     <FurnaceTemperature\_DegreesCelsius>810.000</FurnaceTemperature\_DegreesCelsius>  
     <Duration\_minutes>15.000</Duration\_minutes>  
     <Isotope id="Ar36" value="7.47872e-16" error="1.39e0"></Isotope>

```

<Isotope id="Ar37" value="8.6131e-15" error="1.315e1"></Isotope>
<Isotope id="Ar38" value="3.2482e-15" error="3.09e0"></Isotope>
<Isotope id="Ar39" value="2.16891e-13" error="4.6e-1"></Isotope>
<Isotope id="Ar40" value="4.07308e-13" error="5.1e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="7.47872e-16" error="1.39e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="2.16891e-13" error="4.6e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="4.07308e-13" error="5.1e-1"></Isotope>
<percentage_radiogenic_argon>44.930</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="8.588e-1" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>28.830</cumulated_percentage_Ar39_released>
<MeasuredAge value="1.851" stddev="0.038"></MeasuredAge>
<RecalculatedAge>1.851</RecalculatedAge>
520 <IsotopeRatio id="Ca_K" value="7.55e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="3.67e-2" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Ar36_Ar40" value="1.83613383484e-3" error="3.48865428619e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="5.32498747876e-1" error="5.1652378544e-3"></IsotopeRatio>
</StepData>
525 <StepData>
<StepNumber>19</StepNumber>
<FurnaceTemperature_DegreesCelsius>830.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="8.38311e-16" error="1.9e0"></Isotope>
<Isotope id="Ar37" value="1.8363e-14" error="1.317e1"></Isotope>
530 <Isotope id="Ar38" value="4.9755e-15" error="4.18e0"></Isotope>
<Isotope id="Ar39" value="2.98072e-13" error="5.0e-1"></Isotope>
<Isotope id="Ar40" value="4.94307e-13" error="7.0e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="8.38311e-16" error="1.9e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="2.98072e-13" error="5.0e-1"></Isotope>
535 <Isotope id="Ar40_correctedForIsotopeInterference" value="4.94307e-13" error="7.0e-1"></Isotope>
<percentage_radiogenic_argon>48.890</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="8.271e-1" error="0.0e0"></IsotopeRatio>
540 <cumulated_percentage_Ar39_released>40.190</cumulated_percentage_Ar39_released>
<MeasuredAge value="1.783" stddev="0.043"></MeasuredAge>
<RecalculatedAge>1.783</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.17e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="5.93e-2" error="0.0e0"></IsotopeRatio>
545 <IsotopeRatio id="Ar36_Ar40" value="1.69593188039e-3" error="4.40942288901e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="6.03009870384e-1" error="7.23611844461e-3"></IsotopeRatio>
</StepData>
550 <StepData>
<StepNumber>20</StepNumber>
<FurnaceTemperature_DegreesCelsius>850.000</FurnaceTemperature_DegreesCelsius>
<Duration_minutes>15.000</Duration_minutes>
<Isotope id="Ar36" value="9.30538e-16" error="2.4e0"></Isotope>
<Isotope id="Ar37" value="3.228e-14" error="1.294e1"></Isotope>
555 <Isotope id="Ar38" value="7.2827e-15" error="4.99e0"></Isotope>
<Isotope id="Ar39" value="3.9804e-13" error="5.4e-1"></Isotope>
<Isotope id="Ar40" value="5.92254e-13" error="9.2e-1"></Isotope>
<Isotope id="Ar36_correctedForIsotopeInterference" value="9.30538e-16" error="2.4e0"></Isotope>
<Isotope id="Ar39_correctedForIsotopeInterference" value="3.9804e-13" error="5.4e-1"></Isotope>
<Isotope id="Ar40_correctedForIsotopeInterference" value="5.92254e-13" error="9.2e-1"></Isotope>
560 <percentage_radiogenic_argon>52.390</percentage_radiogenic_argon>
<IsotopeRatio id="Ar40_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="radiogenicAr40_Ar39" value="7.97e-1" error="0.0e0"></IsotopeRatio>
<cumulated_percentage_Ar39_released>55.360</cumulated_percentage_Ar39_released>
<MeasuredAge value="1.718" stddev="0.047"></MeasuredAge>
565 <RecalculatedAge>1.718</RecalculatedAge>
<IsotopeRatio id="Ca_K" value="1.54e-1" error="0.0e0"></IsotopeRatio>
<IsotopeRatio id="Cl_K" value="8.0e-2" error="0.0e0"></IsotopeRatio>
570 <IsotopeRatio id="Ar36_Ar40" value="1.57118060832e-3" error="5.21631961962e-5"></IsotopeRatio>
<IsotopeRatio id="Ar39_Ar40" value="6.72076507715e-1" error="9.81231701263e-3"></IsotopeRatio>
575

```

580           </StepData>  
 581        <StepData>  
 582          <StepNumber>21</StepNumber>  
 583          <FurnaceTemperature\_DegreesCelsius>870.000</FurnaceTemperature\_DegreesCelsius>  
 584          <Duration\_minutes>15.000</Duration\_minutes>  
 585          <Isotope id="Ar36" value="9.5158e-16" error="3.24e0"></Isotope>  
 586          <Isotope id="Ar37" value="4.5492e-14" error="1.295e1"></Isotope>  
 587          <Isotope id="Ar38" value="9.2421e-15" error="5.54e0"></Isotope>  
 588          <Isotope id="Ar39" value="4.6973e-13" error="5.8e-1"></Isotope>  
 589          <Isotope id="Ar40" value="6.42012e-13" error="1.1e0"></Isotope>  
 590          <Isotope id="Ar36\_correctedForIsotopeInterference" value="9.5158e-16" error="3.24e0"></Isotope>  
 591          <Isotope id="Ar39\_correctedForIsotopeInterference" value="4.6973e-13" error="5.8e-1"></Isotope>  
 592          <Isotope id="Ar40\_correctedForIsotopeInterference" value="6.42012e-13" error="1.1e0"></Isotope>  
 593          <percentage\_radiogenic\_argon>54.850</percentage\_radiogenic\_argon>  
 594          <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 595          <IsotopeRatio id="radiogenicAr40\_Ar39" value="7.68e-1" error="0.0e0"></IsotopeRatio>  
 596          <cumulated\_percentage\_Ar39\_released>73.260</cumulated\_percentage\_Ar39\_released>  
 597          <MeasuredAge value="1.655" stddev="0.054"></MeasuredAge>  
 598          <RecalculatedAge>1.655</RecalculatedAge>  
 599          <IsotopeRatio id="Ca\_K" value="1.84e-1" error="0.0e0"></IsotopeRatio>  
 600          <IsotopeRatio id="Cl\_K" value="9.77e-2" error="0.0e0"></IsotopeRatio>  
 601          <IsotopeRatio id="Ar36\_Ar40" value="1.48218413363e-3" error="6.43267913995e-5"></IsotopeRatio>  
 602          <IsotopeRatio id="Ar39\_Ar40" value="7.3165299091e-1" error="1.22917702473e-2"></IsotopeRatio>  
 603        </StepData>  
 604        <StepData>  
 605          <StepNumber>22</StepNumber>  
 606          <FurnaceTemperature\_DegreesCelsius>890.000</FurnaceTemperature\_DegreesCelsius>  
 607          <Duration\_minutes>15.000</Duration\_minutes>  
 608          <Isotope id="Ar36" value="8.11101e-16" error="4.13e0"></Isotope>  
 609          <Isotope id="Ar37" value="4.7308e-14" error="1.323e1"></Isotope>  
 610          <Isotope id="Ar38" value="8.8364e-15" error="6.11e0"></Isotope>  
 611          <Isotope id="Ar39" value="4.25674e-13" error="6.4e-1"></Isotope>  
 612          <Isotope id="Ar40" value="5.56002e-13" error="1.22e0"></Isotope>  
 613          <Isotope id="Ar36\_correctedForIsotopeInterference" value="8.11101e-16" error="4.13e0"></Isotope>  
 614          <Isotope id="Ar39\_correctedForIsotopeInterference" value="4.25674e-13" error="6.4e-1"></Isotope>  
 615          <Isotope id="Ar40\_correctedForIsotopeInterference" value="5.56002e-13" error="1.22e0"></Isotope>  
 616          <percentage\_radiogenic\_argon>55.460</percentage\_radiogenic\_argon>  
 617          <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 618          <IsotopeRatio id="radiogenicAr40\_Ar39" value="7.43e-1" error="0.0e0"></IsotopeRatio>  
 619          <cumulated\_percentage\_Ar39\_released>89.480</cumulated\_percentage\_Ar39\_released>  
 620          <MeasuredAge value="1.601" stddev="0.062"></MeasuredAge>  
 621          <RecalculatedAge>1.601</RecalculatedAge>  
 622          <IsotopeRatio id="Ca\_K" value="2.11e-1" error="0.0e0"></IsotopeRatio>  
 623          <IsotopeRatio id="Cl\_K" value="1.11e-1" error="0.0e0"></IsotopeRatio>  
 624          <IsotopeRatio id="Ar36\_Ar40" value="1.45880950069e-3" error="7.80463082867e-5"></IsotopeRatio>  
 625          <IsotopeRatio id="Ar39\_Ar40" value="7.65597965475e-1" error="1.42401221578e-2"></IsotopeRatio>  
 626        </StepData>  
 627        <StepData>  
 628          <StepNumber>23</StepNumber>  
 629          <FurnaceTemperature\_DegreesCelsius>910.000</FurnaceTemperature\_DegreesCelsius>  
 630          <Duration\_minutes>15.000</Duration\_minutes>  
 631          <Isotope id="Ar36" value="5.0317e-16" error="4.59e0"></Isotope>  
 632          <Isotope id="Ar37" value="2.6394e-14" error="1.389e1"></Isotope>  
 633          <Isotope id="Ar38" value="4.7811e-15" error="6.41e0"></Isotope>  
 634          <Isotope id="Ar39" value="2.25068e-13" error="7.1e-1"></Isotope>  
 635          <Isotope id="Ar40" value="3.1019e-13" error="1.17e0"></Isotope>  
 636          <Isotope id="Ar36\_correctedForIsotopeInterference" value="5.0317e-16" error="4.59e0"></Isotope>  
 637          <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.25068e-13" error="7.1e-1"></Isotope>  
 638          <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.1019e-13" error="1.17e0"></Isotope>  
 639          <percentage\_radiogenic\_argon>50.820</percentage\_radiogenic\_argon>  
 640          <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 641          <IsotopeRatio id="radiogenicAr40\_Ar39" value="7.175e-1" error="0.0e0"></IsotopeRatio>  
 642          <cumulated\_percentage\_Ar39\_released>98.060</cumulated\_percentage\_Ar39\_released>

645 <MeasuredAge value="1.546" stddev="0.076"></MeasuredAge>  
 <RecalculatedAge>1.546</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.23e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.16e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="1.62213482059e-3" error="9.34349656662e-5"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="7.25581095458e-1" error="1.36409245946e-2"></IsotopeRatio>  
 650 </StepData>  
 <StepData>  
 <StepNumber>24</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>930.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="4.24805e-16" error="4.03e0"></Isotope>  
 <Isotope id="Ar37" value="1.4055e-14" error="1.387e1"></Isotope>  
 <Isotope id="Ar38" value="1.5714e-15" error="1.155e1"></Isotope>  
 <Isotope id="Ar39" value="2.43892e-14" error="2.56e0"></Isotope>  
 <Isotope id="Ar40" value="1.29989e-13" error="2.82e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="4.24805e-16" error="4.03e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="2.43892e-14" error="2.56e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.29989e-13" error="2.82e0"></Isotope>  
 <percentage\_radiogenic\_argon>3.390</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.82e-1" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>98.990</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.392" stddev="0.558"></MeasuredAge>  
 <RecalculatedAge>0.392</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="1.09e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="6.1e-1" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.26800729292e-3" error="2.23858499565e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="1.8762510674e-1" error="1.00942307426e-2"></IsotopeRatio>  
 665 </StepData>  
 <StepData>  
 <StepNumber>25</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>950.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="2.16405e-16" error="7.97e0"></Isotope>  
 <Isotope id="Ar37" value="9.7394e-15" error="1.503e1"></Isotope>  
 <Isotope id="Ar38" value="9.7434e-16" error="1.473e1"></Isotope>  
 <Isotope id="Ar39" value="5.77862e-15" error="6.93e0"></Isotope>  
 <Isotope id="Ar40" value="5.9165e-14" error="7.19e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="2.16405e-16" error="7.97e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="5.77862e-15" error="6.93e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="5.9165e-14" error="7.19e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.210</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.002" stddev="2.501"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="3.2e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.84e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.65765232823e-3" error="5.61486211021e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="9.76695681568e-2" error="1.37641395576e-2"></IsotopeRatio>  
 685 </StepData>  
 <StepData>  
 <StepNumber>26</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1000.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="2.00152e-16" error="7.26e0"></Isotope>  
 <Isotope id="Ar37" value="7.2881e-15" error="1.515e1"></Isotope>  
 <Isotope id="Ar38" value="7.4548e-16" error="1.402e1"></Isotope>  
 <Isotope id="Ar39" value="4.43191e-15" error="6.63e0"></Isotope>  
 <Isotope id="Ar40" value="5.61168e-14" error="6.81e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="2.00152e-16" error="7.26e0"></Isotope>

710 <Isotope id="Ar39\_correctedForIsotopeInterference" value="4.43191e-15" error="6.63e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="5.61168e-14" error="6.81e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.380</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.002" stddev="2.817"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="3.12e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.82e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.56670373222e-3" error="5.06960117302e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="7.89765275283e-2" error="1.06003177819e-2"></IsotopeRatio>  
 </StepData>  
 715 <StepData>  
 <StepNumber>27</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1050.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.72525e-16" error="7.35e0"></Isotope>  
 <Isotope id="Ar37" value="5.8845e-15" error="1.48e1"></Isotope>  
 720 <Isotope id="Ar38" value="5.8687e-16" error="1.433e1"></Isotope>  
 <Isotope id="Ar39" value="3.4094e-15" error="6.78e0"></Isotope>  
 <Isotope id="Ar40" value="4.79114e-14" error="6.94e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.72525e-16" error="7.35e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.4094e-15" error="6.78e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="4.79114e-14" error="6.94e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 725 <cumulated\_percentage\_Ar39\_released>99.510</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.002" stddev="3.188"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="3.28e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.85e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.60091752694e-3" error="5.19517344772e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="7.11605171212e-2" error="9.75335276725e-3"></IsotopeRatio>  
 </StepData>  
 730 <StepData>  
 <StepNumber>28</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1100.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>  
 <Isotope id="Ar36" value="1.63774e-16" error="7.06e0"></Isotope>  
 <Isotope id="Ar37" value="5.2333e-15" error="1.468e1"></Isotope>  
 <Isotope id="Ar38" value="5.3353e-16" error="1.4e1"></Isotope>  
 <Isotope id="Ar39" value="3.06478e-15" error="6.63e0"></Isotope>  
 735 <Isotope id="Ar40" value="4.80434e-14" error="6.8e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.63774e-16" error="7.06e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.06478e-15" error="6.63e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="4.80434e-14" error="6.8e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.630</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.002" stddev="3.347"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 740 <IsotopeRatio id="Ca\_K" value="3.24e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.87e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.40887614116e-3" error="4.76777551614e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="6.37919048194e-2" error="8.5604883064e-3"></IsotopeRatio>  
 </StepData>  
 745 <StepData>  
 <StepNumber>29</StepNumber>  
 <FurnaceTemperature\_DegreesCelsius>1200.000</FurnaceTemperature\_DegreesCelsius>  
 <Duration\_minutes>15.000</Duration\_minutes>

770 <Isotope id="Ar36" value="5.00259e-16" error="5.51e0"></Isotope>  
 <Isotope id="Ar37" value="4.6834e-15" error="1.35e1"></Isotope>  
 <Isotope id="Ar38" value="5.1818e-16" error="1.147e1"></Isotope>  
 <Isotope id="Ar39" value="3.24447e-15" error="5.41e0"></Isotope>  
 <Isotope id="Ar40" value="1.46638e-13" error="5.42e0"></Isotope>  
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="5.00259e-16" error="5.51e0"></Isotope>  
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.24447e-15" error="5.41e0"></Isotope>  
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="1.46638e-13" error="5.42e0"></Isotope>  
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>  
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>  
 <cumulated\_percentage\_Ar39\_released>99.750</cumulated\_percentage\_Ar39\_released>  
 <MeasuredAge value="0.002" stddev="7.565"></MeasuredAge>  
 <RecalculatedAge>0.002</RecalculatedAge>  
 <IsotopeRatio id="Ca\_K" value="2.74e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Cl\_K" value="1.46e0" error="0.0e0"></IsotopeRatio>  
 <IsotopeRatio id="Ar36\_Ar40" value="3.41152361598e-3" error="3.73824620102e-4"></IsotopeRatio>  
 <IsotopeRatio id="Ar39\_Ar40" value="2.21257109344e-2" error="2.39713839864e-3"></IsotopeRatio>  
 </StepData>  
 <StepData>
 <StepNumber>30</StepNumber>
 <FurnaceTemperature\_DegreesCelsius>1300.000</FurnaceTemperature\_DegreesCelsius>
 <Duration\_minutes>15.000</Duration\_minutes>
 <Isotope id="Ar36" value="1.22787e-15" error="4.75e0"></Isotope>
 <Isotope id="Ar37" value="3.7879e-15" error="1.441e1"></Isotope>
 <Isotope id="Ar38" value="5.9397e-16" error="8.43e0"></Isotope>
 <Isotope id="Ar39" value="3.15453e-15" error="4.71e0"></Isotope>
 <Isotope id="Ar40" value="3.55407e-13" error="4.71e0"></Isotope>
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.22787e-15" error="4.75e0"></Isotope>
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.15453e-15" error="4.71e0"></Isotope>
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="3.55407e-13" error="4.71e0"></Isotope>
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
 <cumulated\_percentage\_Ar39\_released>99.870</cumulated\_percentage\_Ar39\_released>
 <MeasuredAge value="0.002" stddev="16.426"></MeasuredAge>
 <RecalculatedAge>0.002</RecalculatedAge>
 <IsotopeRatio id="Ca\_K" value="2.28e0" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="Cl\_K" value="1.25e0" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="Ar36\_Ar40" value="3.45482784526e-3" error="3.27085932885e-4"></IsotopeRatio>
 <IsotopeRatio id="Ar39\_Ar40" value="8.87582405524e-3" error="8.36647351692e-4"></IsotopeRatio>
 </StepData>  
 <StepData>
 <StepNumber>31</StepNumber>
 <FurnaceTemperature\_DegreesCelsius>1450.000</FurnaceTemperature\_DegreesCelsius>
 <Duration\_minutes>15.000</Duration\_minutes>
 <Isotope id="Ar36" value="1.92922e-15" error="3.87e0"></Isotope>
 <Isotope id="Ar37" value="3.3902e-15" error="1.35e1"></Isotope>
 <Isotope id="Ar38" value="6.878e-16" error="6.31e0"></Isotope>
 <Isotope id="Ar39" value="3.37341e-15" error="3.84e0"></Isotope>
 <Isotope id="Ar40" value="5.48579e-13" error="3.84e0"></Isotope>
 <Isotope id="Ar36\_correctedForIsotopeInterference" value="1.92922e-15" error="3.87e0"></Isotope>
 <Isotope id="Ar39\_correctedForIsotopeInterference" value="3.37341e-15" error="3.84e0"></Isotope>
 <Isotope id="Ar40\_correctedForIsotopeInterference" value="5.48579e-13" error="3.84e0"></Isotope>
 <percentage\_radiogenic\_argon>0.010</percentage\_radiogenic\_argon>
 <IsotopeRatio id="Ar40\_Ar39" value="0.0e0" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="radiogenicAr40\_Ar39" value="1.0e-3" error="0.0e0"></IsotopeRatio>
 <cumulated\_percentage\_Ar39\_released>100.000</cumulated\_percentage\_Ar39\_released>
 <MeasuredAge value="0.002" stddev="19.498"></MeasuredAge>
 <RecalculatedAge>0.002</RecalculatedAge>
 <IsotopeRatio id="Ca\_K" value="1.91e0" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="Cl\_K" value="1.01e0" error="0.0e0"></IsotopeRatio>
 <IsotopeRatio id="Ar36\_Ar40" value="3.51675875307e-3" error="2.71253057282e-4"></IsotopeRatio>

```
<IsotopeRatio id="Ar39_Ar40" value="6.14936043851e-3" error="4.72551859884e-4"></IsotopeRatio>
</StepData>
835 <CalculationParameters>
    <Parameter id="J_Factor" value="1.1954E-03" uncertainty="0.24" />
    <Parameter id="FluxMonitorAge" value="98.50" uncertainty="0.80" />
    <Parameter id="FluxMonitor_40Ar_39Ar_ratio" value="4.6945E+01" uncertainty="0.24" />
    <Parameter id="MassDiscrimination" value="0.98769" uncertainty="0.15" />
    <Parameter id="Atmospheric_40Ar_36Ar_ratio" value="295.55" uncertainty="" />
840    <Parameter id="CorrectionFactor_36Ar_using_37Ar_fromCa" value="3.2860E-04" uncertainty="" />
    <Parameter id="CorrectionFactor_39Ar_using_37Ar_fromCa" value="7.9250E-04" uncertainty="" />
    <Parameter id="CorrectionFactor_40Ar_using_39Ar_fromZeroAgeK" value="3.3450E-02" uncertainty="" />
    <Parameter id="CorrectionFactor_38Ar_using_39Ar_fromZeroAgeK" value="1.1320E-02" uncertainty="" />
    <Parameter id="ChlorineConversionRatio_38Ar_39Ar_fromZeroAgeK" value="8.1530E-02" uncertainty="" />
845    <Parameter id="DecayConstantK" value="5.5430E-10" uncertainty="0.192" />
</CalculationParameters>
</ArgonData>
</eArgonDataObject>
</eArgon>
```

850

855

860

## 865 \$11 XML for the fractal crystal used by *MacArgon* for modelling purposes

```
<?xml version="1.0" encoding="UTF-8"?>
<MacArgon>
  <FractalCrystal>
    <DiffusionDomainParameters>
      <!--Description of Alunite I Ren and Vasconcelos-->
      <ActivationEnergy>5.9273e1</ActivationEnergy>
      <FrequencyFactor>2.39e7</FrequencyFactor>
      <DiffusionRadiusInMicrons>1.0e2</DiffusionRadiusInMicrons>
      <D0_a2>2.39e11</D0_a2>
      <DomainHasBeenActivated>true</DomainHasBeenActivated>
      <NumberOfFractalIterations>0</NumberOfFractalIterations>
      <SortOfDomain>sphere</SortOfDomain>
      <DomainCanBeUsedInMicrostructuralEvent>false</DomainCanBeUsedInMicrostructuralEvent>
    </DiffusionDomainParameters>
    <DiffusionDomainParameters>
      <!--Description of Alunite II Ren and Vasconcelos-->
      <ActivationEnergy>6.732791587e1</ActivationEnergy>
      <FrequencyFactor>1.18e8</FrequencyFactor>
      <DiffusionRadiusInMicrons>1.0e2</DiffusionRadiusInMicrons>
      <D0_a2>1.18e12</D0_a2>
      <DomainHasBeenActivated>false</DomainHasBeenActivated>
      <NumberOfFractalIterations>0</NumberOfFractalIterations>
      <SortOfDomain>sphere</SortOfDomain>
      <RelativeVolume>2.0e0</RelativeVolume>
      <DomainCanBeUsedInMicrostructuralEvent>true</DomainCanBeUsedInMicrostructuralEvent>
    </DiffusionDomainParameters>
    <DiffusionDomainParameters>
      <!--Description of Alunite I this paper-->
      <ActivationEnergy>1.57e2</ActivationEnergy>
      <FrequencyFactor>2.9e28</FrequencyFactor>
      <DiffusionRadiusInMicrons>1.0e2</DiffusionRadiusInMicrons>
      <D0_a2>2.9e32</D0_a2>
      <DomainHasBeenActivated>true</DomainHasBeenActivated>
      <NumberOfFractalIterations>5</NumberOfFractalIterations>
      <SortOfDomain>sphere</SortOfDomain>
      <FractalVolumelIterator>9.0e-1</FractalVolumelIterator>
      <FractalRadiuslIterator>2.5e0</FractalRadiuslIterator>
      <RelativeVolume>1.0e0</RelativeVolume>
      <FractalType>_branchingFractal_</FractalType>
      <DomainCanBeUsedInMicrostructuralEvent>false</DomainCanBeUsedInMicrostructuralEvent>
    </DiffusionDomainParameters>
    <DiffusionDomainParameters>
      <!--Description of Alunite II this paper-->
      <ActivationEnergy>1.09e2</ActivationEnergy>
      <FrequencyFactor>1.7e14</FrequencyFactor>
      <DiffusionRadiusInMicrons>1.0e2</DiffusionRadiusInMicrons>
      <D0_a2>1.7e18</D0_a2>
      <DomainHasBeenActivated>false</DomainHasBeenActivated>
      <NumberOfFractalIterations>0</NumberOfFractalIterations>
      <SortOfDomain>sphere</SortOfDomain>
      <RelativeVolume>5.0e0</RelativeVolume>
      <DomainCanBeUsedInMicrostructuralEvent>true</DomainCanBeUsedInMicrostructuralEvent>
    </DiffusionDomainParameters>
  </FractalCrystal>
</MacArgon>
```

## §12 Checklist for Data Reporting as set out by Schaen et al. 2021

925

### Minimum Required Data

- Report uncertainties for all parameters (e.g., 95% confidence interval,  $1\sigma$ ,  $2\sigma$ )
- Explicitly stated whether uncertainties on ages include decay constant uncertainties
- Report sample identifier (ideally unique, e.g., International Geo Sample Number [IGSN])
- Report sample location (e.g., latitude, longitude, elevation)
- Report sample lithology
- Specify material analyzed specified (e.g., single vs. multi-crystal aliquot, weight, phase type)
- Report relative isotope abundances<sup>†</sup> for  $^{40}\text{Ar}$ ,  $^{39}\text{Ar}$ ,  $^{38}\text{Ar}$ ,  $^{37}\text{Ar}$ , and  $^{36}\text{Ar}$
- Describe step heating schedule and/or laser power/wattage per analysis
- Identify reactor and port used for irradiation (and if Cd shielding or rotation was used)
- Describe fluence monitor details (e.g., name, age assumed, reference,  $J$  value)
- Report decay constants used (e.g.,  $^{40}\text{K}$ ,  $^{39}\text{Ar}$ ,  $^{37}\text{Ar}$ ,  $^{36}\text{Cl}$ ), references cited
- Identify interfering isotope production ratios (e.g., Ar produced from K, Ca, Cl), references cited
- Report ratios used for trapped<sup>§</sup> argon correction ( $^{40}\text{Ar}/^{36}\text{Ar}$ ,  $^{40}\text{Ar}/^{38}\text{Ar}$ ), reference cited
- Indicate time interval used in decay corrections (e.g., days from end of irradiation to start of analysis)
- Report proportion radiogenic  $^{40}\text{Ar}$  (% $^{40}\text{Ar}^*$ )
- Provide model age and unit of each analysis (e.g., yr, ka, Ma, Ga)
- List  $F$  value ( $^{40}\text{Ar}^*/^{39}\text{Ar}_\text{K}$ )
- Distinguish which steps are included in the age spectrum/isochron
- Report statistics to evaluate robustness of data (e.g., MSWD, p-value)
- Publish data tables in tabular (e.g., CSV, XLS) or machine-readable (e.g., JSON/XML) file format

### Recommended Data

- Describe sample treatment (e.g., mineral separation techniques, acid treatment used)
- Identify data reduction software used (e.g., Mass Spec, ArArCALC, PyChron, in-house)
- List grain size of material analyzed
- Report representative blank measurements
- Report frequency of blank/air/cocktail measurements

<sup>†</sup> Corrected for baseline, background, mass discrimination and/or detector intercalibration, reactor interferences, and radioactive decay

<sup>§</sup> For terrestrial samples, this is commonly the composition of atmospheric argon

\*Note: that the uncertainties for the Ca/K and Cl/K are not reported here.

